



DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: LAMBERT LANE PH.2
 Location: CALEDON
 Model: BARTON 3
 Lot #:
 Elevation: 1

Job Track: 50033
 PlanLog: 201018
 Layout ID: 402973
 Ref #
 Page: 1 of 2
 Date: 05/06/2019
 Designer:
 Sales Rep: Mario DiCano

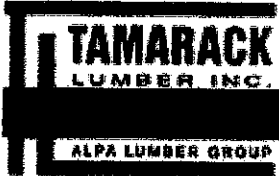
Roof Trusses

PROFILE	QTY PLY	MARK TYPE	PITCH	SPAN	HEIGHT	LUMBER	OVERHANG LEFT RIGHT	HEEL HEIGHT LEFT RIGHT	LBS. BFT.	BUNDLE # STACK #	LOAD BY REMARKS
	6	T6 Flat	0/12	27-00-00	6-06-07	2 x 4		6-06-07 6-06-07	709.75 434.00		
	1 2-ply	T7 Flat Girder	0/12	27-00-00	4-10-07	2 x 6		4-10-07 4-10-07	290 172.00		
	15	P8 Common	10/12	7-11-00	3-07-12	2 x 4		4-03 4-03	349.23 222.50		
	2	T9 Common	10/12	11-02-00	6-03-08	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	99.44 66.00		
	3	T9S Scissor	10/12 7/12	11-02-00	6-03-08	2 x 4	1-03-08 1-03-08	1-07-11 1-07-11	149.51 98.50		
	1	T10 Roof Special Girder	10/12	7-10-00	4-10-11	2 x 4		1-07-11 1-07-11	33.37 22.50		
	2 2-ply	T11 Flat	0/12	3-10-08	1-00-00	2 x 4		1-00-00 1-00-00	49.94 34.67		
	1 2-ply	T21 Hip Girder	6/12	27-00-00	4-01-04	2 x 4 2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	252.71 158.00		
	1	T22 Hip	6/12	27-00-00	5-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	109.31 68.83		
	1	T23 Hip	6/12	27-00-00	6-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	110.98 70.67		
	1	T24 Hip	6/12	27-00-00	7-01-04	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	112.6 70.67		
	11	T25 Common	6/12	27-00-00	7-11-00	2 x 4	1-03-08 1-03-08	1-02-00 1-02-00	1199.12 740.67		
	9	J1 Jack-Open	6/12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	151.15 96.00		
	2	J2 Jack-Open Girder	6/12	1-09-07	2-00-12	2 x 4	1-03-08 4-01-01	1-02-00 2-00-12	23.16 14.67		

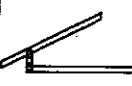
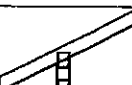
RECEIVED
 JUN 10 2019
 TOWN OF CALEDON
 BUILDING CODE
 FILE NO.

RECEIVED
 JUN 10 2019

TOWN OF CALEDON
 BUILDING SECTION
 FILE NO.

DELIVERY SHIPLIST		
 TAMARACK LUMBER INC. ALPA LUMBER GROUP	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: LAMBERT LANE PH.2 Location: CALEDON Model: BARTON 3 Lot #: Elevation: 1	Job Track: 50033 PlanLog: 201018 Layout ID: 402973 Ref # Page: 2 of 2 Date: 05/06/2019 Designer: Sales Rep: Mario DiCano

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
	2	J3 Jack-Open	6 /12	3-09-07	3-00-12	2 x 4	1-03-08 2-01-01	1-02-00 3-00-12	28.26 17.33		
	2	J4 Jack-Open	6 /12	1-09-07	2-00-12	2 x 4	1-03-08 1-01	1-02-00 2-00-12	14.04 9.33		
	2	J5 Jack-Open	6 /12	1-10-08	3-00-12	2 x 4	1-03-08 1-10-15	1-02-00 2-01-04	19.14 12.00		
	3	J6 Jack-Open	12 /12	3-00-08	4-11-00	2 x 4	1-03-08	1-10-08 4-11-00	42.24 29.00		
	4	J7 Jack-Open	10 /12	3-10-08	4-10-07	2 x 4	1-03-08	1-07-11 4-10-07	60.9 38.67		

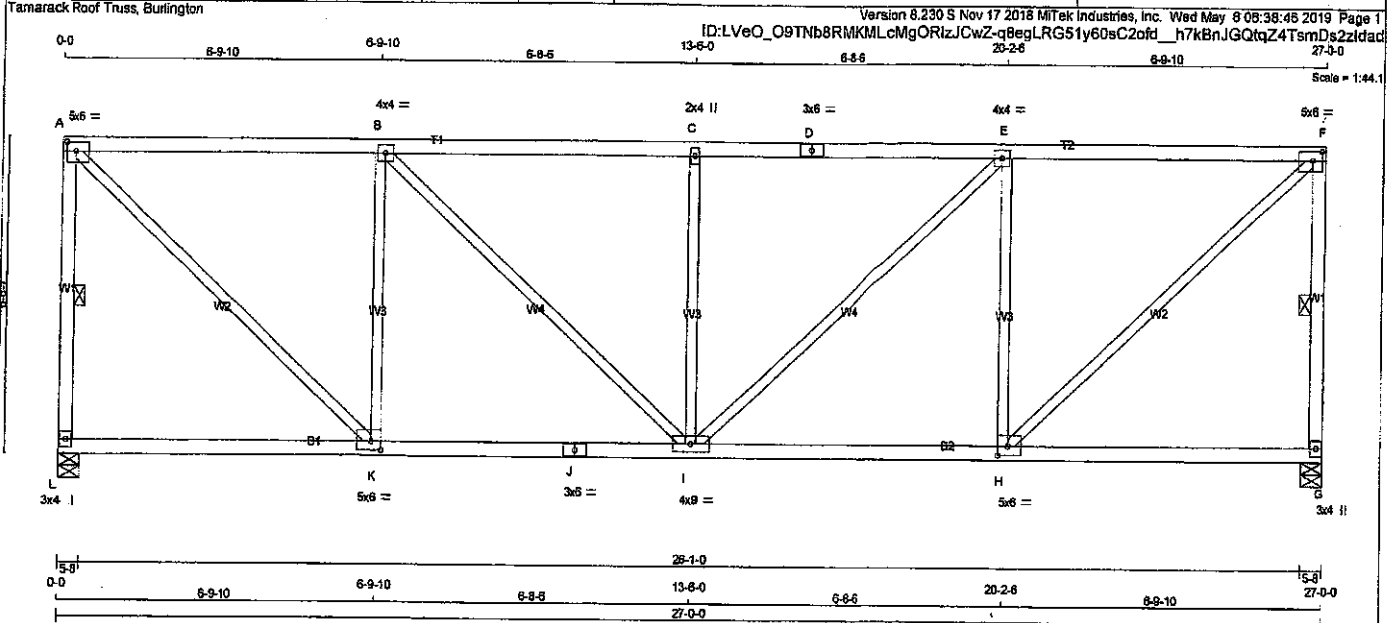
TOTAL # TRUSS= 73 TOTAL BFT OF ALL TRUSSES= 2376.01 BFT. TOTAL WEIGHT OF ALL TRSSES 3804.87 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
1	Hardware	LJS26DS	
3	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 4

JOB NAME 402973	TRUSS NAME T6	QUANTITY 6	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR
L - A	2x4	DRY	No.2	SPF	
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
J - 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
A	TMVW-I	MT20	5.0	8.0	2.25	2.50
B	TMVW-I	MT20	4.0	4.0		
C	TMVW-I	MT20	2.0	4.0		
D	TS-I	MT20	3.0	6.0		
E	TMVW-I	MT20	4.0	4.0		
F	TMVW-I	MT20	5.0	6.0	2.25	2.50
G	BMV1-p	MT20	3.0	4.0		
H	BMVW-I	MT20	5.0	6.0	2.25	2.50
I	BMVW-I	MT20	4.0	9.0		
J	BS-I	MT20	3.0	6.0		
K	BMVW-I	MT20	5.0	6.0	2.25	2.50
L	BMV1-p	MT20	3.0	4.0		

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
L	1899	0	1899	0
G	1899	0	1899	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	PERM LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM LIVE	WIND
L	1419	784 / 0	284 / 0	0 / 0	351 / 0
G	1419	784 / 0	284 / 0	0 / 0	351 / 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 = 3.45 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 A-L, F-G.

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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		
L-A	-1794 / 0	0.0	0.0 0.35 (1)	A-K	0 / 2246	0.51 (1)
A-B	-1654 / 0	-102.1	-102.1 0.84 (1)	K-B	-1222 / 0	0.85 (1)
B-C	-2119 / 0	-102.1	-102.1 0.92 (1)	B-I	0 / 636	0.14 (1)
C-D	-2119 / 0	-102.1	-102.1 0.92 (1)	I-C	-631 / 0	0.44 (1)
D-E	-2119 / 0	-102.1	-102.1 0.92 (1)	E-I	0 / 636	0.14 (1)
E-F	-1654 / 0	-102.1	-102.1 0.84 (1)	F-E	-1222 / 0	0.85 (1)
G-F	-1794 / 0	0.0	0.0 0.35 (1)	F-H	0 / 2246	0.51 (1)
L-K	0 / 0	-38.5	-38.5 0.34 (3)			
K-J	0 / 1654	-38.5	-38.5 0.55 (2)			
J-I	0 / 1654	-38.5	-38.5 0.55 (2)			
I-H	0 / 1654	-38.5	-38.5 0.55 (2)			
H-G	0 / 0	-38.5	-38.5 0.34 (3)			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.92/1.00 (B-C:1), BC=0.55/1.00 (I-K:2), WB=0.85/1.00 (E-H:1), SS=0.33/1.00 (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

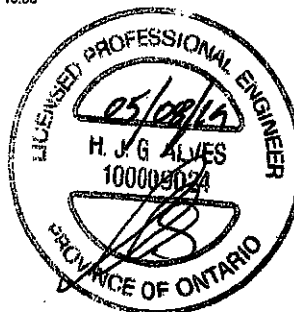
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1967 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.80 (D) (INPUT = 0.90)
JSI METAL=0.84 (J) (INPUT = 1.00)



DWG NO. TAM 1910805
STRUCTURAL
COMPONENT ONLY

JOB NAME 402973	TRUSS NAME IT7	QUANTITY 1	PLY 2	JOB DESCRIPTION GREEN PARK HOMES	DRWG NO. 27-0-0
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Tamarack Roof Truss, Burlington
ID: LVeO_O9TNb8RMKMLcMgORlZJCwZ-ICK2ZnHjGGSUMc_CLVDEKGVXjalLdEiWVmOVzldac
Version 8.230 S Nov 17 2018 MITek Industries, Inc. Wed May 8 08:38:47 2019 Page 1

Scale = 1:43.7
 27-0-0

LUMBER

CHORDS	SIZE	DRY	LUMBER	DESCR.
L - A	2x8	DRY	No.2	SPF
A - D	2x8	DRY	No.2	SPF
D - F	2x8	DRY	No.2	SPF
G - J	2x8	DRY	No.2	SPF
L - J	2x8	DRY	No.2	SPF
J - G	2x8	DRY	No.2	SPF

