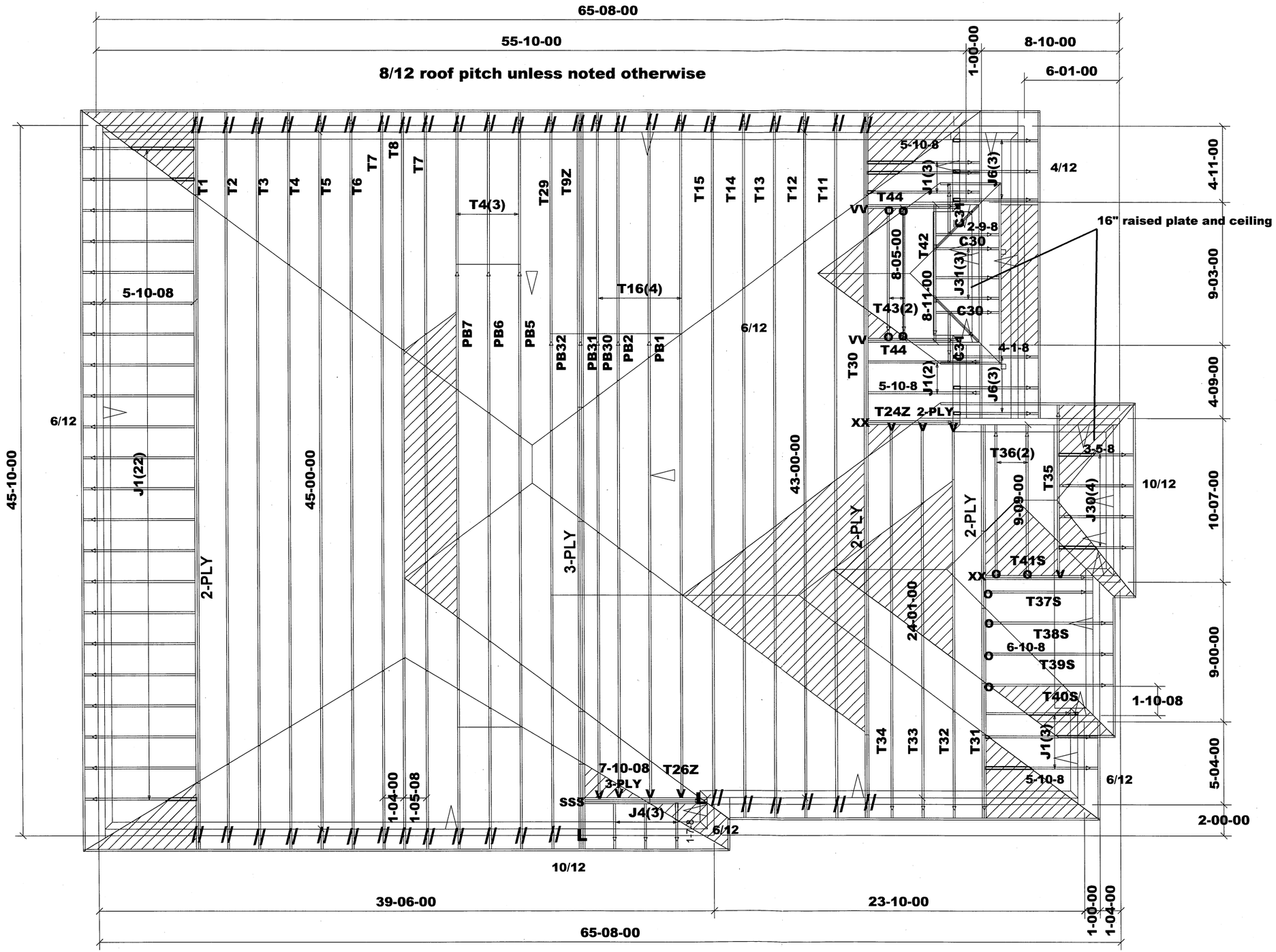


ASPHALT SHINGLES
FINISHED OVERHANG: 12"
2x6 EXTERIOR WALLS
2x6 FASCIA BOARD
HEEL: R.T.M.C.

All conventional framing to conform with Part 9 of O.B.C. 2012 (2019 amendment). Roof rafters that cross over or meet trusses to be min. 2x4 SPF #2 @ 24" o/c with a vertical post to the truss at each cross point. Vertical posts longer than 6' to have lateral bracing so that the distance between the post end points and lateral bracing does not exceed 6'.

DESIGN CONFORMS WITH OBC 2012 (2019 amendment) OCCUPANCY: RESIDENTIAL | PART: 9
Ss = 31.35 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 25.6 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

HARDWARE:
LUS24 - (**O**)
LJS26DS - (**V**)
HGUS26-2 - (**XX**)
LUS26-2 (VV)
HGUS28-3 -(SSS)
H2.5A-(/)
LGT3-SDS2.5-(L)

DENOTES:
CONVENTIONAL FRAMING

M14156

TAMARACK ROOF TRUSSES INC.

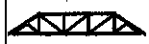
Job Track: **52166**	Builder / Location: **GREENPARK HOMES / HAMILTON**	Model / Elevation: **GRANDVILLE 9/2**	Mitek ver 8.4.2.286
Plan Log: **204651**	Project: **RUSSELL GARDENS PH.4**	THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE.	
Layout ID: **418362**	Date: 2021-07-27 Sales: **William Garcia** Designer: JG		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52166
Builder:	GREENPARK HOMES	PlanLog:	204651
Project:	RUSSELL GARDENS PH.4	Layout ID:	418362
Location:	HAMILTON	Ref #	
Model:	GRANDVILLE 9	Page:	1 of 4
Lot #:		Date:	07-26-2021
Elevation:	2	Designer:	
		Sales Rep:	William Garcia

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1 2-ply	T1 Roof Special Girder	8 /12	45-00-00	4-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	509.35 306.67		
	1	T2 Roof Special	8 /12	45-00-00	5-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	260.69 157.33		
	1	T3 Roof Special	8 /12	45-00-00	6-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	272.6 168.00		
	4	T4 Roof Special	8 /12	45-00-00	7-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	1114.75 680.00		
	1	T5 Roof Special	8 /12	45-00-00	8-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	292.95 176.67		
	1	T6 Roof Special	8 /12	45-00-00	9-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	293.51 177.33		
	2	T7 Roof Special	8 /12	45-00-00	10-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	608.9 362.67		
	1	T8 Roof Special	8 /12	45-00-00	10-09-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	312.04 187.00		
	1 3-ply	T9Z Piggyback Base Girder	8 /12	45-00-00	10-01-11	2 x 6 2 x 8	1-03-08 1-03-08	1-04-13 1-07-11	955.77 579.00		
	1	T11 Hip	8 /12	43-00-00	5-01-06	2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	250.47 153.33		
	1	T12 Hip	8 /12	43-00-00	6-01-06	2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	253.24 154.00		
	1	T13 Hip	8 /12	43-00-00	7-01-06	2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	257.94 157.33		
	1	T14 Hip	8 /12	43-00-00	8-02-06	2 x 6	1-03-08 1-05-00	1-04-13 1-04-13	272.9 165.33		
	1	T15 Hip	8 /12	43-00-00	9-01-06	2 x 6	1-03-08	1-04-13 1-04-13	280.68 170.00		

DELIVERY SHIPLIST

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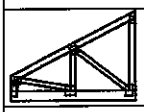
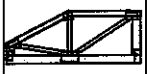
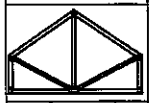
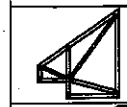
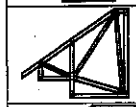
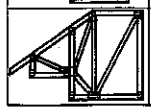
Project:	RUSSELL GARDENS PH.4	Layout ID:	418362
Location:	HAMILTON	Ref #	
Model:	GRANDVILLE 9	Page:	2 of 4
Lot #:		Date:	07-26-2021
Elevation:	2	Designer:	
		Sales Rep:	William Garcia

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	4	T16 Hip	8 /12	43-00-00	10-01-06	2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	1104.37 649.33		
	1 2-ply	T24Z Jack-Closed Girder	6 /12	5-10-08	4-01-04	2 x 4 2 x 6		1-02-00 4-01-04	57.64 37.00		
	1 3-ply	T26Z Half Hip Girder	6 /12	7-10-08	2-11-15	2 x 4 2 x 6		1-02-00 2-11-15	110.29 74.00		
	1	T29 Piggyback Base	8 /12	45-00-00	10-01-11	2 x 6	1-03-08 1-03-08	1-04-13 1-07-11	295.84 177.00		
	1 2-ply	T30 Hip Girder	8 /12	43-00-00	4-01-06	2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	490.37 298.67		
	1 2-ply	T31 Roof Special Girder	8 /12	24-01-00	7-03-13	2 x 4 2 x 6	1-03-08	1-04-13 2-08-13	250.48 159.67		
	1	T32 Hip	8 /12	24-01-00	5-01-04	2 x 4	1-03-08	1-04-13 2-08-13	101.22 64.17		
	1	T33 Hip	8 /12	24-01-00	6-01-04	2 x 4	1-03-08	1-04-13 2-08-13	101.81 64.33		
	1	T34 Hip	8 /12	24-01-00	7-01-04	2 x 4	1-03-08	1-04-13 2-08-13	112.41 72.00		
	1	T35 Hip Girder	8 /12	9-09-00	4-06-04	2 x 4 2 x 6	1-03-08 1-03-08	1-04-13 1-04-13	48.17 29.67		
	2	T36 Common	8 /12	9-09-00	5-11-13	2 x 4		2-08-13 2-08-13	85.36 58.00		
	1	T37S Jack-Closed	8 /12	6-10-08	7-03-13	2 x 4		1-04-13 7-03-13	42.43 27.67		
	1	T38S Half Hip	8 /12	6-10-08	6-07-13	2 x 4	1-03-08	1-04-13 6-07-13	47.36 30.67		
	1	T39S Half Hip	8 /12	6-10-08	5-03-13	2 x 4	1-03-08	1-04-13 5-03-13	44.59 29.00		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

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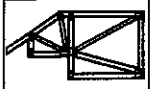
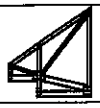
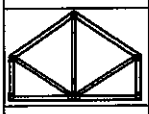
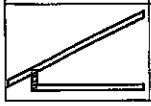
Project:	RUSSELL GARDENS PH.4	Layout ID:	418362
Location:	HAMILTON	Ref #	
Model:	GRANDVILLE 9	Page:	3 of 4
Lot #:		Date:	07-26-2021
Elevation:	2	Designer:	
		Sales Rep:	William Garcia

Roof Trusses

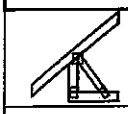
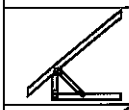
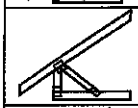
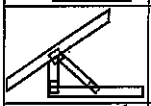
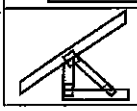
PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	1	T40S Half Hip	8 /12	6-10-08	3-11-13	2 x 4	1-03-08	1-04-13 3-11-13	38.81 26.17		
	1 2-ply	T41S Jack-Closed Girder	8 /12	6-10-08	7-03-13	2 x 4 2 x 6		1-04-13 7-03-13	97.58 64.00		
	1	T42 Hip Girder	8 /12	8-11-00	3-03-02	2 x 4 2 x 6		1-04-13 1-04-13	41.16 27.33		
	2	T43 Common	8 /12	8-05-00	5-08-08	2 x 4		2-10-13 2-10-13	77.36 52.00		
	2 2-ply	T44 Flat Girder	0 /12	5-10-08	1-04-00	2 x 6		1-04-00 1-04-00	106.11 67.33		
	1	PB1 Piggyback	8 /12	16-10-11	1-00-00	2 x 4			38.17 24.17		
	1	PB2 Piggyback	8 /12	16-10-11	2-00-00	2 x 4			49.92 32.33		
	1	PB5 Piggyback	8 /12	25-10-11	7-04-12	2 x 4			94.53 59.00		
	1	PB6 Piggyback	8 /12	29-10-11	6-04-12	2 x 4			99.85 63.33		
	1	PB7 Piggyback	8 /12	29-10-11	5-04-12	2 x 4			106.08 67.83		
	1	PB30 Piggyback	8 /12	16-10-11	2-08-00	2 x 4			50.84 31.33		
	1 3-ply	PB31 Piggyback	8 /12	16-10-11	3-02-00	2 x 4			155.33 100.50		
	1	PB32 Piggyback	8 /12	16-10-11	4-02-00	2 x 4			49.57 31.67		
	30	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	503.84 320.00		

DELIVERY SHIPLIST

TAMARACK ROOF TRUSSES INC.
ALPA LUMBER GROUP

Lumber Yard:	TAMARACK LUMBER	Job Track:	52166
Builder:	GREENPARK HOMES	PlanLog:	204651
Project:	RUSSELL GARDENS PH.4	Layout ID:	418362
Location:	HAMILTON	Ref #	
Model:	GRANDVILLE 9	Page:	4 of 4
Lot #:		Date:	07-26-2021
Elevation:	2	Designer:	
		Sales Rep:	William Garcia

Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	3	J4 Jack-Open	10 /12	**1-07-08**	2-11-15	2 x 4	1-03-08	1-07-11 2-11-15	27.37 21.00		
	6	J6 Jack-Open	4 /12	**4-01-08**	2-01-06	2 x 4	1-03-08	3-15 1-08-07	67.95 44.00		
	4	J30 Jack-Open	10 /12	**3-05-08**	4-06-04	2 x 4	1-03-08	1-07-11 4-06-04	56.53 38.67		
	3	J31 Jack-Open	8 /12	**2-09-08**	3-03-02	2 x 4	1-03-08	1-04-13 3-03-02	34.35 23.00		
	2	C30 Jack-Open	8 /12	**1-09-07**	2-07-02	2 x 4	1-03-08 1-00-01	1-04-13 2-07-02	19.9 12.67		
	2	C31 Jack-Open	8 /12	**1-09-07**	2-07-02	2 x 4	1-03-08 1-01	1-04-13 2-07-02	17.81 11.33		

TOTAL # TRUSS= **114** TOTAL BFT OF ALL TRUSSES= **6483.5** BFT. TOTAL WEIGHT OF ALL TRSSES **10560.99** LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
2	Hardware	HGUS26-2	
1	Hardware	HGUS28-3	
2		LGT3-SDS2.5	
8	Hardware	LJS26DS	
10	Hardware	LUS24	
2	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= **25**

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T1	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Jul 23 07:27:12 2021 . Page 1
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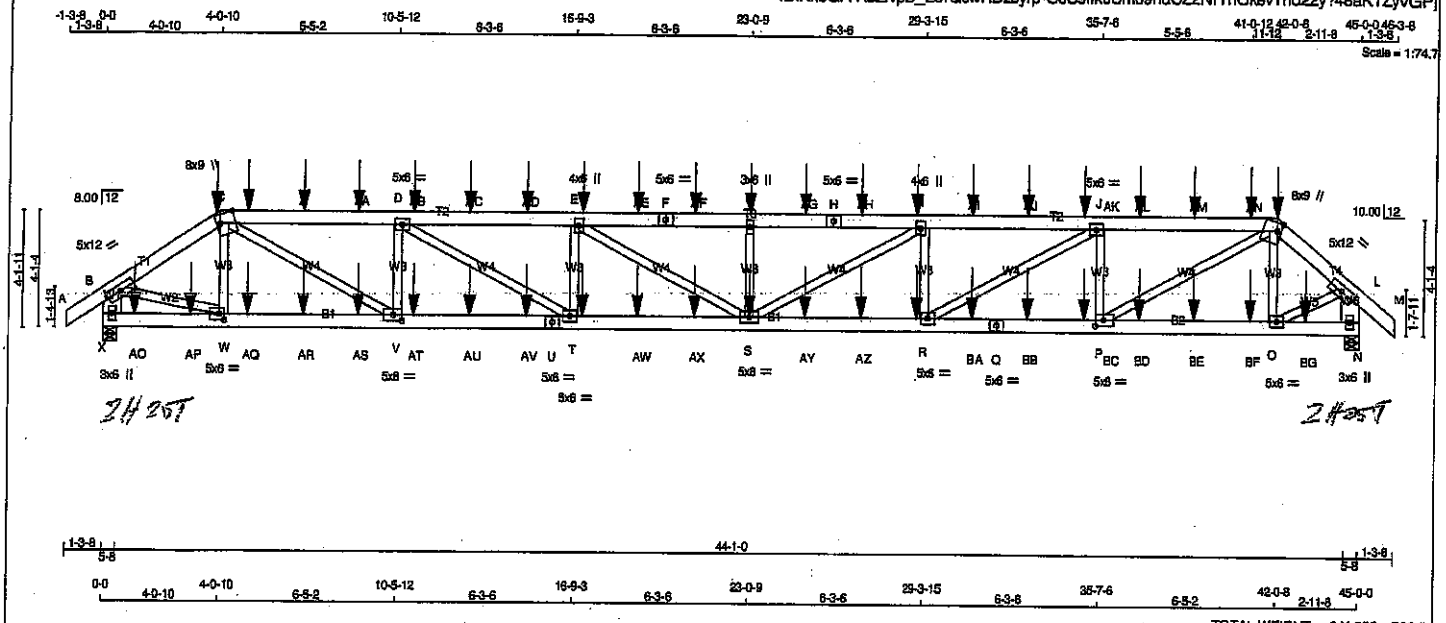

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
K - M	2x6	DRY	No.2	SPF
X - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
X - U	2x6	DRY	1650F 1.5E	SPF
U - Q	2x6	DRY	1650F 1.5E	SPF
Q - N	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-C	2	12	SIDE(140.3)
C-F	2	12	SIDE(210.5)
F-H	2	12	SIDE(210.5)
H-K	2	12	SIDE(210.5)
K-M	2	12	SIDE(140.3)
X-B	2	12	TOP
N-L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
X-U	2	12	SIDE(0.1)
U-Q	2	12	SIDE(210.5)
Q-N	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x4	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123954

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	5046	0	5090	205	-1161	5-8	5-8
N	5094	0	5094	0	-1158	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1161 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1158 LBS FACTORED UPLIFT

PROVIDE FOR 205 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS
1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	3693	2220 / 0	473 / 0	0 / 0	0 / -1153	1030 / 0	0 / 0
N	3725	2223 / 0	473 / 0	0 / 0	14 / -1152	1030 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	146 / -146	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FROM	TO	FACTORED VERT. LOAD LC1 (PLF)	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.05 (2)	10.00	
B-C	-6244 / 1399	-115.2	-115.2	0.15 (2)	4.64	
C-Y	-10870 / 2633	-115.2	-115.2	0.49 (1)	3.40	
Y-Z	-10870 / 2633	-115.2	-115.2	0.49 (1)	3.40	
Z-AA	-10870 / 2633	-115.2	-115.2	0.49 (1)	3.40	
AA-D	-10870 / 2633	-115.2	-115.2	0.49 (1)	3.40	
D-AB	-14041 / 3382	-115.2	-115.2	0.63 (1)	2.91	
AB-AC	-14041 / 3382	-115.2	-115.2	0.63 (1)	2.91	
AC-AD	-14041 / 3382	-115.2	-115.2	0.63 (1)	2.91	
AD-E	-14041 / 3382	-115.2	-115.2	0.63 (1)	2.91	
E-AE	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
AE-F	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
F-AF	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
AF-G	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
G-AG	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
AG-H	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
H-AH	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
AH-I	-14968 / 3598	-115.2	-115.2	0.64 (1)	2.82	
I-AI	-13632 / 3285	-115.2	-115.2	0.61 (1)	2.97	
AI-AJ	-13632 / 3285	-115.2	-115.2	0.61 (1)	2.97	
AJ-AK	-13632 / 3285	-115.2	-115.2	0.61 (1)	2.97	
AK-J	-13632 / 3285	-115.2	-115.2	0.61 (1)	2.97	
J-AL	-10049 / 2447	-115.2	-115.2	0.45 (1)	3.56	
AL-AM	-10049 / 2447	-115.2	-115.2	0.45 (1)	3.56	
AM-AN	-10049 / 2447	-115.2	-115.2	0.45 (1)	3.56	
AN-K	-10049 / 2447	-115.2	-115.2	0.45 (1)	3.56	
K-L	-5185 / 1180	-115.2	-115.2	0.10 (14)	5.08	
L-M	0 / 53	-115.2	-115.2	0.05 (1)	10.00	
X-B	-5025 / 1178	0.0	0.0	0.14 (2)	7.23	
N-L	-5101 / 1174	0.0	0.0	0.14 (1)	7.19	
X-AO	-187 / 196	-39.5	-39.5	0.07 (17)	6.25	
AO-AP	-187 / 196	-39.5	-39.5	0.07 (17)	6.25	
AP-W	-187 / 196	-39.5	-39.5	0.07 (17)	6.25	
W-AQ	-1062 / 5151	-39.5	-39.5	0.26 (2)	6.25	
AQ-AR	-1062 / 5151	-39.5	-39.5	0.26 (2)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W-C	-774 / 254	0.06 (2)
O-K	-1057 / 296	0.09 (1)
B-W	-1094 / 5299	0.47 (2)
O-L	-803 / 4207	0.37 (1)
P-K	-1719 / 7057	0.62 (2)
C-V	-1640 / 6613	0.58 (3)
P-J	-3165 / 914	0.27 (2)
V-D	-2945 / 874	0.25 (3)
R-J	-998 / 4165	0.37 (2)
D-T	-910 / 3703	0.33 (3)
R-I	-1748 / 553	0.15 (2)
T-E	-1519 / 510	0.13 (3)
S-I	-381 / 1568	0.14 (2)
E-S	-295 / 1107	0.10 (11)
S-G	-999 / 379	0.09 (3)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360.(1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.47")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 769 (0.70")

CSI: TC=0.64/1.00 (E-G:1) , BC=0.64/1.00 (S-T:1) , WB=0.62/1.00 (K-P:2) , SSI=0.19/1.00 (J-K:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T1	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	5.0	12.0		
C	TTWW+m	MT20	8.0	9.0	Edge	6.50
D	TMWW-t	MT20	5.0	6.0		
E	TMWW+t	MT20	4.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMW+w	MT20	3.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0		
J	TMWW-t	MT20	5.0	6.0		
K	TTWW+m	MT20	8.0	9.0	3.50	1.75
L	TMVW-t	MT20	5.0	12.0		
N	BMV1+p	MT20	3.0	6.0		
O, R, T						
O	BMWW-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	8.0	2.50	3.50
Q	BS-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	5.0	8.0		
U	BS-t	MT20	5.0	6.0		
V	BMWW-t	MT20	5.0	8.0	2.50	3.75
W	BMWW-t	MT20	5.0	6.0	2.50	2.00
X	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
AR-AS	-1062 / 5151	-39.5	-39.5	0.26 (2)	6.25	
AS-V	-1062 / 5151	-39.5	-39.5	0.26 (2)	6.25	
V-AT	-2450 / 10870	-39.5	-39.5	0.51 (1)	6.25	
AT-AU	-2450 / 10870	-39.5	-39.5	0.51 (1)	6.25	
AU-AV	-2450 / 10870	-39.5	-39.5	0.51 (1)	6.25	
AV-U	-2450 / 10870	-39.5	-39.5	0.51 (1)	6.25	
U-T	-2450 / 10870	-39.5	-39.5	0.51 (1)	6.25	
T-AW	-3198 / 14041	-39.5	-39.5	0.64 (1)	6.25	
AW-AX	-3198 / 14041	-39.5	-39.5	0.64 (1)	6.25	
AX-S	-3198 / 14041	-39.5	-39.5	0.64 (1)	6.25	
S-AY	-3084 / 13632	-39.5	-39.5	0.62 (1)	6.25	
AY-AZ	-3084 / 13632	-39.5	-39.5	0.62 (1)	6.25	
AZ-R	-3084 / 13632	-39.5	-39.5	0.62 (1)	6.25	
R-BA	-2221 / 10050	-39.5	-39.5	0.47 (1)	6.25	
BA-Q	-2221 / 10050	-39.5	-39.5	0.47 (1)	6.25	
Q-BB	-2221 / 10050	-39.5	-39.5	0.47 (1)	6.25	
BB-BC	-2221 / 10050	-39.5	-39.5	0.47 (1)	6.25	
BC-P	-2221 / 10050	-39.5	-39.5	0.47 (1)	6.25	
P-BD	-722 / 3918	-39.5	-39.5	0.22 (1)	6.25	
BD-BE	-722 / 3918	-39.5	-39.5	0.22 (1)	6.25	
BE-BF	-722 / 3918	-39.5	-39.5	0.22 (1)	6.25	
BF-O	-722 / 3918	-39.5	-39.5	0.22 (1)	6.25	
O-BG	-10 / 22	-39.5	-39.5	0.07 (17)	6.25	
BG-N	-10 / 22	-39.5	-39.5	0.07 (17)	6.25	

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-10	-40	-40	—	FRONT	VERT	DEAD	—	C1
C	4-0-10	-171	-171	—	FRONT	VERT	SNOW	—	C1
E	17-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
G	23-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
I	29-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
K	42-0-8	-40	-40	—	FRONT	VERT	DEAD	—	C1
K	42-0-8	-171	-171	—	FRONT	VERT	SNOW	—	C1
R	29-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
S	23-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
T	17-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
Y	5-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
Z	7-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AA	9-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AB	11-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AC	13-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AD	15-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AE	19-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AF	21-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AG	25-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AH	27-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AI	31-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AJ	33-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AK	35-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AL	37-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AM	39-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AN	41-0-12	-61	-61	—	FRONT	VERT	TOTAL	—	C1
AO	1-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AP	3-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AQ	5-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AR	7-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AS	9-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AT	11-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AU	13-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AV	15-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AW	19-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AX	21-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AY	25-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AZ	27-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BA	31-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BB	33-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BC	35-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BD	37-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BE	39-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BF	41-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BG	43-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1**:- A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN). AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.96 (U) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123954

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T2	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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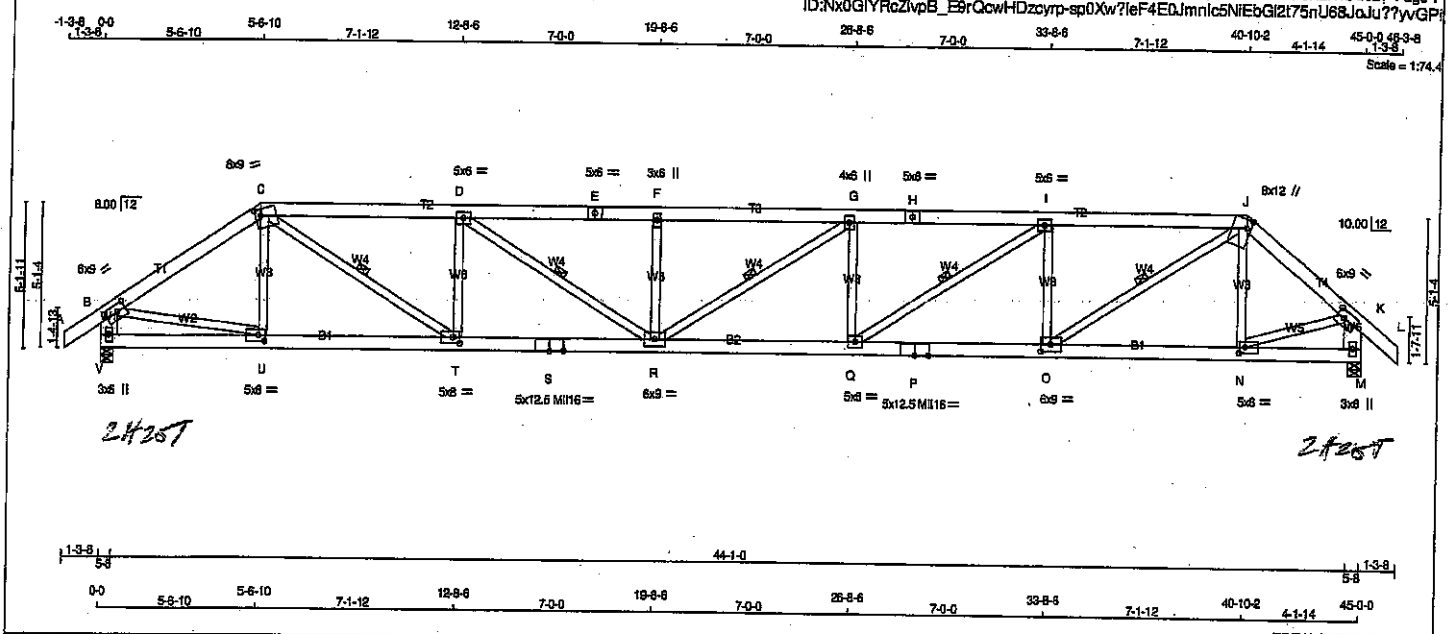

TOTAL WEIGHT = 261 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - E	2x6	DRY	No.2	SPF
E - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
V - B	2x8	DRY	No.2	SPF
M - K	2x8	DRY	No.2	SPF
V - S	2x6	DRY	1650F 1.5E	SPF
S - P	2x8	DRY	1650F 1.5E	SPF
P - M	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TTWW-m	MT20	8.0	9.0	2.75	2.25
D	TMWW-t	MT20	5.0	6.0		
E	TS-t	MT20	5.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW-t	MT20	5.0	6.0		
J	TTWW+m	MT20	8.0	12.0	3.50	1.75
K	TMVW-t	MT20	6.0	9.0	3.00	3.25
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	8.0	2.50	2.50
O	BMWW-t	MT20	6.0	9.0	3.00	4.25
P	BS-t	MII16	5.0	12.5		
Q	BMWW-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	6.0	9.0		
S	BS-t	MII16	5.0	12.5	0.25	6.25
T	BMWW-t	MT20	5.0	8.0	2.50	2.75
U	BMWW-t	MT20	5.0	8.0	2.50	2.75
V	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
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H. J. G. ALVES
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PROVINCE OF ONTARIO

Structural component only
DWG# T-2123955 1/L

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3645	0	3693	245	-1192	5-8	5-8
M	3648	0	3648	0	-1188	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1192 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1188 LBS FACTORED UPLIFT

PROVIDE FOR 245 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2891	1630 / 0	472 / 0	0 / 0	0 / -1150	620 / 0	0 / 0
M	2893	1600 / 0	473 / 0	0 / 0	45 / -1147	620 / 0	0 / 0
HORIZONTAL REACTIONS							
V	—	0 / 0	0 / 0	0 / 0	175 / -174	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.77 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF J-O, C-T, I-Q, D-R, G-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4479 / 1474	-115.2	-115.2	0.47 (2)	3.70
C- D	-6981 / 2421	-115.2	-115.2	0.77 (1)	2.80
D- E	-8391 / 2865	-115.2	-115.2	0.94 (1)	2.39
E- F	-8391 / 2865	-115.2	-115.2	0.94 (1)	2.39
F- G	-8391 / 2865	-115.2	-115.2	0.81 (1)	2.56
G- H	-8235 / 2805	-115.2	-115.2	0.92 (1)	2.43
H- I	-8235 / 2805	-115.2	-115.2	0.92 (1)	2.43
I- J	-6474 / 2256	-115.2	-115.2	0.72 (1)	2.94
J- K	-3798 / 1271	-115.2	-115.2	0.27 (14)	4.22
K- L	0 / 53	-115.2	-115.2	0.09 (1)	10.00
V- B	-3608 / 1211	0.0	0.0	0.18 (2)	6.32
M- K	-3601 / 1204	0.0	0.0	0.18 (1)	6.32
V- U	-227 / 235	-39.5	-39.5	0.10 (17)	6.25
U- T	-1120 / 3710	-39.5	-39.5	0.35 (2)	6.25
T- S	-2196 / 6962	-39.5	-39.5	0.59 (1)	6.12
S- R	-2196 / 6962	-39.5	-39.5	0.59 (1)	6.12
R- Q	-2573 / 8235	-39.5	-39.5	0.69 (1)	5.77
Q- P	-1984 / 6474	-39.5	-39.5	0.55 (1)	6.25
P- O	-1984 / 6474	-39.5	-39.5	0.55 (1)	6.25
O- N	-771 / 2890	-39.5	-39.5	0.29 (1)	6.25
N- M	-10 / 22	-39.5	-39.5	0.09 (5)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U- C	-363 / 221	0.08 (9)
N- J	-499 / 253	0.11 (1)
B- U	-1046 / 3766	0.61 (2)
N- K	-828 / 3001	0.48 (1)
O- J	-1443 / 4308	0.69 (2)
C- T	-1355 / 3943	0.63 (3)
O- I	-2072 / 854	0.49 (2)
T- D	-1874 / 803	0.45 (3)
Q- I	-707 / 2154	0.35 (2)
D- R	-603 / 1777	0.29 (3)
Q- G	-912 / 451	0.22 (2)
R- F	-761 / 404	0.19 (2)
R- G	-80 / 228	0.04 (2)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.46")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 816 (0.66")

CSI: TC=0.94/1.00 (D-F:1) , BC=0.69/1.00 (Q-R:1) , WB=0.69/1.00 (J-O:2) , SSI=0.29/1.00 (I-J:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (N) (INPUT = 0.90)
JSI METAL= 0.76 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T2	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123955

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T3	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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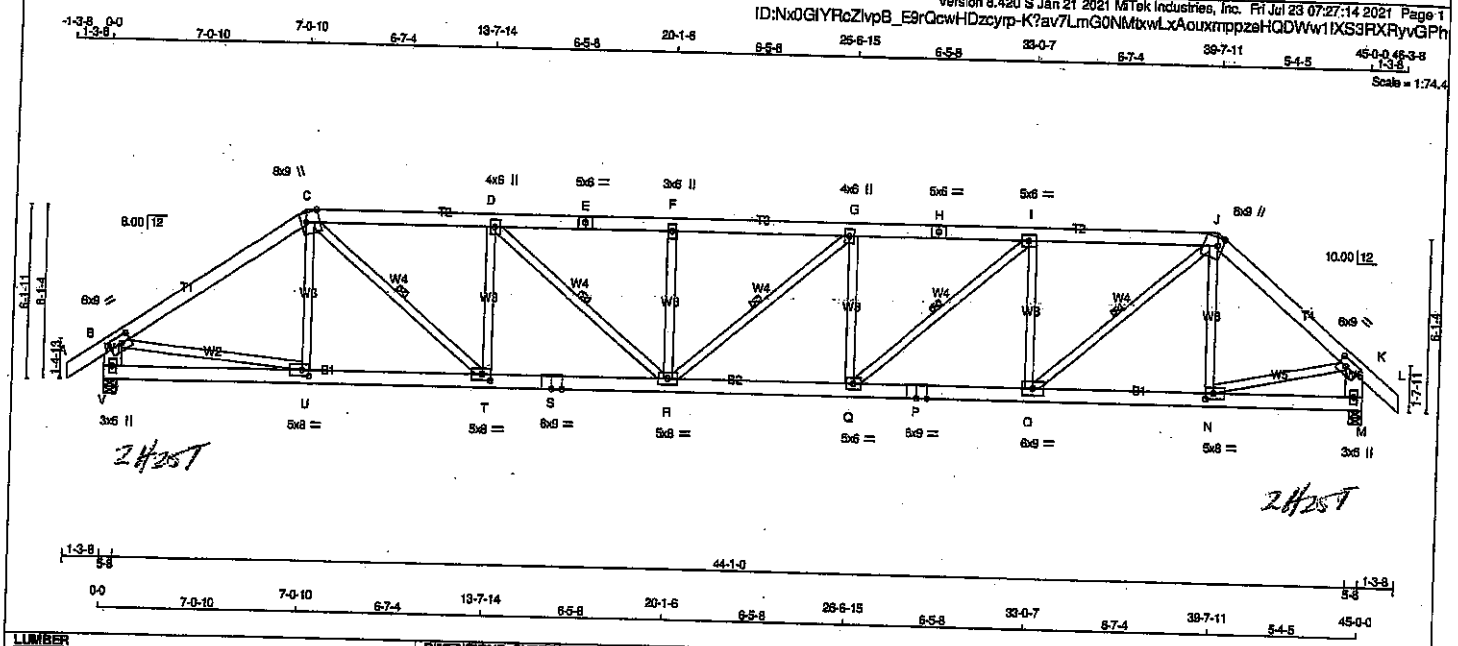

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - E	2x6	DRY	No.2	SPF
E - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TTWW+m	MT20	8.0	9.0	Edge	5.75
D	TMWW+t	MT20	4.0	6.0		
E	TS-t	MT20	5.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW-t	MT20	5.0	6.0		
J	TTWW+m	MT20	8.0	9.0	3.50	2.25
K	TMVW-t	MT20	6.0	9.0	3.00	3.25
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	8.0	2.50	3.25
O	BMWW-t	MT20	6.0	9.0		
P	BS-t	MT20	6.0	9.0		
Q	BMWW-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	5.0	8.0		
S	BS-t	MT20	6.0	9.0		
T	BMWW-t	MT20	5.0	8.0	2.50	3.50
U	BMWW-t	MT20	5.0	8.0	2.50	3.00
V	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

~~NOTES (1)~~
1)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009924
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123956

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 273 lb [M]

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3645	0	3694	284	-1185	5-8	5-8
M	3648	0	3648	0	-1179	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1185 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1179 LBS FACTORED UPLIFT

PROVIDE FOR 284 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2691	1631 / 0	473 / 0	0 / 0	0 / -1145	620 / 0	0 / 0
M	2693	1600 / 0	473 / 0	0 / 0	75 / -1141	620 / 0	0 / 0

HORIZONTAL REACTIONS

V	—	0 / 0	0 / 0	0 / 0	203 / -202	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.63 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF J-O, C-T, I-Q, D-R, G-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4480 / 1464	-115.2	-115.2	0.76 (2)	3.36
C- D	-5960 / 2115	-115.2	-115.2	0.59 (1)	3.18
D- E	-6928 / 2404	-115.2	-115.2	0.68 (1)	2.88
E- F	-6928 / 2404	-115.2	-115.2	0.68 (1)	2.88
F- G	-6928 / 2404	-115.2	-115.2	0.57 (1)	3.00
G- H	-6782 / 2345	-115.2	-115.2	0.66 (1)	2.92
H- I	-6782 / 2345	-115.2	-115.2	0.66 (1)	2.92
I- J	-5512 / 1960	-115.2	-115.2	0.55 (1)	3.33
J- K	-3874 / 1284	-115.2	-115.2	0.39 (1)	4.04
K- L	0 / 53	-115.2	-115.2	0.09 (1)	10.00
V- B	-3576 / 1210	0.0	0.0	0.18 (2)	6.33
M- K	-3565 / 1199	0.0	0.0	0.18 (1)	6.35
V- U	-267 / 275	-39.5	-39.5	0.17 (17)	6.25
U- T	-1107 / 3718	-39.5	-39.5	0.56 (1)	6.25
T- S	-1847 / 5961	-39.5	-39.5	0.79 (1)	5.88
S- R	-1847 / 5961	-39.5	-39.5	0.79 (1)	5.88
R- Q	-2070 / 6782	-39.5	-39.5	0.89 (1)	5.63
Q- P	-1638 / 5513	-39.5	-39.5	0.73 (1)	6.15
P- O	-1638 / 5513	-39.5	-39.5	0.73 (1)	6.15
O- N	-762 / 2968	-39.5	-39.5	0.44 (1)	6.25
N- M	-10 / 22	-39.5	-39.5	0.13 (17)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U- C	-253 / 213	0.09 (8)
N- J	-379 / 215	0.13 (8)
B- U	-1004 / 3750	0.61 (14)
N- K	-805 / 3027	0.49 (1)
D- J	-1150 / 3410	0.55 (2)
C- T	-1068 / 3031	0.49 (3)
O- I	-1962 / 806	0.71 (2)
T- D	-1726 / 747	0.63 (3)
Q- I	-573 / 1743	0.28 (2)
D- R	-476 / 1369	0.22 (3)
Q- G	-891 / 434	0.32 (2)
R- F	-721 / 373	0.26 (2)
R- G	-88 / 251	0.04 (2)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.8.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.35")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.48")

CSI: TC=0.76/1.00 (B-C:2) , BC=0.68/1.00 (Q-R:1) , WB=0.71/1.00 (I-O:2) , SSI=0.27/1.00 (I-J:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (U) (INPUT = 0.90)
JSI METAL= 0.92 (S) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T3	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123956

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T4	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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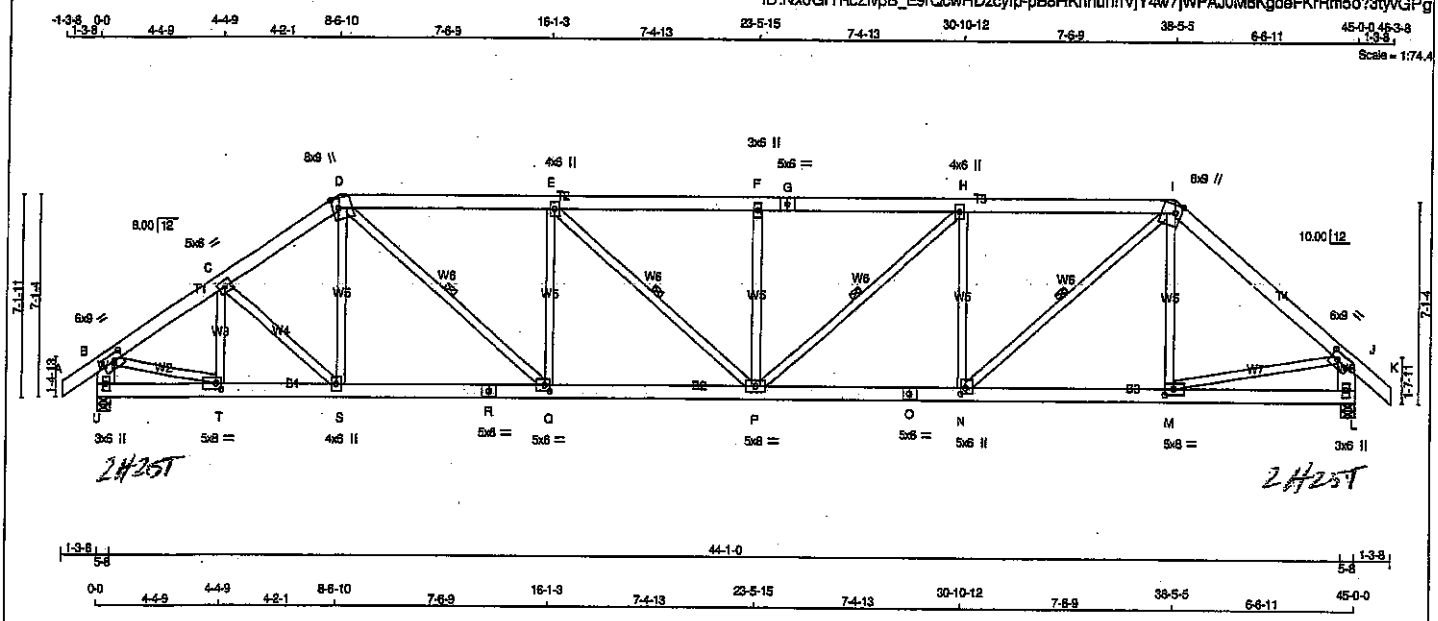

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
U - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	8.0	9.0	Edge	2.50
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	8.0	9.0	3.50	2.50
J	TMVW-t	MT20	6.0	9.0	3.00	3.25
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0	2.50	3.50
N	BMWW+t	MT20	5.0	6.0	2.50	2.00
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0		
Q	BMWW-t	MT20	5.0	6.0	2.50	2.25
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	5.0	8.0	2.50	2.25
U	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123957

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3645	0	3690	324	-1177	5-8	5-8
L	3648	0	3648	0	-1169	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1177 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1169 LBS FACTORED UPLIFT

PROVIDE FOR 324 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2691	1628 / 0	473 / 0	0 / 0	0 / -1139	620 / 0	0 / 0
L	2693	1600 / 0	473 / 0	0 / 0	102 / -1133	620 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	231 / -231	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.98 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.09 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF I-N, D-Q, H-P, E-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00	
B- C	-4364 / 1448	-115.2	-115.2	0.25 (13)	3.98	
C- D	-4437 / 1579	-115.2	-115.2	0.26 (13)	3.98	
D- E	-5534 / 1988	-115.2	-115.2	0.72 (1)	3.12	
E- F	-5960 / 2093	-115.2	-115.2	0.78 (1)	2.98	
F- G	-5960 / 2093	-115.2	-115.2	0.78 (1)	2.98	
G- H	-5960 / 2093	-115.2	-115.2	0.78 (1)	2.98	
H- I	-5190 / 1866	-115.2	-115.2	0.69 (1)	3.25	
I- J	-3698 / 1272	-115.2	-115.2	0.59 (1)	3.82	
J- K	0 / 53	-115.2	-115.2	0.09 (1)	10.00	
U- B	-3592 / 1185	0.0	0.0	0.18 (2)	6.32	
L- J	-3544 / 1192	0.0	0.0	0.18 (1)	6.36	
U- T	-306 / 315	-39.5	-39.5	0.09 (5)	6.25	
T- S	-1207 / 3651	-39.5	-39.5	0.54 (2)	6.25	
S- R	-1080 / 3669	-39.5	-39.5	0.54 (1)	6.25	
R- Q	-1080 / 3659	-39.5	-39.5	0.54 (1)	6.25	
Q- P	-1678 / 5534	-39.5	-39.5	0.75 (1)	6.09	
P- O	-1510 / 5190	-39.5	-39.5	0.71 (1)	6.25	
O- N	-1510 / 5190	-39.5	-39.5	0.71 (1)	6.25	
N- M	-735 / 2983	-39.5	-39.5	0.46 (1)	6.25	
M- L	-10 / 22	-39.5	-39.5	0.18 (17)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	-838 / 275	0.11 (2)
C- S	-203 / 360	0.07 (11)
S- D	-74 / 347	0.05 (5)
M- I	-272 / 201	0.15 (8)
B- T	-1077 / 3727	0.60 (2)
M- J	-772 / 3028	0.49 (1)
N- I	-1030 / 3020	0.49 (13)
D- Q	-930 / 2607	0.44 (11)
N- H	-1704 / 745	0.93 (2)
Q- E	-1427 / 685	0.78 (3)
P- H	-368 / 1119	0.18 (2)
E- P	-270 / 694	0.13 (11)
P- F	-787 / 406	0.43 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.27")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.36")

CSI: TC=0.78/1.00 (F-H:1) , BC=0.75/1.00 (P-Q:1) , WB=0.93/1.00 (H-N:2) , SSI=0.31/1.00 (H-I:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (N) (INPUT = 0.90)
JSI METAL= 0.94 (O) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T4	4	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123957

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T5	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Jul 23 07:27:16 2021 Page 1
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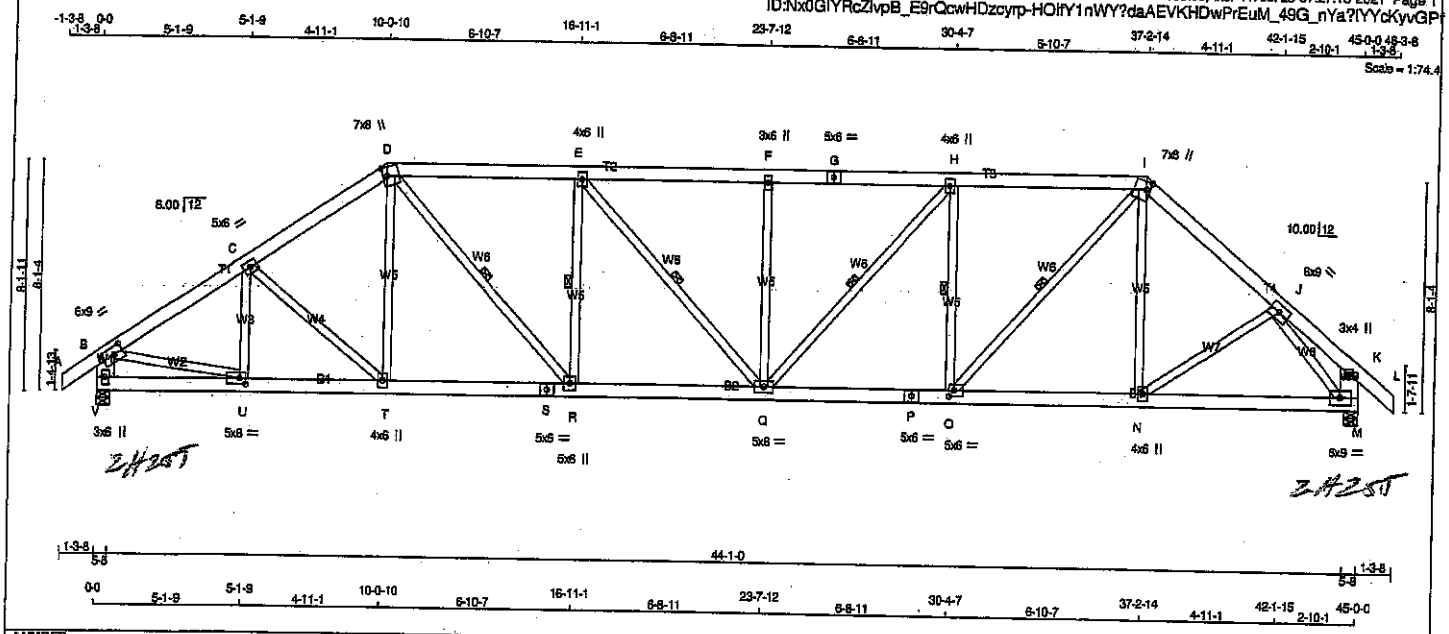

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - L	2x6	DRY	No.2	SPF
V - B	2x8	DRY	No.2	SPF
M - K	2x8	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	7.0	8.0	3.75	1.75
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	7.0	8.0	3.25	1.75
J	TMWW-t	MT20	6.0	9.0		
K	TMV+p	MT20	3.0	4.0		
M	BMVW1-t	MT20	6.0	9.0		
N	BMWW+t	MT20	4.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.00
P	BS-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	5.0	8.0		
R	BMWW+t	MT20	5.0	6.0		
S	BS-t	MT20	5.0	6.0		
T	BMWW+t	MT20	4.0	6.0		
U	BMWW-t	MT20	5.0	8.0	2.50	2.50
V	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J./G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123958

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3645	0	3663	364	-1168	5-8	5-8
M	3648	0	3848	0	-1156	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1168 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1156 LBS FACTORED UPLIFT

PROVIDE FOR 364 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2691	1624 / 0	473 / 0	0 / 0	0 / -1133	620 / 0	0 / 0
M	2693	1600 / 0	473 / 0	0 / 0	129 / -1125	620 / 0	0 / 0
HORIZONTAL REACTIONS							
V	—	0 / 0	0 / 0	0 / 0	260 / -259	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF I-O, D-R, H-O, E-R, H-Q, E-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B-C	-4451 / 1467	-115.2	-115.2	0.32 (2)	3.87
C-D	-4342 / 1556	-115.2	-115.2	0.31 (2)	3.94
D-E	-4894 / 1796	-115.2	-115.2	0.56 (1)	3.49
E-F	-5165 / 1849	-115.2	-115.2	0.57 (1)	3.38
F-G	-5165 / 1849	-115.2	-115.2	0.57 (1)	3.38
G-H	-5165 / 1849	-115.2	-115.2	0.57 (1)	3.38
H-I	-4579 / 1683	-115.2	-115.2	0.53 (1)	3.61
I-J	-3896 / 1373	-115.2	-115.2	0.29 (1)	4.14
J-K	-33 / 167	-115.2	-115.2	0.14 (14)	6.25
K-L	0 / 53	-115.2	-115.2	0.09 (1)	10.00
V-B	-3581 / 1180	0.0	0.0	0.18 (2)	6.33
M-K	-294 / 209	0.0	0.0	0.02 (14)	7.81
V-U	-346 / 354	-39.5	-39.5	0.10 (5)	6.25
U-T	-1237 / 3731	-39.5	-39.5	0.53 (1)	6.25
T-S	-1034 / 3587	-39.5	-39.5	0.52 (1)	6.25
S-R	-1034 / 3587	-39.5	-39.5	0.52 (1)	6.25
R-Q	-1444 / 4894	-39.5	-39.5	0.66 (1)	6.25
Q-P	-1282 / 4579	-39.5	-39.5	0.62 (1)	6.25
P-O	-1282 / 4579	-39.5	-39.5	0.62 (1)	6.25
O-N	-700 / 2989	-39.5	-39.5	0.50 (1)	6.25
N-M	-771 / 2640	-39.5	-39.5	0.46 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U-C	-501 / 250	0.10 (2)
C-T	-272 / 269	0.14 (7)
T-D	-133 / 443	0.11 (13)
N-I	-99 / 305	0.08 (9)
N-J	-118 / 636	0.10 (2)
B-U	-1074 / 3788	0.61 (2)
O-I	-869 / 2508	0.44 (13)
D-R	-772 / 2106	0.39 (11)
O-H	-1614 / 699	0.44 (2)
R-E	-1297 / 637	0.35 (3)
Q-H	-324 / 992	0.16 (13)
E-Q	-236 / 561	0.12 (11)
Q-F	-714 / 369	0.57 (1)
J-M	-4186 / 1257	0.84 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

TOTAL WEIGHT = 293 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.22")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31")

CSI: TC=0.57/1.00 (F-H:1) , BC=0.66/1.00 (Q-R:1) , WB=0.84/1.00 (J-M:1) , SSI=0.29/1.00 (H-I:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.81 (P) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T5	1	1	GREENPARK HOMES TRUSS DESC.	-

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2], BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/13/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123958

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T6	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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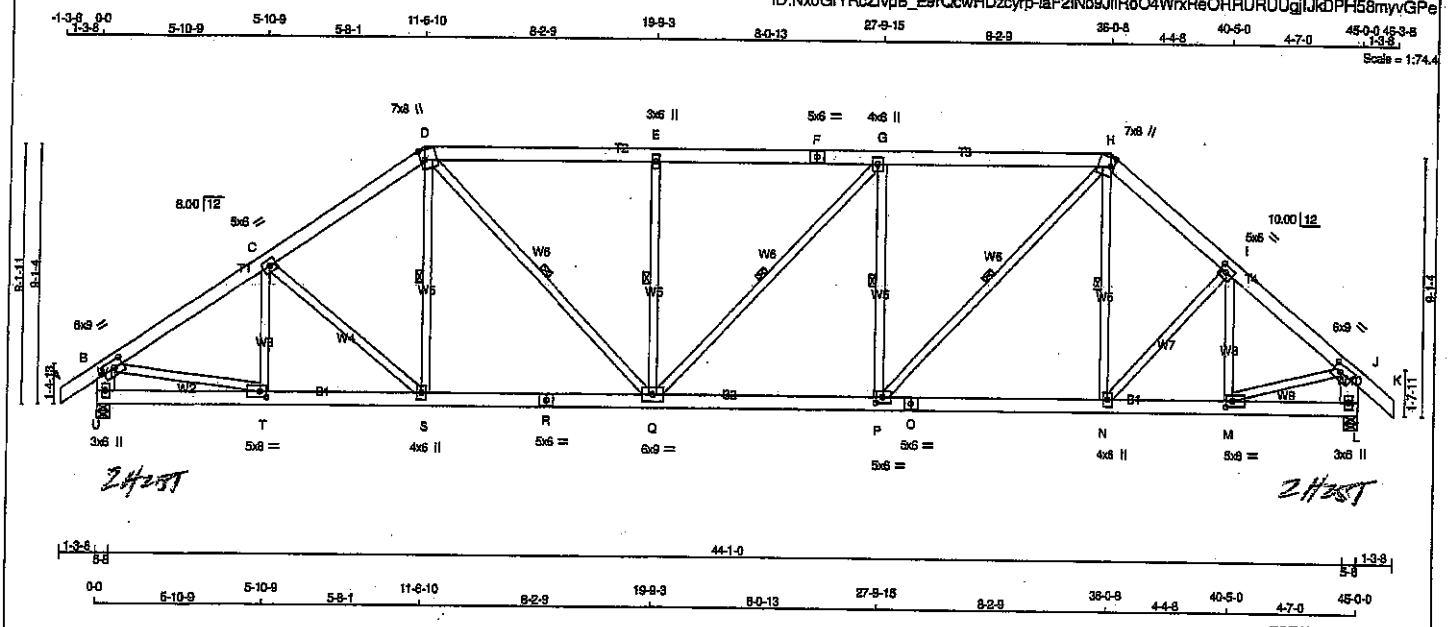

TOTAL WEIGHT = 294 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
U - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	7.0	8.0	4.00	1.75
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	7.0	8.0	3.75	1.50
I	TMWW-t	MT20	5.0	6.0	2.50	2.75
J	TMVW-t	MT20	6.0	9.0	3.00	3.25
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0	2.50	2.75
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75
Q	BMWWW-t	MT20	6.0	9.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	5.0	8.0	2.50	2.75
U	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123959

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3645	0	3672	403	-1158	5-8	5-8
L	3648	0	3648	0	-1142	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1158 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1142 LBS FACTORED UPLIFT

PROVIDE FOR 403 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2591	1617 / 0	473 / 0	0 / 0	14 / -1125	620 / 0	0 / 0
L	2693	1600 / 0	473 / 0	0 / 0	154 / -1114	620 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	288 / -287	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF D-S, H-N, H-P, D-Q, G-P, E-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4508 / 1472	-115.2	-115.2	0.44 (2)	3.74
C- D	-4232 / 1524	-115.2	-115.2	0.42 (2)	3.88
D- E	-4567 / 1694	-115.2	-115.2	0.72 (1)	3.40
E- F	-4567 / 1695	-115.2	-115.2	0.72 (1)	3.36
F- G	-4567 / 1695	-115.2	-115.2	0.72 (1)	3.38
G- H	-4383 / 1618	-115.2	-115.2	0.71 (1)	3.46
H- I	-3847 / 1415	-115.2	-115.2	0.29 (14)	4.21
I- J	-3808 / 1248	-115.2	-115.2	0.27 (14)	4.24
J- K	0 / 53	-115.2	-115.2	0.09 (1)	10.00
U- B	-3561 / 1173	0.0	0.0	0.17 (2)	6.35
L- J	-3554 / 1154	0.0	0.0	0.18 (1)	6.35
U- T	-385 / 394	-39.5	-39.5	0.12 (5)	6.25
T- S	-1254 / 3762	-39.5	-39.5	0.57 (1)	6.25
S- R	-978 / 3492	-39.5	-39.5	0.54 (1)	6.25
R- Q	-978 / 3492	-39.5	-39.5	0.54 (1)	6.25
Q- P	-1198 / 4384	-39.5	-39.5	0.65 (1)	6.25
P- O	-684 / 2924	-39.5	-39.5	0.48 (1)	6.25
O- N	-684 / 2924	-39.5	-39.5	0.48 (1)	6.25
N- M	-747 / 2949	-39.5	-39.5	0.47 (1)	6.25
M- L	-10 / 22	-39.5	-39.5	0.08 (4)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	-417 / 229	0.10 (8)
C- S	-454 / 363	0.35 (2)
S- D	-180 / 601	0.10 (5)
N- H	-155 / 388	0.06 (6)
N- I	-128 / 278	0.07 (8)
M- I	-580 / 239	0.16 (1)
B- T	-1062 / 3826	0.62 (1)
M- J	-791 / 3035	0.49 (1)
P- H	-775 / 2260	0.58 (13)
D- Q	-681 / 1766	0.51 (11)
P- G	-1313 / 636	0.46 (2)
Q- E	-1012 / 527	0.36 (3)
Q- G	-149 / 412	0.11 (13)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.72/1.00 (E-G:1) , BC=0.65/1.00 (P-Q:1) , WB=0.62/1.00 (B-T:1) , SSI=0.34/1.00 (G-H:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1997	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.76 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T6	1	1	TRUSS DESC.	

Tamarack Roof Truss; Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.8} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123959

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T7	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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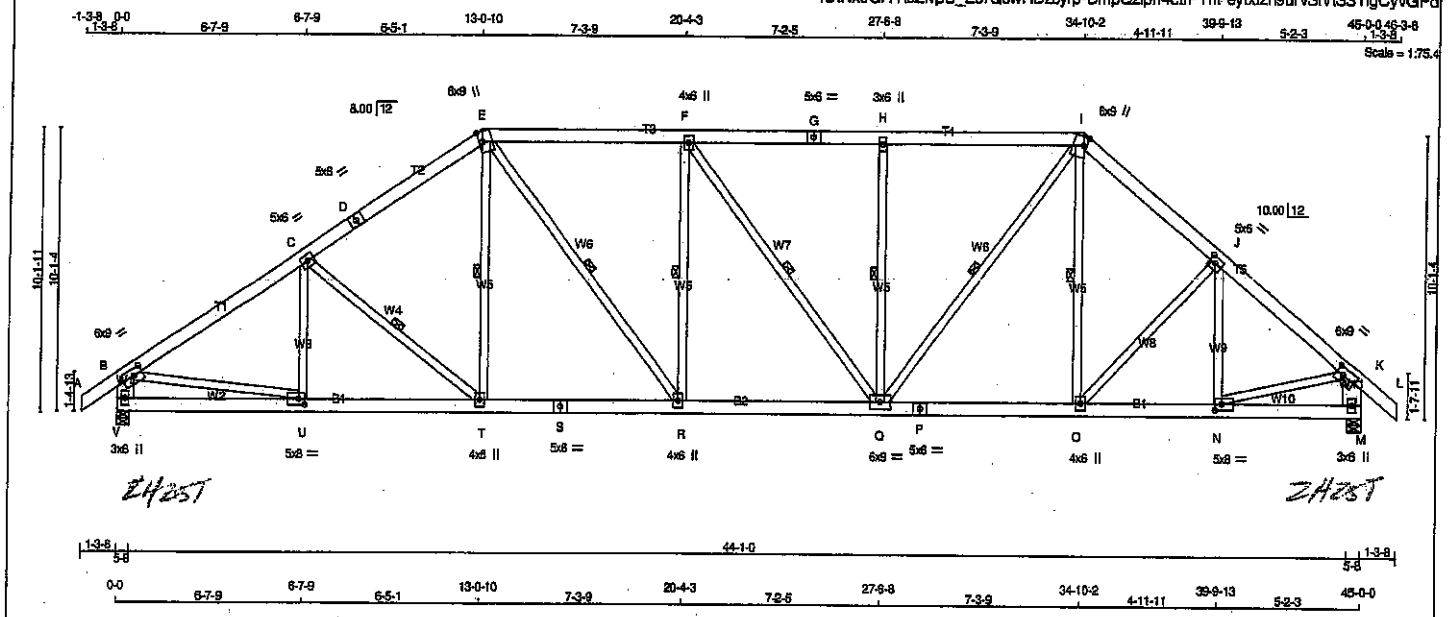

TOTAL WEIGHT = 2 X 304 = 609 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - L	2x6	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.75	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TS-t	MT20	5.0	6.0		
E	TTWW+m	MT20	6.0	9.0	4.25	1.50
F	TMWW+t	MT20	4.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMW+w	MT20	3.0	6.0		
I	TTWW+m	MT20	6.0	9.0	3.75	1.50
J	TMWW-t	MT20	5.0	6.0	2.50	2.75
K	TMVW-t	MT20	6.0	9.0	3.00	3.25
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	8.0	2.50	3.00
O, R, T						
O	BMWW+t	MT20	4.0	6.0		
P	BS-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	6.0	9.0		
S	BS-t	MT20	5.0	6.0		
U	BMWW-t	MT20	5.0	8.0	2.50	2.75
V	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES.
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123960

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3645	0	3656	443	-1146	5-8	5-8
M	3648	0	3648	0	-1126	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1146 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1126 LBS FACTORED UPLIFT

PROVIDE FOR 443 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST.LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2691	1607 / 0	473 / 0	0 / 0	64 / -1117	620 / 0	0 / 0
M	2693	1600 / 0	473 / 0	0 / 0	177 / -1103	620 / 0	0 / 0

HORIZONTAL REACTIONS

V	—	0 / 0	0 / 0	0 / 0	316 / -316	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-T, E-T, E-R, F-R, F-Q, H-Q, I-Q, I-O.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4545 / 1465	-115.2	-115.2	0.60 (2)	3.57
C- D	-4094 / 1483	-115.2	-115.2	0.55 (2)	3.80
D- E	-4094 / 1483	-115.2	-115.2	0.55 (2)	3.80
E- F	-4099 / 1556	-115.2	-115.2	0.54 (1)	3.77
F- G	-3929 / 1484	-115.2	-115.2	0.53 (1)	3.85
G- H	-3929 / 1484	-115.2	-115.2	0.53 (1)	3.85
H- I	-3929 / 1483	-115.2	-115.2	0.52 (1)	3.87
I- J	-3777 / 1397	-115.2	-115.2	0.33 (14)	4.18
J- K	-3869 / 1246	-115.2	-115.2	0.32 (14)	4.13
K- L	0 / 53	-115.2	-115.2	0.09 (1)	10.00
V- B	-3540 / 1165	0.0	0.0	0.17 (2)	6.36
M- K	-3550 / 1140	0.0	0.0	0.18 (1)	6.36
V- U	-425 / 434	-39.5	-39.5	0.14 (4)	6.25
U- T	-1262 / 3820	-39.5	-39.5	0.56 (1)	6.25
T- S	-915 / 3372	-39.5	-39.5	0.50 (1)	6.25
S- R	-915 / 3372	-39.5	-39.5	0.50 (1)	6.25
R- Q	-1122 / 4099	-39.5	-39.5	0.58 (1)	6.25
Q- P	-622 / 2867	-39.5	-39.5	0.44 (1)	6.25
P- O	-622 / 2867	-39.5	-39.5	0.44 (1)	6.25
O- N	-732 / 3002	-39.5	-39.5	0.45 (1)	6.25
N- M	-10 / 22	-39.5	-39.5	0.09 (4)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U- C	-338 / 216	0.10 (8)
C- T	-665 / 451	0.22 (2)
T- E	-231 / 701	0.11 (2)
E- R	-587 / 1444	0.46 (11)
R- F	-867 / 533	0.40 (3)
F- Q	-452 / 167	0.36 (2)
Q- H	-893 / 467	0.41 (3)
Q- I	-661 / 1926	0.52 (13)
O- I	-212 / 462	0.09 (14)
O- J	-272 / 353	0.20 (8)
N- J	-488 / 223	0.16 (8)
B- U	-1041 / 3855	0.62 (1)
N- K	-771 / 3070	0.49 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.60/1.00 (B-C:2) , BC=0.58/1.00 (Q-R:1) , WB=0.62/1.00 (B-U:1) , SSI=0.30/1.00 (E-F:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (N) (INPUT = 0.90)
JSI METAL= 0.77 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T7	2	1	TRUSS DESC.	

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123960

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T8	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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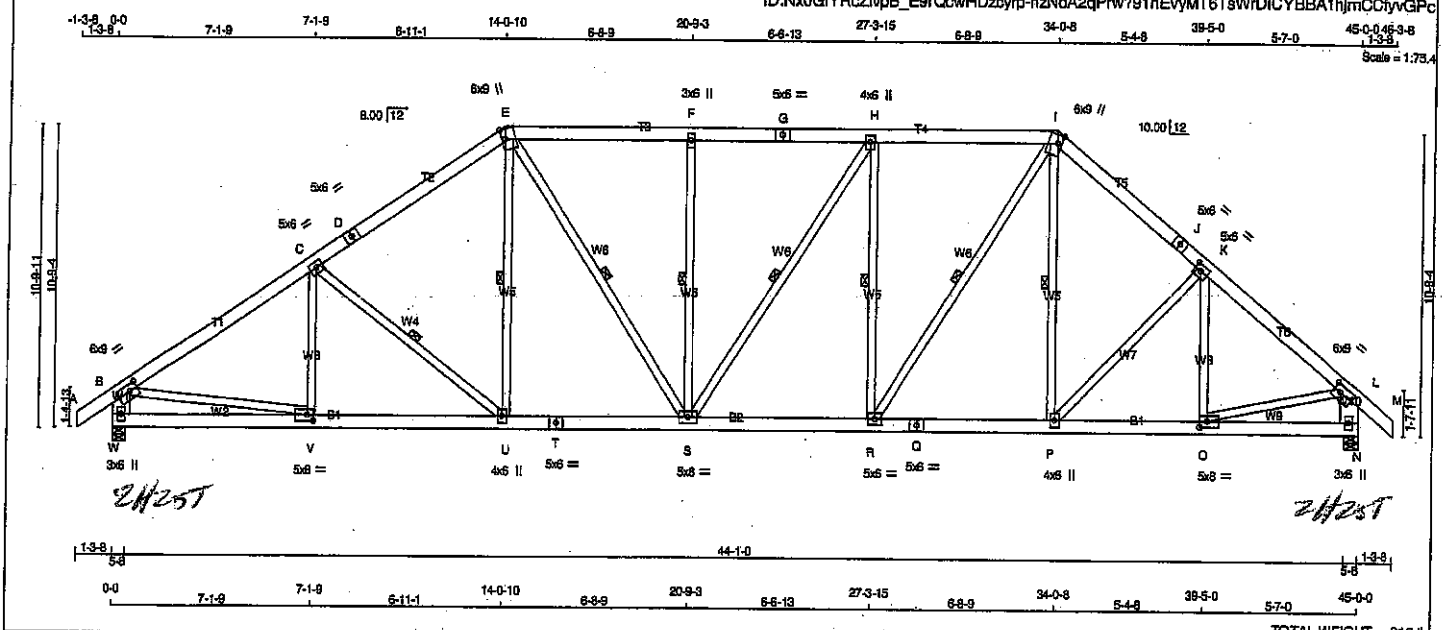

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - J	2x6	DRY	No.2	SPF
J - M	2x6	DRY	No.2	SPF
W - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
W - T	2x6	DRY	No.2	SPF
T - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.75	3.75
C	TMVW-t	MT20	5.0	6.0		
D, G, J						
D	TS-t	MT20	5.0	6.0		
E	TTWW+m	MT20	6.0	9.0	4.25	1.50
F	TMW+w	MT20	3.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	6.0	9.0	3.75	1.75
K	TMWW-t	MT20	5.0	6.0	2.50	2.75
L	TMVW-t	MT20	6.0	9.0	3.00	3.25
N	BMV1+p	MT20	3.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	3.25
P	BMWW+t	MT20	4.0	6.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWW-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	5.0	6.0		
T	BS-t	MT20	5.0	6.0		
U	BMWW+t	MT20	4.0	6.0		
V	BMWW-t	MT20	5.0	6.0	2.50	2.75
W	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123961

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
W	3645	0	3646	469	-1137	5-8	5-8
N	3648	0	3648	0	-1114	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 1137 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1114 LBS FACTORED UPLIFT

PROVIDE FOR 469 LBS FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2691	1599 / 0	473 / 0	0 / 0	97 / -1110	620 / 0	0 / 0
N	2693	1600 / 0	473 / 0	0 / 0	192 / -1094	620 / 0	0 / 0
HORIZONTAL REACTIONS							
W	—	0 / 0	0 / 0	0 / 0	335 / -335	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, N

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-U, E-U, I-P, I-R, E-S, H-R, F-S, H-S.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B-C	-4556 / 1455	-115.2	-115.2	0.70 (2)	3.45
C-D	-3996 / 1453	-115.2	-115.2	0.64 (2)	3.74
D-E	-3996 / 1453	-115.2	-115.2	0.64 (2)	3.74
E-F	-3830 / 1479	-115.2	-115.2	0.43 (1)	4.02
F-G	-3830 / 1480	-115.2	-115.2	0.44 (1)	4.00
G-H	-3830 / 1480	-115.2	-115.2	0.44 (1)	4.00
H-I	-3683 / 1413	-115.2	-115.2	0.43 (1)	4.07
I-J	-3722 / 1379	-115.2	-115.2	0.37 (14)	4.14
J-K	-3722 / 1379	-115.2	-115.2	0.37 (14)	4.14
K-L	-3899 / 1239	-115.2	-115.2	0.37 (1)	4.06
L-M	0 / 53	-115.2	-115.2	0.09 (1)	10.00
W-B	-3523 / 1158	0.0	0.0	0.17 (2)	6.38
N-L	-3547 / 1130	0.0	0.0	0.18 (1)	6.36
W-V	-451 / 460	-39.5	-39.5	0.16 (17)	6.25
V-U	-1263 / 3832	-39.5	-39.5	0.56 (1)	6.25
U-T	-871 / 3288	-39.5	-39.5	0.49 (1)	6.25
T-S	-871 / 3288	-39.5	-39.5	0.49 (1)	6.25
S-R	-924 / 3683	-39.5	-39.5	0.52 (1)	6.25
R-Q	-591 / 2823	-39.5	-39.5	0.42 (1)	6.25
Q-P	-591 / 2823	-39.5	-39.5	0.42 (1)	6.25
P-O	-719 / 3029	-39.5	-39.5	0.44 (1)	6.25
O-N	-10 / 22	-39.5	-39.5	0.10 (4)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
V-C	-293 / 210	0.11 (8)
C-U	-794 / 507	0.31 (2)
U-E	-266 / 778	0.14 (13)
P-I	-244 / 509	0.13 (14)
P-K	-365 / 404	0.32 (8)
O-K	-437 / 212	0.17 (8)
B-V	-1022 / 3863	0.62 (1)
O-L	-755 / 3088	0.50 (1)
R-I	-609 / 1760	0.50 (13)
E-S	-532 / 1258	0.44 (11)
R-H	-1210 / 570	0.66 (2)
S-F	-820 / 428	0.44 (3)
S-H	-167 / 460	0.14 (13)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.70/1.00 (B-C:2) , BC=0.56/1.00 (U-V:1) , WB=0.66/1.00 (H-R:2) , SSI=0.28/1.00 (H-I:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (O) (INPUT = 0.90)
JSI METAL= 0.77 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T8	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123961

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T9	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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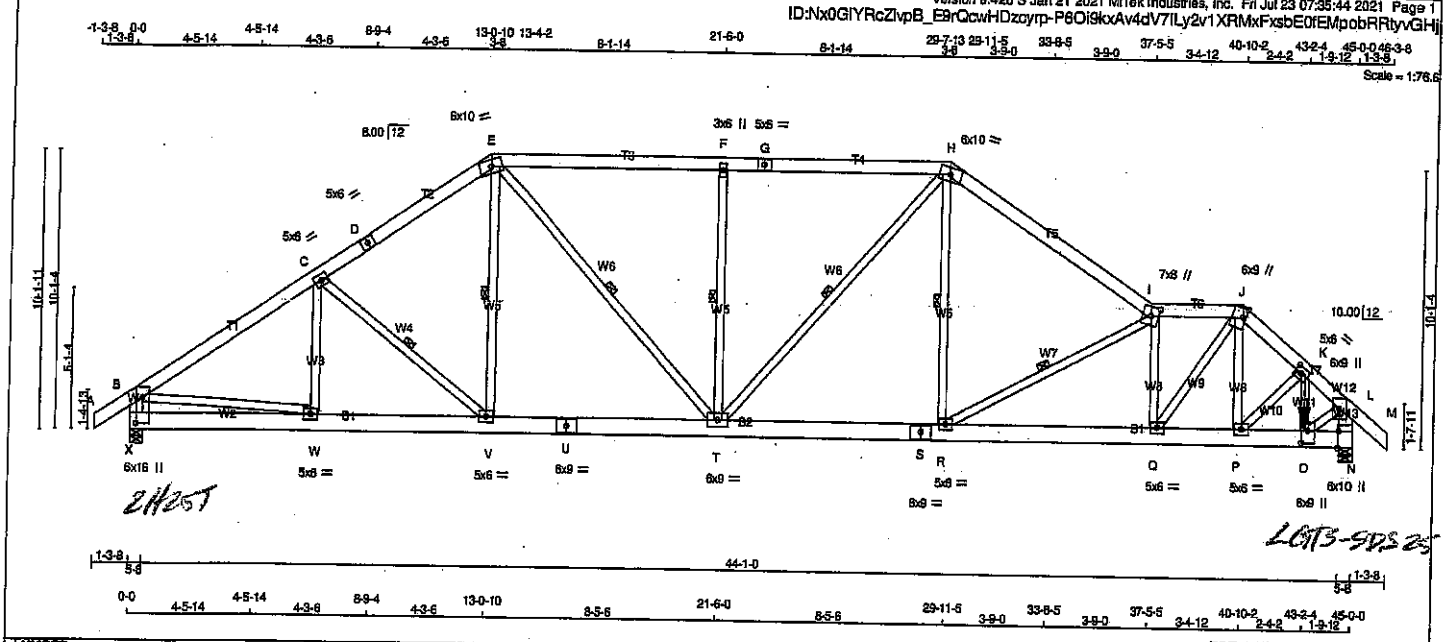

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - H	2x6	DRY	No.2	SPF
H - I	2x6	DRY	No.2	SPF
I - J	2x6	DRY	No.2	SPF
J - M	2x6	DRY	No.2	SPF
X - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
X - U	2x8	DRY	No.2	SPF
U - S	2x8	DRY	No.2	SPF
S - N	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-D	2	12	TOP
D-E	2	12	TOP
E-G	2	12	TOP
G-H	2	12	TOP
H-I	2	12	TOP
I-J	2	12	TOP
J-M	2	12	TOP
X-B	2	12	TOP
N-L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
X-U	2	12	TOP
U-S	2	12	TOP
S-N	3	4	SIDE(1790.0)
WEBS : (0.122"X3") SPIRAL NAILS			
K-O	2	5	SIDE(324.0)
2x4	1	8	

STAGGER NAILS BY HALF THE SPACING IN ADJACENT PLIES.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123962

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 3 X 319 = 956 lb

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	3921	0	3921	438	-1197	5-8	5-8
N	10271	0	10271	0	-3230	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1197 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 3230 LBS FACTORED UPLIFT

PROVIDE FOR 438 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	2894	1721 / 0	507 / 0	0 / 0	117 / -1176	666 / 0	0 / 0
N	7564	4550 / 0	1288 / 0	0 / 0	755 / -3140	1726 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	313 / -312	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-V, E-V, H-R, I-R, H-T, E-T, F-T.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.03 (2)	10.00
B-C	-4995 / 1550	-115.2	-115.2	0.16 (2)	5.97
C-D	-4586 / 1579	-115.2	-115.2	0.15 (2)	6.16
D-E	-4586 / 1579	-115.2	-115.2	0.15 (2)	6.16
E-F	-4817 / 1718	-115.2	-115.2	0.24 (1)	5.92
F-G	-4818 / 1718	-115.2	-115.2	0.24 (1)	5.92
G-H	-4818 / 1718	-115.2	-115.2	0.24 (1)	5.92
H-I	-5428 / 1796	-115.2	-115.2	0.23 (3)	5.71
I-J	-6960 / 2271	-115.2	-115.2	0.09 (14)	5.35
J-K	-6991 / 2287	-115.2	-115.2	0.10 (14)	5.31
K-L	-8523 / 2727	-115.2	-115.2	0.11 (14)	4.91
L-M	0 / 53	-115.2	-115.2	0.03 (1)	10.00
X-B	-3780 / 1211	0.0	0.0	0.08 (1)	7.81
N-L	-9546 / 3011	0.0	0.0	0.21 (1)	5.94
X-W	-422 / 430	-39.5	-39.5	0.04 (4)	6.25
W-V	-1333 / 4193	-39.5	-39.5	0.17 (1)	6.25
V-U	-995 / 3781	-39.5	-39.5	0.16 (1)	6.25
U-T	-995 / 3781	-39.5	-39.5	0.16 (1)	6.25
T-S	-1073 / 4545	-39.5	-39.5	0.18 (1)	6.25
S-R	-1073 / 4545	-39.5	-39.5	0.18 (1)	6.25
R-Q	-1949 / 7028	-39.5	-39.5	0.28 (1)	6.25
Q-P	-1503 / 5455	-39.5	-39.5	0.23 (1)	6.25
P-O	-1899 / 6438	-39.5	-39.5	0.40 (1)	6.25
O-N	-10 / 21	-39.5	-39.5	0.19 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W-C	-379 / 224	0.04 (8)
C-V	-645 / 444	0.07 (2)
V-E	-239 / 750	0.04 (2)
R-H	-526 / 1894	0.10 (3)
R-I	-2948 / 1131	0.37 (3)
Q-I	-2122 / 736	0.16 (1)
Q-J	-726 / 2583	0.14 (1)
P-J	-704 / 2099	0.11 (2)
B-W	-1108 / 4224	0.23 (1)
O-K	-892 / 2472	0.13 (2)
P-K	-1751 / 658	0.09 (2)
O-L	-2213 / 7420	0.40 (1)
T-H	-291 / 774	0.09 (13)
E-T	-669 / 1845	0.20 (11)
T-F	-1178 / 618	0.17 (2)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
O	43-2-4	-5074	-5074	1255	BACK	VERT	TOTAL	—	Cf

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.24/1.00 (F-H:1) , BC=0.40/1.00 (O-P:1) , WB=0.40/1.00 (L-O:1) , SSI=0.13/1.00 (N-O:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (O) (INPUT = 0.90)
JSI METAL= 0.80 (L) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T9	1	3	TRUSS DESC.	

