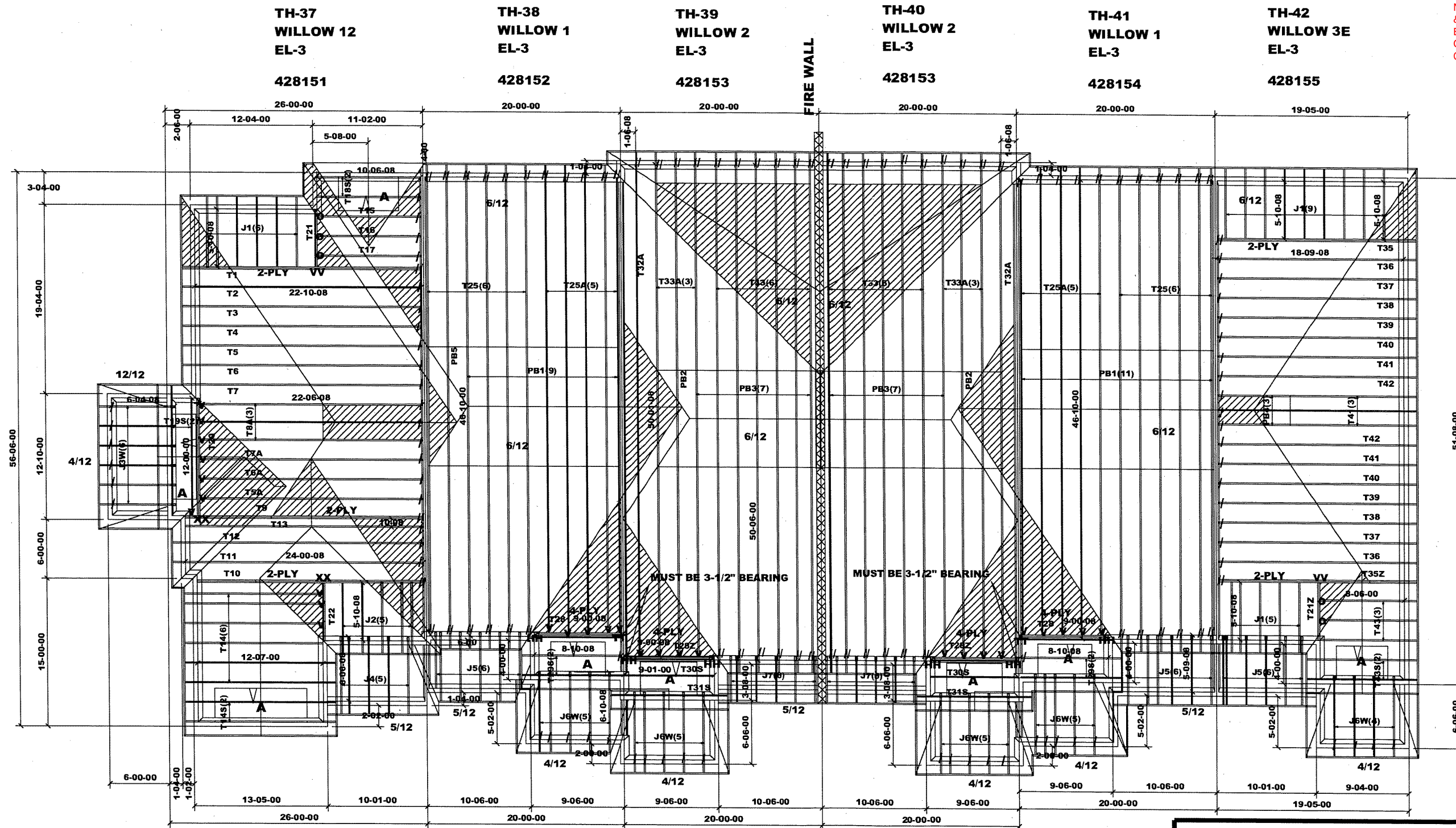


NOT THE GRANTING OF A PERMIT NOR REVIEWING OF SPECS & DRAWINGS NOR INSPECTIONS MADE DURING INSTALLATION BY THE OFFICIAL HAVING JURISDICTION SHALL RELIEVE THE OWNER FROM REQUIREMENTS OF THE ONTARIO BUILDING CODE AND ANY OTHER REFERENCED REQUIREMENTS.



9/12 ROOF PITCH UNLESS NOTED OTHERWISE

A- 12" RAISED CEILING

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 = 33.4 psf | Sr = 8.4 psf

DESIGN LOADS:
TCSL = 26.7 psf
TCDL = 6.0 psf
BCLL = 0.0 psf
BCDL = 7.4 psf

HARDWARE:
LUS24 - (O)
LJS26DS - (V)
HGUS26-2 - (XX)
H2.5A - (I)
HTS16 - (T)
H8 - (H)

DENOTES:
CONVENTIONAL
FRAMING



TRUSS PLACEMENT PLAN.

This is a truss placement plan only, NOT a final roof framing plan. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss drawings for each component identified on this placement plan.

Please verify that all dimensions match the dimensions found on the job. The Building designer is responsible for the temporary/permanent bracing of the roof and floor system and its integration into the bracing of the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer unless otherwise noted in this plan. Building designer to review and approve this plan to ascertain conformity to his overall structural plan.

E22085351 - E22085410

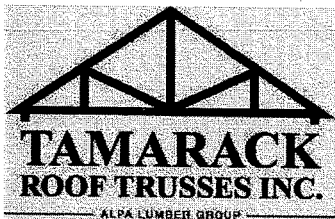


M15087

Job Track:	52956	Builder / Location:	GREEN PARK HOMES / CAMBRIDGE
Layout ID:	428114	Project:	BARLASSINA
Plan Log:	206472	Date:	2022-07-22
		Designer:	YPG

Model / Elevation:	Block 122-WILLOW / TH-37 TO TH-42 (EL.3)	Mitek ver 8.5.3.233
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 UTILIZED FOR ANY OTHER PURPOSE		

DELIVERY SHIPLIST



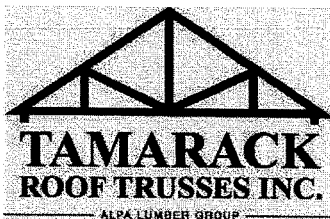
Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-37 (WILLOW 12,E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428151
 Ref #
 Page: 1 of 3
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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 Half Hip Girder	9 /12	22-10-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	207.55 133.33		
	1	T2 Half Hip	9 /12	22-10-08	5-01-04	2 x 4	1-03-08	1-06-04 5-01-04	94.64 60.00		
	1	T3 Half Hip	9 /12	22-10-08	6-01-04	2 x 4	1-03-08	1-06-04 6-01-04	102.7 64.67		
	1	T4 Half Hip	9 /12	22-10-08	7-01-04	2 x 4	1-03-08	1-06-04 7-01-04	109.18 70.00		
	1	T5 Half Hip	9 /12	22-10-08	8-01-04	2 x 4	1-03-08	1-06-04 8-01-04	113.64 71.83		
	1	T5A Half Hip	9 /12	22-06-08	8-01-04	2 x 4		1-09-04 8-01-04	111.24 70.00		
	1	T6 Half Hip	9 /12	22-10-08	9-01-04	2 x 4	1-03-08	1-06-04 9-01-04	119.24 73.50		
	1	T6A Half Hip	9 /12	22-06-08	9-01-04	2 x 4		1-09-04 9-01-04	116.62 72.17		
	1	T7 Half Hip	9 /12	22-10-08	10-01-04	2 x 4	1-03-08	1-06-04 10-01-04	125.12 77.33		
	1	T7A Half Hip	9 /12	22-06-08	10-01-04	2 x 4		1-09-04 10-01-04	122.48 76.00		
	3	T8A Half Hip	9 /12	22-06-08	11-01-04	2 x 4		1-09-04 11-01-04	406.75 251.00		
	1 2-ply	T9 Half Hip Girder	9 /12	24-00-08	7-01-08	2 x 6 2 x 8		7-12 7-01-08	304.18 189.00		
	1 2-ply	T10 Hip Girder	9 /12	22-10-08	5-11-02	2 x 4 2 x 6		1-06-04 1-08-02	231.19 151.33		
	1	T11 Roof Special	9 /12	24-00-08	7-05-02	2 x 4	1-03-08	1-06-04 1-08-02	113.66 73.33		

DELIVERY SHIPLIST

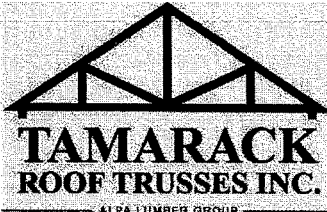


Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-37 (WILLOW 12,E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428151
 Ref #
 Page: 2 of 3
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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	T12 Roof Special	9 /12	24-00-08	8-11-02	2 x 4	1-03-08	1-06-04 1-08-02	121.24 79.00		
	1	T13 Common	9 /12	24-00-08	10-02-02	2 x 4		7-12 1-08-02	97.74 61.17		
	6	T14 Common	9 /12	12-07-00	6-02-14	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	346.51 226.00		
	2	T14S Roof Special	9 /12	12-07-00	6-02-14	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	120.65 83.00		
	1	T15 Half Hip	9 /12	10-06-08	3-02-00	2 x 4		1-06-04 3-02-00	42.6 28.17		
	1	T16 Half Hip	9 /12	10-06-08	4-02-00	2 x 4		1-06-04 4-02-00	44.2 29.00		
	1	T17 Half Hip	9 /12	10-06-08	5-02-00	2 x 4		1-06-04 5-02-00	45.33 29.17		
	2	T18S Roof Special	9 /12	10-06-08	4-08-08	2 x 4		9-04 8-14	84.93 60.00		
	2	T19S Roof Special	9 /12	12-00-00	6-00-04	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	116.38 81.67		
	1 2-ply	T20 Common Girder	9 /12	12-00-00	6-00-04	2 x 4 2 x 6		1-06-04 1-06-04	126.59 83.33		
	1 2-ply	T21 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 2-ply	T22 Jack-Closed Girder	9 /12	5-10-08	5-11-02	2 x 4 2 x 6		1-06-04 5-11-02	67.67 42.00		
	6	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	100.77 64.00		
	5	J2 Jack-Open	9 /12	5-10-08	5-11-02	2 x 4	1-03-08	1-06-04 5-11-02	100.22 67.50		

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 122 Lot #: Elevation: TH-37 (WILLOW 12,E3)	Job Track: 52956 PlanLog: 206472 Layout ID: 428151 Ref # Page: 3 of 3 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

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	J3W Jack-Open	4 /12	6-04-08	2-10-06	2 x 4	1-03-08	3-15 2-05-07	99.57 64.00		
	5	J4 Jack-Open	5 /12	6-06-08	3-06-15	2 x 4	1-03-08	4-01 3-00-12	97.77 60.83		

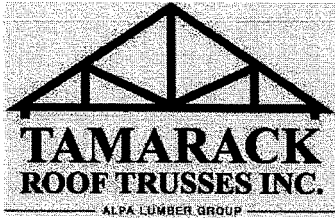
TOTAL # TRUSS= 64 TOTAL BFT OF ALL TRUSSES= 2529.33 BFT. TOTAL WEIGHT OF ALL TRSSES 3948 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
31	Hardware	H2.5A	
2	Hardware	HGUS26-2	
10	Hardware	LJS26DS	
3	Hardware	LUS24	

TOTAL NUMBER OF ITEMS= 46

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-38 (WILLOW 1,E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428152
 Ref #
 Page: 1 of 1
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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	T25 Hip	6 /12	46-10-00	9-10-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1926.24 1160.00		
	5	T25A Piggyback Base	6 /12	46-05-08	9-10-00	2 x 6	1-03-08	1-02-00 1-04-04	1543.07 935.00		
	1 4-ply	T28 Monopitch Girder	9 /12	9-00-08	8-03-10	2 x 4 2 x 10		1-06-04 8-03-10	282.45 176.67		
	2	T29S Monopitch	9 /12	8-10-08	8-02-02	2 x 4	1-03-08	1-06-04 8-02-02	117.32 77.67		
	9	PB1 Piggyback	6 /12	12-02-00	3-00-08	2 x 4			261.18 163.50		
	1	PB5 Piggyback	6 /12	12-02-00	1-06-00	2 x 4			32.33 21.33		
	6	J5 Jack-Open	5 /12	5-08-08	3-02-13	2 x 4	1-03-08	4-01 2-08-09	91.77 56.00		
	5	J6W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.14 60.83		

TOTAL # TRUSS= 38

TOTAL BFT OF ALL TRUSSES= 2651

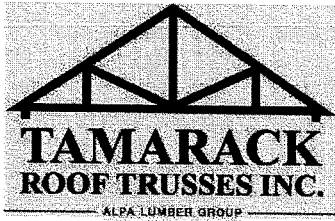
BFT. TOTAL WEIGHT OF ALL TRSSES 4353.5 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
40	Hardware	H2.5A	
2	Hardware	H8	
2		HTS16	
5	Hardware	LJS26DS	

TOTAL NUMBER OF ITEMS= 49

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-39,TH-40 (WILLOW 2, E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428153
 Ref #
 Page: 1 of 1
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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 4-ply	T28Z Monopitch Girder	9 /12	9-00-08	8-03-10	2 x 4 2 x 10		1-06-04 8-03-10	282.45 176.67		
	1	T30S Monopitch	9 /12	9-01-00	8-04-00	2 x 4	1-03-08	1-06-04 8-04-00	59.88 39.50		
	1	T31S Roof Special	9 /12	9-01-00	4-11-02	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	47.56 33.67		
	1	T32A Roof Special	6 /12	50-01-08	9-05-14	2 x 6	1-03-08	1-06-04 1-04-04	314.98 191.33		
	6	T33 Piggyback Base	9 /12	50-06-00	11-00-02	2 x 6	1-03-08 1-03-08	1-06-04 1-02-00	2132.44 1292.00		
	3	T33A Roof Special	9 /12	50-01-08	11-00-02	2 x 6	1-03-08	1-06-04 1-04-04	1039.62 636.00		
	1	PB2 Piggyback	6 /12	9-10-08	1-06-00	2 x 4			25.26 16.33		
	7	PB3 Piggyback	6 /12	9-10-08	2-05-10	2 x 4			161.13 100.33		
	5	J6W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.14 60.83		
	6	J7 Jack-Open	5 /12	3-04-08	2-03-02	2 x 4	1-03-08	4-01 1-08-15	58.51 40.00		

TOTAL # TRUSS= 35

TOTAL BFT OF ALL TRUSSES= 2586.66

BFT.

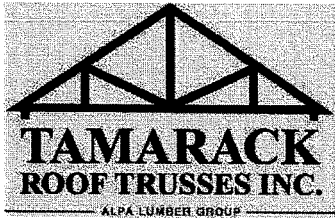
TOTAL WEIGHT OF ALL TRSSES 4220.97 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
37	Hardware	H2.5A	
4	Hardware	H8	
4	Hardware	LJS26DS	

TOTAL NUMBER OF ITEMS= 45

DELIVERY SHIPLIST



Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-41,56,59 (WILLOW 1,E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428154
 Ref #
 Page: 1 of 1
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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	T25 Piggyback Base	6 /12	46-10-00	9-10-00	2 x 6	1-03-08 1-03-08	1-02-00 1-02-00	1926.24 1160.00		
	5	T25A Piggyback Base	6 /12	46-05-08	9-10-00	2 x 6	1-03-08	1-02-00 1-04-04	1543.07 935.00		
	1 4-ply	T28 Monopitch Girder	9 /12	9-00-08	8-03-10	2 x 4 2 x 10		1-06-04 8-03-10	282.45 176.67		
	2	T29S Monopitch	9 /12	8-10-08	8-02-02	2 x 4	1-03-08	1-06-04 8-02-02	117.32 77.67		
	11	PB1 Piggyback	6 /12	12-02-00	3-00-08	2 x 4			319.22 199.83		
	6	J5 Jack-Open	5 /12	5-08-08	3-02-13	2 x 4	1-03-08	4-01 2-08-09	91.77 56.00		
	5	J6W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	99.14 60.83		

TOTAL # TRUSS= 39

TOTAL BFT OF ALL TRUSSES= 2666

BFT.

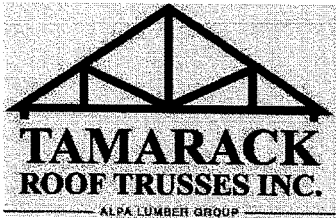
TOTAL WEIGHT OF ALL TRSSES 4379.21 LBS

HARDWARE

QTY	TYPE	MODEL	LENGTH
40	Hardware	H2.5A	
2	Hardware	H8	
2		HTS16	
5	Hardware	LJS26DS	

TOTAL NUMBER OF ITEMS= 49

DELIVERY SHIPLIST

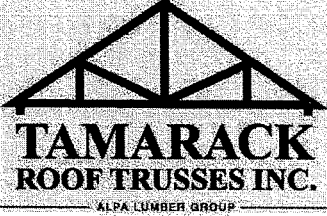


Lumber Yard: TAMARACK LUMBER
 Builder: GREEN PARK HOMES
 Project: BARLASSINA
 Location: CAMBRIDGE
 Model: BLOCK 122
 Lot #:
 Elevation: TH-42,55,60 (WILLOW 3E , E3)

Job Track: 52956
 PlanLog: 206472
 Layout ID: 428155
 Ref #
 Page: 1 of 2
 Date: 08-16-2022
 Designer:
 Sales Rep: Rick DiCiano

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	T21Z 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 2-ply	T35 Half Hip Girder	9 /12	18-09-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	177.93 112.00		
	1 2-ply	T35Z Half Hip Girder	9 /12	18-09-08	4-01-04	2 x 4 2 x 6	1-03-08	1-06-04 4-01-04	176.49 109.33		
	2	T36 Half Hip	9 /12	18-09-08	5-01-04	2 x 4	1-03-08	1-06-04 5-01-04	153.85 98.33		
	2	T37 Half Hip	9 /12	18-09-08	6-01-04	2 x 4	1-03-08	1-06-04 6-01-04	166.98 106.67		
	2	T38 Half Hip	9 /12	18-09-08	7-01-04	2 x 4	1-03-08	1-06-04 7-01-04	176.84 113.33		
	2	T39 Half Hip	9 /12	18-09-08	8-01-04	2 x 4	1-03-08	1-06-04 8-01-04	191.55 121.67		
	2	T40 Half Hip	9 /12	18-09-08	9-01-04	2 x 4	1-03-08	1-06-04 9-01-04	202.89 127.00		
	5	T41 Half Hip	9 /12	18-09-08	10-01-04	2 x 4	1-03-08	1-06-04 10-01-04	531.01 335.00		
	2	T42 Half Hip	9 /12	18-09-08	11-01-04	2 x 4	1-03-08	1-06-04 11-01-04	208.02 128.67		
	3	T43 Common	9 /12	8-06-00	4-08-08	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	114.84 77.50		
	2	T43S Roof Special	9 /12	8-06-00	4-08-08	2 x 4	1-03-08 1-03-08	1-06-04 1-06-04	90.89 67.33		
	3	PB4 Piggyback	9 /12	7-04-03	2-00-00	2 x 4		2-00-00	68.41 46.50		
	14	J1 Jack-Open	6 /12	5-10-08	4-01-04	2 x 4	1-03-08	1-02-00 4-01-04	235.12 149.33		