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	3481 0	3481 0	0	5-8
G	2905 0	2905 0	0	5-8

UNFACTORED REACTIONS

	1ST CASE	MAX. MIN. COMPONENT REACTIONS
JT	2587	1472 / 0
L	2159	1231 / 0
G		485 / 0
		403 / 0
		0 / 0
		0 / 0
		530 / 0
		524 / 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 = 4.78 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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
L-A	-3143 / 0	H-F	0 / 4738
A-M	-4154 / 0	A-K	0 / 4925
M-B	-4154 / 0	H-E	-1914 / 0
B-N	-5626 / 0	K-B	-1811 / 0
N-C	-5626 / 0	E-I	0 / 1983
C-O	-5626 / 0	I-C	0 / 1773
O-P	-5626 / 0	L-C	-856 / 0
P-D	-5626 / 0		
D-E	-5626 / 0		
E-F	-3996 / 0		
G-F	-2832 / 0		

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0		
B	TMVW-t	MT20	5.0	8.0		
C	TMVW-t	MT20	3.0	6.0		
D	TS-t	MT20	5.0	6.0		
E	TMVW-t	MT20	5.0	8.0		
F	TMVW-t	MT20	5.0	8.0		
G	BMV1-p	MT20	3.0	6.0		
H	BMVW-t	MT20	5.0	6.0	2.50	2.00
I	BMVW-t	MT20	5.0	8.0		
J	BS-t	MT20	5.0	8.0		
K	BMVW-t	MT20	5.0	6.0	2.50	2.00
L	BMV1-p	MT20	3.0	6.0		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 088-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/998 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.34/1.00 (A-L-1), BC=0.60/1.00 (H-I-1),
WB=0.61/1.00 (A-K-1), SS=0.21/1.00 (H-I-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) SHEAR SECTION (PL) (PL)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 798 1987 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

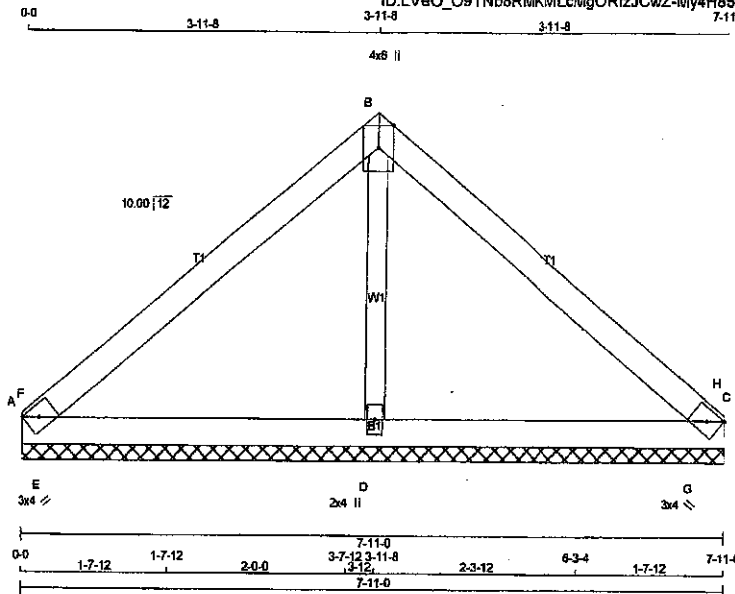
JSI GRIP= 0.87 (F) (INPUT = 0.90)
JSI METAL= 0.70 (J) (INPUT = 1.00)

DRWG NO. TAM **PA10806**
STRUCTURAL
COMPONENT ONLY

CONTINUED ON PAGE 2

JOB NAME 402973	TRUSS NAME P8	QUANTITY 15	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington		TRUSS DESC.			

Version 8.230 S Nov 17 2018 MITak Industries, Inc. Wed May 8 08:38:45 2019 Page 1
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7-11-0



Scale = 1/23.2

TOTAL WEIGHT = 15 X 23 = 349 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	
A - 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 - B	TBM1-h	MT20	3.0	4.0	Edge	1.75	
B - C	TTW+p	MT20	4.0	6.0	Edge		
C - B	TBM1-h	MT20	3.0	4.0	Edge		
D - B	BMV1+w	MT20	2.0	4.0			

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
A	312	0	312	0	0	7-11-0	7-11-0		
C	312	0	312	0	0	7-11-0	7-11-0		
D	490	0	490	0	0	7-11-0	7-11-0		

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE										
A	228	141 / 0	35 / 0	0 / 0	0 / 0	32 / 0	0 / 0						
C	228	141 / 0	35 / 0	0 / 0	0 / 0	32 / 0	0 / 0						
D	376	178 / 0	97 / 0	0 / 0	0 / 0	101 / 0	0 / 0						

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, C, 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		FACTORED				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)	
FR-TO		FROM	TO	CS1 (LC)	LENGTH	FR-TO			
A-F	-52 / 34	-102.1	-102.1	0.09 (1)	6.25	D-B	-204 / 0	0.04 (1)	
F-B	-118 / 0	-102.1	-102.1	0.19 (1)	6.25	E-F	-433 / 18	0.00 (1)	
B-H	-118 / 0	-102.1	-102.1	0.19 (1)	6.25	G-H	-433 / 18	0.00 (1)	
H-C	-52 / 34	-102.1	-102.1	0.09 (1)	6.25				
A-E	0 / 82	-38.5	-38.5	0.19 (1)	10.00				
E-D	0 / 82	-38.5	-38.5	0.20 (1)	10.00				
D-G	0 / 82	-38.5	-38.5	0.20 (1)	10.00				
G-C	0 / 82	-38.5	-38.5	0.19 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.19/1.00 (B-H:1), BC=0.20/1.00 (D-E:1), WB=0.04/1.00 (B-D:1), SSI=0.34/1.00 (A-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

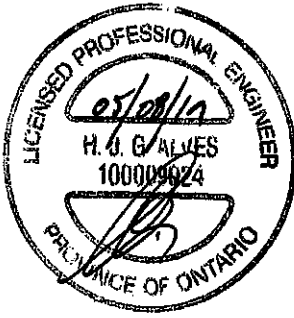
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1655

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (A) (INPUT = 0.90)
JSI METAL= 0.06 (C) (INPUT = 1.00)



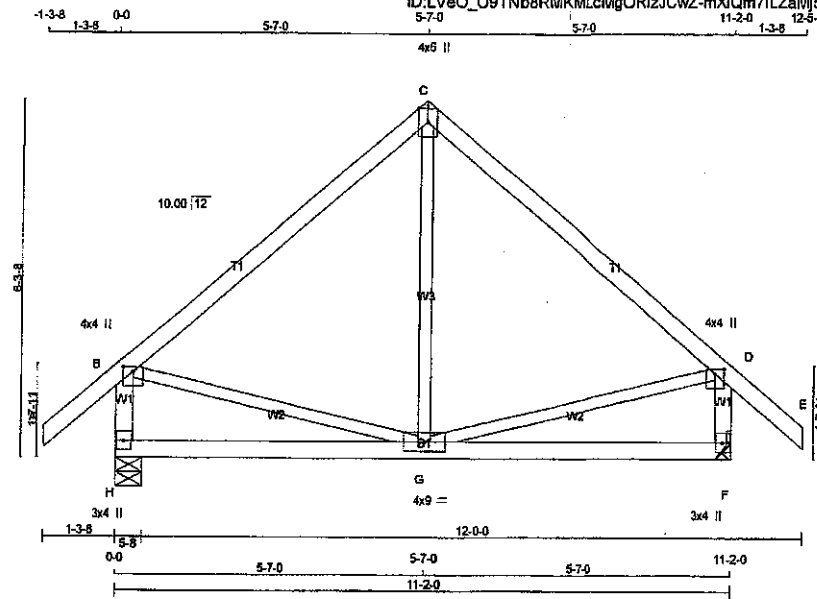
DWG NO. TAM 9910804
STRUCTURAL
COMPONENT ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
402973	T9	2	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:LVeO_Q9TNb8RMKMLcMgORizJCwZ-mXlQm7ILZaMj5WBAm20SmYpf7679Lw_NxAFKwxzIdab



Scale = 1:37.5

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 2x3 DRY No.2 SPF

EXCEPT

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	
C	TTW+p	MT20	4.0	6.0	Edge		
D	TMVW+p	MT20	4.0	4.0	1.00	2.00	
F	BMV1+p	MT20	3.0	4.0			
G	BMVWW+I	MT20	4.0	9.0			
H	BMV1+p	MT20	3.0	4.0			

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT
H	927	0	927	0
F	927	0	927	0

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

UNFACTORED REACTIONS

1ST LOASE	MAX. MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
H	684	405 / 0	117 / 0	0 / 0	162 / 0
F	684	405 / 0	117 / 0	0 / 0	162 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLINE 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	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX
MEMB.	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE	FORCE
FR-TO	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
A-B	0 / 45	-102.1	-102.1	0.14 (1)	10.00	G-C	0 / 248	0.06 (3)			
B-C	-510 / 0	-102.1	-102.1	0.41 (1)	6.25	B-G	0 / 403	0.09 (1)			
C-D	-510 / 0	-102.1	-102.1	0.41 (1)	6.25	G-D	0 / 403	0.09 (1)			
D-E	0 / 45	-102.1	-102.1	0.14 (1)	10.00						
H-B	-845 / 0	0.0	0.0	0.09 (1)	7.81						
F-D	-845 / 0	0.0	0.0	0.09 (1)	7.81						
H-G	0 / 0	-38.5	-38.5	0.27 (3)	10.00						
G-F	0 / 0	-38.5	-38.5	0.27 (3)	10.00						

TOTAL WEIGHT = 2 X 50 = 99 lb

(M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	29.1	PSF
DL =	6.0	PSF	
BOT CH.	LL =	10.5	PSF
DL =	7.0	PSF	
TOTAL LOAD =	52.5	PSF	

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/380$ (0.37")
CALCULATED VERT. DEFL. (LL) = $L/969$ (0.03")
ALLOWABLE DEFL. (TL) = $L/380$ (0.37")
CALCULATED VERT. DEFL. (TL) = $L/969$ (0.05")

CSI: TC=0.41/1.00 (B-C:1), BC=0.27/1.00 (G-H:3), WB=0.09/1.00 (D-G:1), SS=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.