Tamarack Roof Truss, Burlington

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B						
C	TMWW-t	MT20	5.0	6.0		
D	TS-t	MT20	5.0	6.0		
E	TTWW-m	MT20	6.0	10.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TTWW-m	MT20	6.0	10.0		
I	TTWW+m	MT20	7.0	8.0	4.00	3.25
J	TTWW+m	MT20	6.0	9.0	4.00	1.25
K	TMWW-t	MT20	5.0	6.0	2.50	2.75
L	TMVW+p	MT20	6.0	9.0		
N	BMV1+t	MT20	6.0	10.0	Edge	0.50
O	BMWW+t	MT20	6.0	9.0	5.50	3.00
P, Q, R, V, W						
P	BMWW-t	MT20	5.0	6.0		
S	BS-t	MT20	6.0	9.0		
T	BMWWW-t	MT20	6.0	9.0		
U	BS-t	MT20	6.0	9.0		
X						
X	TMBMVW1*+p	MT20	6.0	16.0	11.50	3.00

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.5.2.(6)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123962

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T9Z	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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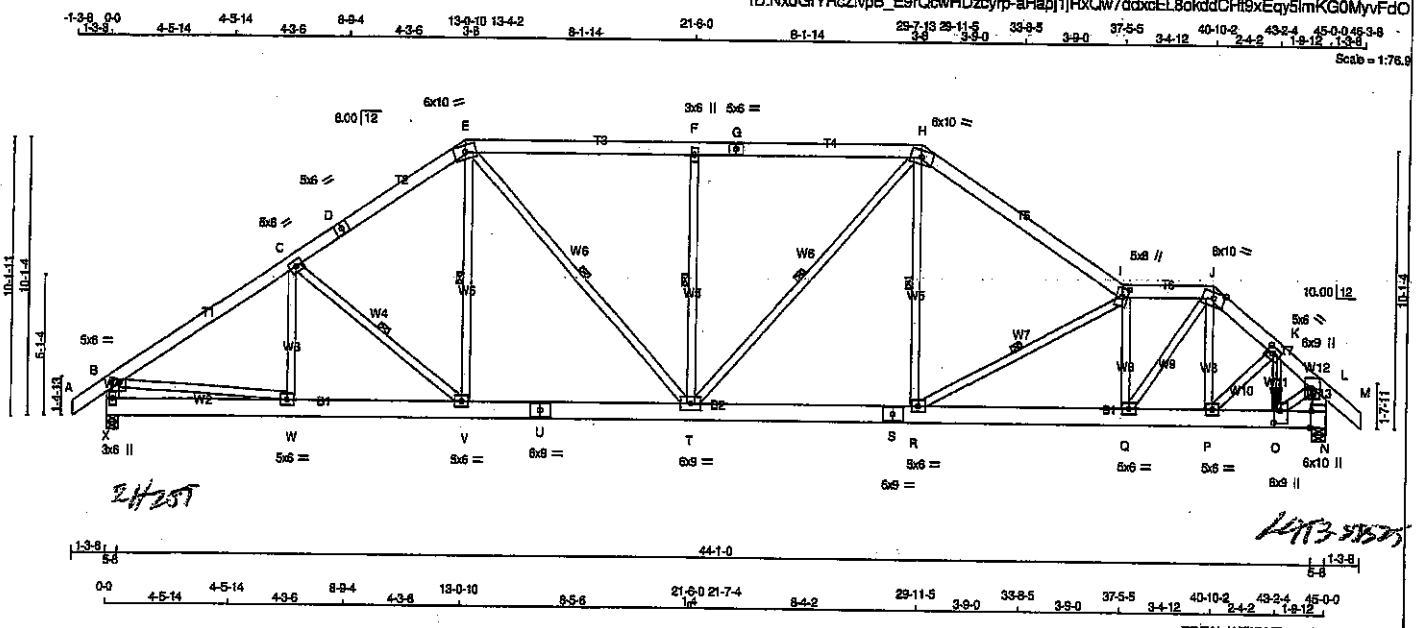

TOTAL WEIGHT = 3 X 319 = 956 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - H	2x6	DRY	No.2	SPF
H - I	2x6	DRY	No.2	SPF
I - J	2x6	DRY	No.2	SPF
J - M	2x6	DRY	No.2	SPF
X - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
X - U	2x6	DRY	No.2	SPF
U - S	2x6	DRY	No.2	SPF
S - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-D	2	12	TOP
D-E	2	12	TOP
E-G	2	12	TOP
G-H	2	12	TOP
H-I	2	12	TOP
I-J	2	12	TOP
J-M	2	12	TOP
X-B	2	12	TOP
N-L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
X-U	2	12	TOP
U-S	2	12	TOP
S-N	4	4	SIDE(2421.8)
WEBS : (0.122"X3") SPIRAL NAILS			
K-O	1	5	SIDE(141.9)
2x4	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

LICENSED PROFESSIONAL ENGINEER
07/23/04
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123989

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	3984	0	3984	438	-1217	5-8	5-8
N	11789	0	11789	0	-3706	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1217 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 3706 LBS FACTORED UPLIFT

PROVIDE FOR 438 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	2941	1749 / 0	515 / 0	0 / 0	123 / -1195	677 / 0	0 / 0
N	8682	5226 / 0	1477 / 0	0 / 0	914 / -3603	1979 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	313 / -312	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 4.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-V, E-V, H-R, I-R, H-T, E-T, F-T.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.03 (2)	10.00
B-C	-5091 / 1580	-115.2	-115.2	0.16 (2)	5.83
C-D	-4691 / 1612	-115.2	-115.2	0.15 (2)	6.11
D-E	-4691 / 1612	-115.2	-115.2	0.15 (2)	6.11
E-F	-4960 / 1763	-115.2	-115.2	0.25 (1)	5.85
F-G	-4961 / 1763	-115.2	-115.2	0.25 (1)	5.85
G-H	-4961 / 1763	-115.2	-115.2	0.25 (1)	5.85
H-I	-5664 / 1871	-115.2	-115.2	0.24 (3)	5.61
I-J	-7483 / 2435	-115.2	-115.2	0.10 (14)	5.20
J-K	-7716 / 2514	-115.2	-115.2	0.11 (14)	5.09
K-L	-9789 / 3125	-115.2	-115.2	0.12 (14)	4.61
L-M	0 / 53	-115.2	-115.2	0.03 (1)	10.00
X-B	-3843 / 1231	0.0	0.0	0.08 (1)	7.81
N-L	-10925 / 3443	0.0	0.0	0.24 (1)	5.60
X-W	-422 / 430	-39.5	-39.5	0.04 (4)	6.25
W-V	-1358 / 4273	-39.5	-39.5	0.17 (1)	6.25
V-U	-1022 / 3868	-39.5	-39.5	0.16 (1)	6.25
U-T	-1022 / 3868	-39.5	-39.5	0.16 (1)	6.25
T-S	-1136 / 4745	-39.5	-39.5	0.19 (1)	6.25
S-R	-1136 / 4745	-39.5	-39.5	0.19 (1)	6.25
R-Q	-2113 / 7549	-39.5	-39.5	0.29 (1)	6.25
Q-P	-1685 / 6038	-39.5	-39.5	0.25 (1)	6.25
P-O	-2198 / 7395	-39.5	-39.5	0.46 (1)	6.25
O-N	-10 / 21	-39.5	-39.5	0.22 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W-C	-389 / 227	0.04 (8)
C-V	-635 / 441	0.07 (2)
V-E	-237 / 745	0.04 (2)
R-H	-589 / 2089	0.11 (3)
R-I	-3326 / 1249	0.42 (3)
Q-I	-2058 / 716	0.15 (1)
Q-J	-694 / 2481	0.13 (1)
P-J	-872 / 2635	0.14 (2)
B-W	-1133 / 4305	0.23 (1)
O-K	-1135 / 3248	0.17 (2)
P-K	-2311 / 834	0.12 (2)
O-L	-2559 / 8523	0.46 (1)
T-H	-264 / 888	0.08 (13)
E-T	-896 / 1929	0.21 (11)
T-F	-1177 / 618	0.17 (2)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
O	43-2-4	-6238	-6238	1539	BACK	VERT	TOTAL	—	C1

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.25/1.00 (F-H:1) , BC=0.46/1.00 (O-P:1) , WB=0.46/1.00 (L-O:1) , SSI=0.15/1.00 (N-O:1)

DOL: LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.92 (L) (INPUT = 1.00)

CONTINUED ON PAGE 2

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TMWW-t	MT20	5.0	6.0		
D	TS-t	MT20	5.0	6.0		
E	TTWW-m	MT20	6.0	10.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TTWW-m	MT20	6.0	10.0		
I	TTWW+m	MT20	5.0	8.0	4.00	2.25
J	TTWW-m	MT20	6.0	10.0	Edge	
K	TMWW-t	MT20	5.0	6.0	2.50	2.75
L	TMVW+p	MT20	6.0	9.0		
N	BMV1+t	MT20	6.0	10.0	Edge	0.50
O	BMWW+t	MT20	6.0	9.0	5.50	2.75
P, Q, R, V, W						
P	BMWW-t	MT20	5.0	6.0		
S	BS-t	MT20	6.0	9.0		
T	BMWWW-t	MT20	6.0	9.0		
U	BS-t	MT20	6.0	9.0		
X	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123989

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T10	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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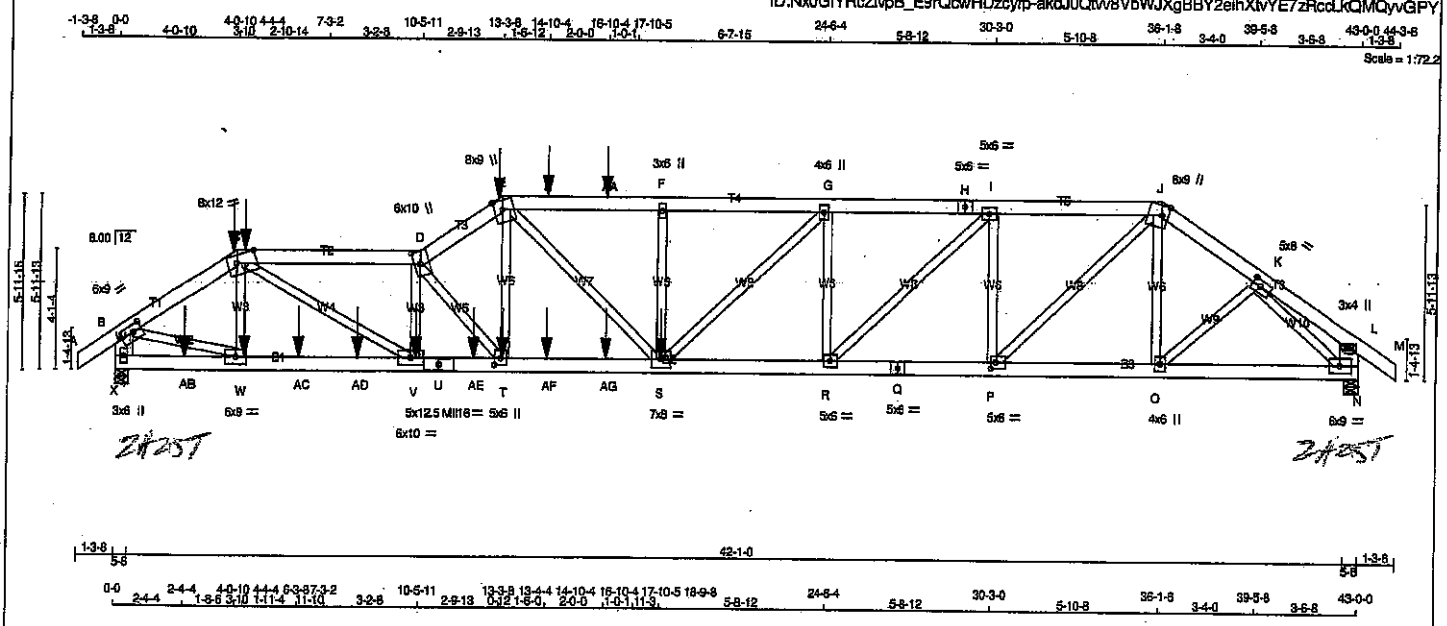

TOTAL WEIGHT = 2 X 266 = 531 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - M	2x6	DRY	No.2	SPF
X - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
X - U	2x6	DRY	1650F 1.5E	SPF
U - Q	2x6	DRY	1650F 1.5E	SPF
Q - N	2x8	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-C	2	12	SIDE(140.3)
C-D	2	12	SIDE(140.3)
D-E	2	12	SIDE(140.3)
E-H	2	12	SIDE(70.1)
H-J	2	12	TOP
J-M	2	12	TOP
X-B	2	12	TOP
N-L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
X-U	2	12	SIDE(210.5)
U-Q	2	12	SIDE(210.5)
Q-N	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x4	1	6	
T-E	1	6	SIDE(0.8)
F-S	1	6	SIDE(544.3)

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123963

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	7075	0	7086	-272	-1096	5-8	5-8
N	5326	0	5326	[illegible]	-1085	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1096 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1085 LBS FACTORED UPLIFT

PROVIDE FOR 272 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	5103	3242 / 0	452 / 0	0 / 0	0 / -1091	1417 / 0	0 / 0
N	3872	2397 / 0	452 / 0	0 / 0	117 / -1063	1023 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	194 / -194	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.05 (2)	10.00
B-C	-9166 / 1312	-115.2	-115.2	0.21 (2)	3.89
C-Y	-15720 / 2358	-115.2	-115.2	0.66 (1)	2.61
Y-D	-15720 / 2358	-115.2	-115.2	0.66 (1)	2.61
D-E	-14850 / 2224	-115.2	-115.2	0.32 (1)	2.98
E-Z	-14457 / 2207	-115.2	-115.2	0.51 (1)	2.92
Z-AA	-14457 / 2207	-115.2	-115.2	0.51 (1)	2.92
AA-F	-14457 / 2207	-115.2	-115.2	0.51 (1)	2.92
F-G	-14457 / 2208	-115.2	-115.2	0.48 (1)	2.97
G-H	-12515 / 2171	-115.2	-115.2	0.41 (1)	3.24
H-I	-12515 / 2171	-115.2	-115.2	0.41 (1)	3.24
I-J	-9698 / 1853	-115.2	-115.2	0.31 (1)	3.74
J-K	-7013 / 1418	-115.2	-115.2	0.14 (1)	4.43
K-L	-48 / 160	-115.2	-115.2	0.07 (3)	6.25
L-M	0 / 49	-115.2	-115.2	0.05 (3)	10.00
X-B	-7149 / 1114	0.0	0.0	0.19 (2)	8.29
N-L	-398 / 233	0.0	0.0	0.01 (14)	7.81
X-AB	-254 / 264	-39.5	-39.5	0.17 (1)	6.25
AB-W	-254 / 264	-39.5	-39.5	0.17 (1)	6.25
W-AC	-1047 / 7582	-39.5	-39.5	0.51 (1)	6.25
AC-AD	-1047 / 7582	-39.5	-39.5	0.51 (1)	6.25
AD-V	-1047 / 7582	-39.5	-39.5	0.51 (1)	6.25
V-U	-2263 / 15899	-39.5	-39.5	0.70 (1)	6.25
U-AE	-2263 / 15899	-39.5	-39.5	0.70 (1)	6.25
AE-T	-2263 / 15899	-39.5	-39.5	0.70 (1)	6.25
T-AF	-1679 / 12493	-39.5	-39.5	0.61 (1)	6.25
AF-AG	-1679 / 12493	-39.5	-39.5	0.61 (1)	6.25
AG-S	-1679 / 12493	-39.5	-39.5	0.61 (1)	6.25
S-R	-1914 / 12515	-39.5	-39.5	0.54 (1)	6.25
R-Q	-1597 / 9699	-39.5	-39.5	0.43 (1)	6.25
Q-P	-1597 / 9699	-39.5	-39.5	0.43 (1)	6.25
P-O	-912 / 5816	-39.5	-39.5	0.28 (1)	6.25
O-N	-922 / 5187	-39.5	-39.5	0.26 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W-C	-647 / 229	0.05 (1)
C-V	-1388 / 9399	0.83 (1)
V-D	-4451 / 773	0.38 (1)
D-T	-5594 / 952	0.70 (1)
T-E	-735 / 5168	0.46 (1)
E-S	-512 / 3019	0.27 (3)
S-F	-633 / 366	0.11 (3)
O-J	-460 / 144	0.08 (8)
O-K	-112 / 1077	0.10 (2)
B-W	-949 / 7779	0.69 (1)
K-N	-7093 / 1285	0.79 (1)
P-J	-939 / 5407	0.48 (2)
S-G	-59 / 2788	0.25 (2)
P-I	-3487 / 689	0.62 (2)
R-G	-2576 / 359	0.46 (2)
R-I	-441 / 4002	0.35 (2)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.36")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 982 (0.53")

CSI: TC=0.66/1.00 (C-D:1) , BC=0.70/1.00 (T-V:1) , WB=0.83/1.00 (C-V:1) , SSI=0.24/1.00 (V-W:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII15	438	302	2547	1256	4283	1816

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T10	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Nx0GlYRcZlvpB_E9rQcwHDzcvrp-akdJ0Qtvv8VbWJXgBBY2eihXtvYE7zRcdLkQMQvvGPY

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.75	3.75
C	TTWW-m	MT20	8.0	12.0	Edge	8.25
D	TTWW+m	MT20	6.0	10.0	5.25	2.25
E	TTWW+m	MT20	8.0	9.0	3.75	3.25
F	TMW+w	MT20	3.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW-t	MT20	5.0	6.0		
J	TTWW+m	MT20	8.0	9.0	Edge	2.50
K	TMWW-t	MT20	5.0	8.0	2.50	3.50
L	TMV+p	MT20	3.0	4.0		
N	BMVW1-t	MT20	6.0	9.0		
O	BMWW+t	MT20	4.0	6.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.00
Q	BS-t	MT20	5.0	6.0		
R	BMWW-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	7.0	8.0		
T	BMWW+t	MT20	5.0	8.0	2.75	2.50
U	BS-t	MI16	5.0	12.5		
V	BMWW-t	MT20	6.0	10.0		
W	BMWW-t	MT20	6.0	9.0		
X	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-10	-40	-40	—	FRONT	VERT	DEAD	—	C1
C	4-4-4	-88	-131	—	BACK	VERT	TOTAL	—	C1
C	4-0-10	-171	-171	—	FRONT	VERT	SNOW	—	C1
E	13-3-8	-406	-485	—	BACK	VERT	TOTAL	—	C1
S	18-9-8	-1967	-1967	—	BACK	VERT	TOTAL	—	C1
T	13-4-4	-167	-167	—	BACK	VERT	TOTAL	—	C1
V	10-4-4	-36	-36	—	BACK	VERT	TOTAL	—	C1
W	4-4-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
Z	14-10-4	-8	-8	—	BACK	VERT	TOTAL	—	C1
AA	16-10-4	-8	-8	—	BACK	VERT	TOTAL	—	C1
AB	2-4-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AC	6-3-8	-482	-482	—	BACK	VERT	TOTAL	—	C1
AD	8-4-4	-36	-36	—	BACK	VERT	TOTAL	—	C1
AE	12-4-4	-36	-36	—	BACK	VERT	TOTAL	—	C1
AF	14-10-4	-167	-167	—	BACK	VERT	TOTAL	—	C1
AG	16-10-4	-167	-167	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90)
JSI METAL= 0.89 (Q) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123963

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T11	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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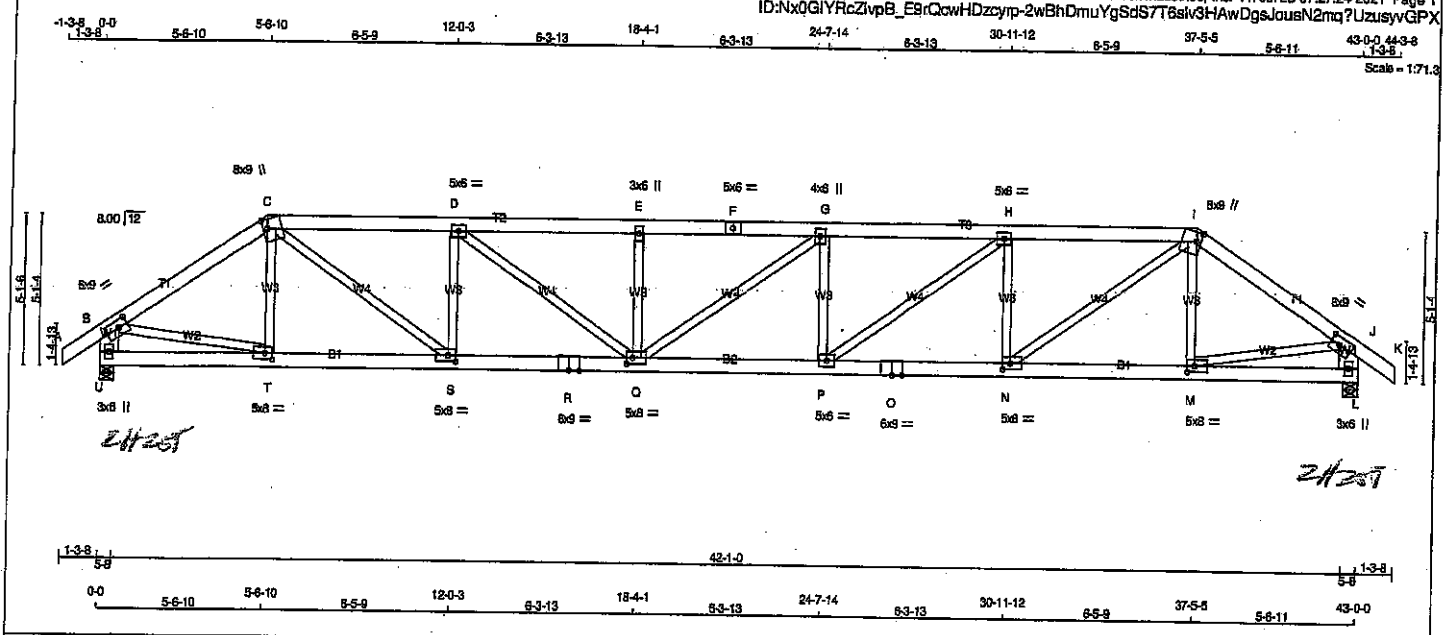

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - F	2x6	DRY	No.2	SPF
F - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
U - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TTWW+m	MT20	8.0	9.0	3.75	1.75
D	TMWW-t	MT20	5.0	6.0		
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TMWW-t	MT20	5.0	6.0		
I	TTWW+m	MT20	8.0	9.0	3.75	1.75
J	TMVW-t	MT20	6.0	9.0	3.00	3.75
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0	2.50	3.00
N	BMWW-t	MT20	5.0	8.0	2.50	3.25
O	BS-t	MT20	6.0	9.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	5.0	8.0	2.50	2.50
R	BS-t	MT20	6.0	9.0		
S	BMWW-t	MT20	5.0	8.0	2.50	3.25
T	BMWW-t	MT20	5.0	8.0	2.50	3.00
U	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123964

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3491	0	3522	-237	-1136	5-8	5-8
L	3491	0	3522	0	-1136	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1136 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1136 LBS FACTORED UPLIFT

PROVIDE FOR 237 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2576	1552 / 0	452 / 0	0 / 0	0 / -1097	593 / 0	0 / 0
L	2576	1552 / 0	452 / 0	0 / 0	85 / -1097	593 / 0	0 / 0
HORIZONTAL REACTIONS							
U	---	0 / 0	0 / 0	0 / 0	169 / -170	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.36 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.09 (2)	10.00	
B-C	-4241 / 1393	-115.2	-115.2	0.45 (2)	3.81	
C-D	-6304 / 2194	-115.2	-115.2	0.59 (1)	3.11	
D-E	-7603 / 2591	-115.2	-115.2	0.71 (1)	2.73	
E-F	-7603 / 2591	-115.2	-115.2	0.61 (1)	2.84	
F-G	-7603 / 2591	-115.2	-115.2	0.61 (1)	2.84	
G-H	-7608 / 2594	-115.2	-115.2	0.71 (1)	2.73	
H-I	-6304 / 2194	-115.2	-115.2	0.58 (1)	3.11	
I-J	-4243 / 1394	-115.2	-115.2	0.45 (3)	3.81	
J-K	0 / 49	-115.2	-115.2	0.09 (3)	10.00	
U-B	-3432 / 1156	0.0	0.0	0.17 (2)	6.44	
L-J	-3432 / 1156	0.0	0.0	0.17 (3)	6.44	
U-T	-219 / 229	-39.5	-39.5	0.12 (17)	6.25	
T-S	-1060 / 3513	-39.5	-39.5	0.50 (1)	6.25	
S-R	-1975 / 6305	-39.5	-39.5	0.84 (1)	5.73	
R-Q	-1975 / 6305	-39.5	-39.5	0.84 (1)	5.73	
Q-P	-2352 / 7608	-39.5	-39.5	1.00 (1)	5.36	
P-O	-1909 / 6304	-39.5	-39.5	0.84 (1)	5.81	
O-N	-1909 / 6304	-39.5	-39.5	0.84 (1)	5.81	
N-M	-949 / 3515	-39.5	-39.5	0.50 (1)	6.25	
M-L	-8 / 18	-39.5	-39.5	0.12 (17)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T-C	-346 / 210	0.08 (8)
M-I	-343 / 209	0.08 (8)
B-T	-985 / 3565	0.57 (1)
M-J	-985 / 3567	0.57 (1)
N-I	-1180 / 3498	0.99 (13)
C-S	-1198 / 3500	1.00 (11)
N-H	-1797 / 746	0.43 (2)
S-D	-1796 / 755	0.43 (3)
P-H	-551 / 1884	0.46 (13)
D-Q	-561 / 1879	0.47 (11)
P-G	-746 / 382	0.18 (2)
Q-E	-706 / 365	0.17 (2)
Q-G	-72 / 61	0.06 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

TOTAL WEIGHT = 250 lb
[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.41")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 914 (0.56")

CSI: TC=0.71/1.00 (D-E:1) , BC=1.00/1.00 (P-Q:1) , WB=1.00/1.00 (C-S:11) , SSI=0.28/1.00 (C-D:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10.SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (S) (INPUT = 0.90)
JSI METAL= 0.98 (R) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T12	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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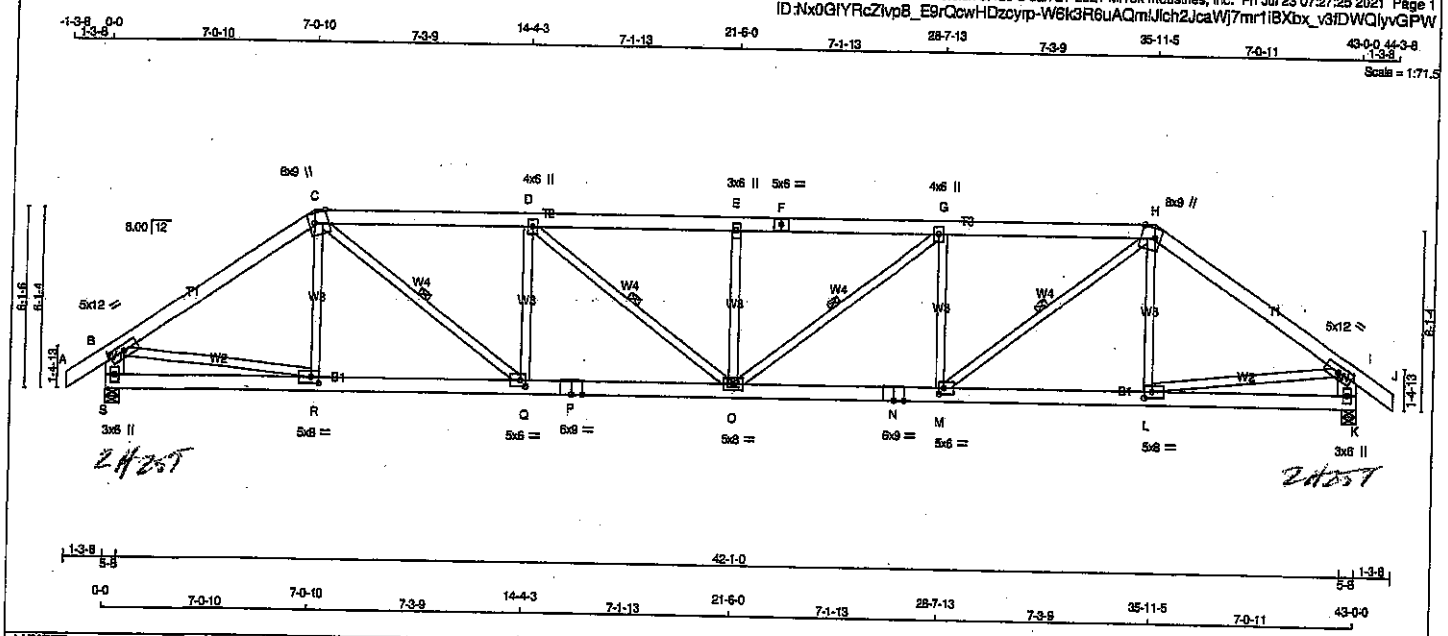

TOTAL WEIGHT = 253 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	No.2	SPF
C - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
S - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - N	2x6	DRY	No.2	SPF
N - K	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	12.0		
C	TTWW+m	MT20	8.0	9.0	Edge	5.75
D	TMWW+t	MT20	4.0	6.0		
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	8.0	9.0	Edge	5.75
I	TMVW-t	MT20	5.0	12.0		
K	BMV1+p	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	8.0	2.50	3.25
M	BMWW-t	MT20	5.0	6.0	2.50	2.00
N	BS-t	MT20	6.0	9.0		
O	BMWWW-t	MT20	5.0	8.0		
P	BS-t	MT20	6.0	9.0		
Q	BMWW-t	MT20	5.0	6.0	2.50	2.00
R	BMWW-t	MT20	5.0	8.0	2.50	3.25
S	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123965

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
S	3491	0	3513	-277	-1127	5-8	5-8
K	3491	0	3513	0	-1127	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT S FOR 1127 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT K FOR 1127 LBS FACTORED UPLIFT

PROVIDE FOR 277 LBS FACTORED HORIZONTAL REACTION AT JOINT S

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	2576	1546 / 0	452 / 0	0 / 0	0 / -1091	593 / 0	0 / 0
K	2576	1546 / 0	452 / 0	0 / 0	121 / -1091	593 / 0	0 / 0
HORIZONTAL REACTIONS							
S	—	0 / 0	0 / 0	0 / 0	198 / -198	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.98 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-M, C-Q, G-O, D-O.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4249 / 1375	-115.2	-115.2	0.73 (2)	3.47
C- D	-5756 / 2027	-115.2	-115.2	0.69 (1)	3.11
D- E	-6417 / 2202	-115.2	-115.2	0.75 (1)	2.90
E- F	-6417 / 2202	-115.2	-115.2	0.75 (1)	2.90
F- G	-6417 / 2202	-115.2	-115.2	0.75 (1)	2.90
G- H	-5757 / 2027	-115.2	-115.2	0.69 (1)	3.11
H- I	-4250 / 1376	-115.2	-115.2	0.74 (3)	3.47
I- J	0 / 49	-115.2	-115.2	0.09 (3)	10.00
S- B	-3397 / 1152	0.0	0.0	0.17 (2)	6.47
K- I	-3397 / 1152	0.0	0.0	0.17 (3)	6.47
S- R	-259 / 269	-39.5	-39.5	0.18 (17)	6.25
R- Q	-1040 / 3527	-39.5	-39.5	0.54 (1)	6.25
Q- P	-1766 / 5756	-39.5	-39.5	0.78 (1)	5.98
P- O	-1766 / 5756	-39.5	-39.5	0.78 (1)	5.98
O- N	-1702 / 5757	-39.5	-39.5	0.78 (1)	6.05
N- M	-1702 / 5757	-39.5	-39.5	0.78 (1)	6.05
M- L	-910 / 3528	-39.5	-39.5	0.54 (1)	6.25
L- K	-8 / 18	-39.5	-39.5	0.18 (17)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
R- C	-227 / 236	0.08 (8)
L- H	-224 / 234	0.08 (8)
B- R	-940 / 3557	0.57 (1)
L- I	-940 / 3558	0.57 (1)
M- H	-1000 / 2919	0.47 (2)
C- Q	-1023 / 2920	0.47 (3)
M- G	-1512 / 673	0.55 (2)
Q- D	-1513 / 687	0.55 (3)
O- G	-303 / 945	0.15 (2)
D- O	-324 / 945	0.15 (3)
O- E	-761 / 393	0.28 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.30")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.42")

CSI: TC=0.75/1.00 (D-E:1) , BC=0.78/1.00 (M-O:1) , WB=0.57/1.00 (I-L:1) , SSI=0.30/1.00 (C-D:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (H) (INPUT = 0.90)
JSI METAL= 0.86 (P) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T12	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123965

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T13	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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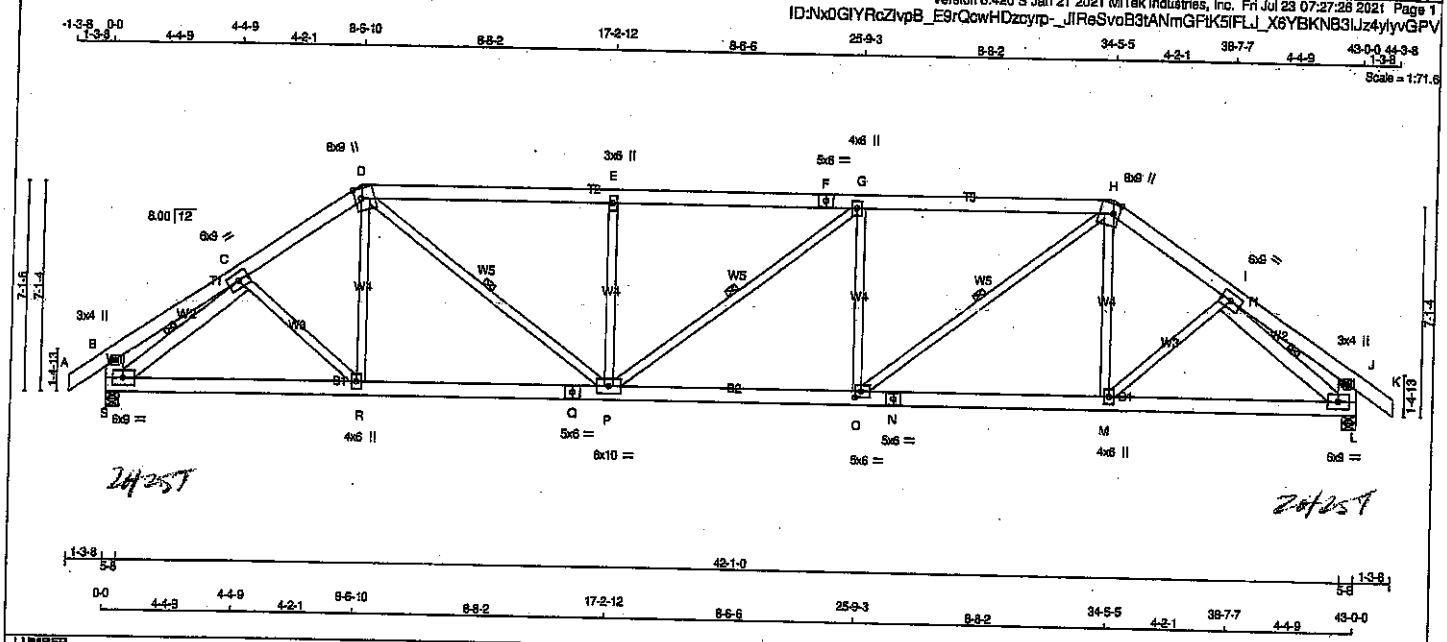

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
S - B	2x8	DRY	No.2	SPF
L - J	2x8	DRY	No.2	SPF
S - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
S - C	2x6	DRY	No.2	SPF
I - L	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	6.0	9.0		
D	TTWW+m	MT20	8.0	9.0	Edge	2.50
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	8.0	9.0	Edge	2.50
I	TMWW-t	MT20	6.0	9.0		
J	TMV+p	MT20	3.0	4.0		
L	BMWW1-t	MT20	6.0	9.0		
M	BMWW+t	MT20	4.0	6.0		
N	BS-t	MT20	5.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.50
P	BMWWW-t	MT20	6.0	10.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWW+t	MT20	4.0	6.0		
S	BMW1-t	MT20	6.0	9.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123966

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	3491	0	3498	0	-1116	5-8	5-8
S	3491	0	3498	-317	-1116	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1116 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT S FOR 1116 LBS FACTORED UPLIFT

PROVIDE FOR 317 LBS FACTORED HORIZONTAL REACTION AT JOINT S

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	2576	1536 / 0	452 / 0	0 / 0	154 / -1083	593 / 0	0 / 0
S	2576	1536 / 0	452 / 0	0 / 0	0 / -1083	593 / 0	0 / 0
HORIZONTAL REACTIONS							
S	—	0 / 0	0 / 0	0 / 0	226 / -226	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, S

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.98 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-O, D-P, G-P, C-S, I-L

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-31 / 180	-115.2	-115.2	0.15 (2)	6.25
C- D	-4218 / 1472	-115.2	-115.2	0.25 (13)	4.07
D- E	-5315 / 1884	-115.2	-115.2	0.88 (1)	3.00
E- F	-5315 / 1885	-115.2	-115.2	0.88 (1)	2.98
F- G	-5315 / 1885	-115.2	-115.2	0.88 (1)	2.98
G- H	-5319 / 1887	-115.2	-115.2	0.89 (1)	2.98
H- I	-4219 / 1473	-115.2	-115.2	0.25 (14)	4.07
I- J	-31 / 180	-115.2	-115.2	0.15 (3)	6.25
J- K	0 / 49	-115.2	-115.2	0.09 (3)	10.00
S- B	-413 / 265	0.0	0.0	0.02 (13)	7.81
L- J	-414 / 265	0.0	0.0	0.02 (14)	7.81
S- R	-1169 / 3409	-39.5	-39.5	0.60 (1)	6.25
R- Q	-999 / 3490	-39.5	-39.5	0.61 (1)	6.25
Q- P	-999 / 3490	-39.5	-39.5	0.61 (1)	6.25
P- O	-1537 / 5319	-39.5	-39.5	0.75 (1)	6.25
O- N	-857 / 3491	-39.5	-39.5	0.61 (1)	6.25
N- M	-857 / 3491	-39.5	-39.5	0.61 (1)	6.25
M- L	-993 / 3411	-39.5	-39.5	0.60 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- R	-153 / 431	0.07 (3)
R- D	-84 / 422	0.07 (5)
M- H	-84 / 411	0.07 (6)
M- I	-90 / 430	0.07 (2)
O- H	-855 / 2454	0.51 (13)
D- P	-883 / 2449	0.52 (11)
O- G	-1164 / 594	0.64 (2)
P- E	-1059 / 558	0.59 (3)
P- G	-158 / 149	0.10 (3)
S- C	-4525 / 1341	0.47 (1)
I- L	-4525 / 1342	0.47 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.8.2.(6)

TOTAL WEIGHT = 265 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.34")

CSI: TC=0.89/1.00 (G-H:1) , BC=0.75/1.00 (O-P:1) , WB=0.64/1.00 (G-O:2) , SSI=0.36/1.00 (G-H:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (H) (INPUT = 0.90)
JSI METAL= 0.72 (I) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T13	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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ID:NxOGIYRcZlvpB_E9rQcwHDzcyrp-_JlReSvoB3tANmGFtK5lFLJ_X6YBKNB3lJz4ylyvGPV

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123966

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T14	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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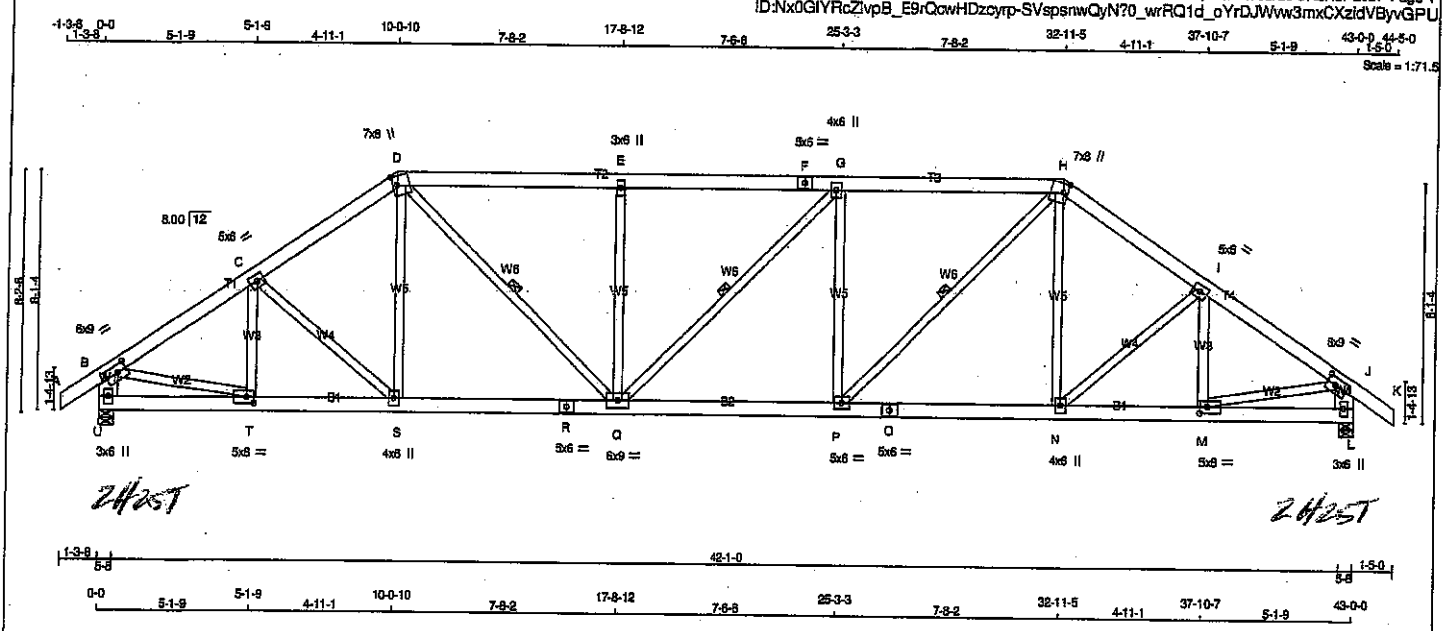

TOTAL WEIGHT = 273 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
U - B	2x8	DRY	No.2	SPF
L - J	2x8	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	7.0	8.0	3.75	1.75
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	7.0	8.0	3.75	1.75
I	TMWW-t	MT20	5.0	6.0		
J	TMVW-t	MT20	6.0	9.0	3.00	3.75
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0	2.50	2.75
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	6.0	9.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	5.0	8.0	2.50	2.75
U	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123967

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3491	0	3491	-358	-1103	5-8	5-8
L	3505	0	3505	0	-1108	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1103 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1108 LBS FACTORED UPLIFT

PROVIDE FOR 358 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
		MAX./MIN. COMPONENT REACTIONS					
U	2576	1532 / 0	452 / 0	0 / 0	0 / -1073	593 / 0	0 / 0
L	2586	1540 / 0	452 / 0	0 / 0	186 / -1078	595 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	255 / -256	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.48 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-P, D-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B-C	-4229 / 1375	-115.2	-115.2	0.31 (2)	3.99
C-D	-4100 / 1454	-115.2	-115.2	0.30 (2)	4.05
D-E	-4634 / 1672	-115.2	-115.2	0.62 (1)	3.49
E-F	-4634 / 1673	-115.2	-115.2	0.63 (1)	3.48
F-G	-4634 / 1673	-115.2	-115.2	0.63 (1)	3.48
G-H	-4638 / 1675	-115.2	-115.2	0.63 (1)	3.48
H-I	-4100 / 1454	-115.2	-115.2	0.30 (3)	4.05
I-J	-4231 / 1377	-115.2	-115.2	0.31 (3)	3.99
J-K	0 / 54	-115.2	-115.2	0.11 (3)	10.00
U-B	-3388 / 1115	0.0	0.0	0.17 (1)	6.47
L-J	-3402 / 1121	0.0	0.0	0.17 (1)	6.46
U-T	-339 / 350	-39.5	-39.5	0.10 (4)	6.25
T-S	-1184 / 3544	-39.5	-39.5	0.53 (1)	6.25
S-R	-952 / 3386	-39.5	-39.5	0.51 (1)	6.25
R-Q	-952 / 3386	-39.5	-39.5	0.51 (1)	6.25
Q-P	-1278 / 4638	-39.5	-39.5	0.65 (1)	6.25
P-O	-805 / 3386	-39.5	-39.5	0.51 (1)	6.25
O-N	-805 / 3386	-39.5	-39.5	0.51 (1)	6.25
N-M	-961 / 3545	-39.5	-39.5	0.53 (1)	6.25
M-L	-8 / 18	-39.5	-39.5	0.10 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T-C	-477 / 235	0.10 (1)
C-S	-292 / 282	0.16 (7)
S-D	-138 / 485	0.11 (13)
N-H	-137 / 483	0.11 (14)
N-I	-283 / 285	0.15 (3)
M-I	-481 / 233	0.10 (8)
B-T	-997 / 3598	0.58 (1)
M-J	-994 / 3599	0.58 (1)
P-H	-667 / 1949	0.39 (13)
D-Q	-701 / 1943	0.40 (11)
P-G	-1074 / 541	0.86 (2)
Q-E	-943 / 492	0.76 (3)
Q-G	-188 / 177	0.11 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.63/1.00 (G-H:1) , BC=0.65/1.00 (P-Q:1) , WB=0.86/1.00 (G-P:2) , SSI=0.32/1.00 (G-H:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (T) (INPUT = 0.80)
JSI METAL= 0.71 (J) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T14	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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ID:Nx0GIYRcZlvpB_E9rQcwHDzcvrp-SVspsnwQyN?0_wrRQ1d_oYrDJWvw3mxCXzidVByvGPU

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123967 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T15	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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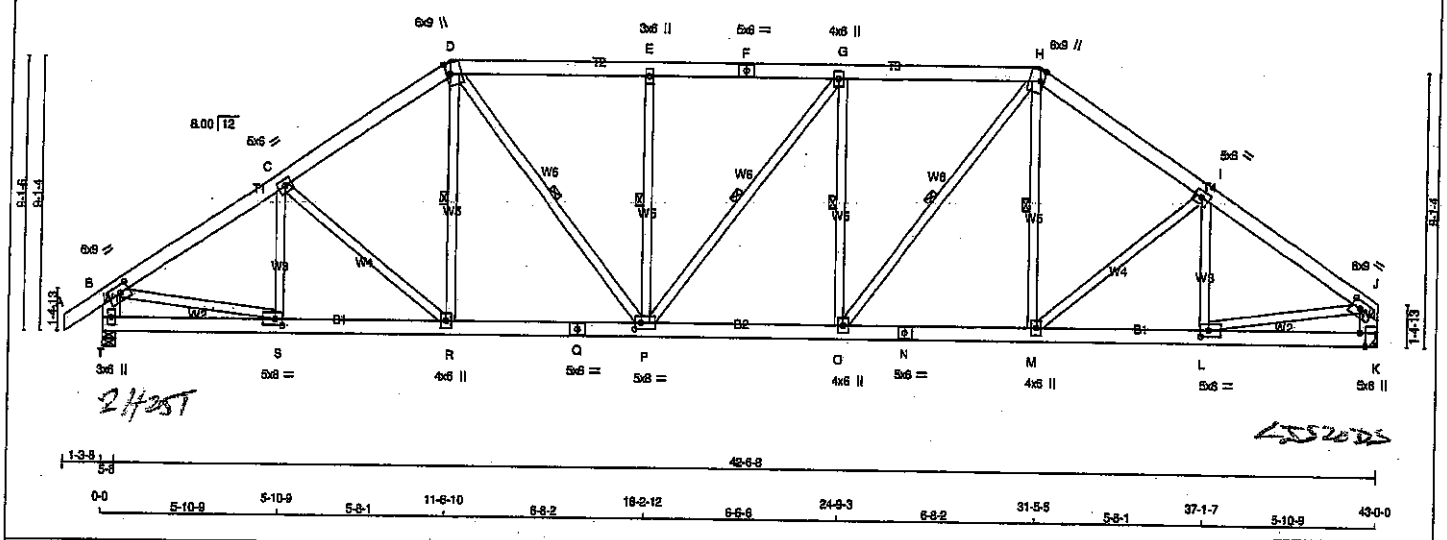

TOTAL WEIGHT = 281 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
T - B	2x8	DRY	No.2	SPF
K - J	2x8	DRY	No.2	SPF
T - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
N - K	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D	TTWW+m	MT20	6.0	9.0	4.25	1.50
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	4.25	1.50
I	TMWW-t	MT20	5.0	6.0		
J	TMVW-t	MT20	6.0	9.0	3.00	3.75
K	BMV1+t	MT20	5.0	8.0	Edge	2.25
L	BMWW-t	MT20	5.0	8.0	2.50	3.00
M, O, R						
M	BMWW+t	MT20	4.0	6.0		
N	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0	2.50	2.50
Q	BS-t	MT20	5.0	6.0		
S	BMWW-t	MT20	5.0	8.0	2.50	3.00
T	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123968

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
T	3491	0	3491	383	-1088	5-8	5-8
K	3327	0	3327	0	-1027	IN-SX MECHANICAL	IN-SX

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT T FOR 1088 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT K FOR 1027 LBS FACTORED UPLIFT

PROVIDE FOR 383 LBS FACTORED HORIZONTAL REACTION AT JOINT T

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	2576	1532 / 0	452 / 0	0 / 0	43 / -1062	593 / 0	0 / 0
K	2465	1437 / 0	452 / 0	0 / 0	201 / -1010	576 / 0	0 / 0
HORIZONTAL REACTIONS							
T	—	0 / 0	0 / 0	0 / 0	274 / -265	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF D-R, H-M, H-O, D-P, G-O, E-P, G-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD-LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00
B- C	-4286 / 1369	-115.2	-115.2	0.43 (2)	3.86
C- D	-3978 / 1413	-115.2	-115.2	0.41 (2)	4.00
D- E	-4105 / 1510	-115.2	-115.2	0.44 (1)	3.89
E- F	-4108 / 1511	-115.2	-115.2	0.45 (1)	3.87
F- G	-4106 / 1511	-115.2	-115.2	0.45 (1)	3.87
G- H	-4110 / 1511	-115.2	-115.2	0.45 (1)	3.87
H- I	-3976 / 1409	-115.2	-115.2	0.41 (3)	4.00
I- J	-4298 / 1361	-115.2	-115.2	0.43 (3)	3.86
T- B	-3382 / 1103	0.0	0.0	0.17 (1)	6.48
K- J	-3219 / 1043	0.0	0.0	0.16 (1)	6.61
T- S	-366 / 363	-39.5	-39.5	0.11 (4)	6.25
S- R	-1200 / 3597	-39.5	-39.5	0.52 (1)	6.25
R- Q	-917 / 3278	-39.5	-39.5	0.48 (1)	6.25
Q- P	-917 / 3278	-39.5	-39.5	0.48 (1)	6.25
P- O	-1100 / 4110	-39.5	-39.5	0.57 (1)	6.25
O- N	-767 / 3278	-39.5	-39.5	0.48 (1)	6.25
N- M	-767 / 3278	-39.5	-39.5	0.48 (1)	6.25
M- L	-990 / 3599	-39.5	-39.5	0.51 (1)	6.25
L- K	-8 / 18	-39.5	-39.5	0.11 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
S- C	-388 / 218	0.10 (8)
C- R	-502 / 373	0.39 (2)
R- D	-195 / 585	0.09 (2)
M- H	-189 / 582	0.09 (3)
M- I	-504 / 368	0.39 (3)
L- I	-392 / 223	0.10 (8)
B- S	-975 / 3639	0.58 (1)
L- J	-1019 / 3640	0.59 (1)
O- H	-544 / 1577	0.32 (13)
D- P	-581 / 1569	0.34 (11)
O- G	-988 / 490	0.35 (2)
P- E	-814 / 426	0.29 (3)
P- G	-222 / 208	0.13 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.45/1.00 (G-H:1) , BC=0.57/1.00 (O-P:1) , WB=0.59/1.00 (J-L:1) , SSI=0.28/1.00 (G-H:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (S) (INPUT = 0.90)
JSI METAL= 0.72 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T15	1	1	TRUSS DESC.	

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J/G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123968 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T16	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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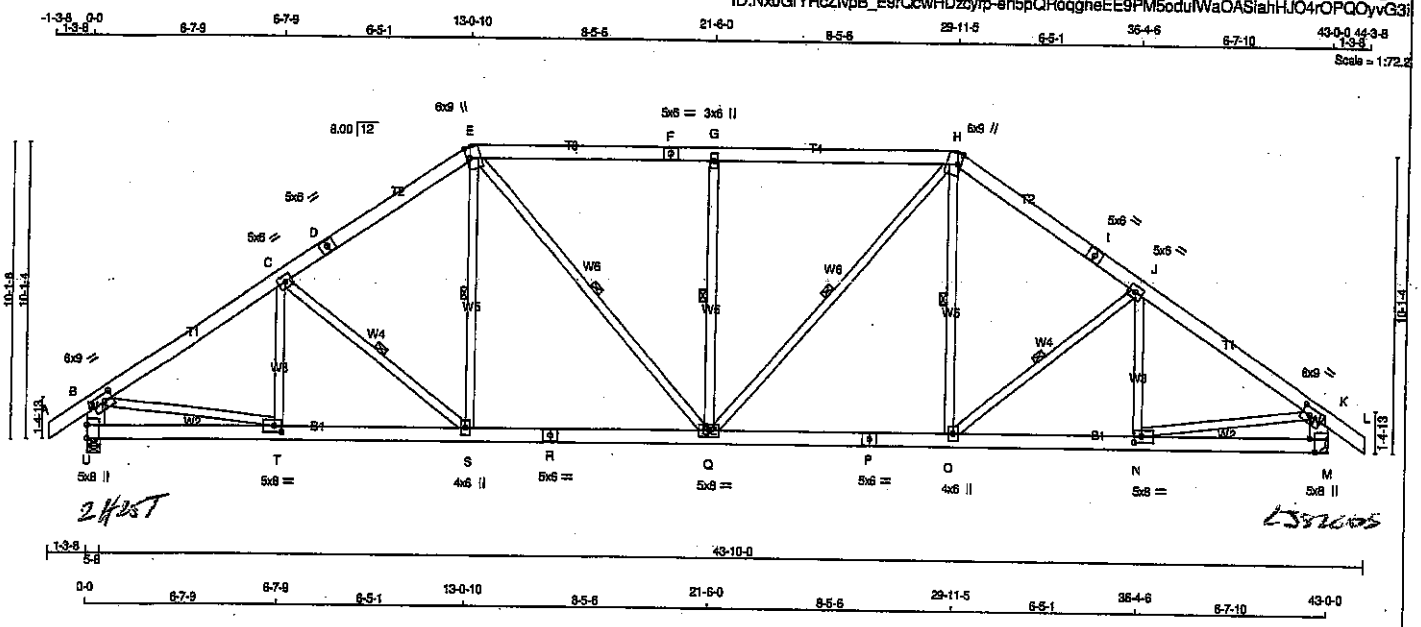

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - I	2x6	DRY	No.2	SPF
I - L	2x6	DRY	No.2	SPF
U - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TMWW-t	MT20	5.0	6.0		
D, F, I						
D	TS-t	MT20	5.0	6.0		
E	TTWW+m	MT20	6.0	9.0	4.25	1.50
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	6.0	9.0	4.25	1.50
J	TMWW-t	MT20	5.0	6.0		
K	TMVW-t	MT20	6.0	9.0	3.00	3.75
M	BMV1+t	MT20	5.0	8.0	Edge	2.25
N	BMWW-t	MT20	5.0	8.0	2.50	3.00
O	BMWW+t	MT20	4.0	6.0		
P	BS-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	5.0	8.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	5.0	8.0	2.50	3.00
U	BMV1+t	MT20	5.0	8.0	5.50	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)

1)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123969

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3491	0	3491	-435	-1071	5-8	5-8
M	3491	0	3491	0	-1071	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT M. MINIMUM BEARING LENGTH AT JOINT M = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1071 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1071 LBS FACTORED UPLIFT

PROVIDE FOR 435 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2576	1532 / 0	452 / 0	0 / 0	96 / -1051	593 / 0	0 / 0
M	2576	1532 / 0	452 / 0	0 / 0	241 / -1051	593 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	311 / -311	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-S, E-S, H-O, J-O, H-Q, E-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)		10.00
B- C	-4313 / 1354	-115.2	-115.2	0.57 (2)		3.70
C- D	-3845 / 1361	-115.2	-115.2	0.53 (2)		3.92
D- E	-3845 / 1361	-115.2	-115.2	0.53 (2)		3.92
E- F	-3831 / 1413	-115.2	-115.2	0.85 (1)		3.34
F- G	-3831 / 1413	-115.2	-115.2	0.85 (1)		3.34
G- H	-3860 / 1413	-115.2	-115.2	0.85 (1)		3.35
H- I	-3845 / 1362	-115.2	-115.2	0.53 (3)		3.92
I- J	-3845 / 1362	-115.2	-115.2	0.53 (3)		3.92
J- K	-4314 / 1355	-115.2	-115.2	0.57 (3)		3.70
K- L	0 / 49	-115.2	-115.2	0.09 (3)		10.00
U- B	-3372 / 1091	0.0	0.0	0.17 (1)		6.48
M- K	-3372 / 1091	0.0	0.0	0.17 (1)		6.48
U- T	-418 / 427	-39.5	-39.5	0.14 (4)		6.25
T- S	-1177 / 3626	-39.5	-39.5	0.56 (1)		6.25
S- R	-820 / 3165	-39.5	-39.5	0.52 (1)		6.25
R- Q	-820 / 3165	-39.5	-39.5	0.52 (1)		6.25
Q- P	-678 / 3166	-39.5	-39.5	0.52 (1)		6.25
P- O	-678 / 3166	-39.5	-39.5	0.52 (1)		6.25
O- N	-922 / 3628	-39.5	-39.5	0.56 (1)		6.25
N- M	-8 / 18	-39.5	-39.5	0.14 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	-320 / 202	0.10 (8)
C- S	-696 / 463	0.23 (2)
S- E	-235 / 745	0.12 (2)
O- H	-235 / 745	0.12 (3)
O- J	-897 / 464	0.23 (3)
N- J	-324 / 202	0.10 (8)
B- T	-948 / 3860	0.59 (1)
N- K	-948 / 3861	0.59 (1)
Q- H	-462 / 1300	0.43 (13)
E- Q	-518 / 1300	0.48 (11)
Q- G	-1184 / 820	0.54 (2)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

TOTAL WEIGHT = 3 X 276 = 828 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.85/1.00 (E-G:1) , BC=0.56/1.00 (N-O:1) , WB=0.59/1.00 (K-N:1) , SSI=0.36/1.00 (G-H:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (T) (INPUT = 0.90)
JSI METAL= 0.73 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T16	3	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123969

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T17	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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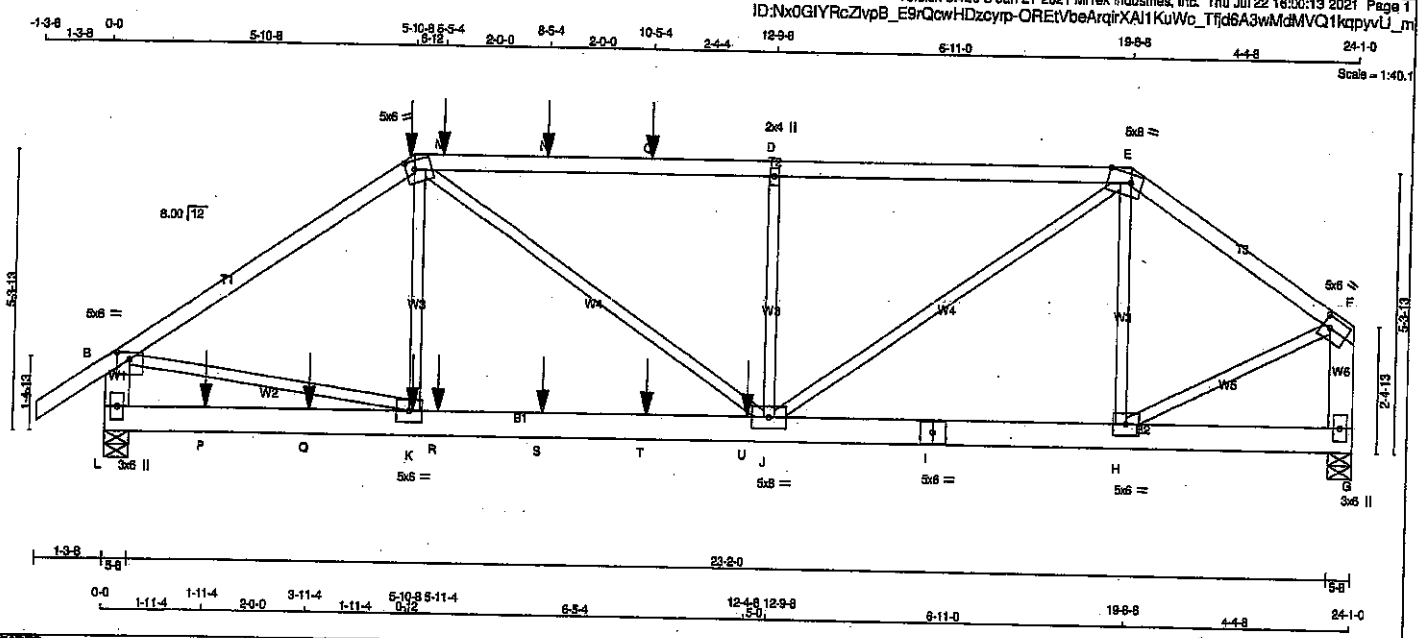

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
G - F	2x6	DRY	No.2	SPF
L - I	2x6	DRY	No.2	SPF
I - G	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	SIDE(61.0)
C- E	1	12	SIDE(61.0)
E- F	1	12	TOP
L- B	2	12	TOP
G- F	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
L- I	2	12	SIDE(183.1)
I- G	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
K- C	1	6	SIDE(5.8)
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123970

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
L	3015	0	3015	0	0	5-8	5-8
G	2404	0	2404	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	2129	1414 / 0	0 / 0	0 / 0	0 / 0	716 / 0	0 / 0
G	1697	1130 / 0	0 / 0	0 / 0	0 / 0	567 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.07 (1)	10.00	
B- C	-3692 / 0	-91.8	-91.8	0.45 (1)	4.49	
C- M	-4260 / 0	-91.8	-91.8	0.80 (1)	3.69	
M- N	-4260 / 0	-91.8	-91.8	0.80 (1)	3.69	
N- O	-4260 / 0	-91.8	-91.8	0.80 (1)	3.69	
O- D	-4260 / 0	-91.8	-91.8	0.80 (1)	3.69	
D- E	-4260 / 0	-91.8	-91.8	0.80 (1)	3.69	
E- F	-2341 / 0	-91.8	-91.8	0.20 (1)	5.65	
L- B	-2960 / 0	0.0	0.0	0.11 (1)	7.81	
G- F	-2370 / 0	0.0	0.0	0.10 (1)	7.81	
L- P	0 / 0	-18.5	-18.5	0.11 (4)	10.00	
P- Q	0 / 0	-18.5	-18.5	0.11 (4)	10.00	
Q- K	0 / 0	-18.5	-18.5	0.11 (4)	10.00	
K- R	0 / 3065	-18.5	-18.5	0.34 (1)	10.00	
R- S	0 / 3065	-18.5	-18.5	0.34 (1)	10.00	
S- T	0 / 3065	-18.5	-18.5	0.34 (1)	10.00	
T- U	0 / 3065	-18.5	-18.5	0.34 (1)	10.00	
U- J	0 / 3065	-18.5	-18.5	0.34 (1)	10.00	
J- I	0 / 1928	-18.5	-18.5	0.20 (1)	10.00	
I- H	0 / 1928	-18.5	-18.5	0.20 (1)	10.00	
H- G	0 / 0	-18.5	-18.5	0.03 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K- C	-129 / 181	0.03 (4)
G- J	0 / 1468	0.18 (1)
J- D	-1032 / 0	0.21 (1)
J- E	0 / 2864	0.35 (1)
H- E	-778 / 0	0.16 (1)
B- K	0 / 3110	0.38 (1)
H- F	0 / 2129	0.26 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-337	-337	---	FRONT	VERT	TOTAL	---	C1
K	5-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
M	6-5-4	-136	-136	---	FRONT	VERT	TOTAL	---	C1
N	8-5-4	-122	-122	---	FRONT	VERT	TOTAL	---	C1
O	10-5-4	-122	-122	---	FRONT	VERT	TOTAL	---	C1
P	1-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
Q	3-11-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
R	6-5-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
S	8-5-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
T	10-5-4	-29	-29	---	FRONT	VERT	TOTAL	---	C1
U	12-4-8	-972	-972	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TOTAL WEIGHT = 2 X 112 = 225 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.80/1.00 (C-D:1) , BC=0.34/1.00 (J-K:1) , WB=0.38/1.00 (B-K:1) , SSI=0.46/1.00 (J-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.35 (K) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T17	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Nx0GIYRcZlvpB_E9rQcwHDzcvrp-OREtVbeArqlrXAl1KuWc_Tfjd6A3wMdMVQ1kqpvvU_m

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	1.50	3.00
C	TTWW-m	MT20	5.0	6.0	2.00	2.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	8.0	Edge	5.50
F	TMVW-t	MT20	5.0	6.0	2.50	1.75
G	BMV1+p	MT20	3.0	6.0		
H	BMWW-t	MT20	5.0	6.0		
I	BS-t	MT20	5.0	6.0		
J	BMWWW-t	MT20	5.0	8.0		
K	BMWW-t	MT20	5.0	6.0		
L	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123970

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T18	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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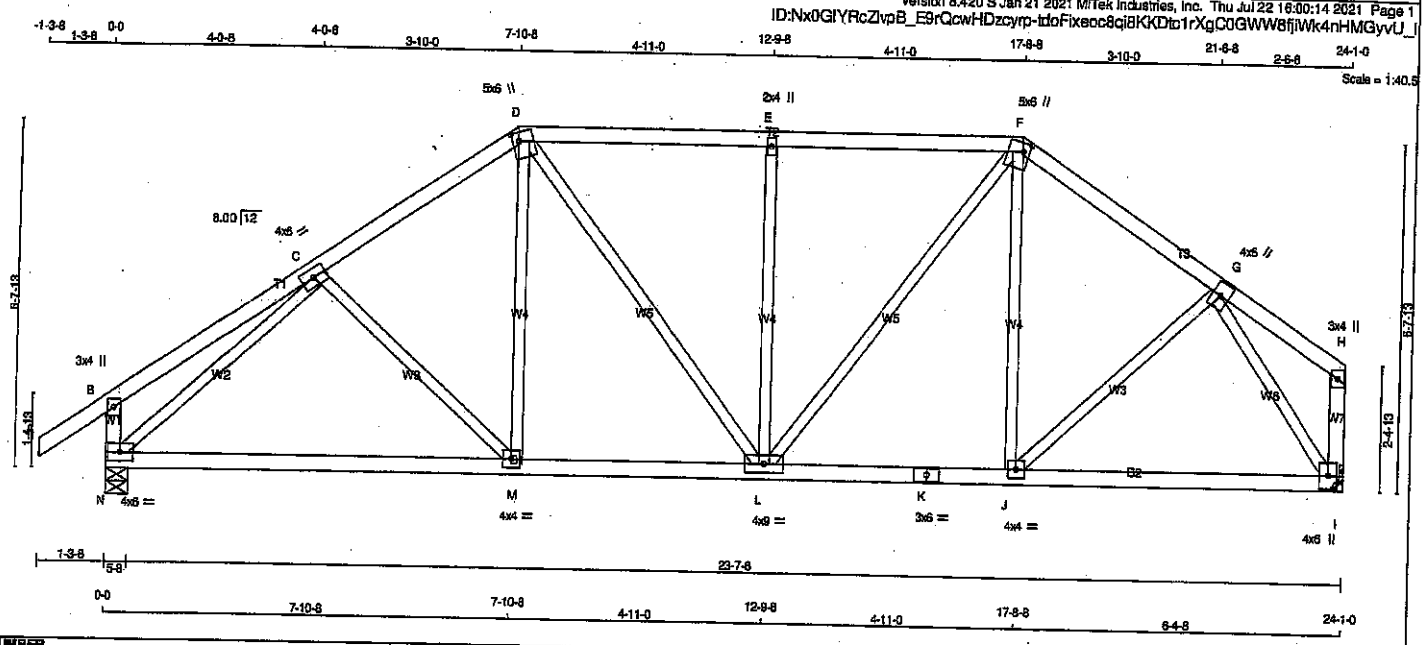

TOTAL WEIGHT = 107 lb

M[F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	1.50
G	TMWW+t	MT20	4.0	6.0		
H	TMV+p	MT20	3.0	4.0		
I	BMVW1+p	MT20	4.0	6.0		
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	9.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMVW1-t	MT20	4.0	6.0		

NOTES- (1)

1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1454	0	1454	0	0	5-8	5-8
I	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1026	686 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
I	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	0 / 22	-91.8	-91.8	0.22 (1)	10.00
C- D	-1374 / 0	-91.8	-91.8	0.19 (1)	5.36
D- E	-1294 / 0	-91.8	-91.8	0.30 (1)	5.33
E- F	-1294 / 0	-91.8	-91.8	0.30 (1)	5.33
F- G	-1214 / 0	-91.8	-91.8	0.18 (1)	5.63
G- H	0 / 28	-91.8	-91.8	0.17 (1)	10.00
N- B	-266 / 0	0.0	0.0	0.03 (1)	7.81
I- H	-62 / 0	0.0	0.0	0.01 (1)	7.81
N- M	0 / 1197	-18.5	-18.5	0.35 (4)	10.00
M- L	0 / 1126	-18.5	-18.5	0.35 (4)	10.00
L- K	0 / 993	-18.5	-18.5	0.26 (4)	10.00
K- J	0 / 993	-18.5	-18.5	0.26 (4)	10.00
J- I	0 / 799	-18.5	-18.5	0.24 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- M	-100 / 20	0.05 (1)
M- D	0 / 220	0.05 (4)
D- L	0 / 273	0.06 (1)
L- E	-551 / 0	0.40 (1)
L- F	0 / 490	0.11 (1)
J- F	-47 / 60	0.03 (1)
J- G	0 / 264	0.06 (1)
N- C	-1644 / 0	0.78 (1)
G- I	-1456 / 0	0.45 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.30/1.00 (D-E:1) , BC=0.35/1.00 (L-M:4) , WB=0.78/1.00 (C-N:1) , SSI=0.22/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (N) (INPUT = 0.90)
JSI METAL= 0.62 (G) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123971

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T19	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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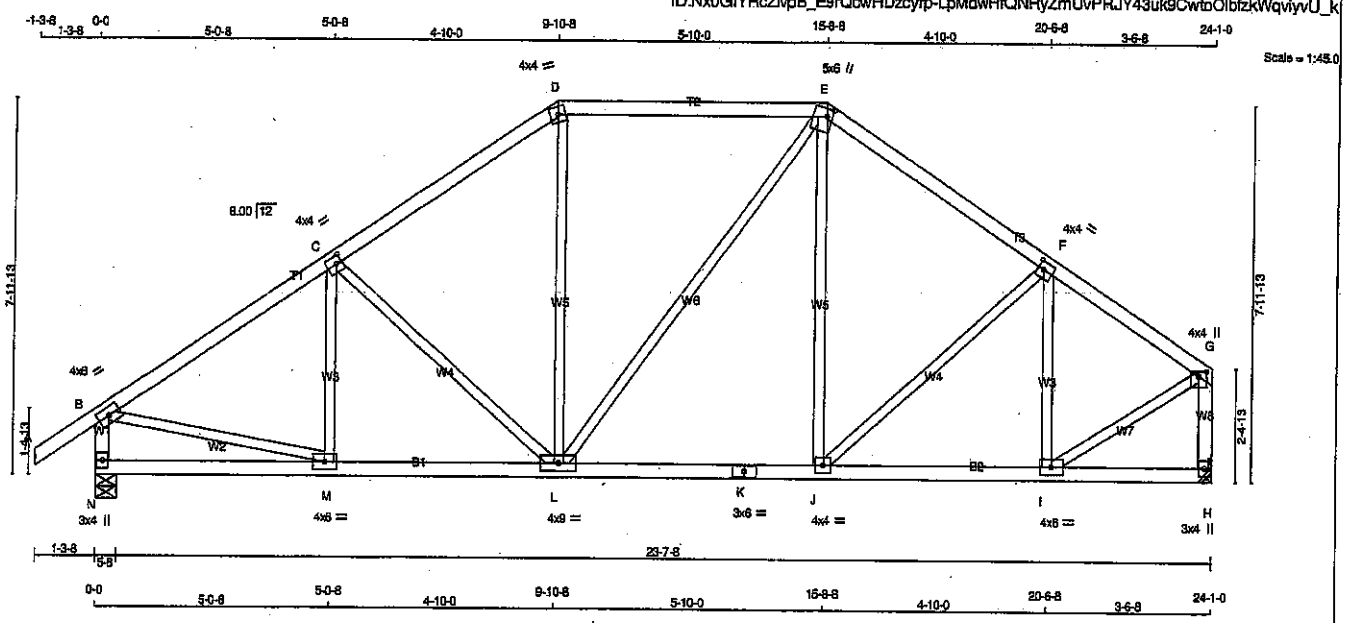

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.00	1.50
F	TMWW-t	MT20	4.0	4.0	2.00	1.50
G	TMVW+p	MT20	4.0	4.0	1.25	2.00
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	9.0		
M	BMWW-t	MT20	4.0	6.0		
N	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
N	1454	0	1454	0	0	5-8	5-8
H	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1026	686 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
H	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.05 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	-1484 / 0	-91.8	-91.8	0.32 (1)	5.05
C- D	-1245 / 0	-91.8	-91.8	0.31 (1)	5.41
D- E	-1012 / 0	-91.8	-91.8	0.42 (1)	5.66
E- F	-1167 / 0	-91.8	-91.8	0.26 (1)	5.61
F- G	-1115 / 0	-91.8	-91.8	0.23 (1)	5.74
N- B	-1413 / 0	0.0	0.0	0.15 (1)	6.86
H- G	-1301 / 0	0.0	0.0	0.17 (1)	7.08
N- M	0 / 0	-18.5	-18.5	0.10 (4)	10.00
M- L	0 / 1258	-18.5	-18.5	0.26 (1)	10.00
L- K	0 / 951	-18.5	-18.5	0.21 (1)	10.00
K- J	0 / 951	-18.5	-18.5	0.21 (1)	10.00
J- I	0 / 954	-18.5	-18.5	0.21 (1)	10.00
I- H	0 / 0	-18.5	-18.5	0.07 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-173 / 21	0.06 (1)
C- L	-336 / 0	0.27 (1)
L- D	0 / 242	0.05 (1)
L- E	0 / 103	0.02 (1)
J- E	0 / 110	0.04 (4)
J- F	-7 / 6	0.01 (1)
I- F	-480 / 0	0.16 (1)
B- M	0 / 1288	0.29 (1)
I- G	0 / 1107	0.25 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.42/1.00 (D-E:1) , BC=0.26/1.00 (L-M:1) , WB=0.29/1.00 (B-M:1) , SSI=0.21/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.38 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123972

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T20	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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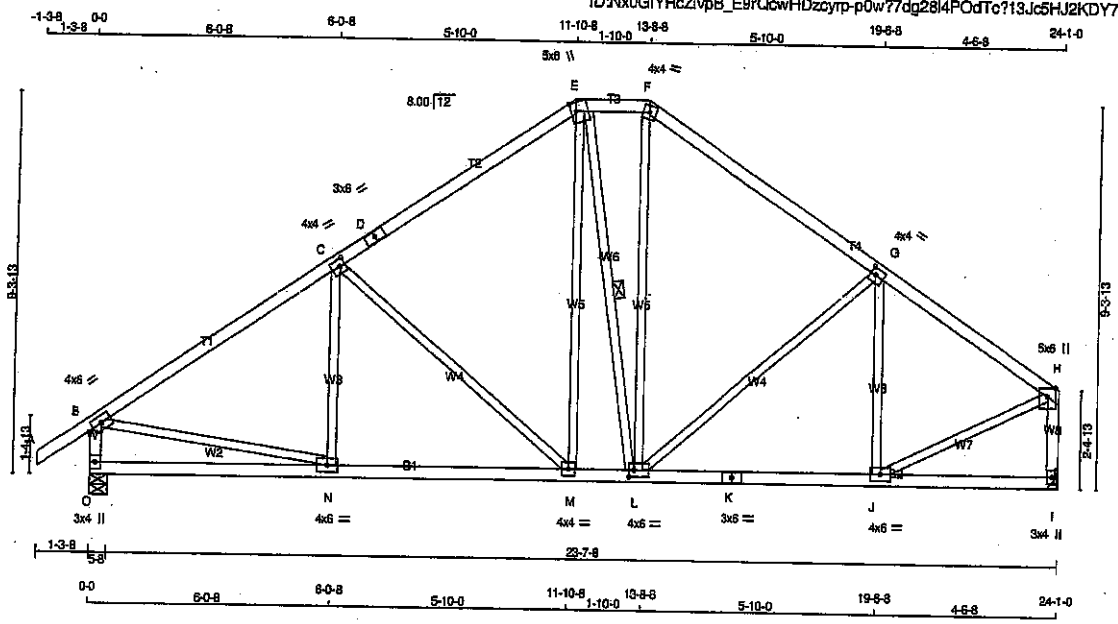

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
O - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTWW+m	MT20	5.0	6.0	2.50	1.50
F	TTW-m	MT20	4.0	4.0		
G	TMWW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW+p	MT20	5.0	6.0	Edge	
I	BMV1+p	MT20	3.0	4.0		
J	BMWW-t	MT20	4.0	6.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	6.0	2.00	1.50
M	BMWW-t	MT20	4.0	4.0		
N	BMWW-t	MT20	4.0	6.0		
O	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
O	1454	0	1454	0	0	5-8	5-8
I	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1026	886 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
I	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-L

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B-C	-1485 / 0	-91.8	-91.8	0.47 (1)	4.83
C-D	-1102 / 0	-91.8	-91.8	0.44 (1)	5.46
D-E	-1102 / 0	-91.8	-91.8	0.44 (1)	5.46
E-F	-877 / 0	-91.8	-91.8	0.05 (1)	8.25
F-G	-1081 / 0	-91.8	-91.8	0.39 (1)	5.58
G-H	-1197 / 0	-91.8	-91.8	0.35 (1)	5.42
O-B	-1408 / 0	0.0	0.0	0.15 (1)	6.87
I-H	-1295 / 0	0.0	0.0	0.16 (1)	7.10
O-N	0 / 0	-18.5	-18.5	0.17 (4)	10.00
N-M	0 / 1266	-18.5	-18.5	0.29 (1)	10.00
M-L	0 / 889	-18.5	-18.5	0.21 (1)	10.00
L-K	0 / 1028	-18.5	-18.5	0.24 (1)	10.00
K-J	0 / 1028	-18.5	-18.5	0.24 (1)	10.00
J-I	0 / 0	-18.5	-18.5	0.12 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
N-C	-98 / 69	0.04 (1)
C-M	-502 / 0	0.63 (1)
M-E	0 / 373	0.08 (1)
E-L	-66 / 0	0.04 (1)
L-F	0 / 287	0.06 (1)
L-G	-203 / 0	0.26 (1)
J-G	-366 / 0	0.16 (1)
B-N	0 / 1286	0.29 (1)
J-H	0 / 1130	0.25 (1)

TOTAL WEIGHT = 116 lb
[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.47/1.00 (B-C:1) , BC=0.29/1.00 (M-N:1) , WB=0.63/1.00 (C-M:1) , SSI=0.22/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (B) (INPUT = 0.90)
JSI METAL= 0.48 (H) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123973

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T21	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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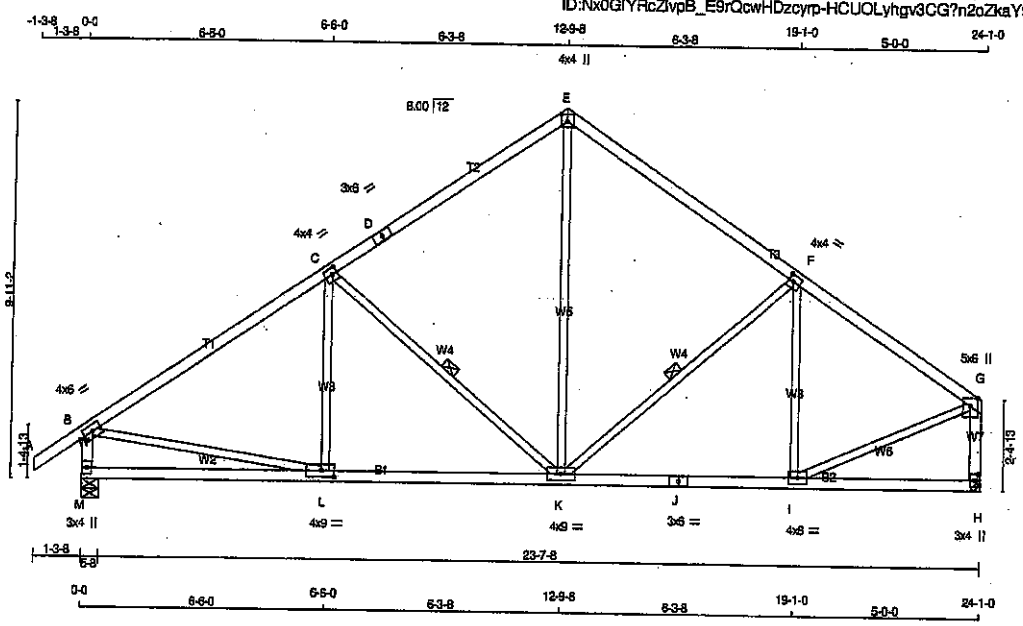

TOTAL WEIGHT = 104 lb
[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTW+p	MT20	4.0	4.0	2.25	2.00
F	TMWW-t	MT20	4.0	4.0	2.00	1.50
G	TMVW+p	MT20	5.0	6.0	Edge	
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	4.0	9.0		
L	BMWW-t	MT20	4.0	9.0	2.00	4.25
M	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1454	0	1454	0	0	5-8	5-8
H	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
M	1026	686 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
H	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.71 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-K, F-K.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	
B- C	-1476 / 0	-91.8	-91.8	0.56 (1)	4.71	
C- D	-1044 / 0	-91.8	-91.8	0.51 (1)	5.44	
D- E	-1044 / 0	-91.8	-91.8	0.51 (1)	5.44	
E- F	-1036 / 0	-91.8	-91.8	0.48 (1)	5.57	
F- G	-1220 / 0	-91.8	-91.8	0.41 (1)	5.29	
M- B	-1404 / 0	0.0	0.0	0.14 (1)	8.87	
H- G	-1292 / 0	0.0	0.0	0.16 (1)	7.10	
M- L	0 / 0	-18.5	-18.5	0.18 (4)	10.00	
L- K	0 / 1261	-18.5	-18.5	0.29 (1)	10.00	
K- J	0 / 1049	-18.5	-18.5	0.25 (1)	10.00	
J- I	0 / 1049	-18.5	-18.5	0.25 (1)	10.00	
I- H	0 / 0	-18.5	-18.5	0.13 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
L- C	-79 / 78	0.04 (1)
C- K	-582 / 0	0.26 (1)
K- E	0 / 667	0.15 (1)
K- F	-283 / 0	0.13 (1)
I- F	-323 / 0	0.16 (1)
B- L	0 / 1278	0.29 (1)
I- G	0 / 1136	0.26 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.56/1.00 (B-C:1) , BC=0.29/1.00 (K-L:1) , WB=0.29/1.00 (B-L:1) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (E) (INPUT = 0.90)
JSI METAL= 0.50 (G) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123974

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T22	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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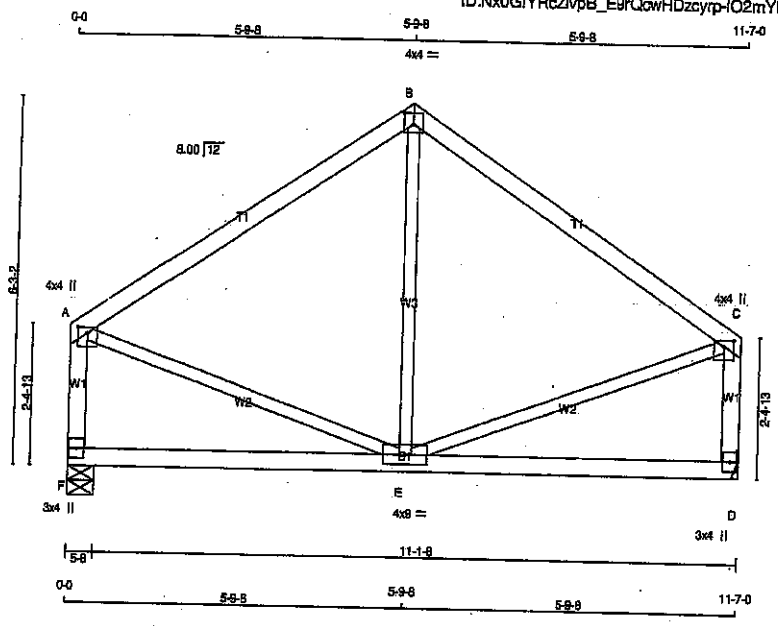

TOTAL WEIGHT = 3 X 48 = 144 lb

[M/F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TTW-p	MT20	4.0	4.0	2.25	2.00
C	TMVW+p	MT20	4.0	4.0	1.25	2.00
D	BMV1+p	MT20	3.0	4.0		
E	BMWWW-t	MT20	4.0	9.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	639	0	639	0	0	5-8	5-8
D	639	0	639	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	452	296 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
D	452	296 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	-389 / 0	-91.8	-91.8	0.40 (1)	6.25	6.25
B-C	-389 / 0	-91.8	-91.8	0.40 (1)	6.25	6.25
F-A	-598 / 0	0.0	0.0	0.08 (1)	7.81	7.81
D-C	-598 / 0	0.0	0.0	0.08 (1)	7.81	
F-E	0 / 0	-18.5	-18.5	0.18 (4)	10.00	
E-D	0 / 0	-18.5	-18.5	0.18 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E-B	-100 / 63	0.06 (1)
A-E	0 / 344	0.08 (1)
E-C	0 / 344	0.08 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.40/1.00 (B-C:1) , BC=0.18/1.00 (D-E:4) , WB=0.08/1.00 (A-E:1) , SSI=0.17/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (A) (INPUT = 0.90)
JSI METAL= 0.12 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123975

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T23S	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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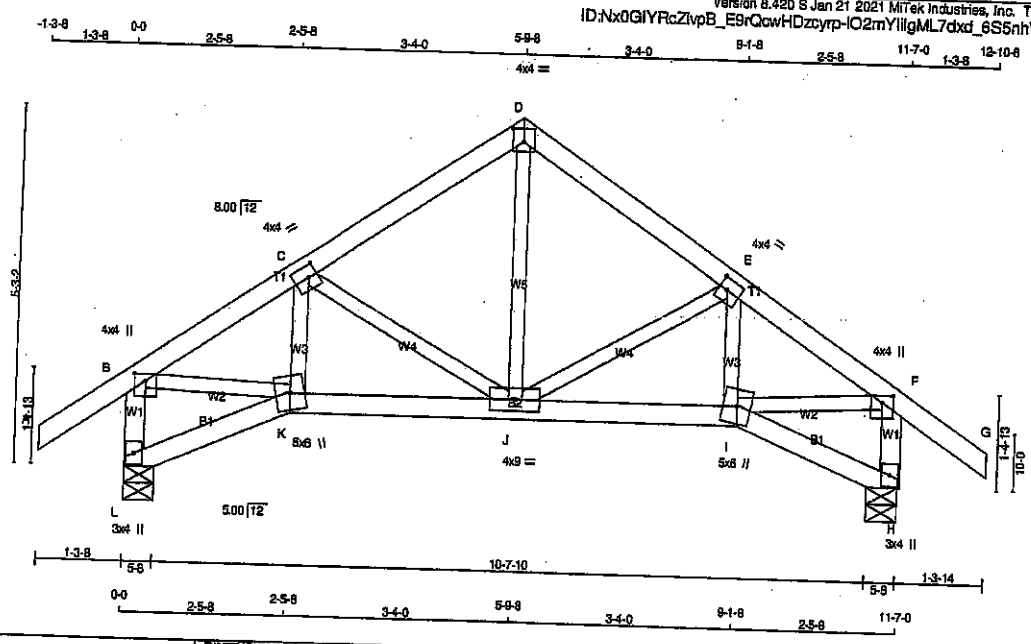

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	2.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-p	MT20	4.0	4.0	2.25	2.00
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TMVW+p	MT20	4.0	4.0	1.25	2.00
H	BMV1+p	MT20	3.0	4.0		
I	BBWW+m	MT20	5.0	6.0		
J	BMWWW-t	MT20	4.0	9.0		
K	BBWW+m	MT20	5.0	6.0		
L	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 51 = 102 lb
[M][F]

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
L	764	0	764	0	0	IN-SX	IN-SX
H	764	0	764	0	0	5-8	5-8
						5-8 (5-2)	5-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): H

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	538	367 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
H	538	367 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) L, H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B-C	-817 / 0	-91.8	-91.8	0.09 (1)	6.25
C-D	-562 / 0	-91.8	-91.8	0.10 (1)	6.25
D-E	-562 / 0	-91.8	-91.8	0.10 (1)	6.25
E-F	-817 / 0	-91.8	-91.8	0.09 (1)	6.25
F-G	0 / 35	-91.8	-91.8	0.12 (1)	10.00
L-B	-742 / 0	0.0	0.0	0.08 (1)	7.81
H-F	-742 / 0	0.0	0.0	0.08 (1)	7.81
L-K	0 / 0	-18.5	-18.5	0.03 (4)	10.00
K-J	0 / 695	-18.5	-18.5	0.14 (1)	10.00
J-I	0 / 695	-18.5	-18.5	0.14 (1)	10.00
I-H	0 / 0	-18.5	-18.5	0.03 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J-D	0 / 363	0.08 (1)
J-E	-261 / 0	0.07 (1)
I-E	-20 / 30	0.01 (4)
C-J	-261 / 0	0.07 (1)
K-C	-20 / 30	0.01 (4)
B-K	0 / 698	0.16 (1)
I-F	0 / 698	0.16 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2018
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(65 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.12/1.00 (F-G:1) , BC=0.14/1.00 (I-J:1) , WB=0.16/1.00 (F-I:1) , SSI=0.11/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (B) (INPUT = 0.90)
JSI METAL= 0.25 (I) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/15/21
H. J. G/ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123976

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T24	1	2	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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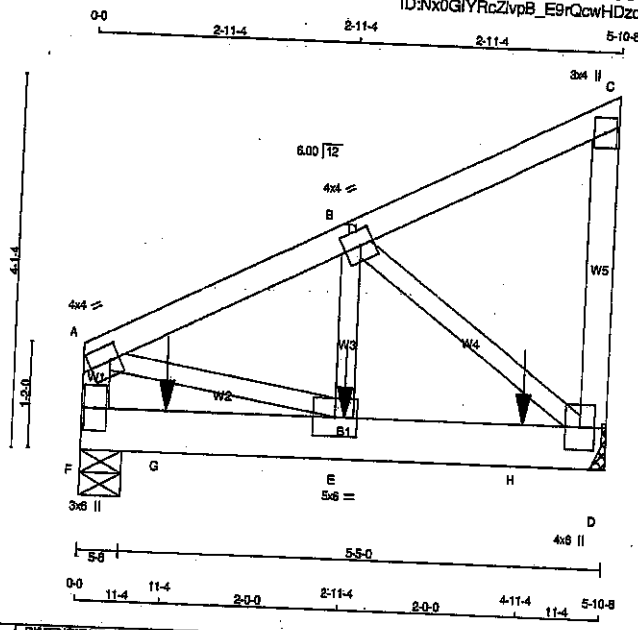