 TAMARACK ROOF TRUSSES INC. ALFA LUMBER GROUP	DELIVERY SHIPLIST	
	Lumber Yard: TAMARACK LUMBER Builder: GREEN PARK HOMES Project: BARLASSINA Location: CAMBRIDGE Model: BLOCK 122 Lot #: Elevation: TH-42,55,60 (WILLOW 3E., E3)	Job Track: 52956 PlanLog: 206472 Layout ID: 428155 Ref # Page: 2 of 2 Date: 08-16-2022 Designer: Sales Rep: Rick DiCiano

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	J5 Jack-Open	5 /12	5-08-08	3-02-13	2 x 4	1-03-08	4-01 2-08-09	91.77 56.00		
	4	J6W Jack-Open	4 /12	6-10-08	3-00-06	2 x 4	1-03-08	3-15 2-07-07	79.31 48.67		

TOTAL # TRUSS= 55
TOTAL BFT OF ALL TRUSSES= 1734.33
BFT.
TOTAL WEIGHT OF ALL TRSSES 2723.53 LBS

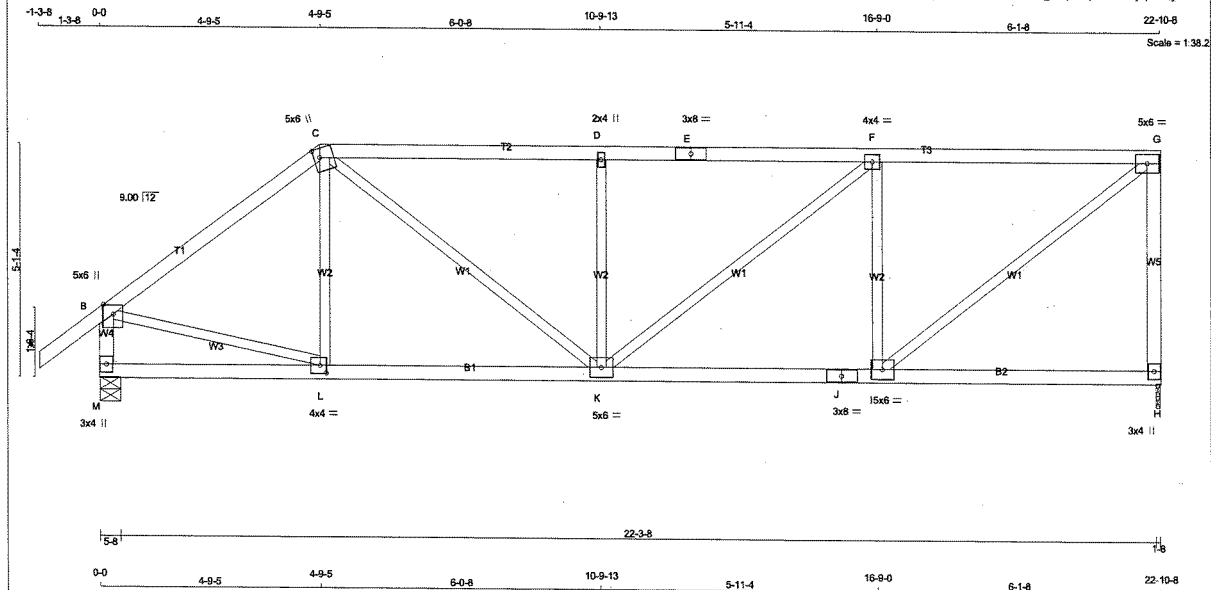
HARDWARE

QTY	TYPE	MODEL	LENGTH
25	Hardware	H2.5A	
2	Hardware	LUS24	
1	Hardware	LUS26-2	

TOTAL NUMBER OF ITEMS= 28

JOB NAME 428114	TRUSS NAME T2	QUANTITY 1	PLY 1	JOB DESC GREEN PARK HOMES	DRWG NO. E22085364
Alpine Roof Truss, Maple		TRUSS DESC. JT 53080		Version 8.530 S Feb 23 2022 MTek Industries, Inc. Fri Aug 12 09:16:13 2022 Page 1	

ID:19f019GMykJZRh3S23hYkyvFb-llc667Yy7/tlwO97BkSe9GgOqUEpRIZfAyp8QyoexV



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
H - G	2x4	DRY	No.2
M - B	2x4	DRY	No.2
M - J	2x4	DRY	No.2
J - H	2x4	DRY	No.2
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	TTWW+m	MT20	5.0	6.0	2.25 1.50
D	TMVW+w	MT20	2.0	4.0	
E	TS-I	MT20	3.0	8.0	
F	TMVW-I	MT20	4.0	4.0	
G	TMVW-I	MT20	5.0	8.0	
H	BMV1+p	MT20	3.0	4.0	
I	BMVW-I	MT20	5.0	6.0	
J	BS-I	MT20	3.0	8.0	
K	BMVW-I	MT20	5.0	6.0	
L	BMVW-I	MT20	4.0	4.0	2.00 1.50
M	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		RECORD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
H	1300	0	1300	0	0	1-8	1-8		
M	1432	0	1432	0	0	5-8	1-9		

UNFACTORED REACTIONS		1ST LC CASE		MAX/MIN COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
H	913	612 / 0	0 / 0	0 / 0	307 / 0
M	1008	685 / 0	0 / 0	0 / 0	323 / 0

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

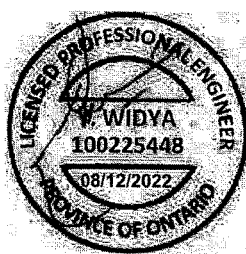
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.50 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		MEMB.		MAX. FACTORED		WEBS		MEMB.		MAX. FACTORED	
FR-TO	FORCE (LBS)	FROM	TO	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRACED LENGTH	FR-TO	FROM	TO	VERT. LOAD (LBS)	LC1 MAX (LC)
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	L-C	-140 / 40	0.05 (1)			
B-C	-1303 / 0	-95.2	-95.2	0.43 (1)	5.11	B-L	0 / 1071	0.24 (1)			
C-D	-1616 / 0	-95.2	-95.2	0.55 (1)	4.53	I-G	0 / 1648	0.37 (1)			
D-E	-1616 / 0	-95.2	-95.2	0.56 (1)	4.50	C-K	0 / 739	0.17 (1)			
E-F	-1616 / 0	-95.2	-95.2	0.56 (1)	4.50	I-F	-892 / 0	0.34 (1)			
F-G	-1295 / 0	-95.2	-95.2	0.54 (1)	4.94	K-D	-617 / 0	0.24 (1)			
H-G	-1254 / 0	0.0	0.0	0.55 (1)	7.18	K-F	0 / 413	0.09 (1)			
M-B	-1398 / 0	0.0	0.0	0.15 (1)	6.88						
M-L	0 / 0	-18.5	-18.5	0.13 (4)	10.00						
L-K	0 / 1038	-18.5	-18.5	0.24 (1)	10.00						
K-J	0 / 1295	-18.5	-18.5	0.29 (1)	10.00						
J-I	0 / 1295	-18.5	-18.5	0.29 (1)	10.00						
I-H	0 / 0	-18.5	-18.5	0.16 (4)	10.00						

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



TOTAL WEIGHT = 95 lb (M)

DESIGN CRITERIA

SPECIFIED LOADS
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

LOADING IN PLAT 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.56/1.00 (D-F-I), BC=0.29/1.00 (I-K-I), WB=0.37/1.00 (G-I), SSI=0.27/1.00 (F-G-I)

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

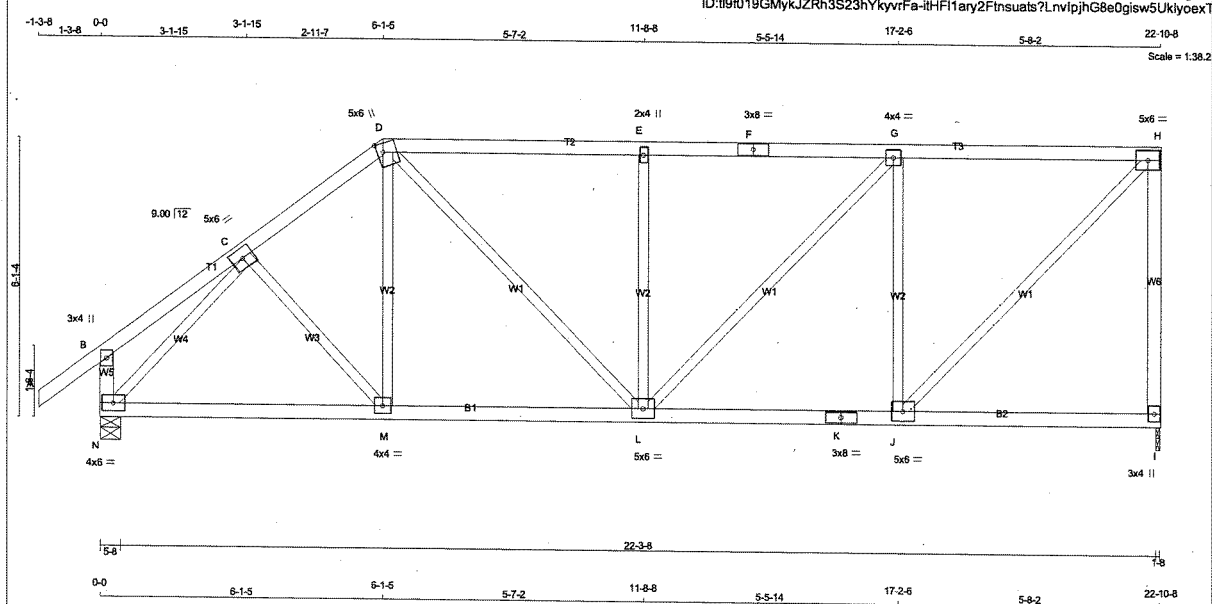
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 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= 0.54 (B) (INPUT = 1.00)



LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										TOTAL WEIGHT = 103 lb	
N L G A RULES										BEARINGS										DESIGN CRITERIA	
CHORDS SIZE LUMBER CESC.R																					
A - D	2x4	DRY	No.2	SPF	FACTORED					MAXIMUM FACTORED					INPUT		RECORD				
O - F	2x4	DRY	No.2	SPF	GROSS REACTION					GROSS REACTION					BRG		BRG				
F - H	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX									
I - H	2x4	DRY	No.2	SPF	I	1300	0	1300	0	0	1-8	1-8									
N - B	2x4	DRY	No.2	SPF	N	1432	0	1432	0	0	5-8	1-8									
N - K	2x4	DRY	No.2	SPF																	
K - I	2x4	DRY	No.2	SPF																	
ALL WEBS EXCEPT										UNFACTORED REACTIONS										SPECIFIED LOADS:	
										1ST LCASE MAX/MIN COMPONENT REACTIONS										TOP CH. LL = 26.7 PSF	
										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										DL = 6.0 PSF	
										I 918 612 / 0 0 / 0 0 / 0 0 307 / 0 0 / 0										BOT CH. LL = 0.0 PSF	
										N 1008 695 / 0 0 / 0 0 / 0 0										CL = 7.4 PSF	
DRY: SEASONED LUMBER.																				TOTAL LOAD = 40.1 PSF	
																				SPACING = 24.0 IN. C/C	
																				LOADING IN FLAT SECTION BASED ON A SLOPE	

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
OL = 7.4 PSF
TOTAL LOAD = 40.1 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

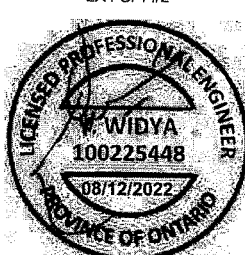
PLATES (table is in inches)				UNFACTORED REACTIONS				DESIGN CRITERIA			
JT	TYPE	PLATES	W	LEN	Y	X	1ST LCASE	MAX/MIN COMPONENT REACTIONS			
B	TMV+p	MT20	3.0	4.0			JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND
C	TMWV-t	MT20	5.0	6.0			I	918	612/0	0/0	0/0
D	TTWV+m	MT20	5.0	6.0	2.25	1.50	N	1008	685/0	0/0	0/0
E	TMV+rw	MT20	2.0	4.0							
F	TS-t	MT20	3.0	8.0							
G	TMWV-t	MT20	4.0	4.0							
H	TMWV-t	MT20	5.0	6.0							
I	BMV+tp	MT20	3.0	4.0							
J	BMWV-t	MT20	5.0	6.0							
K	BS-t	MT20	3.0	8.0							
L	BMWVW-t	MT20	5.0	6.0							
M	BMWV-t	MT20	4.0	4.0							
N	BMWV-t	MT20	4.0	6.0							

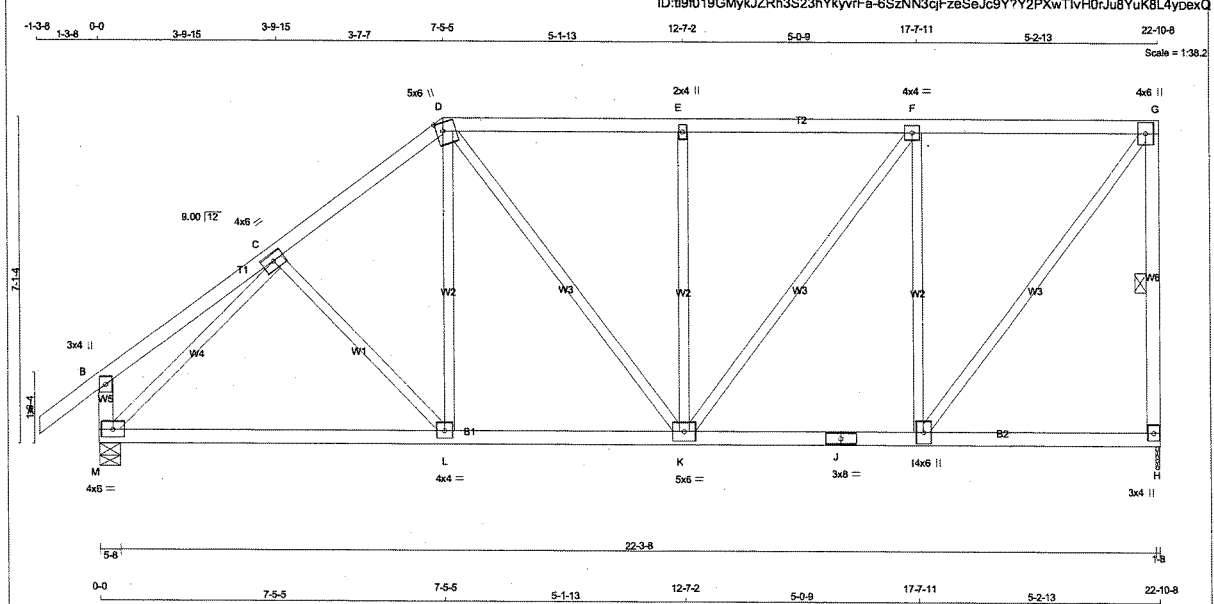
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.01 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
LOADING
TOTAL LOAD CASES: (4)
CHORDS
MEMB. MAX FACTORED FORCE (LBS) VERT. LOAD LC1 MAX. MAX. FACTORED FORCE (LBS) FROM TO LENGTH FR-TO
A-B 0/39 -95.2 -95.2 0.13 (1) 10.00 C-M 0/49 0.02 (4)
B-C 0/18 -95.2 -95.2 0.13 (1) 10.00 M-D 0/106 0.04 (4)
C-D -1291/0 -95.2 -95.2 0.15 (1) 5.04 J-H 0/1453 0.33 (1)
D-E -1331/0 -95.2 -95.2 0.44 (1) 5.01 D-L 0/452 0.10 (1)
E-F -1332/0 -95.2 -95.2 0.46 (1) 5.01 J-G -920/0 0.54 (1)
F-G -1332/0 -95.2 -95.2 0.44 (1) 5.58 L-E -571/0 0.33 (1)
G-H -1015/0 -95.2 -95.2 0.44 (1) 7.17 L-G 0/461 0.10 (1)
H-I -1258/0 0.0 0.0 0.91 (1) 7.81
N-B -246/0 0.0 0.0 0.03 (1) 7.81
N-M 0/997 -18.5 -18.5 0.25 (1) 10.00
M-L 0/1018 -18.5 -18.5 0.25 (1) 10.00
L-K 0/1015 -18.5 -18.5 0.24 (1) 10.00
K-J 0/1015 -18.5 -18.5 0.24 (1) 10.00
J-I 0/0 -18.5 -18.5 0.14 (4) 10.00

ALLOWABLE DEFLECTIONS:
CALCULATED VERT. DEFLECTION (LL) = U/999 (0.05")
ALLOWABLE DEFLECTION (LL) = U/360 (0.76")
CALCULATED VERT. DEFLECTION (TL) = U/999 (0.09")
ALLOWABLE DEFLECTION (TL) = U/360 (0.76")
CSL TC=0.91/1.00 (H-I), BC=0.25/1.00 (L-M), WB=0.54/1.00 (G-J-1), SS=0.25/1.00 (G-H-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 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.82 (N) (INPUT = 0.90)
JSI METAL= 0.34 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 109 lb (M)

LUMBER

N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2
O - G	2x4	DRY	No.2
H - G	2x4	DRY	No.2
M - B	2x4	DRY	No.2
M - J	2x4	DRY	No.2
J - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
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-i	MT20	4.0	6.0	
D	TTWW+m	MT20	5.0	6.0	2.25 1.75
E	TMW-w	MT20	2.0	4.0	
F	TMWW-i	MT20	4.0	4.0	
G	TMW+p	MT20	4.0	6.0	
H	BMV1+p	MT20	3.0	4.0	
I	BMWW+i	MT20	4.0	6.0	
J	BS-i	MT20	3.0	8.0	
K	BMWW-i	MT20	5.0	6.0	
L	BMWW-i	MT20	4.0	4.0	
M	BMW1-i	MT20	4.0	6.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
H	1300	0	1300	0
M	1432	0	1432	0

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS
JT	COMBINED
H	918
M	1008

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.49 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 G-H.