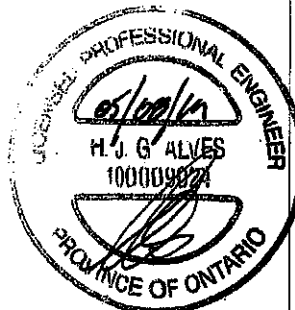
NAIL VALUES

PLATE GRIP(DRY) SHEAR	SECTION
(PSI)	(PLI)
MAX MIN	MAX MIN
MT20	618 354 1667 786 1997 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (D) (INPUT = 0.90)
JSI METAL= 0.21 (D) (INPUT = 1.00)



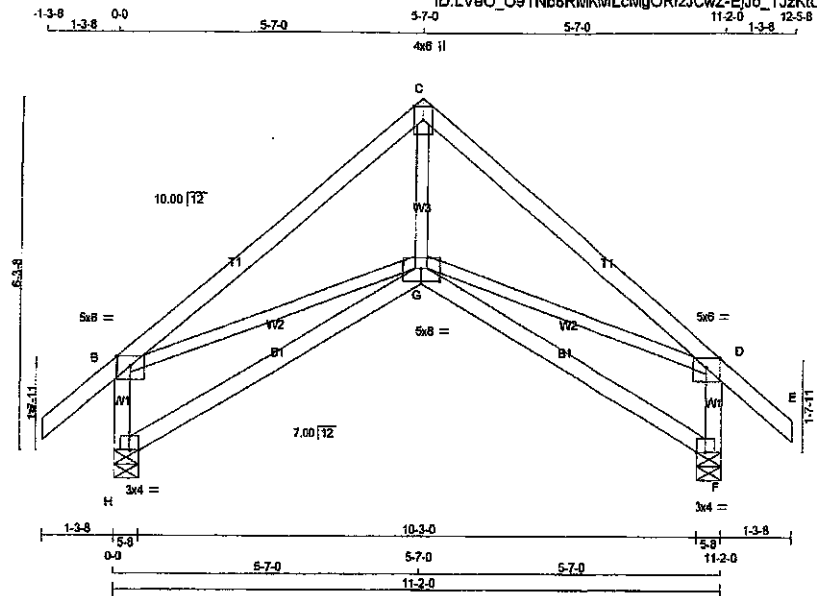
DWG NO. TAM 17910807
STRUCTURAL
COMPONENT ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
402973	T9S	3	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:LVeO_O9TNb8RMKMLcMgORfzJCwZ-EJJo_TJzKtUaigmNkmXhJmMqCWL14MvX9q_tSNzidaa



Scale = 1/32.0

TOTAL WEIGHT = 3 X 50 = 150 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
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	6.0	Edge	
C	TTW+p	MT20	4.0	6.0	Edge	
D	TMVW-p	MT20	5.0	6.0	Edge	
F	BVM1-p	MT20	3.0	4.0		
G	BSVWW-p	MT20	5.0	8.0	2.75	4.00
H	BVM1-p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED	GROSS REACTION	MAXIMUM FACTORED	INPUT	REQD
				BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	927	0	927	0	5-8
F	927	0	927	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS						
H	COMBINED	SNOW	LIVE	PERM	LIVE	WIND	DEAD	SOIL	
F	684	405 / 0	117 / 0	0 / 0	0 / 0	182 / 0	0 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.74 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	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	0 / 45	-102.1 -102.1 0.14 (1)	G-C	0 / 670
B-C	-969 / 0	-102.1 -102.1 0.43 (1)	B-G	0 / 778
C-D	-969 / 0	-102.1 -102.1 0.43 (1)	G-D	0 / 778
D-E	0 / 45	-102.1 -102.1 0.14 (1)		
H-B	-819 / 0	0.0 0.0 0.09 (1)		
F-D	-819 / 0	0.0 0.0 0.09 (1)		
H-G	0 / 0	-38.5 -38.5 0.28 (3)		
G-F	0 / 0	-38.5 -38.5 0.28 (3)		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/965 (0.14")

CSI: TC=0.43/1.00 (B-C:1), BC=0.28/1.00 (F-G:3), WB=0.18/1.00 (B-G:1), SS=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

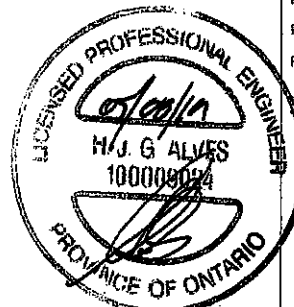
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 518 354 1657 786 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

NSI GRIP= 0.67 (H) (INPUT = 0.90)
NSI METAL= 0.48 (H) (INPUT = 1.00)



DWG NO. TAM 1910808
STRUCTURAL
COMPONENT ONLY

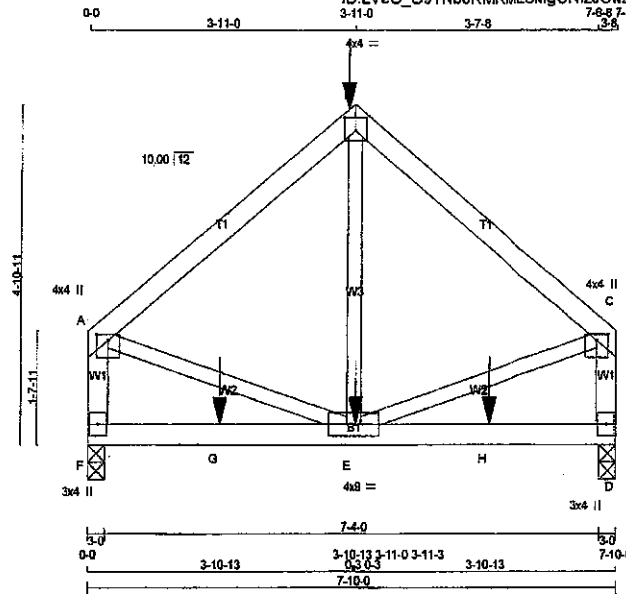
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
402973	T10	1	1	TRUSS DESC.		

Tamarack Roof Truss, Burlington

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ID:LVeO_Q9TNb8RMKMLcMgORizJCwZ-EjJo_TJzKUajgrnKkmXhJlmsYWN34NxX9q_tSNzldaa

Scale = 1:30.7



TOTAL WEIGHT = 33 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	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV+p	MT20	4.0	4.0	1.00	2.00
B	TTW+p	MT20	4.0	4.0	2.25	2.00
C	TMWV+p	MT20	4.0	4.0	1.00	2.00
D	BMV1+p	MT20	3.0	4.0		
E	BMWVW+1	MT20	4.0	9.0		
F	BMV1+p	MT20	3.0	4.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	IN-SX	IN-SX
F	753	0	0	3-0
D	753	0	0	3-0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERMIVE	WIND	DEAD	SOIL	
F	558	323/0	99/0	0/0	0/0	135/0	0/0	
D	558	323/0	99/0	0/0	0/0	135/0	0/0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLINE 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	-544/0	-102.1 -102.1	0.31 (1)	6.25	E-B	-47/179	0.05 (3)
B-C	-544/0	-102.1 -102.1	0.31 (1)	6.25	A-E	0/441	0.11 (1)
F-A	-688/0	0.0 0.0	0.08 (1)	7.81	E-C	0/441	0.11 (1)
D-C	-688/0	0.0 0.0	0.08 (1)	7.81			
F-G	0/0	-38.5 -38.5	0.17 (3)	10.00			
G-E	0/0	-38.5 -38.5	0.17 (3)	10.00			
E-H	0/0	-38.5 -38.5	0.17 (3)	10.00			
H-D	0/0	-38.5 -38.5	0.17 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	3-11-0	-44	-49		FRONT	VERT	DEAD		
B	3-11-0	-61	-61		BACK	VERT	TOTAL		
B	3-11-0	-240	-240		FRONT	VERT	SNOW		
E	3-11-4	-20	-26		BACK	VERT	TOTAL		
G	1-11-4	-20	-26		BACK	VERT	TOTAL		
H	5-11-4	-20	-26		BACK	VERT	TOTAL		

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 = 29.1 PSF
	DL = 6.0 PSF
BOT CH.	LL = 10.5 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 52.5 PSF

SPACING = 24.0 IN. C/C

*** NON STANDARD GIRDER ***

ADDTL. USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.31/1.00 (A-B:1), BC=0.17/1.00 (E-F:3), WB=0.11/1.00 (C-E:1), SSI=0.13/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PL)	(PL)	(PL)
MT20	618	354	1687
	788	1987	1858

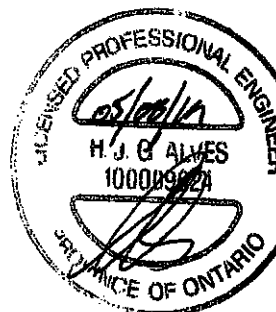
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SI GRIP=0.84 (C) (INPUT = 0.80)

SI METAL=0.16 (C) (INPUT = 1.00)

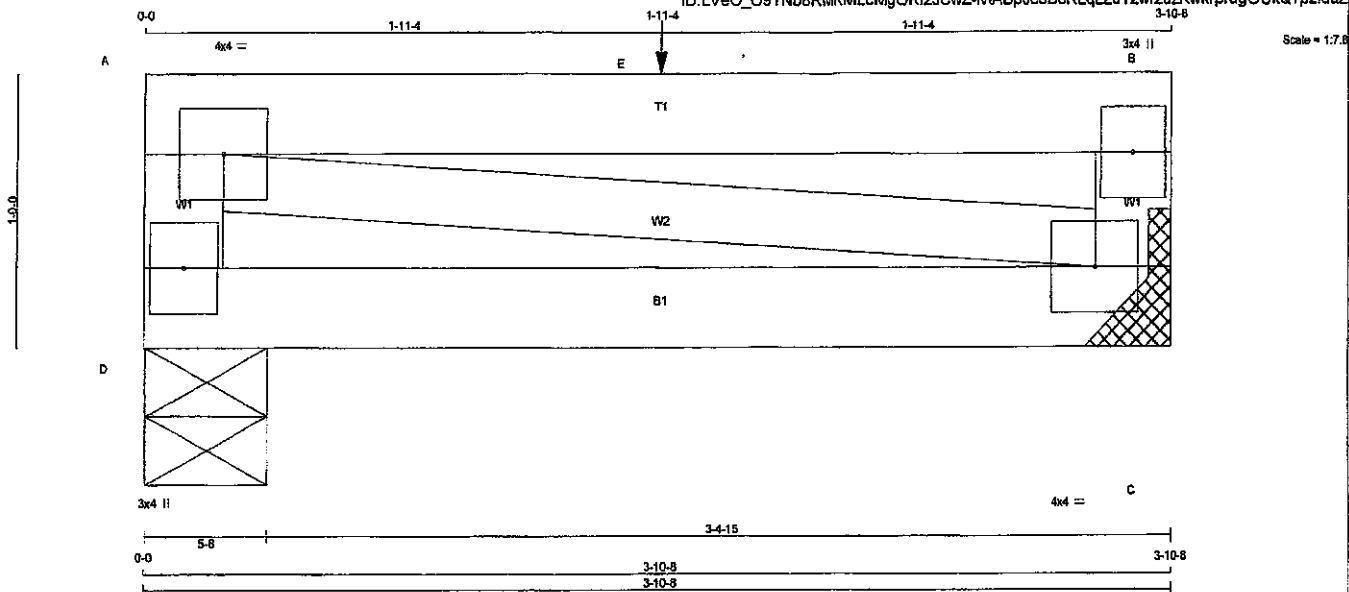
DRWG NO. TAM 17910809
STRUCTURAL
COMPONENT ONLY



JOB NAME 402973	TRUSS NAME T11	QUANTITY 2	PLY 2	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				TRUSS DESC.	