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS		
F-A 1	12	
A-C 1	12	TOP
C-D 1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS		TOP
F-D 2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS		
2x3 1	8	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-t	MT20	4.0	4.0	2.00	1.25
B	TMWW-t	MT20	4.0	4.0	2.00	1.75
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0		

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123977

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 29 = 58 lb

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	588	0	588	0	0	IN-SX	IN-SX
D	713	0	713	0	0	5-8	5-8
						MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 2-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	411	296 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
D	497	366 / 0	0 / 0	0 / 0	0 / 0	132 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F-A	-511 / 0	0.0	0.0	0.03 (1)	7.81	
A-B	-581 / 0	-91.8	-91.8	0.07 (1)	6.25	
B-C	-13 / 0	-91.8	-91.8	0.06 (1)	6.25	
D-C	-105 / 0	0.0	0.0	0.01 (1)	7.81	
F-G	0 / 0	-18.5	-18.5	0.02 (1)	10.00	
G-E	0 / 0	-18.5	-18.5	0.02 (1)	10.00	
E-H	0 / 531	-18.5	-18.5	0.10 (1)	10.00	
H-D	0 / 531	-18.5	-18.5	0.10 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A-E	0 / 550	0.07 (1)
E-B	0 / 343	0.04 (1)
B-D	-669 / 0	0.08 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	2-11-4	-208	-208	—	TOP	VERT	TOTAL	—	C1
G	11-4	-58	-58	—	BACK	VERT	TOTAL	—	C1
H	4-11-4	-184	-184	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN O/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.07/1.00 (A-B:1) , BC=0.10/1.00 (D-E:1) , WB=0.08/1.00 (B-D:1) , SSI=0.07/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (A) (INPUT = 0.90)
JSI METAL= 0.12 (D) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T24	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123977

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T24Z	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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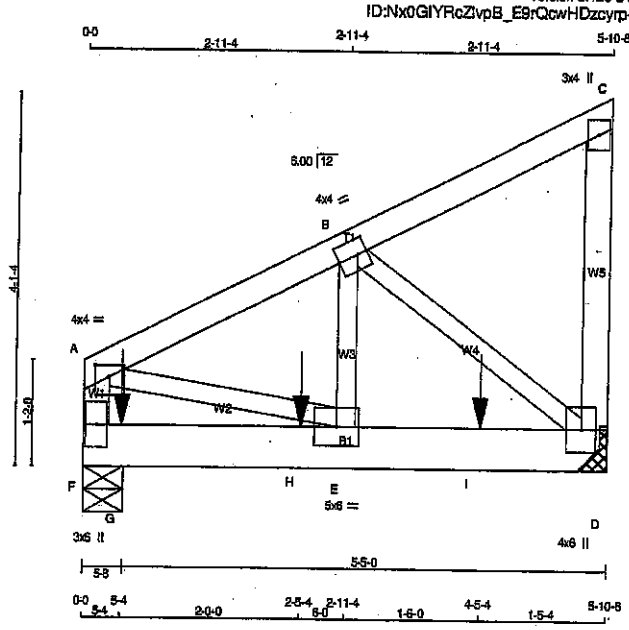

TOTAL WEIGHT = 2 X 29 = 58 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	5	SIDE(366.2)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	4.0	1.50	2.00
B	TMWW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	BMWW1+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0		

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. GALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123990

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	FACTORED UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	2627	0	2627	0	0	5-8	5-8
D	1953	0	1953	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1855	1232 / 0	0 / 0	0 / 0	0 / 0	623 / 0	0 / 0
D	1379	917 / 0	0 / 0	0 / 0	0 / 0	462 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-1433 / 0	0.0	0.0	0.08 (1)	7.81
A- B	-1920 / 0	-91.8	-91.8	0.07 (1)	6.25
B- C	-9 / 0	-91.8	-91.8	0.06 (1)	10.00
D- C	-115 / 0	0.0	0.0	0.01 (1)	7.81
F- G	0 / 0	-18.5	-18.5	0.19 (1)	10.00
G- H	0 / 0	-18.5	-18.5	0.19 (1)	10.00
H- E	0 / 0	-18.5	-18.5	0.19 (1)	10.00
E- I	0 / 1725	-18.5	-18.5	0.38 (1)	10.00
I- D	0 / 1725	-18.5	-18.5	0.38 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 1784	0.22 (1)
E- B	0 / 1871	0.23 (1)
B- D	-2171 / 0	0.28 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1 MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	5-4	-928	-928	—	BACK	VERT	TOTAL	—	C1
H	2-5-4	-924	-924	—	BACK	VERT	TOTAL	—	C1
I	4-5-4	-924	-924	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.08/1.00 (A-F:1) , BC=0.38/1.00 (D-E:1) , WB=0.26/1.00 (B-D:1) , SSI=0.49/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	550	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.39 (D) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T24Z	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123990

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T25	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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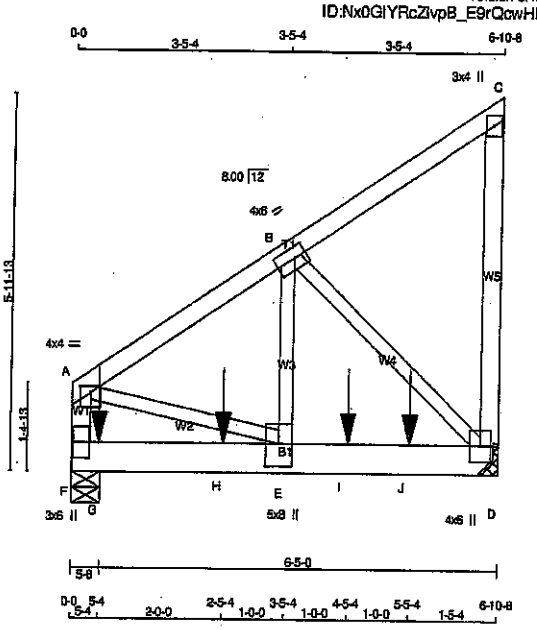

TOTAL WEIGHT = 2 X 37 = 74 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	2	2	SIDE(159.8)
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	11	SIDE(183.1)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	4.0	1.25	2.00
B	TMWW-t	MT20	4.0	6.0	2.00	2.25
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW+t	MT20	5.0	8.0	4.25	2.50

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123978 1/1

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	3193	0	3193	0	0	5-8	5-8
D	2807	0	2807	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	2255	1498 / 0	0 / 0	0 / 0	0 / 0	757 / 0	0 / 0
D	1982	1318 / 0	0 / 0	0 / 0	0 / 0	663 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-1949 / 0	0.0	0.0	0.11 (1)	7.81	
A- B	-2272 / 0	-91.8	-91.8	0.10 (1)	5.83	
B- C	-17 / 0	-91.8	-91.8	0.08 (1)	6.25	
D- C	-128 / 0	0.0	0.0	0.04 (1)	7.81	
F- G	0 / 0	-18.5	-18.5	0.40 (1)	10.00	
G- H	0 / 0	-18.5	-18.5	0.40 (1)	10.00	
H- E	0 / 0	-18.5	-18.5	0.40 (1)	10.00	
E- I	0 / 1904	-18.5	-18.5	0.57 (1)	10.00	
I- J	0 / 1904	-18.5	-18.5	0.57 (1)	10.00	
J- D	0 / 1904	-18.5	-18.5	0.57 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 1982	0.25 (1)
E- B	0 / 2715	0.34 (1)
B- D	-2635 / 0	0.47 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	5-4	-928	-928	---	BACK	VERT	TOTAL	—	C1
H	2-5-4	-924	-924	---	BACK	VERT	TOTAL	—	C1
I	4-5-4	-924	-924	---	BACK	VERT	TOTAL	—	C1
J	5-5-4	-924	-924	---	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.11/1.00 (A-F:1) , BC=0.57/1.00 (D-E:1) , WB=0.47/1.00 (B-D:1) , SSI=0.60/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (A) (INPUT = 0.90)
JSI METAL= 0.43 (D) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T25	1	2	TRUSS DESC.	
Tamarack Roof Truss, Burlington					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	8.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123978

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T26	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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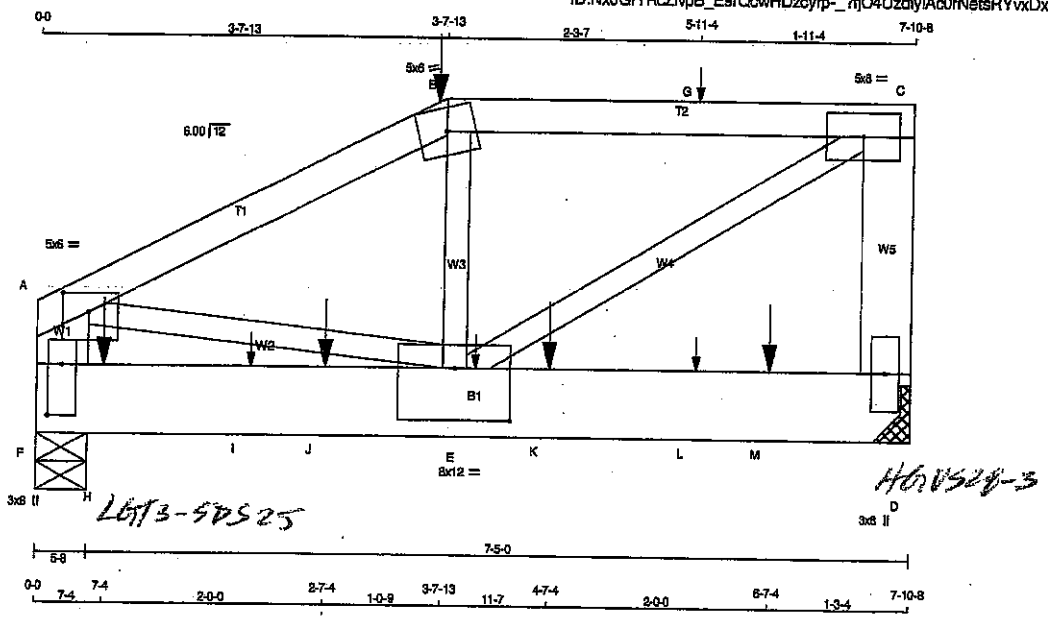

TOTAL WEIGHT = 3 X 41 = 122 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
D - C	2x6	DRY	No.2	SPF
F - A	2x6	DRY	No.2	SPF
F - D	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-B	1	12	SIDE(105.2)
B-C	1	12	SIDE(105.2)
C-D	2	12	TOP
F-A	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F-D	3	4	SIDE(1474.1)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123979

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	6938	0	6938	0	-2181	MECHANICAL	
F	7979	0	7979	150	-2486	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 2181 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT F FOR 2486 LBS FACTORED UPLIFT

PROVIDE FOR 150 LBS FACTORED HORIZONTAL REACTION AT JOINT F

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	5110	3072 / 0	871 / 0	0 / 0	406 / -2121	1167 / 0	0 / 0
F	5885	3512 / 0	1020 / 0	0 / 0	488 / -2427	1352 / 0	0 / 0
HORIZONTAL REACTIONS							
F	---	0 / 0	0 / 0	0 / 0	107 / -44	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (31)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	-7115 / 2209	-115.2	-115.2	0.17 (2)	4.34
B-G	-6576 / 2099	-115.2	-115.2	0.18 (1)	4.46
G-C	-6576 / 2099	-115.2	-115.2	0.18 (1)	4.46
D-C	-4398 / 1420	0.0	0.0	0.12 (1)	7.81
F-A	-4560 / 1445	0.0	0.0	0.10 (1)	7.81
F-H	-135 / 54	-39.5	-39.5	0.33 (3)	6.25
H-I	-135 / 54	-39.5	-39.5	0.33 (3)	6.25
I-J	-135 / 54	-39.5	-39.5	0.33 (3)	6.25
J-E	-135 / 54	-39.5	-39.5	0.33 (3)	6.25
E-K	-20 / 50	-39.5	-39.5	0.48 (1)	6.25
K-L	-20 / 50	-39.5	-39.5	0.48 (1)	6.25
L-M	-20 / 50	-39.5	-39.5	0.48 (1)	6.25
M-D	-20 / 50	-39.5	-39.5	0.48 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
E-B	-817 / 2804	0.21 (3)
E-C	-2426 / 7786	0.58 (1)
A-E	-1940 / 6462	0.48 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	3-7-13	-8	-8	---	FRONT	VERT	DEAD	—	C1
B	3-7-13	1	1	97	BACK	VERT	TOTAL	—	C1
B	3-7-13	-26	-26	—	FRONT	VERT	SNOW	—	C1
E	3-11-4	1	1	---	BACK	VERT	TOTAL	—	C1
G	5-11-4	1	-11	97	BACK	VERT	TOTAL	—	C1
H	7-4	-2436	-2436	588	FRONT	VERT	TOTAL	—	C1
I	1-11-4	1	1	—	BACK	VERT	TOTAL	—	C1
J	2-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1
K	4-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1
L	5-11-4	1	1	---	BACK	VERT	TOTAL	—	C1
M	6-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

[M]

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	8.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/180 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.18/1.00 (B-C:1) , BC=0.48/1.00 (D-E:1) , WB=0.58/1.00 (C-E:1) , SSI=0.81/1.00 (D-E:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T26	1	3	TRUSS DESC.	
Tamarack Roof Truss, Burlington					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	5.0	6.0	2.00	2.75
B	TTW-m	MT20	5.0	6.0		
C	TMVW-t	MT20	5.0	8.0		
D	BMV1+p	MT20	3.0	8.0		
E	BMWWW-t	MT20	8.0	12.0	5.50	6.00
F	BMV1+p	MT20	3.0	8.0	5.50	1.50

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.52 (F) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123979

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T26Z	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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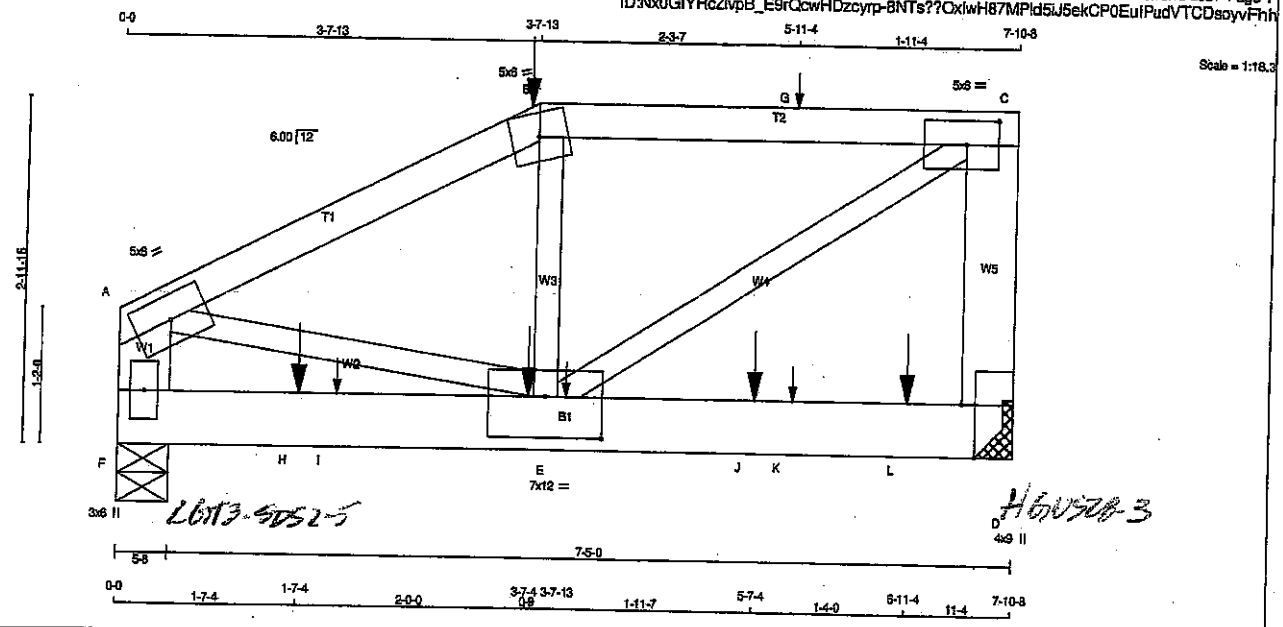

LGT3-SDS2-5

HGUS28-3

TOTAL WEIGHT = 3 X 37 = 110 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
D - C	2x6	DRY	No.2	SPF
F - A	2x6	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-B	1	12	SIDE(105.2)
B-C	1	12	SIDE(105.2)
C-D	2	12	TOP
F-A	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F-D	3	4	SIDE(2361.4)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123991

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	8520	0	8520	0	-2677	MECHANICAL	
F	6551	0	6551	154	-2037	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 2677 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT F FOR 2037 LBS FACTORED UPLIFT

PROVIDE FOR 154 LBS FACTORED HORIZONTAL REACTION AT JOINT F

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	6274	3776 / 0	1067 / 0	0 / 0	518 / -2603	1431 / 0	0 / 0
F	4824	2903 / 0	821 / 0	0 / 0	417 / -1986	1100 / 0	0 / 0
HORIZONTAL REACTIONS							
F	—	0 / 0	0 / 0	0 / 0	110 / -47	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 4.15 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (31)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	-7834 / 2436	-115.2	-115.2	0.19 (2)		4.15
B-G	-7232 / 2307	-115.2	-115.2	0.20 (1)		4.27
G-C	-7232 / 2307	-115.2	-115.2	0.20 (1)		4.27
D-C	-4938 / 1590	0.0	0.0	0.15 (1)		7.68
F-A	-5133 / 1624	0.0	0.0	0.11 (1)		7.57
F-H	-137 / 58	-39.5	-39.5	0.58 (3)		6.25
H-I	-137 / 58	-39.5	-39.5	0.58 (3)		6.25
I-E	-137 / 58	-39.5	-39.5	0.58 (3)		6.25
E-J	-20 / 52	-39.5	-39.5	0.77 (1)		6.25
J-K	-20 / 52	-39.5	-39.5	0.77 (1)		6.25
K-L	-20 / 52	-39.5	-39.5	0.77 (1)		6.25
L-D	-20 / 52	-39.5	-39.5	0.77 (1)		6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E-B	-916 / 3128	0.23 (3)
E-C	-2691 / 8630	0.65 (1)
A-E	-2153 / 7140	0.54 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	3-7-13	-6	-6	—	FRONT	VERT	DEAD	—	C1
B	3-7-13	1	1	97	BACK	VERT	TOTAL	—	C1
B	3-7-13	-28	-28	—	FRONT	VERT	SNOW	—	C1
E	3-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1
E	3-11-4	1	1	—	BACK	VERT	TOTAL	—	C1
G	5-11-4	1	-11	97	BACK	VERT	TOTAL	—	C1
H	1-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1
I	1-11-4	1	1	—	BACK	VERT	TOTAL	—	C1
J	5-7-4	-2541	-2541	616	FRONT	VERT	TOTAL	—	C1
K	5-11-4	1	1	—	BACK	VERT	TOTAL	—	C1
L	6-11-4	-2542	-2542	616	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/180 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.20/1.00 (B-C:1) , BC=0.77/1.00 (D-E:1) , WB=0.65/1.00 (C-E:1) , SSI=0.72/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T26Z	1	3	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0		
B	TTW-m	MT20	5.0	8.0		
C	TMVW-t	MT20	5.0	8.0	2.50	3.50
D	BMV1+t	MT20	4.0	9.0	Edge	1.50
E	BMWWW-t	MT20	7.0	12.0	4.25	6.00
F	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123991

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T28	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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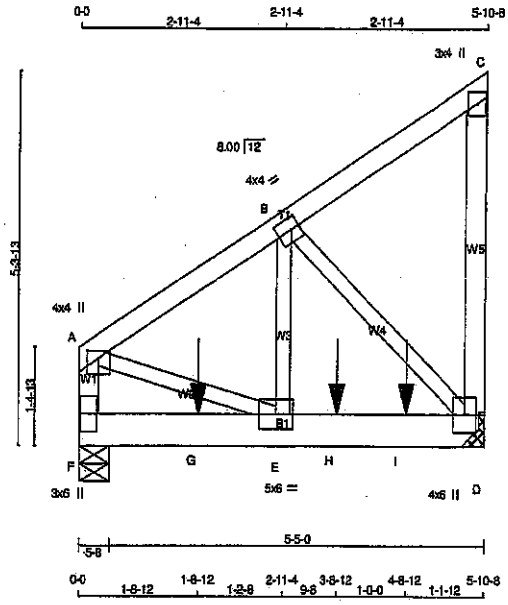

TOTAL WEIGHT = 2 X 32 = 64 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TMWW-t	MT20	4.0	4.0	2.00	1.50
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		
E	BMWW-t	MT20	5.0	6.0		

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009824
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123980

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1109	0	1109	0	0	5-8	5-8
D	1399	0	1399	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	782	526 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0
D	986	664 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-952 / 0	0.0	0.0	0.05 (1)	7.81	
A- B	-994 / 0	-91.8	-91.8	0.07 (1)	6.25	
B- C	-16 / 0	-91.8	-91.8	0.06 (1)	6.25	
D- C	-107 / 0	0.0	0.0	0.02 (1)	7.81	
F- G	0 / 0	-18.5	-18.5	0.14 (1)	10.00	
G- E	0 / 0	-18.5	-18.5	0.14 (1)	10.00	
E- H	0 / 840	-18.5	-18.5	0.24 (1)	10.00	
H- I	0 / 840	-18.5	-18.5	0.24 (1)	10.00	
I- D	0 / 840	-18.5	-18.5	0.24 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 887	0.11 (1)
E- B	0 / 1079	0.13 (1)
B- D	-1192 / 0	0.17 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-8-12	-437	-437	---	FRONT	VERT	TOTAL	---	C1
H	3-8-12	-437	-437	---	FRONT	VERT	TOTAL	---	C1
I	4-8-12	-437	-437	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.07/1.00 (A-B:1) , BC=0.24/1.00 (D-E:1) , WB=0.17/1.00 (B-D:1) , SSI=0.28/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (B) (INPUT = 0.90)
JSI METAL= 0.19 (D) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T28	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
F	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123980 212

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	T29	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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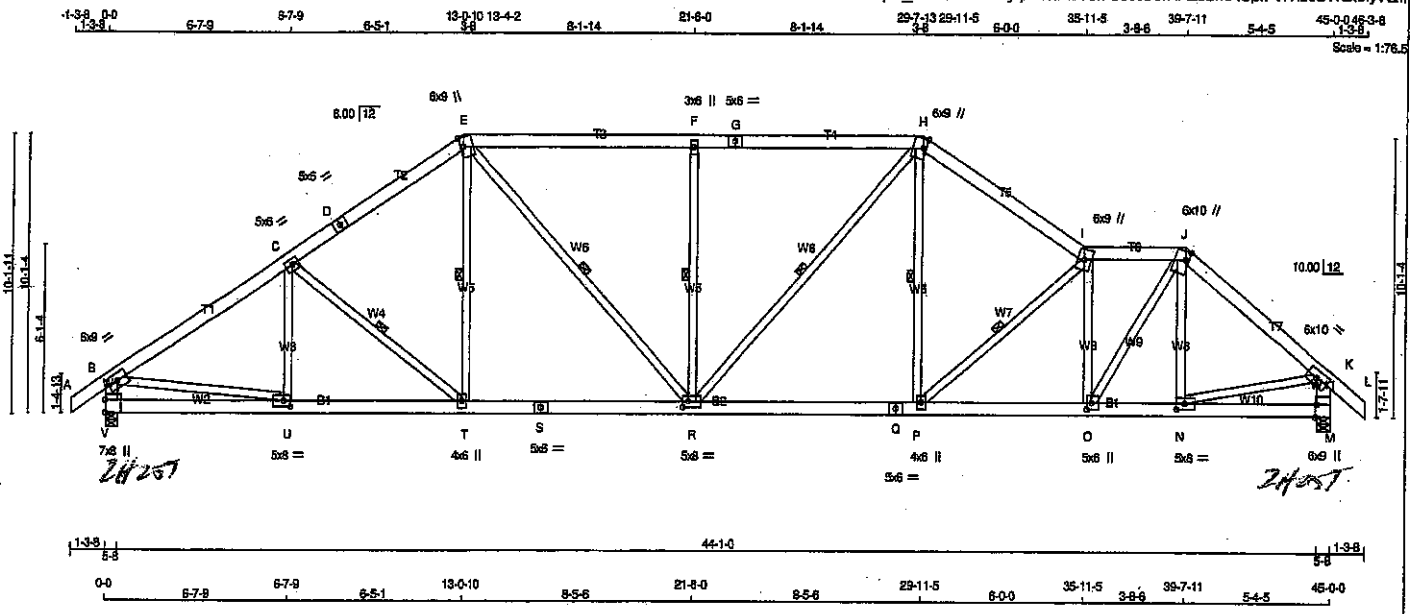

TOTAL WEIGHT = 296 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x6	DRY	No.2	SPF
D - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - H	2x6	DRY	No.2	SPF
H - I	2x6	DRY	No.2	SPF
I - J	2x6	DRY	No.2	SPF
J - L	2x6	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - Q	2x6	DRY	No.2	SPF
Q - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	9.0		
C	TMWW-t	MT20	5.0	6.0		
D	TS-t	MT20	5.0	6.0		
E	TTWW+m	MT20	6.0	9.0	4.25	1.50
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TTWW+m	MT20	6.0	9.0	4.25	1.50
I	TTWW+m	MT20	6.0	9.0		
J	TTWW+m	MT20	6.0	10.0	3.75	1.50
K	TMVW-t	MT20	6.0	10.0		
M	BMV1+t	MT20	6.0	9.0	Edge	0.50
N	BMWW-t	MT20	5.0	8.0	2.50	3.50
O	BMWW+t	MT20	5.0	6.0	2.75	2.00
P	BMWW+t	MT20	4.0	6.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	5.0	8.0	2.50	2.50
S	BS-t	MT20	5.0	6.0		
T	BMWW+t	MT20	4.0	6.0		
U	BMWW-t	MT20	5.0	8.0	2.50	3.00
V	BMV1+t	MT20	7.0	8.0	5.50	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123981 1/2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3645	0	3645	443	-1109	5-8	5-8
M	3648	0	3648	0	-1126	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1109 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1126 LBS FACTORED UPLIFT

PROVIDE FOR 443 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2691	1599 / 0	473 / 0	0 / 0	89 / -1091	620 / 0	0 / 0
M	2693	1600 / 0	473 / 0	0 / 0	136 / -1103	620 / 0	0 / 0
HORIZONTAL REACTIONS							
V	--	0 / 0	0 / 0	0 / 0	316 / -315	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-T, E-T, H-P, I-P, H-R, E-R, F-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.09 (2)	10.00	
B- C	-4543 / 1411	-115.2	-115.2	0.58 (2)	3.61	
C- D	-4098 / 1424	-115.2	-115.2	0.54 (2)	3.80	
D- E	-4098 / 1424	-115.2	-115.2	0.54 (2)	3.80	
E- F	-4174 / 1519	-115.2	-115.2	0.87 (1)	3.19	
F- G	-4175 / 1519	-115.2	-115.2	0.87 (1)	3.19	
G- H	-4175 / 1519	-115.2	-115.2	0.87 (1)	3.19	
H- I	-4364 / 1508	-115.2	-115.2	0.52 (3)	3.71	
I- J	-4413 / 1516	-115.2	-115.2	0.22 (1)	3.97	
J- K	-3666 / 1220	-115.2	-115.2	0.39 (1)	4.04	
K- L	0 / 53	-115.2	-115.2	0.09 (1)	10.00	
V- B	-3526 / 1129	0.0	0.0	0.23 (1)	5.68	
M- K	-3559 / 1148	0.0	0.0	0.23 (1)	5.66	
V- U	-425 / 433	-39.5	-39.5	0.14 (4)	6.25	
U- T	-1218 / 3818	-39.5	-39.5	0.56 (1)	6.25	
T- S	-866 / 3375	-39.5	-39.5	0.54 (1)	6.25	
S- R	-866 / 3375	-39.5	-39.5	0.54 (1)	6.25	
R- Q	-790 / 3648	-39.5	-39.5	0.57 (1)	6.25	
Q- P	-790 / 3648	-39.5	-39.5	0.57 (1)	6.25	
P- O	-1119 / 4470	-39.5	-39.5	0.65 (1)	6.25	
O- N	-668 / 2951	-39.5	-39.5	0.42 (1)	6.25	
N- M	-10 / 22	-39.5	-39.5	0.09 (17)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U- C	-343 / 209	0.11 (8)
C- T	-680 / 458	0.23 (2)
T- E	-231 / 736	0.12 (2)
P- H	-323 / 1102	0.18 (3)
P- I	-1155 / 567	0.38 (3)
O- I	-2199 / 739	0.80 (1)
O- J	-808 / 2734	0.44 (1)
N- J	-386 / 173	0.14 (8)
B- U	-995 / 3853	0.62 (1)
N- K	-708 / 3020	0.49 (1)
R- H	-412 / 1162	0.36 (13)
E- R	-559 / 1487	0.52 (11)
R- F	-1183 / 620	0.54 (2)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 998 (0.18")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.87/1.00 (F-H:1) , BC=0.66/1.00 (O-P:1) , WB=0.80/1.00 (I-O:1) , SSI=0.38/1.00 (E-F:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (U) (INPUT = 0.90)
JSI METAL= 0.77 (B) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	T29	1	1	TRUSS DESC.	

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123981

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T30	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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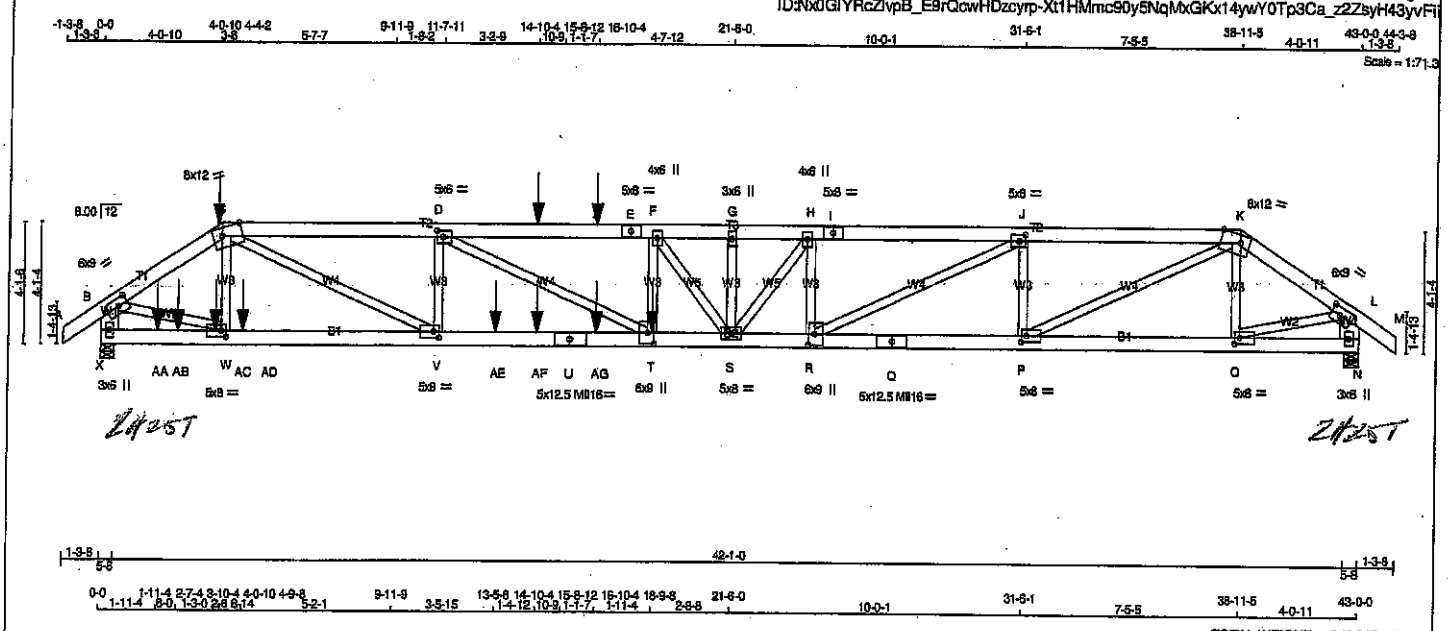

TOTAL WEIGHT = 2 X 245 = 490 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x6	DRY	1650F 1.5E	SPF
C - E	2x6	DRY	1650F 1.5E	SPF
E - I	2x6	DRY	1650F 1.5E	SPF
I - K	2x6	DRY	1650F 1.5E	SPF
K - M	2x6	DRY	1650F 1.5E	SPF
X - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
X - U	2x6	DRY	2100F 1.8E	SPF
U - Q	2x6	DRY	2100F 1.8E	SPF
Q - N	2x6	DRY	2100F 1.8E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	2	12	SIDE(140.3)
C- E	2	12	SIDE(70.1)
E- I	2	12	TOP
I- K	2	12	TOP
K- M	2	12	TOP
X- B	2	12	TOP
N- L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
X- U	2	12	SIDE(227.4)
U- Q	2	12	SIDE(227.4)
Q- N	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x4	1	8	
T- F	1	5	SIDE(307.0)
R- H	1	5	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123992

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	6884	0	6913	-198	-1110	5-8	5-8
N	4927	0	4967	0	-1139	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1110 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1139 LBS FACTORED UPLIFT

PROVIDE FOR 198 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

1ST LOASE — MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	4971	3152 / 0	452 / 0	0 / 0	0 / -1102	1387 / 0	0 / 0
N	3590	2237 / 0	452 / 0	0 / 0	48 / -1102	929 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	141 / -141	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FROM	FACTORED VERT. LOAD LC1 (PLF) TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 49	-115.2	-115.2	0.03 (2)	10.00
B- C	-8794 / 1332	-115.2	-115.2	0.11 (2)	4.80
C- D	-15685 / 2554	-115.2	-115.2	0.40 (1)	3.44
D- Y	-19329 / 3243	-115.2	-115.2	0.54 (1)	3.03
Y- Z	-19329 / 3243	-115.2	-115.2	0.54 (1)	3.03
Z- E	-19329 / 3243	-115.2	-115.2	0.54 (1)	3.03
E- F	-19329 / 3243	-115.2	-115.2	0.54 (1)	3.03
F- G	-18128 / 3244	-115.2	-115.2	0.29 (1)	3.27
G- H	-18128 / 3244	-115.2	-115.2	0.29 (1)	3.26
H- I	-17053 / 3249	-115.2	-115.2	0.43 (1)	3.29
I- J	-17053 / 3249	-115.2	-115.2	0.43 (1)	3.29
J- K	-12363 / 2673	-115.2	-115.2	0.30 (1)	3.88
K- L	-6136 / 1372	-115.2	-115.2	0.09 (14)	5.31
L- M	0 / 49	-115.2	-115.2	0.03 (3)	10.00
X- B	-6894 / 1128	0.0	0.0	0.19 (2)	6.39
N- L	-4943 / 1157	0.0	0.0	0.13 (3)	7.28
X-AA	-180 / 189	-39.5	-39.5	0.08 (3)	6.25
AA-AB	-180 / 189	-39.5	-39.5	0.08 (3)	6.25
AB-AC	-180 / 189	-39.5	-39.5	0.08 (3)	6.25
AC- W	-180 / 189	-39.5	-39.5	0.08 (3)	6.25
W-AD	-1013 / 7289	-39.5	-39.5	0.32 (1)	6.25
AD- V	-1013 / 7289	-39.5	-39.5	0.32 (1)	6.25
V-AE	-2477 / 15686	-39.5	-39.5	0.67 (1)	6.25
AE-AF	-2477 / 15686	-39.5	-39.5	0.67 (1)	6.25
AF- U	-2477 / 15686	-39.5	-39.5	0.67 (1)	6.25
U-AG	-2477 / 15686	-39.5	-39.5	0.67 (1)	6.25
AG- T	-2477 / 15686	-39.5	-39.5	0.67 (1)	6.25
T- S	-3066 / 19329	-39.5	-39.5	0.56 (1)	6.25
S- R	-3057 / 17053	-39.5	-39.5	0.52 (1)	6.25
R- Q	-2445 / 12363	-39.5	-39.5	0.39 (1)	6.25
Q- P	-2445 / 12363	-39.5	-39.5	0.39 (1)	6.25
P- O	-957 / 5082	-39.5	-39.5	0.18 (1)	6.25
O- N	-8 / 18	-39.5	-39.5	0.05 (17)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W- C	-251 / 243	0.02 (8)
O- K	-795 / 250	0.07 (3)
B- W	-978 / 7463	0.66 (1)
O- L	-1606 / 5207	0.46 (3)
C- V	-1684 / 9374	0.83 (3)
V- D	-2825 / 819	0.24 (3)
D- T	-711 / 4107	0.36 (3)
R- H	-2095 / 356	0.18 (2)
T- F	0 / 883	0.08 (2)
S- H	-19 / 1827	0.16 (2)
F- S	-2042 / 10	0.24 (2)
S- G	-43 / 17	0.00 (2)
P- K	-1656 / 8173	0.79 (13)
R- J	-684 / 5289	0.47 (2)
P- J	-3312 / 807	0.28 (2)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.51")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 688 (0.75")

CSI: TC=0.54/1.00 (D-F:1) , BC=0.67/1.00 (T-V:1) , WB=0.83/1.00 (C-V:3) , SSI=0.37/1.00 (V-W:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T30	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Nx0GlYRcZlvpB_E9rQcwHDzcyrp-Xt1HMmc90y5NqMxGKx14ywY0Tp3Ca_z2ZsyH43yvFi

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	3.00	3.75
C	TTWW-m	MT20	8.0	12.0	Edge	8.25
D	TMWW-t	MT20	5.0	6.0	2.50	2.50
E	TS-t	MT20	5.0	8.0		
F	TMWW+t	MT20	4.0	6.0		
G	TMW+w	MT20	3.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TS-t	MT20	5.0	8.0		
J	TMWW-t	MT20	5.0	6.0	2.50	2.50
K	TTWW-m	MT20	8.0	12.0	Edge	8.25
L	TMVW-t	MT20	6.0	9.0	3.00	3.75
N	BMV1+p	MT20	3.0	6.0		
O	BMWW-t	MT20	5.0	8.0	2.50	2.00
P	BMWW-t	MT20	5.0	8.0	2.50	2.25
Q	BS-t	MII16	5.0	12.5		
R	BMWW+t	MT20	6.0	9.0	4.50	2.50
S	BMWWW-t	MT20	5.0	8.0		
T	BMWW+t	MT20	6.0	9.0	4.50	2.50
U	BS-t	MII16	5.0	12.5		
V	BMWW-t	MT20	5.0	8.0	2.50	2.25
W	BMWW-t	MT20	5.0	8.0	2.50	2.00
X	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-10	-40	-40	—	FRONT	VERT	DEAD	—	C1
C	4-0-10	-65	-105	—	BACK	VERT	TOTAL	—	C1
C	4-0-10	-171	-171	—	FRONT	VERT	SNOW	—	C1
T	18-9-8	-1364	-1364	—	BACK	VERT	TOTAL	—	C1
Y	14-10-4	-60	-60	—	BACK	VERT	TOTAL	—	C1
Z	16-10-4	-60	-60	—	BACK	VERT	TOTAL	—	C1
AA	1-11-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AB	2-7-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AC	3-10-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AD	4-9-8	-771	-771	—	BACK	VERT	TOTAL	—	C1
AE	13-5-8	-771	-771	—	BACK	VERT	TOTAL	—	C1
AF	14-10-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AG	16-10-4	-21	-21	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, GpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.78 (U) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123992 7/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T31	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 22 16:43:31 2021 Page 1
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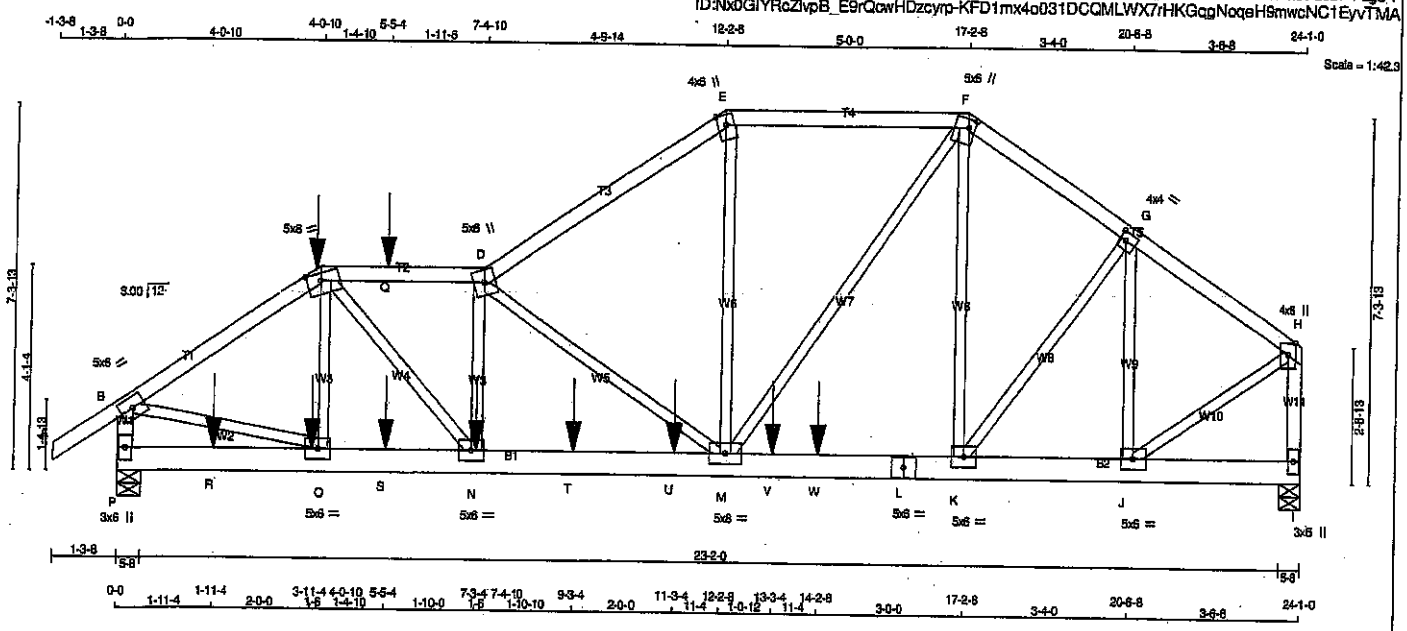

TOTAL WEIGHT = 2 X 125 = 250 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
P - L	2x6	DRY	No.2	SPF
L - I	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	SIDE(61.0)
C- D	1	12	SIDE(61.0)
D- E	1	12	TOP
E- F	1	12	TOP
F- H	1	12	TOP
P- B	1	12	TOP
I- H	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
P- L	2	12	SIDE(183.1)
L- I	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
07/21/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123993

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
P	3359	0	3359	0	0	5-8	5-8
I	2887	0	2887	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	2366	1608 / 0	0 / 0	0 / 0	0 / 0	758 / 0	0 / 0
I	2035	1373 / 0	0 / 0	0 / 0	0 / 0	662 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) P, I

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.07 (1)	10.00
B- C	-3969 / 0	-91.8	-91.8	0.22 (1)	4.58
C- Q	-5016 / 0	-91.8	-91.8	0.25 (1)	4.09
Q- D	-5016 / 0	-91.8	-91.8	0.25 (1)	4.09
D- E	-4162 / 0	-91.8	-91.8	0.31 (1)	4.40
E- F	-3491 / 0	-91.8	-91.8	0.28 (1)	4.73
F- G	-3118 / 0	-91.8	-91.8	0.13 (1)	5.13
G- H	-2421 / 0	-91.8	-91.8	0.11 (1)	5.68
P- B	-3312 / 0	0.0	0.0	0.18 (1)	6.40
I- H	-2818 / 0	0.0	0.0	0.20 (1)	6.83
P- R	0 / 0	-18.5	-18.5	0.03 (4)	10.00
R- O	0 / 0	-18.5	-18.5	0.03 (4)	10.00
O- S	0 / 3279	-18.5	-18.5	0.26 (1)	10.00
S- N	0 / 3279	-18.5	-18.5	0.26 (1)	10.00
N- T	0 / 5059	-18.5	-18.5	0.66 (1)	10.00
T- U	0 / 5059	-18.5	-18.5	0.66 (1)	10.00
U- M	0 / 5059	-18.5	-18.5	0.66 (1)	10.00
M- V	0 / 2574	-18.5	-18.5	0.58 (1)	10.00
V- W	0 / 2574	-18.5	-18.5	0.58 (1)	10.00
W- L	0 / 2574	-18.5	-18.5	0.58 (1)	10.00
L- K	0 / 2574	-18.5	-18.5	0.58 (1)	10.00
K- J	0 / 2030	-18.5	-18.5	0.33 (1)	10.00
J- I	0 / 0	-18.5	-18.5	0.05 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
O- C	-615 / 0	0.08 (1)
C- N	0 / 2647	0.33 (1)
N- D	-1526 / 0	0.19 (1)
D- M	-1998 / 0	0.68 (1)
M- E	0 / 1859	0.23 (1)
M- F	0 / 1590	0.20 (1)
K- F	0 / 81	0.01 (4)
K- G	0 / 917	0.11 (1)
J- G	-1498 / 0	0.28 (1)
B- O	0 / 3390	0.42 (1)
J- H	0 / 2430	0.30 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-11	-40	-40	—	FRONT	VERT	DEAD	—	C1
C	4-0-10	-81	-81	—	FRONT	VERT	TOTAL	—	C1
C	4-0-11	-171	-171	—	FRONT	VERT	SNOW	—	C1
N	7-3-4	-245	-245	—	FRONT	VERT	TOTAL	—	C1
O	3-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
Q	5-5-4	-76	-76	—	FRONT	VERT	TOTAL	—	C1
R	1-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
S	5-5-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
T	9-3-4	-253	-253	—	FRONT	VERT	TOTAL	—	C1
U	11-3-4	-253	-253	—	FRONT	VERT	TOTAL	—	C1
V	13-3-4	-253	-253	—	FRONT	VERT	TOTAL	—	C1
W	14-2-8	-1000	-1000	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.31/1.00 (D-E:1) , BC=0.66/1.00 (M-N:1) , WB=0.68/1.00 (D-M:1) , SSI=0.42/1.00 (K-M:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.58 (H) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T31	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0		
C	TTWW-m	MT20	5.0	8.0	1.75	3.25
D	TTWW+m	MT20	5.0	6.0		
E	TTW+m	MT20	4.0	6.0	Edge	
F	TTWW+m	MT20	5.0	8.0	2.00	1.50
G	TMWW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW+p	MT20	4.0	6.0	Edge	
I	BMV1+p	MT20	3.0	6.0		
J, K, N, O						
J	BMWW-t	MT20	5.0	6.0		
L	BS-t	MT20	5.0	6.0		
M	BMWWW-t	MT20	5.0	8.0		
P	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123993 7/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T32	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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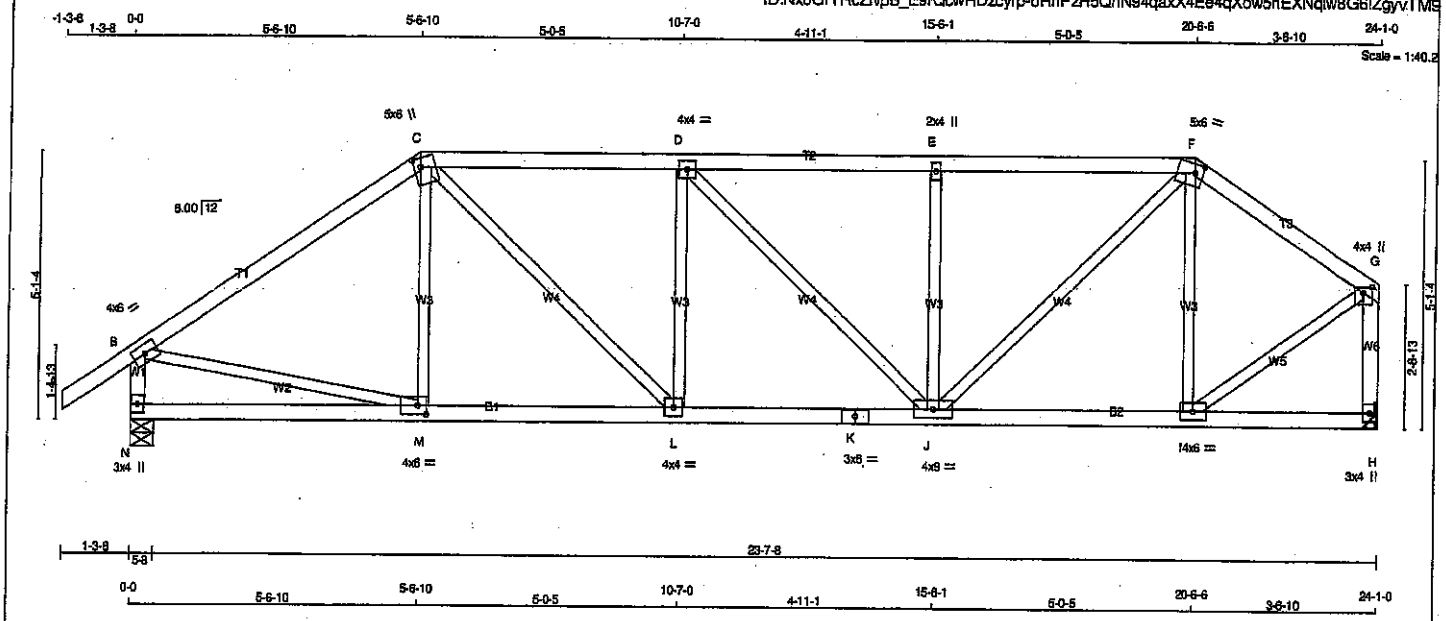

TOTAL WEIGHT = 101 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0		
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TMWW-t	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.00	1.75
G	TMVW+p	MT20	4.0	4.0	1.25	2.00
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BMWWW-t	MT20	4.0	9.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0		
M	BMWW-t	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1454	0	1454	0	0	5-8	5-8
H	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1026	686 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
H	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B-C	-1441 / 0	-91.8	-91.8	0.59 (1)	4.69
C-D	-1687 / 0	-91.8	-91.8	0.36 (1)	4.71
D-E	-1574 / 0	-91.8	-91.8	0.35 (1)	4.85
E-F	-1574 / 0	-91.8	-91.8	0.35 (1)	4.86
F-G	-1033 / 0	-91.8	-91.8	0.22 (1)	5.90
N-B	-1410 / 0	0.0	0.0	0.15 (1)	6.87
H-G	-1304 / 0	0.0	0.0	0.19 (1)	7.07
N-M	0 / 0	-18.5	-18.5	0.13 (4)	10.00
M-L	0 / 1195	-18.5	-18.5	0.26 (1)	10.00
L-K	0 / 1687	-18.5	-18.5	0.31 (1)	10.00
K-J	0 / 1687	-18.5	-18.5	0.31 (1)	10.00
J-I	0 / 847	-18.5	-18.5	0.19 (1)	10.00
I-H	0 / 0	-18.5	-18.5	0.08 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M-C	-116 / 47	0.04 (1)
C-L	0 / 681	0.15 (1)
L-D	-385 / 0	0.15 (1)
D-J	-156 / 0	0.14 (1)
J-E	-494 / 0	0.19 (1)
J-F	0 / 1005	0.23 (1)
I-F	-474 / 0	0.18 (1)
B-M	0 / 1219	0.27 (1)
I-G	0 / 1027	0.23 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.59/1.00 (B-C:1) , BC=0.31/1.00 (J-L:1) , WB=0.27/1.00 (B-M:1) , SSI=0.21/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT.= 0.90)
JSI METAL= 0.53 (K) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123994

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T33	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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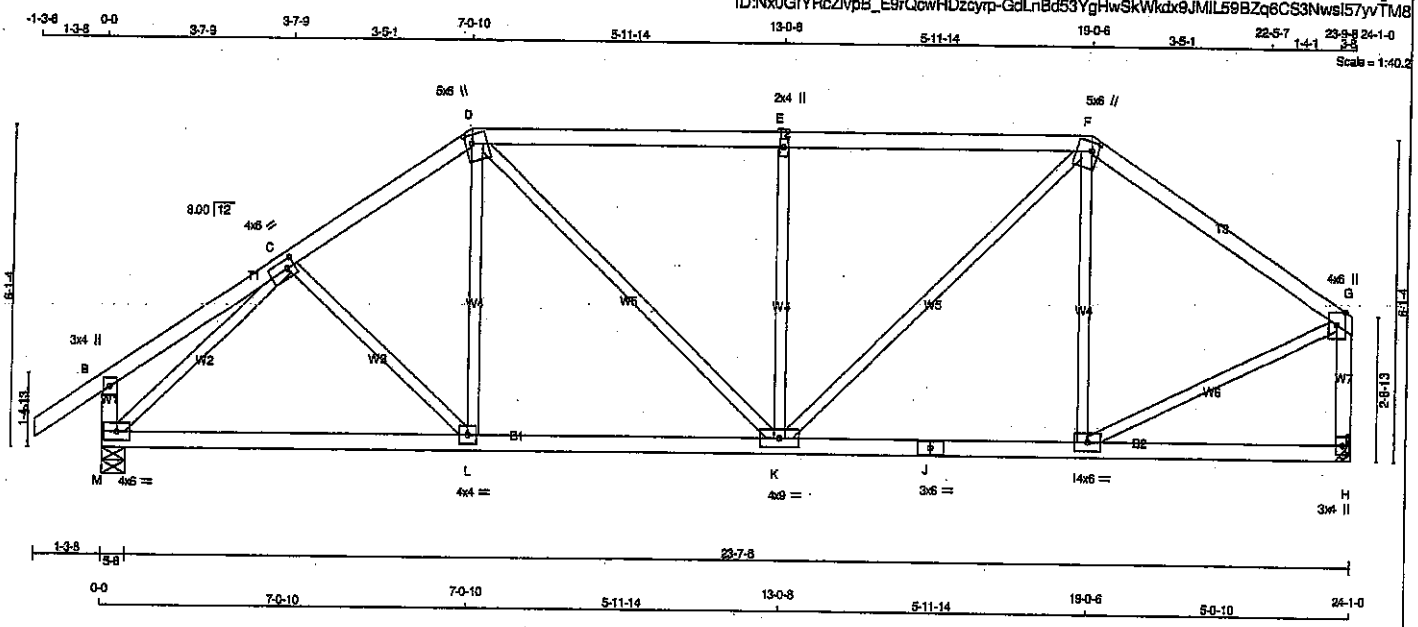

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	6.0	2.00	1.75
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	1.50
G	TMVW+p	MT20	4.0	6.0	Edge	
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	4.0	9.0		
L	BMWW-t	MT20	4.0	4.0		
M	BMVW1-t	MT20	4.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1454	0	1454	0	0	5-8	5-8
H	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1026	666 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
H	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	0 / 19	-91.8	-91.8	0.17 (1)	10.00
C- D	-1410 / 0	-91.8	-91.8	0.20 (1)	5.27
D- E	-1439 / 0	-91.8	-91.8	0.63 (1)	4.55
E- F	-1439 / 0	-91.8	-91.8	0.63 (1)	4.55
F- G	-1121 / 0	-91.8	-91.8	0.45 (1)	5.37
M- B	-253 / 0	0.0	0.0	0.03 (1)	7.81
H- G	-1291 / 0	0.0	0.0	0.19 (1)	7.10
M- L	0 / 1178	-18.5	-18.5	0.31 (1)	10.00
L- K	0 / 1158	-18.5	-18.5	0.31 (4)	10.00
K- J	0 / 926	-18.5	-18.5	0.23 (1)	10.00
J- I	0 / 926	-18.5	-18.5	0.23 (1)	10.00
I- H	0 / 0	-18.5	-18.5	0.14 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- L	-31 / 38	0.01 (4)
L- D	0 / 163	0.05 (4)
D- K	0 / 392	0.09 (1)
K- E	-675 / 0	0.40 (1)
K- F	0 / 715	0.16 (1)
I- F	-318 / 0	0.19 (1)
I- G	0 / 1028	0.23 (1)
M- C	-1644 / 0	0.63 (1)

TOTAL WEIGHT = 102 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.63/1.00 (E-F:1) , BC=0.31/1.00 (K-L:4) , WB=0.63/1.00 (C-M:1) , SSI=0.27/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (G) (INPUT = 0.90)
JSI METAL= 0.57 (G) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123995

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T34	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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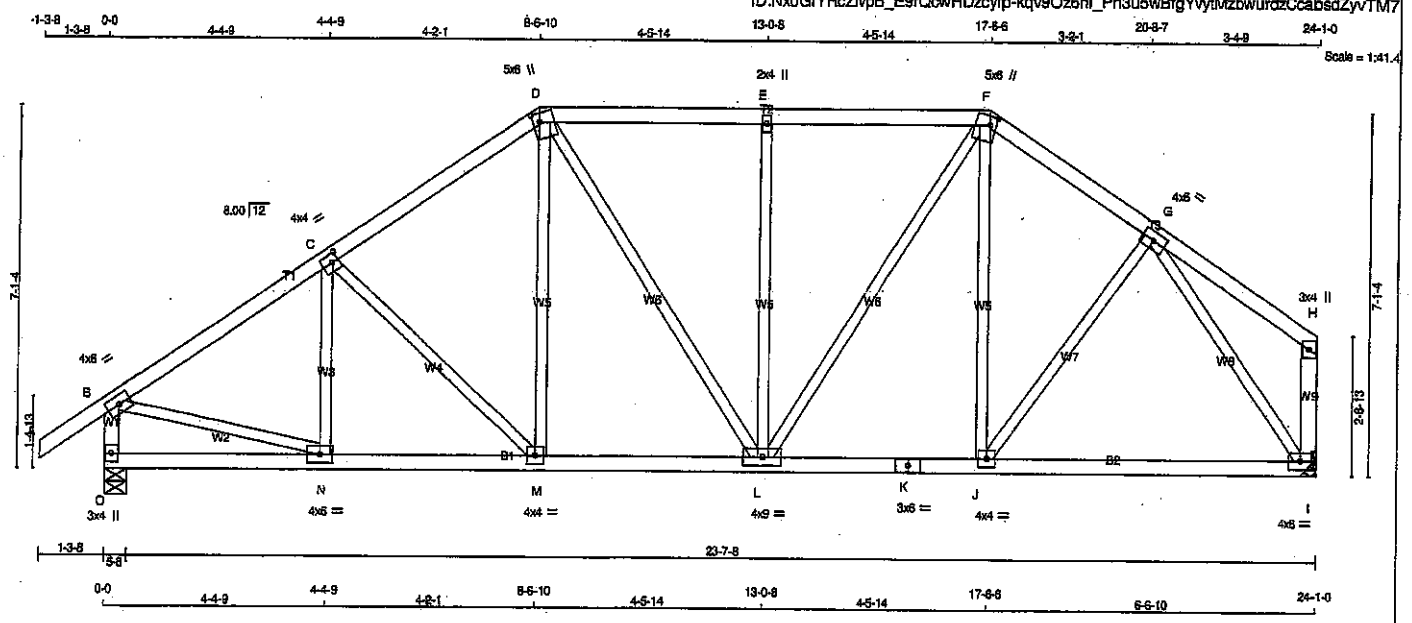

TOTAL WEIGHT = 112 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
O - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	1.50
G	TMWW-t	MT20	4.0	6.0		
H	TMV+p	MT20	3.0	4.0		
I	BMWW1-t	MT20	4.0	6.0		
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	9.0		
M	BMWW-t	MT20	4.0	4.0		
N	BMWW-t	MT20	4.0	6.0		
O	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	FACTORED INPUT BRG	REQRD BRG
O	1454	0	1454	0	0	5-8	5-8
I	1328	0	1328	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1026	686 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
I	939	616 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	-1470 / 0	-91.8	-91.8	0.24 (1)	5.16
C- D	-1325 / 0	-91.8	-91.8	0.23 (1)	5.38
D- E	-1199 / 0	-91.8	-91.8	0.25 (1)	5.57
E- F	-1199 / 0	-91.8	-91.8	0.25 (1)	5.57
F- G	-1155 / 0	-91.8	-91.8	0.13 (1)	5.79
G- H	0 / 18	-91.8	-91.8	0.15 (1)	10.00
O- B	-1418 / 0	0.0	0.0	0.15 (1)	6.85
I- H	-118 / 0	0.0	0.0	0.02 (1)	7.81
O- N	0 / 0	-18.5	-18.5	0.07 (4)	10.00
N- M	0 / 1244	-18.5	-18.5	0.24 (1)	10.00
M- L	0 / 1063	-18.5	-18.5	0.22 (1)	10.00
L- K	0 / 943	-18.5	-18.5	0.26 (4)	10.00
K- J	0 / 943	-18.5	-18.5	0.26 (4)	10.00
J- I	0 / 828	-18.5	-18.5	0.24 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
N- C	-224 / 0	0.06 (1)
C- M	-225 / 0	0.13 (1)
M- D	0 / 241	0.05 (1)
D- L	0 / 211	0.05 (1)
L- E	-501 / 0	0.44 (1)
L- F	0 / 464	0.10 (1)
J- F	-31 / 55	0.03 (1)
J- G	0 / 196	0.04 (1)
B- N	0 / 1281	0.29 (1)
G- I	-1424 / 0	0.74 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.25/1.00 (D-E:1) , BC=0.26/1.00 (J-L:4) , WB=0.74/1.00 (G-I:1) , SSI=0.20/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.90)
JSI METAL= 0.38 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123996

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T35	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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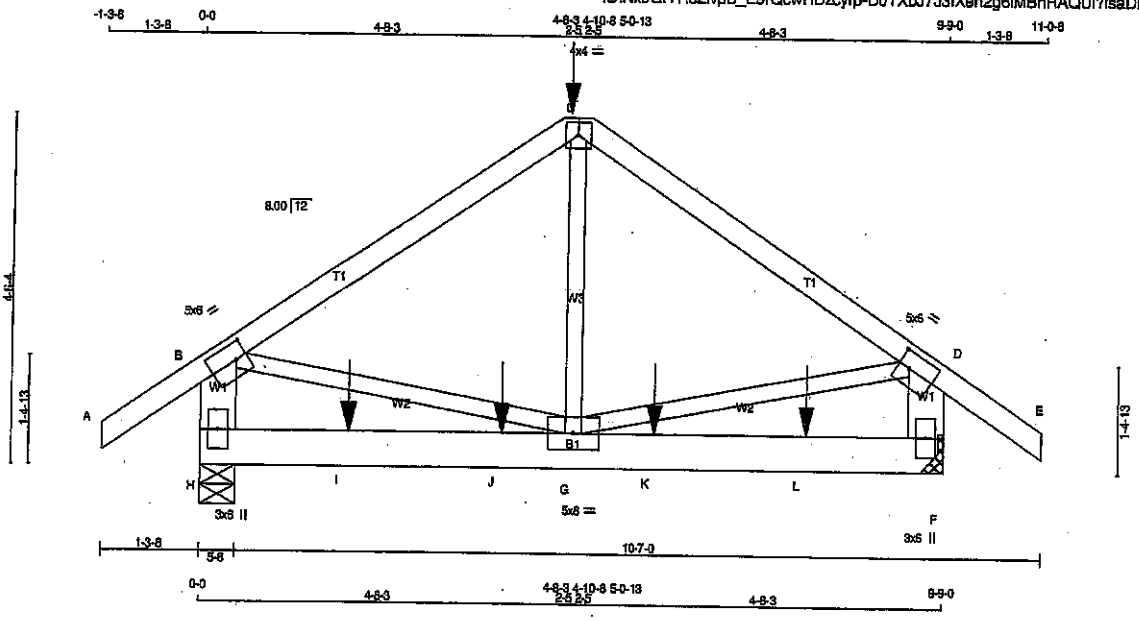

TOTAL WEIGHT = 48 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x6	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	2.50	1.75
C	TTW-p	MT20	4.0	4.0		
D	TMVW-t	MT20	5.0	6.0	2.50	1.75
F	BMV1+p	MT20	3.0	6.0		
G	BMWWW-t	MT20	5.0	8.0		
H	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	877	0	877	0	0	5-8	5-8
F	878	0	878	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 3-8.

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	617	424 / 0	0 / 0	0 / 0	0 / 0	193 / 0	0 / 0
F	618	424 / 0	0 / 0	0 / 0	0 / 0	194 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.14 (1)	10.00
B- C	-662 / 0	-91.8	-91.8	0.43 (1)	6.25
C- D	-662 / 0	-91.8	-91.8	0.43 (1)	6.25
D- E	0 / 35	-91.8	-91.8	0.14 (1)	10.00
H- B	-830 / 0	0.0	0.0	0.06 (1)	7.81
F- D	-830 / 0	0.0	0.0	0.06 (1)	7.81
H- I	0 / 0	-18.5	-18.5	0.08 (4)	10.00
I- J	0 / 0	-18.5	-18.5	0.08 (4)	10.00
J- G	0 / 0	-18.5	-18.5	0.08 (4)	10.00
G- K	0 / 0	-18.5	-18.5	0.08 (4)	10.00
K- L	0 / 0	-18.5	-18.5	0.08 (4)	10.00
L- F	0 / 0	-18.5	-18.5	0.08 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- G	0 / 563	0.14 (1)
G- D	0 / 563	0.14 (1)
G- C	-87 / 91	0.03 (4)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-10-8	-50	-50	—	FRONT	VERT	DEAD	—	C1
C	4-10-8	-208	-208	—	FRONT	VERT	SNOW	—	C1
I	1-11-4	-11	-11	—	BACK	VERT	TOTAL	—	C1
J	3-11-4	-11	-11	—	BACK	VERT	TOTAL	—	C1
K	5-11-4	-11	-11	—	BACK	VERT	TOTAL	—	C1
L	7-11-4	-11	-11	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.43/1.00 (B-C:1) , BC=0.08/1.00 (G-H:4) , WB=0.14/1.00 (B-G:1) , SSI=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.44 (B) (INPUT = 0.90)
JSI METAL= 0.19 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123997

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T36	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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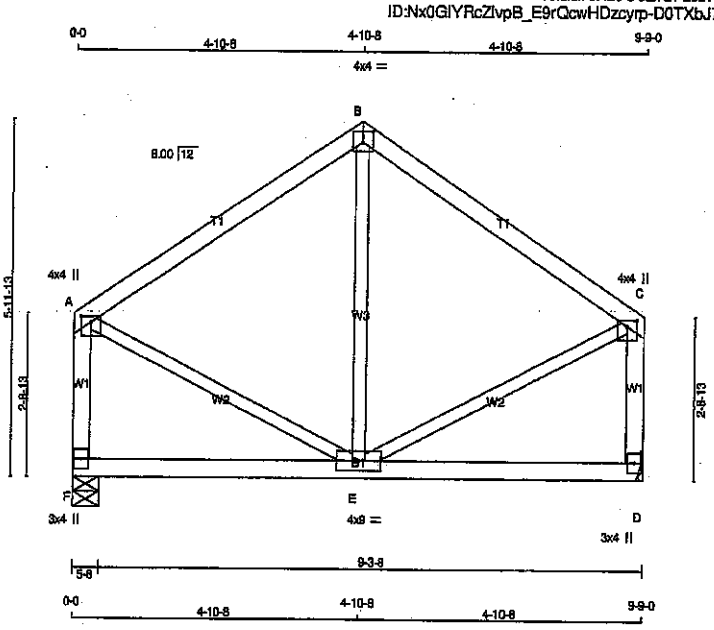

TOTAL WEIGHT = 2 X 43 = 85 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	4.0	1.25	2.00
B	TTW-p	MT20	4.0	4.0	2.25	2.00
C	TMWW+p	MT20	4.0	4.0	1.25	2.00
D	BMV1+p	MT20	3.0	4.0		
E	BMWWW-t	MT20	4.0	9.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	537	0	537	0	0	5-8	5-8
D	537	0	537	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	360	249 / 0	0 / 0	0 / 0	0 / 0	131 / 0	0 / 0
D	360	249 / 0	0 / 0	0 / 0	0 / 0	131 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-289 / 0	-91.8	-91.8	0.28 (1)	6.25
B- C	-289 / 0	-91.8	-91.8	0.28 (1)	6.25
F- A	-503 / 0	0.0	0.0	0.07 (1)	7.81
D- C	-503 / 0	0.0	0.0	0.07 (1)	7.81
F- E	0 / 0	-18.5	-18.5	0.13 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	-127 / 37	0.07 (1)
A- E	0 / 268	0.06 (1)
E- C	0 / 268	0.06 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.28/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.07/1.00 (B-E:1) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (A) (INPUT = 0.90)
JSI METAL= 0.10 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123998

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T37S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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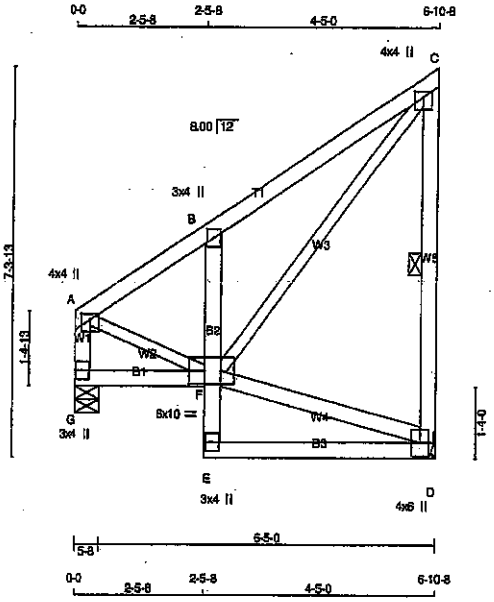

TOTAL WEIGHT = 42 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
G - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
E - B	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
F - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TMV+p	MT20	3.0	4.0		
C	TMVW+p	MT20	4.0	4.0	1.25	2.00
D	BMVW1+p	MT20	4.0	6.0		
E	BMV+p	MT20	3.0	4.0		
F	BVMWWW-I	MT20	6.0	10.0	3.00	3.50
G	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
G	379	0	379	0	0	5-8	5-8
D	379	0	379	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
D	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-D.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
G- A	-355 / 0	0.0	0.0	0.04 (1)	7.81
A- B	-299 / 0	-91.8	-91.8	0.16 (1)	6.25
B- C	-329 / 0	-91.8	-91.8	0.19 (1)	6.25
D- C	-335 / 0	0.0	0.0	0.08 (1)	6.25
G- F	0 / 0	-18.5	-18.5	0.04 (4)	10.00
E- F	0 / 44	0.0	0.0	0.03 (1)	10.00
F- B	-398 / 0	0.0	0.0	0.03 (1)	7.81
E- D	0 / 15	-18.5	-18.5	0.10 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- F	0 / 300	0.07 (1)
F- D	-16 / 0	0.00 (1)
F- C	0 / 428	0.10 (1)

DESIGN CRITERIA [M][F]

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.19/1.00 (B-C:1) , BC=0.10/1.00 (D-E:4) , WB=0.10/1.00 (C-F:1) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN.	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1887	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.37 (C) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123999

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T38S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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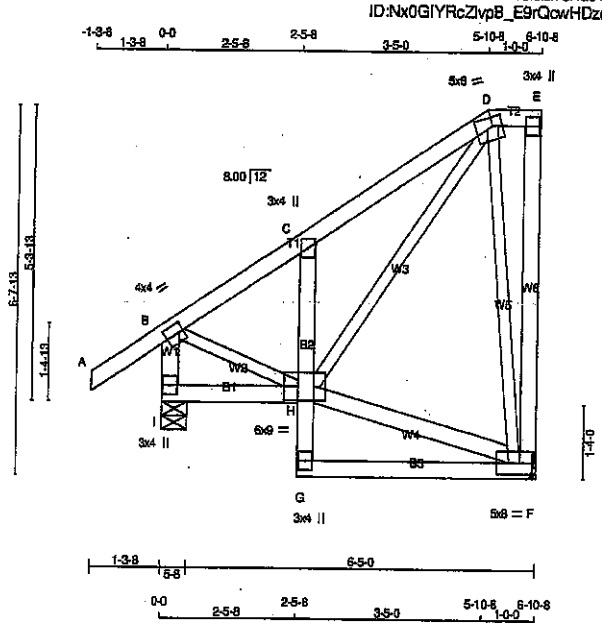

TOTAL WEIGHT = 47 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - C	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
C	TMV+p	MT20	3.0	4.0		
D	TTWW-m	MT20	5.0	6.0	2.00	2.25
E	TMV+p	MT20	3.0	4.0		
F	BMVWW1-t	MT20	5.0	8.0		
G	BMV+p	MT20	3.0	4.0		
H	BVMWWW-l	MT20	6.0	9.0	3.00	3.00
I	BMVT+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	379	0	379	0	0	MECHANICAL	
I	505	0	505	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
I	355	246 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	-287 / 0	-91.8	-91.8	0.10 (1)	6.25
C- D	-305 / 0	-91.8	-91.8	0.11 (1)	6.25
D- E	0 / 0	-91.8	-91.8	0.01 (1)	10.00
F- E	-44 / 0	0.0	0.0	0.04 (1)	7.81
I- B	-481 / 0	0.0	0.0	0.05 (1)	7.81
I- H	0 / 0	-18.5	-18.5	0.04 (4)	10.00
G- H	0 / 44	0.0	0.0	0.03 (1)	10.00
H- C	-327 / 0	0.0	0.0	0.02 (1)	7.81
G- F	0 / 13	-18.5	-18.5	0.10 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- F	0 / 35	0.01 (1)
H- D	0 / 353	0.08 (1)
B- H	0 / 277	0.06 (1)
D- F	-310 / 0	0.23 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.10/1.00 (F-G:4) , WB=0.23/1.00 (D-F:1) , SSI=0.12/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124000

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T39S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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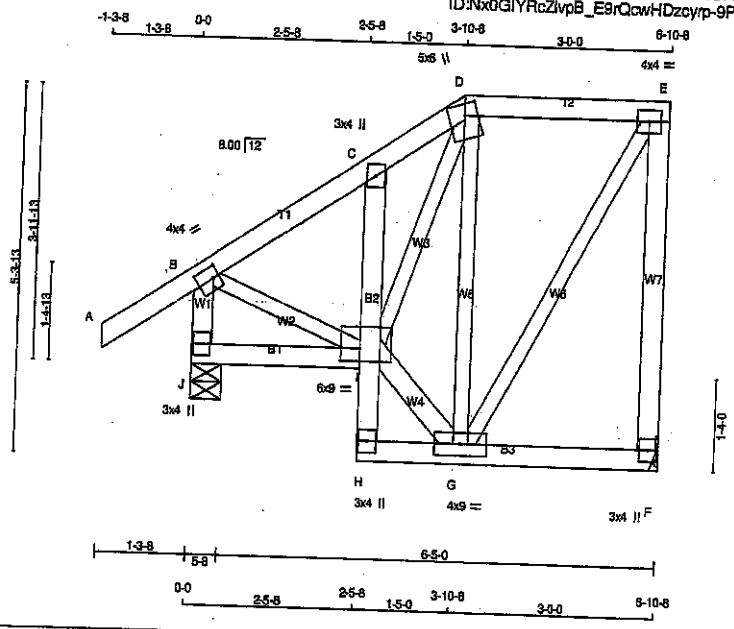

TOTAL WEIGHT = 45 lb

M[F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
H - C	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
C	TMV+p	MT20	3.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.00	2.25
E	TMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	BMV+p	MT20	3.0	4.0		
I	BVMWWW-t	MT20	6.0	9.0	2.25	3.50
J	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	RECORD BRG
F	379	0	379	0	0	IN-SX	IN-SX
J	505	0	505	0	0	MECHANICAL 5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
J	355	246 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B-C	-275 / 0	-91.8	-91.8	0.07 (1)	6.25
C-D	-286 / 0	-91.8	-91.8	0.04 (1)	6.25
D-E	-127 / 0	-91.8	-91.8	0.11 (1)	6.25
F-E	-358 / 0	0.0	0.0	0.18 (1)	7.81
J-B	-481 / 0	0.0	0.0	0.05 (1)	7.81
J-I	0 / 0	-18.5	-18.5	0.04 (4)	10.00
H-I	0 / 3	0.0	0.0	0.03 (1)	10.00
I-C	-218 / 0	0.0	0.0	0.02 (1)	7.81
H-G	0 / 14	-18.5	-18.5	0.03 (4)	10.00
G-F	0 / 0	-18.5	-18.5	0.03 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I-G	0 / 165	0.03 (1)
I-D	0 / 275	0.06 (1)
G-D	-279 / 0	0.12 (1)
B-I	0 / 255	0.06 (1)
G-E	0 / 255	0.06 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.18/1.00 (E-F:1) , BC=0.04/1.00 (I-J:4) , WB=0.12/1.00 (D-G:1) , SSI=0.11/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	798	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124001

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T40S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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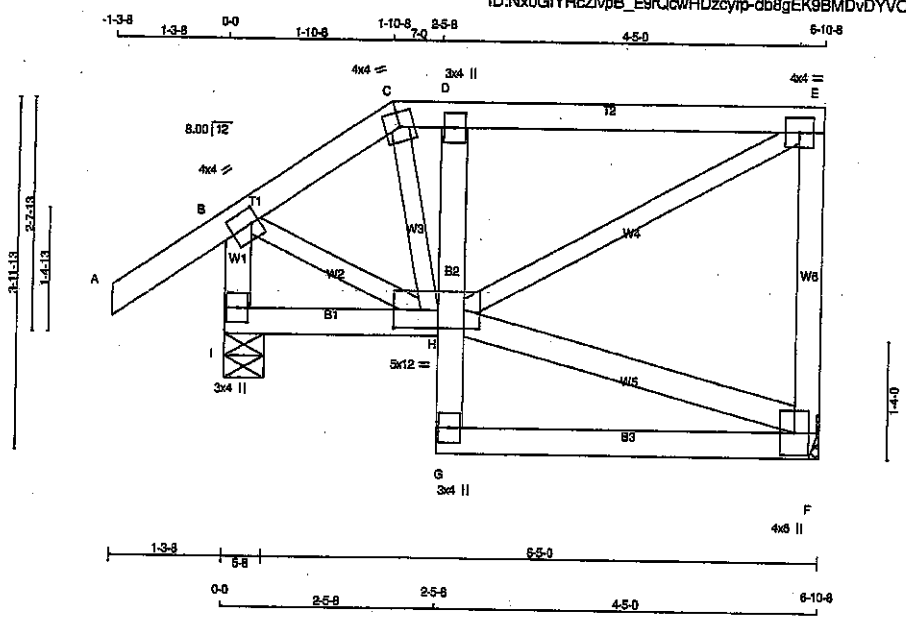

TOTAL WEIGHT = 39 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - D	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
C	TTW-m	MT20	4.0	4.0		
D	TMV+p	MT20	3.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMVW1+p	MT20	4.0	6.0		
G	BMV+p	MT20	3.0	4.0		
H	BVMWWWW*-MT20		5.0	12.0	2.50	3.75
I	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	366	0	366	0	0	MECHANICAL	
I	518	0	518	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	259	169 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0
I	363	253 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	-285 / 0	-91.8	-91.8	0.12 (1)	6.25
C- D	-304 / 0	-91.8	-91.8	0.22 (1)	6.25
D- E	-299 / 0	-91.8	-91.8	0.22 (1)	6.25
F- E	-324 / 0	0.0	0.0	0.08 (1)	7.81
I- B	-493 / 0	0.0	0.0	0.05 (1)	7.81
I- H	0 / 0	-18.5	-18.5	0.04 (4)	10.00
G- H	0 / 44	0.0	0.0	0.02 (1)	10.00
H- D	-495 / 0	0.0	0.0	0.02 (1)	7.81
G- F	0 / 8	-18.5	-18.5	0.10 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- F	-9 / 0	0.00 (1)
H- E	0 / 342	0.08 (1)
C- H	0 / 313	0.07 (1)
B- H	0 / 235	0.05 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.22/1.00 (D-E:1) , BC=0.10/1.00 (F-G:4) , WB=0.08/1.00 (E-H:1) , SSI=0.20/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (B) (INPUT = 0.90)
JSI METAL= 0.14 (H) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124002

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T41S	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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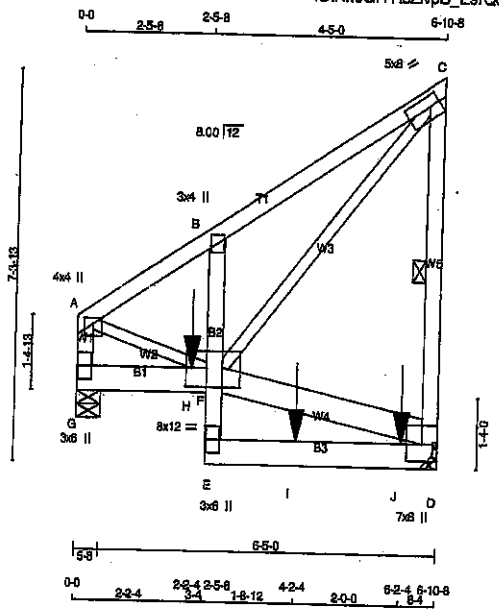

TOTAL WEIGHT = 2 X 49 = 98 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
G - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
G - F	2x6	DRY	No.2	SPF
E - B	2x4	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
G-A	1	12	TOP
A-C	1	12	TOP
C-D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
G-F	2	12	SIDE(0.0)
E-D	2	12	SIDE(0.0)
B-E	1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	
2x6	2	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124003

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
G	1224	0	1224	0	0	IN-SX	IN-SX
D	1440	0	1440	0	0	5-8	5-8
						MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	861	587 / 0	0 / 0	0 / 0	0 / 0	274 / 0	0 / 0
D	1015	687 / 0	0 / 0	0 / 0	0 / 0	327 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-D.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
G-A	-1061 / 0	0.0	0.0	0.06 (1)	7.81
A-B	-1112 / 0	-91.8	-91.8	0.10 (1)	6.25
B-C	-1112 / 0	-91.8	-91.8	0.13 (1)	6.25
D-C	-754 / 0	0.0	0.0	0.09 (1)	6.25
G-H	0 / 0	-18.5	-18.5	0.11 (1)	10.00
H-F	0 / 0	-18.5	-18.5	0.11 (1)	10.00
E-F	0 / 450	0.0	0.0	0.09 (1)	10.00
F-B	-371 / 0	0.0	0.0	0.05 (1)	7.81
E-I	0 / 50	-18.5	-18.5	0.26 (1)	10.00
I-J	0 / 50	-18.5	-18.5	0.26 (1)	10.00
J-D	0 / 50	-18.5	-18.5	0.26 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A-F	0 / 1016	0.13 (1)
F-D	-53 / 0	0.00 (1)
F-C	0 / 1501	0.19 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	2-2-4	-607	-607	—	FRONT	VERT	TOTAL	—	C1
I	4-2-4	-365	-365	—	FRONT	VERT	TOTAL	—	C1
J	6-2-4	-368	-368	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.13/1.00 (B-C:1) , BC=0.26/1.00 (D-E:1) , WB=0.19/1.00 (C-F:1) , SSI=0.25/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.47 (A) (INPUT = 0.90)
JSI METAL= 0.14 (F) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T41S	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TMV+p	MT20	3.0	4.0		
C	TMVW-t	MT20	5.0	8.0	2.25	2.50
D	BMVW1+p	MT20	7.0	8.0	3.75	Edge
E	BMV+p	MT20	3.0	6.0		
F	BVMWWW-t	MT20	8.0	12.0	4.25	4.50
G	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

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07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124003

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T42	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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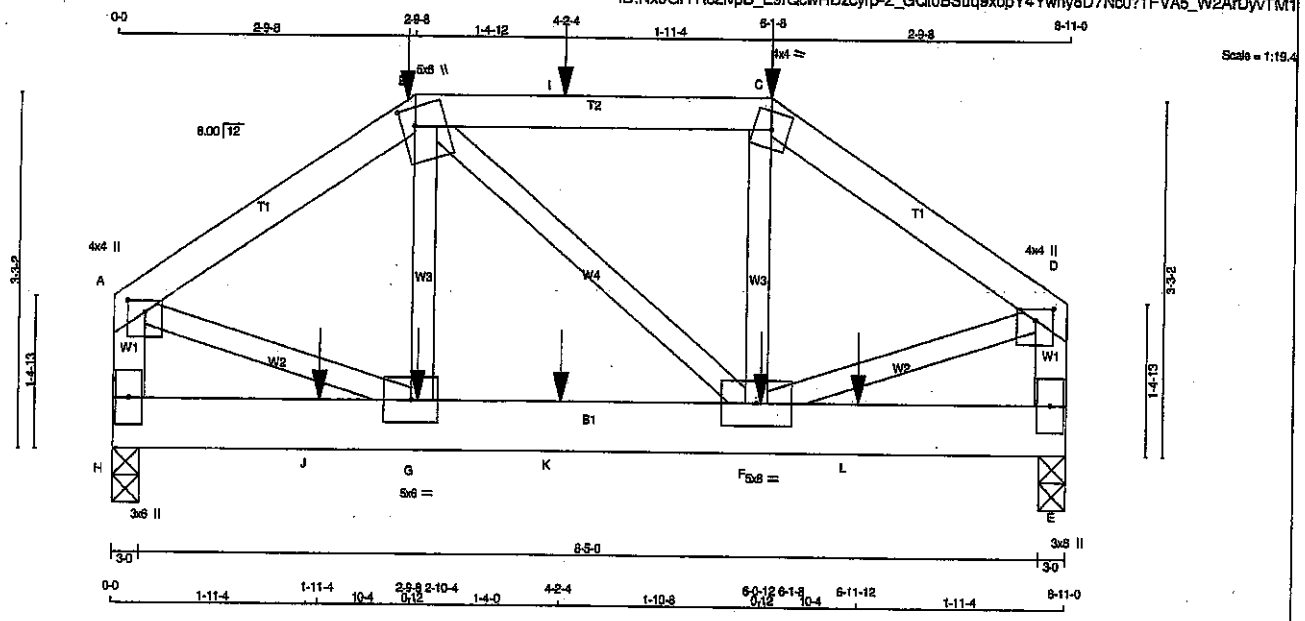

TOTAL WEIGHT = 41 lb (M)

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
H - A	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - E	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TTWW+m	MT20	5.0	6.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMVW+p	MT20	4.0	4.0	1.25	2.00
E	BMV1+p	MT20	3.0	6.0		
F	BMWWW-t	MT20	5.0	8.0		
G	BMWW-t	MT20	5.0	6.0		
H	BMV1+p	MT20	3.0	6.0		