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

LOADING
TOTAL LOAO CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED	MEMB.	FORCE (LBS)	MAX. FACTORED	MAX. FACTORED
FR-TO			CS1 (LC)	FR-TO		CS1 (LC)	CS1 (LC)
A-B	0/39	-95.2	-95.2 0.13 (1)	C-L	-85/21	0.04 (1)	
B-C	0/24	-95.2	-95.2 0.20 (1)	L-D	0/206	0.05 (4)	
C-O	-1242/0	-95.2	-95.2 0.23 (1)	M-C	-1513/0	0.72 (1)	
D-E	-1117/0	-95.2	-95.2 0.36 (1)	I-G	0/1337	0.30 (1)	
E-F	-1117/0	-95.2	-95.2 0.37 (1)	D-K	0/234	0.05 (1)	
F-G	-814/0	-95.2	-95.2 0.36 (1)	I-F	-947/0	0.83 (1)	
G-H	-1262/0	0.0	0.0 0.29 (1)	K-E	-525/0	0.46 (1)	
H-B	-268/0	0.0	0.0 0.03 (1)	K-F	0/508	0.11 (1)	
M-L	0/1032	-18.5	-18.5 0.30 (4)				
L-K	0/976	-18.5	-18.5 0.31 (4)				
K-J	0/814	-18.5	-18.5 0.20 (1)				
J-I	0/814	-18.5	-18.5 0.20 (1)				
I-H	0/0	-18.5	-18.5 0.13 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:	
TOP CH. LL	= 26.7 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
OL	= 7.4 PSF
TOTAL LOAD	= 40.1 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CS1 TC=0.37/1.00 (E-F-1), BC=0.31/1.00 (K-L-4), WB=0.83/1.00 (F-1), SS1=0.23/1.00 (F-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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MT20	650	371	1747
	786	1987	1873

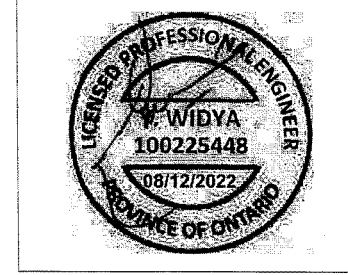
PLATE PLACEMENT TOL. = 0.250 inches

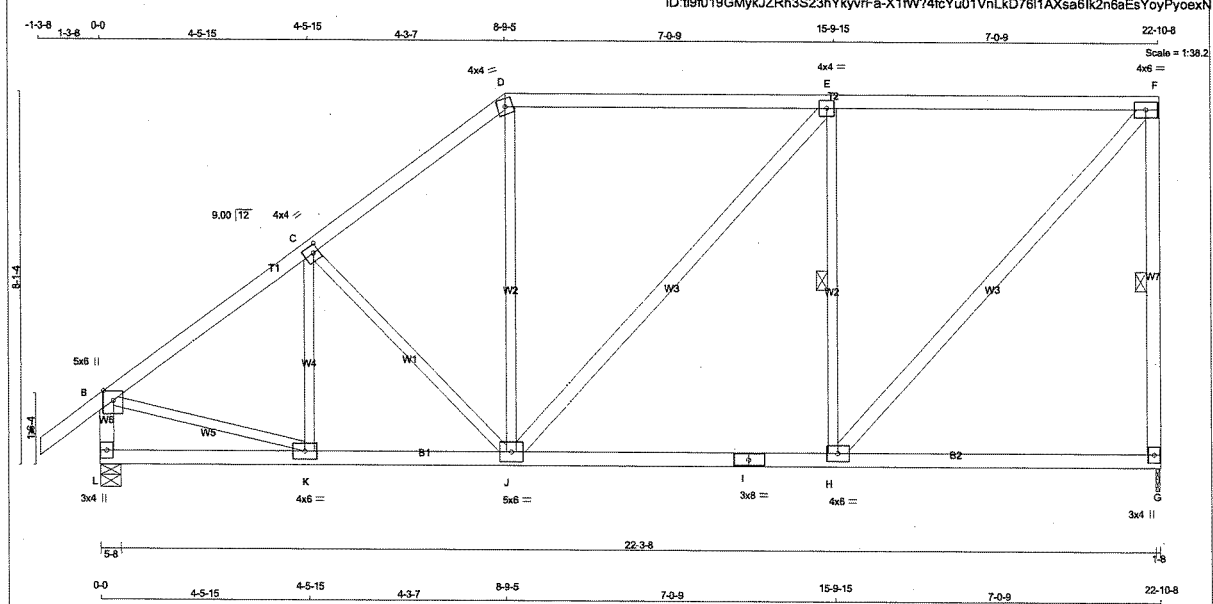
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (C) (INPUT = 0.90)

JSI METAL= 0.37 (G) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 114 lb (M)

LUMBER

N. L. G. A. RULES	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
J - E	2x4	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+p	MT20	5.0	6.0	Edge
C	TMVW-i	MT20	4.0	4.0	2.00 1.50
D	TTW-m	MT20	4.0	4.0	
E	TMVW-i	MT20	4.0	4.0	
F	TMVW-i	MT20	4.0	6.0	
G	BMV1+p	MT20	3.0	4.0	
H	BMVW-i	MT20	4.0	6.0	
I	BS-i	MT20	3.0	8.0	
J	BMVW-i	MT20	5.0	6.0	
K	BMVW-i	MT20	4.0	6.0	
L	BMV1+p	MT20	3.0	4.0	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORO

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REORO
JT	VERT	GROSS REACTION	BRG	BRG
G	1300	0	1300	0
L	1432	0	1432	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED
G	918
L	1008

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

BRACING

TOP CHORO TO BE SHEATHED OR MAX. PURLIN SPACING = 4.57 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 F-G, E-H.

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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	FORCE (LBS)	MAX. CS1 (LC)	
A-B	0/39	-95.2	-95.2 0.13 (1)	K-C	-205/0	0.07 (1)	
B-C	-1323/0	-95.2	-95.2 0.35 (1)	C-J	-254/0	0.18 (1)	
C-D	-1165/0	-95.2	-95.2 0.34 (1)	J-D	0/277	0.08 (1)	
D-E	-909/0	-95.2	-95.2 0.88 (1)	J-E	0/14	0.00 (4)	
E-F	-901/0	-95.2	-95.2 0.88 (1)	H-E	-843/0	0.35 (1)	
G-F	-1248/0	0.0	0.0 0.37 (1)	H-F	0/1341	0.22 (1)	
L-B	-1395/0	0.0	0.0 0.15 (1)	B-K	0/1119	0.25 (1)	
L-K	0/0	-18.5	-18.5 0.08 (4)				
K-J	0/1082	-18.5	-18.5 0.23 (1)				
J-I	0/901	-18.5	-18.5 0.31 (4)				
I-H	0/901	-18.5	-18.5 0.31 (4)				
H-G	0/0	-18.5	-18.5 0.23 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 26.7	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD	=	40.1	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 CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")

CALCULATED VERT. DEFL.(LL) = L/999 (0.04")

ALLOWABLE DEFL.(TL) = L/360 (0.76")

CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CS1: TC=0.88/1.00 (E-F:1) BC=0.31/1.00 (H-J:4), WB=0.35/1.00 (E-H:1), SS=0.33/1.00 (E-F:1)

COL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAO 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)	(PL)	(PL)	(PL)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747

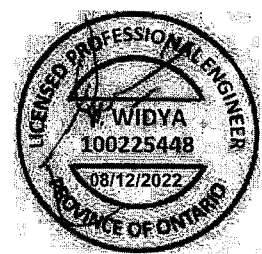
PLATE PLACEMENT TOL. = 0.250 inches

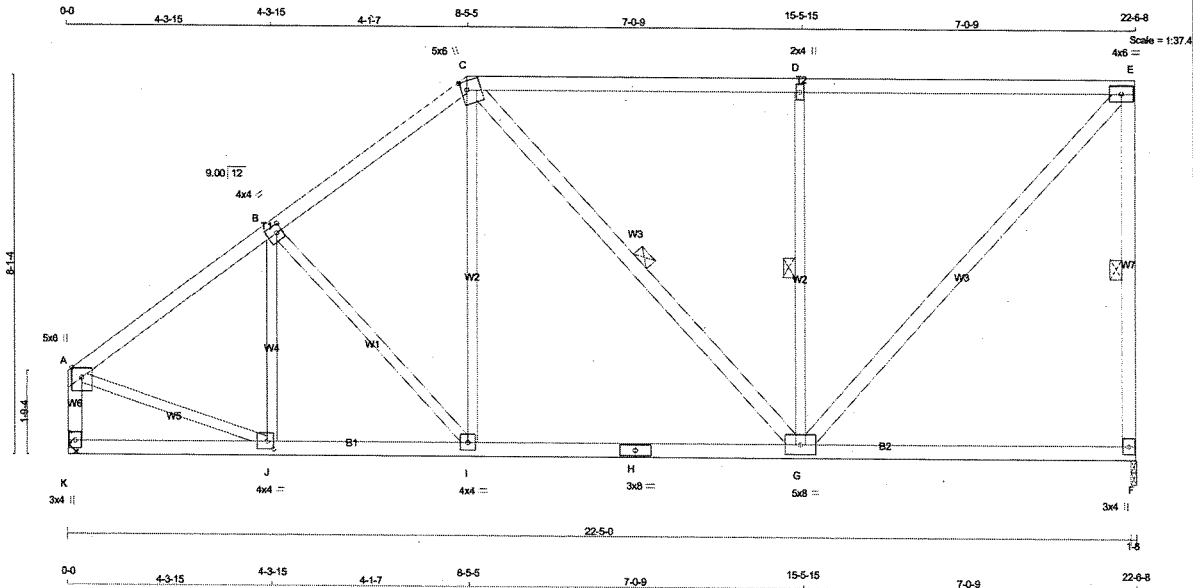
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (H) (INPUT = 0.90)

JSI METAL= 0.54 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
K - A	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
C - G	2x4	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
A	TMWV+p	MT20	5.0	6.0	Edge	
B	TMWV+4	MT20	4.0	4.0	2.00	1.50
C	TTWV+4	MT20	5.0	6.0	2.25	1.50
D	TMWV+4	MT20	2.0	4.0		
E	TMWV+4	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	4.0		
G	BMWVW+4	MT20	5.0	6.0		
H	BS4	MT20	3.0	8.0		
I	BMWV+4	MT20	4.0	4.0		
J	BMWV+4	MT20	4.0	4.0	2.00	1.50
K	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	RECORD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	DOWN	HORZ
F	1281	0	1-8
K	1281	0	MECHANICAL

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM.LIVE WIND DEAD SOIL
F	905	603 / 0	0 / 0 0 / 0 302 / 0 0 / 0
K	905	603 / 0	0 / 0 0 / 0 302 / 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 = 4.64 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-F, C-G, D-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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED (LC1) MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC1) MAX. (LC)			
FR-TO		FROM TO	UNBRAC LENGTH	FR-TO					
A-B	-1226 / 0	-95.2 -95.2	0.32 (1) 5.40	J-B	-257 / 0	0.10 (1)			
B-C	-1121 / 0	-95.2 -95.2	0.31 (1) 5.60	B-I	-196 / 0	0.14 (1)			
C-D	-883 / 0	-95.2 -95.2	0.88 (1) 4.64	I-C	0 / 248	0.08 (1)			
D-E	-884 / 0	-95.2 -95.2	0.88 (1) 4.64	C-G	-5 / 13	0.00 (4)			
E-F	-1229 / 0	0.0 0.0	0.36 (1) 5.79	G-D	-834 / 0	0.35 (1)			
K-A	-1246 / 0	0.0 0.0	0.14 (1) 7.20	G-E	0 / 1315	0.21 (1)			
K-J	0 / 0	-18.5 -18.5	0.07 (4) 10.00	A-J	0 / 1057	0.24 (1)			
J-I	0 / 1003	-18.5 -18.5	0.22 (1) 10.00						
I-H	0 / 875	-18.5 -18.5	0.31 (4) 10.00						
H-G	0 / 875	-18.5 -18.5	0.31 (4) 10.00						
G-F	0 / 0	-18.5 -18.5	0.23 (4) 10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
LL	26.7	PSF
BOT CH.	LL	PSF
LL	0.0	PSF
LL	7.4	PSF
TOTAL LOAD	40.1	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, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.75")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

ALLOWABLE DEFL.(TL)= L/360 (0.75")

CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.88/1.00 (D-E-1), BC=0.31/1.00 (G-I-4), WB=0.35/1.00 (D-G-1), SSI=0.33/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371 1747 788	1987 1873

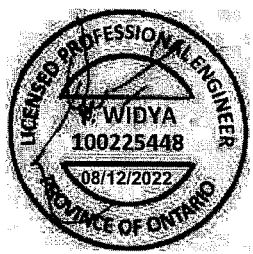
PLATE PLACEMENT TOL. = 0.250 inches

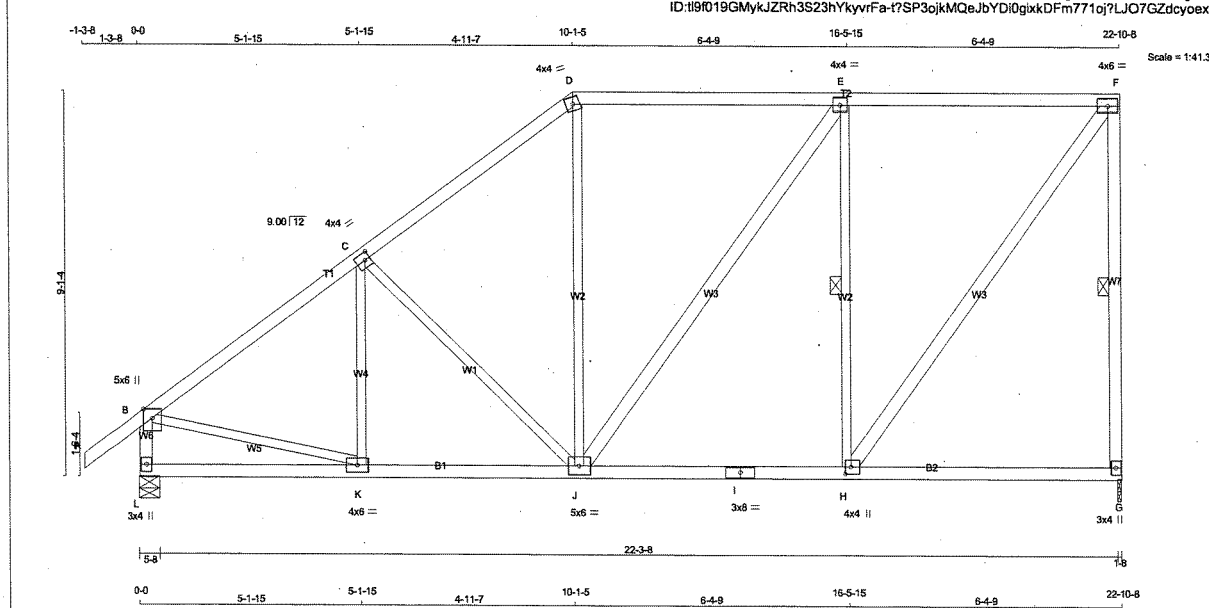
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (J) (INPUT = 0.90)

JSI METAL= 0.48 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 119 lb

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
G - F	2x4	DRY	No.2	SPF
L - B	2x4	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
J - E	2x4	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	TMW+p	MT20	5.0	6.0	Edge	
C	TMW-1	MT20	4.0	4.0	2.00	1.50
D	TTW-n	MT20	4.0	4.0		
E	TMW-1	MT20	4.0	4.0		
F	TMW-1	MT20	4.0	4.0		
G	BMW+1-p	MT20	3.0	4.0		
H	BMW-1	MT20	4.0	4.0	2.00	1.50
I	BS-1	MT20	3.0	8.0		
J	BMW-1	MT20	5.0	6.0		
K	BMW-1	MT20	4.0	6.0		
L	BMW+1-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 GROSS REACTION	INPUT BRG	REQ'D BRG
JT	VERT	HORZ	DOWN	HORZ
G	1300	0	1300	0
L	1432	0	1432	0

UNFACTORED REACTIONS

1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
G	918	612 / 0 0 / 0 0 / 0 0 / 0 307 / 0 0 / 0
L	1008	685 / 0 0 / 0 0 / 0 0 / 0 323 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.01 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 F-G, E-H.

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)

MEMB.		FORCE	VERT. LOAD	LC1	MAX.	MEMB.	FORCE	MAX.
		(LBS)	(PLF)	CSI	UNBRAC			
			FROM TO	MAX	LENGTH			
FR-TO				CSI (L)	FR-TO			CSI (L)
A-B	0 / 39		-95.2	-95.2	0.13 (1)	10.00	K-C	-151 / 34
B-C	-1331 / 0		-95.2	-95.2	0.48 (1)	5.01	C-J	-364 / 0
C-D	-1082 / 0		-95.2	-95.2	0.45 (1)	5.44	J-D	0 / 224
D-E	-838 / 0		-95.2	-95.2	0.70 (1)	5.36	J-E	0 / 162
E-F	-744 / 0		-95.2	-95.2	0.70 (1)	5.60	H-E	-886 / 0
G-F	-1253 / 0		0.0	0.0	0.48 (1)	5.74	H-F	0 / 1264
L-B	-1391 / 0		0.0	0.0	0.15 (1)	6.80	B-K	0 / 1121
L-K	0 / 0		-18.5	-18.5	0.11 (4)	10.00		
K-J	0 / 1092		-18.5	-18.5	0.23 (1)	10.00		
J-I	0 / 744		-18.5	-18.5	0.25 (4)	10.00		
I-H	0 / 744		-18.5	-18.5	0.25 (4)	10.00		
H-G	0 / 0		-18.5	-18.5	0.19 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.76")

CALCULATED VERT. DEFL.(LL) = U/999 (0.04")

ALLOWABLE DEFL.(TL) = L/360 (0.76")

CALCULATED VERT. DEFL.(TL) = U/999 (0.07")

CSI: TC=0.70/1.00 (D-E-1), BC=0.25/1.00 (H-J-4), WB=0.48/1.00 (E-H-1), SS=0.30/1.00 (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)	SHEAR (PSI)	SECTION (PL)
MAX MIN	MAX MIN	MAX MIN
MT20	650 371 1747	788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

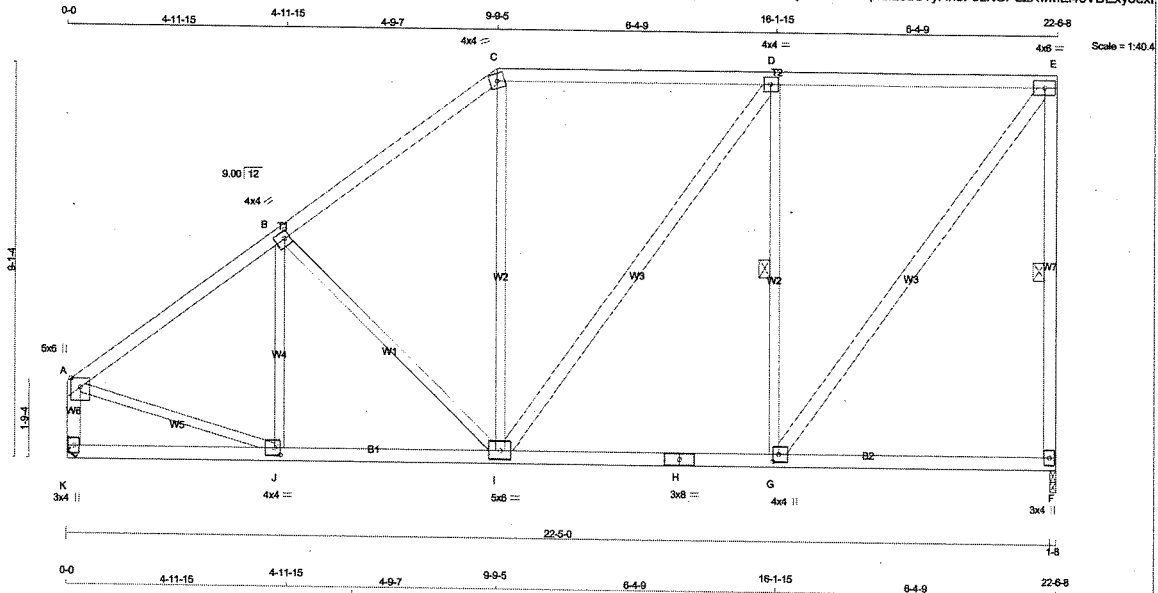
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)