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ID:LVeO_09TNb8RMKMLcMgORIZJCwZ-ivABpJc5BcRLqLZuT2wrzuzKwkrprugOUkQ?pzldaz



TOTAL WEIGHT = 4 X 12 = 50 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR
CHORDS			
D - A	2x4	DRY	No.2
A - B	2x4	DRY	No.2
C - B	2x4	DRY	No.2
D - C	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
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	12	TOP
A-B	12	TOP
B-C	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
D-C	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	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-I	MT20	4.0	4.0
B	TMV+p	MT20	3.0	4.0
C	BMVW-I	MT20	4.0	4.0
D	BMV1+p	MT20	3.0	4.0

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

BEARINGS			
FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT HORZ	DOWN HORZ UPLIFT	IN-SX	IN-SX
D 598 0	598 0	0	5-8
C 598 0	598 0	0	MECHANICAL

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT C. MINIMUM BEARING LENGTH AT JOINT C = 4-0.

UNFACTORED REACTIONS						
1ST LCASE	MAX/MIN	COMPONENT REACTIONS				
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D 447	245 / 0	90 / 0	0 / 0	0 / 0	113 / 0	0 / 0
C 447	245 / 0	90 / 0	0 / 0	0 / 0	113 / 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)
FR-TO			
D-A	-523 / 0	0.0	0.03 (1)
A-E	0 / 0	-102.1	-102.1 0.56 (1)
E-B	0 / 0	-102.1	-102.1 0.56 (1)
C-B	-523 / 0	0.0	0.03 (1)
D-C	0 / 0	-38.5	-38.5 0.07 (3)

FACTORED CONCENTRATED LOADS (LBS)			
JT	LOC.	LC1	MAX- MAX+
E	1-11-4	-851	-851

FACE	DIR.	TYPE	HEEL	CONN.
TOP	VERT	TOTAL		

DESIGN CRITERIA

SPECIFIED LOADS:	
TOP CH.	LL = 29.1 PSF
DL	= 6.0 PSF
BOT CH.	LL = 10.5 PSF
DL	= 7.0 PSF
TOTAL LOAD	= 52.5 PSF

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.09/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2010, CBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.56/1.00 (A-B:1), BC=0.07/1.00 (C-D:3), WB=0.00/1.00 (A-C:1), SS=0.20/1.00 (A-B:1)

OOL 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

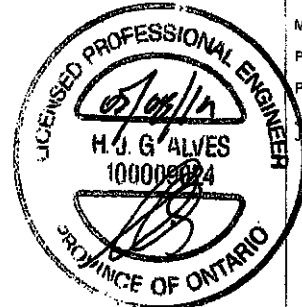
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MT20	618	354	1667 788 1987 1856

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

SI GRIP= 0.16 (A) (INPUT = 0.90)
SI METAL= 0.04 (A) (INPUT = 1.00)



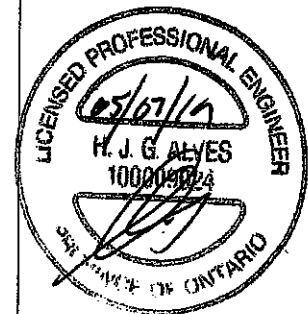
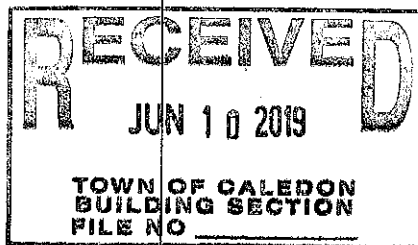
DWG. NO. 444 1910810
SHEET 1
DATE 10/10/10

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402939	T21	1	2	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington				TRUSS DESC.	

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue May 7 17:48:13 2019 Page 2
ID: yH3luQzwKBaXQAh?hsfBURzKCTp-qVvxrdSag6XyilP_FslaBCy48h4xqRDaEHyczgqW

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
O	10-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
P	12-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
Q	14-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
R	16-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
S	18-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
T	20-1-4	-123	-123	—	FRONT	VERT	TOTAL	—	—
U	1-11-4	-55	-74	—	FRONT	VERT	TOTAL	—	—
V	3-11-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
W	8-4-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
X	10-1-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
Y	12-1-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
Z	14-1-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
AA	18-1-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
AB	20-1-4	-55	-70	—	FRONT	VERT	TOTAL	—	—
AC	23-0-12	-55	-70	—	FRONT	VERT	TOTAL	—	—
AD	25-0-12	-55	-74	—	FRONT	VERT	TOTAL	—	—

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE



FILE NO. TAM 17910779
STRUCTURAL
CHECKS ONLY

7/2

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	28.1	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	10.5	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	52.5	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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBCBC 2018, CBC 2012
- CSA 088-08, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.30")

CSI: TC=0.52/1.00 (D-E:1), BC=0.71/1.00 (K-M:2),
WB=0.77/1.00 (G-J:1), SSI=0.28/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LENS=1.10
COMP=1.10 SHEAR=1.10 TEND=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVEHEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN
MT20	618 354	1987 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

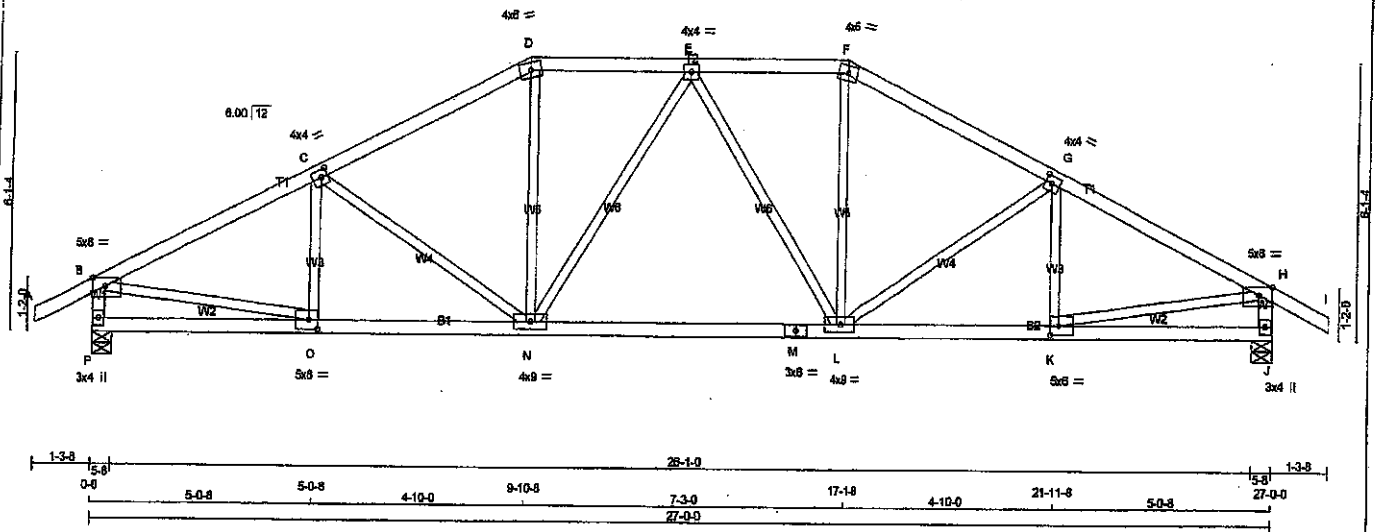
JSI GRIP= 0.86 (C) (INPUT = 0.90)
JSI METAL= 0.73 (L) (INPUT = 1.00)

17910780

STRUCTURAL

CONNECTION ONLY

JOB NAME 402939	TRUSS NAME T23	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington				Version 8.230 S Nov 17 2018 MTek Industries, Inc. Tue May 7 17:48:15 2019 Page 1	
ID: yH3luQzwKBaXQAh7hsf8URzKCTp-mudyMXeibHMFB0sn5fuDfcHKJyKoPkwW1YE00VzldU				27-0-0 28-3-8	
1-3-8 0-0 5-0-8 5-0-8 4-10-0 9-10-8 3-7-8 13-8-8 3-7-8 17-1-8 4-10-0 21-11-8 5-0-8				Scale = 1:46.8	



TOTAL WEIGHT = 111 lb
(MBF)

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - J	2x4	DRY	No.2	SPF	
P - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
P - M	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	Edge	3.50
C	TMVW-w	MT20	4.0	4.0	2.00	1.75
D	TTW-m	MT20	4.0	6.0		
E	TMVW-w	MT20	4.0	4.0		
F	TTW-m	MT20	4.0	6.0		
G	TMVW-w	MT20	4.0	4.0	2.00	1.75
H	TMVW-p	MT20	5.0	8.0	Edge	3.50
J	BMV1+p	MT20	3.0	4.0		
K	BMVW-l	MT20	5.0	6.0	2.50	2.25
L	BMVW-w	MT20	4.0	9.0		
M	BS-l	MT20	3.0	6.0		
N	BMVW-w	MT20	4.0	9.0		
O	BMVW-l	MT20	5.0	6.0	2.50	2.25
P	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	DOWN	BRG	BRG	IN-SX	IN-SX
P	2037	0	2037	0	0	5-8	5-8		
J	2037	0	2037	0	0	5-8	5-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	1514	863 / 0	284 / 0	0 / 0	0 / 0	387 / 0	0 / 0	0 / 0
J	1514	863 / 0	284 / 0	0 / 0	0 / 0	387 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 31	-102.1 -102.1	0.13 (1)	10.00	C-C	-221 / 84	0.05 (1)
B-C	-2863 / 0	-102.1 -102.1	0.41 (1)	3.88	C-N	-410 / 0	0.26 (1)
C-D	-2337 / 0	-102.1 -102.1	0.38 (1)	4.14	N-D	0 / 888	0.16 (1)
D-E	-2078 / 0	-102.1 -102.1	0.20 (1)	4.53	N-E	-258 / 0	0.22 (1)
E-F	-2078 / 0	-102.1 -102.1	0.20 (1)	4.53	E-L	-258 / 0	0.22 (1)
F-G	-2337 / 0	-102.1 -102.1	0.38 (1)	4.14	L-F	0 / 888	0.16 (1)
G-H	-2863 / 0	-102.1 -102.1	0.41 (1)	3.88	L-G	-410 / 0	0.26 (1)
H-I	0 / 31	-102.1 -102.1	0.13 (1)	10.00	K-G	-221 / 84	0.05 (1)
P-B	-1951 / 0	0.0 0.0	0.20 (1)	6.03	B-O	0 / 2438	0.55 (1)
J-H	-1951 / 0	0.0 0.0	0.20 (1)	6.03	K-H	0 / 2438	0.55 (1)
P-O	0 / 0	-38.5 -38.5	0.16 (3)	10.00			
O-N	0 / 2404	-38.5 -38.5	0.56 (1)	10.00			
N-M	0 / 2211	-38.5 -38.5	0.53 (2)	10.00			
M-L	0 / 2211	-38.5 -38.5	0.53 (2)	10.00			
L-K	0 / 2404	-38.5 -38.5	0.56 (1)	10.00			
K-J	0 / 0	-38.5 -38.5	0.16 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 28.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. GIC

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 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, CBC 2012
- CSA 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.41/1.00 (G-H-1), BC=0.55/1.00 (K-L-1), WB=0.55/1.00 (H-K-1), SS=0.22/1.00 (G-H-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