NOTES (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	618	0	618	0	0	3-0	3-0
E	616	0	616	0	0	3-0	3-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	438	285 / 0	0 / 0	0 / 0	0 / 0	153 / 0	0 / 0
E	436	283 / 0	0 / 0	0 / 0	0 / 0	153 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (7)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-547 / 0	-91.8	-91.8	0.14 (1)	6.25	
B- I	-446 / 0	-91.8	-91.8	0.24 (1)	6.25	
I- C	-446 / 0	-91.8	-91.8	0.24 (1)	6.25	
C- D	-541 / 0	-91.8	-91.8	0.14 (1)	6.25	
H- A	-590 / 0	0.0	0.0	0.07 (1)	7.81	
E- D	-585 / 0	0.0	0.0	0.07 (1)	7.81	
H- J	0 / 0	-18.5	-18.5	0.02 (4)	10.00	
J- G	0 / 0	-18.5	-18.5	0.02 (4)	10.00	
G- K	0 / 451	-18.5	-18.5	0.08 (1)	10.00	
K- F	0 / 451	-18.5	-18.5	0.08 (1)	10.00	
F- L	0 / 0	-18.5	-18.5	0.02 (4)	10.00	
L- E	0 / 0	-18.5	-18.5	0.02 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
G- B	-82 / 31	0.02 (1)
B- F	-7 / 0	0.00 (1)
F- C	-83 / 30	0.02 (1)
A- G	0 / 460	0.12 (1)
F- D	0 / 475	0.12 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	2-9-8	-62	-62	97	FRONT	VERT	TOTAL	—	C1
C	6-1-8	-62	-62	97	FRONT	VERT	TOTAL	—	C1
F	6-0-12	-6	-6	—	FRONT	VERT	TOTAL	—	C1
G	2-10-4	-6	-6	—	FRONT	VERT	TOTAL	—	C1
I	4-2-4	-25	-25	—	FRONT	VERT	TOTAL	—	C1
J	1-11-4	-6	-6	—	FRONT	VERT	TOTAL	—	C1
K	4-2-4	-6	-6	—	FRONT	VERT	TOTAL	—	C1
L	6-11-12	-6	-6	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.30")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (B-C:1) , BC=0.08/1.00 (F-G:1) , WB=0.12/1.00 (A-G:1) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.46 (A) (INPUT = 0.90)
JSI METAL= 0.14 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124004

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T43	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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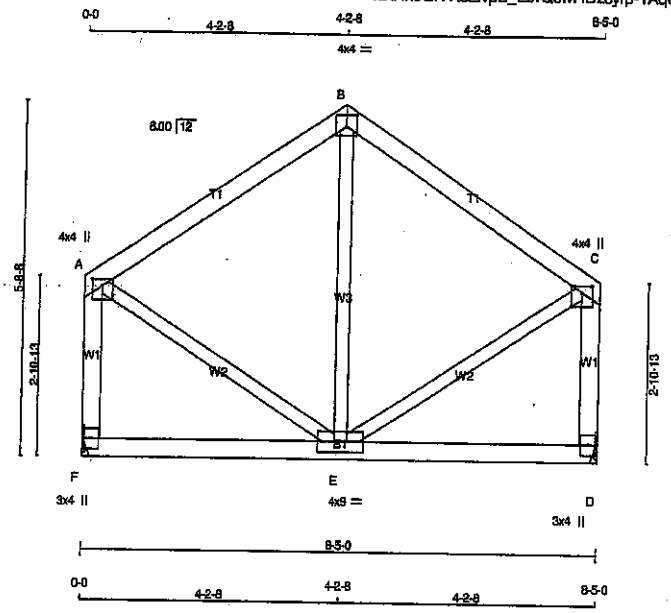

TOTAL WEIGHT = 2 X 39 = 77 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW+p	MT20	4.0	4.0	1.25	2.00
B	TTW-p	MT20	4.0	4.0	2.25	2.00
C	TMWW+p	MT20	4.0	4.0	1.25	2.00
D	BMV1+p	MT20	3.0	4.0		
E	BMWWW-t	MT20	4.0	9.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	464	0	464	0	0	MECHANICAL	
D	464	0	464	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F, D. MINIMUM BEARING LENGTH AT JOINT F = 1-8, JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	328	215 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
D	328	215 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-226 / 0	-91.8	-91.8	0.21 (1)	6.25
B- C	-226 / 0	-91.8	-91.8	0.21 (1)	6.25
F- A	-434 / 0	0.0	0.0	0.07 (1)	7.81
D- C	-434 / 0	0.0	0.0	0.07 (1)	7.81
F- E	0 / 0	-18.5	-18.5	0.09 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.09 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	-135 / 23	0.07 (1)
A- E	0 / 221	0.05 (1)
E- C	0 / 221	0.05 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.8	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.21/1.00 (A-B:1) , BC=0.09/1.00 (E-F:4) , WB=0.07/1.00 (B-E:1) , SSI=0.13/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (C) (INPUT = 0.90)
JSI METAL= 0.09 (C) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124005

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	T44	2	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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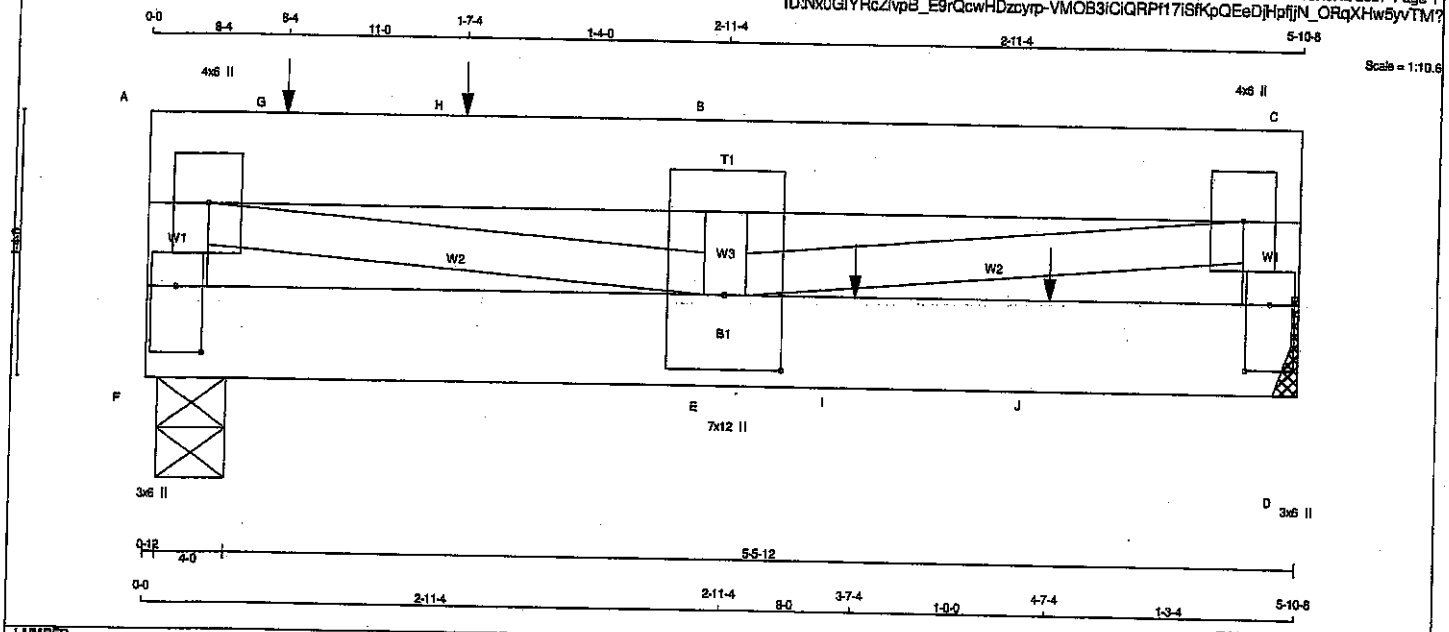

TOTAL WEIGHT = 4 X 27 = 108 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x6	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
C- D	1	12	TOP
A- C	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0		
B						
C	TMVW+p	MT20	4.0	6.0		
D	BMV1+p	MT20	3.0	6.0	4.00	1.50
E						

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124006

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	1157	0	1157	0	0	4-0	4-0
D	1114	0	1114	0	0	IN-SX MECHANICAL	IN-SX

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	817	543 / 0	0 / 0	0 / 0	0 / 0	274 / 0	0 / 0
D	786	527 / 0	0 / 0	0 / 0	0 / 0	259 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-1083 / 0	0.0	0.0	0.06 (1)	7.81	
A- G	-1745 / 0	-91.8	-91.8	0.22 (1)	6.25	
G- H	-1745 / 0	-91.8	-91.8	0.22 (1)	6.25	
H- B	-1745 / 0	-91.8	-91.8	0.22 (1)	6.25	
B- C	-1745 / 0	-91.8	-91.8	0.06 (1)	6.25	
D- C	-686 / 0	0.0	0.0	0.04 (1)	7.81	
F- E	0 / 0	-18.5	-18.5	0.05 (1)	10.00	
E- I	0 / 0	-18.5	-18.5	0.19 (1)	10.00	
I- J	0 / 0	-18.5	-18.5	0.19 (1)	10.00	
J- D	0 / 0	-18.5	-18.5	0.19 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- E	0 / 1821	0.23 (1)
E- B	-541 / 0	0.04 (1)
E- C	0 / 1821	0.23 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	8-4	-145	-145	---	TOP	VERT	TOTAL	---	C1
H	1-7-4	-373	-373	---	TOP	VERT	TOTAL	---	C1
I	3-7-4	-313	-313	---	BACK	VERT	TOTAL	---	C1
J	4-7-4	-313	-313	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.22/1.00 (A-B:1) , BC=0.19/1.00 (D-E:1) , WB=0.23/1.00 (A-E:1) , SSI=0.19/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	786	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (A) (INPUT = 0.90)
JSI METAL= 0.39 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418362	T44	2	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
E	TMBMWWW"+	MT20	7.0	12.0	4.50	3.50
F	BMV1+p	MT20	3.0	6.0	4.00	1.50

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

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07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124006

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T50	1	2	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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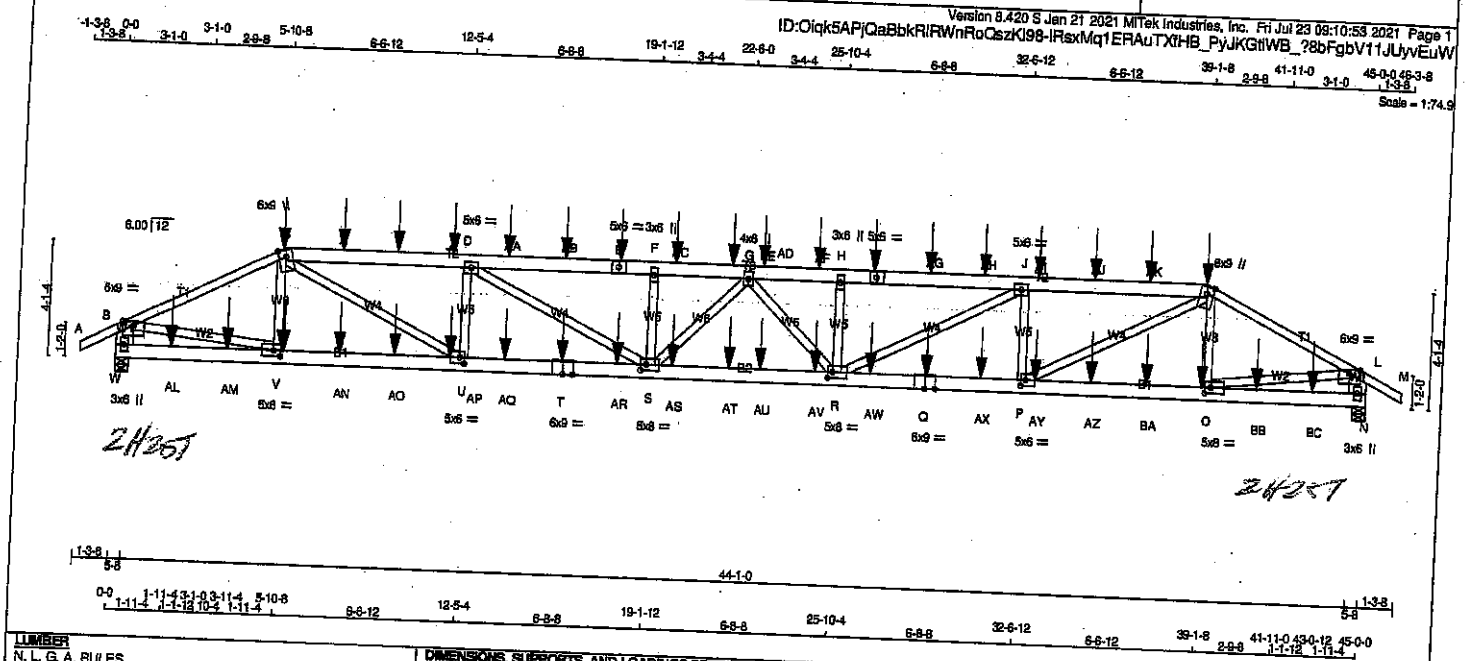

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	1650F 1.5E	SPF
C - E	2x6	DRY	No.2	SPF
E - I	2x6	DRY	No.2	SPF
I - K	2x6	DRY	No.2	SPF
K - M	2x4	DRY	1650F 1.5E	SPF
W - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
W - T	2x6	DRY	1650F 1.5E	SPF
T - Q	2x6	DRY	1650F 1.5E	SPF
Q - N	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	
K- M	1	12	SIDE(70.1)
C- E	2	12	SIDE(70.1)
E- I	2	12	SIDE(70.1)
I- K	2	12	SIDE(0.0)
W- B	2	12	SIDE(70.1)
N- L	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			TOP
W- T	2	12	
T- Q	2	12	SIDE(210.5)
Q- N	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			SIDE(210.5)
V- C	1	6	
O- K	1	6	SIDE(49.4)
2x4	1	6	SIDE(49.4)

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124022

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 239 = 477 lb

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
W	5315	0	5448	-119	-1311	IN-SX	IN-SX
N	5163	0	5278	0	-1261	5-8	5-8
						5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 1311 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1261 LBS FACTORED UPLIFT

PROVIDE FOR 119 LBS FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX/MIN COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	3900	2375 / 0	524 / 0	0 / 0	0 / -1266	1089 / 0	0 / 0
N	3787	2297 / 0	504 / 0	0 / 0	0 / -1218	1053 / 0	0 / 0
HORIZONTAL REACTIONS							
W	—	0 / 0	0 / 0	0 / 0	85 / -85	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.08	(2)	10.00
B- C	-8415 / 1971	-115.2	-115.2	0.87	(2)	3.42
C- X	-12801 / 3131	-115.2	-115.2	0.58	(2)	3.07
X- Y	-12801 / 3131	-115.2	-115.2	0.58	(2)	3.07
Y- Z	-12801 / 3131	-115.2	-115.2	0.58	(2)	3.07
Z- D	-12801 / 3131	-115.2	-115.2	0.58	(2)	3.07
D-AA	-15263 / 3671	-115.2	-115.2	0.74	(1)	2.69
AA-AB	-15263 / 3671	-115.2	-115.2	0.74	(1)	2.69
AB- E	-15263 / 3671	-115.2	-115.2	0.74	(1)	2.69
E- F	-15263 / 3671	-115.2	-115.2	0.74	(1)	2.69
F-AC	-15263 / 3671	-115.2	-115.2	0.49	(1)	2.88
AC-AD	-15263 / 3671	-115.2	-115.2	0.49	(1)	2.88
AD- G	-15263 / 3671	-115.2	-115.2	0.49	(1)	2.88
G-AE	-15215 / 3656	-115.2	-115.2	0.49	(1)	2.89
AE-AF	-15215 / 3656	-115.2	-115.2	0.49	(1)	2.89
AF- H	-15215 / 3656	-115.2	-115.2	0.49	(1)	2.89
H- I	-15215 / 3656	-115.2	-115.2	0.73	(1)	2.70
I-AG	-15215 / 3656	-115.2	-115.2	0.73	(1)	2.70
AG-AH	-15215 / 3656	-115.2	-115.2	0.73	(1)	2.70
AH- J	-15215 / 3656	-115.2	-115.2	0.73	(1)	2.70
J-AI	-12641 / 3084	-115.2	-115.2	0.57	(3)	3.09
AI-AJ	-12641 / 3084	-115.2	-115.2	0.57	(3)	3.09
AJ-AK	-12641 / 3084	-115.2	-115.2	0.57	(3)	3.09
AK- K	-12641 / 3084	-115.2	-115.2	0.57	(3)	3.09
K- L	-8117 / 1884	-115.2	-115.2	0.85	(3)	3.49
L- M	0 / 41	-115.2	-115.2	0.08	(3)	10.00
W- B	-5325 / 1327	0.0	0.0	0.14	(2)	7.08
N- L	-5156 / 1278	0.0	0.0	0.14	(3)	7.16
W-AL	-103 / 111	-39.5	-39.5	0.07	(17)	6.25
AL-AM	-103 / 111	-39.5	-39.5	0.07	(17)	6.25
AM- V	-103 / 111	-39.5	-39.5	0.07	(17)	6.25
V-AN	-1703 / 7561	-39.5	-39.5	0.37	(2)	6.25
AN-AO	-1703 / 7561	-39.5	-39.5	0.37	(2)	6.25
AO-AP	-1703 / 7561	-39.5	-39.5	0.37	(2)	6.25
AP- U	-1703 / 7561	-39.5	-39.5	0.37	(2)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
V- C	-516 / 216	0.04 (8)
O- K	-666 / 271	0.06 (3)
B- V	-1630 / 7612	0.67 (2)
O- L	-1552 / 7342	0.65 (3)
P- K	-1531 / 6229	0.61 (13)
C- U	-1498 / 6115	0.59 (14)
P- J	-2598 / 810	0.23 (2)
U- D	-2640 / 794	0.23 (3)
R- J	-711 / 3006	0.28 (13)
D- S	-875 / 2865	0.27 (14)
R- H	-823 / 312	0.07 (3)
S- F	-824 / 313	0.07 (2)
S- G	-272 / 99	0.04 (3)
G- R	-352 / 121	0.05 (2)

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(60 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.51")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 709 (0.76")

CSI: TC=0.74/1.00 (D-F:1) , BC=0.71/1.00 (R-S:1) , WB=0.67/1.00 (B-V:2) , SSI=0.21/1.00 (J-K:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T50	1	2	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	6.0	9.0	Edge	
C	TTWW+m	MT20	6.0	9.0	Edge	
D	TMWW-t	MT20	5.0	6.0		
E	TS-t	MT20	5.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TMW+w	MT20	3.0	6.0		
I	TS-t	MT20	5.0	6.0		
J	TMWW-t	MT20	5.0	6.0		
K	TTWW+m	MT20	6.0	9.0	Edge	
L	TMW-p	MT20	6.0	9.0	Edge	
N	BMV1+p	MT20	3.0	6.0		
O	BMWW-t	MT20	5.0	8.0	2.50	2.75
P	BMWW-t	MT20	5.0	6.0	2.50	2.00
Q	BS-t	MT20	6.0	9.0		
R	BMWWW-t	MT20	5.0	8.0	2.50	2.00
S	BMWWW-t	MT20	5.0	8.0	2.50	2.50
T	BS-t	MT20	6.0	9.0		
U	BMWW-t	MT20	5.0	6.0	2.50	2.00
V	BMWW-t	MT20	5.0	8.0	2.50	2.75
W	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
U-AQ	-2960 / 12800	-39.5	-39.5	0.59 (2)		6.25
AQ- T	-2960 / 12800	-39.5	-39.5	0.59 (2)		6.25
T-AR	-2960 / 12800	-39.5	-39.5	0.59 (2)		6.25
AR- S	-2960 / 12800	-39.5	-39.5	0.59 (2)		6.25
S-AS	-3542 / 15425	-39.5	-39.5	0.71 (1)		6.25
AS-AT	-3542 / 15425	-39.5	-39.5	0.71 (1)		6.25
AT-AU	-3542 / 15425	-39.5	-39.5	0.71 (1)		6.25
AU-AV	-3542 / 15425	-39.5	-39.5	0.71 (1)		6.25
AV- R	-3542 / 15425	-39.5	-39.5	0.71 (1)		6.25
R-AW	-2835 / 12640	-39.5	-39.5	0.59 (3)		6.25
AW- Q	-2835 / 12640	-39.5	-39.5	0.59 (3)		6.25
Q-AX	-2835 / 12640	-39.5	-39.5	0.59 (3)		6.25
AX- P	-2835 / 12640	-39.5	-39.5	0.59 (3)		6.25
P-AY	-1533 / 7301	-39.5	-39.5	0.35 (3)		6.25
AY-AZ	-1533 / 7301	-39.5	-39.5	0.35 (3)		6.25
AZ-BA	-1533 / 7301	-39.5	-39.5	0.35 (3)		6.25
BA- O	-1533 / 7301	-39.5	-39.5	0.35 (3)		6.25
O-BB	-8 / 16	-39.5	-39.5	0.07 (17)		10.00
BB-BC	-8 / 16	-39.5	-39.5	0.07 (17)		10.00
BC- N	-8 / 16	-39.5	-39.5	0.07 (17)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-367	-491	38	FRONT	VERT	TOTAL	—	C1
E	17-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
I	27-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
K	39-1-8	-367	-462	38	FRONT	VERT	TOTAL	—	C1
O	39-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
Q	29-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
T	15-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
V	5-10-8	-151	-196	38	FRONT	VERT	TOTAL	—	C1
V	5-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
X	7-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
Y	9-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
Z	11-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AA	13-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AB	15-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AC	19-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AD	21-11-4	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AE	23-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AF	25-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AG	29-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AH	31-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AI	33-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AJ	35-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AK	37-0-12	-60	-60	—	FRONT	VERT	TOTAL	—	C1
AL	1-11-4	-20	-20	—	FRONT	VERT	TOTAL	—	C1
AM	3-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AN	7-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AO	9-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AP	11-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AQ	13-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AR	17-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AS	19-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AT	21-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AU	23-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AV	25-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AW	27-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AX	31-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AY	33-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
AZ	35-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BA	37-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BB	41-0-12	-21	-21	—	FRONT	VERT	TOTAL	—	C1
BC	43-0-12	-20	-20	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (U) (INPUT = 0.90)
JSI METAL= 1.00 (T) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124022

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T51	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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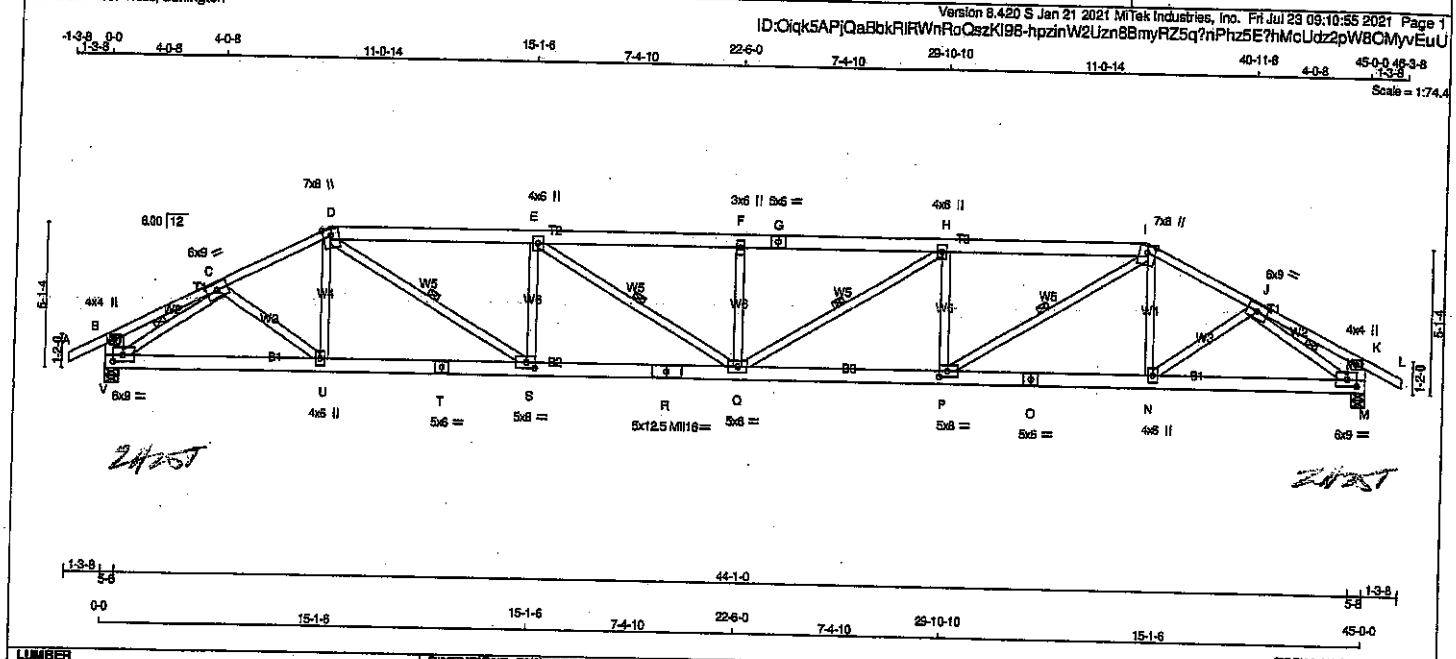

TOTAL WEIGHT = 241 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x6	DRY	1650F 1.5E	SPF
G - I	2x6	DRY	1650F 1.5E	SPF
I - L	2x4	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
V - T	2x6	DRY	1650F 1.5E	SPF
T - R	2x6	DRY	1650F 1.5E	SPF
R - O	2x6	DRY	1650F 1.5E	SPF
O - M	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	6.0	9.0		
D	TTWW+m	MT20	7.0	8.0	Edge	
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	7.0	8.0	Edge	
J	TMWW-t	MT20	6.0	9.0		
K	TMV+p	MT20	4.0	4.0		
M	BMVW1-t	MT20	6.0	9.0	2.75	4.00
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	8.0	2.50	3.50
Q	BMWWW-t	MT20	5.0	8.0		
R	BS-t	MII6	5.0	12.5		
S	BMWW-t	MT20	5.0	8.0	2.50	3.50
T	BS-t	MT20	5.0	6.0		
U	BMWW+t	MT20	4.0	6.0		
V	BMVW1-t	MT20	6.0	9.0	2.75	4.00

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

~~NOTES (1)~~
1)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124023

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3638	0	3730	-139	-1175	5-8	5-8
M	3638	0	3730	0	-1175	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1175 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1175 LBS FACTORED UPLIFT

PROVIDE FOR 139 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2686	1655 / 0	473 / 0	0 / 0	0 / -1138	619 / 0	0 / 0
M	2686	1655 / 0	473 / 0	0 / 0	5 / -1138	619 / 0	0 / 0
HORIZONTAL REACTIONS							
V	—	0 / 0	0 / 0	0 / 0	99 / -99	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.93 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-V, J-M, I-P, D-S, H-Q, E-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (16)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.17 (2)	10.00
B-C	-9 / 118	-115.2	-115.2	0.28 (2)	10.00
C-D	-5448 / 1825	-115.2	-115.2	0.72 (2)	2.44
D-E	-7662 / 2602	-115.2	-115.2	0.47 (1)	3.41
E-F	-8532 / 2835	-115.2	-115.2	0.53 (1)	3.22
F-G	-8532 / 2835	-115.2	-115.2	0.53 (1)	3.22
G-H	-8532 / 2835	-115.2	-115.2	0.53 (1)	3.22
H-I	-7662 / 2602	-115.2	-115.2	0.47 (1)	3.41
I-J	-5448 / 1825	-115.2	-115.2	0.72 (3)	2.44
J-K	-9 / 118	-115.2	-115.2	0.28 (3)	10.00
K-L	0 / 41	-115.2	-115.2	0.17 (3)	10.00
V-B	-394 / 203	0.0	0.0	0.02 (2)	7.81
M-K	-394 / 203	0.0	0.0	0.02 (3)	7.81
V-U	-1538 / 4604	-39.5	-39.5	0.44 (2)	6.25
U-T	-1479 / 4869	-39.5	-39.5	0.45 (1)	6.25
T-S	-1479 / 4869	-39.5	-39.5	0.45 (1)	6.25
S-R	-2389 / 7662	-39.5	-39.5	0.65 (1)	5.93
R-Q	-2389 / 7662	-39.5	-39.5	0.65 (1)	5.93
Q-P	-2311 / 7662	-39.5	-39.5	0.65 (1)	6.01
P-O	-1358 / 4869	-39.5	-39.5	0.45 (1)	6.25
O-N	-1358 / 4869	-39.5	-39.5	0.45 (1)	6.25
N-M	-1417 / 4604	-39.5	-39.5	0.44 (3)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-U	-135 / 727	0.12 (3)
U-D	-161 / 275	0.04 (17)
N-I	-179 / 258	0.04 (9)
N-J	-59 / 727	0.12 (2)
V-C	-5611 / 1745	0.74 (2)
J-M	-5611 / 1745	0.74 (3)
P-I	-1174 / 3469	0.56 (2)
D-S	-1174 / 3469	0.56 (3)
P-H	-1607 / 700	0.38 (2)
S-E	-1607 / 700	0.38 (3)
Q-H	-369 / 1182	0.19 (2)
E-Q	-369 / 1182	0.19 (3)
Q-F	-804 / 415	0.19 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.48")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 822 (0.66")

CSI: TC=0.72/1.00 (C-D:2) , BC=0.65/1.00 (Q-S:1) , WB=0.74/1.00 (J-M:3) , SSI=0.30/1.00 (H-I:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII6	438	302	2547	1256	4283	1816

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.94 (T) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T51	1	1	TRUSS DESC.	
Tamarack Roof Truss, Burlington					

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

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07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124023

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T52	5	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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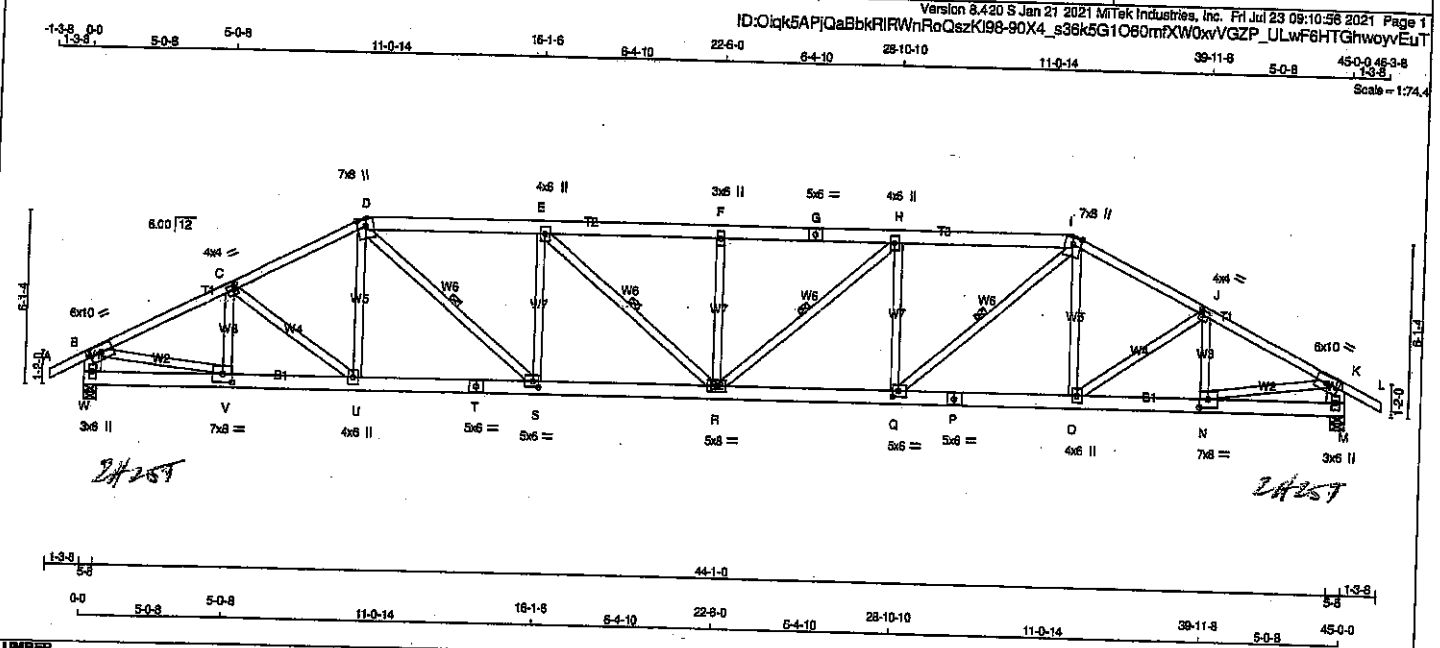

TOTAL WEIGHT = 5 X 253 = 1265 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E	SPF
D - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - L	2x4	DRY	1650F 1.5E	SPF
W - B	2x8	DRY	No.2	SPF
M - K	2x8	DRY	No.2	SPF
W - T	2x6	DRY	No.2	SPF
T - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	7.0	8.0	Edge	
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	7.0	8.0	Edge	
J	TMWW-t	MT20	4.0	4.0	2.00	1.25
K	TMVW-t	MT20	6.0	10.0		
M	BMV1+p	MT20	3.0	6.0		
N	BMWW-t	MT20	7.0	8.0	3.50	3.75
O	BMWW+t	MT20	4.0	6.0		
P	BS-t	MT20	5.0	6.0		
Q	BMWW-t	MT20	5.0	6.0	2.50	2.50
R	BMWWW-t	MT20	5.0	8.0		
S	BMWW-t	MT20	5.0	6.0	2.50	2.50
T	BS-t	MT20	5.0	6.0		
U	BMWW+t	MT20	4.0	6.0		
V	BMWW-t	MT20	7.0	8.0	3.50	3.75
W	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF EDGE.

~~NOTES (1)~~
1)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124024

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
W	3638	0	3720	-158	-1162	5-8	IN-SX
M	3638	0	3720	0	-1162	5-8	IN-SX
						5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 1162 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1162 LBS FACTORED UPLIFT

PROVIDE FOR 158 LBS FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2886	1649 / 0	473 / 0	0 / 0	0 / -1128	619 / 0	0 / 0
M	2886	1649 / 0	473 / 0	0 / 0	26 / -1128	619 / 0	0 / 0
HORIZONTAL REACTIONS							
W	—	0 / 0	0 / 0	0 / 0	113 / -113	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, M

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.76 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF I-Q, D-S, H-R, E-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.15 (2)	10.00
B- C	-5364 / 1731	-115.2	-115.2	0.75 (2)	2.97
C- D	-5326 / 1802	-115.2	-115.2	0.71 (2)	3.00
D- E	-6468 / 2211	-115.2	-115.2	0.58 (1)	3.06
E- F	-7000 / 2336	-115.2	-115.2	0.63 (1)	2.90
F- G	-7000 / 2336	-115.2	-115.2	0.63 (1)	2.90
G- H	-7000 / 2336	-115.2	-115.2	0.63 (1)	2.90
H- I	-6468 / 2211	-115.2	-115.2	0.58 (1)	3.06
I- J	-5326 / 1802	-115.2	-115.2	0.71 (3)	3.00
J- K	-5364 / 1731	-115.2	-115.2	0.75 (3)	2.97
K- L	0 / 41	-115.2	-115.2	0.15 (3)	10.00
W- B	-3602 / 1169	0.0	0.0	0.18 (2)	6.32
M- K	-3602 / 1169	0.0	0.0	0.18 (3)	6.32
W- V	-142 / 163	-39.5	-39.5	0.12 (5)	6.25
V- U	-1560 / 4826	-39.5	-39.5	0.65 (2)	6.24
U- T	-1422 / 4744	-39.5	-39.5	0.64 (1)	6.25
T- S	-1422 / 4744	-39.5	-39.5	0.64 (1)	6.25
S- R	-1956 / 6468	-39.5	-39.5	0.85 (1)	5.76
R- Q	-1870 / 6468	-39.5	-39.5	0.85 (1)	5.86
Q- P	-1275 / 4744	-39.5	-39.5	0.64 (1)	6.25
P- O	-1275 / 4744	-39.5	-39.5	0.64 (1)	6.25
O- N	-1413 / 4826	-39.5	-39.5	0.65 (3)	6.25
N- M	-8 / 16	-39.5	-39.5	0.12 (6)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
V- C	-613 / 293	0.09 (2)
C- U	-166 / 390	0.06 (2)
U- D	-65 / 379	0.06 (5)
O- I	-65 / 379	0.06 (6)
O- J	-190 / 390	0.07 (10)
N- J	-613 / 293	0.09 (3)
B- V	-1444 / 4883	0.78 (2)
N- K	-1445 / 4883	0.78 (3)
Q- I	-635 / 2520	0.41 (2)
D- S	-635 / 2520	0.41 (3)
Q- H	-1445 / 624	0.53 (2)
S- E	-1445 / 624	0.53 (3)
R- H	-284 / 904	0.15 (2)
E- R	-283 / 904	0.15 (3)
R- F	-696 / 359	0.25 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.38")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.52")

CSI: TC=0.75/1.00 (B-C:2) , BC=0.85/1.00 (R-S:1) , WB=0.78/1.00 (K-N:3) , SSI=0.29/1.00 (B-C:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.87 (T) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T52	5	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124024 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T53	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Jul 23 09:10:57 2021 Page 1
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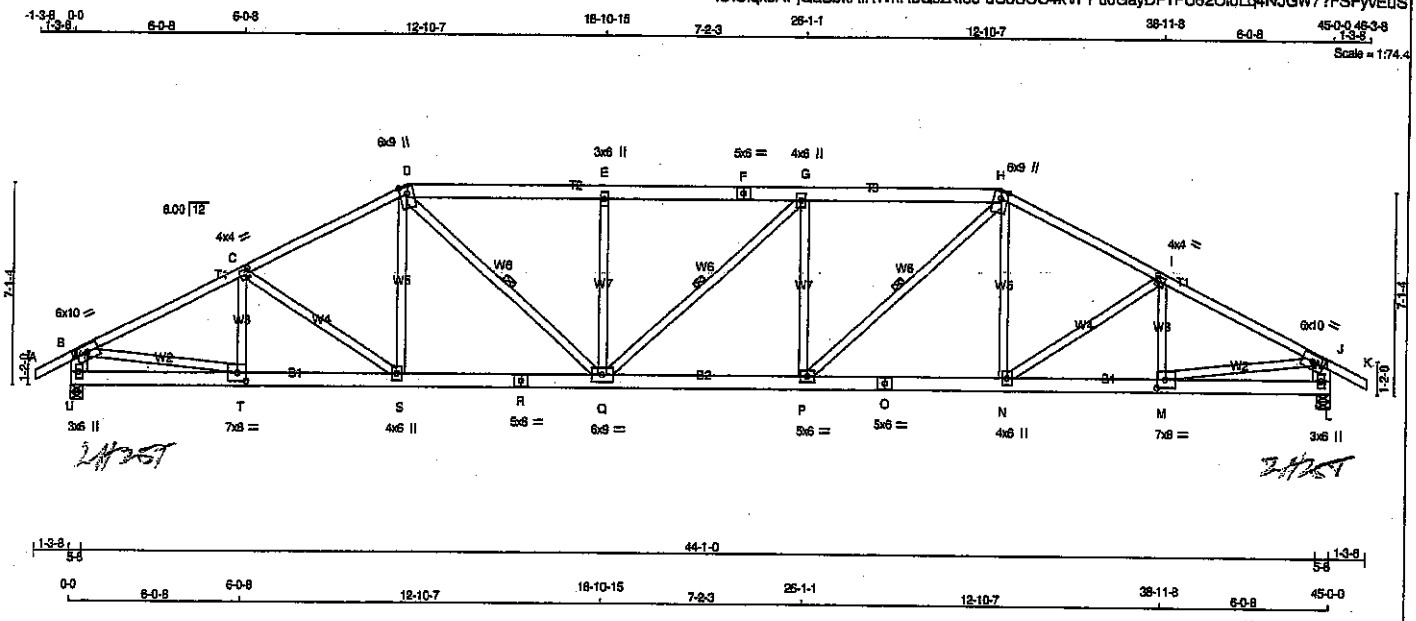

TOTAL WEIGHT = 251 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x4	DRY	2100F 1.8E	SPF
U - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	6.0	9.0	Edge	
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.25
J	TMVW-t	MT20	6.0	10.0		
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	7.0	8.0	3.50	3.75
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	6.0	9.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	7.0	8.0	3.50	3.75
U	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124025

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3638	0	3700	-178	-1146	5-8	5-8
L	3638	0	3700	0	-1146	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1146 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1146 LBS FACTORED UPLIFT

PROVIDE FOR 178 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2696	1636 / 0	473 / 0	0 / 0	0 / -1116	619 / 0	0 / 0
L	2686	1636 / 0	473 / 0	0 / 0	45 / -1116	619 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	127 / -127	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.06 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.15 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF H-P, D-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.11 (2)	10.00
B-C	-5481 / 1743	-115.2	-115.2	0.91 (2)	3.06
C-D	-5153 / 1730	-115.2	-115.2	0.83 (2)	3.22
D-E	-5840 / 1991	-115.2	-115.2	0.62 (1)	3.16
E-F	-5839 / 1990	-115.2	-115.2	0.63 (1)	3.14
F-G	-5839 / 1990	-115.2	-115.2	0.63 (1)	3.14
G-H	-5844 / 1994	-115.2	-115.2	0.63 (1)	3.14
H-I	-5153 / 1730	-115.2	-115.2	0.83 (3)	3.22
I-J	-5481 / 1743	-115.2	-115.2	0.92 (3)	3.06
J-K	0 / 41	-115.2	-115.2	0.11 (3)	10.00
U-B	-3578 / 1159	0.0	0.0	0.17 (2)	6.33
L-J	-3578 / 1159	0.0	0.0	0.17 (3)	6.33
U-T	-161 / 189	-39.5	-39.5	0.14 (5)	6.25
T-S	-1584 / 4915	-39.5	-39.5	0.68 (1)	6.21
S-R	-1327 / 4577	-39.5	-39.5	0.64 (1)	6.25
R-Q	-1327 / 4577	-39.5	-39.5	0.64 (1)	6.25
Q-P	-1637 / 5843	-39.5	-39.5	0.78 (1)	6.15
P-O	-1153 / 4577	-39.5	-39.5	0.64 (1)	6.25
O-N	-1153 / 4577	-39.5	-39.5	0.64 (1)	6.25
N-M	-1410 / 4915	-39.5	-39.5	0.68 (1)	6.25
M-L	-8 / 16	-39.5	-39.5	0.14 (6)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T-C	-472 / 260	0.08 (8)
C-S	-538 / 305	0.32 (2)
S-D	-128 / 589	0.09 (2)
N-H	-126 / 586	0.09 (3)
N-I	-539 / 308	0.32 (3)
M-I	-476 / 259	0.08 (8)
B-T	-1437 / 4955	0.80 (1)
M-J	-1437 / 4955	0.80 (1)
P-H	-668 / 2015	0.32 (2)
D-Q	-663 / 2009	0.32 (3)
P-G	-1104 / 527	0.61 (2)
Q-E	-918 / 472	0.50 (1)
Q-G	-280 / 269	0.13 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.31")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.43")

CSI: TC=0.92/1.00 (H-J:3) , BC=0.78/1.00 (P-Q:1) , WB=0.80/1.00 (J-M:1) , SSI=0.35/1.00 (B-C:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	768	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL= 0.88 (R) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T53	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.8) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

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07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124025

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T54	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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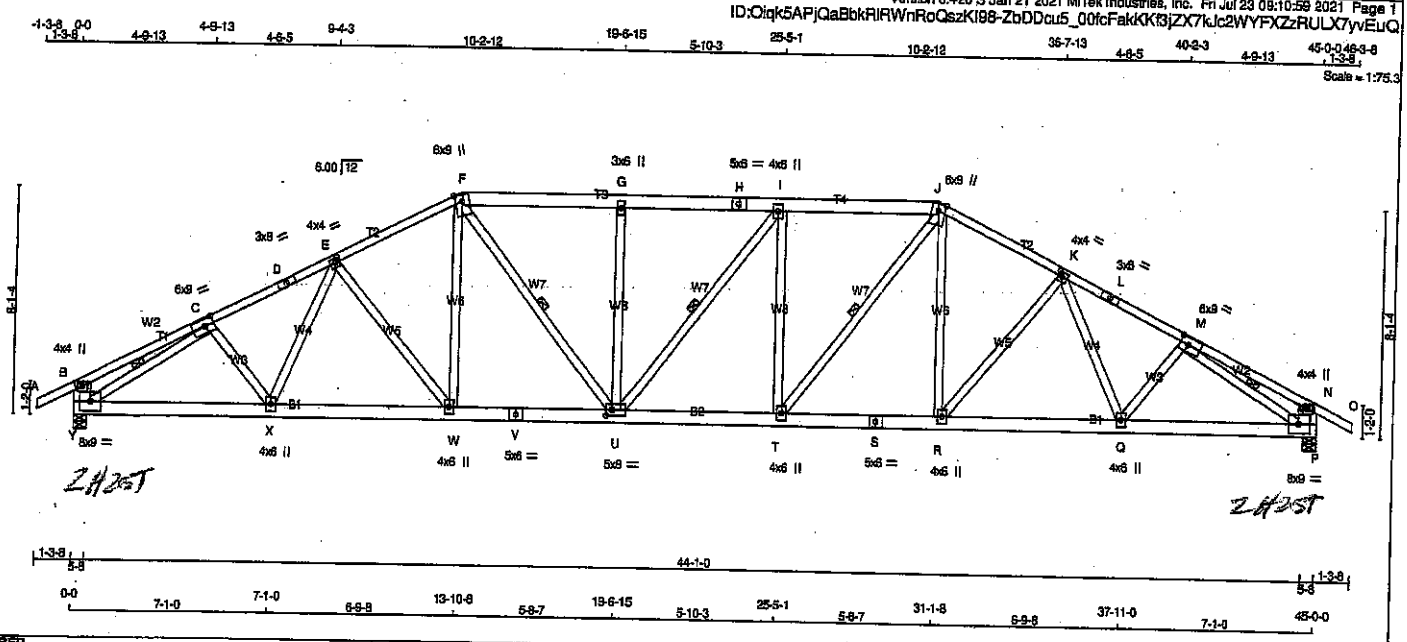

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x8	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - L	2x4	DRY	No.2	SPF
L - O	2x4	DRY	No.2	SPF
Y - B	2x8	DRY	No.2	SPF
P - N	2x8	DRY	No.2	SPF
Y - V	2x6	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	6.0	9.0	3.00	3.75
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F	TTWW+m	MT20	6.0	9.0	Edge	
G	TMW+w	MT20	3.0	6.0		
H	TS-t	MT20	5.0	6.0		
I	TMWW+t	MT20	4.0	6.0		
J	TTWW+m	MT20	6.0	9.0	Edge	
K	TMWW-t	MT20	4.0	4.0	2.00	1.75
L	TS-t	MT20	3.0	8.0		
M	TMWW-t	MT20	6.0	9.0	3.00	3.75
N	TMV+p	MT20	4.0	4.0		
P	BMVW1-t	MT20	8.0	9.0		
Q, R, T, W, X						
Q	BMWW-t	MT20	4.0	6.0		
S	BS-t	MT20	5.0	6.0		
U	BMWWW-t	MT20	5.0	8.0	2.50	2.50
V	BS-t	MT20	5.0	6.0		
Y	BMVW1-t	MT20	8.0	9.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124026

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
Y	3638	0	3670	200	-1126	5-8	5-8
P	3638	0	3670	0	-1126	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT Y FOR 1126 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT P FOR 1126 LBS FACTORED UPLIFT

PROVIDE FOR 200 LBS FACTORED HORIZONTAL REACTION AT JOINT Y

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
		MAX./MIN. COMPONENT REACTIONS					
Y	2686	1616 / 0	473 / 0	0 / 0	0 / -1102	619 / 0	0 / 0
P	2686	1616 / 0	473 / 0	0 / 0	62 / -1102	619 / 0	0 / 0
HORIZONTAL REACTIONS							
Y	---	0 / 0	0 / 0	0 / 0	143 / -143	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Y, P

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.24 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-Y, M-P, J-T, F-U, I-U.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.17 (2)	10.00
B-C	-9 / 133	-115.2	-115.2	0.35 (2)	10.00
C-D	-5373 / 1759	-115.2	-115.2	0.91 (2)	2.36
D-E	-5373 / 1759	-115.2	-115.2	0.91 (2)	2.36
E-F	-4905 / 1670	-115.2	-115.2	0.78 (2)	2.61
F-G	-5088 / 1744	-115.2	-115.2	0.38 (1)	3.60
G-H	-5088 / 1743	-115.2	-115.2	0.39 (1)	3.58
H-I	-5088 / 1743	-115.2	-115.2	0.39 (1)	3.58
I-J	-5093 / 1748	-115.2	-115.2	0.39 (1)	3.58
J-K	-4905 / 1689	-115.2	-115.2	0.78 (3)	2.61
K-L	-5373 / 1760	-115.2	-115.2	0.91 (3)	2.36
L-M	-5373 / 1760	-115.2	-115.2	0.91 (3)	2.36
M-N	-9 / 133	-115.2	-115.2	0.35 (3)	10.00
N-O	0 / 41	-115.2	-115.2	0.17 (3)	10.00
Y-B	-445 / 233	0.0	0.0	0.02 (2)	7.81
P-N	-445 / 233	0.0	0.0	0.02 (3)	7.81
Y-X	-1557 / 4700	-39.5	-39.5	0.70 (1)	6.24
X-W	-1451 / 4755	-39.5	-39.5	0.65 (1)	6.25
W-V	-1216 / 4366	-39.5	-39.5	0.60 (1)	6.25
V-U	-1216 / 4366	-39.5	-39.5	0.60 (1)	6.25
U-T	-1351 / 5093	-39.5	-39.5	0.67 (1)	6.25
T-S	-1049 / 4365	-39.5	-39.5	0.60 (1)	6.25
S-R	-1049 / 4365	-39.5	-39.5	0.60 (1)	6.25
R-Q	-1251 / 4755	-39.5	-39.5	0.65 (1)	6.25
Q-P	-1358 / 4700	-39.5	-39.5	0.70 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-X	-25 / 434	0.07 (3)
X-E	-132 / 250	0.05 (10)
E-W	-741 / 369	0.48 (2)
W-F	-246 / 844	0.20 (13)
R-J	-244 / 840	0.20 (14)
R-K	-742 / 369	0.48 (3)
K-Q	-143 / 251	0.06 (9)
Q-M	-19 / 434	0.07 (2)
Y-C	-5643 / 1847	0.88 (1)
M-P	-5643 / 1848	0.88 (1)
T-J	-506 / 1532	0.25 (2)
F-U	-501 / 1524	0.24 (3)
T-I	-1003 / 459	0.80 (2)
U-G	-749 / 384	0.60 (1)
U-I	-329 / 313	0.15 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

TOTAL WEIGHT = 265 lb
(M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.28")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.39")

CSI: TC=0.91/1.00 (K-M:3) , BC=0.70/1.00 (X-Y:1) , WB=0.88/1.00 (M-P:1) , SSI=0.28/1.00 (B-C:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (M) (INPUT = 0.90)
JSI METAL= 0.85 (M) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T54	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Ojqk5APjQaBbkRIRWnRcQszKf98-ZbDDcu5_00fcFakKKf3jZX7kJc2WYFXZzRULX7yvEuQ

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124026

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T55	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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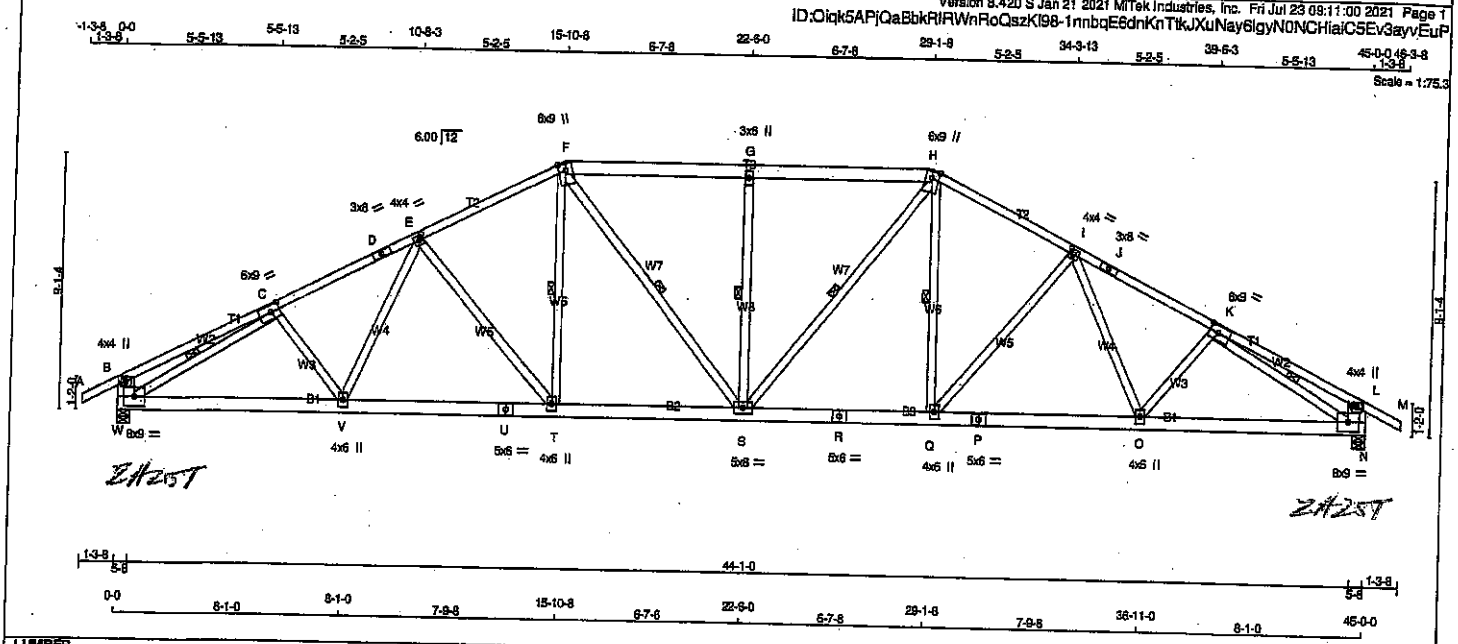

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E	SPF
D - F	2x4	DRY	1650F 1.5E	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x4	DRY	1650F 1.5E	SPF
J - M	2x4	DRY	1650F 1.5E	SPF
W - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
W - U	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - P	2x6	DRY	No.2	SPF
P - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
W - C	2x4	DRY	1650F 1.5E	SPF
K - N	2x4	DRY	1650F 1.5E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	6.0	9.0	3.00	3.75
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F	TTWW+m	MT20	6.0	9.0	Edge	
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.75
J	TS-t	MT20	3.0	8.0		
K	TMWW-t	MT20	6.0	9.0	3.00	3.75
L	TMV+p	MT20	4.0	4.0		
N	BMVW1-t	MT20	8.0	9.0		
O, Q, T, V						
O	BMWW+t	MT20	4.0	6.0		
P, R, U						
P	BS-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	5.0	8.0		
W	BMVW1-t	MT20	8.0	9.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF EDGE.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124027 1/2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
W	3638	0	3638	227	-1104	5-8	5-8
N	3638	0	3638	0	-1104	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 1104 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1104 LBS FACTORED UPLIFT

PROVIDE FOR 227 LBS FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

JT	1ST LOADE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2688	1594 / 0	473 / 0	0 / 0	0 / -1087	619 / 0	0 / 0
N	2686	1594 / 0	473 / 0	0 / 0	78 / -1087	619 / 0	0 / 0
HORIZONTAL REACTIONS							
W	—	0 / 0	0 / 0	0 / 0	162 / -162	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.05 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.21 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-T, F-S, G-S, H-S, H-Q, C-W, K-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.15 (2)	10.00
B- C	-9 / 143	-115.2	-115.2	0.39 (2)	10.00
C- D	-5367 / 1725	-115.2	-115.2	0.76 (2)	3.05
D- E	-5367 / 1725	-115.2	-115.2	0.76 (2)	3.05
E- F	-4658 / 1566	-115.2	-115.2	0.65 (2)	3.33
F- G	-4610 / 1564	-115.2	-115.2	0.54 (1)	3.56
G- H	-4610 / 1564	-115.2	-115.2	0.54 (1)	3.56
H- I	-4658 / 1566	-115.2	-115.2	0.65 (3)	3.33
I- J	-5367 / 1725	-115.2	-115.2	0.76 (3)	3.05
J- K	-5367 / 1725	-115.2	-115.2	0.76 (3)	3.05
K- L	-9 / 143	-115.2	-115.2	0.39 (3)	10.00
L- M	0 / 41	-115.2	-115.2	0.15 (3)	10.00
W- B	-479 / 253	0.0	0.0	0.02 (2)	7.81
N- L	-479 / 253	0.0	0.0	0.02 (3)	7.81
W- V	-1570 / 4788	-39.5	-39.5	0.74 (1)	6.21
V- U	-1389 / 4670	-39.5	-39.5	0.66 (1)	6.25
U- T	-1389 / 4670	-39.5	-39.5	0.66 (1)	6.25
T- S	-1089 / 4138	-39.5	-39.5	0.60 (1)	6.25
S- R	-942 / 4138	-39.5	-39.5	0.60 (1)	6.25
R- Q	-942 / 4138	-39.5	-39.5	0.60 (1)	6.25
Q- P	-1162 / 4670	-39.5	-39.5	0.66 (1)	6.25
P- O	-1162 / 4670	-39.5	-39.5	0.66 (1)	6.25
O- N	-1343 / 4788	-39.5	-39.5	0.74 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- V	-170 / 347	0.06 (3)
V- E	-98 / 442	0.07 (5)
E- T	-979 / 463	0.89 (2)
T- F	-304 / 1049	0.17 (2)
F- S	-395 / 1192	0.24 (14)
S- G	-981 / 502	0.35 (1)
S- H	-395 / 1192	0.24 (13)
Q- H	-304 / 1049	0.17 (3)
Q- I	-979 / 463	0.89 (3)
I- O	-98 / 442	0.07 (6)
O- K	-179 / 347	0.06 (2)
W- C	-5695 / 1616	0.73 (1)
K- N	-5695 / 1616	0.73 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(9)

TOTAL WEIGHT = 258 lb
[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.26")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.36")

CSI: TC=0.76/1.00 (I-K:3) , BC=0.74/1.00 (N-O:1) , WB=0.89/1.00 (I-Q:3) , SSI=0.30/1.00 (K-L:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (W) (INPUT = 0.90)
JSI METAL= 0.86 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T55	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Olpk5APlQaBbkRlRWnRoQszKl98-1nnbqE6dnKnTtkJXuNay6lgyN0NCHlaiC5Ev3ayvEuP

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.6} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124027

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T56	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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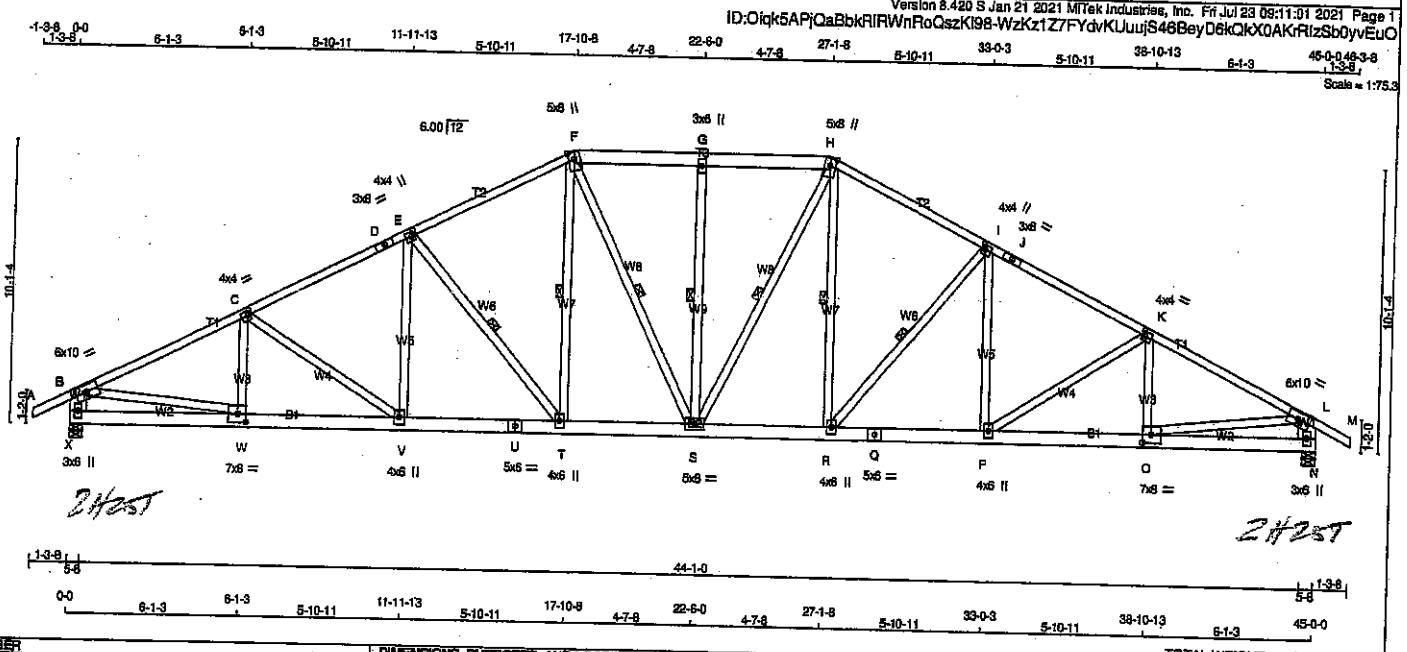

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E	SPF
D - F	2x4	DRY	2100F 1.8E	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x4	DRY	2100F 1.8E	SPF
J - M	2x4	DRY	2100F 1.8E	SPF
X - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
X - U	2x6	DRY	No.2	SPF
U - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TS-t	MT20	3.0	8.0		
E	TMWW+t	MT20	4.0	4.0	2.00	1.25
F	TTWW+m	MT20	5.0	8.0	Edge	
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	5.0	8.0	Edge	
I	TMWW+t	MT20	4.0	4.0	2.00	1.25
J	TS-t	MT20	3.0	8.0		
K	TMWW-t	MT20	4.0	4.0	2.00	1.25
L	TMVW-t	MT20	6.0	10.0		
N	BMV1+p	MT20	3.0	6.0		
O	BMWW-t	MT20	7.0	6.0	3.50	3.75
P, R, T, V						
P	BMWW+t	MT20	4.0	6.0		
Q	BS-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	5.0	8.0		
U	BS-t	MT20	5.0	6.0		
W	BMWW-t	MT20	7.0	8.0	3.50	3.75
X	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

~~NOTES~~ (1)
1)

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124028

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	3638	0	3638	253	-1079	5-8	5-8
N	3638	0	3638	0	-1079	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1079 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1079 LBS FACTORED UPLIFT

PROVIDE FOR 253 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	2686	1594 / 0	473 / 0	0 / 0	12 / -1069	619 / 0	0 / 0
N	2686	1594 / 0	473 / 0	0 / 0	92 / -1069	619 / 0	0 / 0
HORIZONTAL REACTIONS							
X	---	0 / 0	0 / 0	0 / 0	181 / -181	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.31 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-T, F-T, F-S, G-S, H-S, H-R, I-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (16)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.11 (2)	10.00
B- C	-5482 / 1613	-115.2	-115.2	0.79 (2)	3.31
C- D	-5134 / 1604	-115.2	-115.2	0.71 (2)	3.43
D- E	-5134 / 1604	-115.2	-115.2	0.71 (2)	3.43
E- F	-4378 / 1451	-115.2	-115.2	0.62 (2)	3.72
F- G	-4093 / 1393	-115.2	-115.2	0.24 (1)	4.08
G- H	-4093 / 1393	-115.2	-115.2	0.24 (1)	4.08
H- I	-4378 / 1451	-115.2	-115.2	0.62 (3)	3.72
I- J	-5134 / 1605	-115.2	-115.2	0.71 (3)	3.43
J- K	-5134 / 1605	-115.2	-115.2	0.71 (3)	3.43
K- L	-5482 / 1614	-115.2	-115.2	0.79 (3)	3.31
L- M	0 / 41	-115.2	-115.2	0.11 (3)	10.00
X- B	-3519 / 1094	0.0	0.0	0.17 (1)	6.38
N- L	-3519 / 1094	0.0	0.0	0.17 (1)	6.38
X- W	-238 / 289	-39.5	-39.5	0.13 (4)	6.25
W- V	-1543 / 4902	-39.5	-39.5	0.67 (1)	6.25
V- U	-1310 / 4593	-39.5	-39.5	0.60 (1)	6.25
U- T	-1310 / 4593	-39.5	-39.5	0.60 (1)	6.25
T- S	-953 / 3863	-39.5	-39.5	0.51 (1)	6.25
S- R	-837 / 3863	-39.5	-39.5	0.51 (1)	6.25
R- Q	-1057 / 4593	-39.5	-39.5	0.60 (1)	6.25
Q- P	-1057 / 4593	-39.5	-39.5	0.60 (1)	6.25
P- O	-1290 / 4902	-39.5	-39.5	0.67 (1)	6.25
O- N	-8 / 16	-39.5	-39.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W- C	-448 / 239	0.08 (6)
C- V	-527 / 277	0.34 (2)
V- E	-104 / 529	0.08 (5)
E- T	-1267 / 545	0.48 (2)
T- F	-368 / 1176	0.19 (2)
F- S	-305 / 945	0.18 (14)
S- G	-694 / 353	0.32 (1)
S- H	-306 / 945	0.18 (13)
R- H	-368 / 1176	0.19 (3)
R- I	-1267 / 545	0.48 (3)
P- I	-104 / 529	0.08 (6)
P- K	-527 / 277	0.34 (3)
O- K	-454 / 239	0.08 (6)
B- W	-1315 / 4941	0.79 (1)
O- L	-1316 / 4941	0.79 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

TOTAL WEIGHT = 2 X 274 = 548 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.79/1.00 (K-L:3) , BC=0.67/1.00 (O-P:1) , WB=0.79/1.00 (L-O:1) , SSI=0.34/1.00 (K-L:3).

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.84 (O) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T56	2	1	TRUSS DESC.	
Tamarack Roof Truss, Burlington					

ID:Oigk5APjQaBbkRIRWnRoQszKl98-WzKz1Z7FYdvKUuujS46BeyD6kQkX0AKrRIzSb0yvEuO

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_pC_g, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM]. INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124028 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T57	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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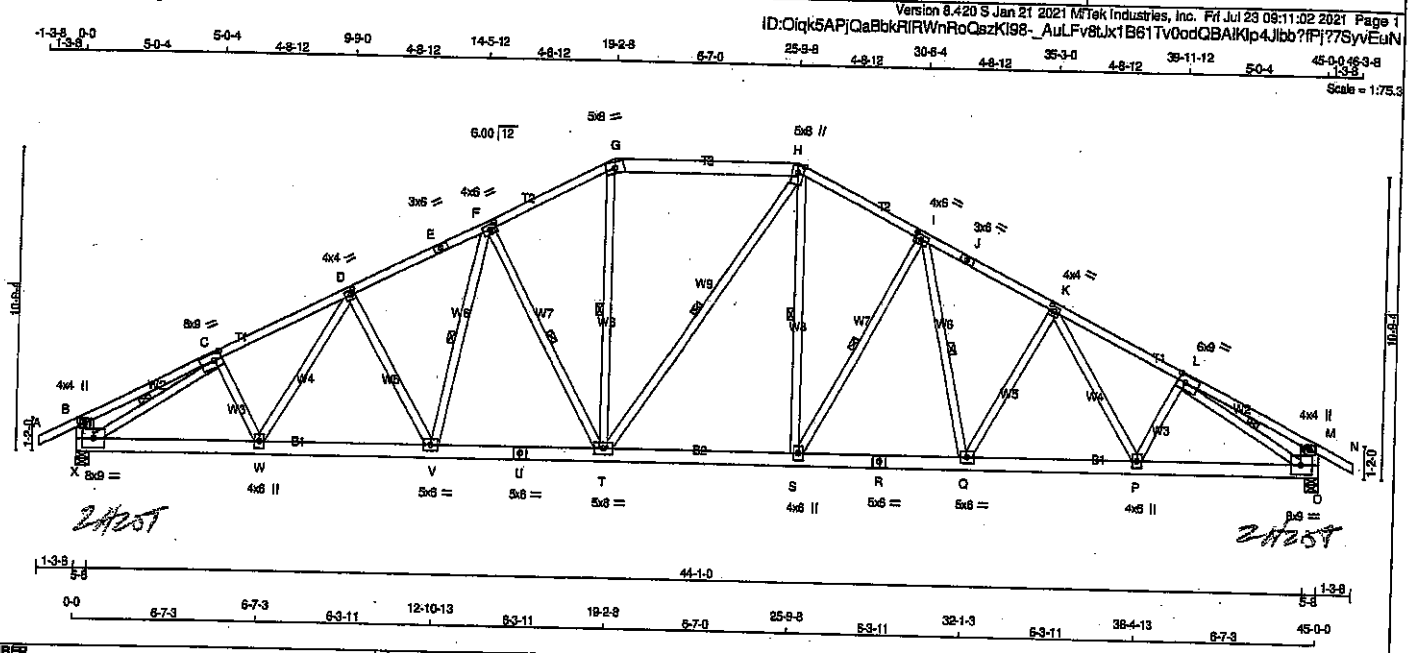

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x4	DRY	1650F 1.5E	SPF
E - G	2x4	DRY	1650F 1.5E	SPF
G - H	2x6	DRY	No.2	SPF
H - J	2x4	DRY	1650F 1.5E	SPF
J - N	2x4	DRY	1650F 1.5E	SPF
X - B	2x8	DRY	No.2	SPF
O - M	2x8	DRY	No.2	SPF
X - U	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	6.0	9.0	3.00	3.25
D	TMWW-t	MT20	4.0	4.0	2.00	1.75
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	6.0	2.00	2.75
G	TTW-m	MT20	5.0	8.0		
H	TTWW+m	MT20	5.0	8.0	Edge	
I	TMWW-t	MT20	4.0	6.0	2.00	2.75
J	TS-t	MT20	3.0	6.0		
K	TMWW-t	MT20	4.0	4.0	2.00	1.75
L	TMWW-t	MT20	6.0	9.0	3.00	3.25
M	TMV+p	MT20	4.0	4.0		
O	BMVW1-t	MT20	8.0	9.0		
P, S, W						
P	BMWW+t	MT20	4.0	6.0		
Q	BMWW-t	MT20	5.0	6.0		
R	BS-t	MT20	5.0	6.0		
T	BMWWW-t	MT20	5.0	8.0		
U	BS-t	MT20	5.0	6.0		
V	BMWW-t	MT20	5.0	6.0		
X	BMVW1-t	MT20	8.0	9.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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PROVINCE OF ONTARIO

Structural component only
DWG# T-2124029

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
X	3638	0	3638	271	-1060	5-8	5-8
O	3638	0	3638	0	-1060	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT X FOR 1060 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT O FOR 1060 LBS FACTORED UPLIFT

PROVIDE FOR 271 LBS FACTORED HORIZONTAL REACTION AT JOINT X

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	2686	1594 / 0	473 / 0	0 / 0	44 / -1055	819 / 0	0 / 0
O	2686	1594 / 0	473 / 0	0 / 0	100 / -1055	819 / 0	0 / 0
HORIZONTAL REACTIONS							
X	—	0 / 0	0 / 0	0 / 0	193 / -193	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, O

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 3.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-V, F-T, G-T, H-T, H-S, I-S, I-Q, C-X, L-O.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.15 (2)	10.00
B- C	-9 / 135	-115.2	-115.2	0.34 (2)	10.00
C- D	-5371 / 1669	-115.2	-115.2	0.60 (2)	3.18
D- E	-4959 / 1582	-115.2	-115.2	0.57 (2)	3.30
E- F	-4959 / 1582	-115.2	-115.2	0.57 (2)	3.30
F- G	-4190 / 1394	-115.2	-115.2	0.49 (2)	3.59
G- H	-3719 / 1310	-115.2	-115.2	0.53 (1)	3.90
H- I	-4186 / 1393	-115.2	-115.2	0.49 (3)	3.59
I- J	-4961 / 1583	-115.2	-115.2	0.56 (3)	3.30
J- K	-4961 / 1583	-115.2	-115.2	0.56 (3)	3.30
K- L	-5371 / 1669	-115.2	-115.2	0.60 (3)	3.18
L- M	-9 / 135	-115.2	-115.2	0.34 (3)	10.00
M- N	0 / 41	-115.2	-115.2	0.15 (3)	10.00
X- B	-451 / 237	0.0	0.0	0.02 (2)	7.81
O- M	-451 / 237	0.0	0.0	0.02 (3)	7.81
X- W	-1533 / 4747	-39.5	-39.5	0.69 (1)	6.25
W- V	-1367 / 4716	-39.5	-39.5	0.65 (1)	6.25
V- U	-1150 / 4288	-39.5	-39.5	0.61 (1)	6.25
U- T	-1150 / 4288	-39.5	-39.5	0.61 (1)	6.25
T- S	-766 / 3715	-39.5	-39.5	0.54 (1)	6.25
S- R	-907 / 4288	-39.5	-39.5	0.59 (1)	6.25
R- Q	-907 / 4288	-39.5	-39.5	0.59 (1)	6.25
Q- P	-1117 / 4717	-39.5	-39.5	0.65 (1)	6.25
P- O	-1262 / 4746	-39.5	-39.5	0.69 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- W	-96 / 343	0.06 (3)
W- D	-110 / 304	0.06 (13)
D- V	-718 / 373	0.37 (2)
V- F	-285 / 892	0.14 (2)
F- T	-1324 / 585	0.55 (2)
T- G	-325 / 1247	0.20 (1)
T- H	-574 / 584	0.50 (3)
S- H	-448 / 1412	0.24 (14)
S- I	-1328 / 586	0.55 (3)
I- Q	-296 / 899	0.14 (3)
Q- K	-716 / 374	0.37 (3)
K- P	-111 / 302	0.06 (14)
P- L	-101 / 343	0.06 (2)
X- C	-5682 / 1529	0.92 (1)
L- O	-5681 / 1529	0.92 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(6)

TOTAL WEIGHT = 270 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(60 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.26")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.36")

CSI: TC=0.60/1.00 (C-D:2) , BC=0.69/1.00 (O-P:1) , WB=0.92/1.00 (C-X:1) , SSI=0.27/1.00 (B-C:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL= 0.86 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T57	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Oiqk5APjQaBbkRIRWnRoQszKj98-AuLFv8tJx1B61Tv0odQBAlKp4JIbb?fPl77SyvEuN

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124029

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T58	1	3	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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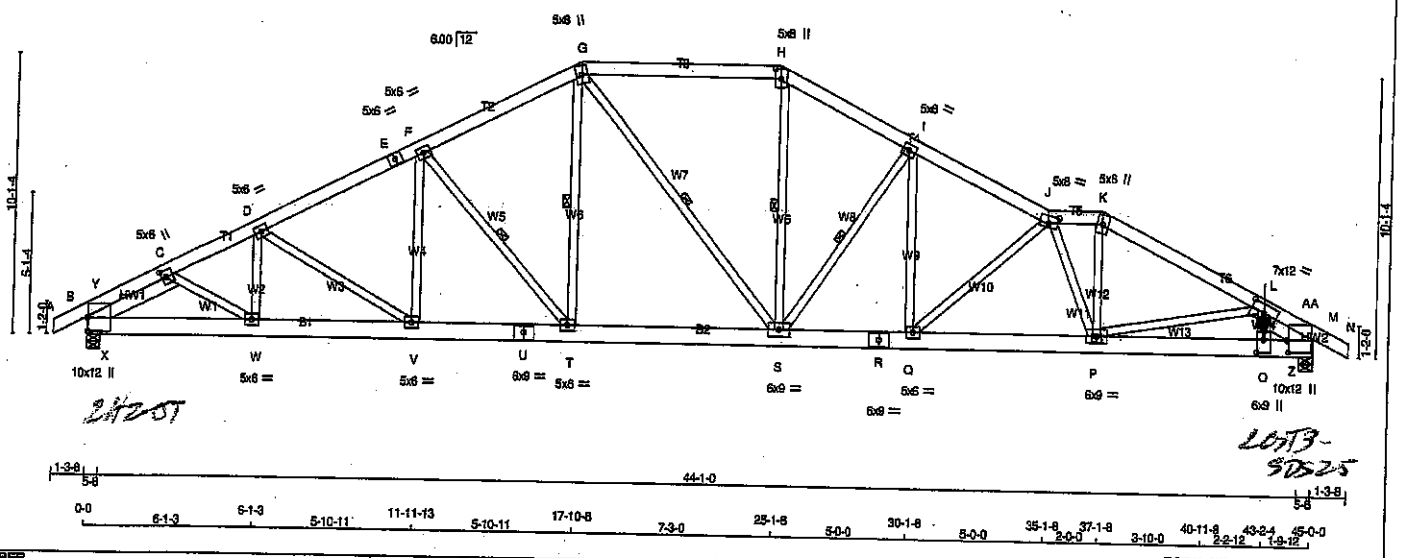

TOTAL WEIGHT = 3 X 317 = 952 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x6	DRY	No.2	SPF
E - G	2x6	DRY	No.2	SPF
G - H	2x6	DRY	No.2	SPF
H - J	2x6	DRY	No.2	SPF
J - K	2x6	DRY	No.2	SPF
K - N	2x6	DRY	No.2	SPF
B - U	2x8	DRY	No.2	SPF
U - R	2x8	DRY	No.2	SPF
R - M	2x8	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
HW2	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- E	2	12	TOP
E- G	2	12	TOP
G- H	2	12	TOP
H- J	2	12	TOP
J- K	2	12	TOP
K- N	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- U	2	12	TOP
U- R	2	12	TOP
R- M	4	4	SIDE(2421.8)
WEBS : (0.122"X3") SPIRAL NAILS			
2x4	1	6	
L- O	2	6	SIDE(53.1)
2x6	2	8	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124030

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	3971	0	3971	255	-1159	5-8	5-8
M	11539	0	11539	0	-3478	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 1159 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 3478 LBS FACTORED UPLIFT

PROVIDE FOR 255 LBS FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE ----MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	2931	1743 / 0	514 / 0	0 / 0	59 / -1153	675 / 0	0 / 0
M	8500	5106 / 0	1452 / 0	0 / 0	819 / -3421	1942 / 0	0 / 0
HORIZONTAL REACTIONS							
B	—	0 / 0	0 / 0	0 / 0	182 / -182	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-T, G-T, H-S, I-S, G-S.