JSI METAL= 0.65 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N.L.S.A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	ORY	No.2
F - E	2x4	DRY	No.2
K - A	2x4	DRY	No.2
K - H	2x4	DRY	No.2
H - F	2x4	ORY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
I - D	2x4	DRY	No.2
G - E	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMW+p	MT20	5.0	6.0	Edge	
B - TMW+1	MT20	4.0	4.0		2.00 1.50
C - TTW-m	MT20	4.0	4.0		
D - TMW+1	MT20	4.0	4.0		
E - TMW+1	MT20	4.0	6.0		
F - BMV+1+p	MT20	3.0	4.0		
G - BMW+1	MT20	4.0	4.0	2.00	1.50
H - BS-1	MT20	3.0	6.0		
I - BMW+1	MT20	5.0	6.0		
J - BMW+1	MT20	4.0	4.0	2.00	1.50
K - BMV+1+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	HORZ	DOWN	HORZ
F	1281	0	1281	0
K	1281	0	1281	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
F	905	603 / 0	0 / 0
K	905	603 / 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 = 5.20 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-F, D-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)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED
	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MEMB. FORCE (LBS)	MAX. FACTORED (LC)
FR-TO		FROM TO	FR-TO	
A-B	-1243 / 0	-95.2 -95.2 0.43 (1)	5.20	J-B -208 / 12 0.09 (1)
B-C	-1046 / 0	-95.2 -95.2 0.42 (1)	5.57	B-I -301 / 0 0.30 (1)
C-D	-810 / 0	-95.2 -95.2 0.70 (1)	5.42	I-C 0 / 200 0.05 (4)
D-E	-731 / 0	-95.2 -95.2 0.70 (1)	5.65	I-D 0 / 138 0.02 (1)
E-F	-1234 / 0	0.0 0.0 0.48 (1)	5.78	G-D -867 / 0 0.47 (1)
K-A	-1244 / 0	0.0 0.0 0.14 (1)	7.20	G-E 0 / 1240 0.20 (1)
K-J	0 / 0	-18.5 -18.5 0.10 (4)	10.00	A-J 0 / 1066 0.24 (1)
J-I	0 / 1021	-18.5 -18.5 0.22 (1)	10.00	
I-H	0 / 731	-18.5 -18.5 0.25 (4)	10.00	
H-G	0 / 731	-18.5 -18.5 0.25 (4)	10.00	
G-F	0 / 0	-18.5 -18.5 0.19 (4)	10.00	

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	8.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD		=	40.1	PSF

SPACING = 24.0 IN./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 COMPLES WITH:

- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.75")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

ALLOWABLE DEFL.(TL) = L/360 (0.75")

CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.70/1.00 (C-D-1), BC=0.25/1.00 (G-H-1), WB=0.47/1.00 (D-G-1), SSI=0.30/1.00 (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) SHEAR SECTION

(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

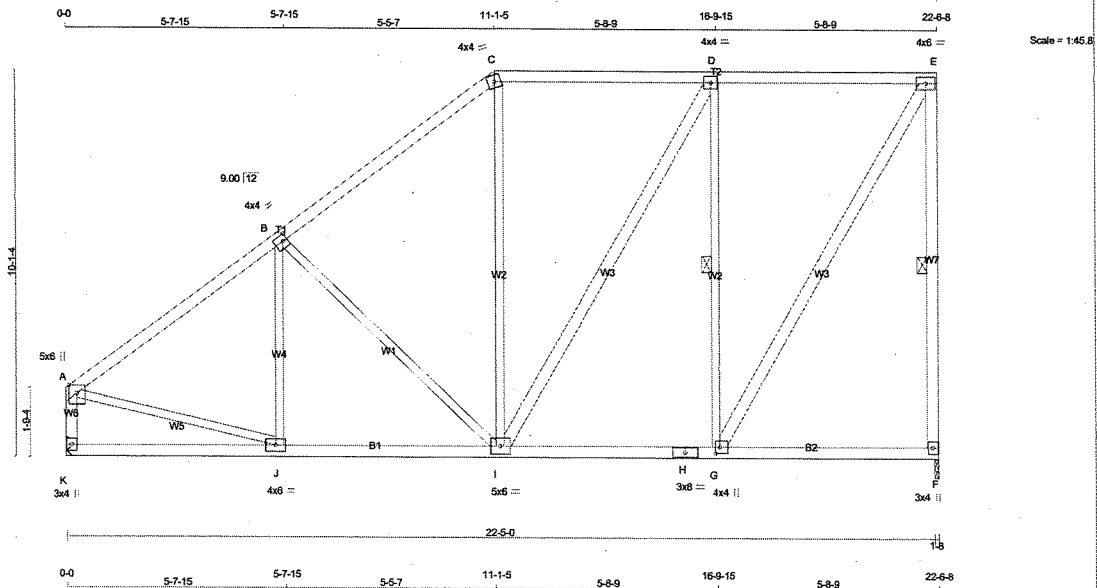
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)

JSI METAL= 0.49 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	8.0	Edge
B	TMVW+1	MT20	4.0	4.0	2.00 1.50
C	TTW-m	MT20	4.0	4.0	
D	TMVW-1	MT20	4.0	4.0	
E	TMVW-1	MT20	4.0	4.0	
F	BMV1+p	MT20	3.0	4.0	
G	BMVW+1	MT20	4.0	4.0	2.00 1.50
H	BS-1	MT20	3.0	8.0	
I	BMVWW-1	MT20	5.0	6.0	
J	BMVW-1	MT20	4.0	6.0	
K	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	RECORD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	HORZ	DOWN	HORZ
F	1281	0	0
K	1281	0	0
		1-8	1-8
		MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
JT COMBINED	SNOW	LIVE	PERM.LIVE
F	905	603 / 0	0 / 0
K	905	603 / 0	0 / 0
		0 / 0	0 / 0
		0 / 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 = 4.96 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-F, D-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC2)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO			FR-TO		
A-B	-1250 / 0	-95.2	-95.2	0.58 (1)	J-B	-155 / 42	0.08 (1)
B-C	-962 / 0	-95.2	-95.2	0.56 (1)	B-I	-409 / 0	0.54 (1)
C-D	-739 / 0	-95.2	-95.2	0.55 (1)	I-C	0 / 146	0.04 (4)
D-E	-605 / 0	-95.2	-95.2	0.54 (1)	I-D	0 / 273	0.04 (1)
E-F	-1239 / 0	0.0	0.0	0.52 (1)	G-D	-911 / 0	0.84 (1)
K-A	-1240 / 0	0.0	0.0	0.13 (1)	G-E	0 / 1195	0.19 (1)
					A-J	0 / 1066	0.24 (1)
K-J	0 / 0	-18.5	-18.5	0.14 (4)			
J-I	0 / 1031	-18.5	-18.5	0.24 (1)			
I-H	0 / 605	-18.5	-18.5	0.19 (4)			
H-G	0 / 605	-18.5	-18.5	0.19 (4)			
G-F	0 / 0	-18.5	-18.5	0.15 (4)			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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 CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.75")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.62/1.00 (E-F-1) BC=0.24/1.00 (I-I-1), WB=0.64/1.00 (D-G-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

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

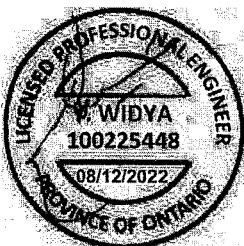
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

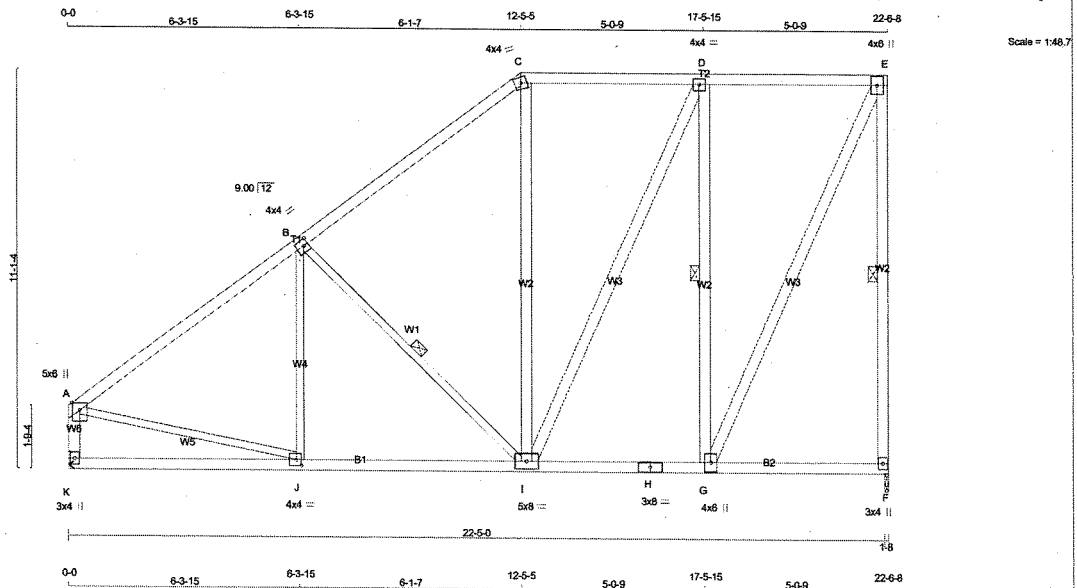
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER	SIZE	DRY	LUMBER	DRY
N. L. G. A. RULES				
CHORDS	SIZE			
A - C	2x4	DRY	No.2	
C - E	2x4	DRY	No.2	
F - E	2x4	DRY	No.2	
K - A	2x4	DRY	No.2	
K - H	2x4	DRY	No.2	
H - F	2x4	DRY	No.2	
ALL WEBS EXCEPT	2x4	DRY	No.2	
J - B	2x3	DRY	No.2	
B - I	2x3	DRY	No.2	
A - J	2x3	DRY	No.2	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
A TMWW+p	MT20	5.0	6.0	Edge
B TMWW-1	MT20	4.0	4.0	2.00 1.50
C TTW-m	MT20	4.0	4.0	
D TMWW-1	MT20	4.0	4.0	
E TMWW+p	MT20	4.0	6.0	
F BMV1+p	MT20	3.0	4.0	
G BMWW-1	MT20	4.0	6.0	
H BS-1	MT20	3.0	6.0	
I BMWW-1	MT20	5.0	6.0	
J BMWW-1	MT20	4.0	4.0	2.00 1.50
K 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	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
F	1281	0	1281	0
K	1281	0	1281	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
F	905	603	0
K	905	603	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.07 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-F, B-I, D-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)	MAX. FACTORED VERT. LOAD (PL)
FR-TO									
A-B	-1241	0	-95.2	-95.2	0.53	(1)	5.07	J-B	-101
B-C	-870	0	-95.2	-95.2	0.50	(1)	5.85	B-I	-517
C-D	-681	0	-95.2	-95.2	0.31	(1)	6.25	I-C	0
D-E	-495	0	-95.2	-95.2	0.31	(1)	6.25	I-D	0
E-F	-1243	0	0.0	0.0	0.79	(1)	5.76	G-D	-960
K-A	-1234	0	0.0	0.0	0.13	(1)	7.22	G-E	0
K-J	0	0	-18.5	-18.5	0.18	(4)	10.00	A-J	0
J-I	0	0	-18.5	-18.5	0.27	(4)	10.00		
I-H	0	0	-18.5	-18.5	0.15	(4)	10.00		
H-G	0	0	-18.5	-18.5	0.15	(4)	10.00		
G-F	0	0	-18.5	-18.5	0.11	(4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 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, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(65 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.75")

CALCULATED VERT. DEFL.(LL) = L/999 (0.04")

ALLOWABLE DEFL.(TL) = L/360 (0.75")

CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CS: TC=0.79/1.00 (E-F:1), BC=0.27/1.00 (I-J:4), WB=0.81/1.00 (D-G:1), SS=0.23/1.00 (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(ORY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

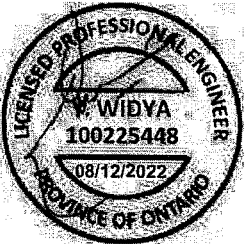
PLATE PLACEMENT TOL. = 0.250 inches

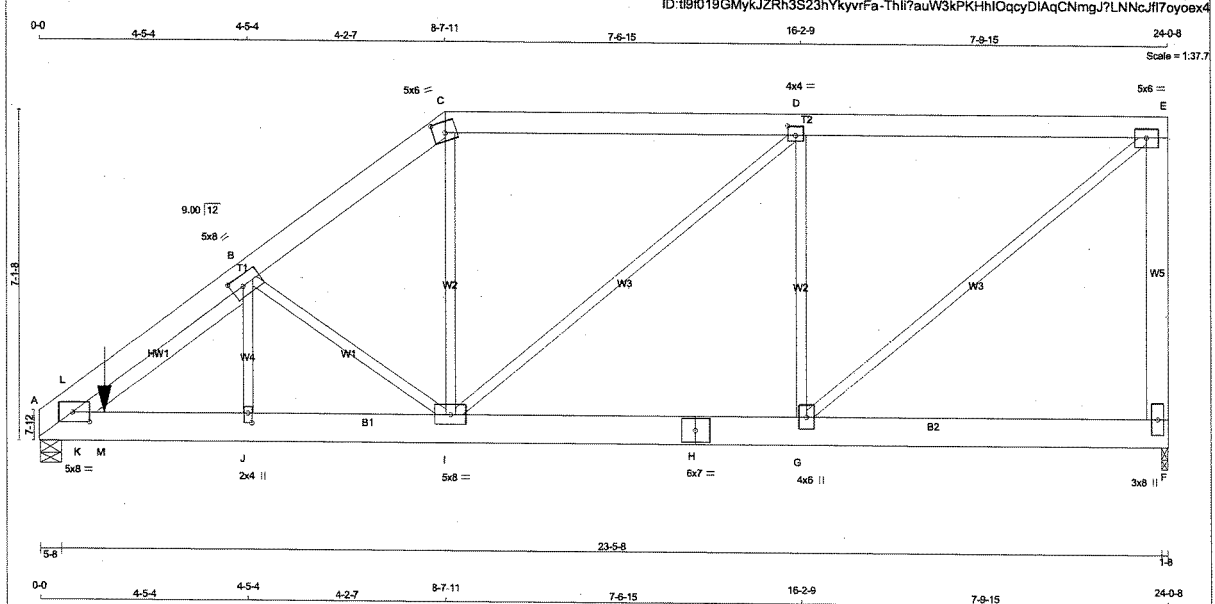
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)

JSI METAL= 0.50 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:37.7 TOTAL WEIGHT = 2 X 152 = 304 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY				DESIGN CRITERIA			
N. L. G. A. RULES				BUILDING DESIGNER				*** SPECIAL LOADS ANALYSIS ***			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	FACTORED	MAXIMUM FACTORED	INPUT	RECORD	GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.	
A - C	2x6	ORY	No.2	SPF	SPF	VERT	GROSS REACTION	BRG	BRG	LOADS WERE DERIVED FROM USER INPUT	
C - E	2x6	ORY	No.2	SPF	SPF	HORZ	DOWN	HORZ	UPLIFT	NO FURTHER MODIFICATIONS WERE MADE	
F - E	2x6	ORY	No.2	SPF	SPF						
A - H	2x6	ORY	No.2	SPF	SPF						
H - F	2x6	ORY	No.2	SPF	SPF						

REINFORCING MEMBERS				UNFACTORED REACTIONS				SPECIFIED LOADS:			
HW1	2x4	ORY	No.2	SPF	SPF	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	TOP CH.	LL	26.7	PSF
ALL WEBS	2x3	ORY	No.2	SPF	SPF	JT COMBINED	SNOW	BOT CH.	LL	0.0	PSF
DRY: SEASONED LUMBER						A	4019		DL	6.0	PSF
						F	1142				

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 TOP

C-E 2 12 TOP

E-F 2 12 TOP

BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS

A-H 2 12 SIDE(142.1)

H-F 2 12 TOP

WEBS: (0.122"x3") SPIRAL NAILS

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.

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 TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (IN)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (IN)	
A-L	-6140 / 0	-95.2 -95.2 0.31 (1)	4.46	J-B	0 / 1230	0.15 (1)	
L-B	-5294 / 0	-95.2 -95.2 0.31 (1)	4.75	B-I	-1817 / 0	0.44 (1)	
B-C	-2194 / 0	-95.2 -95.2 0.12 (1)	6.25	I-C	0 / 891	0.11 (1)	
C-D	-1729 / 0	-95.2 -95.2 0.25 (1)	6.25	G-E	0 / 1964	0.24 (1)	
D-E	-1502 / 0	-95.2 -95.2 0.25 (1)	6.25	I-D	0 / 303	0.04 (1)	
E-F	-1554 / 0	0.0 0.0 0.46 (1)	7.81	G-D	-1098 / 0	0.41 (1)	
A-K	0 / 4370	-302.8 -302.8 0.49 (1)	10.00	K-L	0 / 1149	0.00 (1)	
K-M	0 / 3148	-302.8 -302.8 0.81 (1)	10.00	K-B	0 / 1688	0.15 (1)	
M-J	0 / 3148	-18.5 -18.5 0.81 (1)	10.00				
J-I	0 / 3133	-18.5 -18.5 0.30 (1)	10.00				
I-H	0 / 1502	-18.5 -18.5 0.11 (1)	10.00				
H-G	0 / 1502	-18.5 -18.5 0.11 (1)	10.00				
G-F	0 / 0	-18.5 -18.5 0.05 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)				CONNECTION REQUIREMENTS			
JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE	HEEL
M	1-4-8	-4186	-4186	FRONT	VERT	TOTAL	CONN. C1

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

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 (0.07")

CSI: TC=0.46/1.00 (E-F:1), BC=0.81/1.00 (J-K:1), WB=0.44/1.00 (B-I:1), SS=0.98/1.00 (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

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 650 371 1747 788 1987 1873

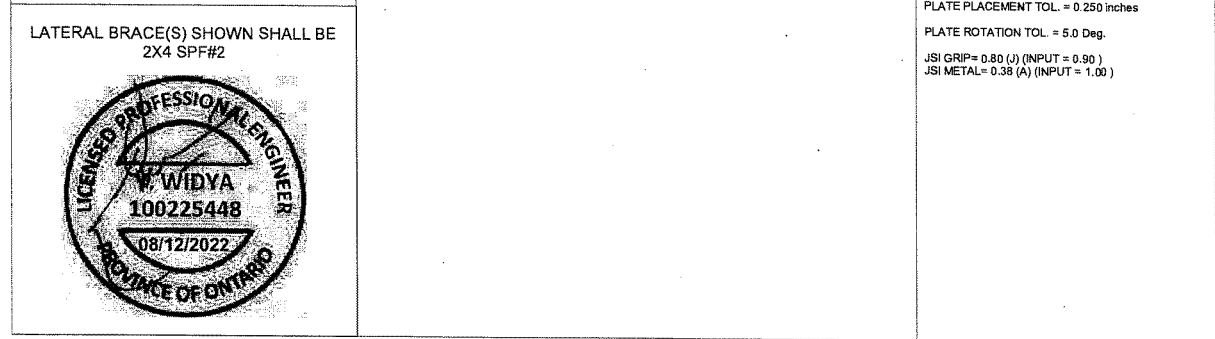
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.80 (J) (INPUT = 0.90)

JSI METAL= 0.38 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428114	TRUSS NAME T10	QUANTITY 2	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085375
Alpa Roof Truss, Maple				
Version 8.530 S Feb 23 2022 MITek Industries, Inc. Fri Aug 12 09:16:44 2022 Page 1 ID:1f9f019GMykZRH3S23hYkyrFa-tG_qdowPMfhv8912WVwwoSIU_mbCKdpH-Huyk7Yoex1				