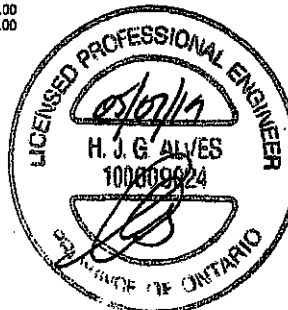
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1967 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

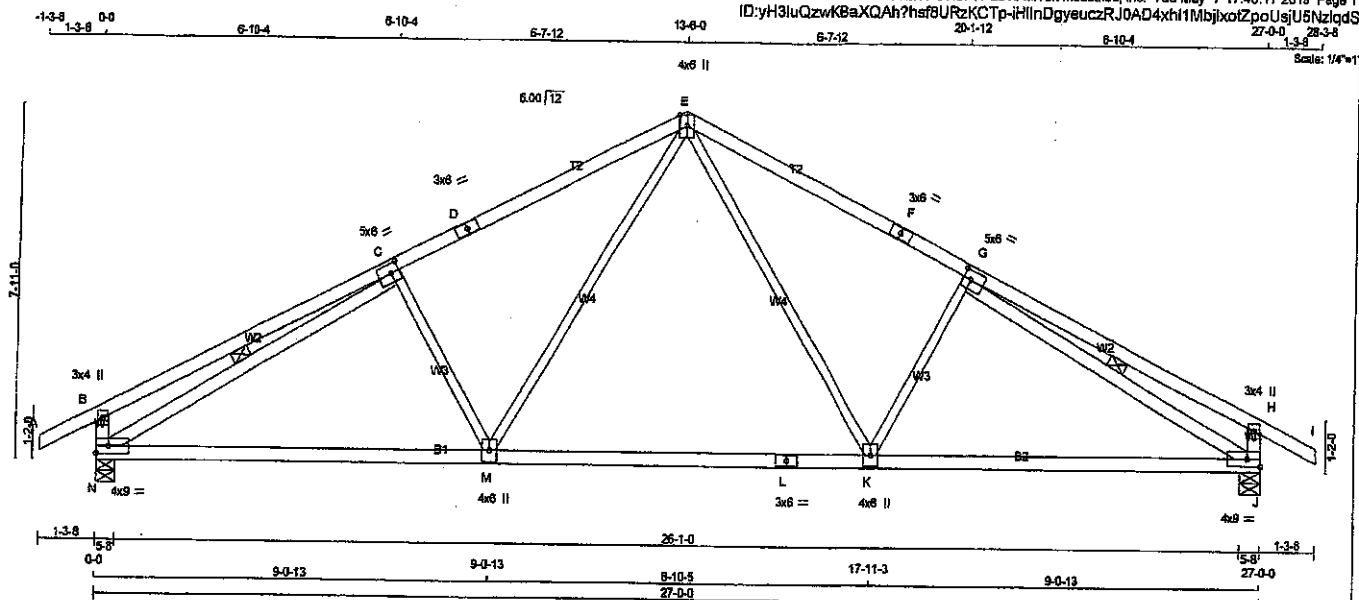
JSI GRIP= 0.85 (K) (INPUT = 0.90)
JSI METAL= 0.65 (M) (INPUT = 1.00)



END AND TAM 17910781
STRUCTURAL
CHECK ONLY

JOB NAME 402939	TRUSS NAME T25	QUANTITY 8	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
Tamarack Roof Truss, Burlington					

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue May 7 17:48:17 2018 Page 1
ID: yH3luQzwKBaXQAh7hsf8URzKCTp-iHlnDgyeuczRJOAD4xh1MbixotZpoU5iU5NzldS



TOTAL WEIGHT = 8 X 109 = 872 lb

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - I	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
N - C	2x4	DRY	No.2	SPF
G - J	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		
C	TMVW+1	MT20	5.0	6.0	2.50	2.25
D	TS-1	MT20	3.0	6.0		
E	TTVW+p	MT20	4.0	6.0	Edge	
F	TS-1	MT20	3.0	6.0		
G	TMVW+1	MT20	5.0	6.0	2.50	2.25
H	TMV+p	MT20	3.0	4.0		
J	BMVW+1	MT20	4.0	9.0	Edge	
K	BMVW+1	MT20	4.0	6.0		
L	BS-1	MT20	3.0	6.0		
M	BMVW+1	MT20	4.0	6.0		
N	BMVW+1	MT20	4.0	9.0	Edge	

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
N	2037	0	2037	0	5-8	5-8
J	2037	0	2037	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERMLIVE			
N	1514	863 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0
J	1514	863 / 0	284 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.54 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-N, G-J.

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				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 31	-102.1 -102.1	0.13 (1)	E-K	0 / 937		0.21 (1)
B-C	0 / 37	-102.1 -102.1	0.78 (1)	K-G	-493 / 7		0.19 (1)
C-D	-2435 / 0	-102.1 -102.1	0.78 (1)	M-E	0 / 837		0.21 (1)
D-E	-2435 / 0	-102.1 -102.1	0.78 (1)	C-M	-493 / 7		0.19 (1)
E-F	-2435 / 0	-102.1 -102.1	0.78 (1)	N-C	-2813 / 0		0.84 (1)
F-G	-2435 / 0	-102.1 -102.1	0.78 (1)	G-J	-2813 / 0		0.84 (1)
G-H	0 / 37	-102.1 -102.1	0.78 (1)				
H-I	0 / 31	-102.1 -102.1	0.13 (1)				
N-B	-400 / 0	0.0 0.0	0.04 (1)				
J-H	-400 / 0	0.0 0.0	0.04 (1)				
N-M	0 / 2383	-38.5 -38.5	0.85 (2)				
M-L	0 / 1674	-38.5 -38.5	0.75 (2)				
L-K	0 / 1674	-38.5 -38.5	0.75 (2)				
K-J	0 / 2383	-38.5 -38.5	0.85 (2)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 29.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/989 (0.27")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/705 (0.46")

CSI: TC=0.76/1.00 (G-H-1), BC=0.85/1.00 (J-K-2), WB=0.84/1.00 (G-J-1), SSI=0.30/1.00 (E-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

AUTOSOLVE HEELS OFF

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

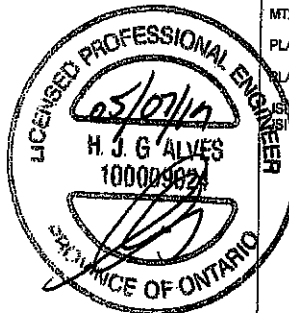
NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1887 1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

SLIP=0.88 (G) (INPUT = 0.90)
SHEAR=0.69 (G) (INPUT = 1.00)



05/07/19
17/10/2019
17/10/2019

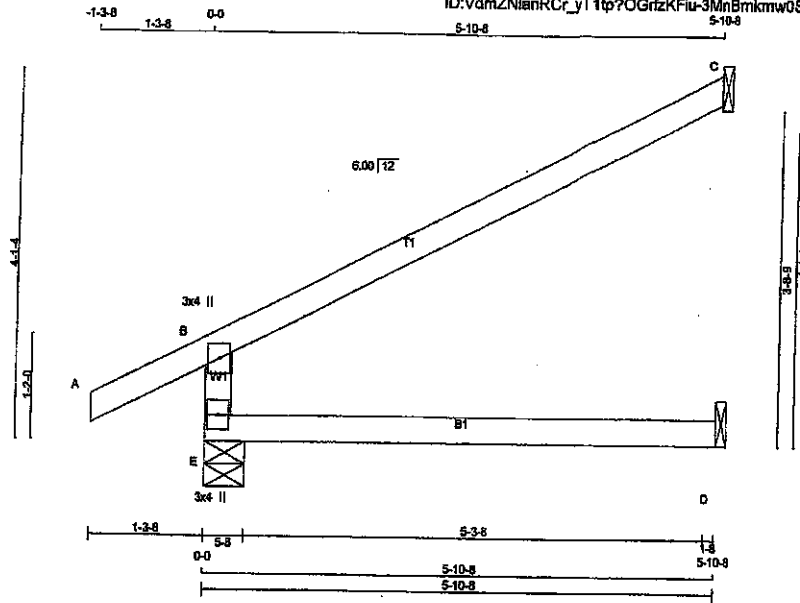
JOB NAME 402938	TRUSS NAME J1	QUANTITY 19	PLY 1	JOB DESC. GREEN PARK HOMES	TRUSS DESC.	DRWG NO.
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Tamarack Roof Truss, Burlington

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ID:VdmZNianRCr_yT1tp?OGfzKFlu-3MnBmkmw0SbQL4YK_XAiqd5QSVtyUbkBMM7ZNLzlgln

Scale = 1:23.6



TOTAL WEIGHT = 19 X 17 = 319 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

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		

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	646	0	646	0	0	5-8	5-8
C	225	0	225	0	0	1-8	1-8
D	93	0	119	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B3782/H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	473	292 / 0	72 / 0	0 / 0	0 / 0	109 / 0	0 / 0
C	154	128 / 0	0 / 0	0 / 0	0 / 0	26 / 0	0 / 0
D	85	0 / 0	51 / 0	0 / 0	0 / 0	34 / 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: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO							
E-B	-514 / 0	0.0	0.0	0.22 (3)	7.81		
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00		
B-C	-34 / 0	-102.1	-102.1	0.60 (1)	6.25		
E-D	0 / 0	-38.5	-38.5	0.22 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.1 PSF
DL = 6.0 PSF	
BOT CH.	LL = 10.5 PSF
DL = 7.0 PSF	
TOTAL LOAD	= 52.6 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBCC 2010, OBC 2012
- CSA 088-09, CSA 088-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.04")
ALLOWABLE DEFL.(TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(TL) = $L/942$ (0.07")

CSI: TC=0.80/1.00 (B-C:1), BC=0.22/1.00 (D-E:3), WB=0.00/1.00 (n/a:0), SSI=0.28/1.00 (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

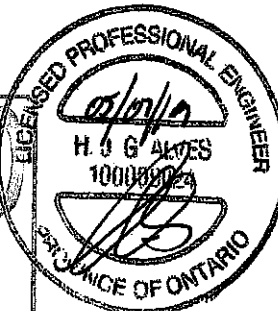
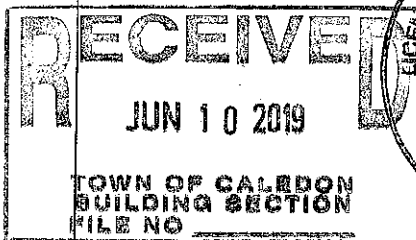
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	788	1967	1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.21 (E) (INPUT = 0.90)
JSI METAL = 0.14 (B) (INPUT = 1.00)