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 6	-115.2	-115.2		0.03 (2)	10.00
B- Y	-4289 / 1165	-115.2	-115.2		0.05 (13)	6.25
Y- C	-3003 / 909	-115.2	-115.2		0.05 (1)	6.25
C- D	-6233 / 1838	-115.2	-115.2		0.09 (13)	5.58
D- E	-5902 / 1780	-115.2	-115.2		0.13 (2)	5.64
E- F	-5902 / 1780	-115.2	-115.2		0.13 (2)	5.64
F- G	-5141 / 1625	-115.2	-115.2		0.12 (2)	5.94
G- H	-4937 / 1667	-115.2	-115.2		0.18 (1)	5.93
H- I	-5584 / 1797	-115.2	-115.2		0.10 (14)	5.79
I- J	-7045 / 2160	-115.2	-115.2		0.12 (14)	5.29
J- K	-7831 / 2422	-115.2	-115.2		0.09 (14)	5.13
K- L	-8555 / 2549	-115.2	-115.2		0.22 (3)	4.79
L- AA	-8769 / 2607	-115.2	-115.2		0.17 (1)	4.77
AA- M	-12252 / 3666	-115.2	-115.2		0.20 (1)	4.12
M- N	0 / 6	-115.2	-115.2		0.03 (3)	10.00
B- X	-943 / 2632	-39.5	-39.5		0.13 (1)	6.25
X- W	-1591 / 4890	-39.5	-39.5		0.21 (1)	6.25
W- V	-1718 / 5814	-39.5	-39.5		0.21 (1)	6.25
V- U	-1499 / 5294	-39.5	-39.5		0.19 (1)	6.25
U- T	-1499 / 5294	-39.5	-39.5		0.19 (1)	6.25
T- S	-1123 / 4550	-39.5	-39.5		0.18 (1)	6.25
S- R	-1548 / 6331	-39.5	-39.5		0.24 (1)	6.25
R- Q	-1548 / 6331	-39.5	-39.5		0.24 (1)	6.25
Q- P	-2285 / 8442	-39.5	-39.5		0.34 (1)	6.25
P- O	-3545 / 11861	-39.5	-39.5		0.82 (1)	6.25
O- Z	-3700 / 12427	-39.5	-39.5		0.64 (1)	6.25
Z- M	-2201 / 7538	-39.5	-39.5		0.42 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
W- D	-276 / 145	0.01 (8)
D- V	-533 / 255	0.11 (2)
V- F	-83 / 497	0.03 (5)
F- T	-1305 / 565	0.15 (2)
T- G	-361 / 1250	0.07 (2)
S- H	-477 / 1849	0.10 (1)
S- I	-2564 / 943	0.29 (3)
Q- I	-562 / 1997	0.12 (14)
Q- J	-2932 / 997	0.56 (3)
P- K	-914 / 3340	0.18 (1)
P- L	-4532 / 1553	0.75 (3)
O- L	-2190 / 7661	0.30 (1)
J- P	-1683 / 498	0.15 (1)
G- S	-348 / 1170	0.09 (14)
C- W	-178 / 877	0.05 (1)
X- Y	-368 / 1741	0.00 (1)
X- C	-3058 / 878	0.10 (1)
L- Z	-7929 / 2430	0.19 (1)
Z- AA	-1803 / 5037	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
O	43-2-4	-6053	-6053	1413	BACK	VERT	TOTAL	—	Ct

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
" "	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.50")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/180 (3.00")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.22/1.00 (K-L:3) , BC=0.64/1.00 (O-Z:1) , WB=0.75/1.00 (L-P:3) , SSI=0.30/1.00 (M-Z:1)

DOL.LUMBER=1.00 NAIL=1.00 LS.BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (O) (INPUT = 0.90)
JSI METAL= 0.99 (O) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T58	1	3	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMW1+l	MT20	10.0	12.0	5.75	0.25
C	TMWW+t	MT20	5.0	6.0	3.00	1.75
D, F, I						
D	TMWW-t	MT20	5.0	6.0		
E	TS-t	MT20	5.0	6.0		
G	TTWW+m	MT20	5.0	8.0		
H	TTW+p	MT20	5.0	8.0	4.25	2.50
J	TTWW-m	MT20	5.0	8.0	3.25	4.00
K	TTW+m	MT20	5.0	8.0		
L	TMWWW-t	MT20	7.0	12.0	3.75	6.00
M	TMBMW1m	MT20	10.0	12.0	0.50	5.25
O	BMW+w	MT20	6.0	9.0	5.50	3.00
P	BMWWW-t	MT20	6.0	9.0		
Q, T, V, W						
Q	BMWW-t	MT20	5.0	6.0		
R	BS-t	MT20	6.0	9.0		
S	BMWWW-t	MT20	6.0	9.0		
U	BS-t	MT20	6.0	9.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124030

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T59	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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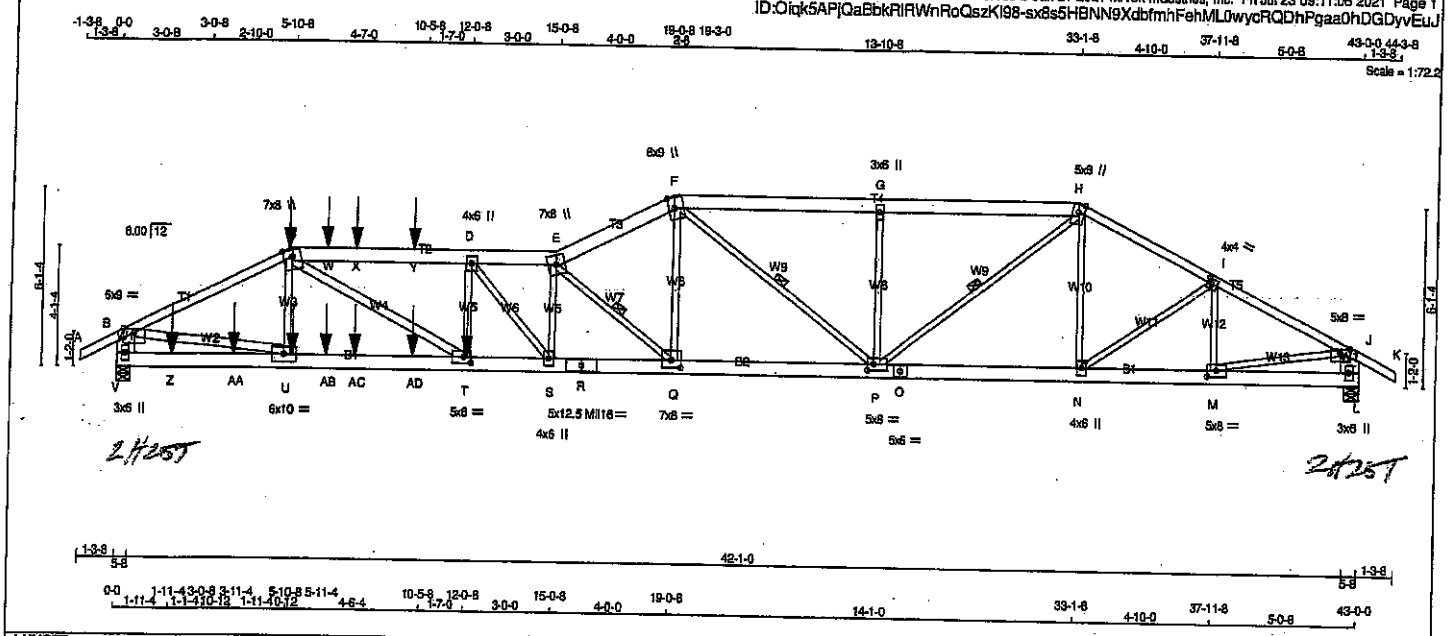

TOTAL WEIGHT = 2 X 220 = 441 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	1650F 1.5E	SPF
C - E	2x6	DRY	No.2	SPF
E - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
V - B	2x8	DRY	No.2	SPF
L - J	2x8	DRY	No.2	SPF
V - R	2x6	DRY	1650F 1.5E	SPF
R - O	2x6	DRY	1650F 1.5E	SPF
O - L	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
C - T	2x4	DRY	No.2	SPF
B - U	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	SIDE(70.1)
H- K	1	12	TOP
C- E	2	12	SIDE(70.1)
E- F	2	12	TOP
F- H	2	12	TOP
V- B	2	12	TOP
L- J	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
V- R	2	12	SIDE(210.5)
R- O	2	12	TOP
O- L	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
U- C	1	6	SIDE(22.2)
D- T	1	3	SIDE(522.1)
2x3	1	6	
2x4	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124031

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	6218	0	6280	-158	-1167	5-8	5-8
L	4385	0	4385	0	-1037	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1167 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1037 LBS FACTORED UPLIFT

PROVIDE FOR 158 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

1ST LCASE — MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	4513	2824 / 0	475 / 0	0 / 0	0 / -1133	1255 / 0	0 / 0
L	3209	1951 / 0	455 / 0	0 / 0	30 / -1028	803 / 0	0 / 0
HORIZONTAL REACTIONS							
V	—	0 / 0	0 / 0	0 / 0	113 / -113	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, L

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Q, H-P, F-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.08 (2)	10.00	
B- C	-9943 / 1719	-115.2	-115.2	0.78 (2)	3.12	
C- W	-15574 / 2701	-115.2	-115.2	0.67 (1)	2.58	
W- X	-15574 / 2701	-115.2	-115.2	0.67 (1)	2.58	
X- Y	-15574 / 2701	-115.2	-115.2	0.67 (1)	2.58	
Y- D	-15574 / 2701	-115.2	-115.2	0.67 (1)	2.58	
D- E	-15758 / 2930	-115.2	-115.2	0.39 (1)	2.82	
E- F	-11208 / 2310	-115.2	-115.2	0.26 (2)	3.50	
F- G	-8836 / 2061	-115.2	-115.2	0.36 (1)	3.81	
G- H	-8837 / 2062	-115.2	-115.2	0.37 (1)	3.81	
H- I	-6780 / 1561	-115.2	-115.2	0.49 (3)	3.42	
I- J	-6574 / 1516	-115.2	-115.2	0.50 (3)	3.48	
J- K	0 / 41	-115.2	-115.2	0.10 (3)	10.00	
V- B	-6160 / 1183	0.0	0.0	0.17 (2)	6.68	
L- J	-4247 / 1043	0.0	0.0	0.11 (1)	7.71	
V- Z	-142 / 162	-39.5	-39.5	0.07 (17)	6.25	
Z-AA	-142 / 162	-39.5	-39.5	0.07 (17)	6.25	
AA- U	-142 / 162	-39.5	-39.5	0.07 (17)	6.25	
U-AB	-1529 / 8936	-39.5	-39.5	0.44 (1)	6.25	
AB-AC	-1529 / 8936	-39.5	-39.5	0.44 (1)	6.25	
AC-AD	-1529 / 8936	-39.5	-39.5	0.44 (1)	6.25	
AD- T	-1529 / 8936	-39.5	-39.5	0.44 (1)	6.25	
T- S	-2583 / 15574	-39.5	-39.5	0.75 (1)	6.25	
S- R	-2825 / 15768	-39.5	-39.5	0.76 (1)	6.25	
R- Q	-2825 / 15768	-39.5	-39.5	0.76 (1)	6.25	
Q- P	-1897 / 10124	-39.5	-39.5	0.45 (1)	6.25	
P- O	-1184 / 6053	-39.5	-39.5	0.29 (1)	6.25	
O- N	-1184 / 6053	-39.5	-39.5	0.29 (1)	6.25	
N- M	-1220 / 5903	-39.5	-39.5	0.29 (1)	6.25	
M- L	-8 / 16	-39.5	-39.5	0.06 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
U- C	-849 / 253	0.10 (1)
C- T	-1228 / 7729	0.88 (1)
S- E	-337 / 401	0.04 (14)
E- Q	-7678 / 1260	0.92 (2)
Q- F	-813 / 5451	0.67 (2)
N- H	-160 / 344	0.04 (17)
N- I	-19 / 634	0.08 (2)
M- I	-832 / 267	0.09 (1)
B- U	-1402 / 8994	0.80 (1)
T- D	-978 / 645	0.12 (1)
D- S	-427 / 358	0.07 (14)
P- H	-806 / 3835	0.47 (2)
F- P	-1880 / 114	0.53 (2)
P- G	-1004 / 521	0.26 (1)
M- J	-1250 / 5972	0.74 (1)

FR-TO: A-B, B-C, C-W, W-X, X-Y, Y-D, D-E, E-F, F-G, G-H, H-I, I-J, J-K, V-B, L-J, V-Z, Z-AA, AA-U, U-AB, AB-AC, AC-AD, AD-T, T-S, S-R, R-Q, Q-P, P-O, O-N, N-M, M-L

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE ***

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(60 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.40")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 894 (0.58")

CSI: TC=0.78/1.00 (B-C:2) , BC=0.76/1.00 (Q-S:1) , WB=0.92/1.00 (E-Q:2) , SSI=0.16/1.00 (C-D:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873
MII16	438	302	2547	1256	4283	1816

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T59	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	6.0	9.0	Edge	
C	TTWW+m	MT20	7.0	8.0	Edge	
D	TMWW+t	MT20	4.0	6.0		
E	TTWW+m	MT20	7.0	8.0		
F	TTWW+m	MT20	6.0	9.0	Edge	2.25
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	5.0	8.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.75
J	TMVW-p	MT20	5.0	8.0	1.50	3.75
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0	2.50	3.75
N	BMWW+t	MT20	4.0	6.0		
O	BS+	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0	2.50	2.50
Q	BMWW-t	MT20	7.0	8.0	3.00	4.00
R	BS-t	MIT6	5.0	12.5		
S	BMWW+t	MT20	4.0	8.0		
T	BMWW-t	MT20	5.0	8.0	2.50	3.00
U	BMWW-t	MT20	6.0	10.0		
V	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-151	-196	38	FRONT	VERT	TOTAL	—	C1
C	5-10-8	-216	-378	—	BACK	VERT	TOTAL	—	C1
T	12-0-8	-1904	-1904	—	BACK	VERT	TOTAL	—	C1
U	5-11-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
W	7-1-4	-60	-127	—	BACK	VERT	TOTAL	—	C1
X	8-1-4	-60	-127	—	BACK	VERT	TOTAL	—	C1
Y	10-1-4	-60	-127	—	BACK	VERT	TOTAL	—	C1
Z	1-11-4	-20	-20	—	BACK	VERT	TOTAL	—	C1
AA	3-11-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AB	7-1-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AC	8-1-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
AD	10-1-4	-21	-21	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (Q) (INPUT = 0.90)
JSI METAL= 0.76 (E) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
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100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124031 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T60	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Jul 23 09:11:07 2021 Page 1
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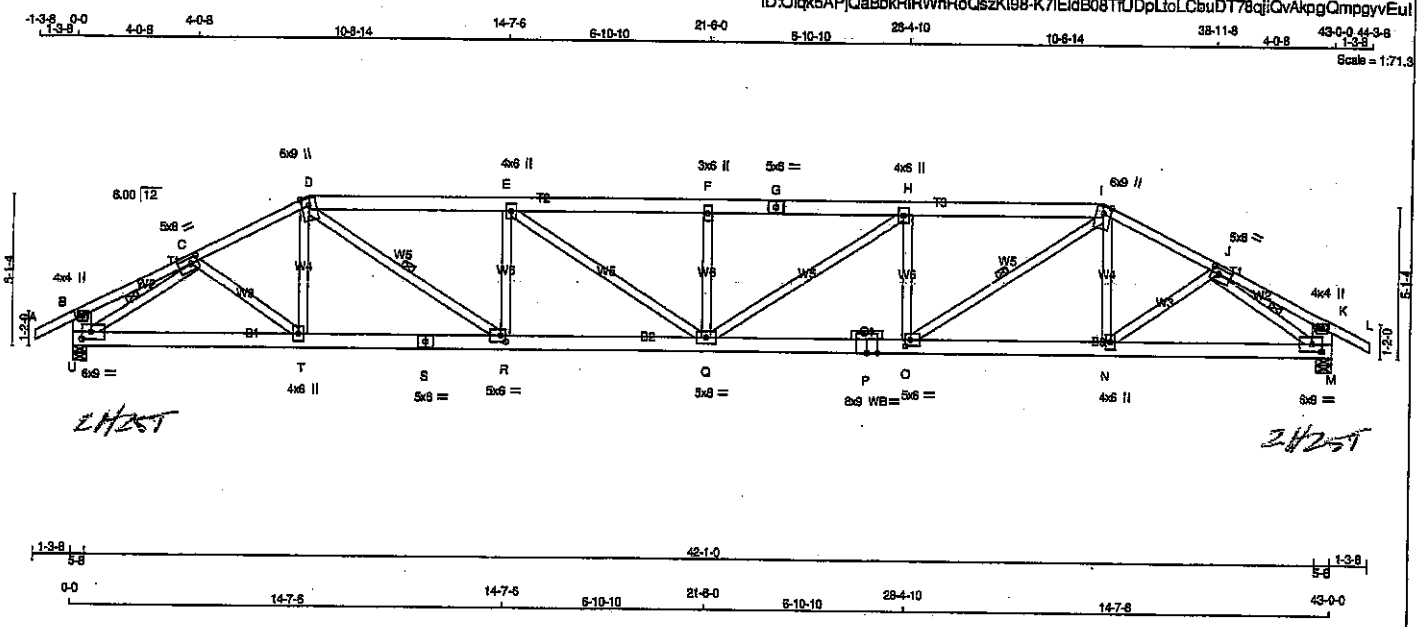

TOTAL WEIGHT = 233 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - L	2x4	DRY	No.2	SPF
U - B	2x8	DRY	No.2	SPF
M - K	2x8	DRY	No.2	SPF
U - S	2x6	DRY	No.2	SPF
S - P	2x6	DRY	No.2	SPF
P - M	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	5.0	8.0	2.25	3.00
D	TTWW+m	MT20	6.0	9.0	Edge	
E	TMWW+t	MT20	4.0	6.0		
F	TMW+w	MT20	3.0	6.0		
G	TS-t	MT20	5.0	6.0		
H	TMWW+t	MT20	4.0	6.0		
I	TTWW+m	MT20	6.0	9.0	Edge	
J	TMWW-t	MT20	5.0	8.0	2.25	3.00
K	TMV+p	MT20	4.0	4.0		
M	BMWW1-t	MT20	6.0	9.0	3.00	3.75
N	BMWW+t	MT20	4.0	6.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.00
P	BS-t	MT20	8.0	9.0		
Q	BMWWW-t	MT20	5.0	8.0		
R	BMWW-t	MT20	5.0	6.0	2.50	2.00
S	BS-t	MT20	5.0	6.0		
T	BMWW+t	MT20	4.0	6.0		
U	BMWW1-t	MT20	6.0	9.0	3.00	3.75

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

WB - INDICATES BLOCKING REQUIRED

~~NOTES (1)~~
1)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124032

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3483	0	3571	-139	-1124	5-8	5-8
M	3483	0	3571	0	-1124	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1124 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 1124 LBS FACTORED UPLIFT

PROVIDE FOR 139 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2572	1586 / 0	452 / 0	0 / 0	0 / -1088	592 / 0	0 / 0
M	2572	1586 / 0	452 / 0	0 / 0	0 / -1088	592 / 0	0 / 0

HORIZONTAL REACTIONS

U	—	0 / 0	0 / 0	0 / 0	99 / -99	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.56 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.52 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF C-U, J-M, I-O, D-R.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.17 (2)	10.00
B- C	-9 / 118	-115.2	-115.2	0.29 (2)	10.00
C- D	-5157 / 1729	-115.2	-115.2	0.68 (2)	2.56
D- E	-7028 / 2393	-115.2	-115.2	0.70 (1)	2.83
E- F	-7785 / 2590	-115.2	-115.2	0.79 (1)	2.61
F- G	-7785 / 2590	-115.2	-115.2	0.79 (1)	2.61
G- H	-7785 / 2590	-115.2	-115.2	0.79 (1)	2.61
H- I	-7028 / 2393	-115.2	-115.2	0.70 (1)	2.83
I- J	-5157 / 1729	-115.2	-115.2	0.68 (3)	2.56
J- K	-9 / 118	-115.2	-115.2	0.29 (3)	10.00
K- L	0 / 41	-115.2	-115.2	0.17 (3)	10.00
U- B	-393 / 203	0.0	0.0	0.02 (2)	7.81
M- K	-393 / 203	0.0	0.0	0.02 (3)	7.81
U- T	-1464 / 4375	-39.5	-39.5	0.66 (2)	6.25
T- S	-1392 / 4607	-39.5	-39.5	0.66 (1)	6.25
S- R	-1392 / 4607	-39.5	-39.5	0.66 (1)	6.25
R- Q	-2180 / 7028	-39.5	-39.5	0.94 (1)	5.52
Q- P	-2104 / 7028	-39.5	-39.5	0.94 (1)	5.59
P- O	-2104 / 7028	-39.5	-39.5	0.94 (1)	5.59
O- N	-1271 / 4607	-39.5	-39.5	0.66 (1)	6.25
N- M	-1343 / 4375	-39.5	-39.5	0.66 (3)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- T	-120 / 681	0.11 (3)
T- D	-144 / 275	0.04 (17)
N- I	-161 / 259	0.04 (17)
N- J	-44 / 681	0.11 (2)
U- C	-5332 / 1655	0.71 (2)
J- M	-5332 / 1655	0.71 (3)
O- I	-1049 / 3090	0.50 (2)
D- R	-1049 / 3090	0.50 (3)
O- H	-1508 / 655	0.36 (2)
R- E	-1508 / 655	0.36 (3)
Q- H	-332 / 1067	0.33 (13)
E- Q	-331 / 1067	0.33 (14)
Q- F	-750 / 387	0.18 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.43")
ALLOWABLE DEFL.(TL)= L/180 (2.67")
CALCULATED VERT. DEFL.(TL) = L/ 874 (0.59")

CSI: TC=0.79/1.00 (F-H:1) , BC=0.94/1.00 (O-Q:1) , WB=0.71/1.00 (J-M:3) , SSI=0.28/1.00 (H-I:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (I) (INPUT = 0.90)
JSI METAL= 0.96 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T60	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

ID:Olgk5APjQaBbkRlRWnRoQszKj98-K7iEldB08TfUDpLtoLCbuDT78gjiQvAkpgQmpgyvEul

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124032

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T61	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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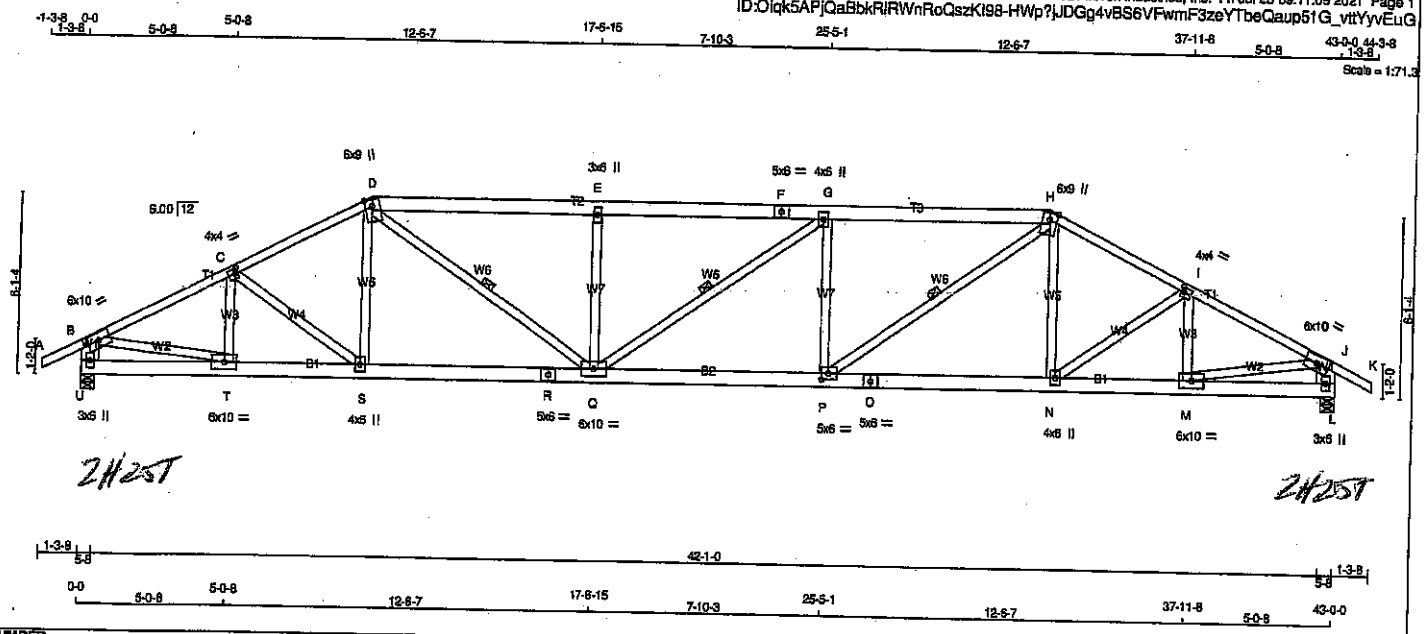

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E	SPF
D - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x4	DRY	1650F 1.5E	SPF
U - B	2x8	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	6.0	9.0	Edge	
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.25
J	TMVW-t	MT20	6.0	10.0		
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	6.0	10.0		
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75
Q	BMWWW-t	MT20	6.0	10.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	6.0	10.0		
U	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124033

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
U	3483	0	3560	-158	-1109	IN-SX	IN-SX
L	3483	0	3560	0	-1109	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1109 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1109 LBS FACTORED UPLIFT

PROVIDE FOR 158 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2572	1578 / 0	452 / 0	0 / 0	0 / -1078	592 / 0	0 / 0
L	2572	1578 / 0	452 / 0	0 / 0	28 / -1078	592 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	113 / -113	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.90 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-P, D-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.15 (2)	10.00	
B- C	-5088 / 1643	-115.2	-115.2	0.72 (2)	3.06	
C- D	-5037 / 1698	-115.2	-115.2	0.69 (2)	3.10	
D- E	-6259 / 2126	-115.2	-115.2	0.78 (1)	2.91	
E- F	-6259 / 2125	-115.2	-115.2	0.79 (1)	2.89	
F- G	-6259 / 2125	-115.2	-115.2	0.79 (1)	2.89	
G- H	-6283 / 2129	-115.2	-115.2	0.78 (1)	2.89	
H- I	-5036 / 1698	-115.2	-115.2	0.69 (3)	3.10	
I- J	-5088 / 1643	-115.2	-115.2	0.72 (3)	3.06	
J- K	0 / 41	-115.2	-115.2	0.15 (3)	10.00	
U- B	-3441 / 1117	0.0	0.0	0.17 (2)	6.44	
L- J	-3441 / 1117	0.0	0.0	0.17 (3)	6.44	
U- T	-142 / 163	-39.5	-39.5	0.12 (5)	6.25	
T- S	-1481 / 4580	-39.5	-39.5	0.65 (2)	6.25	
S- R	-1329 / 4483	-39.5	-39.5	0.64 (1)	6.25	
R- Q	-1329 / 4483	-39.5	-39.5	0.64 (1)	6.25	
Q- P	-1818 / 6262	-39.5	-39.5	0.85 (1)	5.90	
P- O	-1182 / 4482	-39.5	-39.5	0.64 (1)	6.25	
O- N	-1182 / 4482	-39.5	-39.5	0.64 (1)	6.25	
N- M	-1334 / 4580	-39.5	-39.5	0.65 (3)	6.25	
M- L	-8 / 16	-39.5	-39.5	0.12 (6)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	-587 / 277	0.09 (2)
C- S	-196 / 365	0.07 (2)
S- D	-67 / 439	0.07 (5)
N- H	-65 / 437	0.07 (6)
N- I	-219 / 364	0.08 (10)
M- I	-588 / 276	0.09 (3)
B- T	-1365 / 4634	0.74 (2)
M- J	-1365 / 4634	0.74 (3)
P- H	-811 / 2437	0.39 (2)
D- Q	-807 / 2432	0.39 (3)
P- G	-1137 / 556	0.41 (2)
Q- E	-1002 / 516	0.36 (1)
Q- G	-235 / 226	0.11 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

TOTAL WEIGHT = 235 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(60 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.34")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.47")

CSI: TC=0.79/1.00 (E-G:1) , BC=0.85/1.00 (P-Q:1) , WB=0.74/1.00 (J-M:3) , SSI=0.32/1.00 (G-H:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	786	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.80 (R) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363 Tamarack Roof Truss, Burlington	T61	1	1	TRUSS DESC.	

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.8} PSF AT {30-0-0} FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE {MAIN WIND FORCE RESISTING SYSTEM}.INTERNAL WIND PRESSURE IS BASED ON DESIGN {CATEGORY 2}. BUILDING MAY BE LOCATED ON {OPEN TERRAIN}, AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST {0-0} FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124033

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T62	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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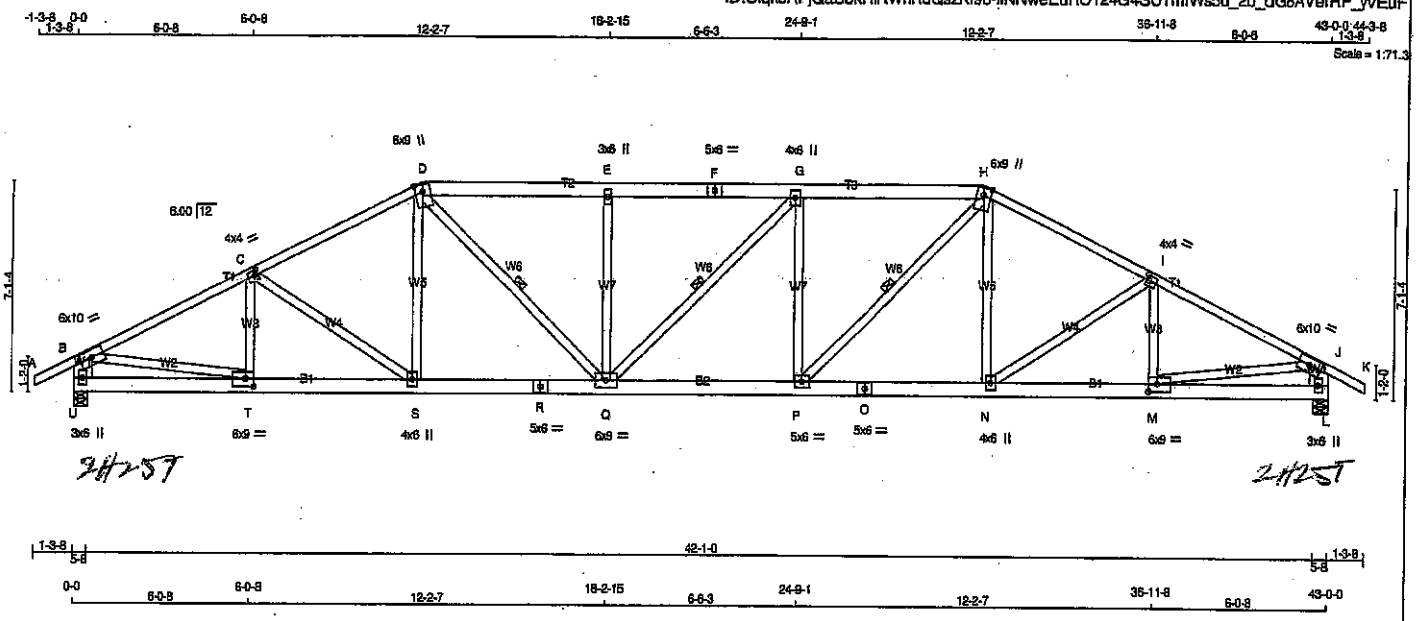

TOTAL WEIGHT = 242 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E	SPF
D - F	2x8	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - K	2x4	DRY	2100F 1.8E	SPF
U - B	2x8	DRY	No.2	SPF
L - J	2x8	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	6.0	9.0	Edge	
E	TMW+w	MT20	3.0	6.0		
F	TS-t	MT20	5.0	6.0		
G	TMWW+t	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.25
J	TMW-t	MT20	6.0	10.0		
L	BMV1+p	MT20	3.0	6.0		
M	BMWW-t	MT20	6.0	9.0	3.25	3.50
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BMWWW-t	MT20	6.0	9.0		
R	BS-t	MT20	5.0	6.0		
S	BMWW+t	MT20	4.0	6.0		
T	BMWW-t	MT20	6.0	9.0	3.25	3.50
U	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124034

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3483	0	3537	-178	-1092	5-8	5-8
L	3483	0	3537	0	-1092	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1092 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 1092 LBS FACTORED UPLIFT

PROVIDE FOR 178 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS
1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2572	1563 / 0	452 / 0	0 / 0	0 / -1065	592 / 0	0 / 0
L	2572	1563 / 0	452 / 0	0 / 0	47 / -1065	592 / 0	0 / 0
HORIZONTAL REACTIONS							
U	—	0 / 0	0 / 0	0 / 0	127 / -127	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF H-P, D-Q, G-Q.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.11 (2)	10.00
B- C	-5189 / 1649	-115.2	-115.2	0.88 (2)	3.16
C- D	-4844 / 1626	-115.2	-115.2	0.79 (2)	3.34
D- E	-5334 / 1824	-115.2	-115.2	0.48 (1)	3.43
E- F	-5334 / 1822	-115.2	-115.2	0.49 (1)	3.42
F- G	-5334 / 1822	-115.2	-115.2	0.49 (1)	3.42
G- H	-5339 / 1827	-115.2	-115.2	0.49 (1)	3.42
H- I	-4843 / 1625	-115.2	-115.2	0.79 (3)	3.34
I- J	-5190 / 1649	-115.2	-115.2	0.88 (3)	3.16
J- K	0 / 41	-115.2	-115.2	0.11 (3)	10.00
U- B	-3416 / 1106	0.0	0.0	0.17 (2)	6.45
L- J	-3416 / 1106	0.0	0.0	0.17 (3)	6.45
U- T	-161 / 189	-39.5	-39.5	0.14 (5)	6.25
T- S	-1500 / 4672	-39.5	-39.5	0.64 (1)	6.25
S- R	-1233 / 4299	-39.5	-39.5	0.60 (1)	6.25
R- Q	-1233 / 4299	-39.5	-39.5	0.60 (1)	6.25
Q- P	-1473 / 5338	-39.5	-39.5	0.71 (1)	6.25
P- O	-1068 / 4299	-39.5	-39.5	0.60 (1)	6.25
O- N	-1068 / 4299	-39.5	-39.5	0.60 (1)	6.25
N- M	-1326 / 4672	-39.5	-39.5	0.64 (1)	6.25
M- L	-8 / 16	-39.5	-39.5	0.14 (6)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T- C	-441 / 249	0.07 (8)
C- S	-582 / 317	0.35 (2)
S- D	-138 / 597	0.10 (2)
N- H	-136 / 593	0.10 (3)
N- I	-583 / 318	0.35 (3)
M- I	-445 / 248	0.07 (8)
B- T	-1352 / 4710	0.76 (1)
M- J	-1352 / 4711	0.76 (1)
P- H	-587 / 1774	0.29 (2)
D- Q	-582 / 1767	0.26 (3)
P- G	-1028 / 486	0.56 (2)
Q- E	-833 / 428	0.46 (1)
Q- G	-279 / 267	0.12 (3)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.8.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.27")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.37")

CSI: TC=0.88/1.00 (I-J:3) , BC=0.71/1.00 (P-Q:1) , WB=0.76/1.00 (J-M:1) , SSI=0.35/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (M) (INPUT = 0.90)
JSI METAL= 0.80 (R) (INPUT = 1.00)

CONTINUED ON PAGE 2

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.8) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpC_g, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H.J. GALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124034 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T63	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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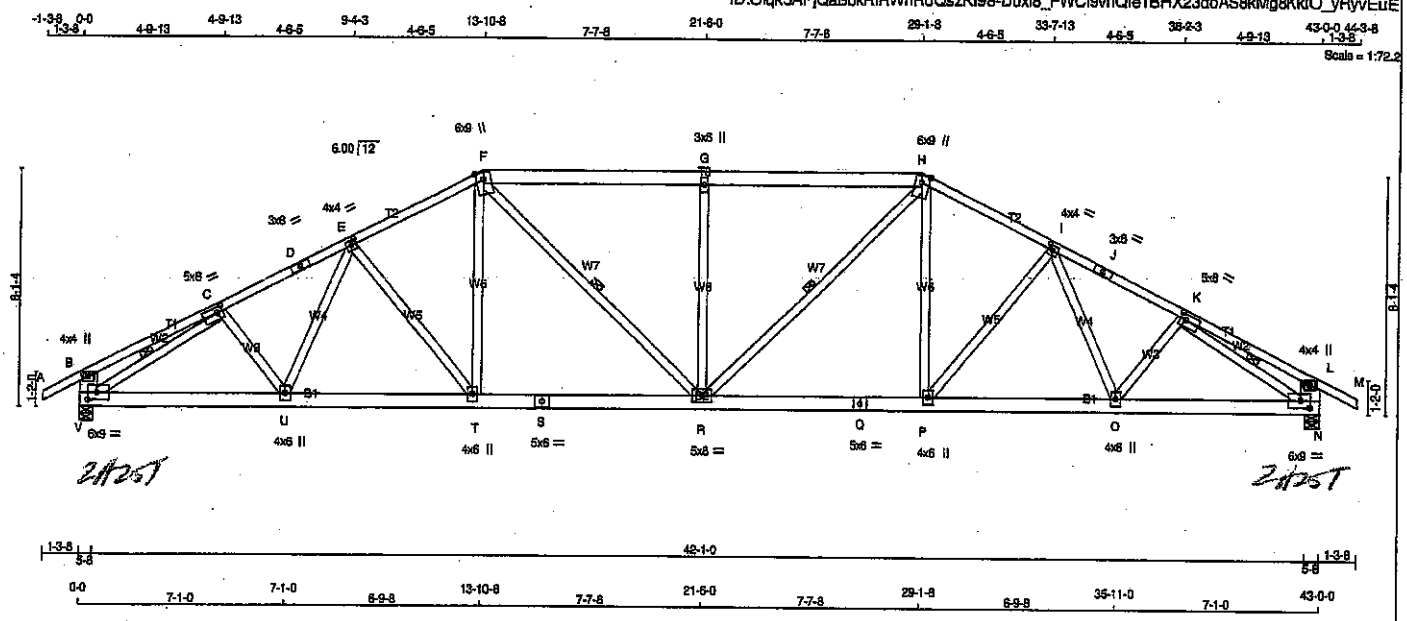

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
J - M	2x4	DRY	No.2	SPF
V - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
V - S	2x6	DRY	No.2	SPF
S - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	4.0	4.0		
C	TMWW-t	MT20	5.0	8.0	2.25	2.25
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F	TTWW+m	MT20	5.0	9.0	Edge	
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.75
J	TS-t	MT20	3.0	8.0		
K	TMWW-t	MT20	5.0	8.0	2.25	2.25
L	TMV+p	MT20	4.0	4.0		
N	BMVW1-t	MT20	6.0	9.0	3.00	3.75
O, P, T, U						
O	BMWW+t	MT20	4.0	6.0		
Q	BS-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	5.0	8.0		
S	BS-t	MT20	5.0	6.0		
V	BMVW1-t	MT20	6.0	9.0	3.00	3.75

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009924
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124035

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3483	0	3503	200	-1072	5-8	5-8
N	3483	0	3503	0	-1072	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1072 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1072 LBS FACTORED UPLIFT

PROVIDE FOR 200 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2572	1541 / 0	452 / 0	0 / 0	0 / -1051	592 / 0	0 / 0
N	2572	1541 / 0	452 / 0	0 / 0	64 / -1051	592 / 0	0 / 0
HORIZONTAL REACTIONS							
V	--	0 / 0	0 / 0	0 / 0	143 / -143	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, N

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-R, H-R, C-V, K-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 41	-115.2	-115.2	0.17 (2)	10.00
B- C	-9 / 133	-115.2	-115.2	0.35 (2)	10.00
C- D	-5089 / 1661	-115.2	-115.2	0.85 (2)	2.49
D- E	-5089 / 1661	-115.2	-115.2	0.85 (2)	2.49
E- F	-4600 / 1559	-115.2	-115.2	0.73 (2)	2.75
F- G	-4801 / 1626	-115.2	-115.2	0.74 (1)	3.23
G- H	-4801 / 1626	-115.2	-115.2	0.74 (1)	3.23
H- I	-4600 / 1559	-115.2	-115.2	0.73 (3)	2.75
I- J	-5089 / 1661	-115.2	-115.2	0.85 (3)	2.49
J- K	-5089 / 1661	-115.2	-115.2	0.85 (3)	2.49
K- L	-9 / 133	-115.2	-115.2	0.35 (3)	10.00
L- M	0 / 41	-115.2	-115.2	0.17 (3)	10.00
V- B	-444 / 233	0.0	0.0	0.02 (2)	7.81
N- L	-444 / 233	0.0	0.0	0.02 (3)	7.81
V- U	-1477 / 4467	-39.5	-39.5	0.67 (1)	6.25
U- T	-1358 / 4491	-39.5	-39.5	0.64 (1)	6.25
T- S	-1117 / 4091	-39.5	-39.5	0.60 (1)	6.25
S- R	-1117 / 4091	-39.5	-39.5	0.60 (1)	6.25
R- Q	-963 / 4091	-39.5	-39.5	0.60 (1)	6.25
Q- P	-963 / 4091	-39.5	-39.5	0.60 (1)	6.25
P- O	-1158 / 4491	-39.5	-39.5	0.64 (1)	6.25
O- N	-1277 / 4467	-39.5	-39.5	0.67 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- U	-38 / 401	0.06 (3)
U- E	-112 / 268	0.05 (10)
E- T	-760 / 378	0.49 (2)
T- F	-244 / 893	0.20 (13)
F- R	-458 / 1380	0.28 (14)
R- G	-1122 / 577	0.90 (1)
R- H	-459 / 1380	0.28 (13)
P- H	-244 / 893	0.20 (14)
P- I	-760 / 378	0.49 (3)
I- O	-123 / 268	0.05 (9)
O- K	-50 / 401	0.06 (2)
V- C	-5364 / 1551	0.83 (1)
K- N	-5364 / 1552	0.83 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.35")

CSI: TC=0.85/1.00 (I-K:3) , BC=0.67/1.00 (N-O:1) , WB=0.90/1.00 (G-R:1) , SSI=0.33/1.00 (F-G:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (V) (INPUT = 0.90)
JSI METAL= 0.95 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T63	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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ID:Oiqk5APjQaBbkRIRWnRoQszKl98-DuxI8_FWCi9vhQfe1BHX23doAS8kMq8KkIO_yRyvEuE

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.6] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124035 2/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T64	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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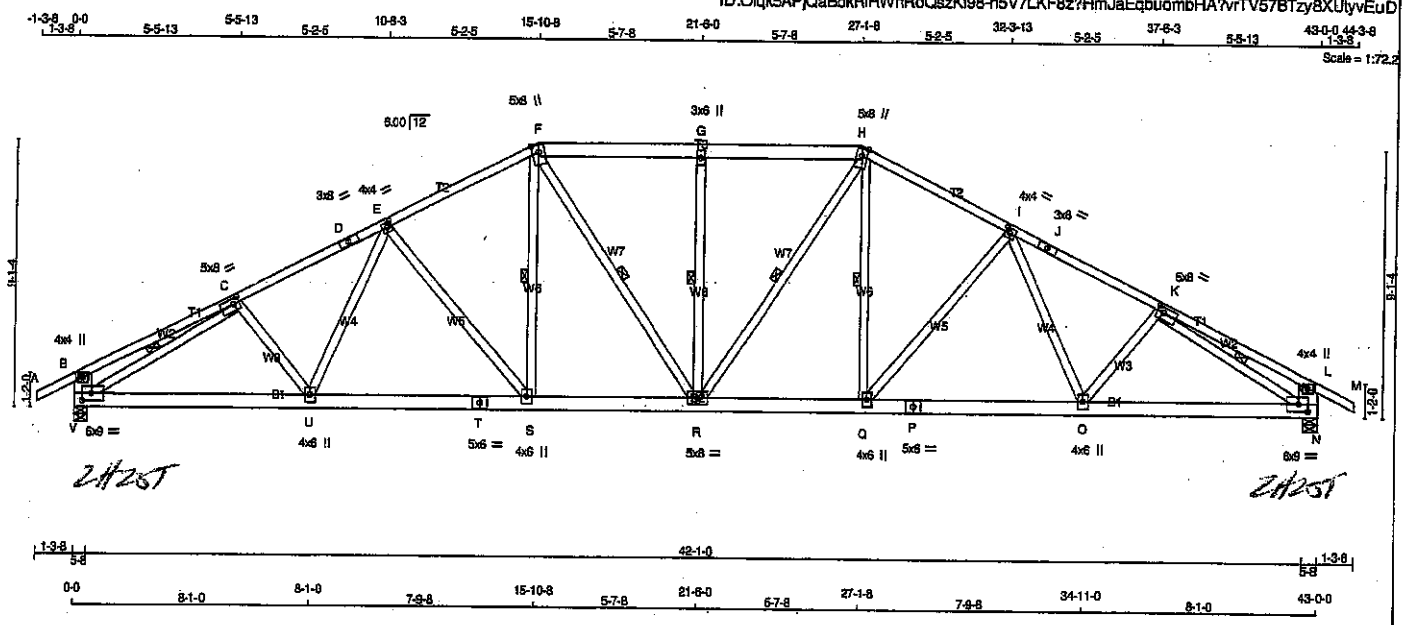

TOTAL WEIGHT = 249 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	1650F 1.5E	SPF
D - F	2x4	DRY	1650F 1.5E	SPF
F - H	2x6	DRY	No.2	SPF
H - J	2x4	DRY	1650F 1.5E	SPF
J - M	2x4	DRY	1650F 1.5E	SPF
V - B	2x8	DRY	No.2	SPF
N - L	2x8	DRY	No.2	SPF
V - T	2x6	DRY	No.2	SPF
T - P	2x6	DRY	No.2	SPF
P - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
V - C	2x4	DRY	1650F 1.5E	SPF
K - N	2x4	DRY	1650F 1.5E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	5.0	8.0	2.25	2.50
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F	TTWW+m	MT20	5.0	8.0	Edge	
G	TMW+w	MT20	3.0	6.0		
H	TTWW+m	MT20	5.0	8.0	Edge	
I	TMWW-t	MT20	4.0	4.0	2.00	1.75
J	TS-t	MT20	3.0	8.0		
K	TMWW-t	MT20	5.0	8.0	2.25	2.50
L	TMV+p	MT20	4.0	4.0		
N	BMWW1-t	MT20	6.0	9.0	3.00	3.75
O, Q, S, U						
O	BMWW+t	MT20	4.0	6.0		
P	BS-t	MT20	5.0	6.0		
R	BMWWW-t	MT20	5.0	8.0		
T	BS-t	MT20	5.0	6.0		
V	BMWW1-t	MT20	6.0	9.0	3.00	3.75

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

~~NOTES (1)~~
1)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124036

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
V	3483	0	3483	227	-1049	5-8	5-8
N	3483	0	3483	0	-1049	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT V FOR 1049 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 1049 LBS FACTORED UPLIFT

PROVIDE FOR 227 LBS FACTORED HORIZONTAL REACTION AT JOINT V

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2572	1528 / 0	452 / 0	0 / 0	0 / -1034	592 / 0	0 / 0
N	2572	1528 / 0	452 / 0	0 / 0	79 / -1034	592 / 0	0 / 0
HORIZONTAL REACTIONS							
V	—	0 / 0	0 / 0	0 / 0	162 / -162	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, N

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-S, F-R, G-R, H-R, H-Q, C-V, K-N

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.15 (2)	10.00	
B-C	-8 / 143	-115.2	-115.2	0.40 (2)	10.00	
C-D	-5079 / 1622	-115.2	-115.2	0.72 (2)	3.16	
D-E	-5079 / 1622	-115.2	-115.2	0.72 (2)	3.16	
E-F	-4341 / 1454	-115.2	-115.2	0.62 (2)	3.45	
F-G	-4190 / 1426	-115.2	-115.2	0.37 (1)	3.91	
G-H	-4190 / 1426	-115.2	-115.2	0.37 (1)	3.91	
H-I	-4341 / 1454	-115.2	-115.2	0.62 (3)	3.45	
I-J	-5079 / 1622	-115.2	-115.2	0.72 (3)	3.16	
J-K	-5079 / 1622	-115.2	-115.2	0.72 (3)	3.16	
K-L	-8 / 143	-115.2	-115.2	0.40 (3)	10.00	
L-M	0 / 41	-115.2	-115.2	0.15 (3)	10.00	
V-B	-478 / 253	0.0	0.0	0.02 (2)	7.81	
N-L	-478 / 253	0.0	0.0	0.02 (3)	7.81	
V-U	-1485 / 4550	-39.5	-39.5	0.70 (1)	6.25	
U-T	-1292 / 4400	-39.5	-39.5	0.82 (1)	6.25	
T-S	-1292 / 4400	-39.5	-39.5	0.62 (1)	6.25	
S-R	-988 / 3853	-39.5	-39.5	0.55 (1)	6.25	
R-Q	-858 / 3853	-39.5	-39.5	0.55 (1)	6.25	
Q-P	-1066 / 4400	-39.5	-39.5	0.62 (1)	6.25	
P-O	-1066 / 4400	-39.5	-39.5	0.62 (1)	6.25	
O-N	-1256 / 4550	-39.5	-39.5	0.70 (1)	6.25	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-U	-200 / 318	0.05 (3)
U-E	-108 / 473	0.08 (5)
E-S	-1005 / 470	0.91 (2)
S-F	-312 / 1051	0.17 (2)
F-R	-342 / 1030	0.18 (14)
R-G	-837 / 427	0.80 (1)
R-H	-342 / 1030	0.18 (13)
Q-H	-313 / 1051	0.17 (3)
Q-I	-1005 / 470	0.91 (3)
I-O	-108 / 473	0.08 (6)
O-K	-208 / 318	0.05 (2)
V-C	-5412 / 1514	0.70 (1)
K-N	-5412 / 1515	0.70 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.72/1.00 (I-K:3) , BC=0.70/1.00 (U-V:1) , WB=0.91/1.00 (I-Q:3) , SSI=0.30/1.00 (K-L:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.96 (K) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T64	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124036

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T65	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Fri Jul 23 09:30:43 2021 Page 1
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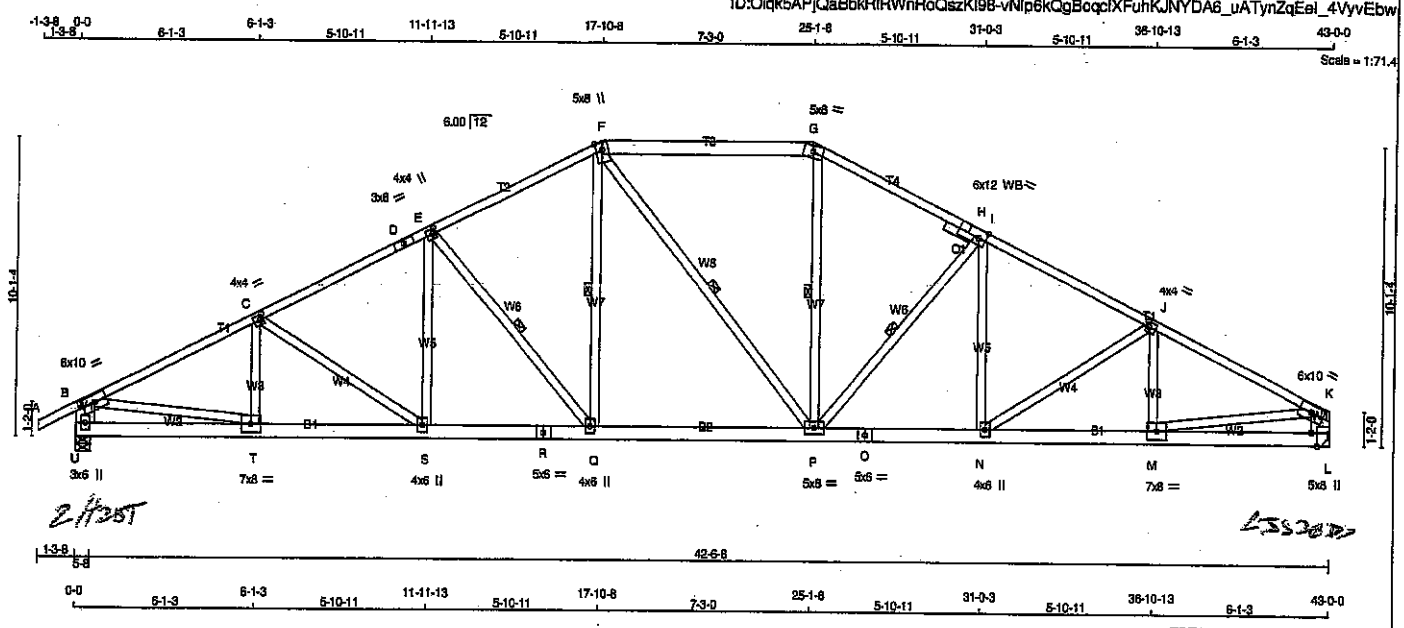

2/1355T

TOTAL WEIGHT = 3 X 246 = 738 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E	SPF
D - F	2x4	DRY	2100F 1.8E	SPF
F - G	2x6	DRY	No.2	SPF
G - H	2x4	DRY	2100F 1.8E	SPF
H - K	2x4	DRY	2100F 1.8E	SPF
U - B	2x8	DRY	No.2	SPF
L - K	2x8	DRY	No.2	SPF
U - R	2x6	DRY	No.2	SPF
R - O	2x6	DRY	No.2	SPF
O - L	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	10.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TS-t	MT20	3.0	8.0		
E	TMWW+t	MT20	4.0	4.0	2.00	1.25
F	TTWW+m	MT20	5.0	8.0	Edge	
G	TTW-m	MT20	5.0	8.0		
H						
H	TSWW-t	MT20	6.0	12.0	Edge	3.00
I						
J	TMWW-t	MT20	4.0	4.0	2.00	1.25
K	TMVW-t	MT20	6.0	10.0		
L	BMV1+t	MT20	5.0	8.0	Edge	2.25
M	BMWW-t	MT20	7.0	8.0		
N, Q, S						
N	BMWW+t	MT20	4.0	6.0		
O	BS-t	MT20	5.0	6.0		
P	BMWWW-t	MT20	5.0	8.0		
R	BS-t	MT20	5.0	6.0		
T	BMWW-t	MT20	7.0	8.0		
U	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

WB - INDICATES BLOCKING REQUIRED

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124037

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
U	3483	0	3483	271	-1022	5-8	5-8
L	3327	0	3327	0	-964	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT L. MINIMUM BEARING LENGTH AT JOINT L = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT U FOR 1022 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT L FOR 964 LBS FACTORED UPLIFT

PROVIDE FOR 271 LBS FACTORED HORIZONTAL REACTION AT JOINT U

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2572	1528 / 0	452 / 0	0 / 0	30 / -1015	592 / 0	0 / 0
L	2465	1437 / 0	452 / 0	0 / 0	101 / -965	576 / 0	0 / 0
HORIZONTAL REACTIONS							
U	---	0 / 0	0 / 0	0 / 0	194 / -155	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF E-Q, F-Q, F-P, G-P, I-P.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (16)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.11 (2)	10.00
B-C	-5180 / 1513	-115.2	-115.2	0.75 (2)	3.42
C-D	-4825 / 1493	-115.2	-115.2	0.67 (2)	3.55
D-E	-4825 / 1493	-115.2	-115.2	0.67 (2)	3.55
E-F	-4067 / 1332	-115.2	-115.2	0.59 (2)	3.86
F-G	-3606 / 1273	-115.2	-115.2	0.63 (1)	3.80
G-H	-4070 / 1332	-115.2	-115.2	0.58 (3)	3.86
H-I	-4070 / 1332	-115.2	-115.2	0.58 (3)	3.86
I-J	-4824 / 1490	-115.2	-115.2	0.67 (3)	3.55
J-K	-5181 / 1507	-115.2	-115.2	0.75 (3)	3.42
U-B	-3366 / 1037	0.0	0.0	0.16 (1)	6.49
L-K	-3210 / 979	0.0	0.0	0.15 (1)	6.61
U-T	-256 / 233	-39.5	-39.5	0.13 (4)	6.25
T-S	-1471 / 4658	-39.5	-39.5	0.64 (1)	6.25
S-R	-1229 / 4316	-39.5	-39.5	0.61 (1)	6.25
R-Q	-1229 / 4316	-39.5	-39.5	0.61 (1)	6.25
Q-P	-864 / 3603	-39.5	-39.5	0.54 (1)	6.25
P-O	-991 / 4315	-39.5	-39.5	0.62 (1)	6.25
O-N	-991 / 4315	-39.5	-39.5	0.62 (1)	6.25
N-M	-1230 / 4659	-39.5	-39.5	0.64 (1)	6.25
M-L	-8 / 16	-39.5	-39.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
T-C	-419 / 228	0.07 (7)
C-S	-570 / 288	0.37 (2)
S-E	-115 / 534	0.09 (2)
E-Q	-1273 / 555	0.48 (2)
Q-F	-360 / 1242	0.20 (2)
F-P	-551 / 558	0.46 (2)
P-G	-283 / 1098	0.18 (1)
P-I	-1268 / 552	0.48 (3)
N-I	-112 / 529	0.09 (3)
N-J	-572 / 285	0.37 (3)
M-J	-423 / 232	0.07 (8)
B-T	-1225 / 4695	0.75 (1)
M-K	-1256 / 4696	0.75 (1)

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.8.2.(8)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.22")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.75/1.00 (J-K:3) , BC=0.64/1.00 (M-N:1) , WB=0.75/1.00 (K-M:1) , SSI=0.34/1.00 (J-K:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.79 (M) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T65	3	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

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07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124037

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T66	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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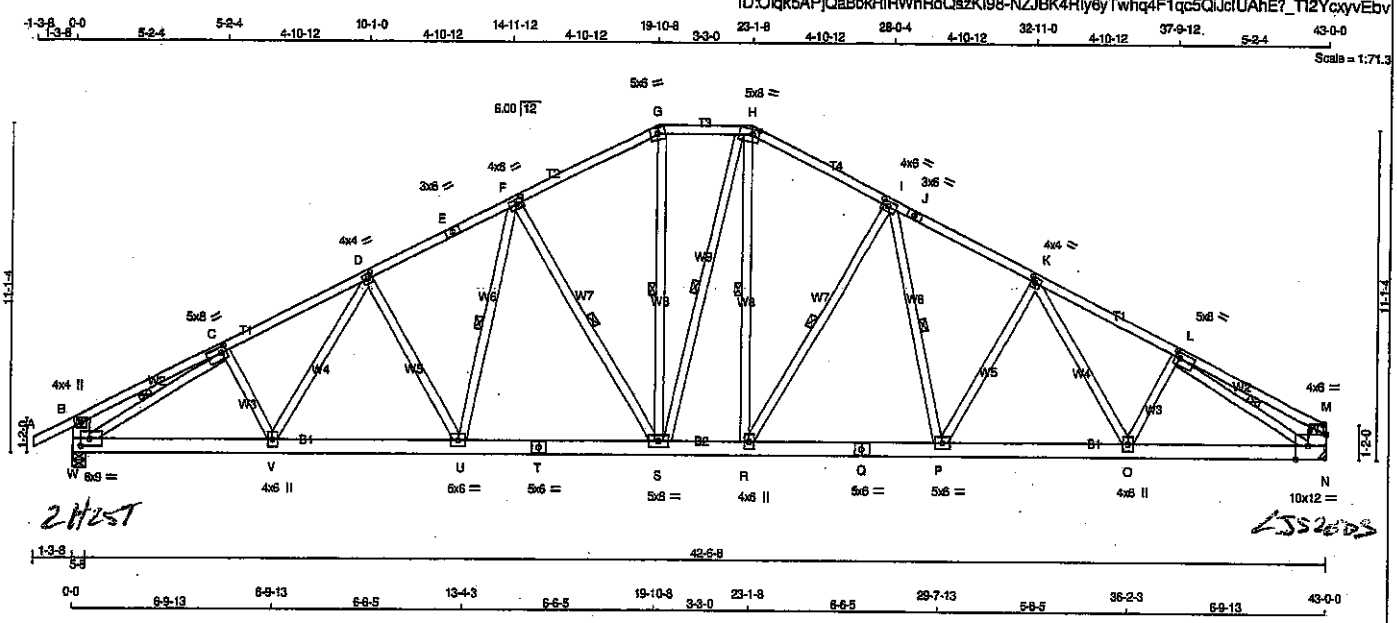

TOTAL WEIGHT = 261 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - E	2x4	DRY	1650F 1.5E	SPF
E - G	2x4	DRY	1650F 1.5E	SPF
G - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	1650F 1.5E	SPF
J - M	2x4	DRY	1650F 1.5E	SPF
W - B	2x8	DRY	No.2	SPF
N - M	2x8	DRY	No.2	SPF
W - T	2x6	DRY	No.2	SPF
T - Q	2x6	DRY	No.2	SPF
Q - N	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
W - C	2x4	DRY	1650F 1.5E	SPF
L - N	2x4	DRY	1650F 1.5E	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	4.0	4.0		
C	TMWW-t	MT20	5.0	8.0	2.25	2.00
D	TMWW-t	MT20	4.0	4.0	2.00	1.75
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	6.0	2.00	2.75
G	TTW-m	MT20	5.0	6.0		
H	TTWW-m	MT20	5.0	8.0	2.00	2.75
I	TMWW-t	MT20	4.0	6.0	2.00	2.75
J	TS-t	MT20	3.0	6.0		
K	TMWW-t	MT20	4.0	4.0	2.00	1.75
L	TMWW-t	MT20	5.0	8.0	2.25	2.00
M	TMV-p	MT20	4.0	6.0	4.00	0.75
N	BMVW1-t	MT20	10.0	12.0	Edge	4.75
O, R, V						
O	BMWW-t	MT20	4.0	6.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BS-t	MT20	5.0	6.0		
S	BMWWW-t	MT20	5.0	8.0		
T	BS-t	MT20	5.0	6.0		
U	BMWW-t	MT20	5.0	6.0		
W	BMVW1-t	MT20	6.0	9.0	3.00	3.75

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
W	3483	0	3483	299	-992	5-8	5-8
N	3327	0	3327	0	-934	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT N. MINIMUM BEARING LENGTH AT JOINT N = 3-8.

PROVIDE ANCHORAGE AT BEARING JOINT W FOR 992 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT N FOR 934 LBS FACTORED UPLIFT

PROVIDE FOR 299 LBS FACTORED HORIZONTAL REACTION AT JOINT W

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. COMPONENT REACTIONS LIVE	PERM LIVE	WIND	DEAD	SOIL
W	2572	1528 / 0	452 / 0	0 / 0	76 / -994	592 / 0	0 / 0
N	2465	1437 / 0	452 / 0	0 / 0	113 / -943	576 / 0	0 / 0
HORIZONTAL REACTIONS							
W	—	0 / 0	0 / 0	0 / 0	213 / -175	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) W

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/ 2 LENGTH OF F-U, F-S, G-S, H-S, H-R, I-R, I-P, C-W, L-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (18)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 41	-115.2	-115.2	0.15 (2)	10.00
B-C	-8 / 137	-115.2	-115.2	0.37 (2)	10.00
C-D	-5099 / 1551	-115.2	-115.2	0.63 (2)	3.23
D-E	-4601 / 1435	-115.2	-115.2	0.58 (2)	3.39
E-F	-4601 / 1435	-115.2	-115.2	0.58 (2)	3.39
F-G	-3734 / 1218	-115.2	-115.2	0.50 (2)	3.77
G-H	-3332 / 1161	-115.2	-115.2	0.34 (1)	3.54
H-I	-3725 / 1215	-115.2	-115.2	0.49 (3)	3.77
I-J	-4605 / 1433	-115.2	-115.2	0.57 (3)	3.39
J-K	-4605 / 1433	-115.2	-115.2	0.57 (3)	3.39
K-L	-5097 / 1546	-115.2	-115.2	0.63 (3)	3.23
L-M	-10 / 97	-115.2	-115.2	0.37 (3)	6.25
W-B	-459 / 241	0.0	0.0	0.02 (2)	7.81
N-M	-277 / 164	0.0	0.0	0.01 (14)	7.81
W-V	-1462 / 4536	-39.5	-39.5	0.67 (1)	6.25
V-U	-1284 / 4428	-39.5	-39.5	0.61 (1)	6.25
U-T	-1028 / 3953	-39.5	-39.5	0.56 (1)	6.25
T-S	-1028 / 3953	-39.5	-39.5	0.56 (1)	6.25
S-R	-664 / 3323	-39.5	-39.5	0.49 (1)	6.25
R-Q	-819 / 3952	-39.5	-39.5	0.56 (1)	6.25
Q-P	-819 / 3952	-39.5	-39.5	0.56 (1)	6.25
P-O	-1018 / 4430	-39.5	-39.5	0.61 (1)	6.25
O-N	-1193 / 4535	-39.5	-39.5	0.67 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C-V	-173 / 294	0.05 (3)
V-D	-145 / 403	0.08 (13)
D-U	-790 / 403	0.44 (2)
U-F	-301 / 984	0.15 (2)
F-S	-1446 / 623	0.67 (2)
S-G	-377 / 1253	0.23 (14)
S-H	-523 / 572	0.35 (3)
R-H	-476 / 1379	0.29 (14)
R-I	-1457 / 625	0.68 (3)
I-P	-305 / 999	0.16 (3)
P-K	-788 / 400	0.44 (3)
K-O	-140 / 398	0.08 (14)
O-L	-176 / 294	0.05 (2)
W-C	-5417 / 1408	0.83 (1)
L-N	-5415 / 1443	0.83 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	33.4	PSF
	DL =	6.0	PSF
BOT CH.	LL =	10.5	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.43")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.24")
ALLOWABLE DEFL.(TL)= L/180 (2.87")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.34")

CSI: TC=0.63/1.00 (C-D:2) , BC=0.67/1.00 (N-O:1) , WB=0.68/1.00 (I-R:3) , SSI=0.28/1.00 (B-C:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	789	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.96 (C) (INPUT = 1.00)

CONTINUED ON PAGE 2

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124038

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T66	1	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF [9.8] PSF AT [30-0-0] FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE [MAIN WIND FORCE RESISTING SYSTEM].INTERNAL WIND PRESSURE IS BASED ON DESIGN [CATEGORY 2]. BUILDING MAY BE LOCATED ON [OPEN TERRAIN], AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST [0-0] FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124038

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T67	1	2	GREENPARK HOMES I TRUSS DESC.	

Tamarack Roof Truss, Burlington

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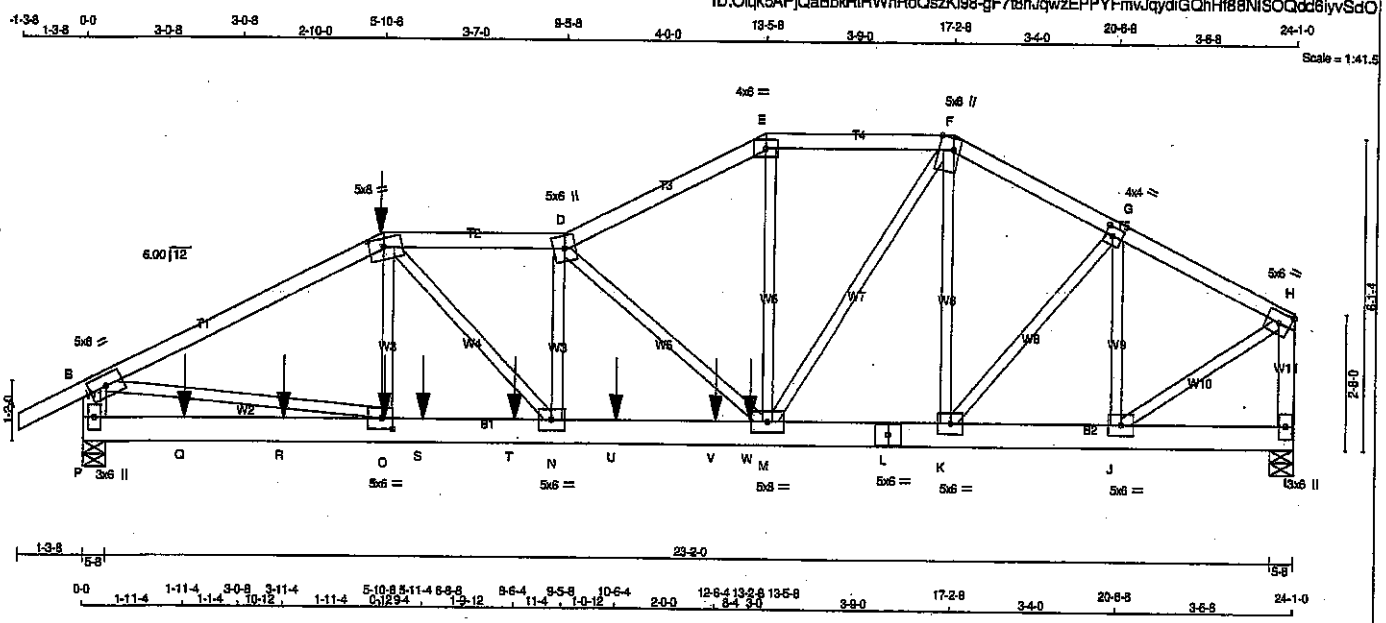

TOTAL WEIGHT = 2 X 120 = 240 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
P - B	2x6	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
P - L	2x6	DRY	No.2	SPF
L - I	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-C	1	12	SIDE(61.0)
C-D	1	12	SIDE(61.0)
D-E	1	12	TOP
E-F	1	12	TOP
F-H	1	12	TOP
I-H	1	12	TOP
P-B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
P-L	2	12	SIDE(183.1)
L-I	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124039

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
P	3410	0	3410	0	0	5-8	5-8
I	2924	0	2924	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	2403	1628 / 0	0 / 0	0 / 0	0 / 0	777 / 0	0 / 0
I	2060	1396 / 0	0 / 0	0 / 0	0 / 0	664 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) P, I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.72 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 28	-91.8	-91.8	0.07 (1)	10.00	
B-C	-5209 / 0	-91.8	-91.8	0.53 (1)	3.81	
C-D	-6244 / 0	-91.8	-91.8	0.25 (1)	3.72	
D-E	-4846 / 0	-91.8	-91.8	0.24 (1)	4.18	
E-F	-4369 / 0	-91.8	-91.8	0.19 (1)	4.41	
F-G	-3447 / 0	-91.8	-91.8	0.13 (1)	4.93	
G-H	-2683 / 0	-91.8	-91.8	0.12 (1)	5.46	
P-B	-3332 / 0	0.0	0.0	0.12 (1)	7.61	
I-H	-2885 / 0	0.0	0.0	0.20 (1)	6.76	
P-Q	0 / 0	-18.5	-18.5	0.07 (4)	10.00	
Q-R	0 / 0	-18.5	-18.5	0.07 (4)	10.00	
R-O	0 / 0	-18.5	-18.5	0.07 (4)	10.00	
O-S	0 / 4651	-18.5	-18.5	0.38 (1)	10.00	
S-T	0 / 4651	-18.5	-18.5	0.38 (1)	10.00	
T-N	0 / 4651	-18.5	-18.5	0.38 (1)	10.00	
N-U	0 / 6265	-18.5	-18.5	0.61 (1)	10.00	
U-V	0 / 6265	-18.5	-18.5	0.61 (1)	10.00	
V-W	0 / 6265	-18.5	-18.5	0.61 (1)	10.00	
W-M	0 / 6265	-18.5	-18.5	0.61 (1)	10.00	
M-L	0 / 3051	-18.5	-18.5	0.33 (1)	10.00	
L-K	0 / 3051	-18.5	-18.5	0.33 (1)	10.00	
K-J	0 / 2413	-18.5	-18.5	0.18 (1)	10.00	
J-I	0 / 0	-18.5	-18.5	0.02 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B-O	0 / 4695	0.58 (1)
O-C	-169 / 83	0.02 (1)
C-N	0 / 2331	0.29 (1)
N-D	-768 / 0	0.10 (1)
D-M	-2604 / 0	0.68 (1)
M-E	0 / 1813	0.22 (1)
M-F	0 / 2452	0.30 (1)
K-F	-816 / 0	0.23 (1)
K-G	0 / 1008	0.12 (1)
J-G	-1487 / 0	0.21 (1)
J-H	0 / 2868	0.35 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	5-10-8	-254	-254	—	FRONT	VERT	TOTAL	—	C1
O	5-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
Q	1-11-4	-20	-20	—	FRONT	VERT	TOTAL	—	C1
R	3-11-4	-21	-21	—	FRONT	VERT	TOTAL	—	C1
S	6-8-8	-236	-236	—	FRONT	VERT	TOTAL	—	C1
T	8-6-4	-252	-252	—	FRONT	VERT	TOTAL	—	C1
U	10-6-4	-253	-253	—	FRONT	VERT	TOTAL	—	C1
V	12-6-4	-253	-253	—	FRONT	VERT	TOTAL	—	C1
W	13-2-8	-1187	-1187	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

i) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=0.53/1.00 (B-C:1) , BC=0.61/1.00 (M-N:1) , WB=0.68/1.00 (D-M:1) , SSI=0.66/1.00 (M-N:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.53 (O) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T67	1	2	TRUSS DESC.	

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0		
C	TTWW-m	MT20	5.0	8.0	2.00	3.50
D	TTWW+m	MT20	5.0	6.0		
E	TTW-t	MT20	4.0	6.0		
F	TTWW+m	MT20	5.0	8.0	Edge	3.50
G	TMWW-t	MT20	4.0	4.0	2.00	1.75
H	TMVW-t	MT20	5.0	6.0		Edge
I	BMV1+p	MT20	3.0	6.0		
J, K, N						
J	BMWW-t	MT20	5.0	6.0		
L	BS-t	MT20	5.0	6.0		
M	BMWWW-t	MT20	5.0	8.0		
O	BMWW-t	MT20	5.0	6.0	2.50	2.75
P	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124039 JL

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T68	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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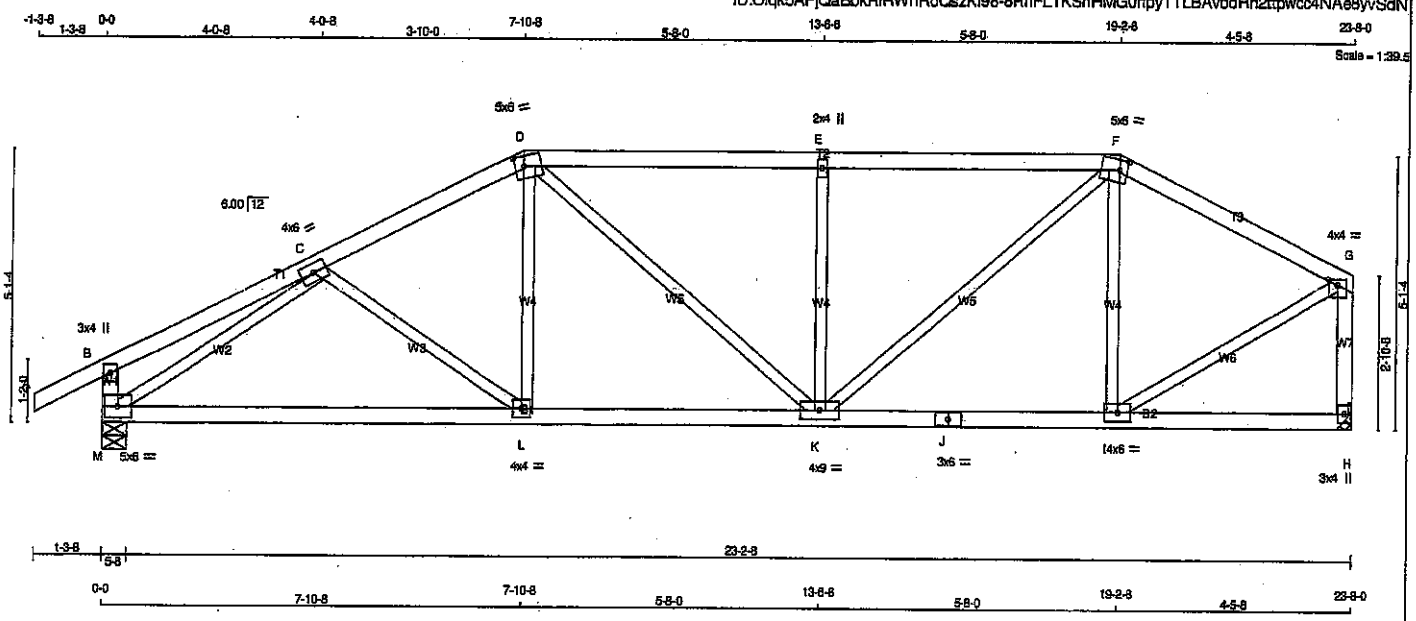

TOTAL WEIGHT = 95 lb

[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TTWW-m	MT20	5.0	6.0	2.25	1.75
G	TMVW-p	MT20	4.0	4.0	1.25	2.00
H	BMV1+p	MT20	3.0	4.0		
I	BMWW-t	MT20	4.0	6.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW-t	MT20	4.0	9.0		
L	BMWW-t	MT20	4.0	4.0		
M	BMVW1-t	MT20	5.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
M	1429	0	1429	0	0	5-8	5-8
H	1305	0	1305	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	1008	675 / 0	0 / 0	0 / 0	0 / 0	333 / 0	0 / 0
H	923	605 / 0	0 / 0	0 / 0	0 / 0	317 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.71 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	0 / 17	-91.8	-91.8	0.21 (1)	10.00
C- D	-1634 / 0	-91.8	-91.8	0.19 (1)	5.01
D- E	-1648 / 0	-91.8	-91.8	0.41 (1)	4.71
E- F	-1648 / 0	-91.8	-91.8	0.41 (1)	4.71
F- G	-1124 / 0	-91.8	-91.8	0.25 (1)	5.69
M- B	-268 / 0	0.0	0.0	0.03 (1)	7.81
H- G	-1274 / 0	0.0	0.0	0.19 (1)	7.14
M- L	0 / 1534	-18.5	-18.5	0.38 (1)	10.00
L- K	0 / 1449	-18.5	-18.5	0.38 (4)	10.00
K- J	0 / 995	-18.5	-18.5	0.23 (1)	10.00
J- I	0 / 995	-18.5	-18.5	0.23 (1)	10.00
I- H	0 / 0	-18.5	-18.5	0.12 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- L	-110 / 27	0.04 (1)
L- D	0 / 215	0.05 (4)
D- K	0 / 260	0.06 (1)
K- E	-639 / 0	0.25 (1)
K- F	0 / 856	0.19 (1)
I- F	-454 / 0	0.17 (1)
M- C	-1888 / 0	0.72 (1)
I- G	0 / 1153	0.26 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=0.41/1.00 (D-E:1) , BC=0.38/1.00 (L-M:1) , WB=0.72/1.00 (C-M:1) , SSI=0.25/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (G) (INPUT = 0.90)
JSI METAL= 0.41 (C) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H.J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124040

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T69	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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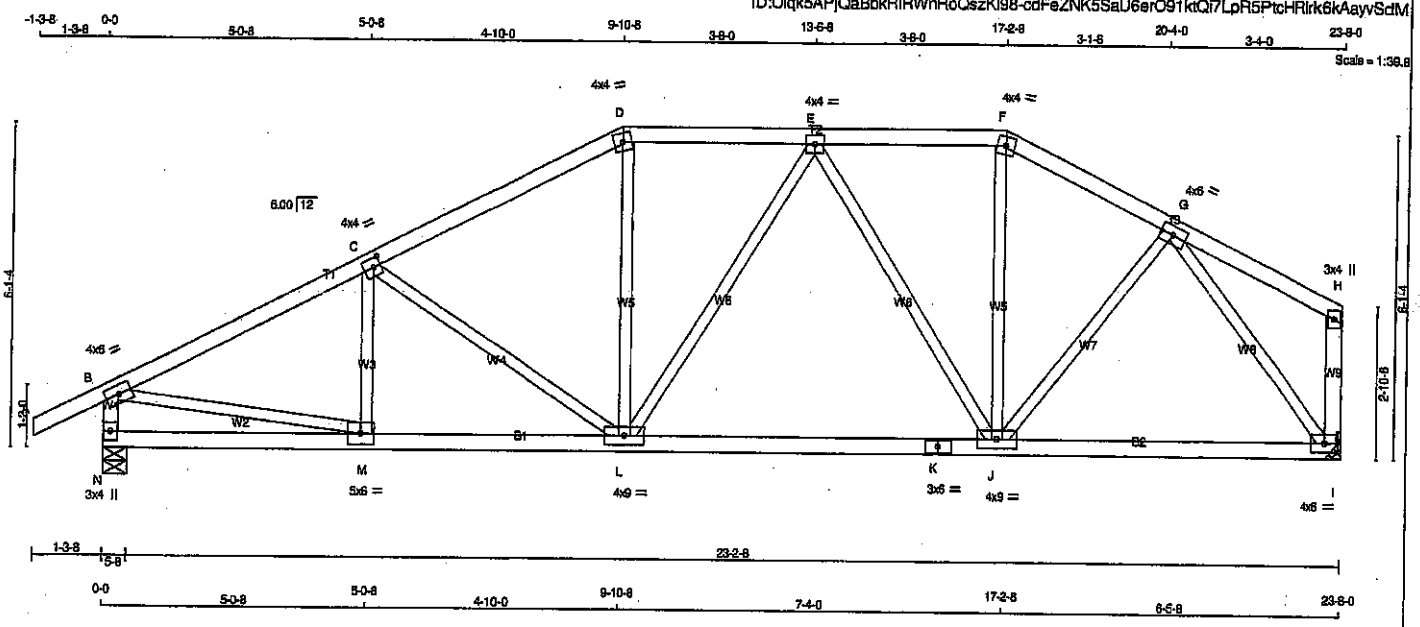

TOTAL WEIGHT = 100 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTW-m	MT20	4.0	4.0		
G	TMWW-t	MT20	4.0	6.0		
H	TMV+p	MT20	3.0	4.0		
I	BMVW1-t	MT20	4.0	6.0		
J	BMWWW-t	MT20	4.0	9.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	4.0	9.0		
M	BMWW-t	MT20	5.0	6.0		
N	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
N	1429	0	1429	0	0	5-8	5-8
I	1305	0	1305	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1008	675 / 0	0 / 0	0 / 0	0 / 0	333 / 0	0 / 0
I	923	605 / 0	0 / 0	0 / 0	0 / 0	317 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	-1783 / 0	-91.8	-91.8	0.32 (1)	4.69
C- D	-1477 / 0	-91.8	-91.8	0.30 (1)	5.07
D- E	-1305 / 0	-91.8	-91.8	0.17 (1)	5.49
E- F	-1079 / 0	-91.8	-91.8	0.16 (1)	5.90
F- G	-1216 / 0	-91.8	-91.8	0.12 (1)	5.69
G- H	0 / 14	-91.8	-91.8	0.14 (1)	10.00
N- B	-1387 / 0	0.0	0.0	0.14 (1)	6.91
I- H	-117 / 0	0.0	0.0	0.02 (1)	7.81
N- M	0 / 0	-18.5	-18.5	0.10 (4)	10.00
M- L	0 / 1615	-18.5	-18.5	0.34 (1)	10.00
L- K	0 / 1317	-18.5	-18.5	0.33 (1)	10.00
K- J	0 / 1317	-18.5	-18.5	0.33 (1)	10.00
J- I	0 / 882	-18.5	-18.5	0.29 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M- C	-185 / 14	0.04 (1)
C- L	-384 / 0	0.24 (1)
L- D	0 / 351	0.08 (1)
L- E	-23 / 26	0.02 (1)
E- J	-455 / 0	0.40 (1)
J- F	0 / 292	0.07 (1)
J- G	0 / 307	0.07 (1)
B- M	0 / 1638	0.37 (1)
G- I	-1442 / 0	0.64 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.32/1.00 (B-C:1) , BC=0.34/1.00 (L-M:1) , WB=0.64/1.00 (G-I:1) , SSI=0.20/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (I) (INPUT = 0.90)
JSI METAL= 0.44 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124041

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T70	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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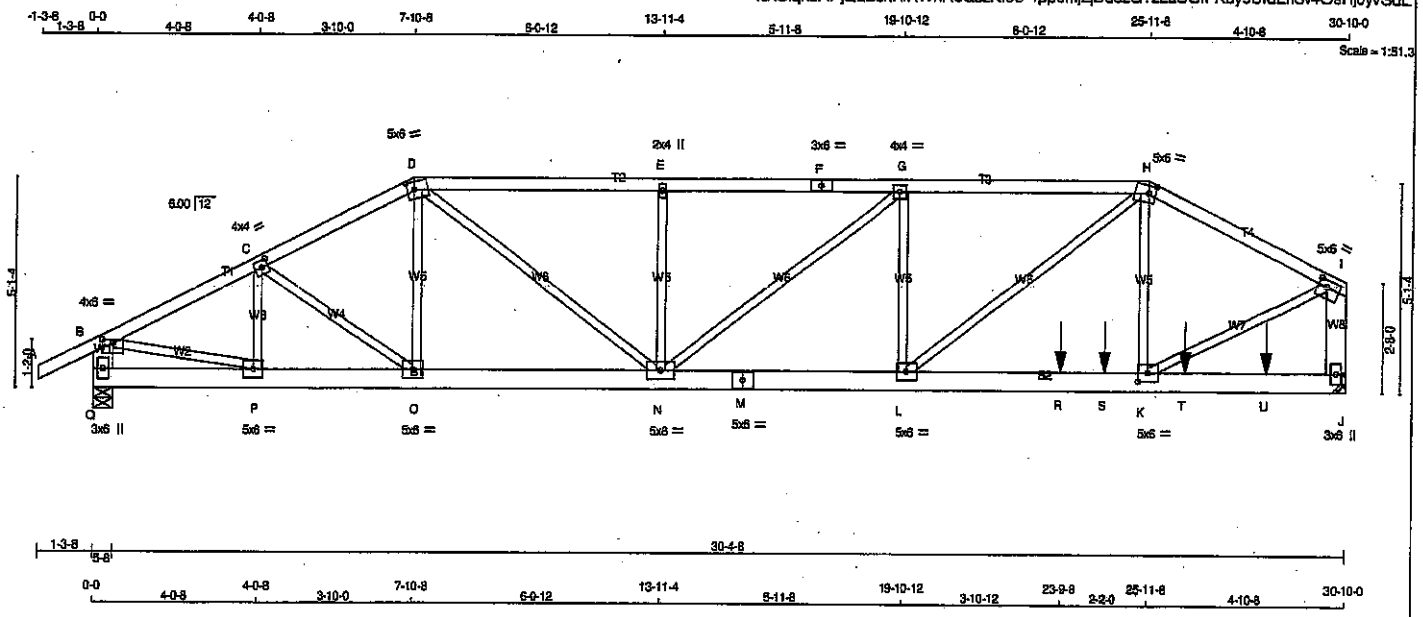

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
Q - B	2x6	DRY	No.2	SPF
J - I	2x6	DRY	No.2	SPF
Q - M	2x6	DRY	No.2	SPF
M - J	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- D	1	12	TOP
D- F	1	12	TOP
F- H	1	12	TOP
H- I	1	12	TOP
Q- B	2	12	TOP
J- I	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
Q- M	2	12	TOP
M- J	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124042

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
Q	2271	0	2271	0	0	5-8	5-8
J	3540	0	3540	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT J. MINIMUM BEARING LENGTH AT JOINT J = 4-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1602	1073 / 0	0 / 0	0 / 0	0 / 0	529 / 0	0 / 0
J	2497	1679 / 0	0 / 0	0 / 0	0 / 0	818 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.07 (1)	10.00
B- C	-3100 / 0	-91.8	-91.8	0.15 (1)	5.12
C- D	-3242 / 0	-91.8	-91.8	0.15 (1)	5.03
D- E	-4092 / 0	-91.8	-91.8	0.36 (1)	4.38
E- F	-4092 / 0	-91.8	-91.8	0.36 (1)	4.38
F- G	-4092 / 0	-91.8	-91.8	0.36 (1)	4.38
G- H	-4590 / 0	-91.8	-91.8	0.39 (1)	4.16
H- I	-3825 / 0	-91.8	-91.8	0.29 (1)	4.56
Q- B	-2202 / 0	0.0	0.0	0.08 (1)	7.81
J- I	-3501 / 0	0.0	0.0	0.16 (1)	7.48
Q- P	0 / 0	-18.5	-18.5	0.05 (1)	10.00
P- O	0 / 2787	-18.5	-18.5	0.23 (1)	10.00
O- N	0 / 2885	-18.5	-18.5	0.25 (1)	10.00
N- M	0 / 4590	-18.5	-18.5	0.49 (1)	10.00
M- L	0 / 4590	-18.5	-18.5	0.49 (1)	10.00
L- R	0 / 3427	-18.5	-18.5	0.75 (1)	10.00
R- S	0 / 3427	-18.5	-18.5	0.75 (1)	10.00
S- K	0 / 3427	-18.5	-18.5	0.75 (1)	10.00
K- T	0 / 0	-18.5	-18.5	0.39 (1)	10.00
T- U	0 / 0	-18.5	-18.5	0.39 (1)	10.00
U- J	0 / 0	-18.5	-18.5	0.39 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
P- C	-555 / 0	0.05 (1)
C- O	0 / 116	0.01 (1)
O- D	0 / 136	0.02 (4)
K- H	0 / 353	0.04 (1)
B- P	0 / 2836	0.35 (1)
K- I	0 / 3759	0.47 (1)
L- H	0 / 1474	0.18 (1)
D- N	0 / 1531	0.19 (1)
L- G	-201 / 12	0.04 (1)
N- E	-598 / 0	0.11 (1)
N- G	-635 / 0	0.36 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
R	23-9-8	-1083	-1083	—	FRONT	VERT	TOTAL	—	C1
S	24-10-12	-175	-175	—	FRONT	VERT	TOTAL	—	C1
T	26-10-12	-175	-175	—	FRONT	VERT	TOTAL	—	C1
U	28-10-12	-175	-175	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

CSI: TC=0.39/1.00 (G-H:1) , BC=0.75/1.00 (K-L:1) , WB=0.47/1.00 (I-K:1) , SSI=0.45/1.00 (K-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.60)
JSI METAL= 0.45 (I) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T70	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	6.0	1.00	3.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTWW-m	MT20	5.0	6.0	2.25	2.00
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW-m	MT20	5.0	6.0	2.25	2.00
I	TMVW-t	MT20	5.0	6.0	2.00	2.25
J	BMV1+p	MT20	3.0	6.0		
K	BMWW-t	MT20	5.0	6.0	2.50	2.75
L, O, P						
L	BMWW-t	MT20	5.0	6.0		
M	BS-t	MT20	5.0	6.0		
N	BMWWW-t	MT20	5.0	6.0		
Q	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124042

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T71	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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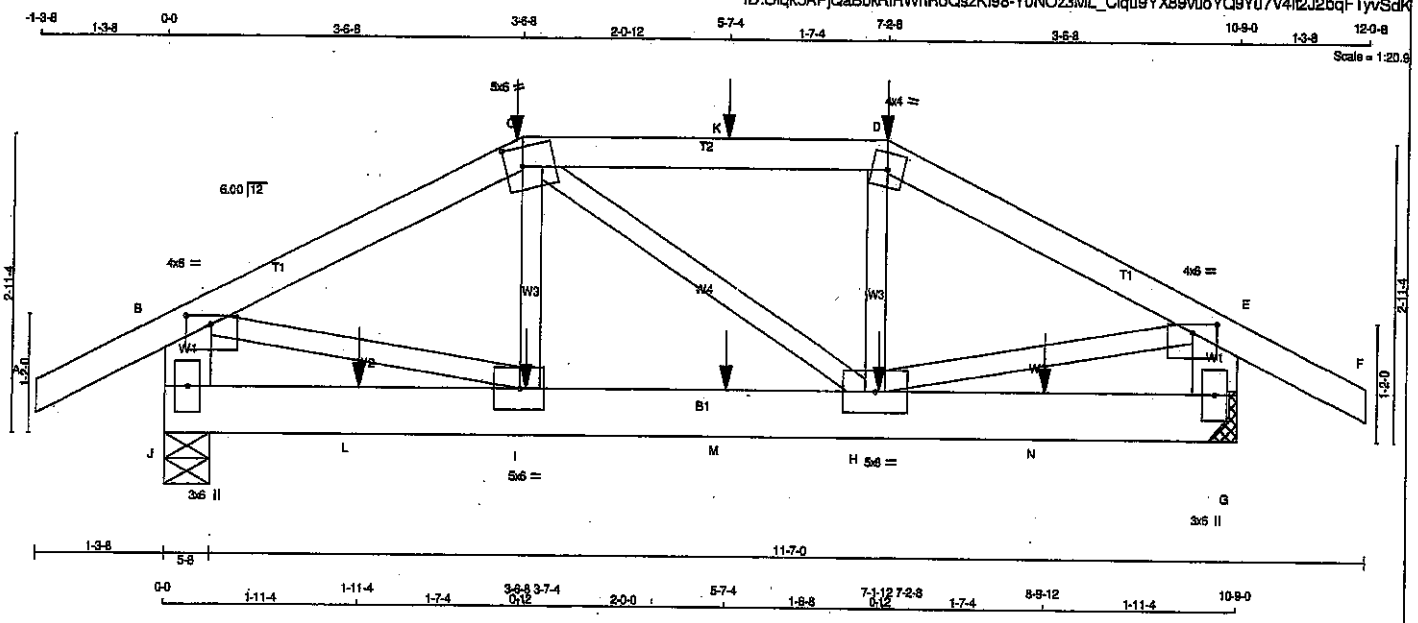