Scale = 1:37.0

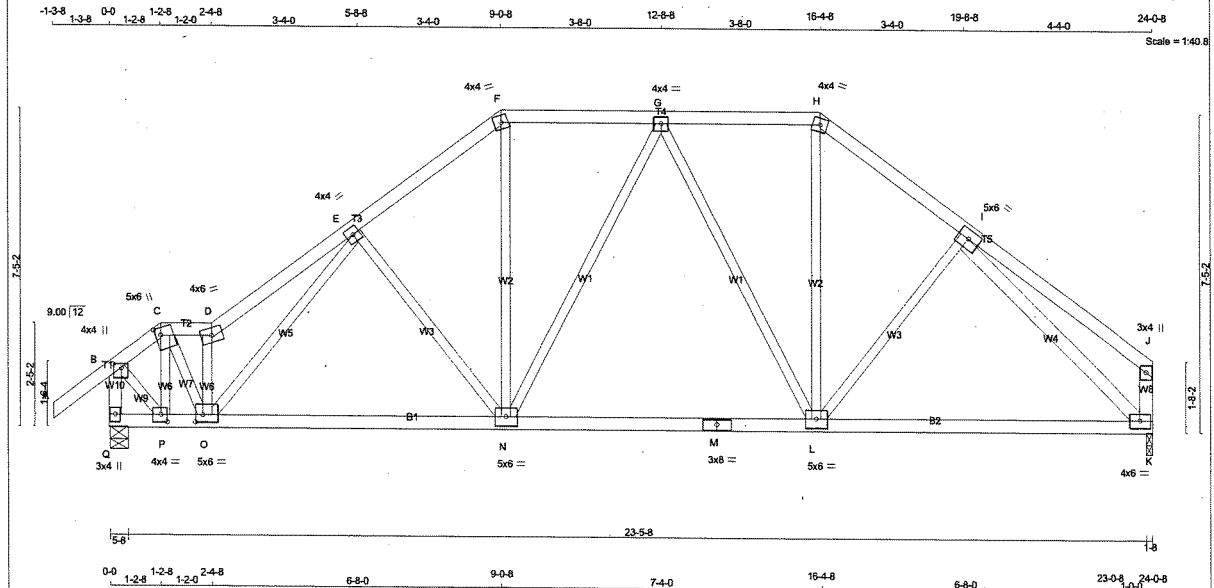
LUMBER		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER		DESIGN CRITERIA	
CHDRDS	SIZE	LUMBER	DESCR.	BEARINGS	
A - C	2x4 DRY	No.2 SPF		FACTORED GRDSS REACTION	MAXIMUM FACTORED INPUT REDRD
C - E	2x4 DRY	No.2 SPF		JT VERT HORZ	BRG BRG
E - G	2x4 DRY	No.2 SPF		O 2123 0	IN-SX IN-SX
G - H	2x6 DRY	No.2 SPF		H 2886 0	1-8 1-8
D - L	2x6 DRY	No.2 SPF			
L - H	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:					
CHDRDS #RDWS	SURFACE SPACING (IN)	LOAD(PLF)			
TDP CHDRDS : (0.122"x3") SPIRAL NAILS					
A-C	12	TOP SIDE(46.1)			
C-E	12	SIDE(57.6)			
E-G	12	TDP			
G-H	12	TDP			
BOTTOM CHDRDS : (0.122"x3") SPIRAL NAILS					
B-D	12	TDP			
D-F	12	SIDE(10.0)			
F-H	12	TDP			
WEBS : (0.122"x3") SPIRAL NAILS					
J-E	6	SIDE(31.4)			
2x3	6				
NAILS TO BE DRIVEN FROM DOWN SIDE ONLY.					
GRIDER NAILING ASSUMES NAILO HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.					
TDP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.					
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TDP.					
PLATES (table in inches)					
JT TYPE	PLATES	W	LEN	Y	X
A	TMWW-I MT20	4.0	6.0	1.75	1.50
B	TMWW-I MT20	4.0	6.0		
C	TTWW-m MT20	5.0	6.0	2.25	1.25
D	TMWW-w MT20	2.0	4.0	2.25	1.50
E	TTWW-m MT20	5.0	6.0		
F	TMWW-I MT20	4.0	6.0		
G	TMWW-I MT20	4.0	6.0	1.50	1.50
H	BMV-I+p MT20	2.0	4.0		
I, J, M, N	BMWW-I MT20	4.0	6.0		
K	BMWWW-I MT20	5.0	6.0		
L	BS-I MT20	4.0	6.0		
D	BMV-I+p MT20	2.0	4.0		
FACTORED CONCENTRATED LOADS (LBS) JT LOC LC1 MAX- MAX+ FACE DIR TYPE HEEL CONN. E 17'-2" -393 -393 — FRONT VERT TDIAL C1 Q 12'-8" -1218 -1218 — FRONT VERT TOTAL — C1					
CONNECTION REQUIREMENTS 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.					
DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEDMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TDP CH. LL = 26.7 PSF BOT CH. DL = 6.0 PSF BOT CH. DL = 6.0 PSF TDP CH. DL = 40.1 PSF SPACING = 24.0 IN/C LOADING IN FLAT SECTION BASED ON A SLPOE DF 2.00/12 MINIMUM GRIDER TYPE: CPineHp LEFT SETBACK = 5'-10"-8 RIGHT SETBACK = 5'-8"-0 END WALL WIDTH = 0'-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED DN 55 % DF GSL. LOADS APPLIED TO FIRST 10'-2-0 DF SPAN MEASURED FROM THE RIGHT. *** NDN STANDARD GIRDER *** ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL DR SMALL BUILDING REQUIREMENTS DF PART 9, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018, ABC 2019 - PART 9 OF DBC 2012 (2019 AMENDMENT) - CSA 086-14 - TPIC 2014 (55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EDUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD ALLDWABLE DEFL.(LL) = L/360 (0.76") CALCULATED VERT. DEFL.(LL) = U/999 (0.06") ALLDWABLE DEFL.(TL) = L/360 (0.76") CALCULATED VERT. DEFL.(TL) = U/999 (0.11") CSI: TC=0.47/1.00 (D-E=1), BC=0.45/1.00 (J-K=1), WB=0.28/1.00 (G-I=1), SS=0.35/1.00 (J-K=1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 COMPAIND LIVE LDAD FACTDR = 1.00 AUTDSOLVE HEELS DFF 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 MAX MIN MT20 850 371 1747 788 1987 1873 PLATE PLACEMENT TD. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.87 (G) (INPUT = 0.90) JSI METAL= 0.32 (G) (INPUT = 1.00)					

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

JOB NAME 428114	TRUSS NAME T11	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085376
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MTek Industries, Inc. Fri Aug 12 09:16:48 2022 Page 1
ID:119f019GMykJZRh3S23hYkyvFb-m1DLTzzvQtHLDmKklass4ecSib978RfPDvsAsvyowwz



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

DRY: SEASONED LUMBER.

PLATES (Table is in inches)	W	LEN	Y	X
JT TYPE				
B TMVW+p	MT20	4.0	4.0	1.00 2.25
C TTWW+m	MT20	5.0	6.0	2.00 1.50
D TTW-m	MT20	4.0	6.0	
E TMWW-t	MT20	4.0	4.0	
F TTW-m	MT20	4.0	4.0	
G TMWW-t	MT20	4.0	4.0	
H TTW-m	MT20	4.0	4.0	
I TMWW-t	MT20	5.0	6.0	
J TMV+p	MT20	3.0	4.0	
K BMVW-t	MT20	4.0	6.0	
L BMVWW-t	MT20	5.0	6.0	
M BS-t	MT20	3.0	6.0	
N BMVWW-t	MT20	5.0	6.0	
O BMVWW-t	MT20	5.0	6.0	2.00 2.00
P BMVW-t	MT20	4.0	4.0	2.00 1.75
O BMV+p	MT20	3.0	4.0	

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
	FACTORED	MAXIMUM FACTORED	INPUT	RECORD					
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
O	1502	0	1502	0	0	5-8	1-10		
K	1363	0	1363	0	0	1-8	1-8		
UNFACTORED REACTIONS									
1ST LCASE	MAX/MIN	COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
O	1058	719 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0		
K	962	641 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, K
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.00 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PL)	MAX. CSI (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO					FR-TO				
A-B	0 / 39	-95.2	-95.2 0.13 (1)	10.00	P-C	-623 / 0	0.10 (1)		
B-C	-988 / 0	-95.2	-95.2 0.10 (1)	6.17	C-O	0 / 1293	0.28 (1)		
C-D	-1296 / 0	-95.2	-95.2 0.03 (1)	5.65	O-D	-1178 / 0	0.18 (1)		
D-E	-1864 / 0	-95.2	-95.2 0.16 (1)	5.00	O-E	0 / 97	0.03 (4)		
E-F	-1377 / 0	-95.2	-95.2 0.16 (1)	5.40	E-N	-352 / 0	0.20 (1)		
F-G	-1089 / 0	-95.2	-95.2 0.16 (1)	5.88	N-F	0 / 547	0.12 (1)		
G-H	-1018 / 0	-95.2	-95.2 0.16 (1)	6.03	N-G	-154 / 0	0.21 (1)		
H-I	-1235 / 0	-95.2	-95.2 0.19 (1)	5.47	G-L	-312 / 0	0.42 (1)		
I-J	0 / 23	-95.2	-95.2 0.23 (1)	10.00	L-H	0 / 505	0.11 (1)		
O-B	-1513 / 0	0.0	0.0 0.16 (1)	6.68	L-I	-90 / 22	0.05 (1)		
K-J	-161 / 0	0.0	0.0 0.02 (1)	7.81	I-K	-1564 / 0	0.73 (1)		
O-P	0 / 0	-18.5	-18.5 0.04 (1)	10.00	B-P	0 / 1009	0.23 (1)		
P-O	0 / 716	-18.5	-18.5 0.18 (4)	10.00					
O-N	0 / 1299	-18.5	-18.5 0.31 (1)	10.00					
N-M	0 / 1158	-18.5	-18.5 0.35 (4)	10.00					
M-L	0 / 1158	-18.5	-18.5 0.35 (4)	10.00					
L-K	0 / 1067	-18.5	-18.5 0.34 (4)	10.00					

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL	= 26.7 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 40.1 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 CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 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 (0.13")

CSI: TC=0.23/1.00 (I-J-I), BC=0.35/1.00 (L-N-4), WB=0.73/1.00 (I-K-I), SSI=0.17/1.00 (G-H-I)

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

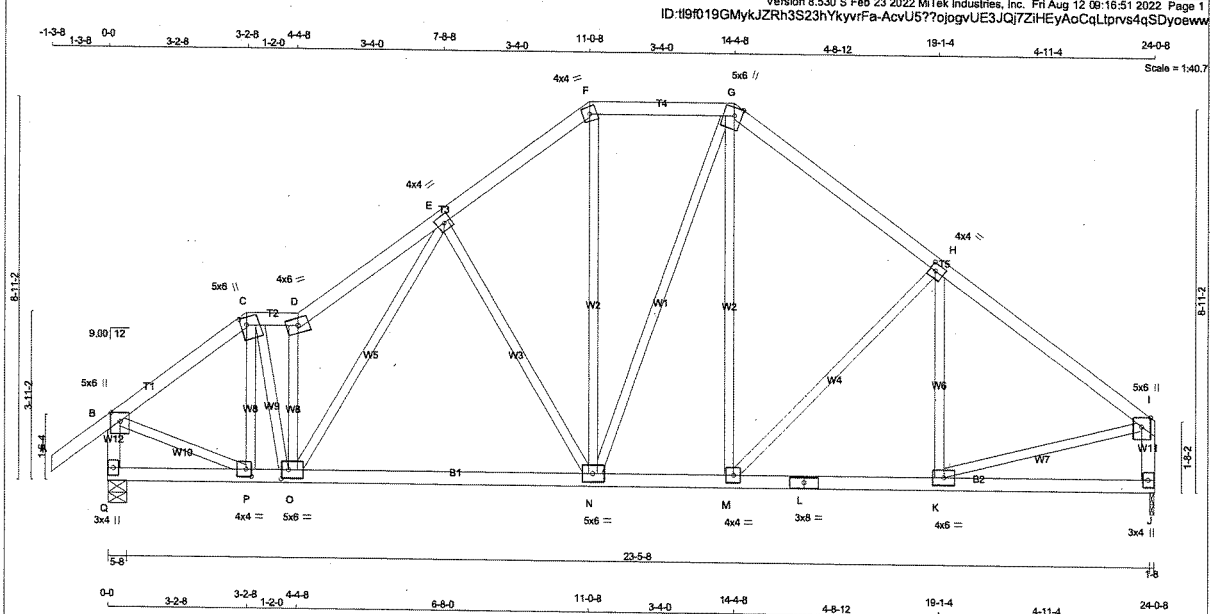
AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN 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 (P) (INPUT = 0.90)
JSI METAL= 0.49 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N.L.G.A. RULES	CHOROS	SIZE	LUMBER	OESCR
A - C	2x4	DRY	No.2	SPF
C - O	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - I	2x4	ORY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
J - I	2x4	ORY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - J	2x4	ORY	No.2	SPF
ALL WEBS EXCEPT	2x3	ORY	No.2	SPF

ORY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMW+p	MT20	5.0	6.0	Edge	
C TTW+m	MT20	5.0	6.0	2.00	1.50
O TTW-m	MT20	4.0	6.0		
E TMW+t	MT20	4.0	4.0		
F TTW-m	MT20	4.0	4.0		
G TTW+m	MT20	5.0	6.0	Edge	2.00
H TMW+t	MT20	4.0	4.0	2.00	1.50
I TMW+p	MT20	5.0	6.0	Edge	
J BMW+t	MT20	3.0	4.0		
K BMW+t	MT20	4.0	6.0		
L BS-t	MT20	3.0	8.0		
M BMW+t	MT20	4.0	4.0		
N BMW+t	MT20	5.0	6.0		
O BMW+t	MT20	5.0	6.0	2.50	2.00
P BMW+t	MT20	4.0	4.0	2.00	1.50
O BMW+t	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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTOREO GROSS REACTION		INPUT REORO	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	1498	0	1498	0	0	5-8	1-10
J	1367	0	1367	0	0	1-8	1-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1055	716 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
J	965	643 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 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)

CHOROS		FACTOREO		MEMB.		WEBS	
MAX. FACTOREO	FORCE	VERT. LOAD	LC1	MAX. FORCE	MAX. LENGTH	MAX. FORCE	MAX. LENGTH
FR TO							
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	P-C	-325 / 0
B-C	-1341 / 0	-95.2	-95.2	0.15 (1)	5.46	C-O	0 / 965
C-O	-1332 / 0	-95.2	-95.2	0.03 (1)	5.80	O-O	-1193 / 0
O-E	-1681 / 0	-95.2	-95.2	0.17 (1)	4.97	E-E	0 / 371
E-F	-1213 / 0	-95.2	-95.2	0.15 (1)	5.66	E-N	-479 / 0
F-G	-955 / 0	-95.2	-95.2	0.30 (1)	5.52	N-G	0 / 104
G-H	-1180 / 0	-95.2	-95.2	0.31 (1)	5.21	M-G	0 / 265
H-I	-1370 / 0	-95.2	-95.2	0.15 (1)	6.74	M-H	-300 / 0
O-B	-1478 / 0	0.0	0.0	0.14 (1)	7.02	K-H	-202 / 19
J-I	-1329 / 0	0.0	0.0	0.14 (1)	7.02	B-P	0 / 1137
O-P	0 / 0	-18.5	-18.5	0.05 (4)	10.00	K-I	0 / 1164
P-O	0 / 1060	-18.5	-18.5	0.22 (4)	10.00		
O-N	0 / 1185	-18.5	-18.5	0.29 (1)	10.00		
N-M	0 / 918	-18.5	-18.5	0.24 (1)	10.00		
M-L	0 / 1122	-18.5	-18.5	0.24 (1)	10.00		
L-K	0 / 1122	-18.5	-18.5	0.24 (1)	10.00		
K-J	0 / 0	-18.5	-18.5	0.11 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
OL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/989 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/989 (0.12")

CSI: TC=0.31/1.00 (H-1), BC=0.29/1.00 (N-0-1), WB=0.44/1.00 (E-N-1), SS=0.18/1.00 (H-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

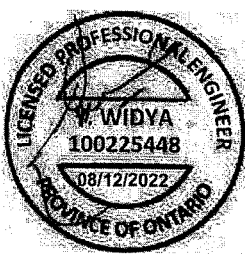
MT20 650 371 1747 788 1987 1873

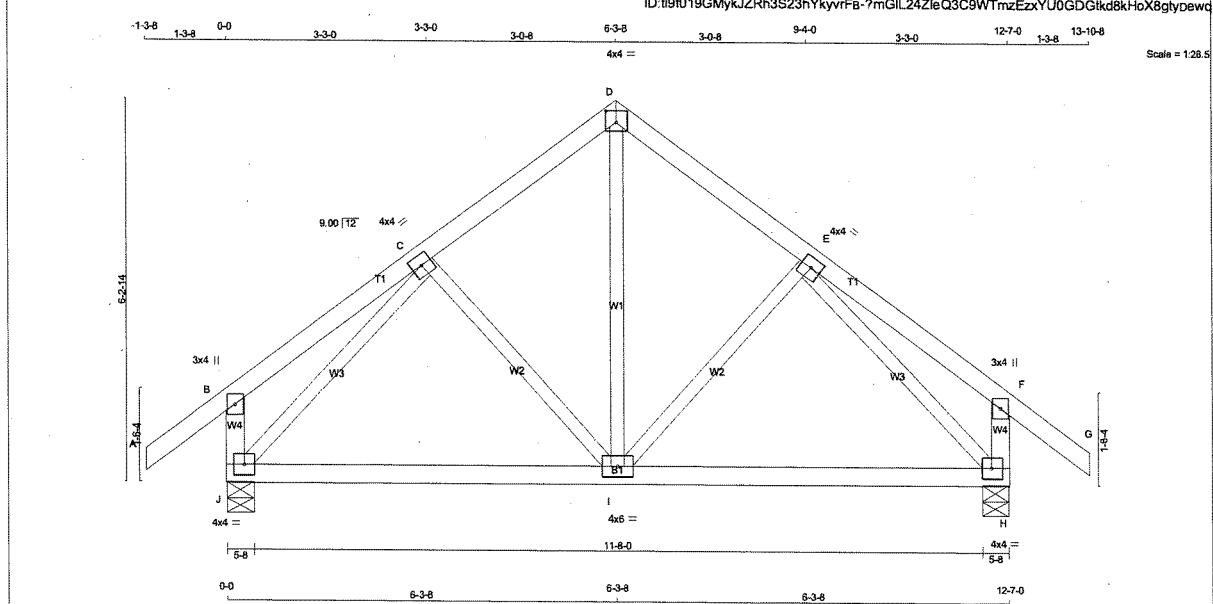
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.88 (O) (INPUT = 0.90)
JSI METAL= 0.53 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
J - B	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
J - H	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	TMV+p	MT20	3.0	4.0	
C	TMWW-i	MT20	4.0	4.0	
D	TTW-p	MT20	4.0	4.0	2.25 2.00
E	TMWW-i	MT20	4.0	4.0	
F	TMV+p	MT20	3.0	4.0	
H	BMVW1-i	MT20	4.0	4.0	
I	BMVW1-i	MT20	4.0	4.0	
J	BMVW1-i	MT20	4.0	4.0	

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

BEARINGS

FACTORED	MAXIMUM FACTORED	INPUT	REDRD
GROSS REACTION	GROSS REACTION	BRG	BRG
JT VERT	847	0	5-8
JT HDZ	847	0	5-8
JT UPLIFT	847	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SDIL
J	595 410 / 0 0 / 0 0 / 0 185 / 0 0 / 0
H	595 410 / 0 0 / 0 0 / 0 185 / 0 0 / 0