DWG NO. TAM 11910753
STRUCTURAL
COMPONENT ONLY

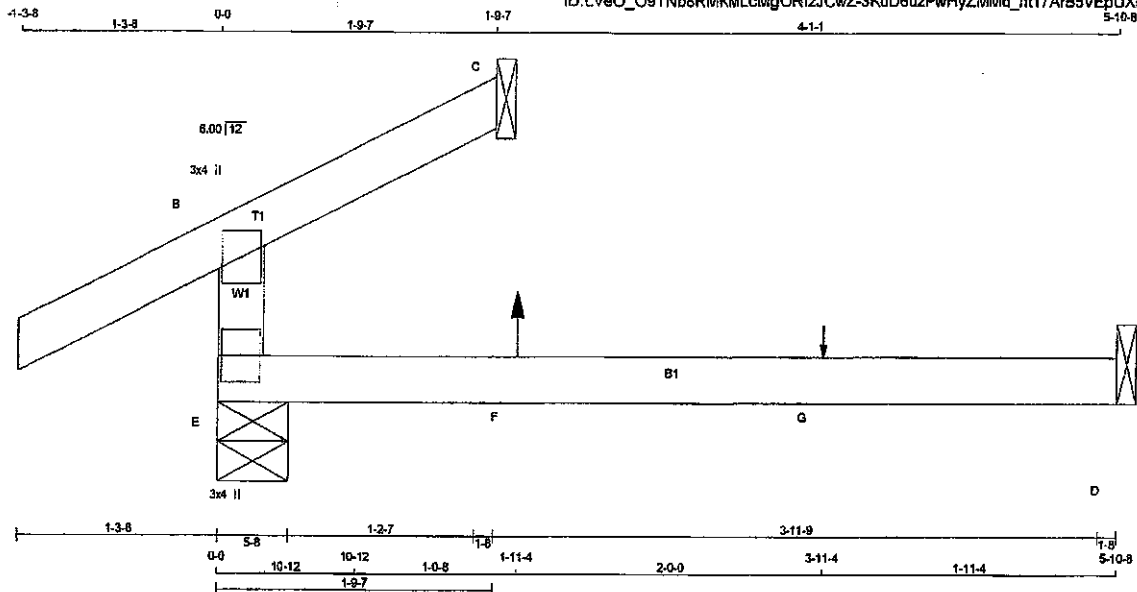


JOB NAME 402973	TRUSS NAME J2	QUANTITY 2	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO.
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Tamarack Roof Truss, Burlington

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ID:L\VeO_09TNb8RMKMLcMgORizJCwZ-3KdD6uzPwHyZMMd_ht17ArB5VEpUXkiPJTCOU?zldbo



TOTAL WEIGHT = 2 X 12 = 23 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	DRY	No.2

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	

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

BEARINGS

	FACTORED GROSS REACTION	FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	IN-SX	IN-SX
JT	352	0	0	5-8
E	94	0	0	1-8
C	94	0	0	1-8
D	94	0	0	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM	LIVE	WIND	DEAD
JT	259	158/0	42/0	0/0	0/0	0/0	61/0
E	76	24/0	28/0	0/0	0/0	0/0	24/0
C	88	0/-3	53/0	0/0	0/0	0/0	35/0
D							

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)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (LC)	MAX. UNBRACED LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO						FR-TO			
E-B	-228/28	0.0	0.0	0.18 (3)	7.81				
A-B	0/31	-102.1	-102.1	0.15 (1)	10.00				
B-C	0/27	-102.1	-102.1	0.16 (3)	10.00				
E-F	0/0	-38.5	-38.5	0.23 (3)	10.00				
F-G	0/0	-38.5	-38.5	0.23 (3)	10.00				
G-D	0/0	-38.5	-38.5	0.23 (3)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
F	1-11.4	8	1	13	FRONT	VERT	TOTAL	-	-
G	3-11.4	1	1	-	FRONT	VERT	TOTAL	-	-

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 29.1 PSF
	DL = 6.0 PSF
BOT CH.	LL = 10.5 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.05")
ALLOWABLE DEFL. (TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL. (TL) = $L/839$ (0.08")

CSI: TC=0.18/1.00 (B-E-3), BC=0.23/1.00 (D-E-3),
WB=0.00/1.00 (A-B-0), SS=0.14/1.00 (D-E-3)

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)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667
	789	1987	1656

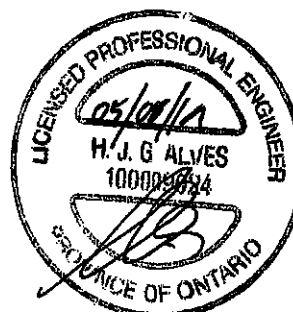
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (E) (INPUT = 0.90)
JSI METAL= 0.06 (B) (INPUT = 1.00)

DWG NO. TAM 1910798
STRUCTURAL
COMPONENT ONLY

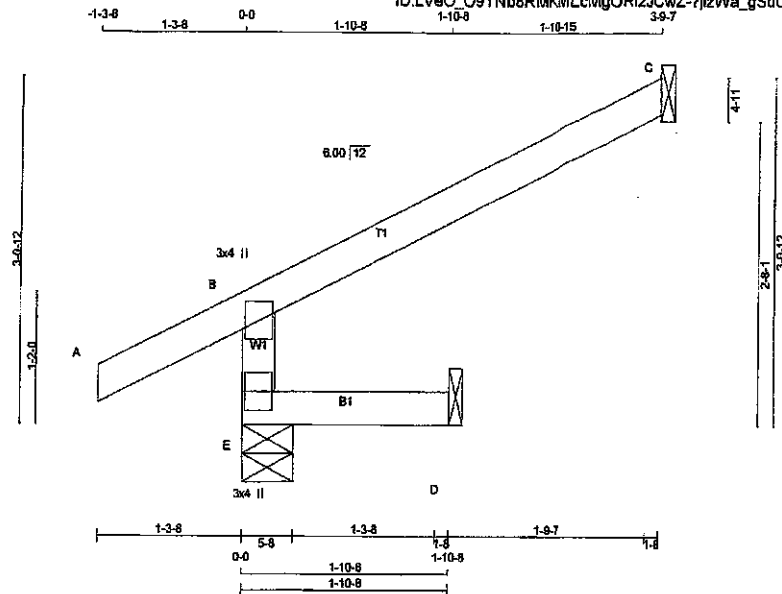
THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402973	J5	2	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington		TRUSS DESC.			

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Wed May 8 08:38:23 2019 Page 1

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Scale = 1/16"

TOTAL WEIGHT = 2 X 10 = 18 lb

LUMBER	N.L.G.A. RULES	CHORDS	SIZE	LUMBER
E - B	2x4	DRY	No.2	
A - C	2x4	DRY	No.2	
E - D	2x4	DRY	No.2	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE PLATES				
B TMV+p MT20	3.0	4.0		
E BMV1+p MT20	3.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	420	0	420	0	5-8	5-8
C	145	0	145	0	1-8	1-8
D	32	0	41	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LOASE		MAX./MIN. COMPONENT REACTIONS		PERM LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
E	297	218 / 0	22 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0
C	100	83 / 0	0 / 0	0 / 0	0 / 0	0 / 0	17 / 0	0 / 0
D	29	0 / 0	18 / 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. UNSHEATHED 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)

MEMB.	CHORDS		FACTORED		WEBS		MAX. FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED (LBS)	MAX. FACTORED (LBS)	MAX. FACTORED (LBS)
FR-TO			FROM	TO	LENGTH	FR-TO		
E-B	-360 / 0	0.0	0.0	0.0	0.01 (3)	7.81		
A-B	0 / 31	-102.1	-102.1	0.13 (1)	10.00			
B-C	-22 / 0	-102.1	-102.1	0.25 (1)	6.25			
E-D	0 / 0	-38.5	-38.5	0.03 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 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=0.25/1.00 (B-C:1), BC=0.03/1.00 (D-E:3),
WB=0.00/1.00 (n/a:0), 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.

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.16 (E) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

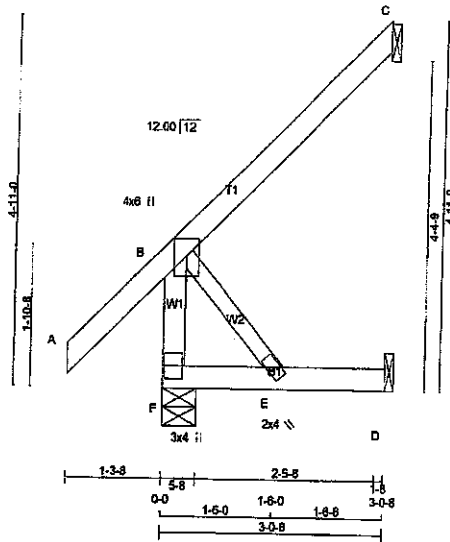


DWG NO. TAM 1910801
STRUCTURAL
COMPONENT ONLY

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
402973	J6	3	1	GREEN PARK HOMES	
Tamarack Roof Truss, Burlington					
TRUSS DESC.					

Version 8.230 S Nov 17 2018 Mittek Industries, Inc. Wed May 8 08:38:24 2019 Page 1
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Scale = 1:28.3



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 in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.75	2.00
E	BMVW+p	MT20	2.0	4.0		
F	BMV1+p	MT20	3.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
F	356 0	356 0	5-8	5-8
C	155 0	155 0	1-8	1-8
D	59 0	75 0	1-8	1-8

SEE MITTEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

1ST LOASE	MAX./MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
F	256 169/0	32/0	0/0	56/0	0/0
C	107 88/0	0/0	0/0	18/0	0/0
D	53 0/0	32/0	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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. CSI (LC)	MAX. MEMB. LENGTH FR-TO	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO								
F-B	-288/0	0.0	0.0	0.03 (1)	7.81	B-E	0/0	0.00 (1)
A-B	0/50	-102.1	-102.1	0.14 (1)	10.00			
B-C	0/0	-102.1	-102.1	0.16 (1)	10.00			
F-E	0/0	-38.5	-38.5	0.08 (3)	10.00			
E-D	0/0	-38.5	-38.5	0.08 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 29.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, OBC 2012
- CSA 085-09, CSA 085-14
- TPIC 2011, TPIC 2014

(56 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.16/1.00 (B-C-1), BC=0.09/1.00 (D-E-3), WB=0.00/1.00 (B-E-1), SS=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

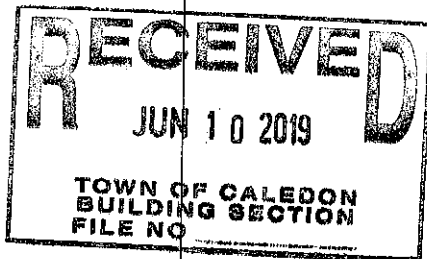
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	818 354	1667 788

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

DWG NO. TAM 10802
STRUCTURAL
COMPONENT ONLY





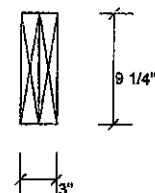
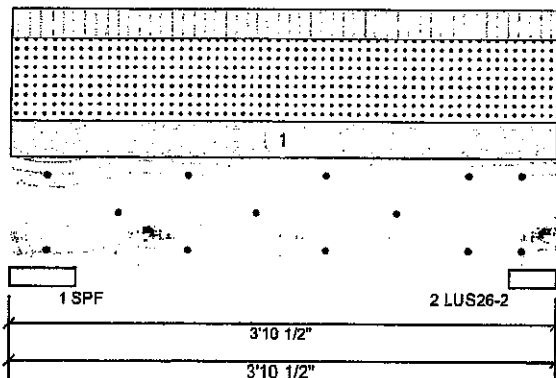
isDesign™