TOTAL WEIGHT = 50 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
J - B	2x6	DRY	No.2	SPF
G - E	2x6	DRY	No.2	SPF
J - G	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	4.0	6.0	1.00	3.00
C	TTWW-m	MT20	5.0	6.0	2.25	2.00
D	TTW-m	MT20	4.0	4.0		
E	TMVW-p	MT20	4.0	6.0	1.00	3.00
G	BMV1+p	MT20	3.0	6.0		
H	BMWWW-t	MT20	5.0	8.0		
I	BMWW-t	MT20	5.0	6.0		
J	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
J	882	0	882	0	0	5-8	5-8
G	884	0	884	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT G. MINIMUM BEARING LENGTH AT JOINT G = 3-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	622	419 / 0	0 / 0	0 / 0	0 / 0	204 / 0	0 / 0
G	623	419 / 0	0 / 0	0 / 0	0 / 0	204 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 28	-91.8	-91.8	0.13 (1)	10.00	
B-C	-872 / 0	-91.8	-91.8	0.23 (1)	6.23	
C-K	-777 / 0	-91.8	-91.8	0.28 (1)	6.25	
K-D	-777 / 0	-91.8	-91.8	0.28 (1)	6.25	
D-E	-877 / 0	-91.8	-91.8	0.23 (1)	6.22	
E-F	0 / 28	-91.8	-91.8	0.13 (1)	10.00	
J-B	-844 / 0	0.0	0.0	0.06 (1)	7.81	
G-E	-843 / 0	0.0	0.0	0.06 (1)	7.81	
J-L	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
L-I	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
I-M	0 / 776	-18.5	-18.5	0.13 (1)	10.00	
M-H	0 / 776	-18.5	-18.5	0.13 (1)	10.00	
H-N	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
N-G	0 / 0	-18.5	-18.5	0.04 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I-C	-85 / 41	0.02 (4)
C-H	0 / 4	0.00 (4)
H-D	-86 / 43	0.02 (4)
B-I	0 / 797	0.20 (1)
H-E	0 / 800	0.20 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-6-8	-91	-91	—	BACK	VERT	TOTAL	—	C1
D	7-2-8	-91	-91	—	BACK	VERT	TOTAL	—	C1
H	7-1-12	-8	-8	—	BACK	VERT	TOTAL	—	C1
I	3-7-4	-8	-8	—	BACK	VERT	TOTAL	—	C1
K	5-7-4	-21	-21	—	BACK	VERT	TOTAL	—	C1
L	1-11-4	-5	-5	—	BACK	VERT	TOTAL	—	C1
M	5-7-4	-8	-8	—	BACK	VERT	TOTAL	—	C1
N	8-9-12	-5	-5	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.28/1.00 (C-D:1) , BC=0.13/1.00 (H-I:1) , WB=0.20/1.00 (E-H:1) , SSI=0.18/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (E) (INPUT = 0.90)
JSI METAL= 0.21 (E) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124043

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T72	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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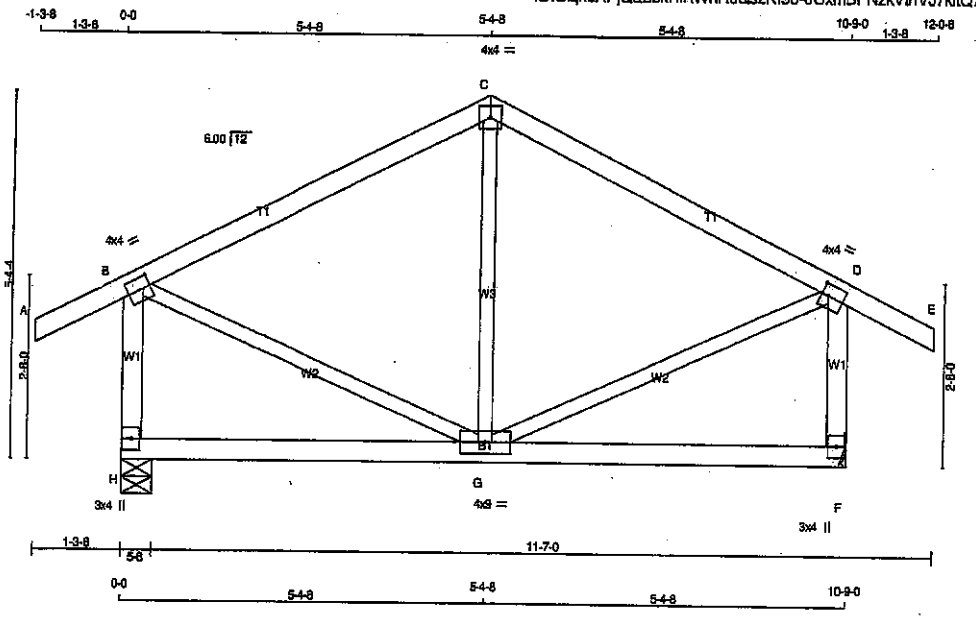

TOTAL WEIGHT = 2 X 47 = 95 lb

[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTW-p	MT20	4.0	4.0		
D	TMVW-t	MT20	4.0	4.0	2.00	1.25
F	BMV1+p	MT20	3.0	4.0		
G	BMWWW-t	MT20	4.0	9.0		
H	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	717	0	717	0	0	5-8	5-8
F	717	0	717	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	505	344 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
F	505	344 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00	
B- C	-367 / 0	-91.8	-91.8	0.34 (1)	6.25	
C- D	-367 / 0	-91.8	-91.8	0.34 (1)	6.25	
D- E	0 / 28	-91.8	-91.8	0.12 (1)	10.00	
H- B	-679 / 0	0.0	0.0	0.09 (1)	7.81	
F- D	-679 / 0	0.0	0.0	0.09 (1)	7.81	
H- G	0 / 0	-18.5	-18.5	0.15 (4)	10.00	
G- F	0 / 0	-18.5	-18.5	0.15 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
G- C	-165 / 32	0.07 (1)
B- G	0 / 358	0.08 (1)
G- D	0 / 358	0.08 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.34/1.00 (B-C:1) , BC=0.15/1.00 (F-G:4) , WB=0.08/1.00 (B-G:1) , SSI=0.17/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (B) (INPUT = 0.80)
JSI METAL= 0.18 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124044

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T73S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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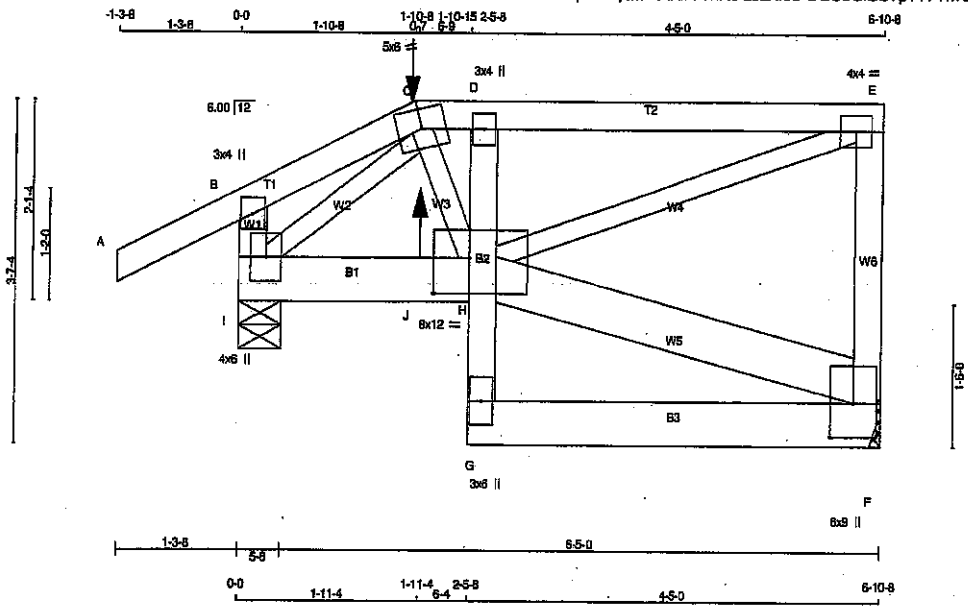

TOTAL WEIGHT = 43 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x6	DRY	No.2	SPF
G - D	2x4	DRY	No.2	SPF
G - F	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0		
D	TMV+p	MT20	3.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMVW1+p	MT20	6.0	9.0	4.25	3.00
G	BMV+p	MT20	3.0	6.0		
H	BVMWWW-l	MT20	8.0	12.0	4.50	4.50
I	BMVW1+p	MT20	4.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	378	0	378	0	0	MECHANICAL	
I	500	0	500	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	267	175 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
I	351	242 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (7)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.13 (1)	10.00	
B- C	0 / 0	-91.8	-91.8	0.06 (1)	10.00	
C- D	-440 / 0	-91.8	-91.8	0.24 (5)	8.25	
D- E	-429 / 0	-91.8	-91.8	0.24 (5)	6.25	
F- E	-333 / 0	0.0	0.0	0.07 (1)	7.81	
I- B	-212 / 0	0.0	0.0	0.02 (1)	7.81	
I- J	0 / 293	-18.5	-18.5	0.05 (1)	10.00	
J- H	0 / 293	-18.5	-18.5	0.05 (1)	10.00	
G- H	0 / 44	0.0	0.0	0.04 (1)	10.00	
H- D	-499 / 0	0.0	0.0	0.03 (1)	7.81	
G- F	0 / 14	-18.5	-18.5	0.05 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
C- H	0 / 426	0.11 (5)
H- F	-15 / 0	0.00 (1)
H- E	0 / 462	0.11 (1)
I- C	-395 / 0	0.07 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	1-10-15	-1	-1	67	BACK	VERT	TOTAL	—	C1
J	1-11-4	4	1	8	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.24/1.00 (D-E:5) , BC=0.05/1.00 (F-G:4) , WB=0.11/1.00 (E-H:1) , SSI=0.22/1.00 (C-D:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.54 (E) (INPUT = 0.90)
JSI METAL= 0.15 (E) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124045

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T74S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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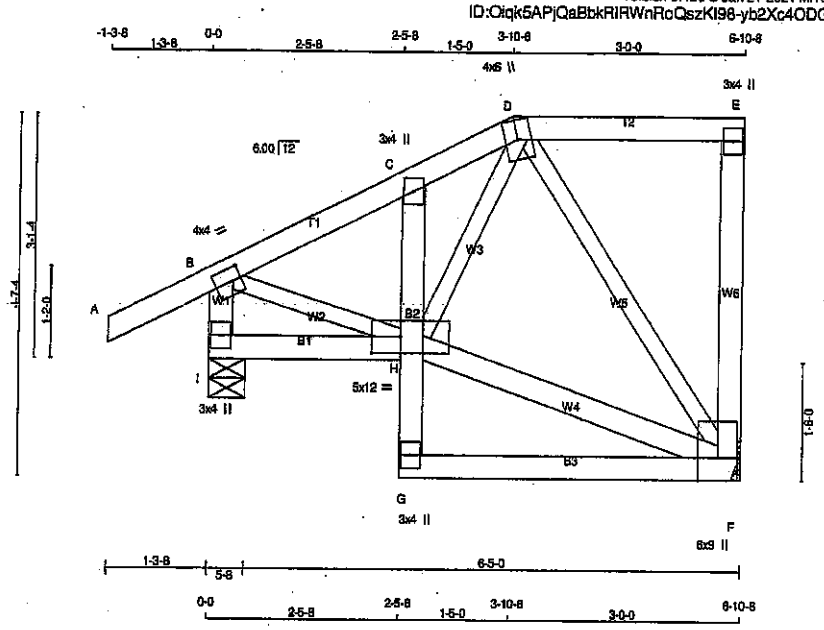

TOTAL WEIGHT = 40 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - C	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	TTWW+m	MT20	4.0	6.0		
E	TMV+p	MT20	3.0	4.0		
F	BMVWW1+p	MT20	6.0	9.0	Edge	
G	BMV+p	MT20	3.0	4.0		
H	BVMWWW-I	MT20	5.0	12.0	2.50	4.50
I	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	379	0	379	0	0	MECHANICAL	
I	503	0	503	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
I	354	245 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	-338 / 0	-91.8	-91.8	0.07 (1)	6.25
C- D	-340 / 0	-91.8	-91.8	0.04 (1)	6.25
D- E	0 / 0	-91.8	-91.8	0.14 (1)	10.00
F- E	-136 / 0	0.0	0.0	0.05 (1)	7.81
I- B	-479 / 0	0.0	0.0	0.05 (1)	7.81
I- H	0 / 0	-18.5	-18.5	0.04 (4)	10.00
G- H	0 / 44	0.0	0.0	0.03 (1)	10.00
H- C	-218 / 0	0.0	0.0	0.02 (1)	7.81
G- F	0 / 10	-18.5	-18.5	0.10 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
H- F	0 / 181	0.03 (1)
H- D	0 / 265	0.06 (1)
B- H	0 / 323	0.07 (1)
D- F	-320 / 0	0.13 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN.C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.14/1.00 (D-E:1) , BC=0.10/1.00 (F-G:4) , WB=0.13/1.00 (D-F:1) , SSI=0.11/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (B) (INPUT = 0.90)
JSI METAL= 0.15 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124046

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T75S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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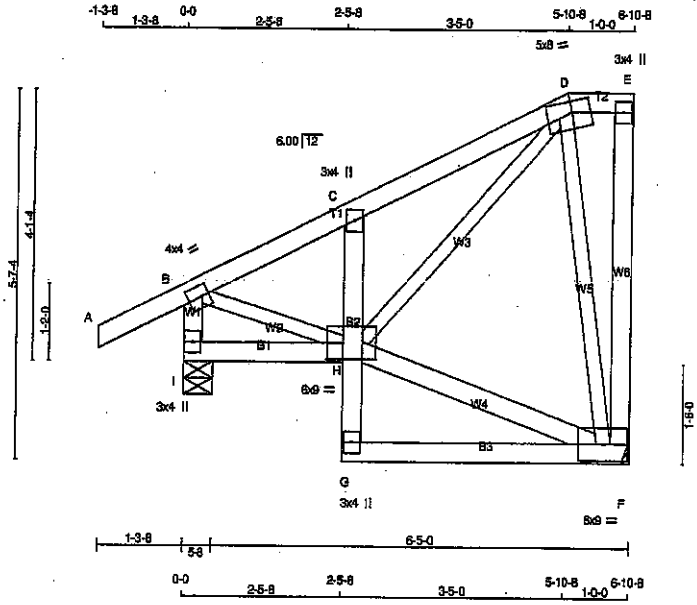

TOTAL WEIGHT = 43 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - C	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	TTWW-m	MT20	5.0	8.0	2.00	3.25
E	TMV+p	MT20	3.0	4.0		
F	BMVWW1-t	MT20	6.0	9.0		
G	BMV+p	MT20	3.0	4.0		
H	BVMWWW-t	MT20	6.0	9.0	3.00	3.00
I	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	379	0	379	0	0	MECHANICAL	
I	503	0	503	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	268	176 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
I	354	245 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00	
B- C	-354 / 0	-91.8	-91.8	0.10 (1)	6.25	
C- D	-361 / 0	-91.8	-91.8	0.11 (1)	6.25	
D- E	0 / 0	-91.8	-91.8	0.01 (1)	10.00	
F- E	-44 / 0	0.0	0.0	0.03 (1)	7.81	
I- B	-479 / 0	0.0	0.0	0.05 (1)	7.81	
I- H	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
G- H	0 / 44	0.0	0.0	0.03 (1)	10.00	
H- C	-326 / 0	0.0	0.0	0.02 (1)	7.81	
G- F	0 / 13	-18.5	-18.5	0.10 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
D- F	-316 / 0	0.15 (1)
H- F	0 / 46	0.01 (1)
H- D	0 / 390	0.09 (1)
B- H	0 / 349	0.08 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.10/1.00 (F-G:4) , WB=0.15/1.00 (D-F:1) , SSI=0.13/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.54 (B) (INPUT = 0.90)
JSI METAL= 0.16 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124047

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T76S	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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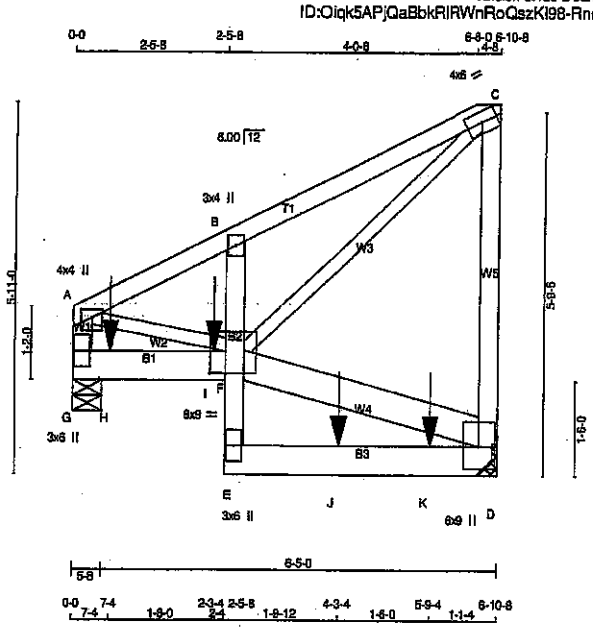

TOTAL WEIGHT = 2 X 45 = 90 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
G - A	2x4	DRY	No.2	SPF
G - F	2x6	DRY	No.2	SPF
E - B	2x4	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A-C	1	12	TOP
C-D	1	12	TOP
G-A	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
G-F	2	12	SIDE(0.0)
E-D	2	12	SIDE(0.0)
B-E	1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	
2x6	2	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124048

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	1710	0	1710	0	0	MECHANICAL	
G	1576	0	1576	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	1202	830 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
G	1106	771 / 0	0 / 0	0 / 0	0 / 0	335 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	-1617 / 0	-91.8	-91.8	0.09 (1)	6.25	
B-C	-1580 / 0	-91.8	-91.8	0.14 (1)	6.25	
D-C	-657 / 0	0.0	0.0	0.29 (1)	7.81	
G-A	-1241 / 0	0.0	0.0	0.07 (1)	7.81	
G-H	0 / 0	-18.5	-18.5	0.10 (1)	10.00	
H-I	0 / 0	-18.5	-18.5	0.10 (1)	10.00	
I-F	0 / 0	-18.5	-18.5	0.10 (1)	10.00	
E-F	0 / 646	0.0	0.0	0.13 (1)	10.00	
F-B	-353 / 0	0.0	0.0	0.07 (1)	7.81	
E-J	0 / 65	-18.5	-18.5	0.39 (1)	10.00	
J-K	0 / 65	-18.5	-18.5	0.39 (1)	10.00	
K-D	0 / 65	-18.5	-18.5	0.39 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F-D	-69 / 0	0.01 (1)
F-C	0 / 1971	0.24 (1)
A-F	0 / 1526	0.19 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	7-4	-179	-179	—	TOP	VERT	TOTAL	—	C1
I	2-3-4	-613	-613	—	FRONT	VERT	TOTAL	—	C1
J	4-3-4	-490	-490	—	FRONT	VERT	TOTAL	—	C1
K	5-9-4	-490	-490	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	25.6	PSF
		DL =	6.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.4	PSF
TOTAL LOAD =			39.0	PSF

SPACING = 24.0 **IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.29/1.00 (C-D:1) , BC=0.39/1.00 (D-E:1) , WB=0.24/1.00 (C-F:1) , SSI=0.28/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.21 (A) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T76S	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 22 17:33:33 2021 Page 2
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.50	2.00
B	TMV+p	MT20	3.0	4.0		
C	TMVW-t	MT20	4.0	6.0	2.00	3.00
D	BMVW1+p	MT20	6.0	9.0	4.25	3.00
E	BMV+p	MT20	3.0	6.0		
F	BVMWWW-t	MT20	6.0	9.0	4.25	3.00
G	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124048

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T77S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 22 17:33:34 2021 Page 1
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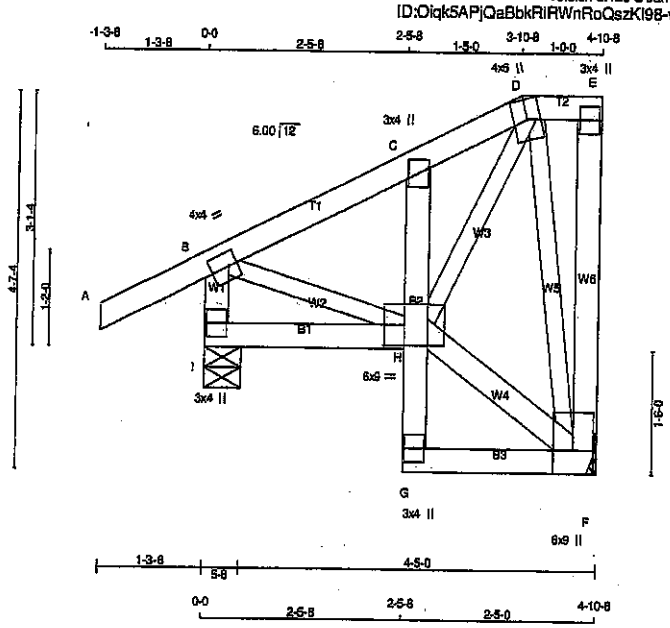

TOTAL WEIGHT = 33 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - C	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	TTWW+m	MT20	4.0	6.0		
E	TMV+p	MT20	3.0	4.0		
F	BMVWW1+p	MT20	6.0	9.0	Edge	
G	BMV+p	MT20	3.0	4.0		
H	BVMWWW-I	MT20	6.0	9.0	3.00	3.00
I	BMV1+p	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	269	0	269	0	0	MECHANICAL	
I	393	0	393	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	190	125 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
I	276	194 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B-C	-186 / 0	-91.8	-91.8	0.07 (1)	6.25
C-D	-196 / 0	-91.8	-91.8	0.06 (1)	6.25
D-E	0 / 0	-91.8	-91.8	0.01 (1)	10.00
F-E	-44 / 0	0.0	0.0	0.02 (1)	7.81
I-B	-369 / 0	0.0	0.0	0.04 (1)	7.81
I-H	0 / 0	-18.5	-18.5	0.04 (4)	10.00
G-H	0 / 24	0.0	0.0	0.02 (1)	10.00
H-C	-222 / 0	0.0	0.0	0.02 (1)	7.81
G-F	0 / 8	-18.5	-18.5	0.03 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H-F	0 / 53	0.01 (1)
H-D	0 / 263	0.06 (1)
B-H	0 / 184	0.04 (1)
D-F	-238 / 0	0.07 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (H-I:4) , WB=0.07/1.00 (D-F:1) , SSI=0.09/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124049

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T78S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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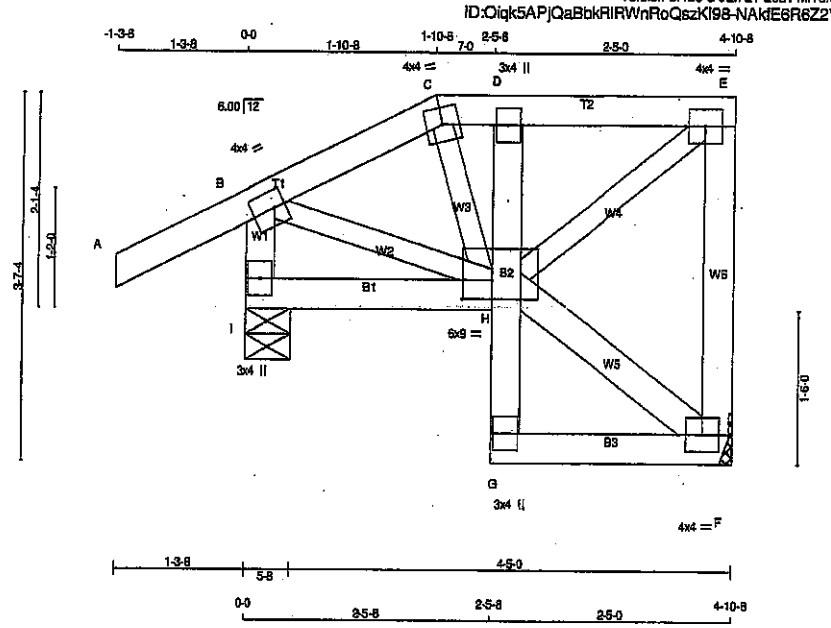

TOTAL WEIGHT = 29 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - B	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF
G - D	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTW-m	MT20	4.0	4.0		
D	TMV+p	MT20	3.0	4.0		
E	TMVW-t	MT20	4.0	4.0		
F	BMVW1-t	MT20	4.0	4.0		
G	BMV+p	MT20	3.0	4.0		
H	BVMWWWW-t	MT20	6.0	9.0	2.25	3.50
I	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	269	0	269	0	0	MECHANICAL	
I	393	0	393	0	0	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

MAX./MIN. COMPONENT REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	190	125 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
I	276	194 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00	
B- C	-212 / 0	-91.8	-91.8	0.08 (1)	6.25	
C- D	-198 / 0	-91.8	-91.8	0.05 (1)	6.25	
D- E	-194 / 0	-91.8	-91.8	0.06 (1)	6.25	
F- E	-244 / 0	0.0	0.0	0.05 (1)	7.81	
I- B	-369 / 0	0.0	0.0	0.04 (1)	7.81	
I- H	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
G- H	0 / 24	0.0	0.0	0.01 (1)	10.00	
H- D	-199 / 0	0.0	0.0	0.01 (1)	7.81	
G- F	0 / 6	-18.5	-18.5	0.03 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- H	0 / 25	0.01 (1)
H- F	-7 / 0	0.00 (1)
H- E	0 / 246	0.06 (1)
B- H	0 / 199	0.04 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.15")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.15")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (H-I:4) , WB=0.06/1.00 (E-H:1) , SSI=0.09/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124050

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T79S	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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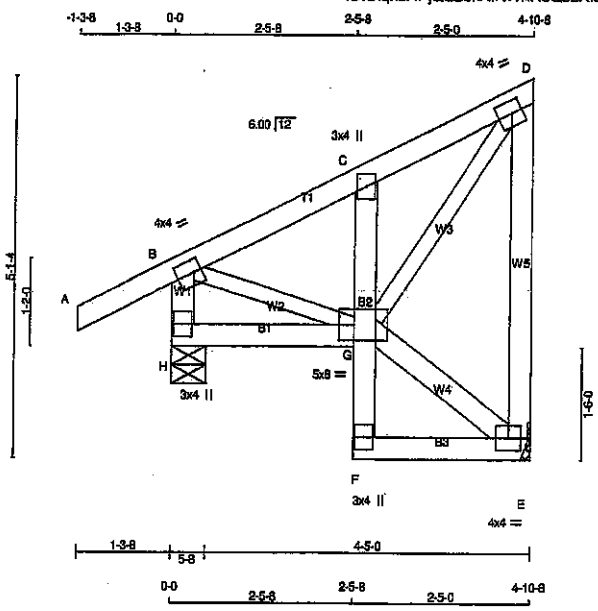

TOTAL WEIGHT = 31 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
H - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
F - C	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	TMVW-t	MT20	4.0	4.0	2.00	1.75
E	BMVW1-t	MT20	4.0	4.0		
F	BMV+p	MT20	3.0	4.0		
G	BVMWWW-l	MT20	5.0	8.0	2.50	2.50
H	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
H	393	0	393	0	0	5-8	5-8
E	269	0	269	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	276	194 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
E	190	125 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
H- B	-369 / 0	0.0	0.0	0.04 (1)	7.81
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	-193 / 0	-91.8	-91.8	0.08 (1)	6.25
C- D	-199 / 0	-91.8	-91.8	0.08 (1)	6.25
E- D	-242 / 0	0.0	0.0	0.10 (1)	7.81
H- G	0 / 0	-18.5	-18.5	0.04 (4)	10.00
F- G	0 / 24	0.0	0.0	0.02 (1)	10.00
G- C	-265 / 0	0.0	0.0	0.02 (1)	7.81
F- E	0 / 9	-18.5	-18.5	0.03 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- G	0 / 192	0.04 (1)
G- E	-10 / 0	0.00 (1)
G- D	0 / 296	0.07 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (G-H:4) , WB=0.07/1.00 (D-G:1) , SSI=0.10/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.34 (G) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124051

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T80	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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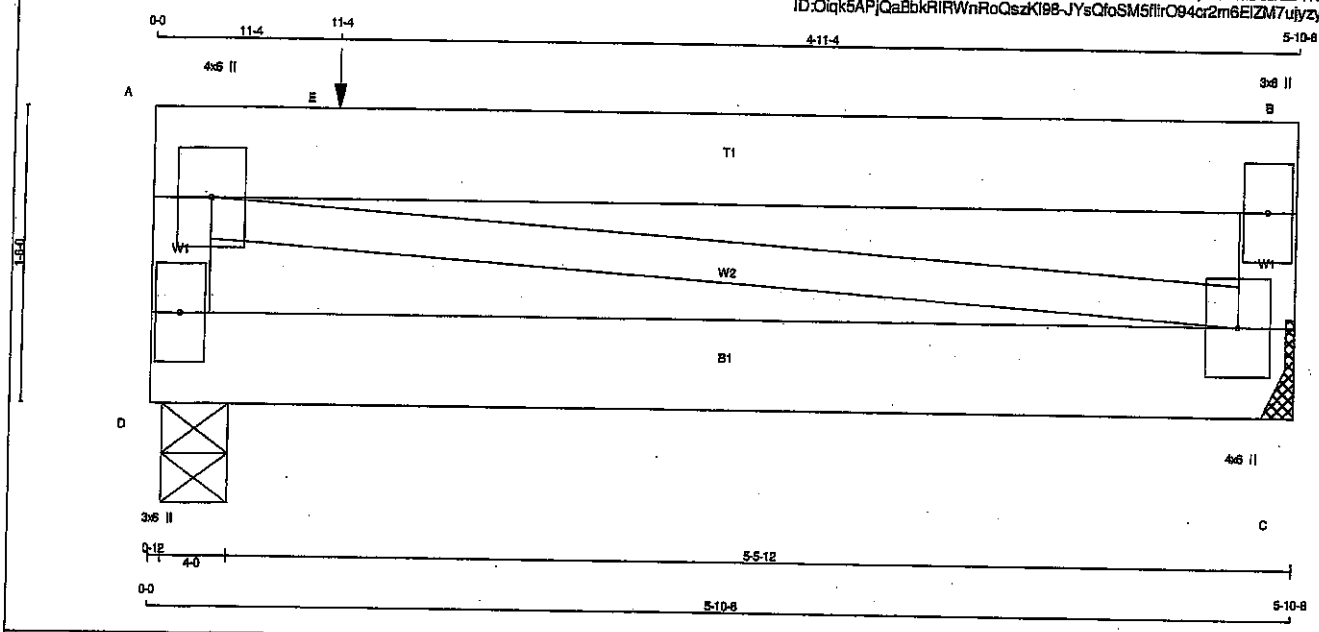

TOTAL WEIGHT = 2 X 27 = 53 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
D - A	2x4	DRY	No.2	SPF
A - B	2x6	DRY	No.2	SPF
C - B	2x4	DRY	No.2	SPF
D - C	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
D- A	1	12	TOP
B- C	1	12	TOP
A- B	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
D- C	2	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0		
B	TMV+p	MT20	3.0	6.0		
C	BMVW1+p	MT20	4.0	6.0		
D	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	490	0	490	0	0	4-0	4-0
C	355	0	355	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 2-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	345	235 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
C	251	169 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
D- A	-436 / 0	0.0	0.0	0.02 (1)	7.81	
A- E	0 / 0	-91.8	-91.8	0.17 (1)	10.00	
E- B	0 / 0	-91.8	-91.8	0.17 (1)	10.00	
C- B	-301 / 0	0.0	0.0	0.02 (1)	7.81	
D- C	0 / 0	-18.5	-18.5	0.05 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- C	0 / 0	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	11-4	-138	-138	—	TOP	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.17/1.00 (A-B:1) , BC=0.05/1.00 (C-D:4) , WB=0.00/1.00 (A-C:1) , SSI=0.13/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.06 (A) (INPUT = 0.90)
JSI METAL= 0.03 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124052

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T81	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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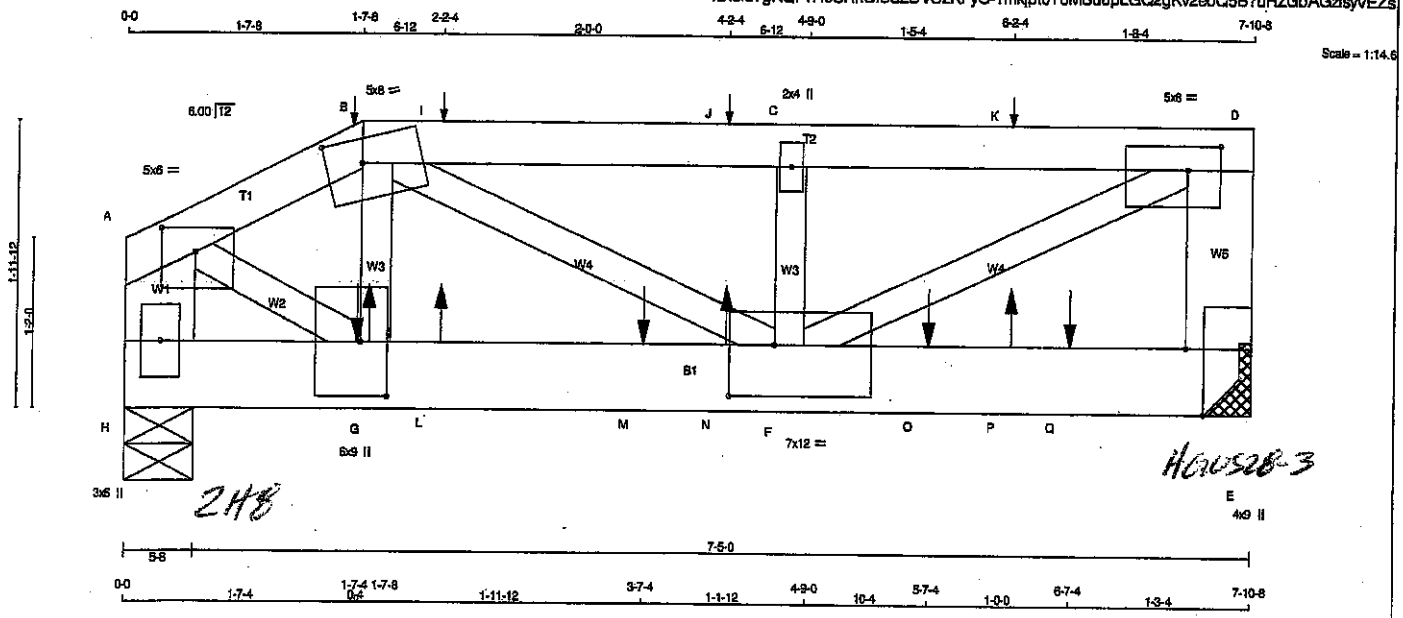

TOTAL WEIGHT = 3 X 35 = 104 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
E - D	2x6	DRY	No.2	SPF
H - A	2x6	DRY	No.2	SPF
H - E	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- B	1	8	SIDE(105.2)
B- D	1	8	SIDE(105.2)
D- E	2	12	TOP
H- A	2	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
H- E	3	4	SIDE(1790.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124053 1/2

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	7917	0	7917	0	-2356	MECHANICAL	
H	6418	0	6418	93	-1904	5-8	5-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 4-0.

PROVIDE ANCHORAGE AT BEARING JOINT E FOR 2356 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT H FOR 1904 LBS FACTORED UPLIFT

PROVIDE FOR 93 LBS FACTORED HORIZONTAL REACTION AT JOINT H

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
E	5851	3453 / -47	1042 / 0	0 / 0	210 / -2335	1356 / 0	0 / 0
H	4744	2799 / -9	846 / 0	0 / 0	178 / -1869	1101 / 0	0 / 0
HORIZONTAL REACTIONS							
H	—	0 / 0	0 / 0	0 / 0	67 / -38	0 / 0	0 /0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.59 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (31)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	-7477 / 2229	-115.2	-115.2	0.11 (13)	4.32
B- I	-10312 / 3091	-115.2	-115.2	0.25 (2)	3.61
I- J	-10312 / 3091	-115.2	-115.2	0.25 (2)	3.61
J- C	-10312 / 3091	-115.2	-115.2	0.25 (2)	3.61
C- K	-10312 / 3092	-115.2	-115.2	0.25 (1)	3.59
K- D	-10312 / 3092	-115.2	-115.2	0.25 (1)	3.59
E- D	-5333 / 1614	0.0	0.0	0.12 (1)	7.46
H- A	-6455 / 1926	0.0	0.0	0.14 (1)	6.94
H- G	-77 / 46	-39.5	-39.5	0.03 (3)	6.25
G- L	-1974 / 6747	-39.5	-39.5	0.61 (2)	6.25
L- M	-1974 / 6747	-39.5	-39.5	0.61 (2)	6.25
M- N	-1974 / 6747	-39.5	-39.5	0.61 (2)	6.25
N- F	-1974 / 6747	-39.5	-39.5	0.61 (2)	6.25
F- O	-12 / 32	-39.5	-39.5	0.73 (1)	6.25
O- P	-12 / 32	-39.5	-39.5	0.73 (1)	6.25
P- Q	-12 / 32	-39.5	-39.5	0.73 (1)	6.25
Q- E	-12 / 32	-39.5	-39.5	0.73 (1)	6.25

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
G- B	-318 / 1187	0.09 (2)
B- F	-1223 / 4066	0.30 (3)
F- C	-237 / 163	0.01 (11)
F- D	-3412 / 11500	0.86 (1)
A- G	-2135 / 7312	0.55 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	1-7-8	1	-8	87	BACK	VERT	TOTAL	—	C1
G	1-7-4	-2429	-2429	545	FRONT	VERT	TOTAL	—	C1
G	1-8-4	6	1	9	BACK	VERT	TOTAL	—	C1
I	2-2-4	1	-18	72	BACK	VERT	TOTAL	—	C1
J	4-2-4	1	-18	87	BACK	VERT	TOTAL	—	C1
K	6-2-4	1	-18	87	BACK	VERT	TOTAL	—	C1
L	2-2-4	6	1	9	BACK	VERT	TOTAL	—	C1
M	3-7-4	-2429	-2429	523	FRONT	VERT	TOTAL	—	C1
N	4-2-4	6	1	9	BACK	VERT	TOTAL	—	C1
O	5-7-4	-2429	-2429	545	FRONT	VERT	TOTAL	—	C1
P	6-2-4	6	1	9	BACK	VERT	TOTAL	—	C1

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	33.4	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	57.3	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 4 OF BCBC 2018 , ABC 2019
- PART 4 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR USED
- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 33.4 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/180 (0.52")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.25/1.00 (C-D:1) , BC=0.73/1.00 (E-F:1) , WB=0.86/1.00 (D-F:1) , SSI=0.83/1.00 (E-F:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.68 (G) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T81	1	3	TRUSS DESC.	

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-p	MT20	5.0	6.0	2.00	2.75
B	TTWW-m	MT20	5.0	8.0	2.00	3.00
C	TMW+w	MT20	2.0	4.0		
D	TMWW-t	MT20	5.0	8.0	2.00	2.75
E	BMV1+t	MT20	4.0	9.0	Edge	1.50
F	BMWWW-t	MT20	7.0	12.0	4.25	3.75
G	BMWW+t	MT20	6.0	9.0	4.50	2.25
H	BMV1+p	MT20	3.0	6.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
Q	6-7-4	-2429	-2429	545	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (9.6) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.TRUSS UPLIFT IS BASED ON TOP AND BOTTOM CHORD DEAD LOADS OF 5.0 PSF AND 5.0 PSF RESPECTIVELY.

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124053 1/2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T82	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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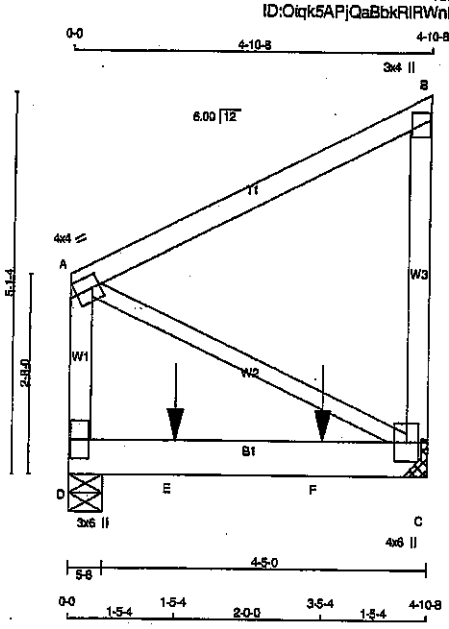

TOTAL WEIGHT = 2 X 26 = 52 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
D - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
C - B	2x4	DRY	No.2	SPF
D - C	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)		LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
D- A	1	12	TOP
A- B	1	12	TOP
B- C	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
D- C	2	12	SIDE(0.0)
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	4.0	2.00	1.25
B	TMV+p	MT20	3.0	4.0		
C	BMVW1+p	MT20	4.0	6.0		
D	BMV1+p	MT20	3.0	6.0		

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124054

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
D	1555	0	1555	0	0	5-8	5-8
C	1555	0	1555	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 4-0.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	1098	730 / 0	0 / 0	0 / 0	0 / 0	368 / 0	0 / 0
C	1098	730 / 0	0 / 0	0 / 0	0 / 0	368 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
D- A	-224 / 0	0.0	0.0	0.02 (1)	7.81
A- B	0 / 0	-91.8	-91.8	0.20 (1)	10.00
C- B	-224 / 0	0.0	0.0	0.05 (1)	7.81
D- E	0 / 0	-18.5	-18.5	0.70 (1)	10.00
E- F	0 / 0	-18.5	-18.5	0.70 (1)	10.00
F- C	0 / 0	-18.5	-18.5	0.70 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- C	0 / 0	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	1-5-4	-908	-908	---	BACK	VERT	TOTAL	---	C1
F	3-5-4	-908	-908	---	BACK	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 849 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 451 (0.13")

CSI: TC=0.20/1.00 (A-B:1) , BC=0.70/1.00 (C-D:1) , WB=0.00/1.00 (A-C:1) , SSI=0.44/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.07 (A) (INPUT = 0.90)
JSI METAL= 0.03 (B) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	T83	1	2	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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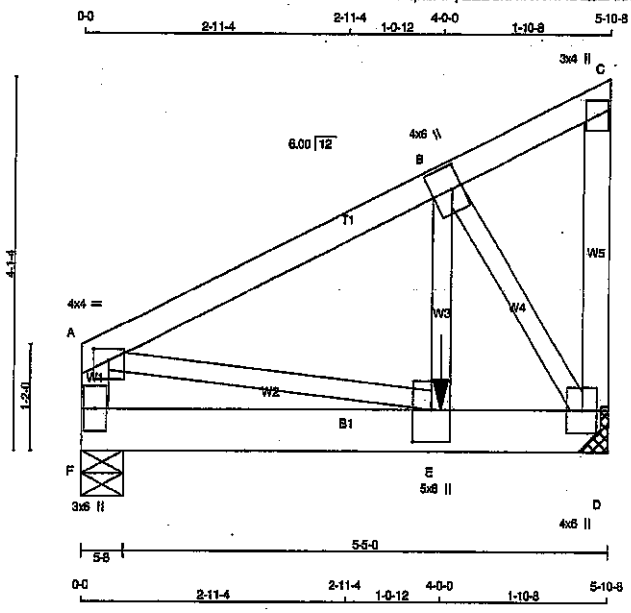

TOTAL WEIGHT = 2 X 30 = 60 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - A	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
F- A	1	12	TOP
A- C	1	12	TOP
C- D	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
F- D	2	7	SIDE(366.2)
WEBS : (0.122"X3") SPIRAL NAILS			
B- E	1	2	SIDE(552.5)
2x3	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-p	MT20	4.0	4.0	1.50	2.00
B	TMVW+t	MT20	4.0	6.0	3.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	BMVW1+p	MT20	4.0	6.0		

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124055

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	1448	0	1448	0	0	5-8	5-8
D	2722	0	2722	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 4-0.

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	1021	686 / 0	0 / 0	0 / 0	0 / 0	335 / 0	0 / 0
D	1919	1293 / 0	0 / 0	0 / 0	0 / 0	625 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
F- A	-1329 / 0	0.0	0.0	0.07 (1)	7.81
A- B	-1872 / 0	-91.8	-91.8	0.12 (1)	6.24
B- C	-21 / 0	-91.8	-91.8	0.07 (1)	6.25
D- C	-38 / 0	0.0	0.0	0.00 (1)	7.81
F- E	0 / 0	-18.5	-18.5	0.12 (1)	10.00
E- D	0 / 1684	-18.5	-18.5	0.23 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- B	0 / 2993	0.37 (1)
A- E	0 / 1715	0.21 (1)
B- D	-3007 / 0	0.32 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	4-0-0	-2482	-2482	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.23/1.00 (D-E:1) , WB=0.37/1.00 (B-E:1) , SSI=0.08/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (A) (INPUT = 0.90)
JSI METAL= 0.46 (E) (INPUT = 1.00)

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418363	T83	1	2	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
E	BMWW+t	MT20	5.0	8.0	4.25	2.50
F	BMV1+p	MT20	3.0	6.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/13/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124055

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB1	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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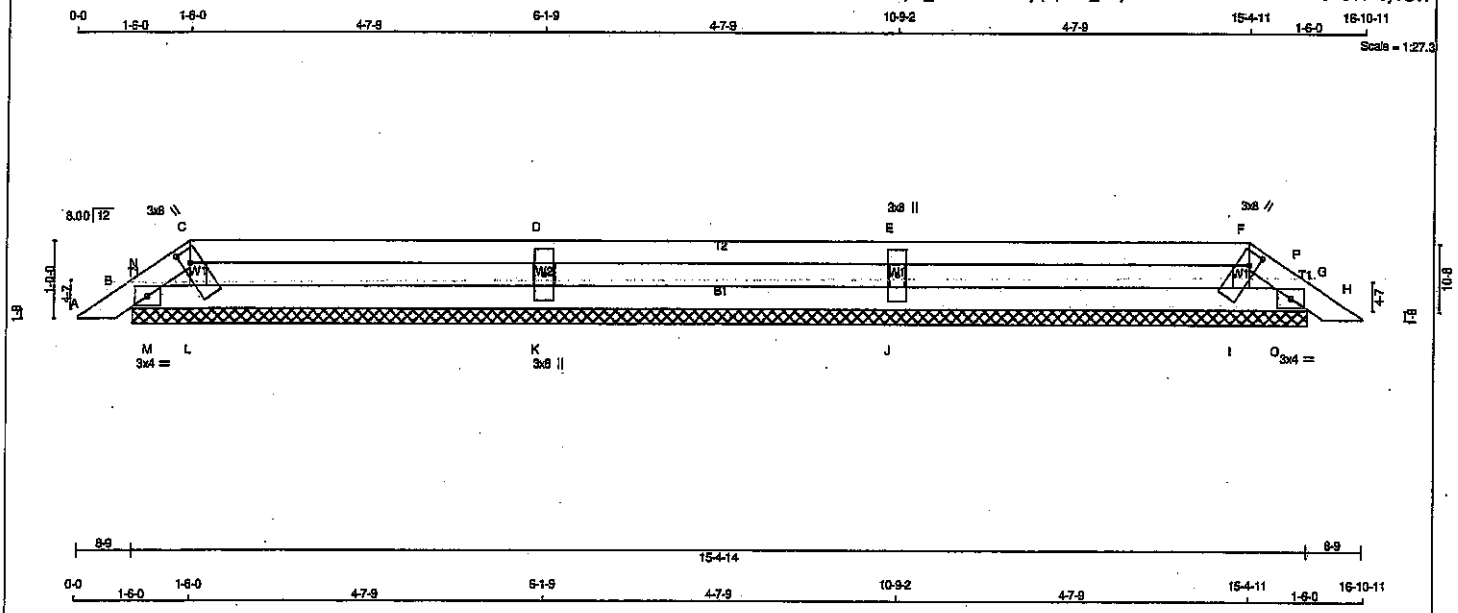

TOTAL WEIGHT = 39 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
B - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
K - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C, D, E, F, I, J, K, L						
C						
C	TTBW1"+h	MT20	3.0	8.0	2.00	1.25
E	TMBMW1+I	MT20	3.0	8.0		
F	TTBW1"+h	MT20	3.0	8.0	2.00	1.25
G	TMB1-I	MT20	3.0	4.0		
K	TMBMW1+I	MT20	3.0	8.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	117	0	117	0	0	15-4-14	15-4-14
G	117	0	117	0	0	15-4-14	15-4-14
L	237	0	237	0	0	15-4-14	15-4-14
I	237	0	237	0	0	15-4-14	15-4-14
K	554	0	554	0	0	15-4-14	15-4-14
J	554	0	554	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	78	78 / 0	0 / 0	0 / 0	0 / 0	0 / -0	0 / 0
G	78	78 / 0	0 / 0	0 / 0	0 / 0	0 / -0	0 / 0
L	172	88 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
I	172	88 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
K	391	261 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
J	391	261 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, G, L, I, K, J

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.03 (1)	10.00	
B- N	-49 / 7	-91.8	-91.8	0.03 (1)	6.25	
N- C	-48 / 0	-91.8	-91.8	0.02 (4)	6.25	
C- D	0 / 0	-91.8	-91.8	0.27 (1)	10.00	
D- E	0 / 0	-91.8	-91.8	0.27 (1)	10.00	
E- F	0 / 0	-91.8	-91.8	0.27 (1)	10.00	
F- P	-48 / 0	-91.8	-91.8	0.02 (4)	6.25	
P- G	-49 / 8	-91.8	-91.8	0.03 (1)	6.25	
G- H	0 / 15	-91.8	-91.8	0.03 (1)	10.00	
B- M	0 / 27	-18.5	-18.5	0.01 (1)	10.00	
M- L	0 / 27	-18.5	-18.5	0.08 (4)	10.00	
L- K	0 / 0	-18.5	-18.5	0.08 (4)	10.00	
K- J	0 / 0	-18.5	-18.5	0.08 (4)	10.00	
J- I	0 / 0	-18.5	-18.5	0.08 (4)	10.00	
I- O	0 / 27	-18.5	-18.5	0.08 (4)	10.00	
O- G	0 / 27	-18.5	-18.5	0.01 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- C	-148 / 0	0.02 (1)
I- F	-148 / 0	0.02 (1)
K- D	-467 / 0	0.05 (1)
J- E	-467 / 0	0.07 (1)
M- N	-41 / 0	0.00 (1)
O- P	-41 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.27/1.00 (D-E:1) , BC=0.08/1.00 (J-K:4) , WB=0.07/1.00 (E-J:1) , SSI=0.20/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (F) (INPUT = 0.90)
JSI METAL= 0.07 (K) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123947

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB2	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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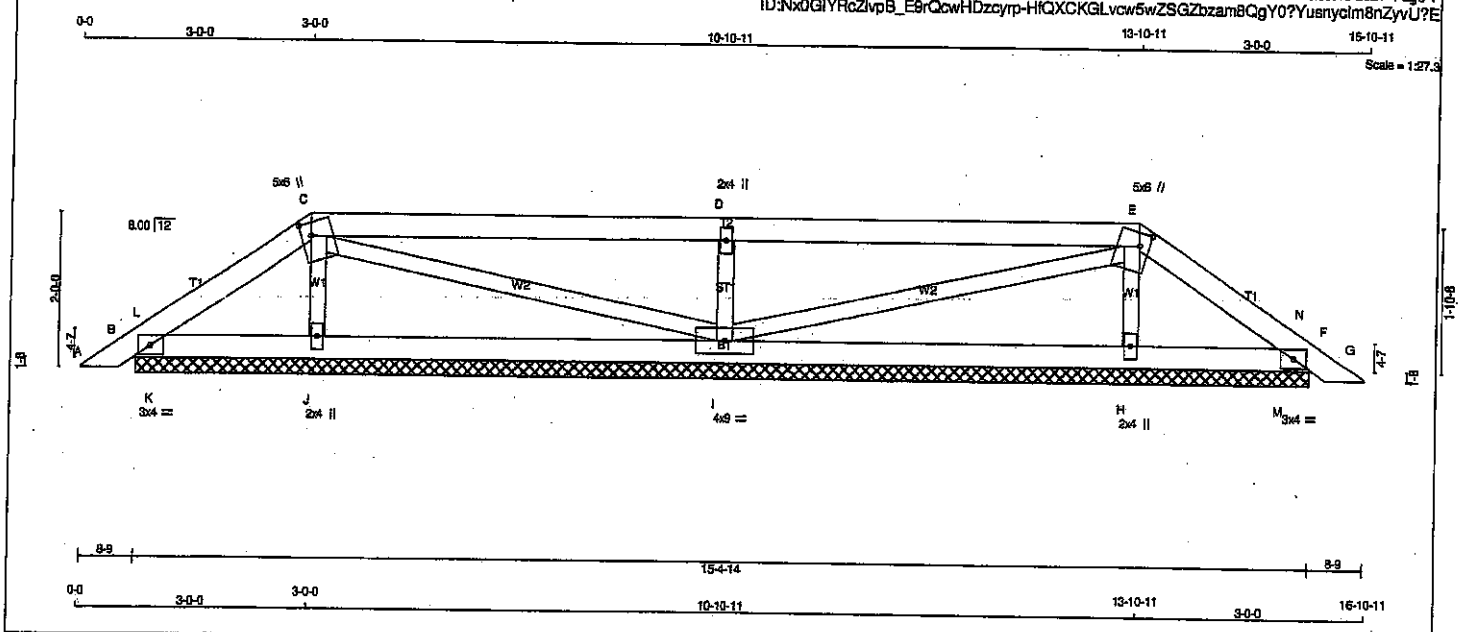

TOTAL WEIGHT = 50 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.00	1.50
F	TMB1-I	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMWWW1-I	MT20	4.0	9.0		
J	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	199	0	199	0	0	15-4-14	15-4-14
F	199	0	199	0	0	15-4-14	15-4-14
I	738	0	738	0	0	15-4-14	15-4-14
J	340	0	340	0	0	15-4-14	15-4-14
H	340	0	340	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	138	107 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
F	138	107 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
I	520	353 / 0	0 / 0	0 / 0	0 / 0	167 / 0	0 / 0
J	243	144 / 0	0 / 0	0 / 0	0 / 0	100 / 0	0 / 0
H	243	144 / 0	0 / 0	0 / 0	0 / 0	100 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, J, H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B- L	-32 / 0	-91.8	-91.8	0.02 (1)	6.25
L- C	-58 / 0	-91.8	-91.8	0.05 (1)	6.25
C- D	-8 / 0	-91.8	-91.8	0.46 (1)	10.00
D- E	-8 / 0	-91.8	-91.8	0.46 (1)	10.00
E- N	-58 / 0	-91.8	-91.8	0.05 (1)	6.25
N- F	-32 / 0	-91.8	-91.8	0.02 (1)	6.25
F- G	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B- K	0 / 45	-18.5	-18.5	0.06 (1)	10.00
K- J	0 / 45	-18.5	-18.5	0.08 (4)	10.00
J- I	0 / 29	-18.5	-18.5	0.12 (4)	10.00
I- H	0 / 29	-18.5	-18.5	0.12 (4)	10.00
H- M	0 / 45	-18.5	-18.5	0.08 (4)	10.00
M- F	0 / 45	-18.5	-18.5	0.06 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- D	-624 / 0	0.09 (1)
J- C	-235 / 0	0.03 (1)
H- E	-235 / 0	0.03 (1)
C- I	-22 / 0	0.01 (1)
I- E	-22 / 0	0.01 (1)
K- L	-144 / 0	0.00 (1)
M- N	-144 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.46/1.00 (D-E:1) , BC=0.12/1.00 (H-I:4) , WB=0.09/1.00 (D-I:1) , SSI=0.24/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (D) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123948

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB3	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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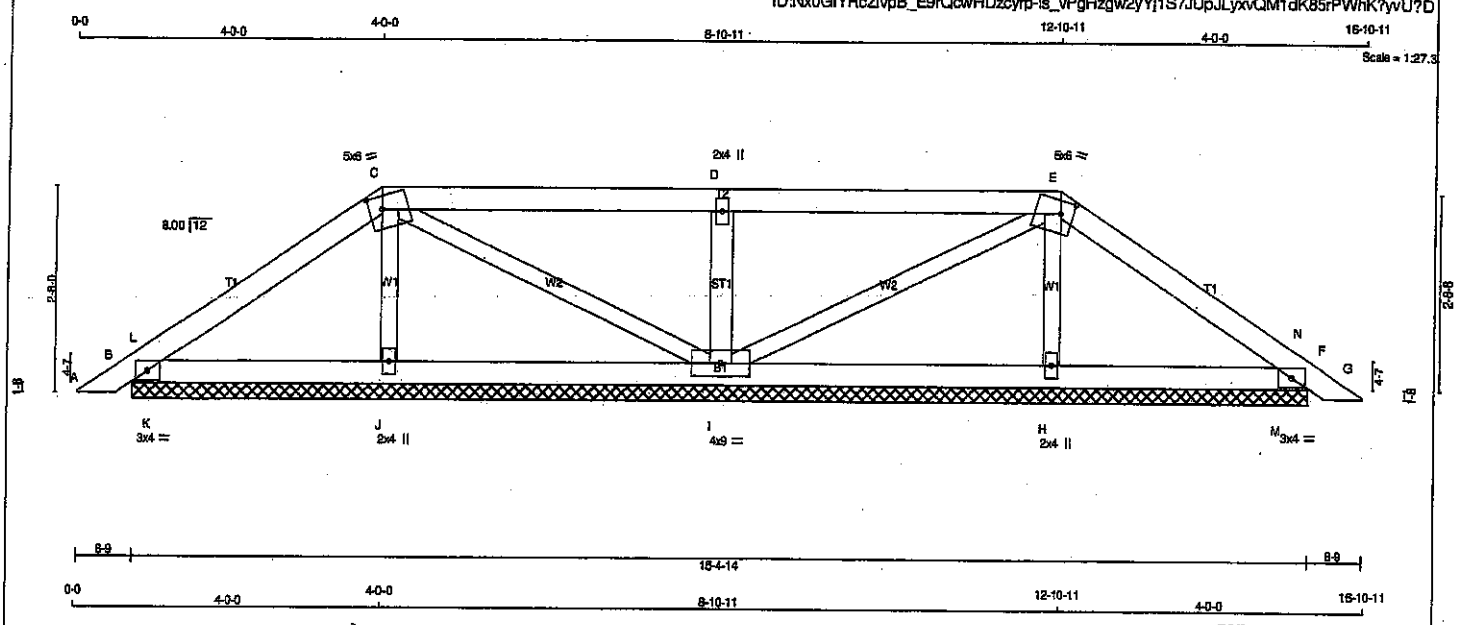

TOTAL WEIGHT = 3 X 51 = 154 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
I - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	TOP
C- E	1	12	TOP
E- G	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- F	1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x3	1	6	
2x4	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0	2.00	2.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	6.0	2.00	2.00
F	TMB1-I	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMWWW1-t	MT20	4.0	9.0		
J	BMW1+w	MT20	2.0	4.0		

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123949

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	274	0	274	0	0	15-4-14	15-4-14
F	274	0	274	0	0	15-4-14	15-4-14
I	623	0	623	0	0	15-4-14	15-4-14
J	323	0	323	0	0	15-4-14	15-4-14
H	323	0	323	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	191	139 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
F	191	139 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
I	438	301 / 0	0 / 0	0 / 0	0 / 0	137 / 0	0 / 0
J	231	136 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
H	231	136 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, J, H

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.01 (1)	10.00
B- L	-31 / 0	-91.8	-91.8	0.01 (1)	6.25
L- C	-89 / 0	-91.8	-91.8	0.04 (1)	6.25
C- D	-15 / 0	-91.8	-91.8	0.10 (1)	6.25
D- E	-15 / 0	-91.8	-91.8	0.10 (1)	6.25
E- N	-89 / 0	-91.8	-91.8	0.04 (1)	6.25
N- F	-31 / 0	-91.8	-91.8	0.01 (1)	6.25
F- G	0 / 15	-91.8	-91.8	0.01 (1)	10.00
B- K	0 / 69	-18.5	-18.5	0.04 (1)	10.00
K- J	0 / 69	-18.5	-18.5	0.04 (1)	10.00
J- I	0 / 59	-18.5	-18.5	0.02 (1)	10.00
I- H	0 / 59	-18.5	-18.5	0.02 (1)	10.00
H- M	0 / 69	-18.5	-18.5	0.04 (1)	10.00
M- F	0 / 69	-18.5	-18.5	0.04 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- D	-510 / 0	0.02 (1)
J- C	-210 / 0	0.01 (1)
H- E	-210 / 0	0.01 (1)
C- I	-50 / 0	0.01 (1)
I- E	-50 / 0	0.01 (1)
K- L	-240 / 0	0.00 (1)
M- N	-240 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10/1.00 (C-D:1) , BC=0.04/1.00 (H-M:1) , WB=0.02/1.00 (D-I:1) , SSI=0.07/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.08 (D) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB4	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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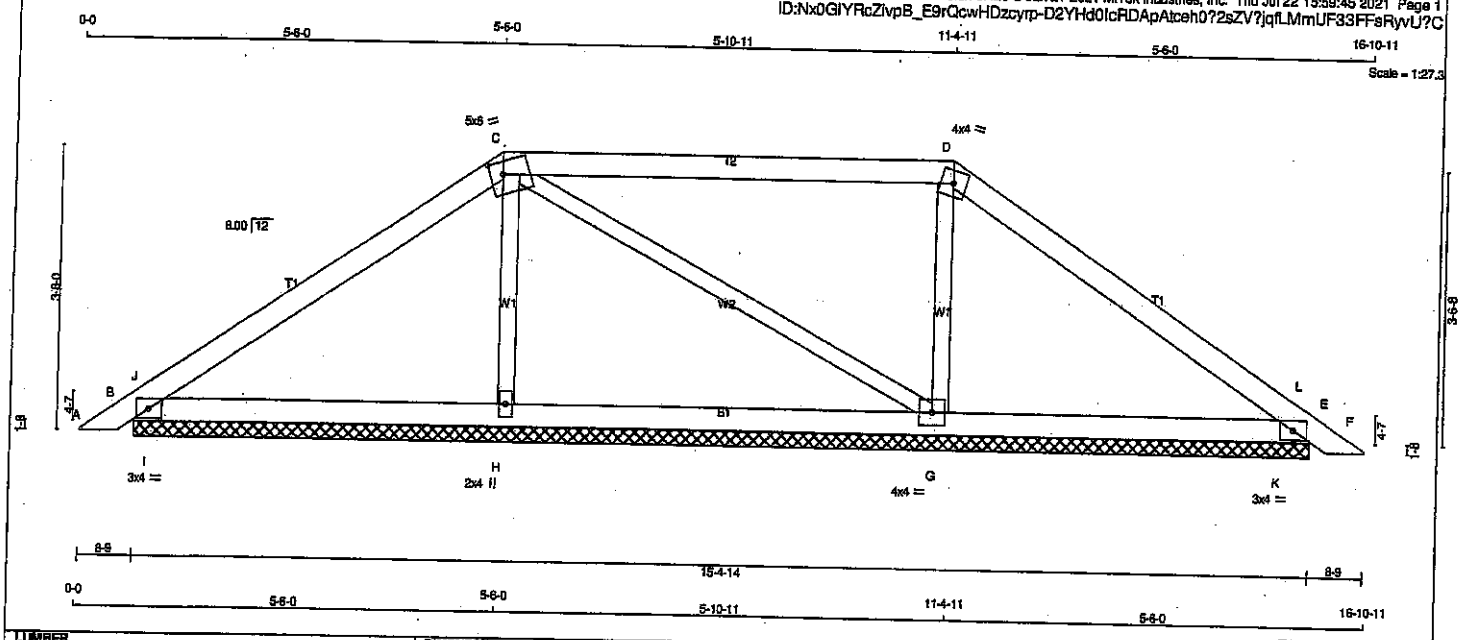

TOTAL WEIGHT = 49 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0	2.00	2.00
D	TTW-m	MT20	4.0	4.0		
E	TMB1-I	MT20	3.0	4.0		
G	BMWW1-t	MT20	4.0	4.0		
H	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	417	0	417	0	0	15-4-14	15-4-14
E	394	0	394	0	0	15-4-14	15-4-14
H	471	0	471	0	0	15-4-14	15-4-14
G	535	0	535	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	292	210 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
E	276	197 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
H	335	208 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
G	379	242 / 0	0 / 0	0 / 0	0 / 0	138 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.03 (1)	10.00	
B- J	-46 / 0	-91.8	-91.8	0.11 (1)	6.25	
J- C	-206 / 0	-91.8	-91.8	0.26 (1)	6.25	
C- D	-116 / 0	-91.8	-91.8	0.55 (1)	6.25	
D- L	-164 / 0	-91.8	-91.8	0.26 (1)	6.25	
L- E	-38 / 3	-91.8	-91.8	0.11 (1)	6.25	
E- F	0 / 15	-91.8	-91.8	0.03 (1)	10.00	
B- I	0 / 162	-18.5	-18.5	0.22 (1)	10.00	
I- H	0 / 162	-18.5	-18.5	0.22 (1)	10.00	
H- G	0 / 152	-18.5	-18.5	0.13 (4)	10.00	
G- K	0 / 128	-18.5	-18.5	0.22 (1)	10.00	
K- E	0 / 128	-18.5	-18.5	0.22 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H- C	-327 / 0	0.07 (1)
G- D	-371 / 0	0.08 (1)
C- G	-41 / 0	0.03 (1)
I- J	-478 / 0	0.00 (1)
K- L	-481 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.55/1.00 (C-D:1) , BC=0.22/1.00 (B-I:1) , WB=0.08/1.00 (D-G:1) , SSI=0.37/1.00 (E-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	798	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.34 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123950

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB5	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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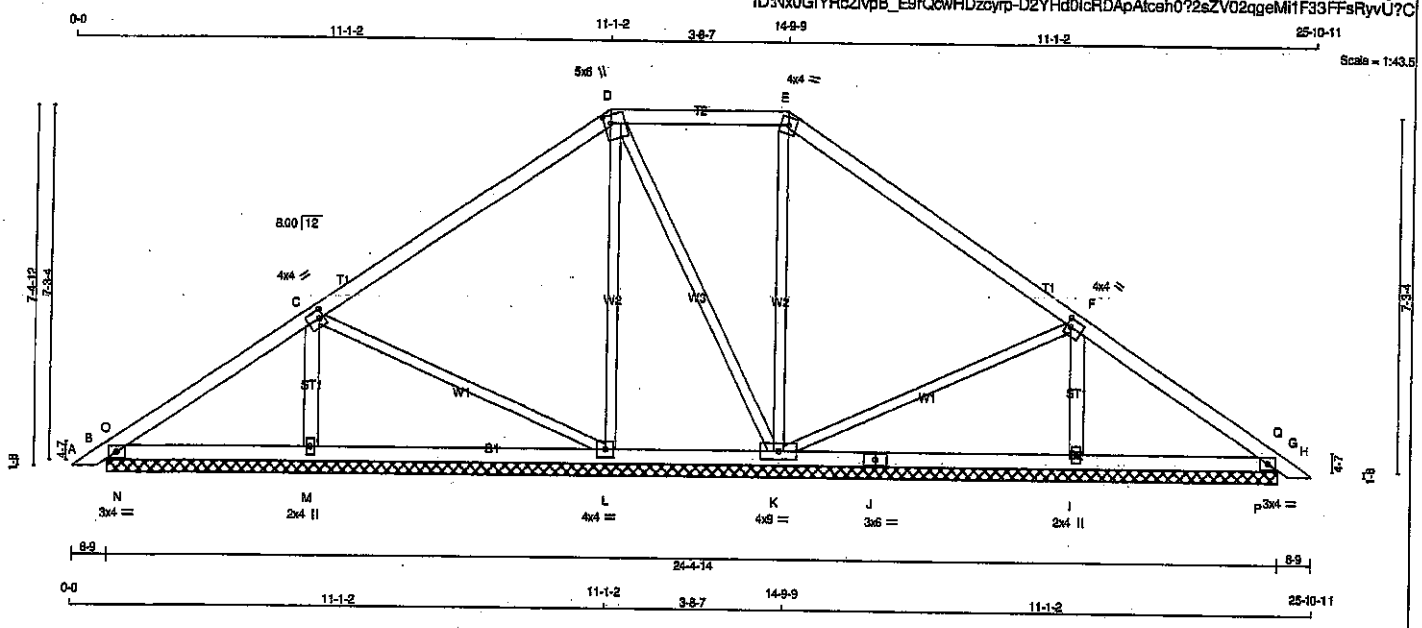

TOTAL WEIGHT = 96 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
M - C	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.00
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TTW-m	MT20	4.0	4.0		
F	TMWW-t	MT20	4.0	4.0	2.00	1.00
G	TMB1-I	MT20	3.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BS-t	MT20	3.0	6.0		
K	BMWWW1-t	MT20	4.0	9.0		
L	BMWW1-t	MT20	4.0	4.0		
M	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	268	0	268	0	0	24-4-14	(15-12#8-)14
M	684	0	684	0	0	24-4-14	(15-12#8-)14
I	648	0	648	0	0	24-4-14	(15-12#8-)14
L	333	0	333	0	0	24-4-14	(15-12#8-)14
K	625	0	625	0	0	24-4-14	(15-12#8-)14
G	250	0	250	0	0	24-4-14	(15-12#8-)14

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	188	135 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
M	483	319 / 0	0 / 0	0 / 0	0 / 0	164 / 0	0 / 0
I	459	299 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0
L	239	137 / 0	0 / 0	0 / 0	0 / 0	103 / 0	0 / 0
K	440	300 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
G	175	124 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, M, I, L, K, G

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-O	-163 / 0	-91.8	-91.8	0.02 (4)	6.25
O-C	-78 / 0	-91.8	-91.8	0.46 (1)	6.25
C-D	-116 / 0	-91.8	-91.8	0.46 (1)	6.25
D-E	-7 / 0	-91.8	-91.8	0.21 (1)	10.00
E-F	-45 / 0	-91.8	-91.8	0.46 (1)	6.25
F-Q	-45 / 0	-91.8	-91.8	0.46 (1)	6.25
Q-G	-130 / 0	-91.8	-91.8	0.02 (1)	6.25
G-H	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-N	0 / 106	-18.5	-18.5	0.04 (1)	10.00
N-M	0 / 106	-18.5	-18.5	0.14 (4)	10.00
M-L	0 / 106	-18.5	-18.5	0.14 (4)	10.00
L-K	0 / 68	-18.5	-18.5	0.10 (4)	10.00
K-J	0 / 79	-18.5	-18.5	0.14 (4)	10.00
J-I	0 / 79	-18.5	-18.5	0.14 (4)	10.00
I-P	0 / 79	-18.5	-18.5	0.14 (4)	10.00
P-G	0 / 79	-18.5	-18.5	0.04 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
M-C	-566 / 0	0.08 (1)
I-F	-530 / 0	0.07 (1)
L-D	-231 / 0	0.21 (1)
K-E	-389 / 0	0.36 (1)
D-K	-134 / 0	0.17 (1)
C-L	-38 / 0	0.03 (1)
K-F	-73 / 0	0.06 (1)
N-O	-47 / 13	0.00 (1)
P-Q	-49 / 12	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(65 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.46/1.00 (C-D:1) , BC=0.14/1.00 (M-N:4) , WB=0.36/1.00 (E-K:1) , SSI=0.22/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (C) (INPUT = 0.50)
JSI METAL= 0.16 (J) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123951

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB6	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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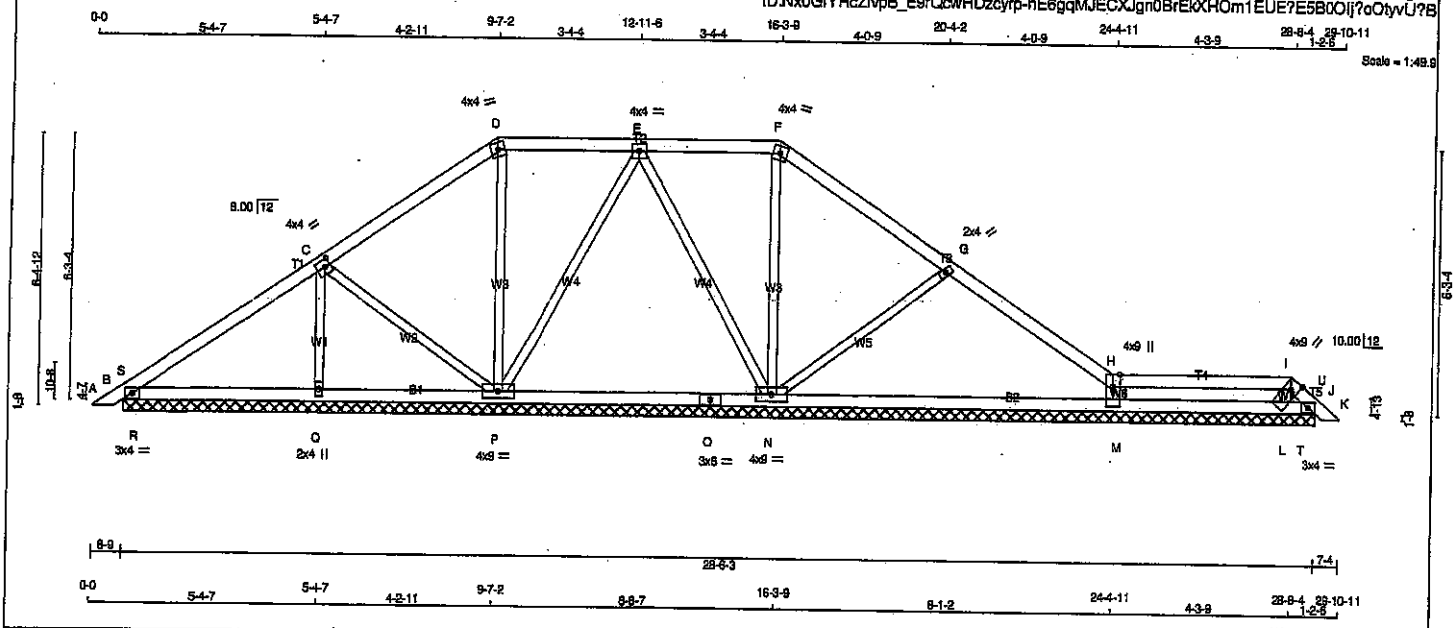

TOTAL WEIGHT = 102 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
B - O	2x4	DRY	No.2	SPF
O - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
M - H	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTW-m	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H, I, L, M						
H						
H	TTBMW1*+p	MT20	4.0	9.0	Edge	
I	TTBW1*+h	MT20	4.0	9.0	Edge	
J	TMB1-I	MT20	3.0	4.0		
N	BMWWW1-t	MT20	4.0	9.0		
O	BS-t	MT20	3.0	6.0		
P	BMWWW1-t	MT20	4.0	9.0		
Q	BMW1+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	317	0	317	0	0	28-6-3 (14-6-Z)β-6-3	
P	595	0	595	0	0	28-6-3 (14-6-Z)β-6-3	
N	982	0	982	0	0	28-6-3 (14-6-Z)β-6-3	
L	104	0	104	0	0	28-6-3 (14-6-Z)β-6-3	
M	613	0	613	0	0	28-6-3 (14-6-Z)β-6-3	
Q	420	0	420	0	0	28-6-3 (14-6-Z)β-6-3	
J	221	0	221	0	0	28-6-3 (14-6-Z)β-6-3	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	223	155 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
P	420	280 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
N	692	464 / 0	0 / 0	0 / 0	0 / 0	228 / 0	0 / 0
L	73	51 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0
M	437	266 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
Q	298	188 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
J	153	115 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, P, N, L, M, Q, J

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-S	-56 / 0	-91.8	-91.8	0.04 (1)	6.25
S-C	-83 / 0	-91.8	-91.8	0.28 (1)	6.25
C-D	0 / 22	-91.8	-91.8	0.28 (1)	10.00
D-E	0 / 46	-91.8	-91.8	0.18 (1)	10.00
E-F	0 / 113	-91.8	-91.8	0.19 (1)	10.00
F-G	0 / 104	-91.8	-91.8	0.27 (1)	10.00
G-H	-236 / 0	-91.8	-91.8	0.25 (1)	6.25
H-I	-96 / 0	-91.8	-91.8	0.29 (1)	6.25
I-U	-164 / 0	-91.8	-91.8	0.01 (1)	6.25
U-J	-189 / 0	-91.8	-91.8	0.02 (1)	6.25
J-K	0 / 14	-91.8	-91.8	0.02 (1)	10.00
B-R	0 / 88	-18.5	-18.5	0.12 (1)	10.00
R-Q	0 / 88	-18.5	-18.5	0.12 (1)	10.00
Q-P	0 / 88	-18.5	-18.5	0.10 (4)	10.00
P-O	0 / 25	-18.5	-18.5	0.24 (4)	10.00
O-N	0 / 25	-18.5	-18.5	0.24 (4)	10.00
N-M	0 / 218	-18.5	-18.5	0.24 (4)	10.00
M-L	0 / 96	-18.5	-18.5	0.21 (4)	10.00
L-T	0 / 113	-18.5	-18.5	0.02 (1)	10.00
T-J	0 / 113	-18.5	-18.5	0.02 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
P-D	-287 / 0	0.18 (1)
N-F	-332 / 0	0.21 (1)
L-I	-95 / 0	0.01 (1)
M-H	-492 / 0	0.05 (1)
N-G	-408 / 0	0.19 (1)
Q-C	-303 / 0	0.06 (1)
C-P	-159 / 0	0.08 (1)
P-E	-149 / 0	0.13 (1)
E-N	-290 / 0	0.25 (1)
R-S	-248 / 12	0.00 (1)
T-U	0 / 13	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.29/1.00 (H-I:1) , BC=0.24/1.00 (M-N:4) , WB=0.25/1.00 (E-N:1) , SSI=0.20/1.00 (B-R:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	789	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (I) (INPUT = 0.90)
JSI METAL= 0.13 (F) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123952

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	PB7	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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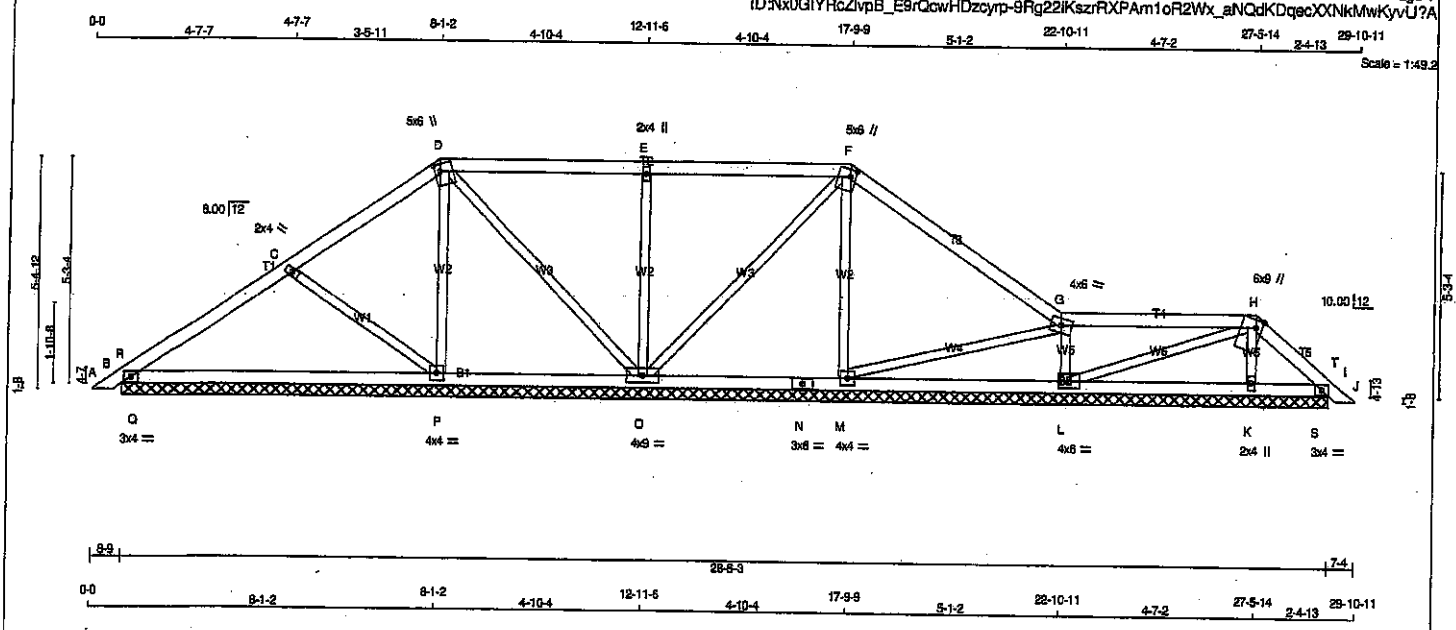

TOTAL WEIGHT = 106 lb (M)

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
B - N	2x4	DRY	No.2	SPF
N - I	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	5.0	6.0	2.00	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	1.50
G	TTWW-m	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	Edge	1.75
I	TMB1-I	MT20	3.0	4.0		
K	BMW1+w	MT20	2.0	4.0		
L	BMWW1-t	MT20	4.0	6.0		
M	BMWW1-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMWWW1-t	MT20	4.0	9.0		
P	BMWW1-t	MT20	4.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	430	0	430	0	0	28-6-3 (15-11	28-6-3
P	621	0	621	0	0	28-6-3 (15-11	28-6-3
M	381	0	381	0	0	28-6-3 (15-11	28-6-3
O	779	0	779	0	0	28-6-3 (15-11	28-6-3
L	556	0	556	0	0	28-6-3 (15-11	28-6-3
K	305	0	305	0	0	28-6-3 (15-11	28-6-3
I	178	0	178	0	0	28-6-3 (15-11	28-6-3

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	303	205 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 0
P	442	274 / 0	0 / 0	0 / 0	0 / 0	168 / 0	0 / 0
M	273	158 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
O	544	395 / 0	0 / 0	0 / 0	0 / 0	150 / 0	0 / 0
L	394	257 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0
K	217	134 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0
I	124	96 / 0	0 / 0	0 / 0	0 / 0	28 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, P, M, O, L, K, I

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-R	-447 / 0	-91.8	-91.8	0.13 (4)	6.25
R-C	-292 / 0	-91.8	-91.8	0.21 (1)	6.25
C-D	-3 / 23	-91.8	-91.8	0.21 (1)	10.00
D-E	0 / 90	-91.8	-91.8	0.38 (1)	10.00
E-F	0 / 90	-91.8	-91.8	0.38 (1)	10.00
F-G	-27 / 0	-91.8	-91.8	0.41 (1)	6.25
G-H	-7 / 0	-91.8	-91.8	0.33 (1)	10.00
H-T	-69 / 0	-91.8	-91.8	0.03 (1)	6.25
T-I	-47 / 0	-91.8	-91.8	0.01 (1)	6.25
I-J	0 / 14	-91.8	-91.8	0.02 (1)	10.00
B-Q	0 / 269	-18.5	-18.5	0.11 (4)	10.00
Q-P	0 / 269	-18.5	-18.5	0.20 (4)	10.00
P-O	-45 / 0	-18.5	-18.5	0.18 (4)	6.25
O-N	0 / 17	-18.5	-18.5	0.10 (4)	10.00
N-M	0 / 17	-18.5	-18.5	0.10 (4)	10.00
M-L	0 / 37	-18.5	-18.5	0.10 (4)	10.00
L-K	0 / 35	-18.5	-18.5	0.09 (4)	10.00
K-S	0 / 50	-18.5	-18.5	0.05 (4)	10.00
S-I	0 / 50	-18.5	-18.5	0.04 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
P-D	-267 / 0	0.11 (1)
M-F	-277 / 0	0.11 (1)
O-E	-556 / 0	0.23 (1)
D-O	-64 / 0	0.06 (1)
O-F	-152 / 0	0.13 (1)
L-G	-456 / 0	0.07 (1)
K-H	-223 / 0	0.03 (1)
L-H	-30 / 0	0.01 (1)
M-G	-15 / 0	0.01 (1)
C-P	-378 / 0	0.13 (1)
Q-R	0 / 219	0.00 (1)
S-T	-111 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.41/1.00 (F-G:1) , BC=0.20/1.00 (P-Q:4) , WB=0.23/1.00 (E-O:1) , SSI=0.22/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) MAX	MIN	SHEAR (PSI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.67 (M) (INPUT = 0.90)
JSI METAL= 0.12 (C) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123953

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	PB30	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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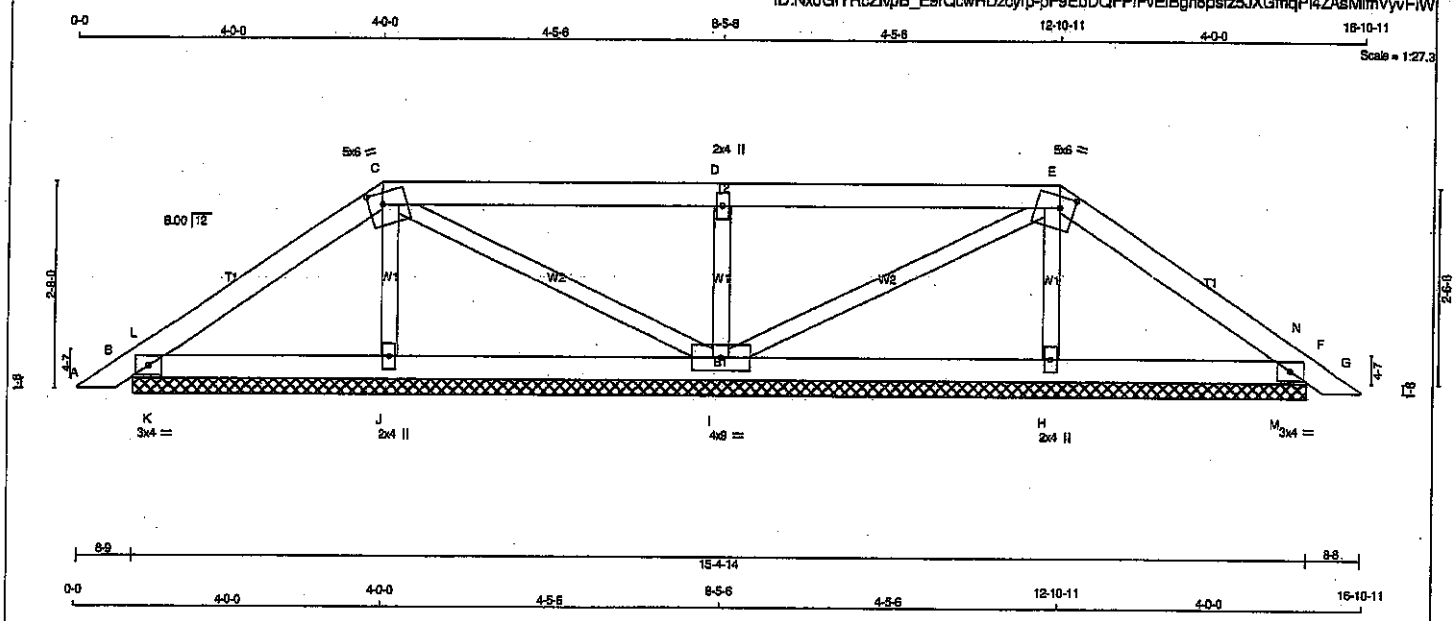