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

BRACINGS

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				WEBS			
MEMB.	FORCE (LBS)	FACTORED	MAX	MEMB.	FORCE (LBS)	FACTORED	MAX
A-B	0 / 39	-95.2	-95.2 0.13 (1)	I-D	0 / 357	0.08 (1)	
B-C	0 / 20	-95.2	-95.2 0.15 (1)	I-E	-144 / 0	0.05 (1)	
C-D	-514 / 0	-95.2	-95.2 0.11 (1)	C-I	-144 / 0	0.05 (1)	
D-E	-514 / 0	-95.2	-95.2 0.11 (1)	J-C	-741 / 0	0.26 (1)	
E-F	0 / 20	-95.2	-95.2 0.15 (1)	E-H	-741 / 0	0.26 (1)	
F-G	0 / 39	-95.2	-95.2 0.13 (1)				
J-B	-246 / 0	0.0	0.0 0.03 (1)				
H-F	-246 / 0	0.0	0.0 0.03 (1)				
J-I	0 / 491	-18.5	-18.5 0.25 (4)				
I-H	0 / 491	-18.5	-18.5 0.25 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
DL = 6.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.4 PSF

TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % DF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EDUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.15/1.0 (B-C-1), BC=0.25/1.0 (I-J-4), WB=0.26/1.0 (C-J-1), SSI=0.11/1.0 (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

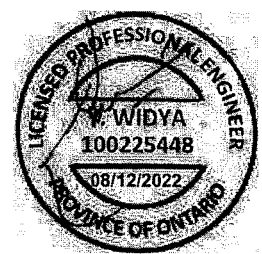
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PL)
MT20	650 371 1747 788 1987 1873	

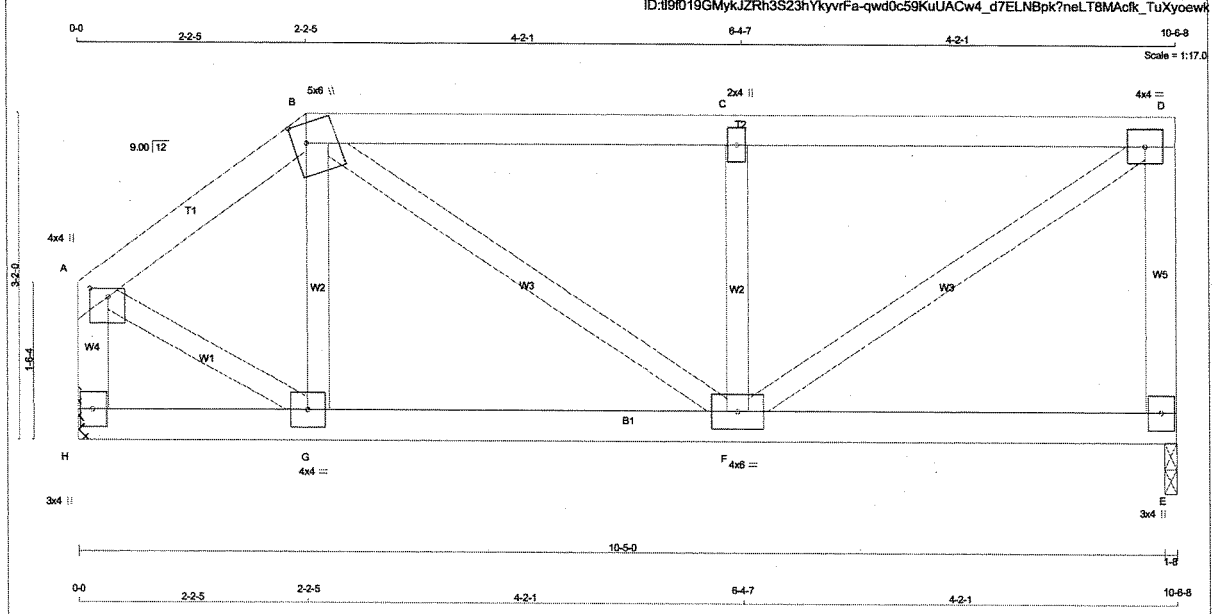
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (C) (INPUT = 0.90)
JSI METAL= 0.24 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:17.0 TOTAL WEIGHT = 43 lb

N. L. G. A. RULES				BUILDING DESIGNER				DESIGN CRITERIA					
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:					
A - B	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	RECORD	TOP CH. LL =	26.7	PSF		
B - O	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	DL =	8.0	PSF		
E - D	2x4	DRY	No.2	SPF	JT	VERT	DOWN	HORIZ	UPLIFT	BOT CH. LL =	0.0	PSF	
H - A	2x4	DRY	No.2	SPF	E	599	0	599	0	1-8	1-8	PSF	
H - E	2x4	DRY	No.2	SPF	H	599	0	599	0	0	MECHANICAL	OL = 7.4	PSF
ALL WEBS 2x3 DRY No.2				A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 1-8.				TOTAL LOAD = 40.1 PSF					
EXCEPT								SPACING = 24.0 IN. C/C					
DRY: SEASONED LUMBER.								LOADING IN FLAT SECTION BASED ON A SLOPE					

PLATES (table is in inches)				1ST LCASE				MAX. MIN. COMPONENT REACTIONS			
JT	TYPE	PLATES	W	LEN	Y	X	JT	COMBINED	SNOW	LIVE	PERM. LIVE
A	TMW+p	MT20	4.0	4.0	1.00	2.00	E	423	282/0	0/0	0/0
B	TTW+m	MT20	5.0	6.0	2.25	1.50	H	423	282/0	0/0	0/0
C	TMW+w	MT20	2.0	4.0							
D	TMW-l	MT20	4.0	4.0							
E	BMV+p	MT20	3.0	4.0							
F	BMVWW-l	MT20	4.0	8.0							
G	BMVWW-l	MT20	4.0	4.0							
H	BMV+p	MT20	3.0	4.0							

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC2)
FR-TO				FR-TO			
A-B	-473/0	-95.2	-95.2 0.08 (1)	G-B	-130/3	0.02 (1)	
B-C	-602/0	-95.2	-95.2 0.27 (1)	B-F	0/279	0.05 (1)	
C-D	-602/0	-95.2	-95.2 0.27 (1)	F-C	-487/0	0.09 (1)	
E-D	-565/0	0.0	0.0 0.09 (1)	F-D	0/728	0.18 (1)	
H-A	-586/0	0.0	0.0 0.08 (1)	A-G	0/425	0.10 (1)	
H-G	0/0	-18.5	-18.5 0.04 (4)				
G-F	0/372	-18.5	-18.5 0.11 (4)				
F-E	0/0	-18.5	-18.5 0.07 (4)				

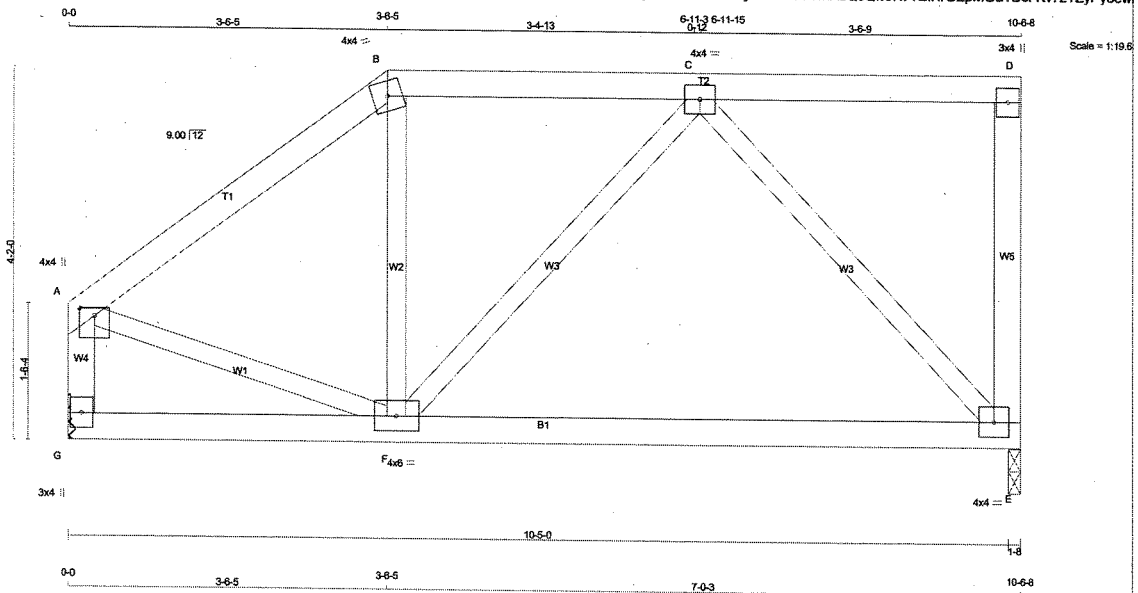
ALLOWABLE DEFL. (LL) = L/360 (0.35")
 CALCULATED VERT. DEFL. (LL) = L/999 (0.01")
 ALLOWABLE DEFL. (TL) = L/360 (0.35")
 CALCULATED VERT. DEFL. (TL) = L/999 (0.02")
 CS: TC=0.27/1.00 (C-D:1), BC=0.11/1.00 (F-G:4),
 WB=0.16/1.00 (D-F:1), SS=0.19/1.00 (C-D:1)
 OOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
 COMP=1.10 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)
 MAX MIN MAX MIN 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 (F) (INPUT = 0.90)
 JSI METAL= 0.21 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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ID:119f019GMykJZRh3S23hYkyvFa-mJlm1nAaQ6Qw9N7?EINrGepMGS7DcFkv72TZyPyoww



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER
A - B	2x4	DRY No.2
B - D	2x4	DRY No.2
E - D	2x4	DRY No.2
G - A	2x4	DRY No.2
G - E	2x4	DRY No.2
ALL WEBS EXCEPT	2x3	DRY No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMVW+p	MT20	4.0	4.0	1.00	2.00
B - TTW-m	MT20	4.0	4.0		
C - TMVW-t	MT20	4.0	4.0		
D - TMV+p	MT20	3.0	4.0		
E - BMVW-t	MT20	4.0	4.0		
F - BMVW-t	MT20	4.0	4.0		
G - BMV+p	MT20	3.0	4.0		

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
JT	VERT	GROSS REACTION	DOWN	BRG
E	599	0	599	0
G	599	0	599	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT G. MINIMUM BEARING LENGTH AT JOINT G = 1-3.

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	423	282 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0
G	423	282 / 0	0 / 0	0 / 0	0 / 0	141 / 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO							
A-B	-484 / 0	-95.2	-95.2	0.21 (1)	6.25	F-B	-3 / 56
B-C	-386 / 0	-95.2	-95.2	0.19 (1)	6.25	F-C	0 / 59
C-D	0 / 0	-95.2	-95.2	0.19 (1)	10.00	C-E	-565 / 0
E-D	-129 / 0	0.0	0.0	0.03 (1)	7.81	A-F	0 / 407
G-A	-587 / 0	0.0	0.0	0.08 (1)	7.81		
G-F	0 / 0	-18.5	-18.5	0.19 (4)	10.00		
F-E	0 / 382	-18.5	-18.5	0.22 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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 CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $\frac{U}{360}$ (0.35")
CALCULATED VERT. DEFL.(LL) = $\frac{U}{999}$ (0.01")
ALLOWABLE DEFL.(TL) = $\frac{U}{360}$ (0.35")
CALCULATED VERT. DEFL.(TL) = $\frac{U}{999}$ (0.07")

CSI: TC=0.21/1.00 (A-B:1), BC=0.22/1.00 (E-F:4), WB=0.25/1.00 (C-E:1), SS=0.16/1.00 (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.

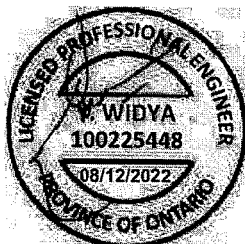
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1967 1873

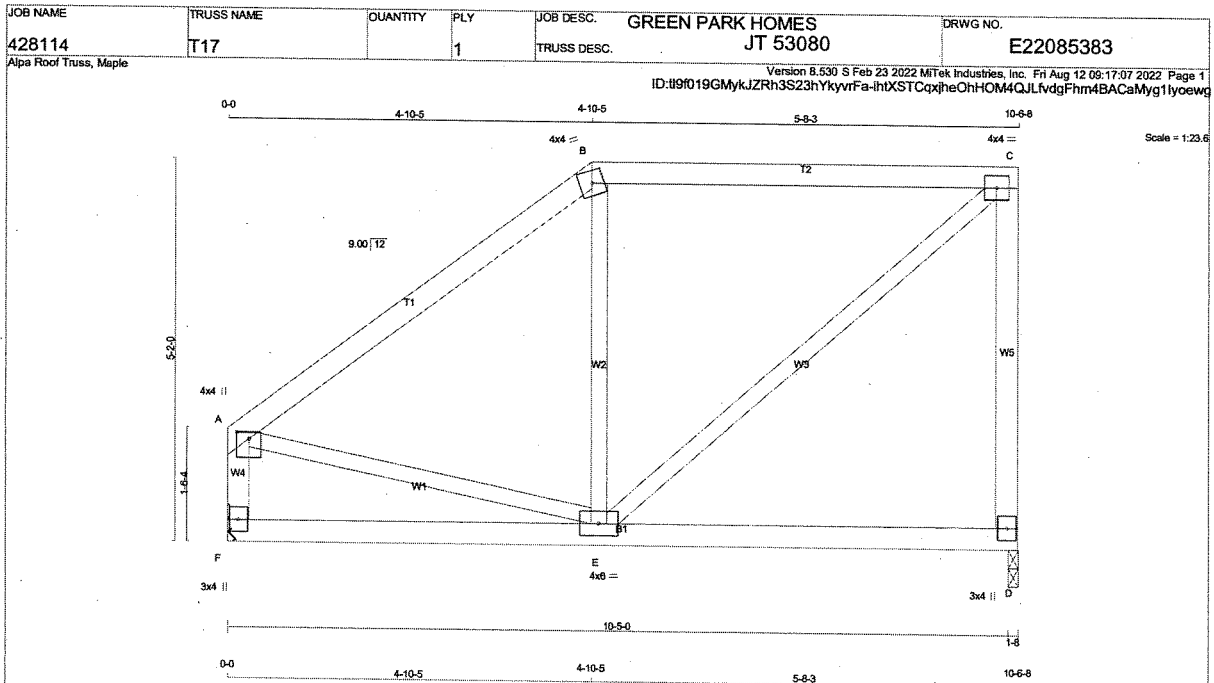
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (F) (INPUT = 0.90)
JSI METAL= 0.15 (A) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

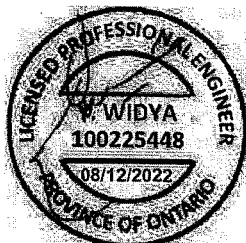


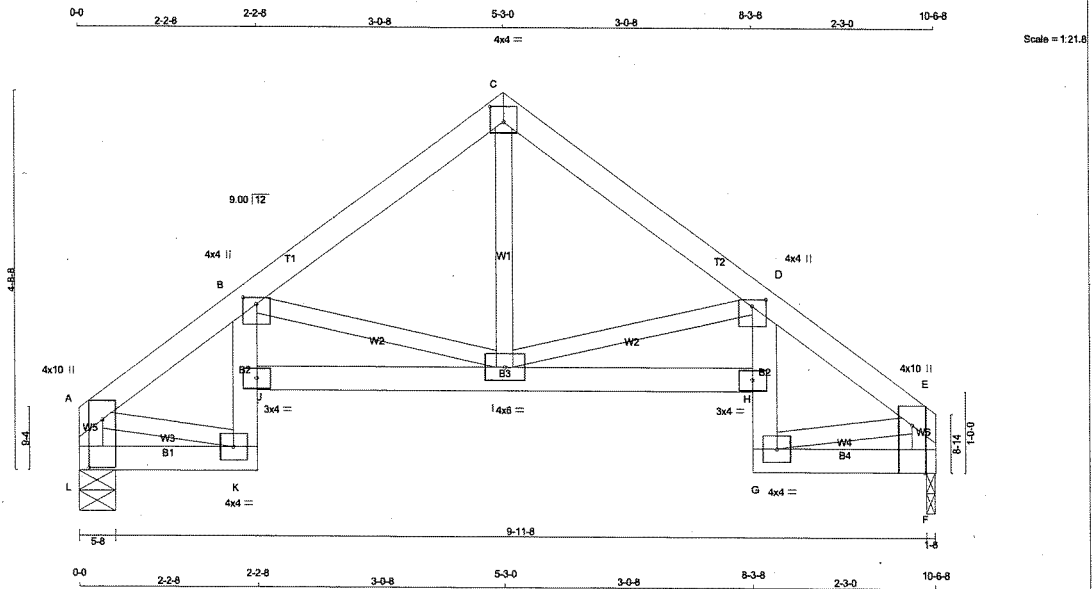


LUMBER		CHORDS		ALL WEBS EXCEPT		DRY: SEASONED LUMBER.	
N.L.G.A. RULES	SIZE	DRY	No.2	DRY	No.2		
A - B	2x4	DRY	No.2	DRY	No.2		
B - C	2x4	DRY	No.2	DRY	No.2		
D - C	2x4	DRY	No.2	DRY	No.2		
F - A	2x4	DRY	No.2	DRY	No.2		
F - D	2x4	DRY	No.2	DRY	No.2		
ALL WEBS EXCEPT	2x3	DRY	No.2	DRY	No.2		
PLATES (table is in inches)		W	LEN	Y	X		
JT TYPE	PLATES	4.0	4.0	1.00	2.00		
A - TMVW+p	MT20	4.0	4.0	1.00	2.00		
B - TTW-m	MT20	4.0	4.0				
C - TMVW-l	MT20	4.0	4.0				
D - BMV1+p	MT20	3.0	4.0				
E - BMVWW-t	MT20	4.0	6.0				
F - BMV1+p	MT20	3.0	4.0				

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL	= 28.7 PSF
DL	= 8.0 PSF
BOT CH. LL	= 0.0 PSF
OL	= 7.4 PSF
TOTAL LOAD	= 40.1 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 CBC 2018, ABC 2019	
- PART 9 OF CBC 2012 (2019 AMENDMENT)	
- CSA 086-14	
- TPIC 2014	
(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD	
ALLOWABLE DEFL.(LL) = L/360 (0.35")	
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")	
ALLOWABLE DEFL.(TL) = L/360 (0.35")	
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")	
CSK: TC=0.53/1.00 (B-C-1), BC=0.15/1.00 (E-F-4), WB=0.10/1.00 (B-E-1), SS=0.21/1.00 (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
(F-B)	(PLI)
MAX MIN	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 (A) (INPUT = 0.90)	
JSI METAL= 0.14 (A) (INPUT = 1.00)	