Client:
Project:
Address:Date: 5/8/2019
Designer:
Job Name: 201018
Project #:

Page 1 of 2

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level

**Member Information**

Type: Girder
Plies: 2
Moisture Condition: Dry
Deflection LL: 360
Deflection TL: 360
Importance: Normal

Application: Roof (Residential)
Slope: 0/12
Design Method: LSD
Building Code: NBCC 2015
Load Sharing: No
Deck: Not Checked
Vibration: Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	138	171	388	0
2	130	160	364	0

Bearings and Factored Reactions

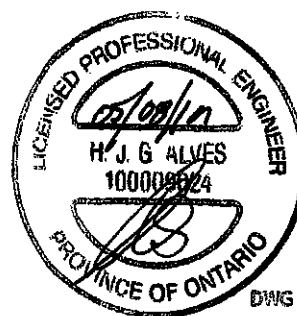
Bearing	Length	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	9%	214 / 721	935 L	1.25D+1.5S +L
2 - LUS26-2	4.000"	12%	201 / 676	876 L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	601 ft-lb	2'	6039 ft-lb	0.100 (10%)	1.25D+1.5S +L	L
Unbraced	601 ft-lb	2'	5734 ft-lb	0.105 (10%)	1.25D+1.5S +L	L
Shear	750 lb	1'2"	3984 lb	0.188 (19%)	1.25D+1.5S +L	L
LL Defl inch	0.002 (L/19241)	2'	0.107 (L/360)	0.020 (2%)	S+0.5L	L
TL Defl inch	0.003 (L/14002)	2'	0.107 (L/360)	0.030 (3%)	D+S+0.5L	L

Design Notes

- 1 Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on single ply width.



DWG NO. TAM 110811
STRUCTURAL
CORE CONCRETE 1/2

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		6-7-0	Near Face	13 PSF	10.5 PSF	29.5 PSF	0 PSF	

Manufacturer Info

Tamarack Roof Trusses
3289 North Service Rd., ON
Canada
L7N3G2
(905) 335-1115



This design is valid until 12/11/2021





isDesign™

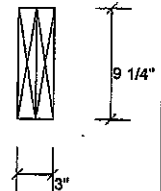
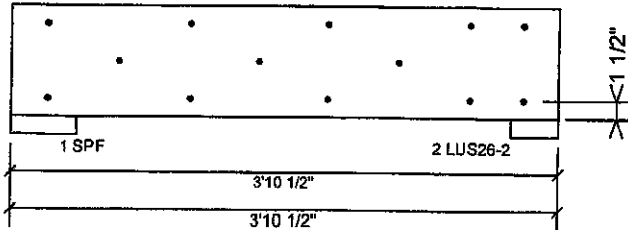
Client:
Project:
Address:

Date: 5/8/2019
Designer:
Job Name: 201018
Project #:

Page 2 of 2

BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of Pneumatic Gun Nail (.120x3.25") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	68.7 %
Load	233.7 PLF
Yield Limit per Foot	340.0 PLF
Yield Limit per Fastener	113.3 lb.
Yield Mode	g
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	1.25D+1.5S+L
Duration Factor	1.00



DWG NO. TAM 1910811
STRUCTURAL
COMPONENT ONLY 4/2

Manufacturer Info	Tamarack Roof Trusses 3289 North Service Rd., ON Canada L7N3G2 (905) 335-1115
	TAMARACK LUMBER INC ALMA LUMBER GROUP

This design is valid until 12/11/2021



TECH-NOTES

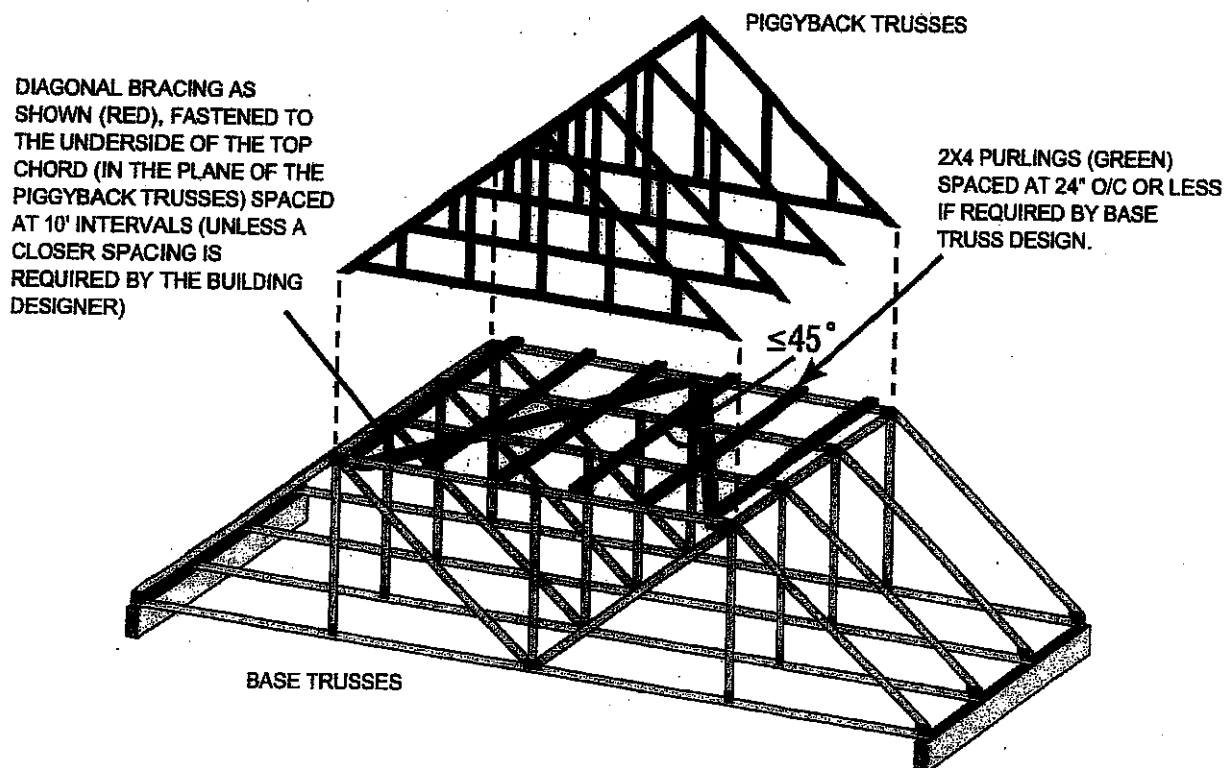
TN 15-001 Piggyback Bracing

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.

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:

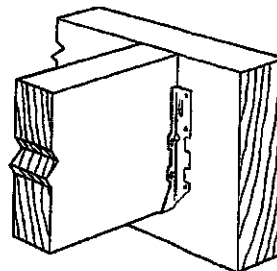
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

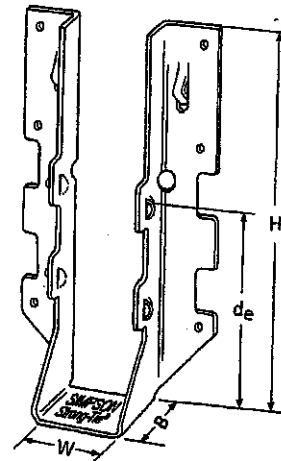
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



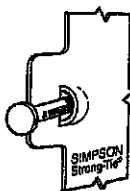
Typical LUS Installation



LUS28

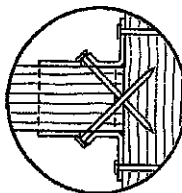
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _e =1.15)	(K _e =1.00)	(K _e =1.15)	(K _e =1.00)
LUS24	18	1 1/4	3 1/2	1 1/4	1 1/4	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3 1/4	3 1/4	2	1 1/4	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1 1/4	4 1/4	1 1/4	3 1/4	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3 1/4	4 1/4	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 1/4	4 1/4	2	3 1/4	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1 1/4	6 1/4	1 1/4	3 1/4	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/4	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 1/4	6 1/4	2	3 1/4	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/4	7 1/4	1 1/4	3 1/4	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3 1/4	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4 1/4	8 1/4	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.

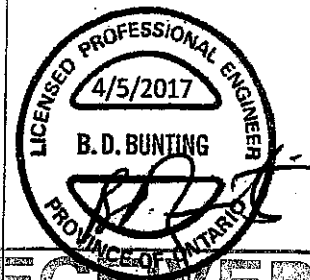


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



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BUILDING SECTION
FILE NO.

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:

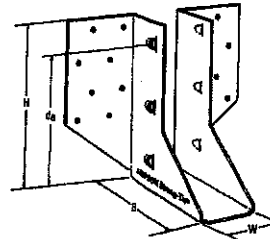
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

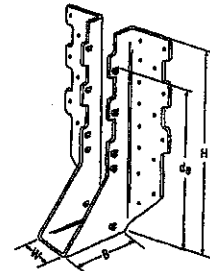
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

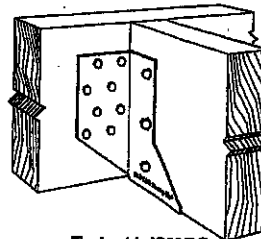
- See current catalogue for options



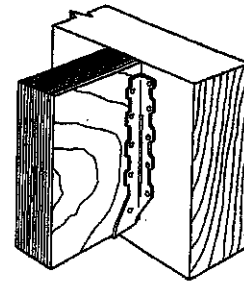
LJS26DS



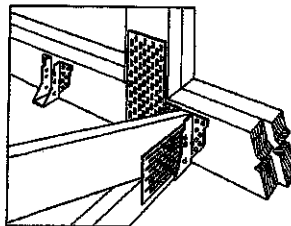
HUS210
(HUS26, HUS28, similar)



Typical LJS28DS
Installation



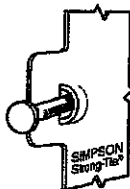
Typical HUS
Installation



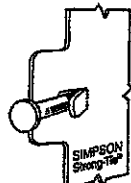
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _u =1.00)	Uplift (K _u =1.15)	Normal (K _u =1.00)
LJS26DS	18	1 1/8	5	3 1/2	4 1/2	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 1/8	5 1/2	3	3 1/8	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 1/8	7 1/2	3	6 1/2	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 1/8	9 1/2	3	7 1/2	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 1/8	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

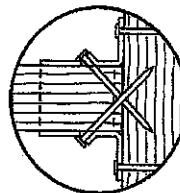
1. d₁ is the distance from the seat of the hanger to the highest joist nail.