TOTAL WEIGHT = 51 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW-m	MT20	5.0	6.0	1.75	2.25
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	5.0	6.0	1.75	2.25
F	TMB1-I	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMWWW1-I	MT20	4.0	9.0		
J	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	273	0	273	0	0	15-4-14	15-4-14
F	273	0	273	0	0	15-4-14	15-4-14
J	324	0	324	0	0	15-4-14	15-4-14
I	622	0	622	0	0	15-4-14	15-4-14
H	324	0	324	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	191	138 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
F	191	138 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
J	231	138 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
I	438	300 / 0	0 / 0	0 / 0	0 / 0	137 / 0	0 / 0
H	231	138 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, J, I, H

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B- L	-28 / 0	-91.8	-91.8	0.04 (1)	6.25
L- C	-88 / 0	-91.8	-91.8	0.12 (1)	6.25
C- D	-14 / 0	-91.8	-91.8	0.31 (1)	6.25
D- E	-14 / 0	-91.8	-91.8	0.31 (1)	6.25
E- N	-88 / 0	-91.8	-91.8	0.12 (1)	6.25
N- F	-28 / 0	-91.8	-91.8	0.04 (1)	6.25
F- G	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B- K	0 / 69	-18.5	-18.5	0.11 (1)	10.00
K- J	0 / 69	-18.5	-18.5	0.11 (1)	10.00
J- I	0 / 59	-18.5	-18.5	0.07 (1)	10.00
I- H	0 / 59	-18.5	-18.5	0.07 (1)	10.00
H- M	0 / 69	-18.5	-18.5	0.11 (1)	10.00
M- F	0 / 69	-18.5	-18.5	0.11 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- C	-211 / 0	0.03 (1)
C- I	-49 / 0	0.02 (1)
I- D	-509 / 0	0.08 (1)
I- E	-49 / 0	0.02 (1)
H- E	-211 / 0	0.03 (1)
K- L	-245 / 0	0.00 (1)
M- N	-244 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.31/1.00 (C-D:1) , BC=0.11/1.00 (B-K:1) , WB=0.08/1.00 (D-I:1) , SSI=0.20/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (D) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123986

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	PB31	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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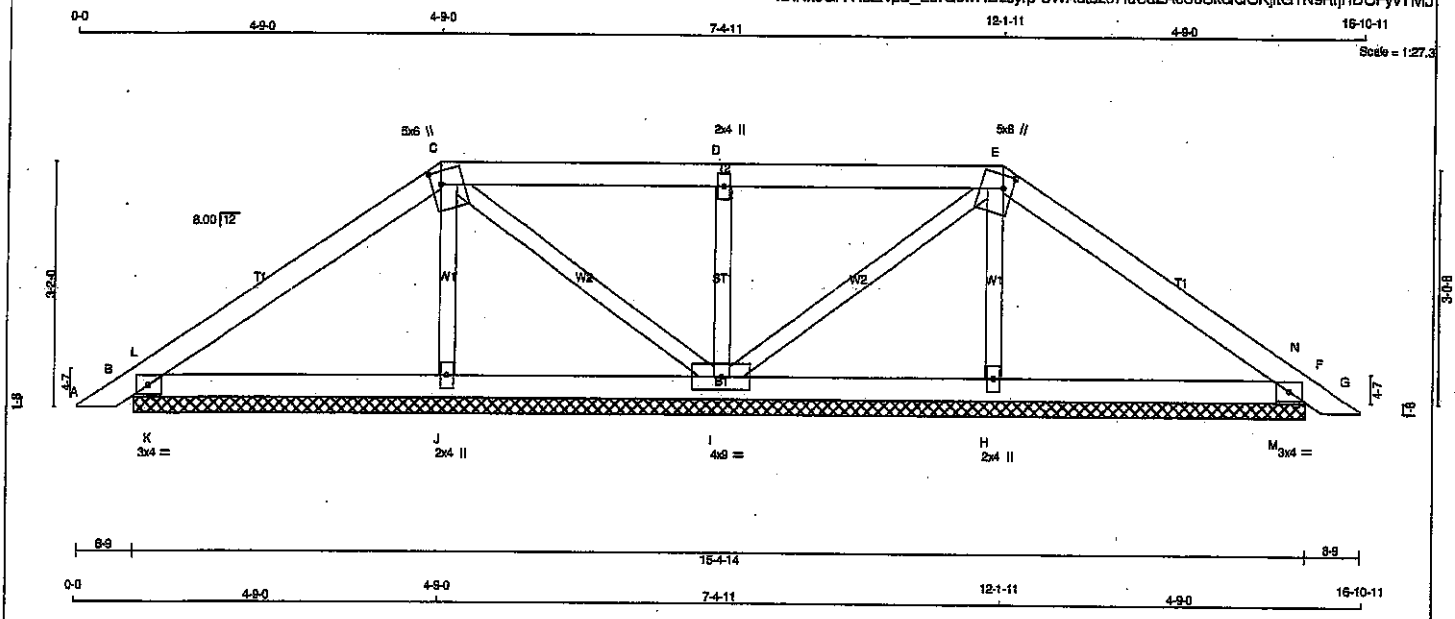

TOTAL WEIGHT = 3 X 52 = 155 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS		
A- C 1	12	TOP
C- E 1	12	TOP
E- G 1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS		
B- F 1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS		
2x3 1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.00	1.50
F	TMB1-I	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BMWWW1-t	MT20	4.0	9.0		
J	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123987

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	329	0	329	0	0	15-4-14	15-4-14
F	329	0	329	0	0	15-4-14	15-4-14
I	540	0	540	0	0	15-4-14	15-4-14
J	309	0	309	0	0	15-4-14	15-4-14
H	309	0	309	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	230	164 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
F	230	164 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
I	379	257 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
J	221	130 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0
H	221	130 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, I, J, H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 15	-91.8	-91.8	0.01 (1)	10.00	
B- L	-34 / 0	-91.8	-91.8	0.02 (1)	6.25	
L- C	-119 / 0	-91.8	-91.8	0.06 (1)	6.25	
C- D	-26 / 0	-91.8	-91.8	0.07 (1)	6.25	
D- E	-26 / 0	-91.8	-91.8	0.07 (1)	6.25	
E- N	-119 / 0	-91.8	-91.8	0.06 (1)	6.25	
N- F	-34 / 0	-91.8	-91.8	0.02 (1)	6.25	
F- G	0 / 15	-91.8	-91.8	0.01 (1)	10.00	
B- K	0 / 92	-18.5	-18.5	0.05 (1)	10.00	
K- J	0 / 92	-18.5	-18.5	0.05 (1)	10.00	
J- I	0 / 85	-18.5	-18.5	0.03 (1)	10.00	
I- H	0 / 85	-18.5	-18.5	0.03 (1)	10.00	
H- M	0 / 92	-18.5	-18.5	0.05 (1)	10.00	
M- F	0 / 92	-18.5	-18.5	0.05 (1)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
I- D	-423 / 0	0.03 (1)
J- C	-178 / 0	0.01 (1)
H- E	-178 / 0	0.01 (1)
C- I	-73 / 0	0.01 (1)
I- E	-73 / 0	0.01 (1)
K- L	-349 / 0	0.00 (1)
M- N	-349 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.07/1.00 (C-D:1) , BC=0.05/1.00 (H-M:1) , WB=0.03/1.00 (D-I:1) , SSI=0.09/1.00 (F-M:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.09 (B) (INPUT = 0.90)
JSI METAL= 0.03 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	PB32	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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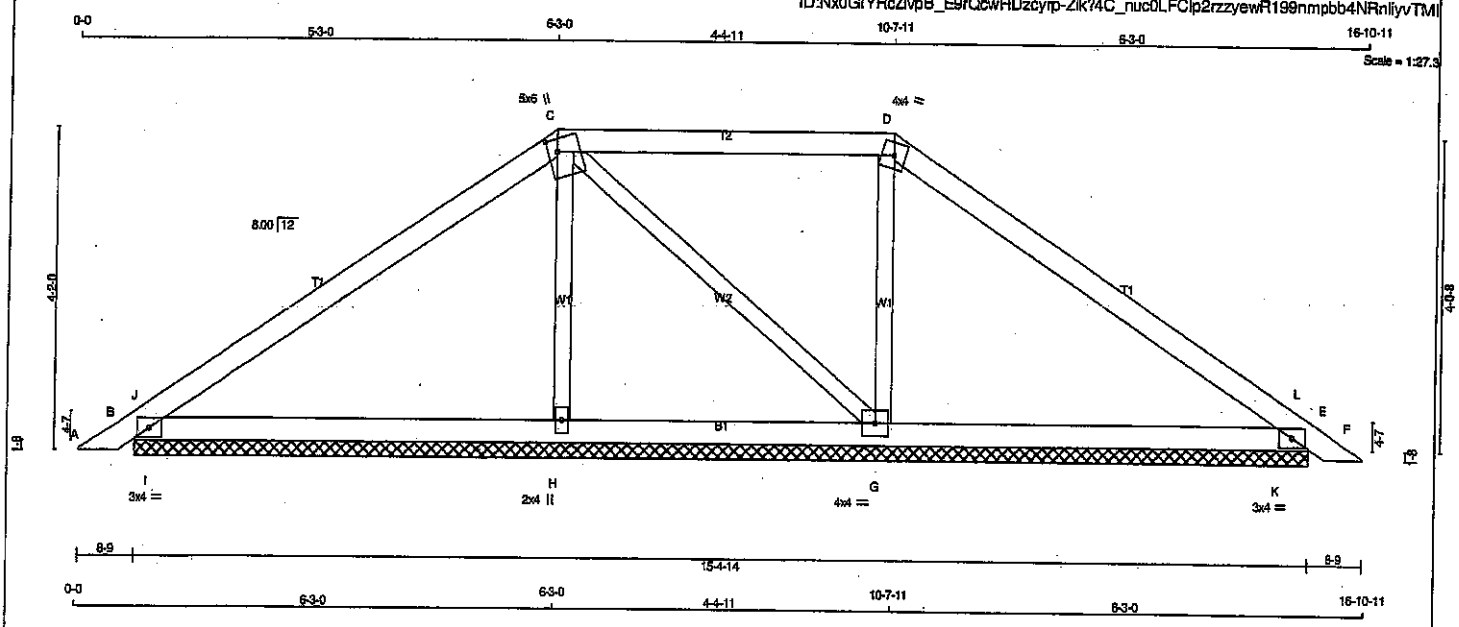

TOTAL WEIGHT = 50 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTWW+m	MT20	5.0	6.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMB1-I	MT20	3.0	4.0		
G	BMWW1-t	MT20	4.0	4.0		
H	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	486	0	486	0	0	15-4-14	15-4-14
E	458	0	458	0	0	15-4-14	15-4-14
H	385	0	385	0	0	15-4-14	15-4-14
G	486	0	486	0	0	15-4-14	15-4-14

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	341	240 / 0	0 / 0	0 / 0	0 / 0	100 / 0	0 / 0
E	321	224 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
H	275	165 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0
G	345	224 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-J	-71 / 0	-91.8	-91.8	0.16 (1)	6.25
J-C	-258 / 0	-91.8	-91.8	0.35 (1)	6.25
C-D	-154 / 0	-91.8	-91.8	0.30 (1)	6.25
D-L	-205 / 0	-91.8	-91.8	0.35 (1)	6.25
L-E	-63 / 30	-91.8	-91.8	0.16 (1)	6.25
E-F	0 / 15	-91.8	-91.8	0.03 (1)	10.00
B-I	0 / 204	-18.5	-18.5	0.29 (1)	10.00
I-H	0 / 204	-18.5	-18.5	0.29 (1)	10.00
H-G	0 / 197	-18.5	-18.5	0.16 (1)	10.00
G-K	0 / 163	-18.5	-18.5	0.29 (1)	10.00
K-E	0 / 163	-18.5	-18.5	0.29 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
H-C	-244 / 0	0.06 (1)
G-D	-309 / 0	0.06 (1)
C-G	-57 / 0	0.03 (1)
I-J	-622 / 0	0.00 (1)
K-L	-627 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.35/1.00 (C-J:1) , BC=0.29/1.00 (B-I:1) , WB=0.08/1.00 (D-G:1) , SSI=0.49/1.00 (E-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (B) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. GALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123988

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB50	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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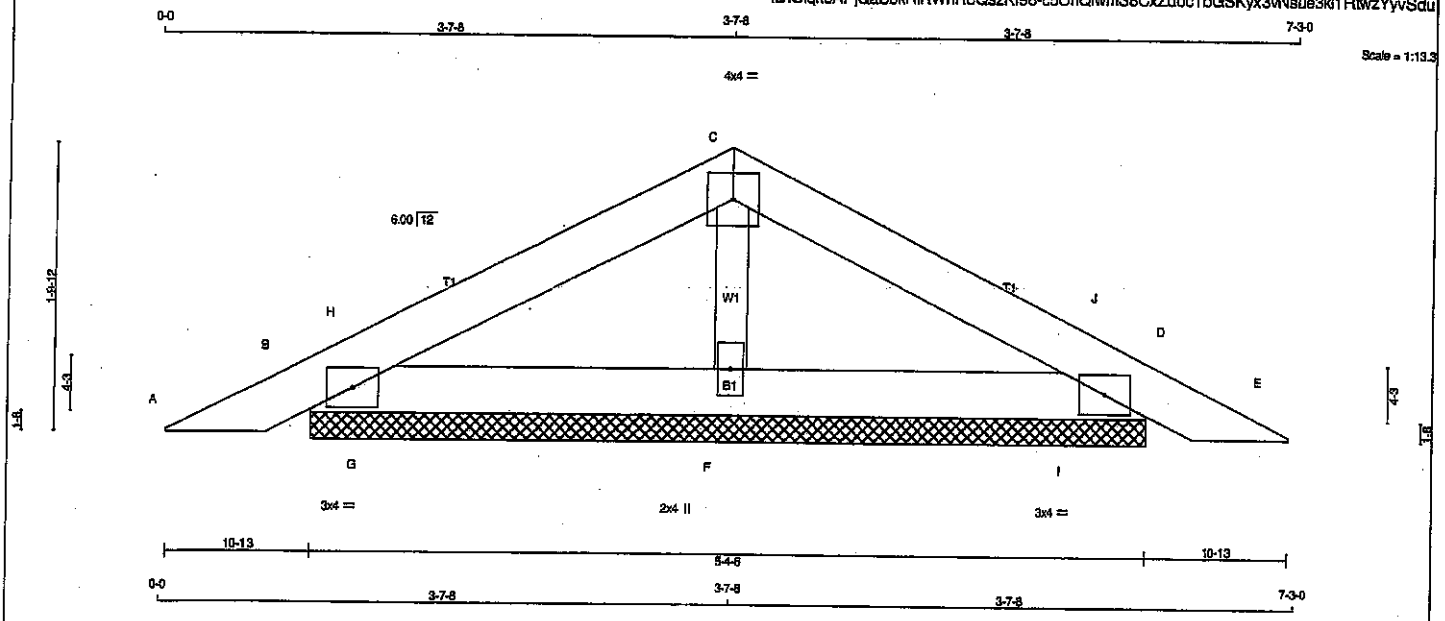

TOTAL WEIGHT = 2 X 16 = 32 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMB1-I	MT20	3.0	4.0	
C	TTW-p	MT20	4.0	4.0	
D	TMB1-I	MT20	3.0	4.0	
F	BMW1+w	MT20	2.0	4.0	

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	234	0	234	0	0	5-4-6	5-4-6
D	234	0	234	0	0	5-4-6	5-4-6
F	279	0	279	0	0	5-4-6	5-4-6

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	163	118 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
D	163	118 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
F	198	124 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- H	-44 / 0	-91.8	-91.8	0.02 (1)	6.25
H- C	-59 / 0	-91.8	-91.8	0.07 (1)	6.25
C- J	-59 / 0	-91.8	-91.8	0.07 (1)	6.25
J- D	-44 / 0	-91.8	-91.8	0.02 (1)	6.25
D- E	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- G	0 / 50	-18.5	-18.5	0.08 (1)	10.00
G- F	0 / 50	-18.5	-18.5	0.08 (1)	10.00
F- I	0 / 50	-18.5	-18.5	0.08 (1)	10.00
I- D	0 / 50	-18.5	-18.5	0.08 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-148 / 0	0.02 (1)
G- H	-151 / 0	0.00 (1)
I- J	-151 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.07/1.00 (C-J:1) , BC=0.08/1.00 (F-I:1) , WB=0.02/1.00 (C-F:1) , SSI=0.11/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124016

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB50Z	1	3	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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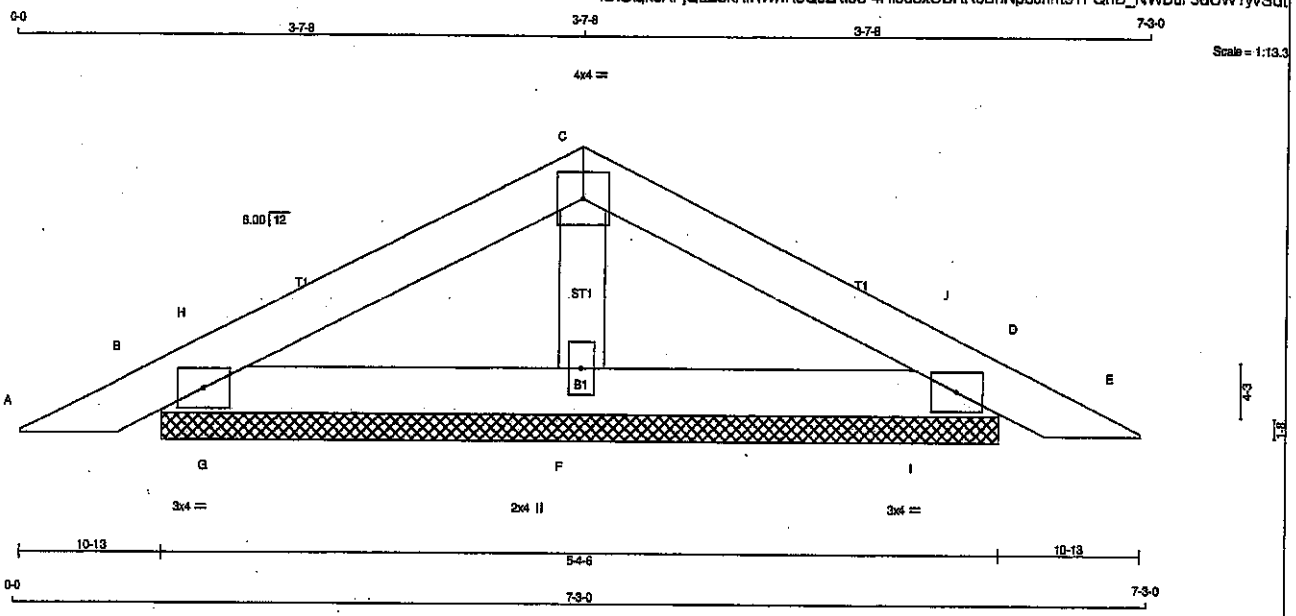

TOTAL WEIGHT = 3 X 16 = 49 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"X3") SPIRAL NAILS			
A- C	1	12	TOP
C- E	1	12	TOP
BOTTOM CHORDS : (0.122"X3") SPIRAL NAILS			
B- D	1	12	TOP
WEBS : (0.122"X3") SPIRAL NAILS			
2x4	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTW-p	MT20	4.0	4.0		
D	TMB1-I	MT20	3.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	231	0	231	0	0	5-4-6	5-4-6
D	231	0	231	0	0	5-4-6	5-4-6
F	283	0	283	0	0	5-4-6	5-4-6

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
B	162	117 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
D	162	117 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
F	201	127 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 16	-91.8	-91.8	0.02 (1)	10.00
B- H	-40 / 0	-91.8	-91.8	0.00 (1)	6.25
H- C	-53 / 0	-91.8	-91.8	0.02 (1)	6.25
C- J	-53 / 0	-91.8	-91.8	0.02 (1)	6.25
J- D	-40 / 0	-91.8	-91.8	0.00 (1)	6.25
D- E	0 / 16	-91.8	-91.8	0.02 (1)	10.00
B- G	0 / 45	-18.5	-18.5	0.03 (1)	10.00
G- F	0 / 45	-18.5	-18.5	0.03 (1)	10.00
F- I	0 / 45	-18.5	-18.5	0.03 (1)	10.00
I- D	0 / 45	-18.5	-18.5	0.03 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
F- C	-154 / 0	0.01 (1)
G- H	-148 / 0	0.00 (1)
I- J	-148 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD		39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.02/1.00 (C-J:1) , BC=0.03/1.00 (F-I:1) , WB=0.01/1.00 (C-F:1) , SSI=0.03/1.00 (B-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	798	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.06 (B) (INPUT = 0.90)
JSI METAL= 0.01 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124017

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB51	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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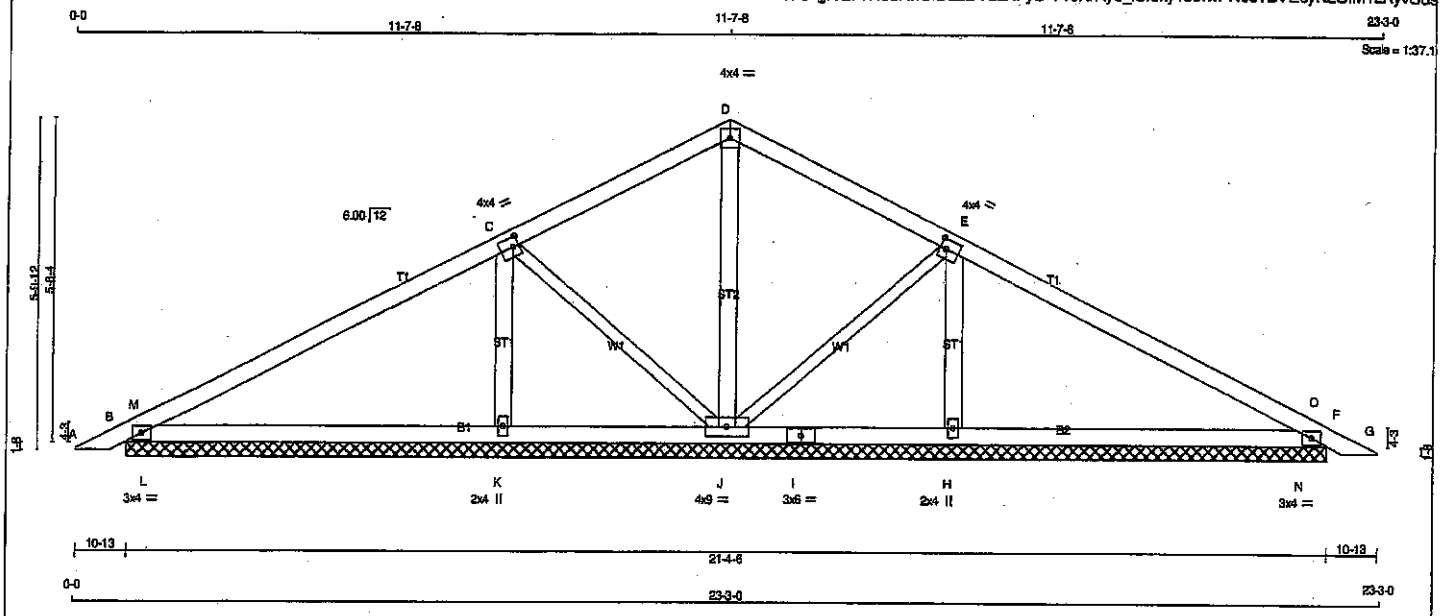

TOTAL WEIGHT = 75 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
C - J	2x3	DRY	No.2	SPF
J - E	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-t	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTW-p	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.25
F	TMB1-t	MT20	3.0	4.0		
H	BMW1+w	MT20	2.0	4.0		
I	BS-t	MT20	3.0	6.0		
J	BMWWW1-t	MT20	4.0	9.0		
K	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	446	0	446	0	0	21-4-6 (11-11	24-6
J	396	0	396	0	0	21-4-6 (11-11	24-6
K	611	0	611	0	0	21-4-6 (11-11	24-6
H	611	0	611	0	0	21-4-6 (11-11	24-6
F	446	0	446	0	0	21-4-6 (11-11	24-6

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	314	216 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
J	278	197 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
K	434	275 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0
H	434	275 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0
F	314	216 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, J, K, H, F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- M	-72 / 0	-91.8	-91.8	0.11 (1)	6.25
M- C	-139 / 0	-91.8	-91.8	0.45 (1)	6.25
C- D	-49 / 0	-91.8	-91.8	0.45 (1)	6.25
D- E	-49 / 0	-91.8	-91.8	0.45 (1)	6.25
E- O	-139 / 0	-91.8	-91.8	0.45 (1)	6.25
O- F	-72 / 0	-91.8	-91.8	0.11 (1)	6.25
F- G	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- L	0 / 140	-18.5	-18.5	0.28 (1)	10.00
L- K	0 / 140	-18.5	-18.5	0.28 (1)	10.00
K- J	0 / 140	-18.5	-18.5	0.22 (1)	10.00
J- I	0 / 140	-18.5	-18.5	0.22 (1)	10.00
I- H	0 / 140	-18.5	-18.5	0.22 (1)	10.00
H- N	0 / 140	-18.5	-18.5	0.28 (1)	10.00
N- F	0 / 140	-18.5	-18.5	0.28 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
J- D	-192 / 0	0.07 (1)
K- C	-418 / 0	0.07 (1)
H- E	-418 / 0	0.07 (1)
C- J	-170 / 0	0.08 (1)
J- E	-170 / 0	0.08 (1)
L- M	-459 / 12	0.00 (1)
N- O	-459 / 12	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.45/1.00 (C-M:1) , BC=0.28/1.00 (K-L:1) , WB=0.08/1.00 (C-J:1) , SSI=0.37/1.00 (B-L:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.47 (E) (INPUT = 0.90)
JSI METAL= 0.09 (K) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H.J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124018

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB52	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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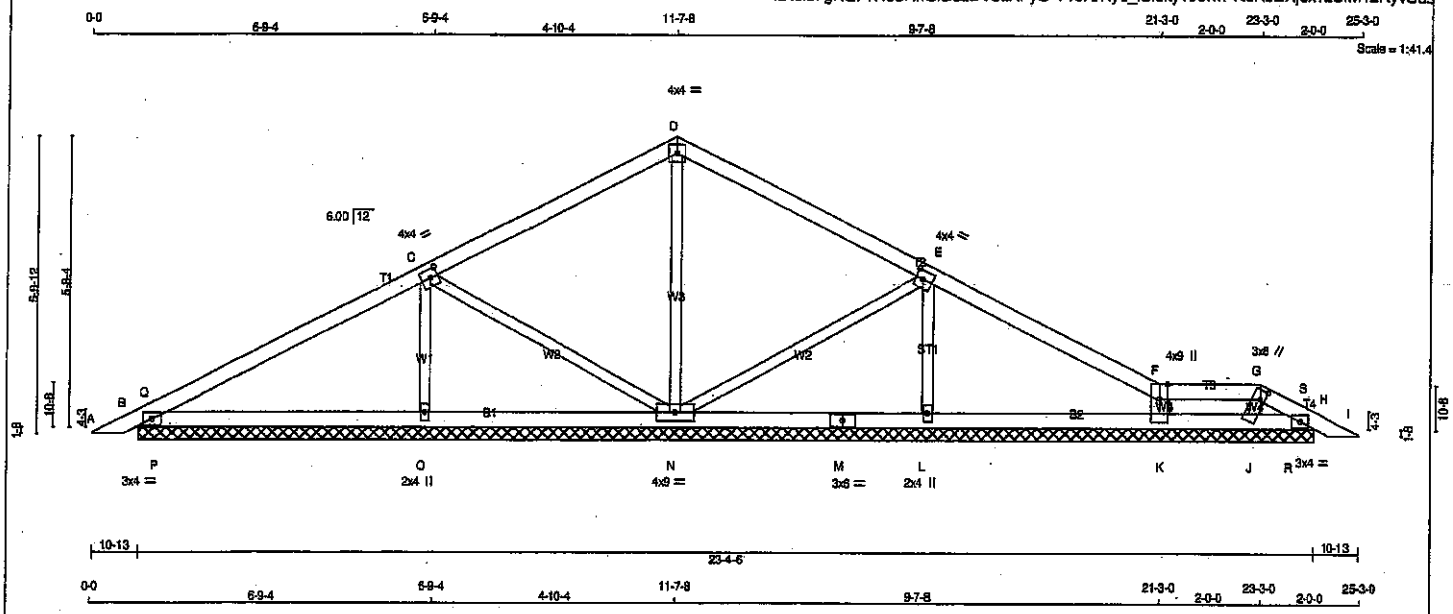

TOTAL WEIGHT = 76 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
B - M	2x4	DRY	No.2	SPF
M - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTW-p	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F, G, J, K						
F						
F	TTBMW1*+p	MT20	4.0	9.0	Edge	
G	TTBW1*+h	MT20	3.0	8.0	2.25	1.00
H	TMB1-I	MT20	3.0	4.0		
L	BMW1+w	MT20	2.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMWWW1-t	MT20	4.0	9.0		
O	BMW1+w	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	383	0	383	0	0	23-4-6 (13-11	24-6
L	577	0	577	0	0	23-4-6 (13-11	24-6
J	96	0	96	0	0	23-4-6 (13-11	24-6
K	356	0	356	0	0	23-4-6 (13-11	24-6
N	516	0	516	0	0	23-4-6 (13-11	24-6
O	608	0	608	0	0	23-4-6 (13-11	24-6
H	193	0	193	0	0	23-4-6 (13-11	24-6

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
L	408	269 / 0	0 / 0	0 / 0	0 / 0	139 / 0	0 / 0
J	67	49 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
K	253	158 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0
N	366	239 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
O	431	280 / 0	0 / 0	0 / 0	0 / 0	151 / 0	0 / 0
H	134	100 / 0	0 / 0	0 / 0	0 / 0	34 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, L, J, K, N, O, H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- Q	-97 / 0	-91.8	-91.8	0.05 (1)	6.25
Q- C	-112 / 0	-91.8	-91.8	0.41 (1)	6.25
C- D	-35 / 0	-91.8	-91.8	0.41 (1)	6.25
D- E	-32 / 0	-91.8	-91.8	0.36 (1)	6.25
E- F	-58 / 0	-91.8	-91.8	0.36 (1)	6.25
F- G	-24 / 0	-91.8	-91.8	0.06 (1)	6.25
G- S	-48 / 0	-91.8	-91.8	0.01 (1)	6.25
S- H	-87 / 0	-91.8	-91.8	0.04 (1)	6.25
H- I	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- P	0 / 121	-18.5	-18.5	0.18 (1)	10.00
P- O	0 / 121	-18.5	-18.5	0.19 (1)	10.00
O- N	0 / 121	-18.5	-18.5	0.14 (1)	10.00
N- M	0 / 75	-18.5	-18.5	0.10 (4)	10.00
M- L	0 / 75	-18.5	-18.5	0.10 (4)	10.00
L- K	0 / 75	-18.5	-18.5	0.10 (4)	10.00
K- J	0 / 24	-18.5	-18.5	0.06 (4)	10.00
J- R	0 / 41	-18.5	-18.5	0.01 (1)	10.00
R- H	0 / 41	-18.5	-18.5	0.01 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
L- E	-480 / 0	0.09 (1)
J- G	-99 / 0	0.01 (1)
K- F	-268 / 0	0.04 (1)
N- D	-338 / 0	0.16 (1)
N- E	-78 / 0	0.04 (1)
O- C	-460 / 0	0.09 (1)
C- N	-131 / 0	0.07 (1)
P- Q	-285 / 15	0.00 (1)
R- S	0 / 28	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 **IN. C/C**

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.8 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.41/1.00 (C-Q:1) , BC=0.19/1.00 (O-P:1) , WB=0.16/1.00 (D-N:1) , SSI=0.23/1.00 (B-P:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (G) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124019

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB53	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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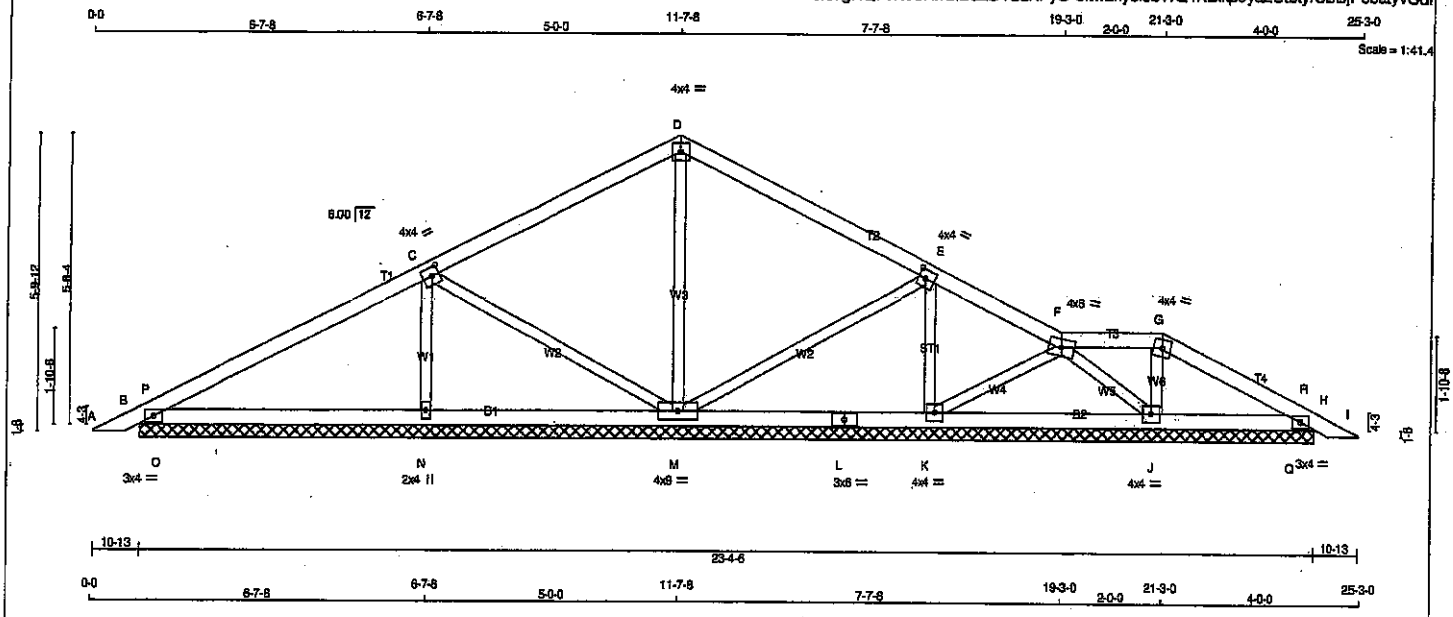

TOTAL WEIGHT = 81 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
B - L	2x4	DRY	No.2	SPF
L - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTW-p	MT20	4.0	4.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.75
F	TTWW-m	MT20	4.0	6.0		
G	TTW-m	MT20	4.0	4.0		
H	TMB1-I	MT20	3.0	4.0		
J	BMWW1-t	MT20	4.0	4.0		
K	BMWW1-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMWWW1-t	MT20	4.0	9.0		
N	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	384	0	384	0	0	23-4-6 (9-4-10)	23-4-6
K	564	0	564	0	0	23-4-6 (9-4-10)	23-4-6
J	414	0	414	0	0	23-4-6 (9-4-10)	23-4-6
M	513	0	513	0	0	23-4-6 (9-4-10)	23-4-6
N	610	0	610	0	0	23-4-6 (9-4-10)	23-4-6
H	246	0	246	0	0	23-4-6 (9-4-10)	23-4-6

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	270	188 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
K	399	263 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0
J	293	189 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
M	363	235 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
N	432	281 / 0	0 / 0	0 / 0	0 / 0	151 / 0	0 / 0
H	172	125 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, K, J, M, N, H

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB: FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A-B	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B-P	-99 / 0	-91.8	-91.8	0.05 (1)	6.25
P-C	-114 / 0	-91.8	-91.8	0.41 (1)	6.25
C-D	-39 / 0	-91.8	-91.8	0.41 (1)	6.25
D-E	-32 / 0	-91.8	-91.8	0.29 (1)	6.25
E-F	-28 / 0	-91.8	-91.8	0.29 (1)	6.25
F-G	-9 / 0	-91.8	-91.8	0.05 (1)	10.00
G-R	-27 / 0	-91.8	-91.8	0.10 (1)	6.25
R-H	-12 / 0	-91.8	-91.8	0.02 (1)	6.25
H-I	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B-O	0 / 122	-18.5	-18.5	0.16 (1)	10.00
O-N	0 / 122	-18.5	-18.5	0.19 (1)	10.00
N-M	0 / 122	-18.5	-18.5	0.14 (1)	10.00
M-L	0 / 58	-18.5	-18.5	0.09 (4)	10.00
L-K	0 / 58	-18.5	-18.5	0.09 (4)	10.00
K-J	0 / 140	-18.5	-18.5	0.09 (4)	10.00
J-Q	0 / 22	-18.5	-18.5	0.09 (1)	10.00
Q-H	0 / 22	-18.5	-18.5	0.09 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
K-E	-425 / 0	0.08 (1)
J-G	-198 / 0	0.03 (1)
M-D	-345 / 0	0.17 (1)
N-C	-462 / 0	0.09 (1)
C-M	-128 / 0	0.07 (1)
M-E	-53 / 0	0.03 (1)
K-F	-97 / 0	0.02 (1)
F-J	-171 / 0	0.03 (1)
Q-P	-284 / 15	0.00 (1)
Q-R	-171 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN.C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.41/1.00 (C-P:1) , BC=0.19/1.00 (N-O:1) , WB=0.17/1.00 (D-M:1) , SSI=0.23/1.00 (B-O:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.59 (G) (INPUT = 0.90)
JSI METAL= 0.11 (D) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124020

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	PB54	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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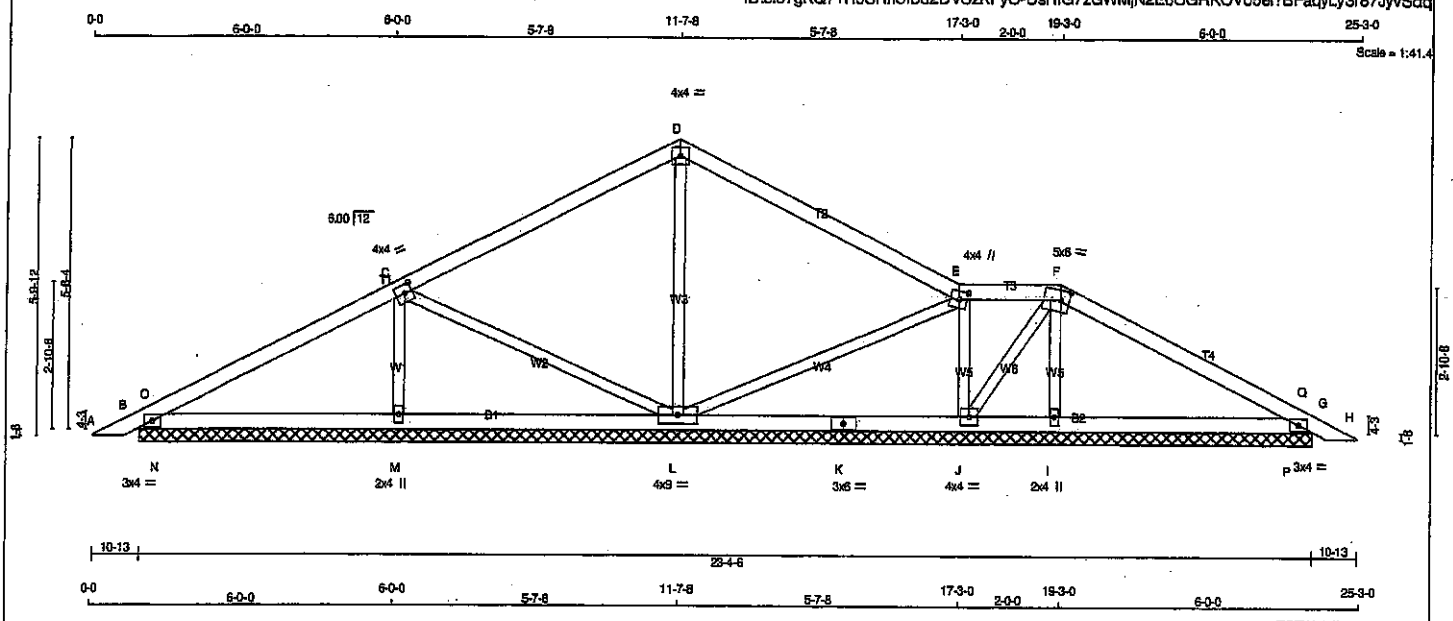

TOTAL WEIGHT = 80 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
B - K	2x4	DRY	No.2	SPF
K - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TTW-p	MT20	4.0	4.0		
E	TTWW+m	MT20	4.0	4.0	2.00	1.75
F	TTWW-m	MT20	5.0	6.0	2.25	2.00
G	TMB1-I	MT20	3.0	4.0		
I	BMW1+w	MT20	2.0	4.0		
J	BMWW1-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW1-t	MT20	4.0	9.0		
M	BMW1+w	MT20	2.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
B	348	0	348	0	0	23-4-6 (9-4-10	3-4-6
L	554	0	554	0	0	23-4-6 (9-4-10	3-4-6
I	311	0	311	0	0	23-4-6 (9-4-10	3-4-6
J	469	0	469	0	0	23-4-6 (9-4-10	3-4-6
M	652	0	652	0	0	23-4-6 (9-4-10	3-4-6
G	396	0	396	0	0	23-4-6 (9-4-10	3-4-6

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	244	171 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
L	394	249 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0
I	221	140 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0
J	331	221 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
M	461	305 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
G	278	195 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, L, I, J, M, G

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- O	-124 / 0	-91.8	-91.8	0.04 (4)	6.25
O- C	-104 / 0	-91.8	-91.8	0.42 (1)	6.25
C- D	-77 / 0	-91.8	-91.8	0.42 (1)	6.25
D- E	-52 / 0	-91.8	-91.8	0.50 (1)	6.25
E- F	-49 / 0	-91.8	-91.8	0.06 (1)	6.25
F- Q	-137 / 0	-91.8	-91.8	0.29 (1)	6.25
Q- G	-43 / 0	-91.8	-91.8	0.10 (1)	6.25
G- H	0 / 16	-91.8	-91.8	0.05 (1)	10.00
B- N	0 / 118	-18.5	-18.5	0.13 (1)	10.00
N- M	0 / 118	-18.5	-18.5	0.14 (1)	10.00
M- L	0 / 118	-18.5	-18.5	0.13 (4)	10.00
L- K	0 / 64	-18.5	-18.5	0.13 (4)	10.00
K- J	0 / 64	-18.5	-18.5	0.13 (4)	10.00
J- I	0 / 110	-18.5	-18.5	0.16 (1)	10.00
I- P	0 / 116	-18.5	-18.5	0.25 (1)	10.00
P- G	0 / 116	-18.5	-18.5	0.25 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)
L- D	-409 / 0	0.20 (1)
I- F	-149 / 0	0.03 (1)
J- E	-365 / 0	0.06 (1)
L- E	-20 / 0	0.01 (1)
M- C	-520 / 0	0.09 (1)
C- L	-79 / 0	0.05 (1)
J- F	-102 / 0	0.02 (1)
N- O	-189 / 17	0.00 (1)
P- Q	-423 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.50/1.00 (D-E:1) , BC=0.25/1.00 (I-P:1) , WB=0.20/1.00 (D-L:1) , SSI=0.32/1.00 (G-P:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (E) (INPUT = 0.90)
JSI METAL= 0.16 (K) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124021

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	J1	23	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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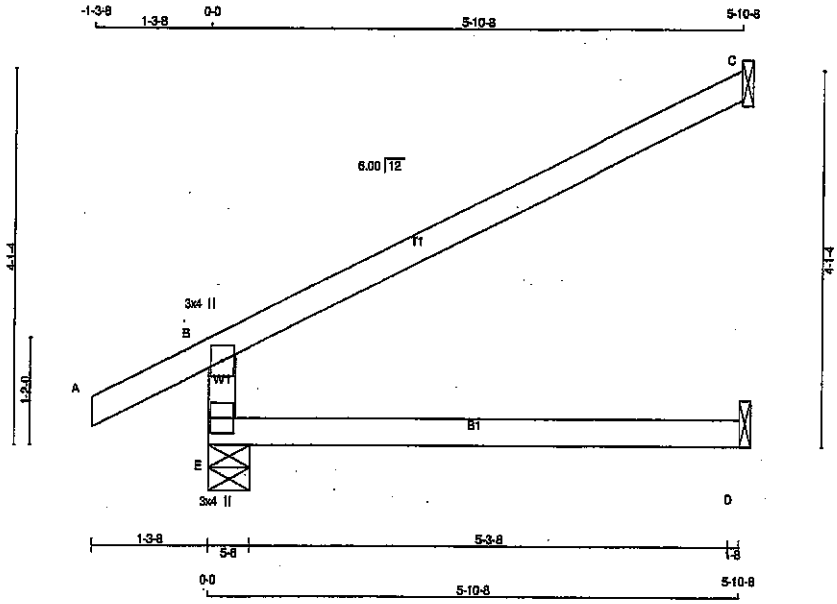

TOTAL WEIGHT = 23 X 17 = 386 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	525	0	525	0	0	5-8	5-8
C	202	0	202	0	0	1-8	1-8
D	45	0	50	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	369	257 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
C	139	113 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-461 / 0	0.0	0.0	0.13 (4)		7.81
A- B	0 / 28	-91.8	-91.8	0.12 (1)		10.00
B- C	-30 / 0	-91.8	-91.8	0.54 (1)		6.25
E- D	0 / 0	-18.5	-18.5	0.13 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.24/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (E) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124012

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	J2	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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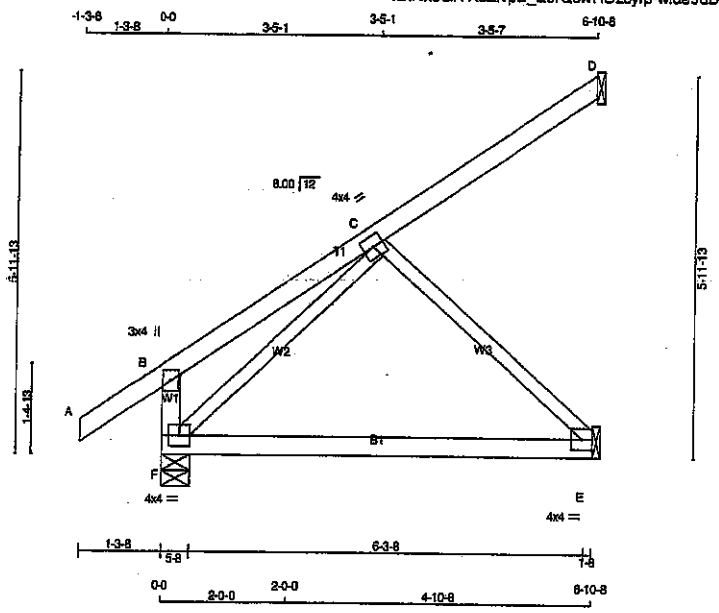

TOTAL WEIGHT = 3 X 26 = 83 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV-p	MT20	3.0	4.0		
C	TMWW-t	MT20	4.0	4.0		
E	BMW1-t	MT20	4.0	4.0		Edge
F	BMVW1-t	MT20	4.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	502	0	502	0	0	5-8	5-8
D	127	0	127	0	0	1-8	1-8
E	254	0	254	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) D , E

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
F	353	245 / 0	0 / 0	0 / 0	0 / 0	108 / 0	0 / 0
D	87	71 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
E	182	106 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-238 / 0	0.0	0.0	0.02 (1)	7.81
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	0 / 22	-91.8	-91.8	0.16 (1)	10.00
C- D	-20 / 0	-91.8	-91.8	0.14 (1)	6.25
F- E	0 / 202	-18.5	-18.5	0.26 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
C- E	-278 / 0	0.11 (1)
F- C	-285 / 0	0.10 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 848 (0.10")

CSI: TC=0.18/1.00 (B-C:1) , BC=0.26/1.00 (E-F:4) , WB=0.11/1.00 (C-E:1) , SSI=0.13/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (F) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123942

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC. GREENPARK HOMES	DRWG NO.
418361	J3	4	1	TRUSS DESC.	

Tamarack Roof Truss, Burlington

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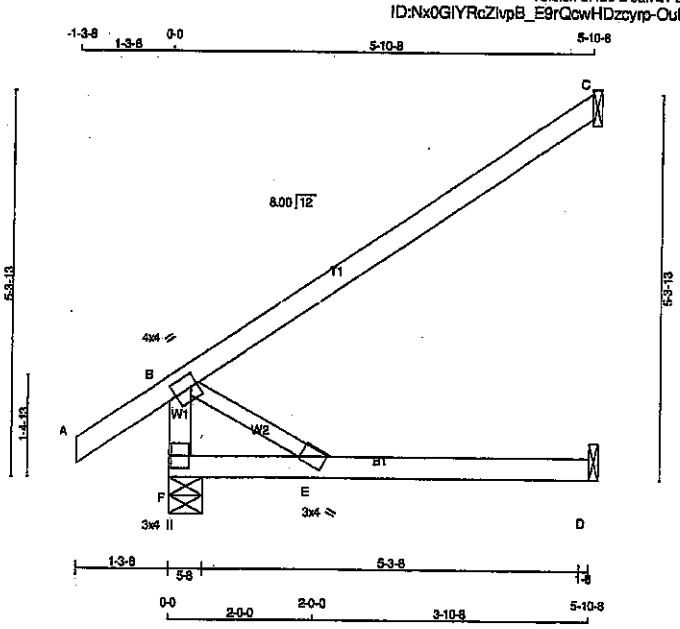

TOTAL WEIGHT = 4 X 20 = 78 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	3.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	450	0	450	0	0	5-8	5-8
C	270	0	270	0	0	1-8	1-8
D	54	0	61	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	316	221 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0
C	186	150 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
D	43	0 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-395 / 0	0.0	0.0	0.04 (1)	7.81	
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	
B- C	0 / 0	-91.8	-91.8	0.54 (1)	10.00	
F- E	0 / 0	-18.5	-18.5	0.17 (4)	10.00	
E- D	0 / 0	-18.5	-18.5	0.19 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.54/1.00 (B-C:1) , BC=0.19/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.17/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	768	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123943

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	J4	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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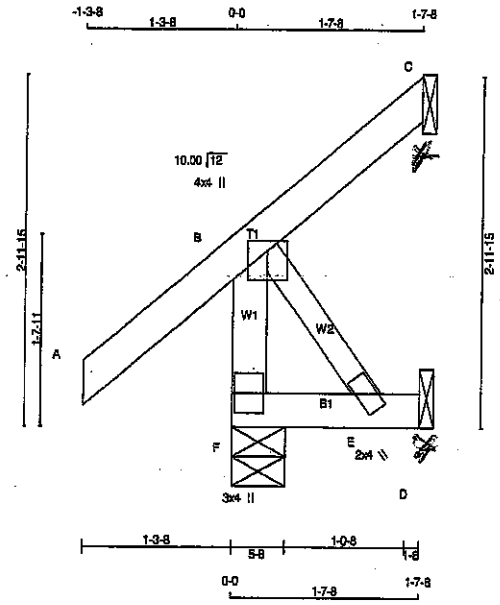

TOTAL WEIGHT = 3 X 9 = 27 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	271	0	271	0	0	5-8	5-8
C	20	0	20	0	-45	1-8	1-8
D	15	0	17	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	188	143 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
C	14	11 / -30	0 / 0	0 / 0	0 / 0	3 / 0	0 / 0
D	12	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-256 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 41	-91.8	-91.8	0.13 (1)	10.00
B- C	-35 / 0	-91.8	-91.8	0.12 (1)	6.25
F- E	0 / 0	-18.5	-18.5	0.01 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.01 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ASC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.01/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.08/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. GALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123944

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	J5	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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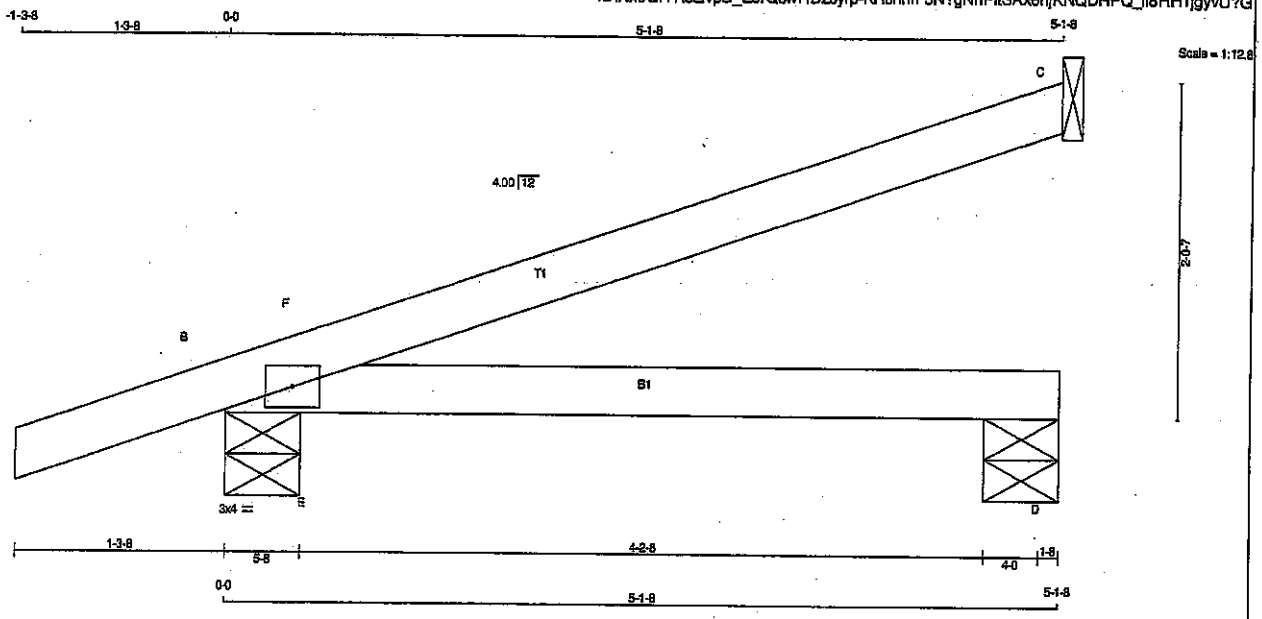

TOTAL WEIGHT = 3 X 14 = 41 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB14	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM. FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
C	205	0	205	0	0	1-8	1-8
B	405	0	405	0	0	5-8	5-8
D	78	0	78	0	0	5-8	5-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	142	110 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0
B	284	200 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
D	58	21 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 CSI (LC)	MAX UNBRAC LENGTH
A- B	0 / 18	-91.8	-91.8	0.11 (1)	10.00
B- F	-17 / 7	-91.8	-91.8	0.06 (4)	6.25
F- C	0 / 2	-91.8	-91.8	0.31 (1)	10.00
B- E	0 / 0	-18.5	-18.5	0.22 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.22 (1)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- F	-257 / 10	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(65 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 728 (0.06")

CSI: TC=0.31/1.00 (C-F:1) , BC=0.22/1.00 (D-E:1) , WB=0.00/1.00 (E-F:1) , SSI=0.21/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1997	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123945

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	J6	7	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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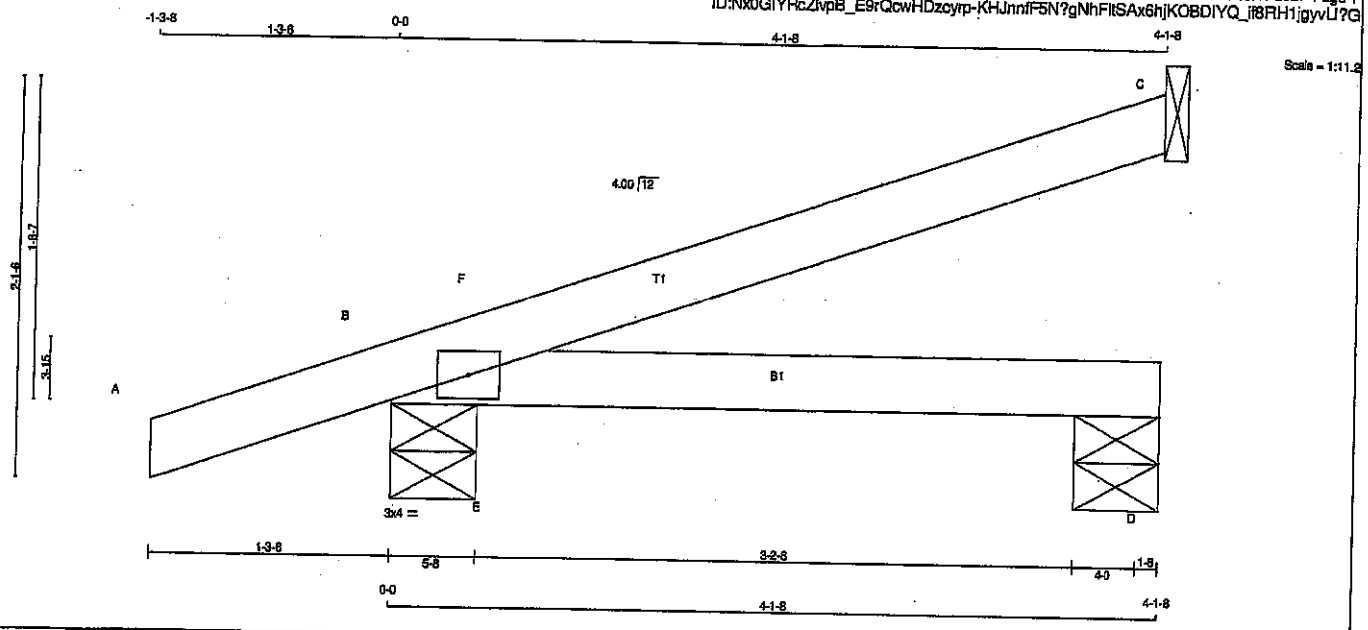

TOTAL WEIGHT = 7 X 11 = 79 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
C	163	0	163	0	0	1-8	1-8
B	350	0	350	0	0	5-8	5-8
D	64	0	64	0	0	5-8	5-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	113	88 / 0	0 / 0	0 / 0	0 / 0	25 / 0	0 / 0
B	245	174 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0
D	48	18 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, B, D

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
A- B	0 / 18	-91.8	-91.8	0.11 (1)		10.00
B- F	-13 / 0	-91.8	-91.8	0.04 (4)		6.25
F- C	0 / 2	-91.8	-91.8	0.20 (1)		10.00
B- E	0 / 0	-18.5	-18.5	0.15 (1)		10.00
E- D	0 / 0	-18.5	-18.5	0.15 (1)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
E- F	-175 / 7	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	=	25.6	PSF
		DL	=	6.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.4	PSF
TOTAL LOAD			=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.20/1.00 (C-F:1) , BC=0.15/1.00 (D-E:1) , WB=0.00/1.00 (E-F:1) , SSI=0.15/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
01/13/21
H. J/G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123946

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	J30	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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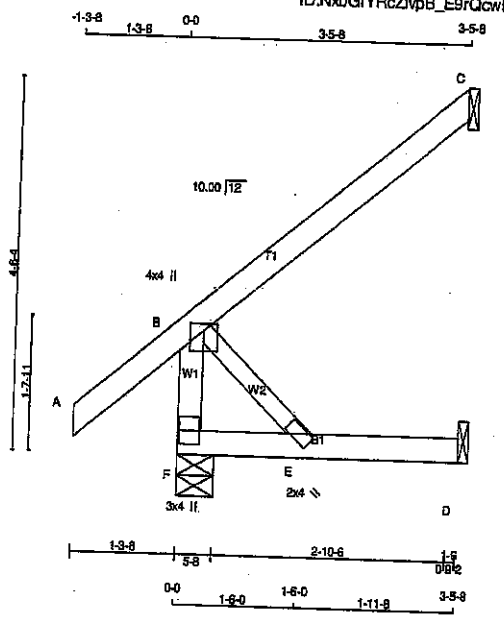

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.00	2.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 4 X 14 = 57 lb (M)

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	318	0	318	0	0	5-8	5-8
C	159	0	159	0	0	1-8	1-8
D	32	0	36	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	222	159 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0
C	109	88 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0
D	26	0 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-288 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 41	-91.8	-91.8	0.14 (5)	10.00
B- C	0 / 0	-91.8	-91.8	0.19 (1)	10.00
F- E	0 / 0	-18.5	-18.5	0.06 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.06 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.19/1.00 (B-C:1) , BC=0.06/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.10/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1673

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009824
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123984

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362 Tamarack Roof Truss, Burlington	J31	3	1	GREENPARK HOMES TRUSS DESC.	

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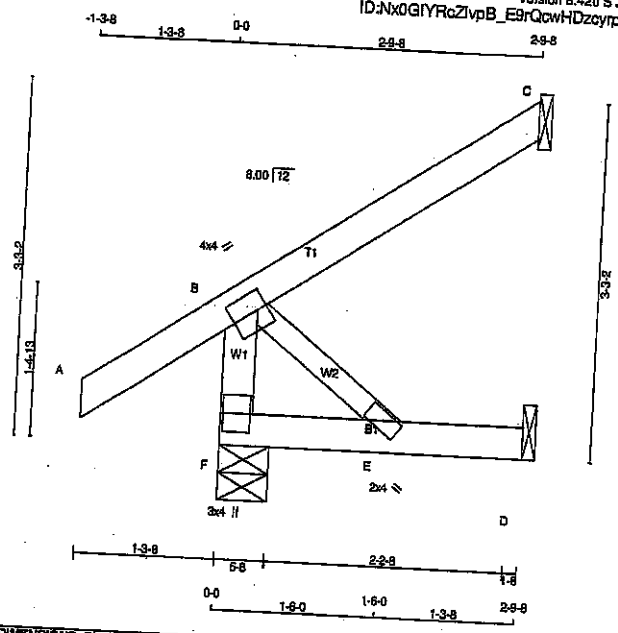

TOTAL WEIGHT = 3 X 11 = 34 lb (M)

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
F	280	0	280	0	0	IN-SX	IN-SX
C	128	0	128	0	0	5-8	5-8
D	26	0	29	0	0	1-8	1-8
							1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX /MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	196	142 / 0	0 / 0	0 / 0	0 / 0	54 / 0	0 / 0
C	88	71 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	21	0 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F-B	-254 / 0	0.0	0.0	0.03 (1)	7.81	
A-B	0 / 35	-91.8	-91.8	0.13 (5)	10.00	
B-C	0 / 0	-91.8	-91.8	0.12 (1)	10.00	
F-E	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
E-D	0 / 0	-18.5	-18.5	0.04 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B-E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN.C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:5) , BC=0.04/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123985

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	J50	3	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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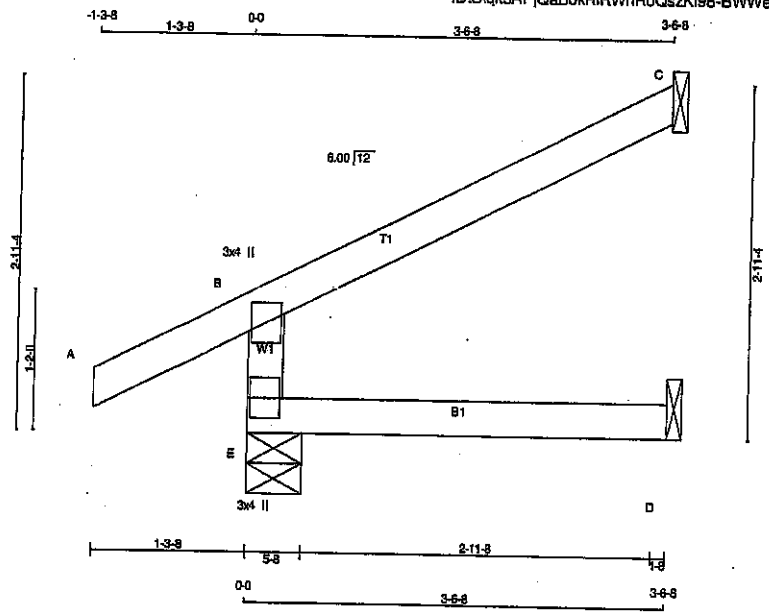

TOTAL WEIGHT = 3 X 11 = 33 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	365	0	365	0	0	5-8	5-8
C	122	0	122	0	0	1-8	1-8
D	28	0	31	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	255	193 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
C	84	68 / 0	0 / 0	0 / 0	0 / 0	16 / 0	0 / 0
D	22	0 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-327 / 0	0.0	0.0	0.04 (4)	7.81
A- B	0 / 28	-91.8	-91.8	0.13 (5)	10.00
B- C	-18 / 0	-91.8	-91.8	0.20 (1)	6.25
E- D	0 / 0	-18.5	-18.5	0.05 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.20/1.00 (B-C:1) , BC=0.05/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.14/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (E) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124013

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	J51	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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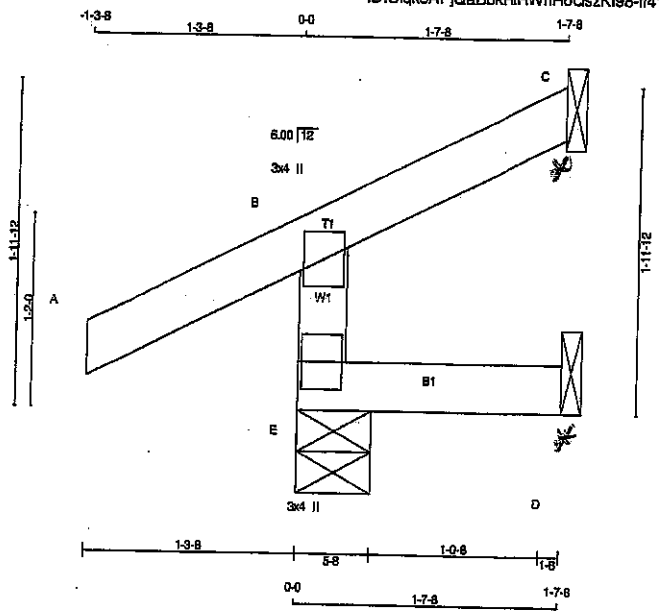

TOTAL WEIGHT = 4 X 7 = 28 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	266	0	266	0	0	5-8	5-8
C	34	0	34	0	-27	1-8	1-8
D	4	0	14	0	-5	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	185	140 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
C	23	18 / -20	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
D	4	0 / -9	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LCT	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-240 / 0	0.0	0.0		0.04 (5)	7.81
A- B	0 / 28	-91.8	-91.8		0.12 (1)	10.00
B- C	-18 / 0	-91.8	-91.8		0.09 (1)	6.25
E- D	0 / 0	-18.5	-18.5		0.04 (5)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (D-E:5) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.07 (B) ((INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	J52	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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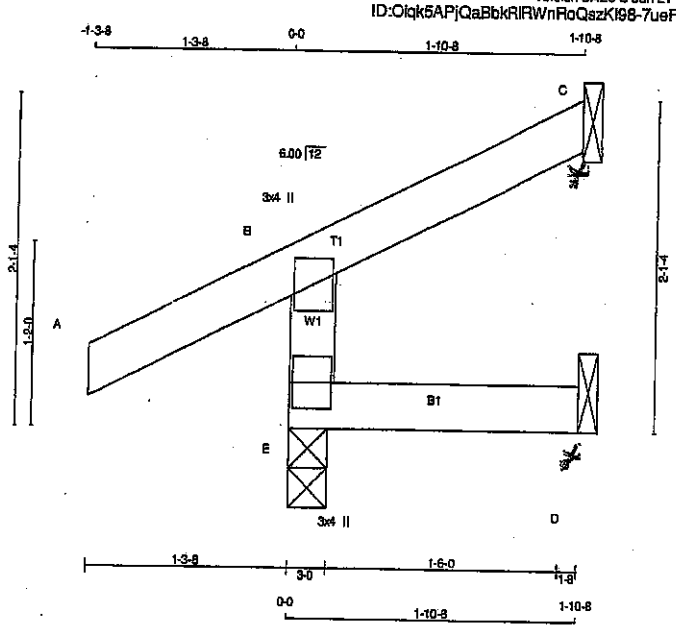

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMV+p	MT20	3.0	4.0	
E	BMV1+p	MT20	3.0	4.0	

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	273	0	273	0	0	3-0	3-0
C	50	0	50	0	-20	1-8	1-8
D	8	0	17	0	-2	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	190	143 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	35	27 / -17	0 / 0	0 / 0	0 / 0	7 / 0	0 / 0
D	6	0 / -8	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-247 / 0	0.0	0.0	0.04 (5)	7.81
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	-16 / 0	-91.8	-91.8	0.09 (1)	8.25
E- D	0 / 0	-18.5	-18.5	0.04 (5)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

TOTAL WEIGHT = 7 lb
[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (D-E:5) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124015

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C1	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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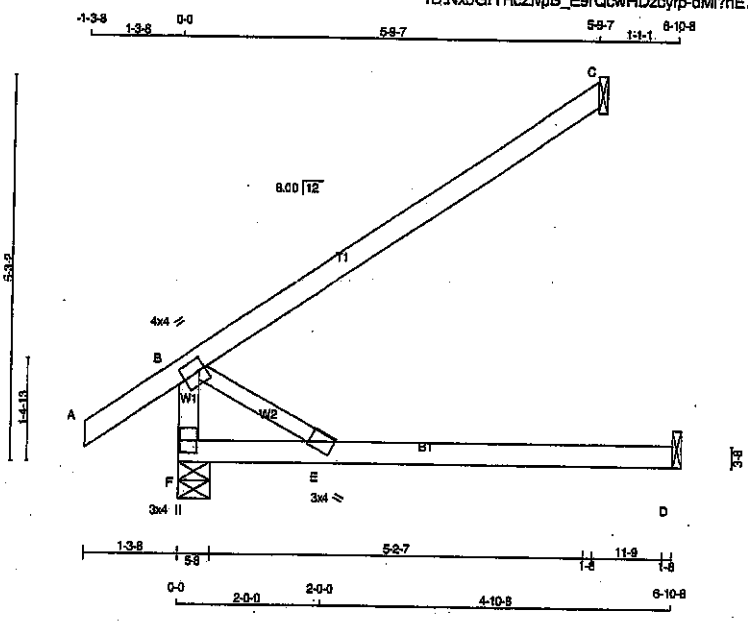

TOTAL WEIGHT = 21 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	3.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	455	0	455	0	0	5-8	5-8
C	265	0	265	0	0	1-8	1-8
D	64	0	71	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	320	218 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
C	183	148 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
D	51	0 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F-B	-391 / 0	0.0	0.0	0.04 (1)	7.81
A-B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B-C	0 / 0	-91.8	-91.8	0.52 (1)	10.00
F-E	0 / 0	-18.5	-18.5	0.21 (4)	10.00
E-D	0 / 0	-18.5	-18.5	0.26 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B-E	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 819 (0.10")

CSI: TC=0.52/1.00 (B-C:1) , BC=0.26/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.17/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123933

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C2	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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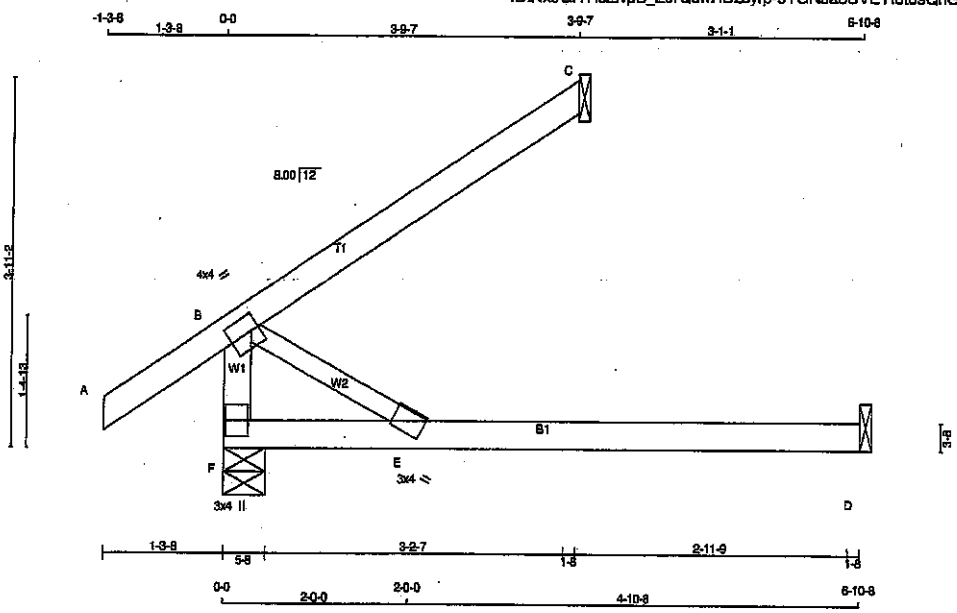

TOTAL WEIGHT = 18 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	3.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	363	0	363	0	0	5-8	5-8
C	174	0	174	0	0	1-8	1-8
D	64	0	71	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	257	167 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0
C	120	97 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	51	0 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-300 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	
B- C	0 / 0	-91.8	-91.8	0.22 (1)	10.00	
F- E	0 / 0	-18.5	-18.5	0.21 (4)	10.00	
E- D	0 / 0	-18.5	-18.5	0.26 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD		39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 819 (0.10")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.26/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123934

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C3	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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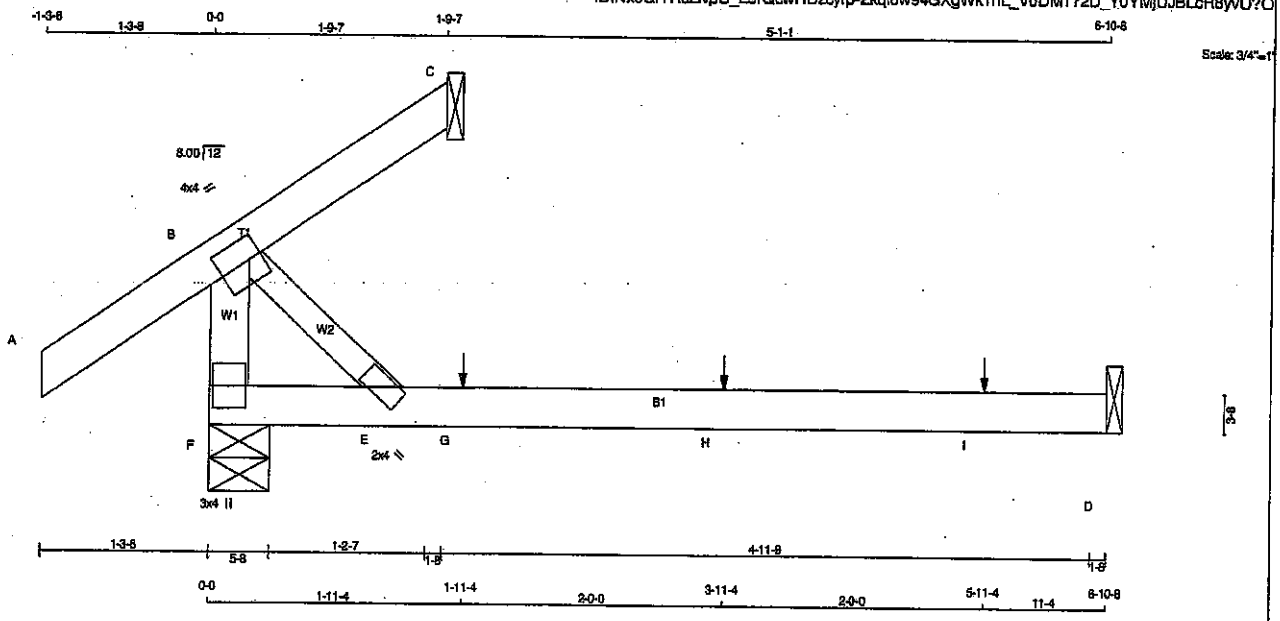

TOTAL WEIGHT = 15 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	320	0	320	0	0	5-8	5-8
C	34	0	34	0	0	1-8	1-8
D	64	0	71	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	227	143 / 0	0 / 0	0 / 0	0 / 0	84 / 0	0 / 0
C	23	19 / 0	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	51	0 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-256 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 35	-91.8	-91.8	0.13 (1)	10.00	
B- C	-27 / 0	-91.8	-91.8	0.10 (1)	6.25	
F- E	0 / 0	-18.5	-18.5	0.16 (4)	10.00	
E- G	0 / 0	-18.5	-18.5	0.26 (4)	10.00	
G- H	0 / 0	-18.5	-18.5	0.26 (4)	10.00	
H- I	0 / 0	-18.5	-18.5	0.26 (4)	10.00	
I- D	0 / 0	-18.5	-18.5	0.26 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	1	1	---	FRONT	VERT	TOTAL	—	C1
H	3-11-4	1	1	---	FRONT	VERT	TOTAL	—	C1
I	5-11-4	1	1	---	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/ 819 (0.10")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.26/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (B-C:1)

DOL LUMBER=0.93 NAIL=0.93 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1687	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123935

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C4	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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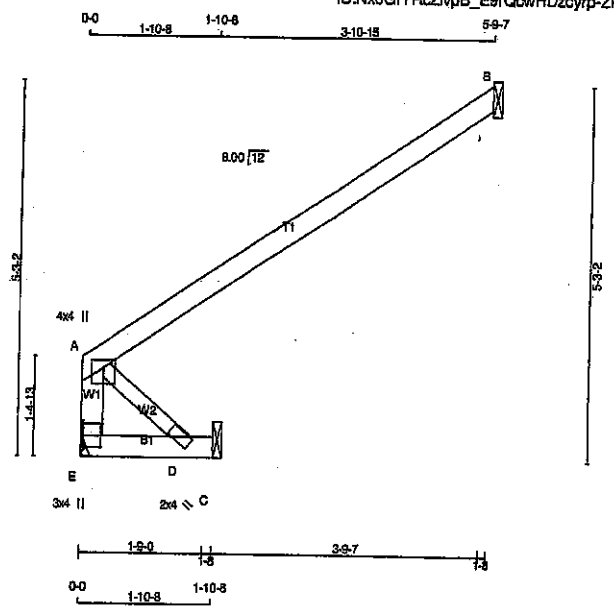

TOTAL WEIGHT = 13 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
D	BMW+w	MT20	2.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	283	0	283	0	0	MECHANICAL	
B	265	0	265	0	0	1-8	1-8
C	17	0	19	0	0	1-8	1-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) B , C

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	197	148 / 0	0 / 0	0 / 0	0 / 0	49 / 0	0 / 0
B	183	148 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
C	14	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- A	-265 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 0	-91.6	-91.6	0.52 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00
D- C	0 / 0	-18.5	-18.5	0.01 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- D	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.52/1.00 (A-B:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (A-D:1) , SSI=0.17/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (A) (INPUT = 0.90)
JSI METAL= 0.05 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H.J. GALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123936

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C5	2	1	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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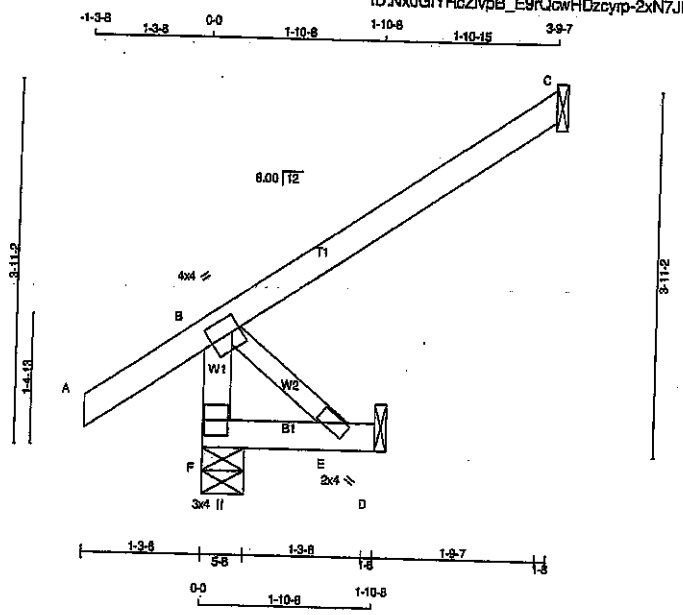

TOTAL WEIGHT = 2 X 12 = 23 lb

[M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2..

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	317	0	317	0	0	5-8	5-8
C	174	0	174	0	0	1-8	1-8
D	17	0	19	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	220	167 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
C	120	97 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	14	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-300 / 0	0.0	0.0	0.03 (1)		7.81
A- B	0 / 35	-91.8	-91.8	0.13 (5)		10.00
B- C	0 / 0	-91.8	-91.8	0.22 (1)		10.00
F- E	0 / 0	-18.5	-18.5	0.02 (4)		10.00
E- D	0 / 0	-18.5	-18.5	0.01 (4)		10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.80)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123937

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C6	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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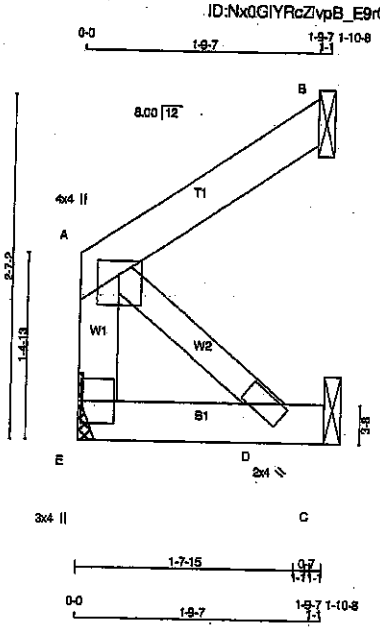

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
D	BMW+w	MT20	2.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG	REQRD BRG
E	99	0	99	0	0	IN-SX	IN-SX
B	82	0	82	0	0	MECHANICAL	
C	17	0	19	0	0	1-8	1-8
						1-8	1-8

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) B , C

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	70	46 / 0	0 / 0	0 / 0	0 / 0	25 / 0	0 / 0
B	56	46 / 0	0 / 0	0 / 0	0 / 0	11 / 0	0 / 0
C	14	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- A	-82 / 0	0.0	0.0	0.01 (1)	7.81
A- B	0 / 0	-91.8	-91.8	0.05 (1)	10.00
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00
D- C	0 / 0	-18.5	-18.5	0.01 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
A- D	0 / 0	0.00 (1)

TOTAL WEIGHT = 2 X 7 = 14 lb
[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015 .

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.05/1.00 (A-B:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (A-D:1) , SSI=0.05/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1997	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.05 (A) (INPUT = 0.90)
JSI METAL= 0.02 (A) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123938

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C7	1	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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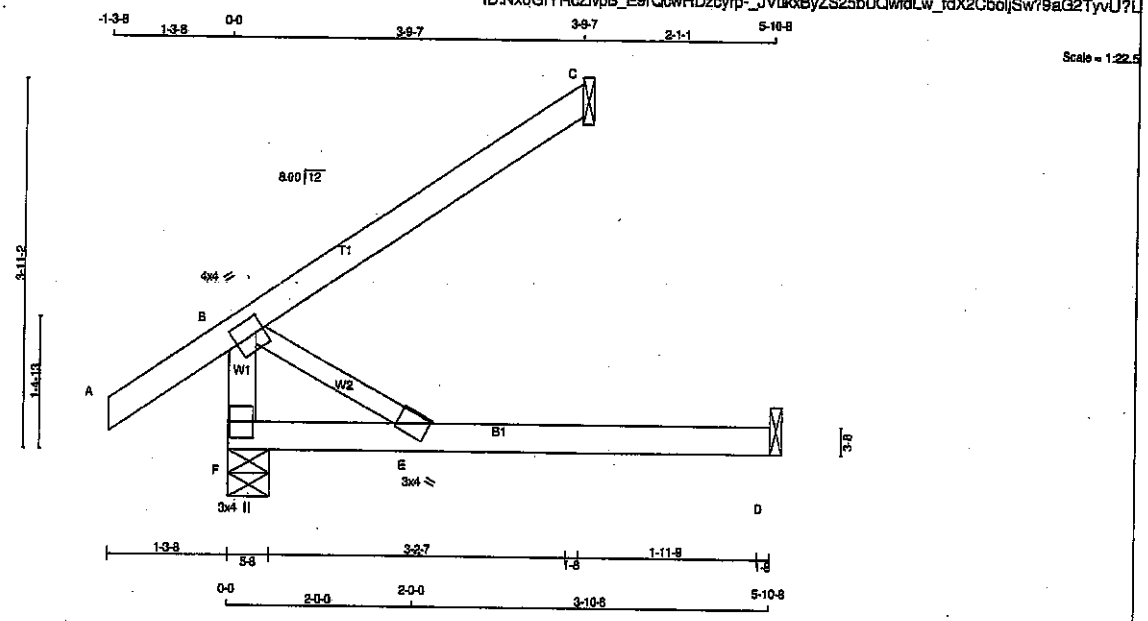

TOTAL WEIGHT = 17 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	3.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	354	0	354	0	0	5-8	5-8
C	174	0	174	0	0	1-8	1-8
D	54	0	61	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	250	167 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0
C	120	97 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
D	43	0 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-300 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00
B- C	0 / 0	-91.8	-91.8	0.22 (1)	10.00
F- E	0 / 0	-18.5	-18.5	0.17 (4)	10.00
E- D	0 / 0	-18.5	-18.5	0.19 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD		39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.19/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
01/22/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123939

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418361	C8	1	1	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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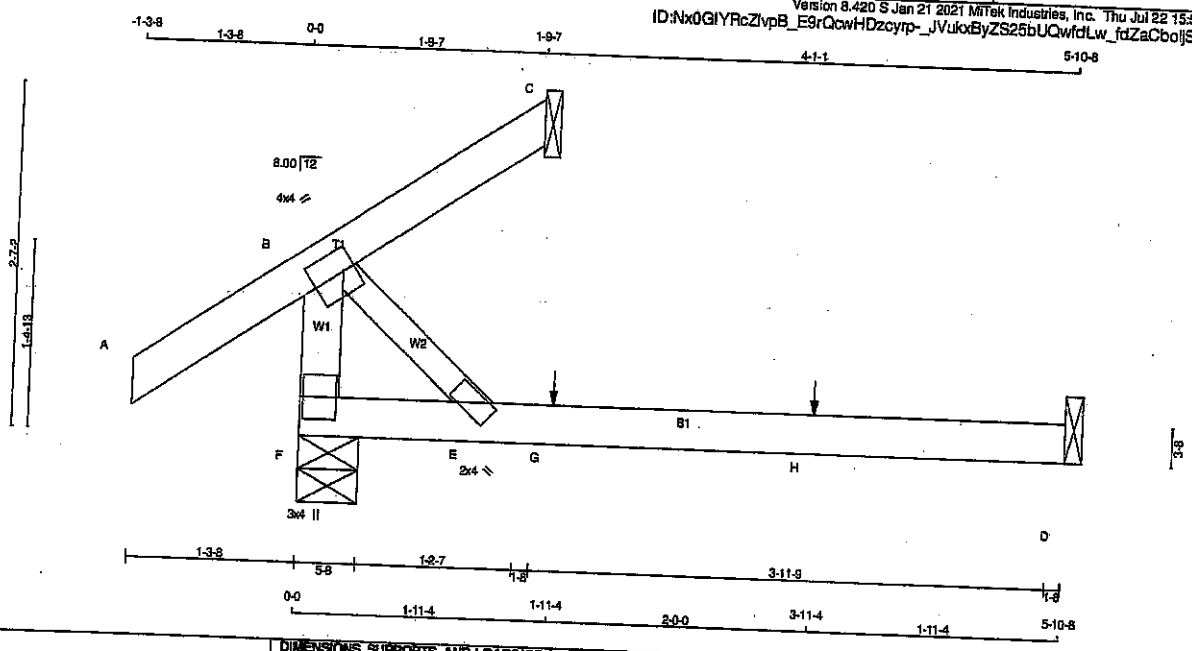

TOTAL WEIGHT = 13 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	311	0	311	0	0	5-8	5-8
C	34	0	34	0	0	1-8	1-8
D	54	0	61	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D .