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER	SIZE	LUMBER	DESCR
N. L. G. A. RULES			
CHORDS	SIZE		
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
L - A	2x4	DRY	No.2
F - E	2x4	DRY	No.2
L - K	2x4	DRY	No.2
K - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
G - D	2x4	DRY	No.2
G - F	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A, E, F, L					
A	TMBMW1**pMT20	4.0	10.0	7.00	2.00
B	TMBWW-p	MT20	4.0	4.0	1.00 2.00
C	TTW-p	MT20	4.0	4.0	2.25 2.00
D	TMBWW-p	MT20	4.0	4.0	1.00 2.00
E	TMBMW1**pMT20	4.0	10.0	Edge 2.00	
G	BMMW-l	MT20	4.0	4.0	
H	BVM-l	MT20	3.0	4.0	
I	BMMWW-l	MT20	4.0	6.0	
J	BVM-l	MT20	3.0	4.0	
K	BMMW-l	MT20	4.0	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	REORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	UPLIFT	IN-SX
L	599	0	5-8	1-8
F	599	0	0	1-8

UNFACTORED REACTIONS	1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
L	423	282 / 0	0 / 0
F	423	282 / 0	0 / 0

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

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	MAX. FACTORED	FACTORED	MAX. FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	LENGTH FR-TO		
A-B	-622 / 0	-95.2	-95.2 0.08 (1)	B-I	-547 / 0
B-C	-590 / 0	-95.2	-95.2 0.18 (1)	I-C	0 / 401
C-D	-590 / 0	-95.2	-95.2 0.18 (1)	I-D	-563 / 0
D-E	-631 / 0	-95.2	-95.2 0.08 (1)	A-K	0 / 506
L-A	-580 / 0	0.0	0.0 0.06 (1)	G-E	0 / 512
F-E	-580 / 0	0.0	0.0 0.06 (1)		
L-K	0 / 0	-18.5	-18.5 0.02 (4)		
K-J	-87 / 0	0.0	0.0 0.67 (1)		
J-B	-64 / 13	0.0	0.0 0.67 (1)		
J-I	0 / 996	-18.5	-18.5 0.19 (1)		
I-H	0 / 1010	-18.5	-18.5 0.19 (1)		
G-H	-79 / 0	0.0	0.0 0.68 (1)		
H-D	-56 / 16	0.0	0.0 0.68 (1)		
G-F	0 / 0	-18.5	-18.5 0.02 (4)		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL (LL) = L/360 (0.35")
CALCULATED VERT. DEFL (LL) = L/999 (0.05")
ALLOWABLE DEFL (TL) = L/360 (0.35")
CALCULATED VERT. DEFL (TL) = L/999 (0.10")

CSI: TC=0.18/1.00 (C-D-1), BC=0.68/1.00 (G-H-1), WB=0.12/1.00 (D-I-1), SS=0.40/1.00 (D-H-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 650 371 1747 788 1987 1873

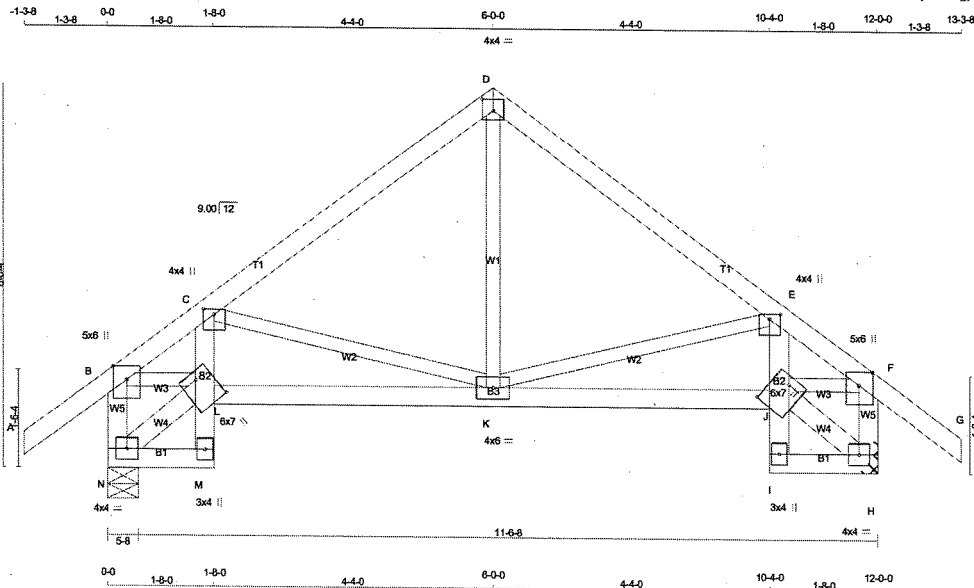
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.80 (G) (INPUT = 0.90)
JSI METAL= 0.28 (H) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1/2" = 1'-0"

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
N - B	2x4	DRY	No.2
H - F	2x4	DRY	No.2
N - M	2x4	DRY	No.2
M - C	2x4	DRY	No.2
L - J	2x4	DRY	No.2
I - E	2x4	DRY	No.2
I - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
N - L	2x4	DRY	No.2
J - H	2x4	DRY	No.2

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	TMVW+p	MT20	4.0	4.0	1.00 2.00
D	TTW+p	MT20	4.0	4.0	2.25 2.00
E	TMVW+p	MT20	4.0	4.0	1.00 2.00
F	TMVW+p	MT20	5.0	6.0	Edge
H	BMVW-i	MT20	4.0	4.0	
I	BMV+p	MT20	3.0	4.0	
J	BMVW-w	MT20	6.0	7.0	3.00 5.50
K	BMVW-w	MT20	4.0	6.0	
L	BMVW-w	MT20	6.0	7.0	3.00 5.50
M	BMV+p	MT20	3.0	4.0	
N	BMVW-i	MT20	4.0	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	RECORD BRG
	VERT	HORZ	DOWN	HORZ		
N	813	0	813	0	5-8	1-8
H	813	0	813	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	572	395 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
H	572	395 / 0	0 / 0	0 / 0	0 / 0	177 / 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 = 6.13 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)	FACTORED HORZ. LOAD (LC1 MAX)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO					FR-TO		
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	K-D	0 / 279
B-C	-989 / 0	-95.2	-95.2	0.17 (1)	6.13	K-E	-415 / 0
C-D	-553 / 0	-95.2	-95.2	0.23 (1)	6.25	C-K	-415 / 0
D-E	-553 / 0	-95.2	-95.2	0.23 (1)	8.25	N-L	-39 / 0
E-F	-969 / 0	-95.2	-95.2	0.17 (1)	8.13	B-L	0 / 794
F-G	0 / 39	-95.2	-95.2	0.13 (1)	10.00	J-H	-39 / 0
N-B	-776 / 0	0.0	0.0	0.08 (1)	7.81	J-F	0 / 794
H-F	-776 / 0	0.0	0.0	0.08 (1)	7.81		
N-M	0 / 31	-18.5	-18.5	0.01 (4)	10.00		
M-L	0 / 16	0.0	0.0	0.05 (1)	10.00		
L-C	0 / 48	0.0	0.0	0.05 (1)	10.00		
L-K	0 / 824	-18.5	-18.5	0.19 (1)	10.00		
K-J	0 / 824	-18.5	-18.5	0.19 (1)	10.00		
I-J	0 / 16	0.0	0.0	0.05 (1)	10.00		
J-E	0 / 48	0.0	0.0	0.05 (1)	10.00		
I-H	0 / 31	-18.5	-18.5	0.01 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.9 IN. C/C

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

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.03")

CSI: TC=0.23/1.00 (D-E-1), BC=0.19/1.00 (J-K-1), WB=0.18/1.00 (F-J-1), SSI=0.15/1.00 (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

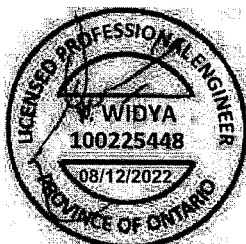
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

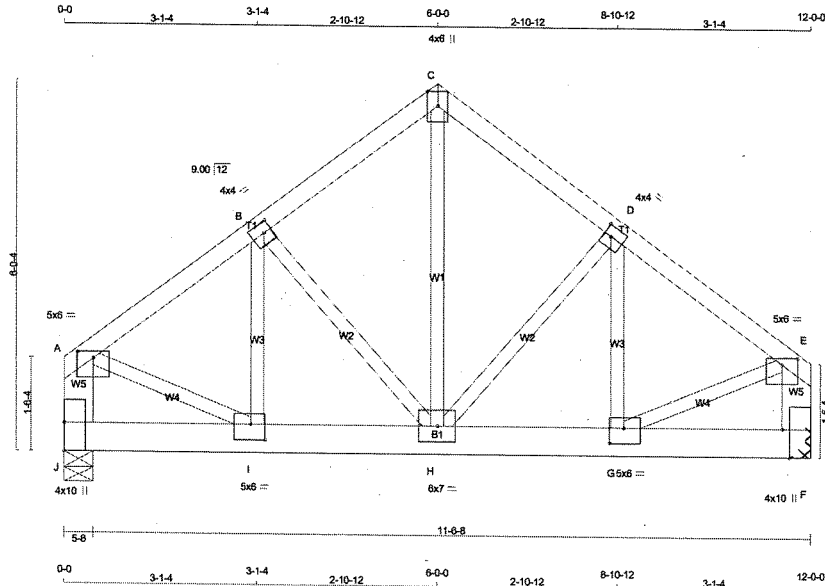
JSI GRIP= 0.81 (L) (INPUT = 0.90)
JSI METAL= 0.39 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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ID:09f019GMKJZRh3S23hYkyvFfa-xQvxLYJTqUpM_4T6OT4QDYNgrt0hBkXfAfHfHyocwX



Scale = 1:28.5

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

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-C	1	12
C-E	1	12
J-A	2	12
F-E	2	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J-F	2	9
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.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. 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	TMWV-p	MT20	5.0	6.0	1.25	3.00
B	TMWV-i	MT20	4.0	4.0	2.00	1.50
C	TTW-p	MT20	4.0	6.0		
D	TMWV-i	MT20	4.0	4.0	2.00	1.50
E	TMWV-p	MT20	5.0	6.0	1.25	3.00
F	BMV-i	MT20	4.0	10.0	Edge	1.50
G	BMWV-i	MT20	5.0	6.0	3.00	2.75
H	BMWV-i	MT20	6.0	7.0		
I	BMWV-i	MT20	5.0	6.0	3.00	2.75
J	BMV-i	MT20	4.0	10.0	5.50	

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	RECORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
J	4186	0	4186	0
F	4186	0	4186	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 4.0.

UNFACTORED REACTIONS

1ST LOASE	MAX/MIN	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM	LIVE	WIND	DEAD
J	2935	1968	0	0	0	0	0
F	2955	1968	0	0	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 = 4.84 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	MAX	UNBRAC	MEMB.	MAX. FACTORED
	FORCE		(PLF)		CSI	(LC)	LENGTH		FORCE
FR-TO	(LBS)								(LBS)
A-B	-3640	0	-95.2	-95.2	0.12	(1)	4.84	H-C	0/3216
B-C	-2892	0	-95.2	-95.2	0.09	(1)	5.33	H-D	-951
C-D	-2892	0	-95.2	-95.2	0.09	(1)	5.33	G-D	0/870
D-E	-3640	0	-95.2	-95.2	0.12	(1)	4.84	B-H	-951
J-A	-3365	0	0.0	0.0	0.12	(1)	7.58	I-B	0/870
F-E	-3365	0	0.0	0.0	0.12	(1)	7.58	A-I	0/3100
								G-E	0/3100
J-I	0	0	-602.4	-602.4	0.21	(1)	10.00		
I-H	0/2919		-602.4	-602.4	0.33	(1)	10.00		
H-G	0/2919		-602.4	-602.4	0.33	(1)	10.00		
G-F	0	0	-602.4	-602.4	0.21	(1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
OL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAO = 40.1 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 22-6-8
END DISTANCE = 12-0-0
END SPAN CARRIED = 22-6-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
-ADDTL LOADS BASED ON 55 % DF GSL.
(DEFINED BY USER)

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

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

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CS: TC=0.12/1.00 (A-J-1), BC=0.33/1.00 (H-I-1), WB=0.40/1.00 (C-H-1), SSI=0.35/1.00 (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 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)
MAX	MIN	MAX	MIN
MT20	650	371	1747
		788	1987
		1873	

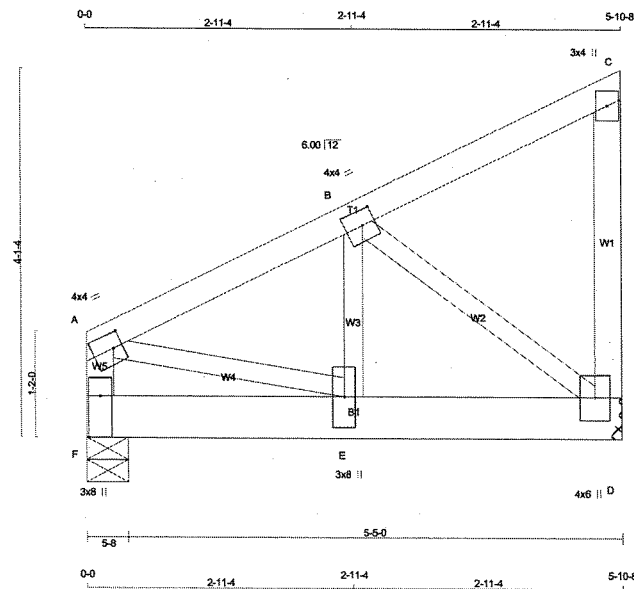
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (I) (INPUT = 0.90)
JSI METAL= 0.36 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:19.5

TOTAL WEIGHT = 2 X 29 = 58 lb

CHORDS	SIZE	LUMBER	DESCR.
F - A	2x4	DRY	SPF
A - C	2x4	DRY	No.2
O - C	2x4	DRY	No.2
F - D	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY-SEASONED LUMBER.			SPF

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(121.4)
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.

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

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE PLATES				
A TMWV-t MT20	4.0	4.0	2.00	1.25
B TMWV-t MT20	4.0	4.0	2.00	1.75
C TMV+p MT20	3.0	4.0		
D BMWV1+p MT20	4.0	6.0		
E BMWV1+p MT20	3.0	6.0		
F BMV1+p MT20	3.0	6.0	Edge	1.50

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	REQRD					
	GROSS REACTION	GROSS REACTION	BRG	BRG					
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
F	1047	0	1047	0	0	5-8	1-8		
D	1047	0	1047	0	0	MECHANICAL			

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

UNFACTORED REACTIONS									
1ST LCASE	MAX	MIN	COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM	LIVE	WIND	DEAD	SOIL	
F	739	492 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
D	739	492 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC1 MIN	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC1 MIN
FR-TO					FR-TO				
F-A	-721 / 0	0.0	0.0	0.04 (1)	A-E	0 / 826	0.10 (1)		
A-B	-880 / 0	-95.2	-95.2	0.07 (1)	E-B	0 / 672	0.08 (1)		
B-C	-13 / 0	-95.2	-95.2	0.06 (1)	B-D	-1005 / 0	0.12 (1)		
D-C	-111 / 0	0.0	0.0	0.01 (1)					
F-E	0 / 0	-261.3	-261.3	0.07 (1)					
E-O	0 / 798	-261.3	-261.3	0.13 (1)					

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF
SPACING = 24.0 IN. C/C
GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
SPAN CARRIED = 10-6-8
END DISTANCE = 5-10-8
ENOS CARRIED = 10-6-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
-ADDTL. LOADS BASED ON 55 % OF G.S.L.
(DEFINED BY USER)

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

THIS DESIGN COMPLES WITH:
-PART 9 OF CBC 2015, ABC 2019
-PART 9 OF CBC 2012 (2019 AMENDMENT)
-CSA 086-14
-TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 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")

CSL: TC=0.07/1.00 (A-B:1), BC=0.13/1.00 (D-E:1), WB=0.12/1.00 (B-D:1), SS=0.15/1.00 (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.

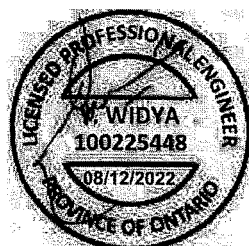
PLATE GRIP(DRY) SHEAR SECTION	(PSI)	(PL)	(PL)
MAX MIN MAX MIN MAX MIN			
MT20	850	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

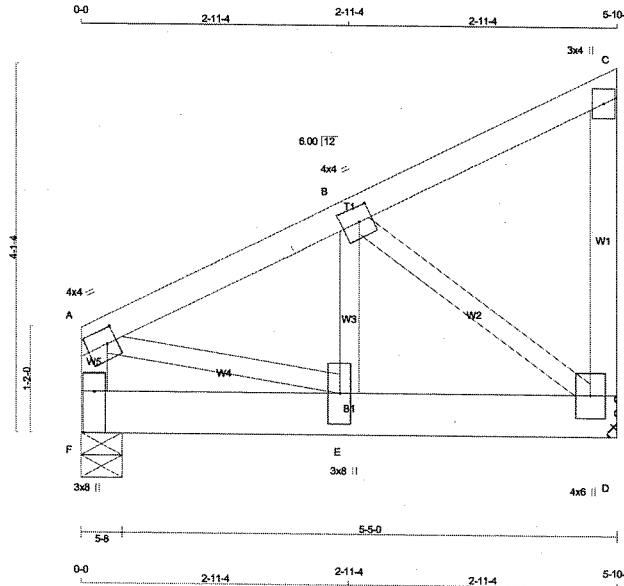
JSI GRIP= 0.69 (A) (INPUT = 0.90)
JSI METAL= 0.24 (E) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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Scale = 1:19.5

CHORDS	SIZE	LUMBER	DESCR.
F - A	2x4	DRY	No.2
A - C	2x4	DRY	No.2
D - C	2x4	DRY	No.2
F - D	2x6	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	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(92.4)
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.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. 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+1	MT20	4.0	4.0	2.00	1.25	
B	TMVW+1	MT20	4.0	4.0	2.00	1.75	
C	TMV+1	MT20	3.0	4.0			
D	BMVW+1	MT20	4.0	6.0			
E	BMVW+1	MT20	3.0	8.0			
F	BMV+1	MT20	3.0	8.0	Edge	1.50	

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

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

	FACTORED		MAXIMUM FACTORED			INPUT	REORD
JT	GROSS REACTION		GROSS REACTION			BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	877	0	877	0	0	5-8	1-8
D	877	0	877	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	619	412 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0
D	619	412 / 0	0 / 0	0 / 0	0 / 0	207 / 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 = 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	VERT. LOAD	LC1	MAX	MAX	UNBRAC	WEBS	MAX. FACTORED	VERT. LOAD	LC1	MAX	MAX	UNBRAC
MEMB.	FORCE (LBS)	PLF	CSI (LC)	LEN	FR-TO	FR-TO	MEMB.	FORCE (LBS)	PLF	CSI (LC)	LEN	FR-TO	FR-TO
F-A	-621 / 0	0.0	0.0	0.03 (1)	7.81	A-E	0 / 692	0.09 (1)					
A-B	-735 / 0	-95.2	-95.2	0.07 (1)	6.25	E-B	0 / 507	0.06 (1)					
B-C	-13 / 0	-95.2	-95.2	0.07 (1)	6.25	B-D	-842 / 0	0.10 (1)					
D-C	-110 / 0	0.0	0.0	0.01 (1)	7.81								
F-E	0 / 0	-203.3	-203.3	0.06 (1)	10.00								
E-D	0 / 669	-203.3	-203.3	0.10 (1)	10.00								

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 8-6-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 8-6-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL. LOADS BASED ON 55% OF GSL.
(DEFINED BY USER)

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 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=0.10/1.00 (B-D:1), SSI=0.11/1.00 (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) SHEAR SECTION
(PSI) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.58 (A) (INPUT = 0.90)
JSI METAL= 0.20 (E) (INPUT = 1.00)