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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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:

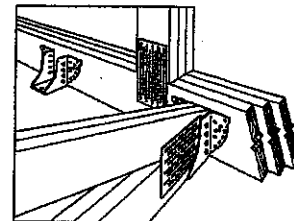
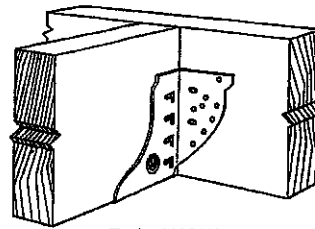
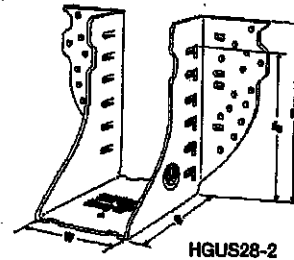
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" 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

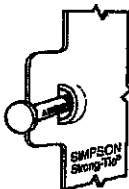
Options:

- See current catalogue for options

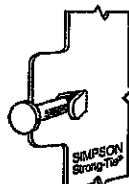


Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₁ =1.15)	Normal (K ₂ =1.00)	Uplift (K ₁ =1.15)	Normal (K ₂ =1.00)
HGUS26	12	1 1/8	5 1/8	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/8	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/8	7 1/8	5	8 1/8	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 1/8	7 1/8	4	6 1/8	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210-2	12	3 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-3	12	4 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 1/8	9 1/8	4	8 1/8	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 1/8	10 1/8	4	10 1/8	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 1/8	12 1/8	4	11 1/8	(66) 16d	(22) 16d	10130	16400	7195	11645

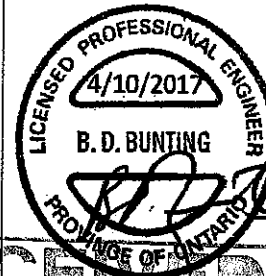
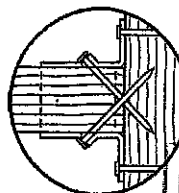
1. d₁ is the distance from the seat of the hanger to the highest joist nail.



U.S. Patent
5,803,580

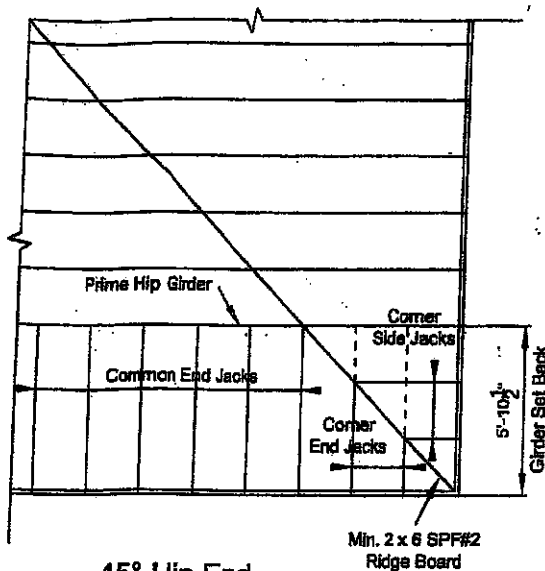


Double Shear Nailing Top View.



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BUILDING SECTION
FILE NO



45° Hip End

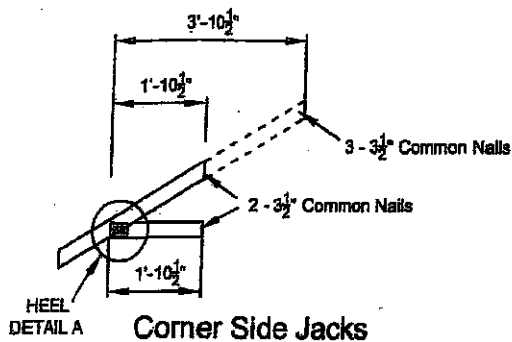
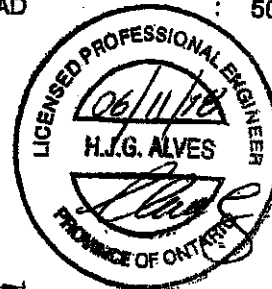
LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

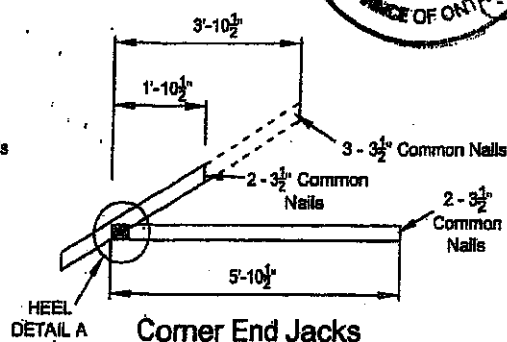
DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

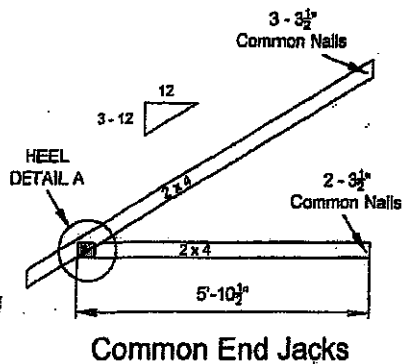
TOTAL LOAD : 50.5 P.S.F



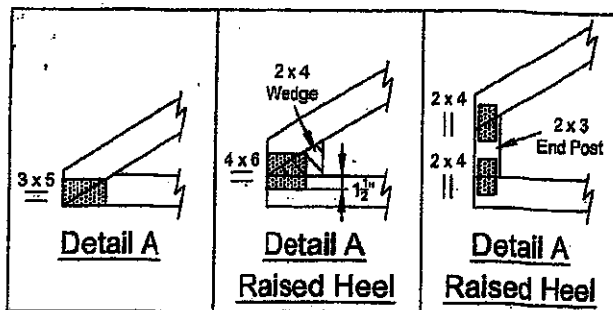
Corner Side Jacks



Corner End Jacks

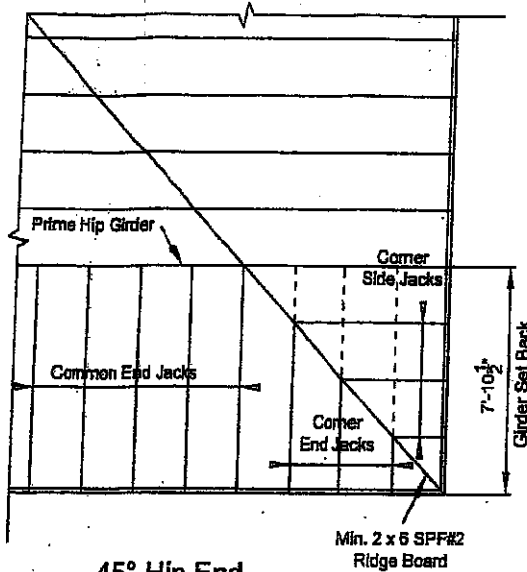


Common End Jacks



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

T-180021



45° Hip End

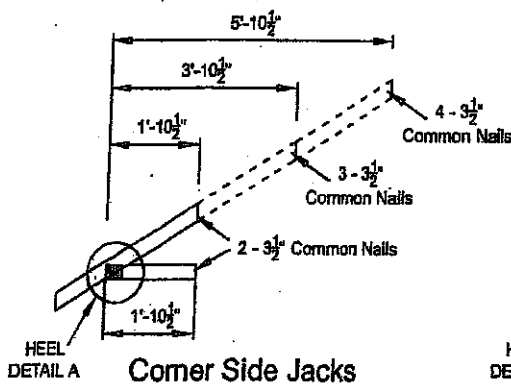
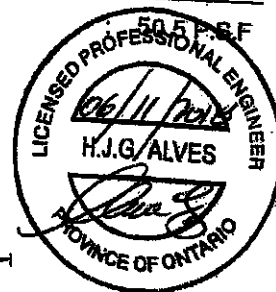
LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

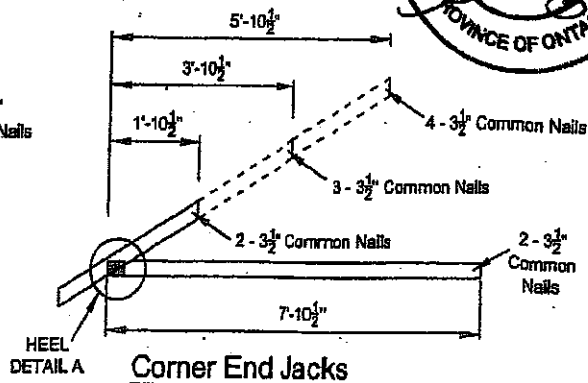
DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

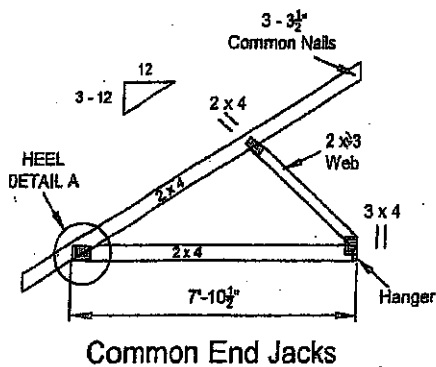
TOTAL LOAD



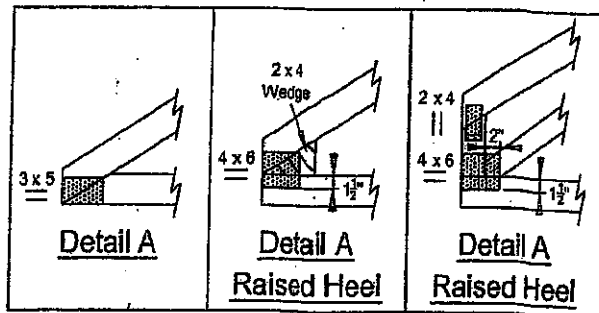
Corner Side Jacks



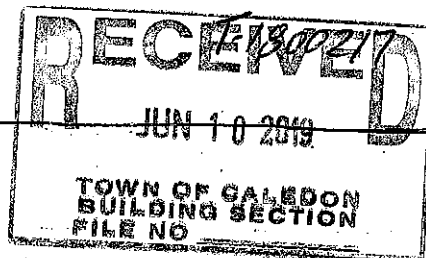
Corner End Jacks



Common End Jacks



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

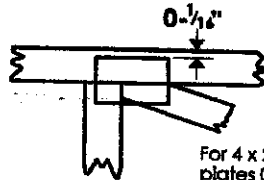


Symbols

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

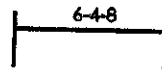


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

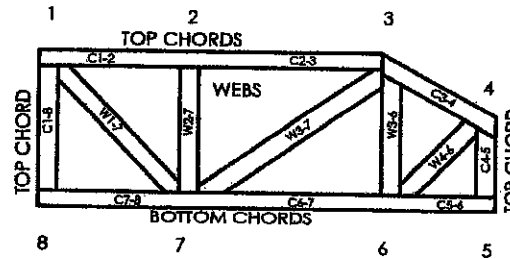
Industry Standards:

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



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 Engineering Reference Sheet: MH-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.

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JUN 10 2019

TOWN OF CALEDON
BUILDING SECTION
FILE NO



Alves Engineering Services Inc.

5208 Easton road
Burlington, Ontario L7L 6N6
(289) 259 5455

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 system and General Safety notes

THIS STRUCTURE MUST BE
CONSTRUCTED TO MEET OR
EXCEED THE PROVISIONS OF
THE ONTARIO BUILDING CODE

T-1900218

Feb 09, 2018