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	220	143 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
C	23	19 / 0	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	43	0 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-256 / 0	0.0	0.0	0.03 (1)	7.81
A- B	0 / 35	-91.8	-91.8	0.13 (1)	10.00
B- C	-27 / 0	-91.8	-91.8	0.12 (1)	6.25
F- E	0 / 0	-18.5	-18.5	0.13 (4)	10.00
E- G	0 / 0	-18.5	-18.5	0.19 (4)	10.00
G- H	0 / 0	-18.5	-18.5	0.19 (4)	10.00
H- D	0 / 0	-18.5	-18.5	0.19 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	1	1	—	BACK	VERT	TOTAL	—	C1
H	3-11-4	1	1	—	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) **C1:** A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 **IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.13/1.00 (A-B:1) , BC=0.19/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (B-C:1)

DOL LUMBER=0.98 NAIL=0.98 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123940

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	C30	2	1	GREENPARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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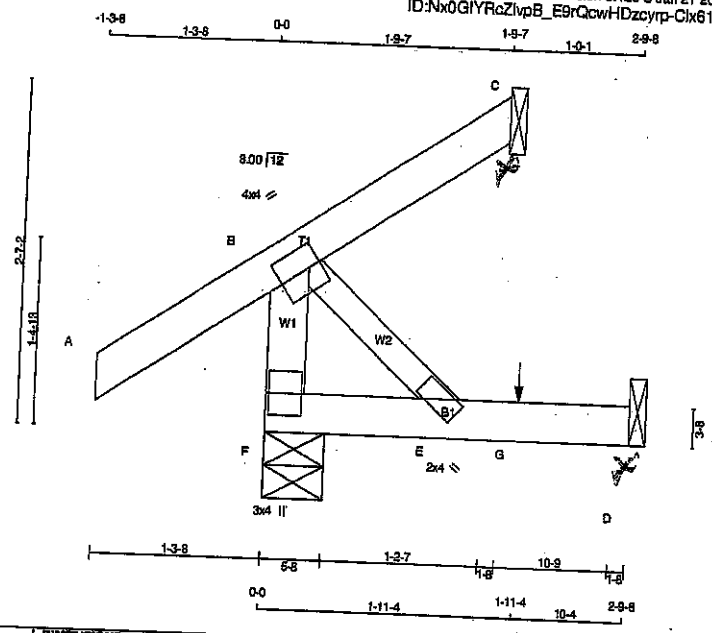

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

TOTAL WEIGHT = 2 X 10 = 20 lb [M]

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	282	0	282	0	0	5-8	5-8
C	34	0	34	0	-39	1-8	1-8
D	26	0	29	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	197	143 / 0	0 / 0	0 / 0	0 / 0	54 / 0	0 / 0
C	23	19 / -27	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	21	0 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F-B	-256 / 0	0.0	0.0	0.03 (1)	7.81	
A-B	0 / 35	-91.8	-91.8	0.14 (5)	10.00	
B-C	-27 / 0	-91.8	-91.8	0.13 (5)	6.25	
F-E	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
E-G	0 / 0	-18.5	-18.5	0.04 (4)	10.00	
G-D	0 / 0	-18.5	-18.5	0.04 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B-E	0 / 0	0.00 (1)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	1-11-4	-0	-0	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.14/1.00 (A-B:5) , BC=0.04/1.00 (D-E:4) , WB=0.00/1.00 (B-E:1) , SSI=0.09/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1997	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123982

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418362	C31	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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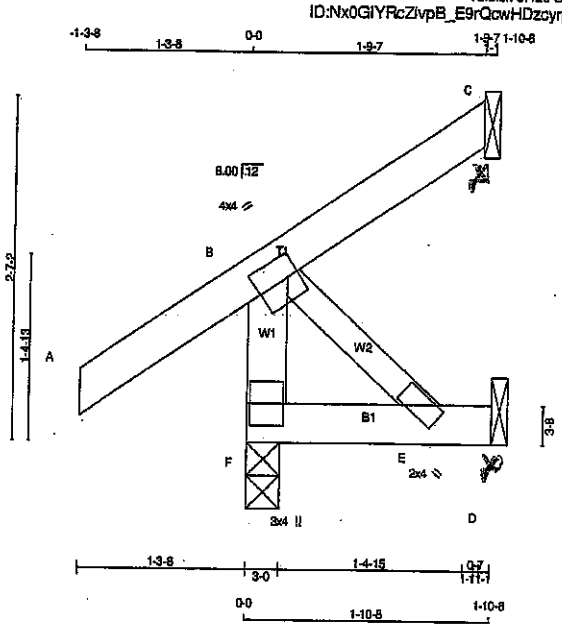

TOTAL WEIGHT = 2 X 9 = 18 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
F - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW-t	MT20	4.0	4.0	2.00	1.00
E	BMW+w	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
F	274	0	274	0	0	3-0	3-0
C	34	0	34	0	-39	1-8	1-8
D	17	0	19	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
F	190	143 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	23	19 / -27	0 / 0	0 / 0	0 / 0	4 / 0	0 / 0
D	14	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
F- B	-256 / 0	0.0	0.0	0.03 (1)	7.81	
A- B	0 / 35	-91.8	-91.8	0.12 (1)	10.00	
B- C	-27 / 0	-91.8	-91.8	0.12 (1)	6.25	
F- E	0 / 0	-18.5	-18.5	0.02 (4)	10.00	
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
B- E	0 / 0	0.00 (1)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA [M]

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.02/1.00 (E-F:4) , WB=0.00/1.00 (B-E:1) , SSI=0.08/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2123983

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	C50	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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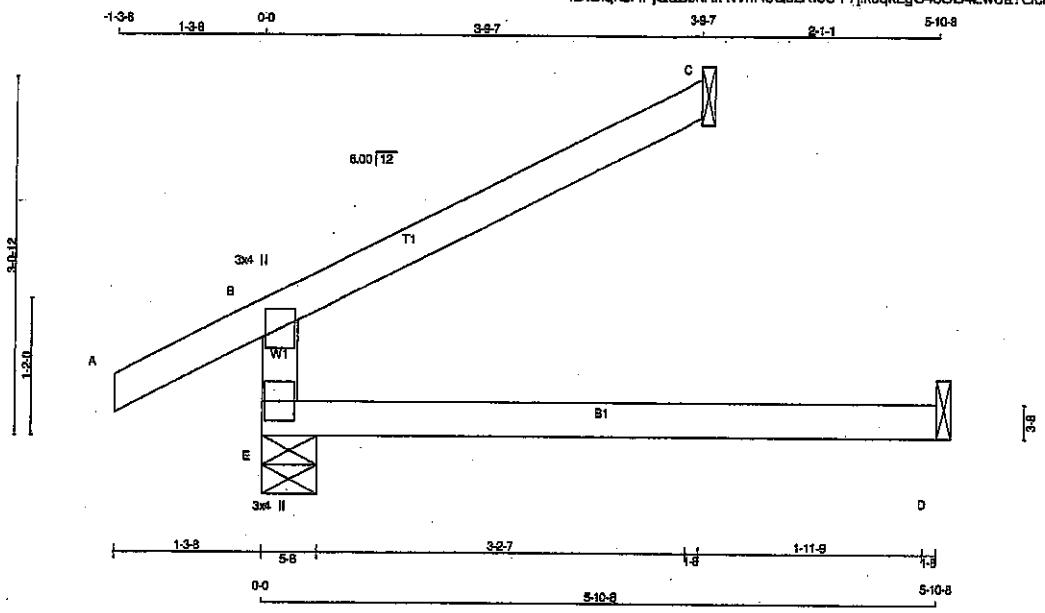

TOTAL WEIGHT = 4 X 14 = 57 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	405	0	405	0	0	5-8	5-8
C	130	0	130	0	0	1-8	1-8
D	45	0	50	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	286	190 / 0	0 / 0	0 / 0	0 / 0	96 / 0	0 / 0
C	90	73 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	36	0 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-342 / 0	0.0	0.0	0.13 (4)	7.81
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00
B- C	-19 / 0	-91.8	-91.8	0.22 (1)	6.25
E- D	0 / 0	-18.5	-18.5	0.13 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	550	371	1747	788	1987	1373

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124007

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	C51	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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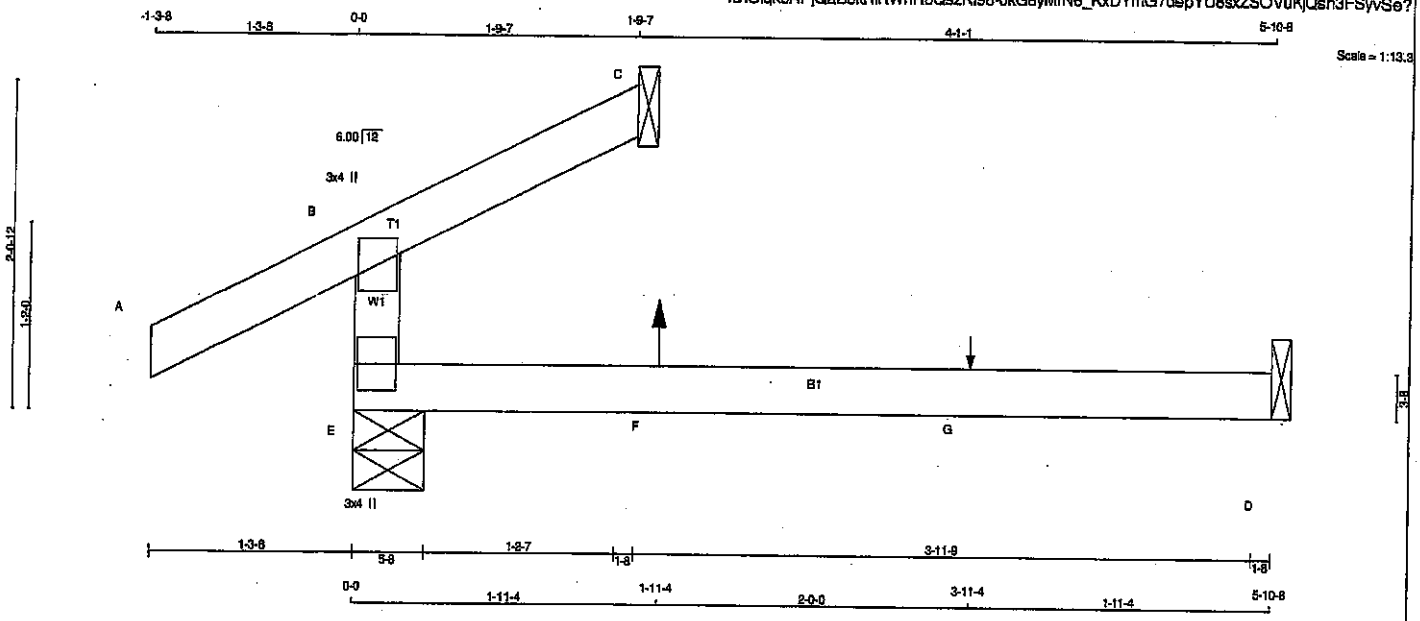

TOTAL WEIGHT = 4 X 12 = 46 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	284	0	284	0	0	5-8	5-8
C	63	0	63	0	0	1-8	1-8
D	44	0	52	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	200	137 / 0	0 / 0	0 / 0	0 / 0	62 / 0	0 / 0
C	46	21 / 0	0 / 0	0 / 0	0 / 0	25 / 0	0 / 0
D	35	0 / -3	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (7)

CHORDS

MEMB. FR-TO	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH
E- B	-227 / 0	0.0	0.0	0.11 (4)	7.81	
A- B	0 / 28	-91.8	-91.8	0.12 (1)	10.00	
B- C	-9 / 9	-91.8	-91.8	0.08 (4)	10.00	
E- F	0 / 0	-18.5	-18.5	0.14 (4)	10.00	
F- G	0 / 0	-18.5	-18.5	0.14 (4)	10.00	
G- D	0 / 0	-18.5	-18.5	0.14 (4)	10.00	

WEBS

MEMB. FR-TO	MAX. FORCE (LBS)	MAX CSI (LC)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-11-4	5	1	8	BACK	VERT	TOTAL	—	C1
G	3-11-4	1	1	---	BACK	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.14/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=0.99 NAIL=0.99 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.09 (E) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124008

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	C52	4	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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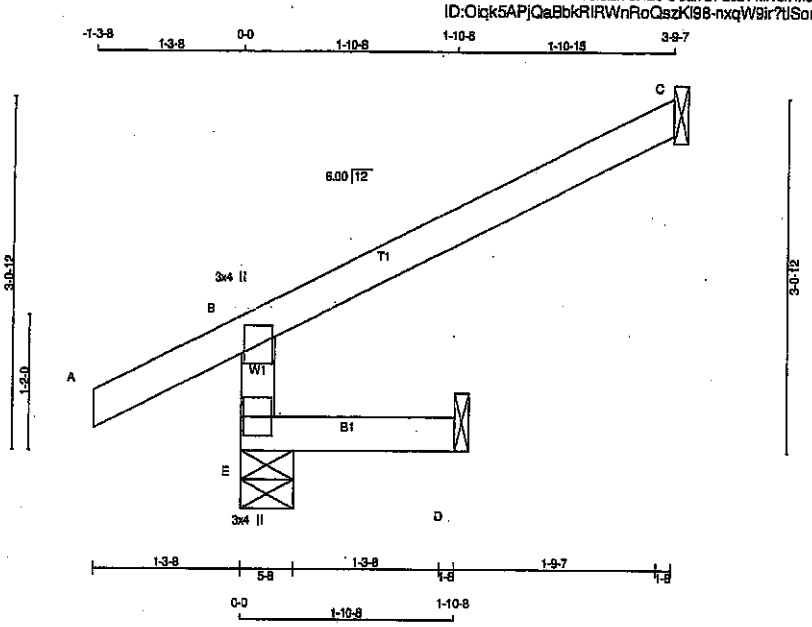

TOTAL WEIGHT = 4 X 10 = 38 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	361	0	361	0	0	5-8	5-8
C	130	0	130	0	0	1-8	1-8
D	16	0	17	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL S97791H FOR CONNECTION TO JOINT(S) C , D

UNFACTORED REACTIONS

JT	1ST LOASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	250	190 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
C	90	73 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	12	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF) FROM	TO	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH FR-TO
E- B	-342 / 0	0.0	0.0	0.01 (4)	7.81
A- B	0 / 28	-91.8	-91.8	0.13 (5)	10.00
B- C	-19 / 0	-91.8	-91.8	0.22 (1)	6.25
E- D	0 / 0	-18.5	-18.5	0.02 (4)	10.00

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.22/1.00 (B-C:1) , BC=0.02/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.15/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23/21
H. J. G. ALVES
100009824
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124009

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	C53	6	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

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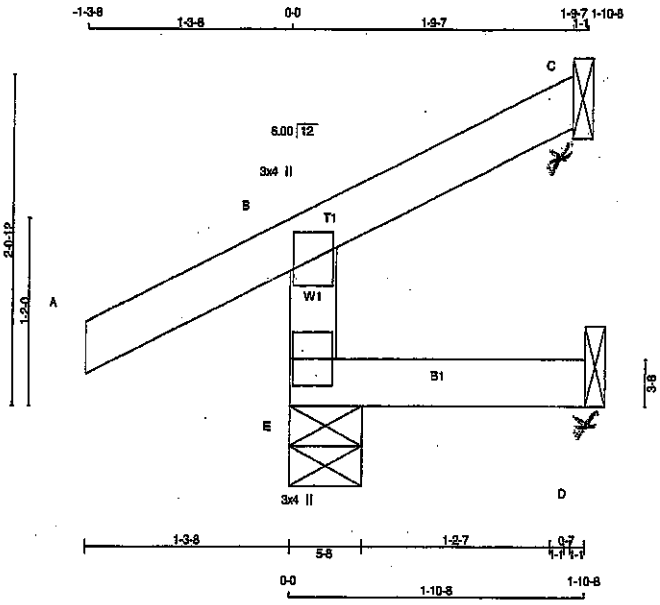

TOTAL WEIGHT = 6 X 7 = 42 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN Y	X
B	TMV+p	MT20	3.0	4.0	
E	BMV1+p	MT20	3.0	4.0	

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	271	0	271	0	0	5-8	5-8
C	45	0	45	0	-23	1-8	1-8
D	8	0	17	0	-2	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	188	141 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0
C	31	24 / -18	0 / 0	0 / 0	0 / 0	7 / 0	0 / 0
D	7	0 / -8	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)
E- B	-244 / 0	0.0	0.0	0.04 (5)
A- B	0 / 28	-91.8	-91.8	0.12 (1)
B- C	-17 / 0	-91.8	-91.8	0.09 (1)
E- D	0 / 0	-18.5	-18.5	0.04 (5)

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	MAX. UNBRAC LENGTH
			7.81
			10.00
			6.25
			10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	25.6	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.12/1.00 (A-B:1) , BC=0.04/1.00 (D-E:5) , WB=0.00/1.00 (n/a:0) , SSI=0.09/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/22/21
H. J. G. ALVES
100009924
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124010

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
418363	C54	2	1	GREENPARK HOMES TRUSS DESC.	

Tamarack Roof Truss, Burlington

Version 8.420 S Jan 21 2021 MiTek Industries, Inc. Thu Jul 22 17:32:48 2021 Page 1
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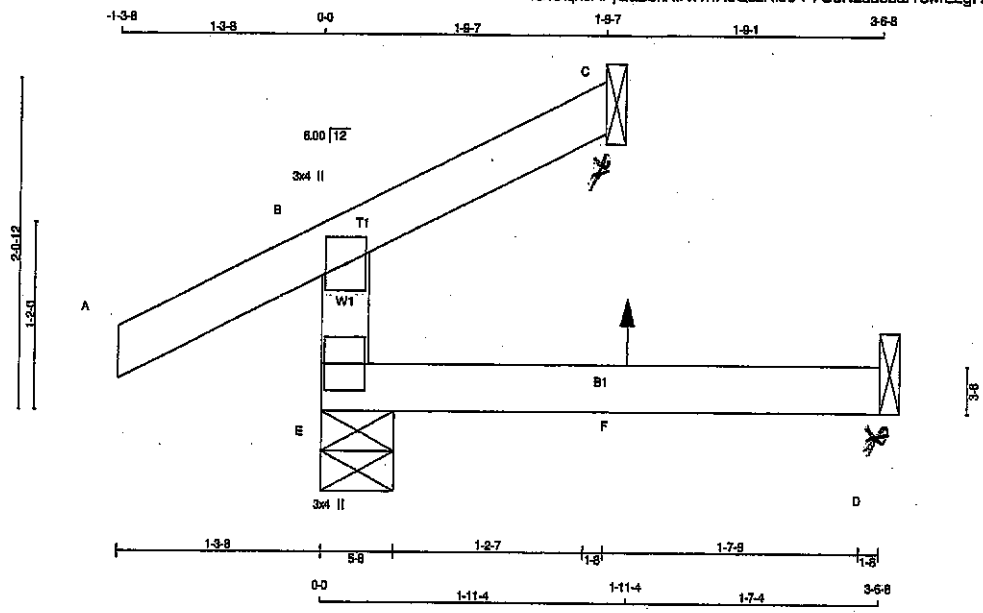


TOTAL WEIGHT = 2 X 9 = 18 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE		LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	3.0	4.0		
E	BMV1+p	MT20	3.0	4.0		

NOTES- (1)
1) Lateral braces to be a minimum of 2X4 SPF #2.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	HORZ	UPLIFT	INPUT BRG IN-SX	REQRD BRG IN-SX
E	277	0	277	0	0	5-8	5-8
C	47	0	47	0	-21	1-8	1-8
D	23	0	32	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	194	138 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0
C	34	22 / -20	0 / 0	0 / 0	0 / 0	11 / 0	0 / 0
D	19	0 / -6	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (9)

CHORDS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF) FROM	TO	MAX CSI (LC)	MAX. UNBRAC LENGTH
E-B	-242 / 0	0.0	0.0	0.04 (5)	7.81
A-B	0 / 28	-91.8	-91.8	0.13 (5)	10.00
B-C	-16 / 0	-91.8	-91.8	0.09 (6)	6.25
E-F	0 / 0	-18.5	-18.5	0.05 (4)	10.00
F-D	0 / 0	-18.5	-18.5	0.05 (4)	10.00

WEBS

MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)

SPECIFIED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-11-4	5	1	8	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	25.6	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	39.0	PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 31.3 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 25.6 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13/1.00 (A-B:5) , BC=0.05/1.00 (D-E:4) , WB=0.00/1.00 (n/a:0) , SSI=0.10/1.00 (A-B:5)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI) MAX	MIN	SHEAR (PLI) MAX	MIN	SECTION (PLI) MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER
07/23 M
H. J. G. ALVES
100009024
PROVINCE OF ONTARIO

Structural component only
DWG# T-2124011

Alves Engineering Services Inc.
5208 Easton road
Burlington, Ontario L7L 6N6
(289) 259 5455

LICENSED PROFESSIONAL ENGINEER
06/11/18
H.J.G. ALVES
PROVINCE OF ONTARIO

RESPONSABILITIES

1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components

2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.

3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.

4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.

5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

SPECIFICATIONS

1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.

2- Lumber is to be the sizes and grade specified on the truss drawing.

3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.

4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings

5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.

6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)

7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.

8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering ·em and General Safety notes.

T-1800218 Feb 09, 2018

TOE-NAIL CAPACITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

			SPF	D. FIR	SPF	D. FIR
COMMON WIRE	3.00	0.144	122	139	30	42
	3.25	0.144	127	144	32	45
	3.50	0.160	152	173	38	52
COMMON SPIRAL	3.00	0.122	96	108	26	36
	3.25	0.122	97	108	28	40
	3.50	0.152	142	161	36	50
3.25" Gun nail	3.25	0.120	94	105	28	39

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

Nail type:	**Common wire**	**Common spiral**	**Common wire**	**Common spiral**	**Gun Nail**
Diameter (in.)	0.160	0.152	0.144	0.122	0.120
Length (in.)	3.50	3.50	3.00	3.00	3.25
2x4 SPF	2	2	3	3	3
2x6 SPF	4	4	4	5	5
2x4 D. FIR	2	2	2	2	2
2x6 D. FIR	3	3	3	4	4

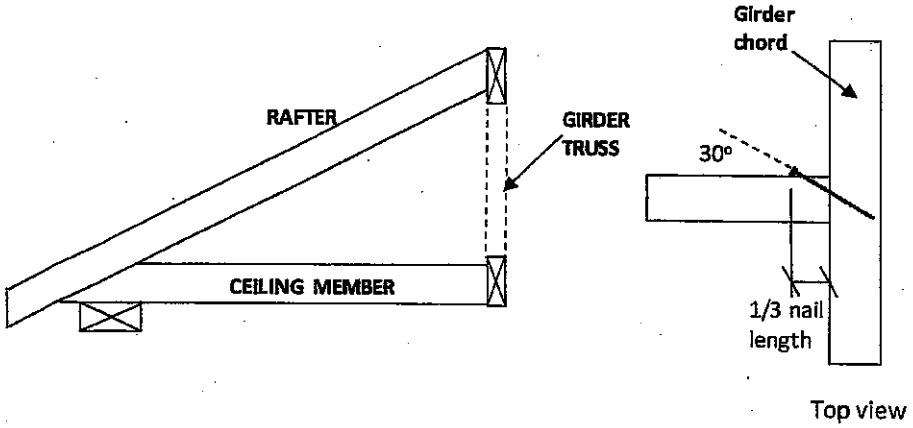


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

PEO
Certificate No. 10889485

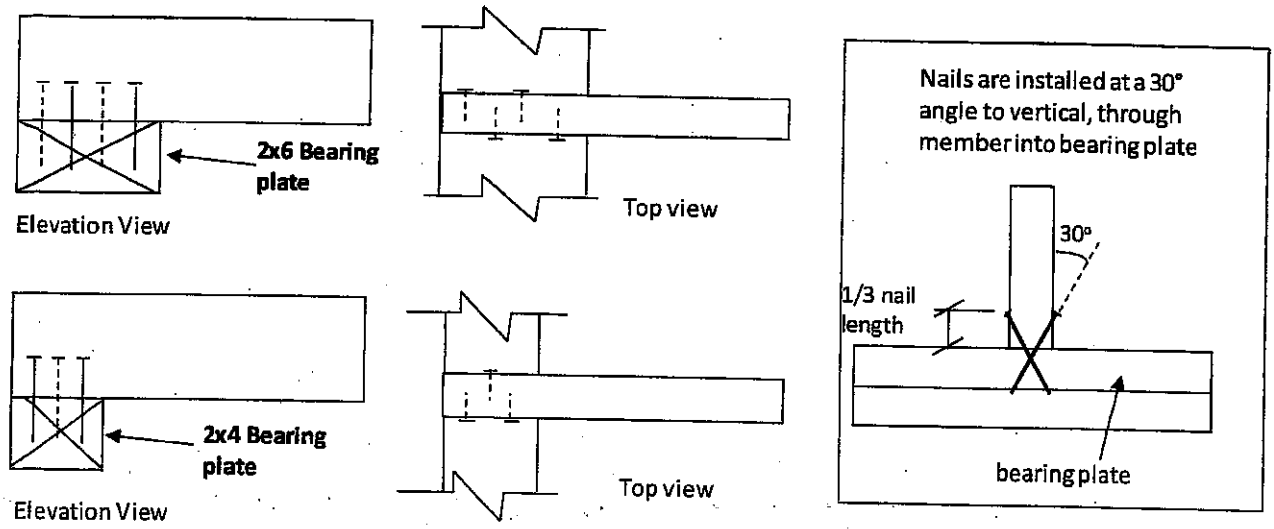
LICENSED PROFESSIONAL ENGINEER
C. Cordogiannis
90553736
PROVINCE OF ONTARIO

December 21, 2020

©2020 MiTek Canada Inc., 240 Stirling Crescent, Bradford, Ontario, L3Z 4L5 | (800) 268-3434, www.mitek.ca

TOE-NAIL CAPACITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).

2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails.** Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).

3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.

4. Nail values are based on specific gravity of G = 0.42 (SPF) and G = 0.49 (D. Fir).

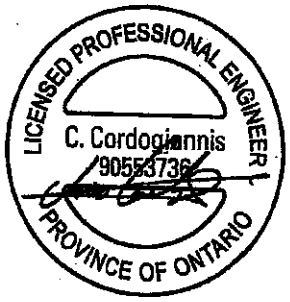
5. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.

6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.

7. Lumber must be dry (< 19% moisture content) at the time of nail installation.

8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485



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December 21, 2020

LUL/LUS/LJS/HUS/HHUS/HGUS

SIMPSON Strong-Tie®

Standard and Double-Shear Joist Hangers

VALUE ENGINEERED

This product is preferable to similar connectors because of a) easier installation, b) higher capacities, c) lower installed cost, or a combination of these features.

Most hangers in this series have double-shear nailing — an innovation that distributes the load through two points on each joist nail for greater strength. This allows for fewer nails, faster installation, and the use of all common nails for the same connection. (Do not bend or remove tabs)

Double-shear hangers range from the light capacity LUS hangers to the highest capacity HGUS hangers. For medium load truss applications, the HUS offers a lower cost alternative and easier installation than the HGUS hangers, while providing greater load capacity and bearing than the LUS.

Material: See table on pp. 217–218.

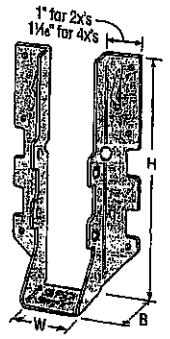
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

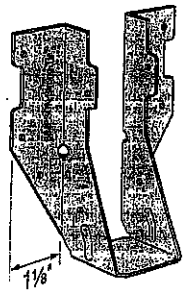
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1½" nails into the header and 10d commons into the joist, and reduce the resistance to 0.64 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

Options:

- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



LUS28



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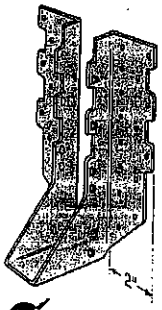
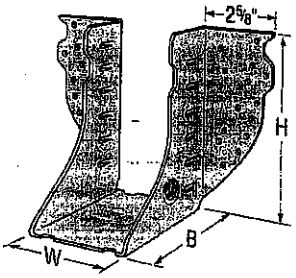
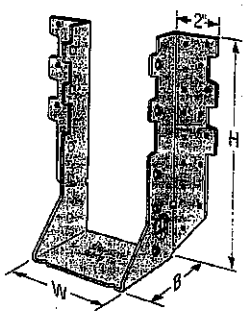


HUS210
(HUS26, HUS28, and HHUS similar)



HGUS28-2



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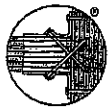
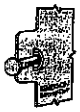
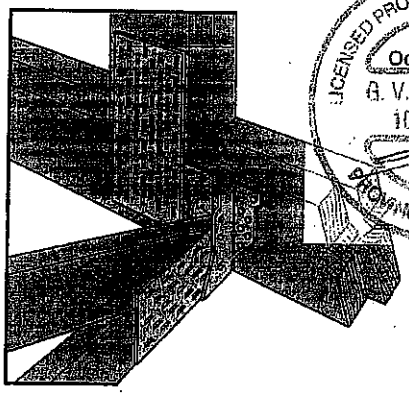


Double-Shear Nailing Top View

Double-Shear Nailing Side View; Do not bend tab

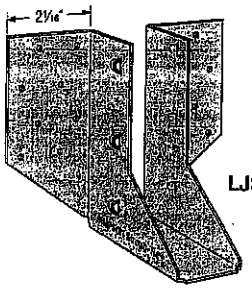


Dome Double-Shear Nailing Side View *(available on some models)*



Typical HUS26 Installation with Reduced Heel Height
(Truss Designer to provide fastener quantity for connecting multiple members together)

LICENSED PROFESSIONAL ENGINEER
Oct. 14, 2020
G. V. LUBARSKY
100044463
PROVINCE OF ONTARIO



LJS26DS

Plated Truss Connectors

C-C-CAN2020 ©2020 SIMPSON STRONG-TIE COMPANY INC.

TECHNICAL BULLETIN

LUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

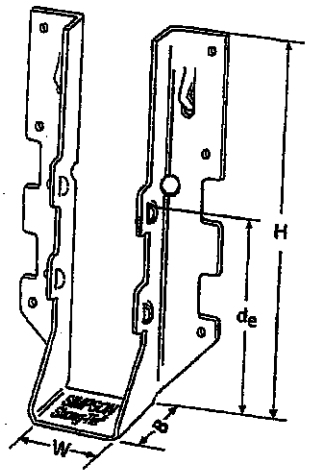
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

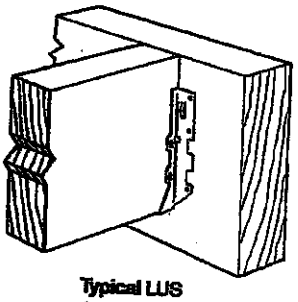
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



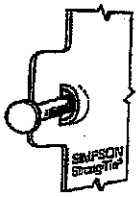
LUS28



Typical LUS Installation

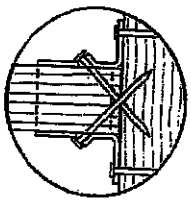
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
LUS24	18	1 9/16	3 1/8	1 3/4	1 13/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 9/16	4 3/4	1 3/4	3 5/8	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 5/8	4 3/16	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 9/16	6 5/8	1 3/4	3 3/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 5/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 9/16	7 13/16	1 3/4	3 7/8	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 5/8	8 3/16	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2375

1. d_e is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

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T-SPECLUS20 3/20 exp. 6/22

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TECHNICAL BULLETIN

HUS/LJS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: See table

Finish: G90 galvanized

Design:

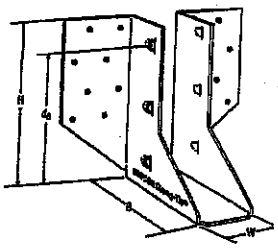
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

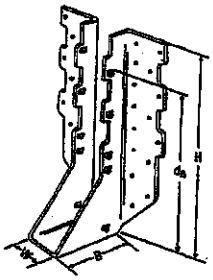
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

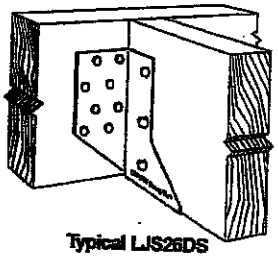
- See current catalogue for options



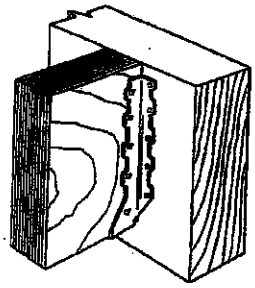
LJS26DS



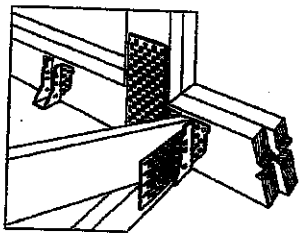
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS Installation



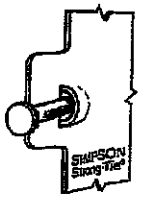
Typical HUS Installation



Typical HUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

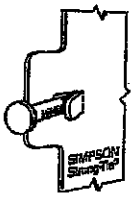
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
								lb.	lb.	lb.	lb.
LJS26DS	18	1 9/16	5	3½	4⅝	(16) 16d	(6) 16d	2055	4285	1460	4115
HUS26	16	1⅝	5⅝	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅝	7 3/32	3	6 1/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅝	9 3/32	3	7 31/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d_e is the distance from the seat of the hanger to the highest joist nail.

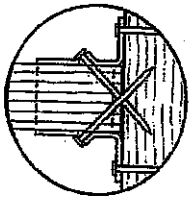


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
R. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

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TECHNICAL BULLETIN

HGUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All HGUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 12 gauge

Finish: G90 galvanized

Design:

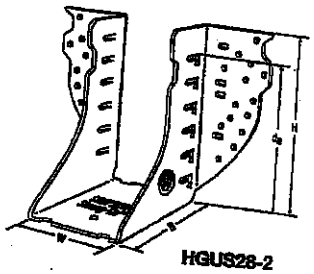
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

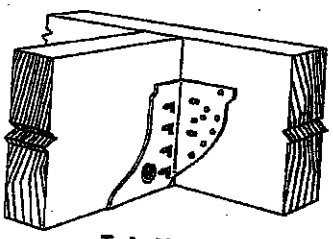
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

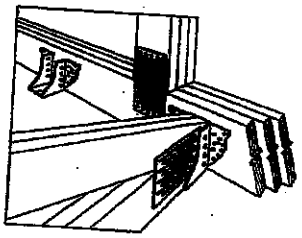
- See current catalogue for options



HGUS28-2



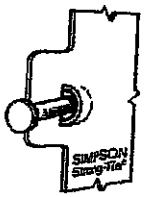
Typical HGUS Installation



Typical HGUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

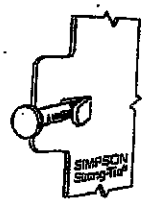
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HGUS26	12	1⅝	5⅜	5	4 5/32	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 5/16	5 7/16	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 15/16	5½	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 9/16	5 7/16	4	4⅛	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1⅝	7⅛	5	6⅛	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 5/16	7 3/16	4	6⅛	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 15/16	7¼	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 9/16	7 3/16	4	6⅛	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1⅝	9⅛	5	7⅞	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 5/16	9 3/16	4	8⅛	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 15/16	9¼	4	8⅜	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 9/16	9 3/16	4	8⅛	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 9/16	10⅝	4	10⅛	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 9/16	12⅝	4	11⅛	(66) 16d	(22) 16d	10130	16400	7195	11645

1. d_e is the distance from the seat of the hanger to the highest joist nail.

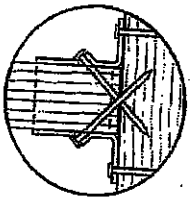


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

LICENSED PROFESSIONAL ENGINEER 04/01/2020 B. D. BUNTING PROVINCE OF ONTARIO

LIMIT STATES DESIGN

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TECHNICAL BULLETIN

HHUS – Double Shear Joist Hangers

SIMPSON Strong-Tie®

All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

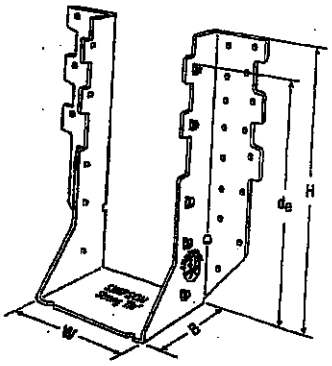
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

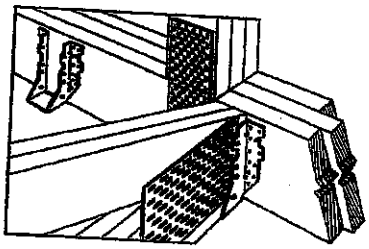
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



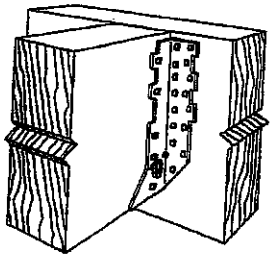
HHUS410



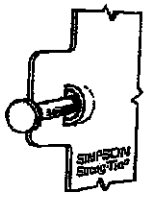
Typical HHUS Installation (Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								DFir-L		S-P-F	
		W	H	B	d_e[1]	Face	Joist	Uplift (K_D=1.15)	Normal (K_D=1.00)	Uplift (K_D=1.15)	Normal (K_D=1.00)
HHUS26-2	14	3⅝	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3⅝	7 7/32	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3⅝	9 3/32	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4 11/16	9	3	7 15/16	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6⅛	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3⅝	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3⅝	7⅛	3	6⅛	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3⅝	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5½	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7¼	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4670	10155	3370	7210

1. d_e is the distance from the seat of the hanger to the highest joist nail.

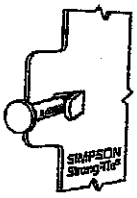


Typical HHUS Installation

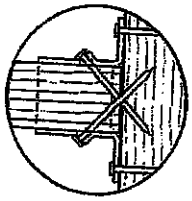


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.

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04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

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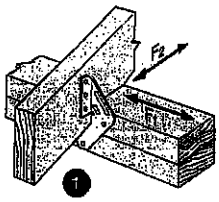
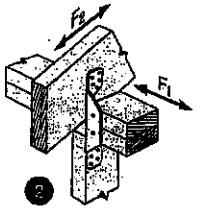
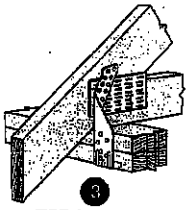
Seismic and Hurricane Ties (cont.)



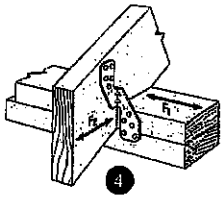
1 H1 Installation



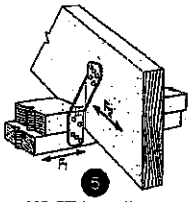
2 H2A Installation



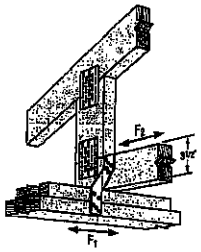
3 TSP Installation



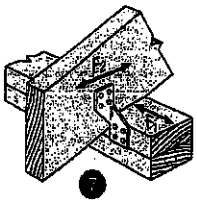
4 H2.5A Installation
(Nails into both top plates)



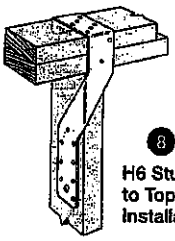
5 H2.5T Installation
(Nails into both top plates)



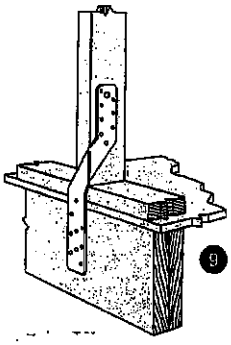
6 H2.5T Installation



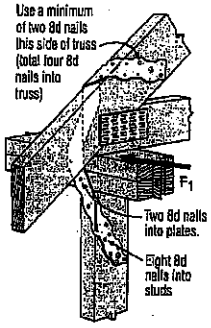
7 H3 Installation
(Nails into upper top plate)



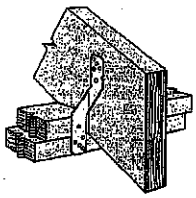
8 H6 Stud to Top Plate Installation



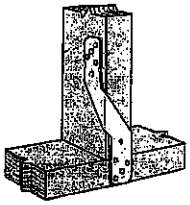
9 H6 Stud to Band Joist Installation



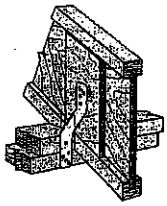
10 H7Z Installation



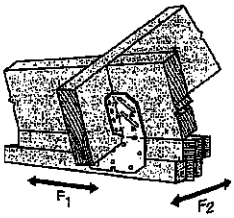
11 H8 Attaching Rafter to Double Top Plates



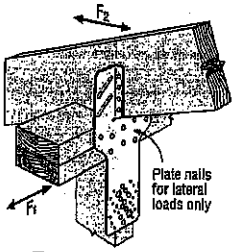
12 H8 attaching Stud to Sill
((4) 8d into plate, (5) 8d into stud)



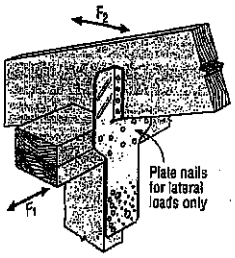
13 H8 attaching I-Joist to Double Top Plates



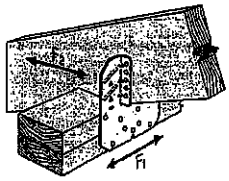
14 H10A Field-Bent Installation



15 H10S Installation



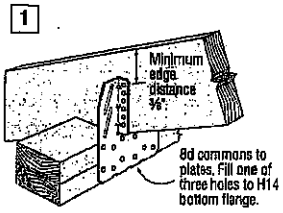
15 H10S Installation with Stud Offset



17 H10A Installation

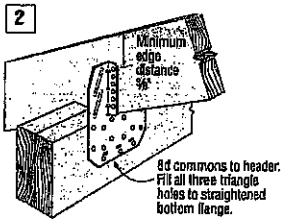
H10A optional positive angle nailing connects shear blocking to rafter. Use 8d common nails. Slot allows maximum field-bending up to a pitch of 6/12, use 75% of the table uplift value; bend one time only.

1



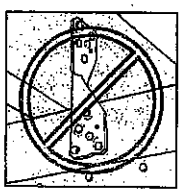
18 H14 Installation to Double Top Plates

2



19 H14 Installation to Double 2x Header

Avoid a Misinstallation



Do not make new holes or overdrive nails.

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SIMPSON Strong-Tie

H/TSP

Seismic and Hurricane Ties

Simpson Strong-Tie® hurricane ties provide a positive connection between truss/rafter and the wall of the structure to resist wind and seismic forces. New additions to the line provide even more options.

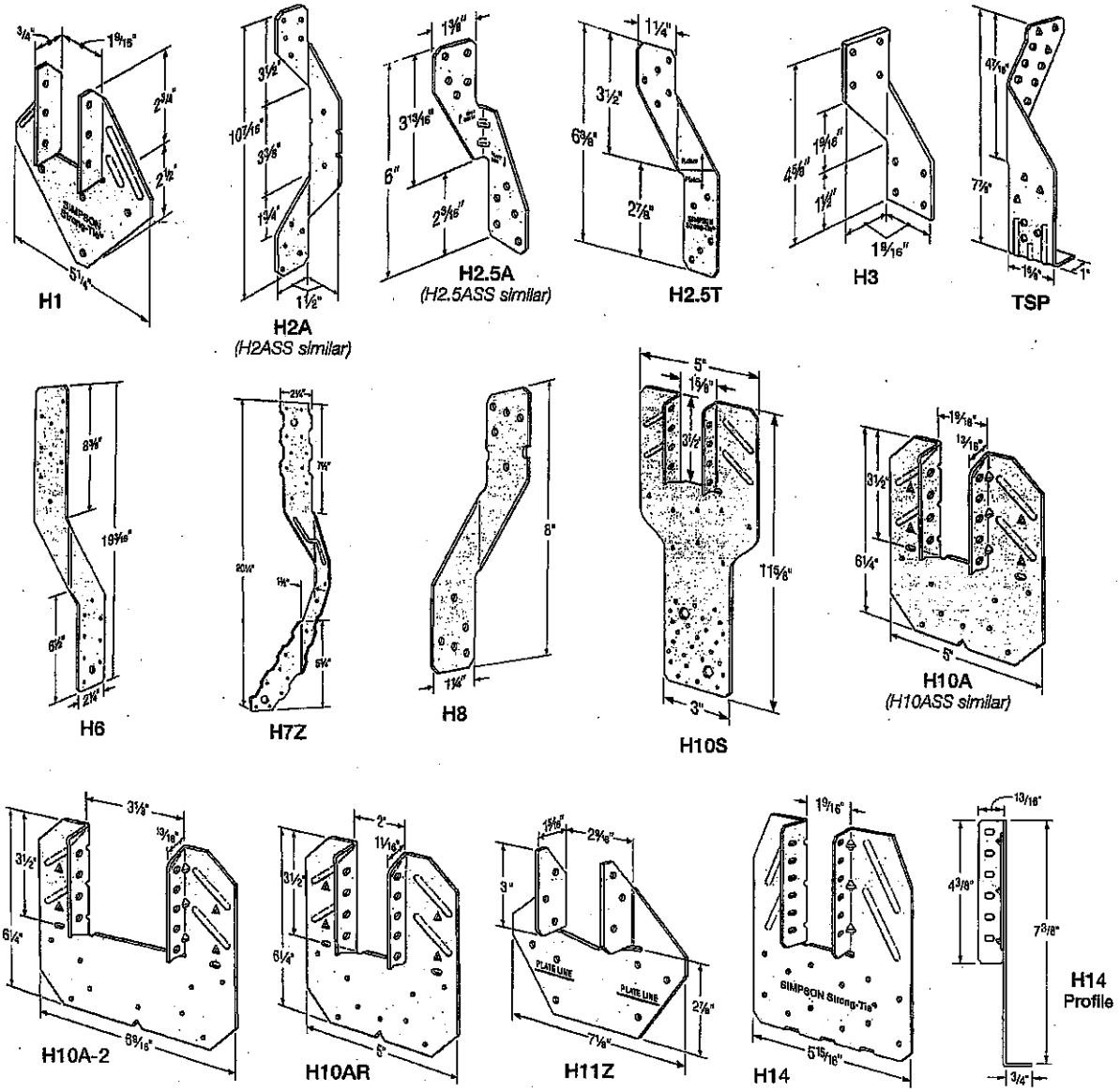
- H10AR — The heavy-duty design of the H10A available with a 2" wide throat to accommodate rough lumber
- H10A-2 — The H10A design with a 3" throat for double 2x members
- H2ASS, H2.5ASS and H10ASS — Popular ties now available in stainless steel

Material: See table

Finish: Galvanized. H7Z and H11Z — ZMAX® coating. Some models available in stainless steel or ZMAX; see Corrosion Information, pp. 20–24 or visit **strongtie.com**.

Installation:

- Use all specified fasteners; see General Notes.
- H1 can be installed with flanges facing inward (reverse of H1 installation drawing; number 1).
- H2.5T, H3 and H6 ties are shipped in equal quantities of right and left versions (right versions shown).
- Hurricane ties do not replace solid blocking.
- When installing ties on plated trusses (on the side opposite the truss plate) do not fasten through the truss plate from behind. This can force the truss plate off of the truss and compromise truss performance.
- H10A optional nailing to connect shear blocking, use 8d nails. Slots allow maximum field bending up to a pitch of 6:12, use H10A sloped loads for field bent installation.



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TECHNICAL BULLETIN

H – Seismic and Hurricane Ties

SIMPSON Strong-Tie®

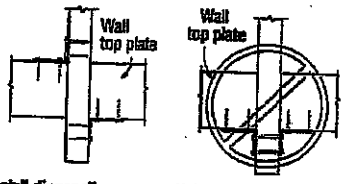
The H connector series provides wind and seismic ties for trusses and rafters.
Material: 18 gauge **Finish:** G90 galvanized

Design: • Factored resistances are in accordance with CSA O86-14
• Factored resistances have been increased 15%. No further increase is permitted.

Installation: • Use all specified fasteners
• Nails: 8d = 0.131" dia. x 2½" long common wire, 8d x 1½" = 0.131" x 1½ long, 10d x 1½" = 0.146" x 1½" long
• H1 can be installed with flanges facing outwards
• Hurricane ties do not replace solid blocking

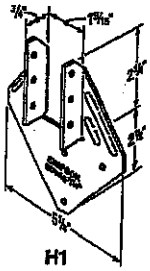
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0.

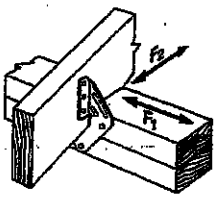
Hurricane Tie Installations to Achieve Twice the Load (Top View)

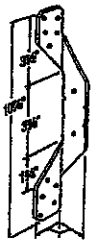


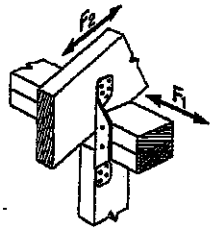
Install diagonally across from each other for minimum 2x truss.

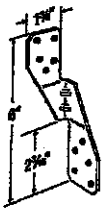
Nailing into both sides of a single ply 2x truss may cause the wood to split.

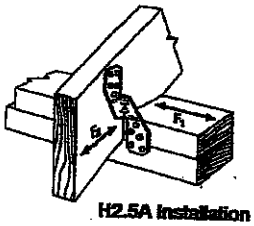

H1

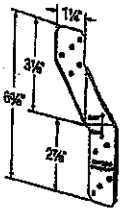

H1 Installation

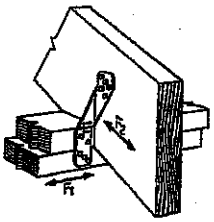

H2A

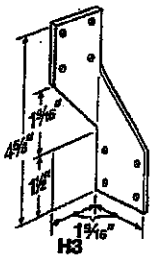

H2A Installation

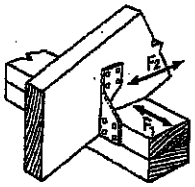

H2.5A

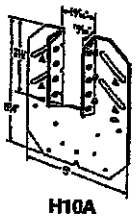

H2.5A Installation

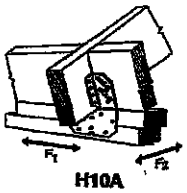

H2.5T


H2.5T Installation (Nails into both top plates)


H3


H3 Installation


H10A


H10A Installation

Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
					D.Fir-L			S-P-F		
					Uplift	Normal		Uplift	Normal	
		To Rafter	To Plates	To Studs		F_1	F_2		F_1	F_2
					(K_D=1.15)			(K_D=1.15)		
H1	18	(6) 8d x 1½"	(4) 8d	—	740	685	300	680	485	215
H2A	18	(5) 8d x 1½"	(2) 8d x 1½"	(5) 8d x 1½"	830	220	75	590	155	55
H2.5A	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H2.5T	18	(5) 8d	(5) 8d	—	835	175	240	740	160	210
H3	18	(4) 8d	(4) 8d	—	740	180	265	615	125	190
H10A	18	(9) 10d x 1½"	(9) 10d x 1½"	—	1735	795	410	1505	565	290

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Factored resistances are for one anchor. A minimum rafter thickness of 2½" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.
3. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
4. Hurricane ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
B. D. BUNTING
PROVINCE OF ONTARIO

LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECH20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

TECHNICAL BULLETIN

TC – Truss Connectors

SIMPSON Strong-Tie®

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

Material: 16 gauge

Finish: G90 galvanized

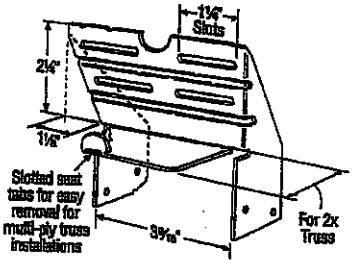
Design: Factored resistances are in accordance with CSA 086-14

Installation:

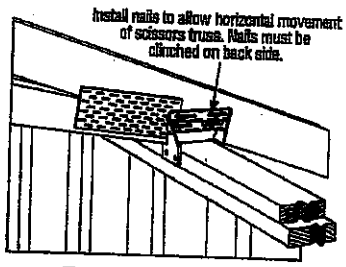
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½ = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss-allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

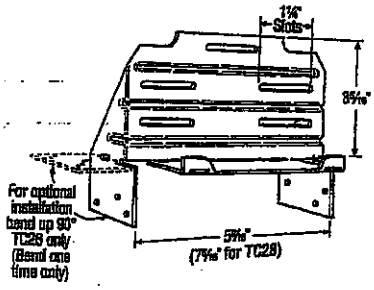
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



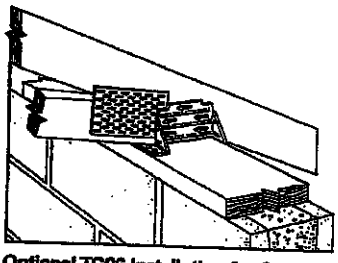
TC24
U.S. Patent 4,932,173



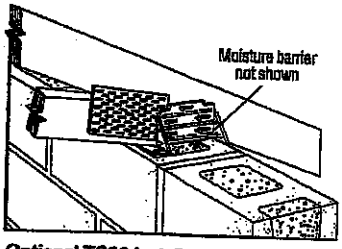
Typical TC24 Installation



TC26
(TC28 Similar)



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer
(8", 10", 12" Wall Installation Similar)



Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K_D=1.15)	Uplift (K_D=1.15)
			lb.	lb.
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K_D=1.15)	Uplift (K_D=1.15)
			lb.	lb.
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ⅜" x 2¼" Titen screws has a factored uplift resistance of 275 lb.

LICENSED PROFESSIONAL ENGINEER
04/01/2020
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LIMIT STATES DESIGN

This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECTC20 3/20 exp. 6/22

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HTU

SIMPSON Strong-Tie

Face-Mount Truss Hanger (cont.)

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32-34 for more information.

Alternate Installation for (2) 2x4 and (2) 2x6 Headers

Model No.	Min. Heel Height (in.)	Minimum Header Size	Fasteners		Factored Resistance			
					D.Fir-L		S-P-F	
			Header	Joist	Uplift (K_D = 1.15)	Normal (K_D = 1.00)	Uplift (K_D = 1.15)	Normal (K_D = 1.00)
					lb. / kN	lb. / kN	lb. / kN	lb. / kN
HTU26 (Min.)	3⅝	(2) 2x4	(10) 16d	(14) 10d x 1½"	1740 / 7.74	3340 / 14.86	1235 / 5.49	2370 / 10.54
HTU26 (Max.)	5½	(2) 2x4	(10) 16d	(20) 10d x 1½"	2470 / 10.99	4015 / 17.86	1755 / 7.81	2850 / 12.68
HTU28 (Max.)	3⅝	(2) 2x6	(20) 16d	(26) 10d x 1½"	4150 / 18.46	6395 / 28.45	2945 / 13.10	4540 / 20.19
HTU210 (Max.)	7¼	(2) 2x6	(20) 16d	(32) 10d x 1½"	4150 / 18.46	6395 / 28.45	2945 / 13.10	4540 / 20.19

See table footnotes on p. 260.

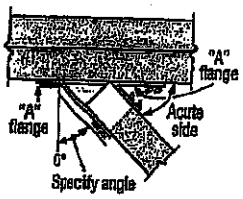
LICENSED PROFESSIONAL ENGINEER 5/29/19 B. D. BUNTING PROVINCE OF ONTARIO

Hanger Options

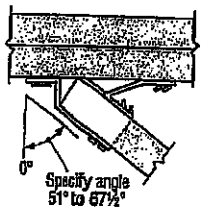
See Hanger Options information on pp. 125–127.

Skewed Seat

- Skewable up to 67½°
- Available in single and 2-ply size
- No bevel cut required



Top View HTU Hanger Skewed Right < 51°



Top View HTU Hanger Skewed Right ≥ 51°

Factored Resistances for Skewed HTU Hangers

Model No.	Skew Angle (Degrees)	Fasteners		Factored Resistance			
				D.Fir-L		S-P-F	
		Header	Joist	Uplift (KD=1.15)	Normal (KD=1.00)	Uplift (KD=1.15)	Normal (KD=1.00)
				lbs / kN	lbs / kN	lbs / kN	lbs / kN
HTU26	< 51	(20) 16d	(14) 10d x 1½"	1835 / 8.16	4110 / 18.28	1300 / 5.78	2905 / 12.92
	51–67½	(20) 16d	(12) 10d x 1½"	1350 / 6.01	3620 / 16.10	955 / 4.25	2560 / 11.39
HTU28	< 51	(26) 16d	(20) 10d x 1½"	2810 / 12.50	4270 / 18.99	1985 / 8.83	3030 / 13.48
	51–67½	(26) 16d	(17) 10d x 1½"	2075 / 9.23	3930 / 17.48	1465 / 6.52	2780 / 12.37
HTU210	< 51	(32) 16d	(26) 10d x 1½"	3785 / 16.84	4430 / 19.71	2675 / 11.90	3135 / 13.95
	51–67½	(32) 16d	(22) 10d x 1½"	2795 / 12.43	4240 / 18.86	1980 / 8.81	3000 / 13.35
HTU26-2	< 51	(20) 16d	(14) 10d	2140 / 9.52	3715 / 16.53	1515 / 6.74	2625 / 11.68
	51–67½	(20) 16d	(12) 10d	1610 / 7.16	3920 / 17.44	1140 / 5.07	2785 / 12.39
HTU28-2	< 51	(26) 16d	(20) 10d	3960 / 17.62	5425 / 24.13	2815 / 12.52	3855 / 17.15
	51–67½	(26) 16d	(17) 10d	2385 / 10.61	5425 / 24.13	1695 / 7.54	3855 / 17.15
HTU210-2	< 51	(32) 16d	(26) 10d	5025 / 22.35	6890 / 30.65	3570 / 15.88	4890 / 21.75
	51–67½	(36) 16d	(22) 10d	3145 / 13.99	6680 / 29.72	2225 / 9.90	4745 / 21.10

1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Reduced heel heights are not permitted for skewed HTU's.
3. Nails: 16d = 0.162" dia. x 3½" long, 10d x 1½" = 0.148" dia. x 1½" long, 10d = 0.148" dia. x 3" long. See pp. 27–28 for other nail sizes and information.

Plated Truss Connectors

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ONTARIO WOOD TRUSS FABRICATORS ASSOCIATION

TECH-NOTES

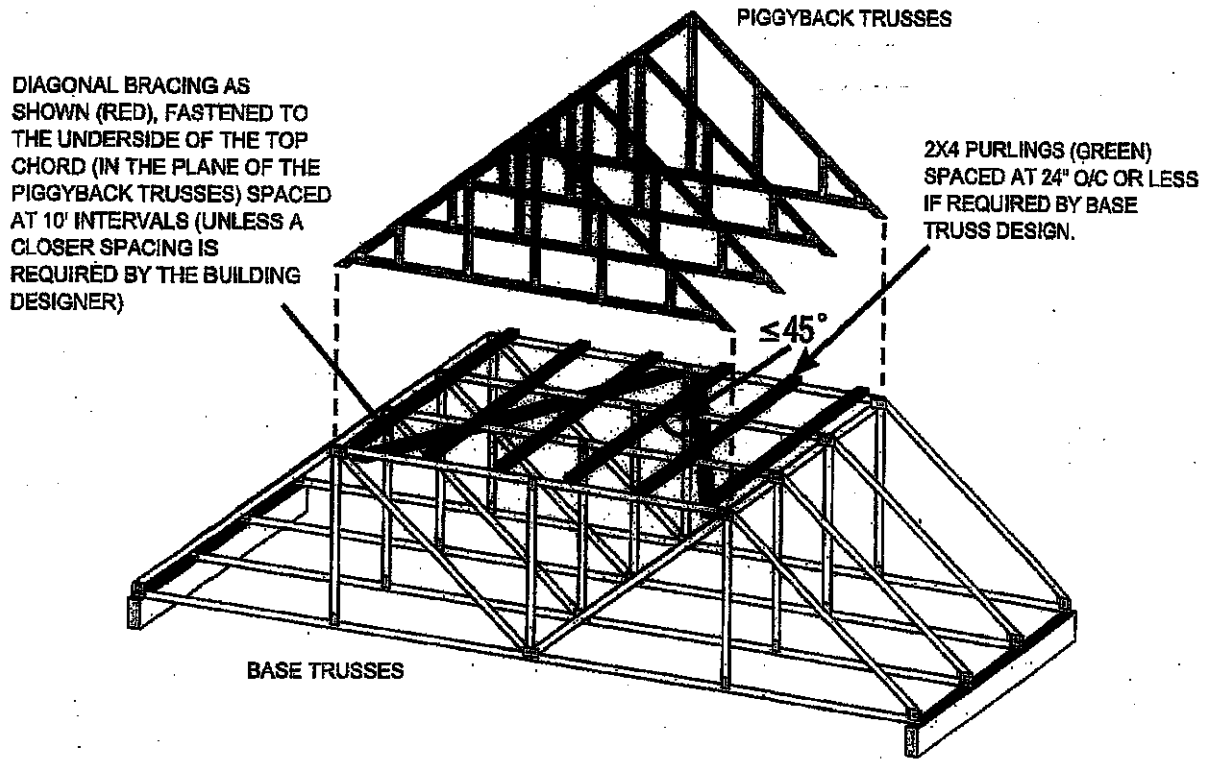
TN 15-001
Piggyback Bracing

Overview:

Where piggybacks are connected overtop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

SIMPSON Strong-Tie®

Strap Ties

Straps are designed to transfer tension loads in a wide variety of applications.

HRS — Heavy strap designed for installation on the edge of 2x members. The HRS416Z installs with Strong-Drive® SDS Heavy-Duty Connector screws.

LSTA and MSTA — Designed for use on the edge of 2x members, with a nailing pattern that reduces the potential for splitting.

LSTI and MSTI — Light and medium straps that are suitable where pneumatic-nailing is necessary through diaphragm decking and wood chord open-web trusses.

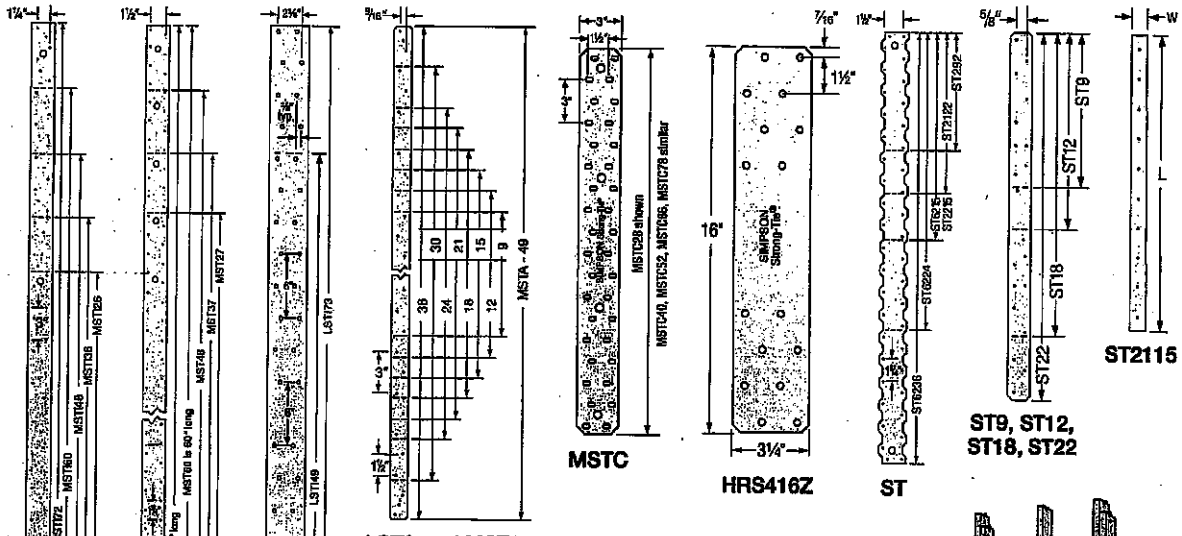
MST — High-capacity strap that can be installed with either nails or bolts. Suitable for double 2x member connections or greater.

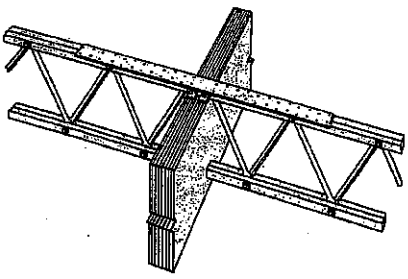
MSTC — High-capacity strap that utilizes a staggered nail pattern to help minimize wood splitting. Nail slots have been countersunk to provide a lower nail head profile.

Finish: Galvanized. Some products are available in stainless steel, ZMAX® coating or black powder coat (add PC to sku); contact Simpson Strong-Tie. See Corrosion Information, pp. 18–20.

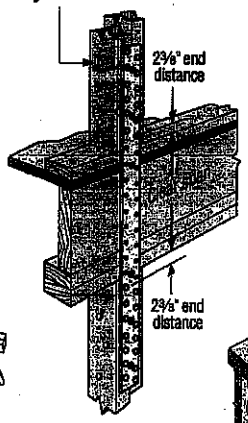
Installation: Use all specified fasteners; see General Notes

Options: Special sizes can be made to order; contact Simpson Strong-Tie for longer lengths

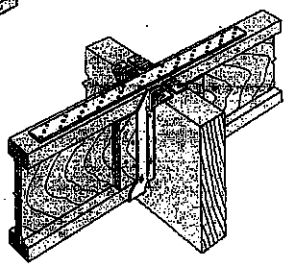




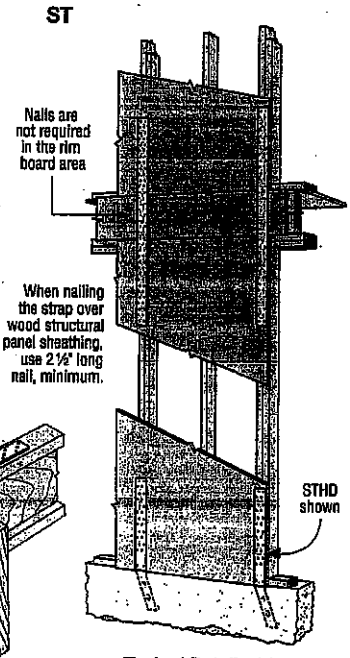
Typical LSTI Installation



Floor-to-Floor Tie Installation Showing a Clear Span



Typical MSTI Installation
(MIT hanger shown)
LSTI similar



Typical Detail with Strap Installed over Wood Structural Panel Sheathing

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HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

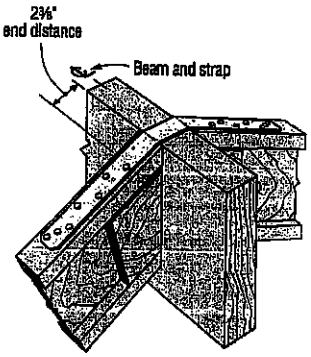
SIMPSON Strong-Tie®

Strap Ties (cont.)

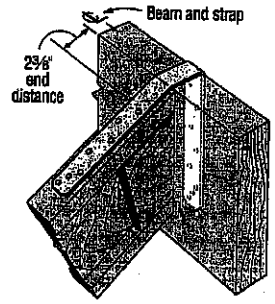
These products are available with additional corrosion protection. For more information, see p. 20.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.) W	Dimensions (in.) L	Fasteners (Total)	Factored Tensile Resistance D.Fir-L (K_D = 1.00) lb. / kN	D.Fir-L (K_D = 1.15) lb. / kN	S-P-F (K_D = 1.00) lb. / kN	S-P-F (K_D = 1.15) lb. / kN
LSTA9	20	1¼	9	(6) 10d	600 / 2.67	690 / 3.07	555 / 2.47	635 / 2.82
LSTA12	20	1¼	12	(8) 10d	800 / 3.56	920 / 4.09	735 / 3.27	845 / 3.76
LSTA15	20	1¼	15	(10) 10d	1000 / 4.45	1150 / 5.12	920 / 4.09	1060 / 4.72
LSTA18	20	1¼	18	(12) 10d	1200 / 5.34	1380 / 6.14	1105 / 4.92	1270 / 5.65
LSTA21	20	1¼	21	(14) 10d	1400 / 6.23	1610 / 7.16	1290 / 5.74	1485 / 6.61
LSTA24	20	1¼	24	(16) 10d	1600 / 7.12	1840 / 8.19	1475 / 6.56	1695 / 7.54
ST292	20	2 1/16	9 5/16	(8) 8d	585 / 2.60	675 / 3.00	535 / 2.38	615 / 2.74
ST2122	20	2 1/16	12 13/16	(12) 8d	940 / 4.18	1085 / 4.83	865 / 3.85	995 / 4.43
ST2115	20	¾	16 5/16	(8) 8d	670 / 2.98	770 / 3.43	615 / 2.74	710 / 3.16
ST2215	20	2 1/16	16 5/16	(16) 8d	1335 / 5.94	1540 / 6.85	1235 / 5.49	1420 / 6.32
LSTA30	18	1¼	30	(20) 10d	2235 / 9.94	2465 / 10.97	2075 / 9.23	2385 / 10.61
LSTA36	18	1¼	36	(24) 10d	2465 / 10.97	2465 / 10.97	2465 / 10.97	2465 / 10.97
LSTI49	18	3¾	49	(32) 10d x 1½"	3115 / 13.86	3580 / 15.93	2852 / 12.69	3280 / 14.59
LSTI73	18	3¾	73	(48) 10d x 1½"	4670 / 20.77	5370 / 23.89	4280 / 19.04	4920 / 21.89
MSTA9	18	1¼	9	(6) 10d	670 / 2.98	770 / 3.43	625 / 2.78	715 / 3.18
SS MSTA12	18	1¼	12	(8) 10d	895 / 3.98	1030 / 4.58	830 / 3.69	955 / 4.25
MSTA15	18	1¼	15	(10) 10d	1120 / 4.98	1285 / 5.72	1040 / 4.63	1195 / 5.32
SS MSTA18	18	1¼	18	(12) 10d	1340 / 5.96	1545 / 6.87	1245 / 5.54	1430 / 6.36
MSTA21	18	1¼	21	(14) 10d	1565 / 6.96	1800 / 8.01	1455 / 6.47	1670 / 7.43
SS MSTA24	18	1¼	24	(16) 10d	1790 / 7.96	2060 / 9.16	1660 / 7.38	1910 / 8.50
MSTA30	16	1¼	30	(20) 10d	2470 / 10.99	2840 / 12.63	2260 / 10.05	2595 / 11.54
SS MSTA36	16	1¼	36	(24) 10d	2965 / 13.19	3070 / 13.66	2710 / 12.06	3070 / 13.66
MSTA49	16	1¼	49	(28) 8d	2725 / 12.12	2725 / 12.12	2545 / 11.32	2725 / 12.12
ST6215	16	2 1/16	16 5/16	(16) 8d	1405 / 6.25	1615 / 7.18	1300 / 5.78	1500 / 6.67
ST6224	16	2 1/16	23 5/16	(24) 8d	2305 / 10.25	2650 / 11.79	2155 / 9.59	2475 / 11.01
ST9	16	1¼	9	(6) 8d	525 / 2.34	605 / 2.69	490 / 2.18	560 / 2.49
ST12	16	1¼	11⅝	(8) 8d	700 / 3.11	805 / 3.58	650 / 2.89	750 / 3.34
ST18	16	1¼	17¾	(12) 8d	1050 / 4.67	1210 / 5.38	975 / 4.34	1125 / 5.00
ST22	16	1¼	21⅝	(18) 8d	1580 / 7.03	1790 / 7.96	1465 / 6.52	1685 / 7.50



Typical LSTA Installation
(hanger not shown)
Bend strap one time only



Typical LSTA Installation
(hanger not shown)
Bend strap one time only

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Use half of the nails in each member being connected to achieve the listed resistances.
3. **Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.

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HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

SIMPSON Strong-Tie®

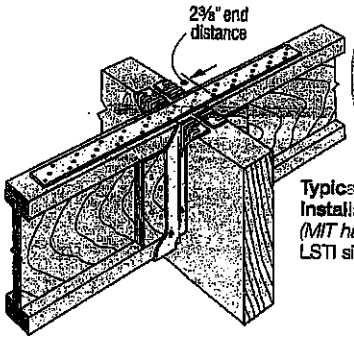
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.) W	Dimensions (in.) L	Fasteners (Total)	Factored Tensile Resistance D.Fir-L (K_D = 1.00) lb. / kN	D.Fir-L (K_D = 1.15) lb. / kN	S-P-F (K_D = 1.00) lb. / kN	S-P-F (K_D = 1.15) lb. / kN
MSTC28	16	3	28¼	(32) 10d	3955 / 17.59	4545 / 20.22	3615 / 16.08	4155 / 18.48
MSTC40		3	40¼	(48) 10d	5930 / 26.38	6820 / 30.34	5420 / 24.11	6235 / 27.74
MSTC52		3	52¼	(54) 10d	6670 / 29.67	6940 / 30.87	6100 / 27.14	6940 / 30.87
MSTC66	14	3	65¾	(66) 10d	8515 / 37.88	8565 / 38.10	7455 / 33.16	8565 / 38.10
MSTC78		3	77¾	(66) 10d	8515 / 37.88	8565 / 38.10	7455 / 33.16	8565 / 38.10
ST6236		2⅛	33⅝	(36) 8d	3735 / 16.61	4295 / 19.11	3270 / 14.55	3760 / 16.73
MSTI26	12	2⅛	26	(22) 10d x 1½"	2825 / 12.57	3250 / 14.46	2475 / 11.01	2850 / 12.68
MSTI36		2⅛	36	(32) 10d x 1½"	4110 / 18.28	4725 / 21.02	3600 / 16.01	4140 / 18.42
MSTI48		2⅛	48	(44) 10d x 1½"	5650 / 25.13	6500 / 28.91	4955 / 22.04	5695 / 25.33
MSTI60		2⅛	60	(56) 10d x 1½"	7195 / 32.01	7360 / 32.74	6305 / 28.05	7250 / 32.25
MSTI72		2⅛	72	(68) 10d x 1½"	7360 / 32.74	7360 / 32.74	7240 / 32.21	7360 / 32.74
MST27		2⅛	27	(26) 8d	2685 / 11.94	3090 / 13.75	2355 / 10.48	2710 / 12.06
MST37		2⅛	37½	(38) 8d	3930 / 17.48	4515 / 20.08	3440 / 15.30	3960 / 17.62
MST48		2⅛	48	(50) 8d	5170 / 23.00	5945 / 26.45	4530 / 20.15	5210 / 23.18
HRS416Z		3¼	16	(16) ¼" x 1½" SDS	2400 / 10.68	2760 / 12.28	2120 / 9.43	2440 / 10.85
MST60	10	2⅛	60	(64) 8d	6620 / 29.45	7610 / 33.85	5800 / 25.80	6670 / 29.67
MST72		2⅛	72	(78) 8d	8065 / 35.88	9135 / 40.64	7065 / 31.43	8125 / 36.14

1. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
2. Use half of the nails in each member being connected to achieve the listed resistances.
3. **Nails:** 10d = 0.148" dia. x 3" long, 10d x 1½" = 0.148" dia. x 1½" long, 8d = 0.131" dia. x 2½" long. See pp. 22–23 for other nail sizes and information.



Typical MST Installation
(MIT hanger shown)
LSTI similar

LICENSED PROFESSIONAL ENGINEER
Jan. 5, 2021
G. V. LUBARSKY
100044463
PROVINCE OF ONTARIO

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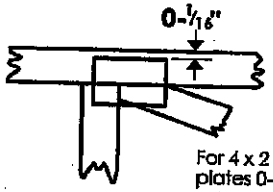
Straps and Ties

Symbols

PLATE LOCATION AND ORIENTATION

Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths or mm. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0-1/4" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

*Plate location details available in MiTek software or upon request.

PLATE SIZE

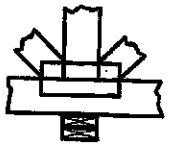
4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION

Indicated by symbol shown and/or by text in the bracing section of the output. Use T, I or Eliminator bracing if indicated.

BEARING



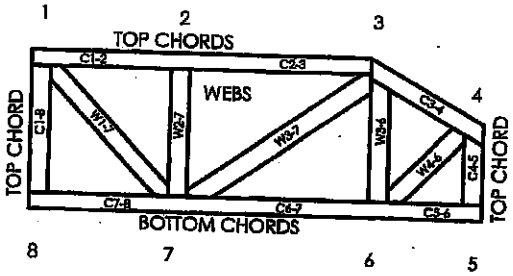
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

Industry Standards:

TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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MiTek®

POWER TO PERFORM.™

MiTek Engineering Reference Sheet: Mil-7473C rev. 10-'08

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by TPIC.
7. Design assumes trusses will be suitably protected from the environment in accord with TPIC.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with TPIC Quality Criteria.

LGT/MGT/VGT

SIMPSON Strong-Tie®

Girder Tiedowns

The LGT, MGT and VGT are girder tiedowns for moderate- to high-load applications. The LGT and VGT are also suitable for retrofit applications.

LGT connectors provide a low-profile connection to the studs for easy installation of drywall. Simple to install and can be installed on the inside or outside of the wall.

The variable girder tiedown (VGT) is a higher capacity alternative to the LGT and MGT for girder trusses. It attaches with Strong-Drive® SDS Heavy-Duty Connector screws to the side of truss and features a predeflected crescent washer that allows it to accommodate top chord pitches up to 8:12. The VGT is also available with one flange concealed for attachment to trusses with no overhang.

Material: VGT — 7 gauge, LGT2 — 14 gauge, MGT, LGT3, LGT4 — 12 gauge

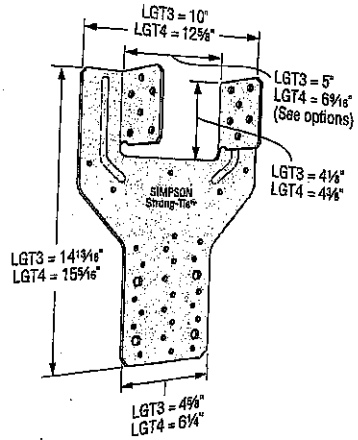
Finish: Galvanized

Installation:

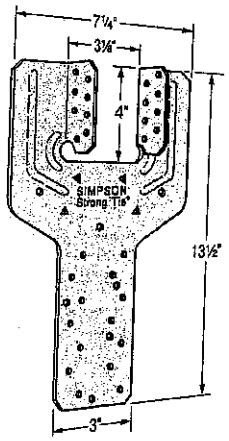
- Before installing fasteners, ensure LGT3-SDS2.5 makes complete contact with bottom of truss.
- Strong-Drive SDS Heavy-Duty Connector screws included with LGT3, LGT4 and VGT series.
- Strong-Drive SDS Heavy-Duty Connector screws driven through truss plates must be approved by the Truss Designer. Predrilling using a 5/32" bit is required.
- VGT — Can be installed on roof pitches up to 8/12 or on a bottom chord designed to transfer the load.
- VGT — Screw holes are configured to allow for double installation on a two-ply (minimum) truss.
- VGT — The product can be installed in a single application or in pairs to achieve a higher uplift capacity.
- VGT — When installed on trusses with no overhangs, specify VGTR/L.
- VGT — Install washer component (provided) so that top of washer is horizontal as well as parallel with top of wall top plate.
- LGT3-SDS2.5 and LGT4-SDS3 — The four large hexagon holes are intended for GFCMU and concrete applications.
- MGT — Install a minimum of (6) 10d nails into the face of roof member that is on same side as MGT base.
- See p. 303 for masonry applications.

Options:

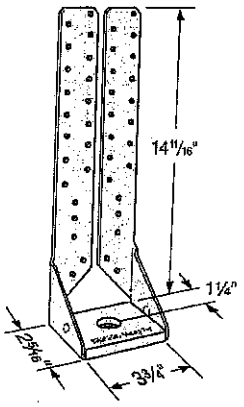
- LGT3 and LGT4 are available with reduced widths of W = 4 13/16" and W = 6 3/8" — order as LGT3N-SDS2.5 and LGT4N-SDS3.



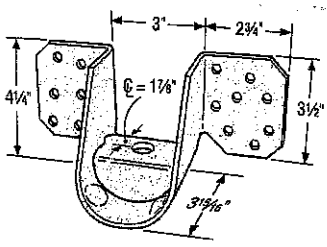
LGT3-SDS2.5
(LGT4-SDS3 similar)



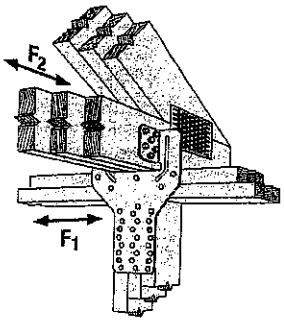
LGT2



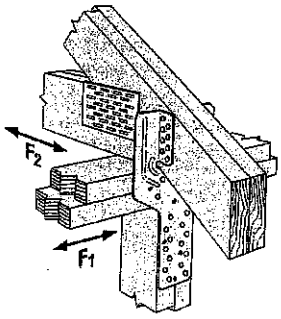
MGT



VGT
US Patent
7,707,785



Typical LGT3-SDS2.5 Installation



Typical LGT2 Installation

Straps and Ties

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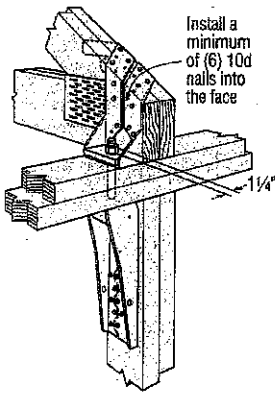
LGT/MGT/VGT

Girder Tiedowns (cont.)

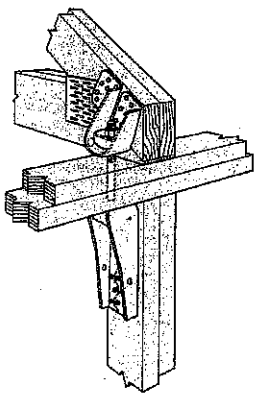
These products are available with additional corrosion protection. For more information, see p. 20.

Model No.	Qty.	No. of Plies	Fasteners: Studs or Anchor	Fasteners: Girder Truss	Factored Resistance (K_D = 1.15) D.Fir-L Uplift	D.Fir-L Lateral F_1	D.Fir-L Lateral F_2	S-P-F Uplift	S-P-F Lateral F_1	S-P-F Lateral F_2
					lb.	lb.	lb.	lb.	lb.	lb.
					kN	kN	kN	kN	kN	kN
LGT2	1	Two ply	(14) 10d[4]	(16) 10d	3670	1170	285	2605	830	200
					16.33	5.20	1.27	11.59	3.69	0.89
LGT3-SDS2.5	1	Three ply	(26) 10d	(12) ¼" x 2½" SDS	6415	1335	670	4930	945	475
					28.54	5.94	2.98	21.93	4.20	2.11
LGT4-SDS3	1	Four ply	(30) 10d[5]	(16) ¼" x 3" SDS	6030	2785	1125	3980	1980	800
					26.82	12.39	5.00	17.70	8.81	3.56
MGT	1	Two ply min.	(1) ⅝" diameter	(22) 10d	5610	—	—	3985	—	—
					24.96	—	—	17.73	—	—
VGT	1	Two ply min.	(1) ⅝" diameter	(16) ¼" x 3" SDS	8600	—	—	6195	—	—
					38.26	—	—	27.56	—	—
	2	Two ply min.	(2) ⅝" diameter	(32) ¼" x 3" SDS	11690	—	—	8420	—	—
					52.00	—	—	37.46	—	—
VGTR/L	1	Two ply min.	(1) ⅝" diameter	(16) ¼" x 3" SDS	3475	—	—	2505	—	—
					15.46	—	—	11.14	—	—
	2	Two ply min.	(2) ⅝" diameter	(32) ¼" x 3" SDS	6950	—	—	5010	—	—
					30.92	—	—	22.29	—	—

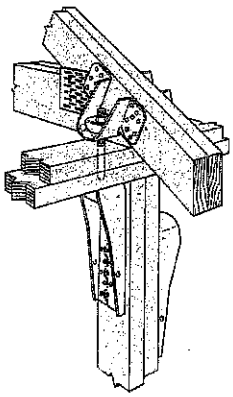
1. Attached members must be designed to resist the factored resistances.
2. Factored resistances have been increased 15% for uplift with no further increase allowed; reduce where other loads govern.
3. Additional anchorage products to be designed by others.
4. LGT2 — F_2 factored resistance requires installation of (4) 10d nails in optional nail holes.
5. LGT4 — F_2 factored resistance requires installation of (7) 10d nails in optional nail holes.
6. MGT can be installed with straps vertical for full table value provided (26) 10d nails are installed to either a solid header or minimum double 2x6 web.
7. Nails: 10d = 0.148" dia. x 3" long. See pp. 22–23 for other nail sizes and information.



Typical MGT Installation with HDU4



Typical VGTR Single Installation with HDU2



Typical VGT Double Installation with HDU4s

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