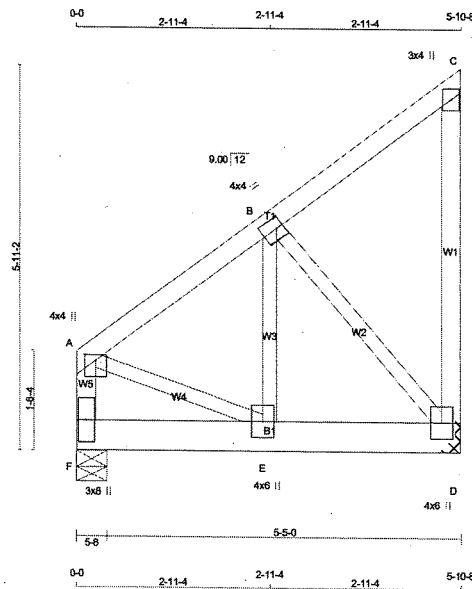
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428114	TRUSS NAME T22	QUANTITY 2	PLY 2	JOB DESC. GREEN PARK HOMES JT 53080	DRWG NO. E22085389
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Alpa Roof Truss, Maple

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Scale = 1/2\"/>

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(150.4)
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.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING 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	1.00	2.00
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMV+p	MT20	3.0	4.0		
D	BMVW+p	MT20	4.0	6.0		
E	BMVW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	3.0	8.0		

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	RECORD
JT	VERT	HORZ	DOWN	HORZ
F	1218	0	1218	0
D	1218	0	1218	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE
F	880	573 / 0	0 / 0	0 / 0
D	880	573 / 0	0 / 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 = 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED HORIZ. LOAD (LC2)	MAX. FACTORED LENGTH (FR-TO)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LC2)
FR-TO										
F-A	-829 / 0	0.0	0.0	0.05 (1)	7.81	A-E	0 / 683	0.08 (1)		
A-B	-780 / 0	-95.2	-95.2	0.07 (1)	6.25	E-B	0 / 858	0.11 (1)		
B-C	-19 / 0	-95.2	-95.2	0.07 (1)	6.25	B-D	-963 / 0	0.15 (1)		
D-C	-109 / 0	0.0	0.0	0.03 (1)	7.81					
F-E	0 / 0	-319.3	-319.3	0.09 (1)	10.00					
E-D	0 / 639	-319.3	-319.3	0.13 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 12-7-0
END DISTANCE = 5-10-8
END SPAN CARRIED = 12-7-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.
(DEFINED BY USER)

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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 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=0.13/1.00 (D-E:1), WB=0.15/1.00 (B-D:1), SS=0.18/1.00 (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

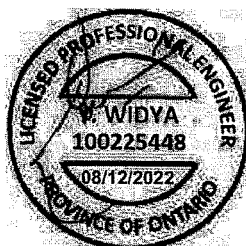
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

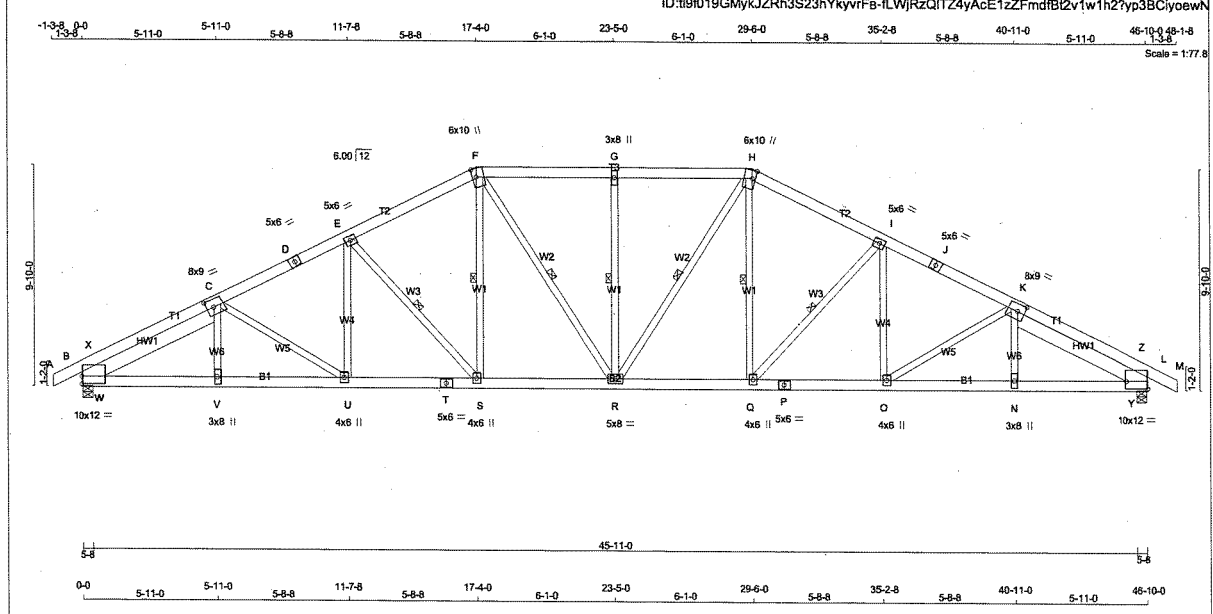
PLATE PLACEMENT TOL. = 0.250 inches

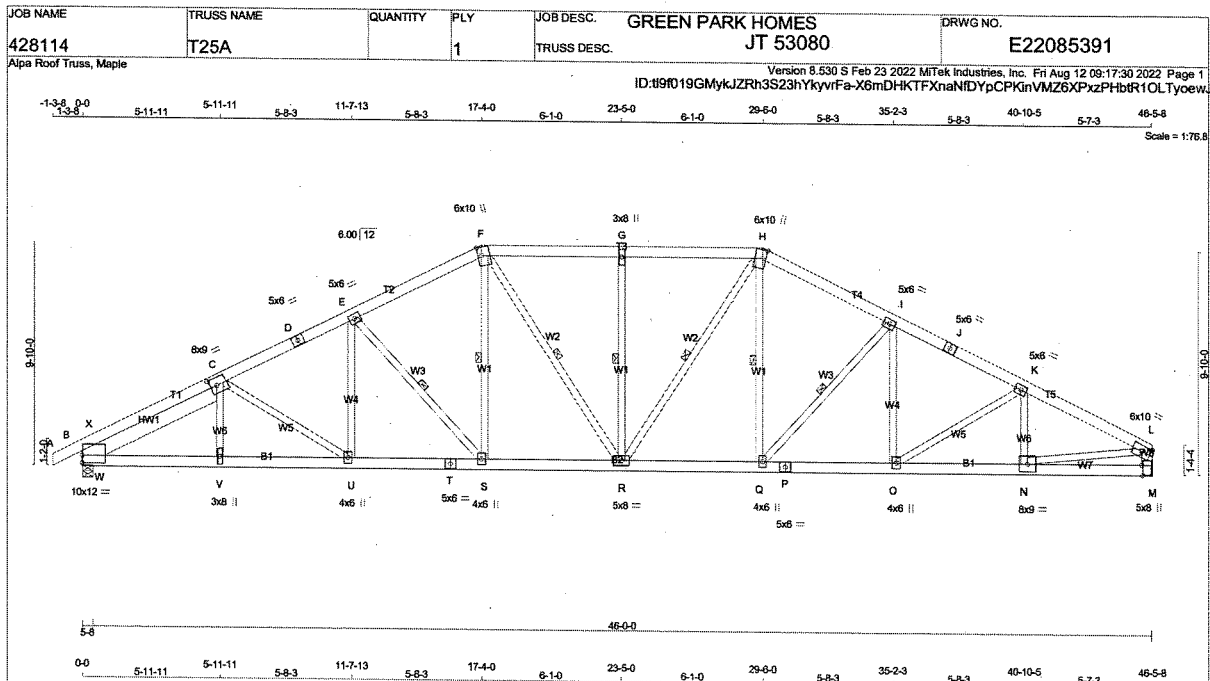
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.44 (B) (INPUT = 0.90)
JSI METAL = 0.14 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2







LUMBER		N. L. G. A. RULES		CHORDS		SIZE		LUMBER	
A - D	2x6	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	RECORD	
D - F	2x6	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	
F - H	2x6	DRY	No.2	SPF	JT VERT	HORIZ	DOWN	HORIZ	UPLIFT
H - J	2x6	DRY	No.2	SPF	B	3954	0	3954	140
J - L	2x6	DRY	No.2	SPF	M	3788	0	3788	0
M - L	2x6	DRY	No.2	SPF					
L - P	2x6	DRY	No.2	SPF					
P - M	2x6	DRY	No.2	SPF					

REINFORCING MEMBERS		N. L. G. A. RULES		CHORDS		SIZE		LUMBER	
HW1	2x8	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	RECORD	
ALL WEBS	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	RECORD	

DRY: SEASONED LUMBER.

PLATES (table is in inches)		N. L. G. A. RULES		CHORDS		SIZE		LUMBER	
JT	TYPE	PLATES	W	LEN	Y	X			
8	TMWVW-1	MT20	10.0	12.0	4.00				
C	TMWVW-1	MT20	8.0	9.0	4.00	3.50			
D	TS-1	MT20	5.0	8.0					
E, I, K									
E	TMWV-1	MT20	5.0	8.0					
F	TTWVW-m	MT20	6.0	10.0	4.50	1.75			
G	TMWVW	MT20	3.0	8.0					
H	TTWVW-m	MT20	6.0	10.0	4.50	1.75			
J	TS-1	MT20	5.0	8.0					
L	TMWV-1	MT20	8.0	10.0					
M	BMV1H	MT20	5.0	8.0	Edge	0.50			
N	BMWV-1	MT20	8.0	9.0					
O, Q, S, U									
O	BMWVW-1	MT20	4.0	6.0					
P	BS-1	MT20	5.0	8.0					
R	BMWVW-1	MT20	5.0	8.0					
T	BS-1	MT20	5.0	8.0					
V	BMWVW	MT20	3.0	8.0					

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

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

BEARINGS		N. L. G. A. RULES		CHORDS		SIZE		LUMBER	
FACTORED	MAXIMUM FACTORED	INPUT	RECORD						
JT	VERT	HORIZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX		
B	3954	0	3954	140	-203	5-8	4-5		
M	3788	0	3788	0	-174	MECHANICAL			

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

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 203 LBS. FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT M FOR 174 LBS. FACTORED UPLIFT

PROVIDE FOR 140 LBS. FACTORED HORIZONTAL REACTION AT JOINT B

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		N. L. G. A. RULES		CHORDS		SIZE	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
B	2915	1728 / 0	488 / 0	0 / 0	75 / -595	700 / 0	0 / 0		
M	2502	1630 / 0	488 / 0	0 / 0	78 / -564	884 / 0	0 / 0		

HORIZONTAL REACTIONS

B		0 / 0		0 / 0		100 / -88		0 / 0	
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BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B

BRACING

FOR SECTION F-H, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.

FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 3.33 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-S, F-S, F-R, G-R, H-R, H-Q, I-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		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS.)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FORCE (LBS.)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 1	-120.3 -120.3	0.09 (2)	10.00	V-C	0 / 280	0.05 (17)
B-X	-4615 / 175	-120.3 -120.3	0.27 (2)	3.86	C-U	-511 / 127	0.29 (2)
X-C	-3107 / 234	-120.3 -120.3	0.23 (2)	4.62	U-E	0 / 508	0.08 (2)
C-D	-5777 / 280	-120.3 -120.3	0.47 (2)	3.33	E-S	-1315 / 213	0.47 (2)
D-E	-5777 / 280	-120.3 -120.3	0.47 (2)	3.33	S-F	-81 / 1219	0.20 (2)
E-F	-5003 / 255	-120.3 -120.3	0.42 (1)	3.59	F-R	-184 / 1139	0.18 (3)
F-G	-4829 / 226	-132.8 -132.8	0.52 (1)	2.00	R-G	-975 / 83	0.41 (1)
G-H	-4829 / 226	-132.8 -132.8	0.52 (1)	2.00	R-H	-139 / 1193	0.19 (2)
H-I	-4959 / 250	-120.3 -120.3	0.41 (1)	3.62	Q-H	-76 / 1143	0.18 (3)
I-J	-5859 / 273	-120.3 -120.3	0.46 (1)	3.37	O-I	-1215 / 208	0.43 (3)
J-K	-5659 / 273	-120.3 -120.3	0.46 (1)	3.37	O-I	0 / 420	0.07 (6)
K-L	-5754 / 255	-120.3 -120.3	0.46 (1)	3.34	Q-K	-326 / 174	0.19 (3)
M-L	-3676 / 202	0.0 0.0	0.24 (1)	5.58	N-K	-624 / 113	0.10 (1)
					N-L	-175 / 5227	0.84 (1)
B-W	-259 / 2776	-39.5 -39.5	0.35 (1)	6.25	W-X	0 / 1932	0.00 (1)
W-V	-301 / 5454	-39.5 -39.5	0.74 (1)	6.25	W-C	-3262 / 50	0.97 (1)
V-U	-302 / 5449	-39.5 -39.5	0.72 (1)	6.25			
U-T	-197 / 5179	-39.5 -39.5	0.69 (1)	6.25			
T-S	-197 / 5179	-39.5 -39.5	0.89 (1)	6.25			
S-R	-56 / 4461	-39.5 -39.5	0.60 (1)	8.25			
R-O	0 / 4421	-39.5 -39.5	0.60 (1)	10.00			
Q-P	-63 / 5069	-39.5 -39.5	0.87 (1)	6.25			
P-O	-63 / 5069	-39.5 -39.5	0.67 (1)	6.25			
O-N	-163 / 5165	-39.5 -39.5	0.70 (1)	6.25			
N-M	-5 / 10	-39.5 -39.5	0.12 (4)	10.00			

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 (7.5) PSF AT (30-40) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS. CO_Q BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND -8.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

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 CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.59")
CALCULATED VERT. DEFL.(LL) = L/998 (0.23")
ALLOWABLE DEFL.(TL) = L/180 (3.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")

CSI: TC=0.52/1.00 (F-G-1); BC=0.74/1.00 (V-W-1); WB=0.87/1.00 (C-W-1); 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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN 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= 0.90 (T) (INPUT = 1.00)

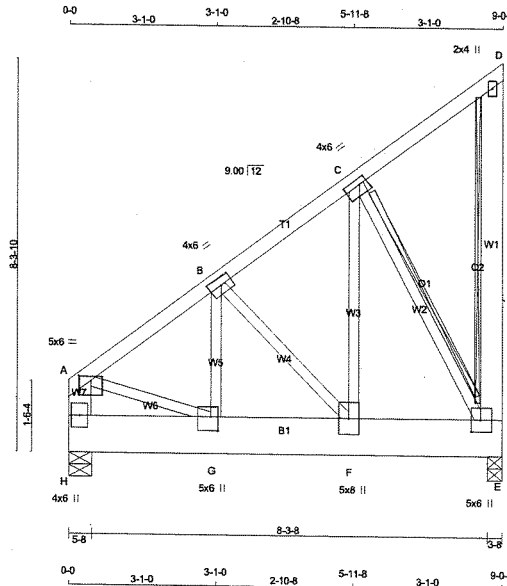
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME 428114	TRUSS NAME T28	QUANTITY 4	PLY 4	JOB DESC. GREEN PARK HOMES	TRUSS DESC. JT 53080	DRWG NO. E22085392
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Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 Mitek Industries, Inc. Fri Aug 12 09:17:34 2022 Page 1
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Scale = 1:37.0

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No. 2	SPF	
E - D	2x6	DRY	No. 2	SPF	
H - A	2x6	DRY	No. 2	SPF	
H - E	2x10	DRY	No. 2	SPF	
ALL WEBS	2x3	DRY	No. 2	SPF	
EXCEPT					

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 4 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 - E 2	12	TOP
H - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H - E 4	4	SIDE(1368.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

IN ADDITION, PRE-DRILL ONE 0.56" DIAM. HOLE IN EACH CHORD PANEL AND INSTALL 0.50" DIAM. ASTM A307 BOLTS WITH WASHERS, BOTH SIDES. FOR OTHER BOLT TYPES SEE CSA086 3.3.2.

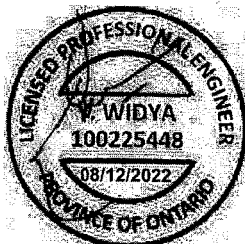
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. 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	TMWV-p	MT20	5.0	6.0	1.25 3.00
B	TMWV-i	MT20	4.0	6.0	
C	TMWV-i	MT20	4.0	6.0	1.50 2.00
D	TMWV-p	MT20	2.0	4.0	
E	BMWV+1-p	MT20	5.0	6.0	3.00 2.25
F	BMWV-i	MT20	5.0	8.0	
G	BMWV-i	MT20	5.0	6.0	3.50 1.75
H	BMV+1-p	MT20	4.0	6.0	

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
E	8970	0	8983	0
H	8970	0	8983	261
			-283	5-8
			-283	2-7

PROVIDE ANCHORAGE AT BEARING JOINT E FOR 388 LBS. FACTORED UPLIFT

PROVIDE ANCHORAGE AT BEARING JOINT H FOR 283 LBS. FACTORED UPLIFT

PROVIDE FOR 261 LBS. FACTORED HORIZONTAL REACTION AT JOINT H

UNFACTORED REACTIONS	1ST CASE	MAX./MIN.	COMPONENT REACTIONS						
	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
E	8613	3983 / 0	1159 / 0	0 / 0	1289 / -1228	1479 / 0	0 / 0	0 / 0	
H	8613	3983 / 0	1159 / 0	0 / 0	1249 / -1153	1479 / 0	0 / 0	0 / 0	

HORIZONTAL REACTIONS

H — 0 / 0 0 / 0 186 / -122 0 / 0 0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.65 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.

2x8 DRY SPF No.2 T-BRACE AT D-E, C-E

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3"

COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	A-B	-8908 / 214	-120.3	-120.3	0.14 (2)	4.65	G-B	-129 / 3762	0.21 (1)
	B-C	-4078 / 172	-120.3	-120.3	0.08 (2)	5.73	B-F	-3260 / 205	0.24 (2)
	C-D	-79 / 103	-120.3	-120.3	0.06 (2)	6.25	F-C	-289 / 1785	0.44 (2)
	D-E	-156 / 62	0.0	0.0	0.03 (1)	7.81	C-E	-6652 / 347	0.40 (2)
	H-A	-5962 / 201	0.0	0.0	0.11 (2)	7.66	A-G	-174 / 5696	0.32 (2)
	H-G	-250 / 166	-1863.9	-1863.9	0.21 (2)	6.25			
	G-F	-287 / 5442	-1863.9	-1863.9	0.33 (2)	6.25			
	F-E	-174 / 3288	-1863.9	-1863.9	0.29 (2)	6.25			

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 (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe}, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.

TOTAL WEIGHT = 8 X 71 = 568 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 6.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 46-10-0

END DISTANCE = 9-0-8

END SPAN CARRIED = 46-10-0

END WALL WIDTH = 0-0

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL. LOADS BASED ON 83 % OF GSL.

(DEFINED BY USER)

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

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F.

RAIN LOAD) TIMES IMPORTANCE FACTOR

EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE

LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.30")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

ALLOWABLE DEFL.(TL) = L/180 (0.60")

CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.14/1.00 (A-B-2), BC=0.33/1.00 (F-G-2),

WB=0.44/1.00 (C-F-2), SS=0.37/1.00 (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) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

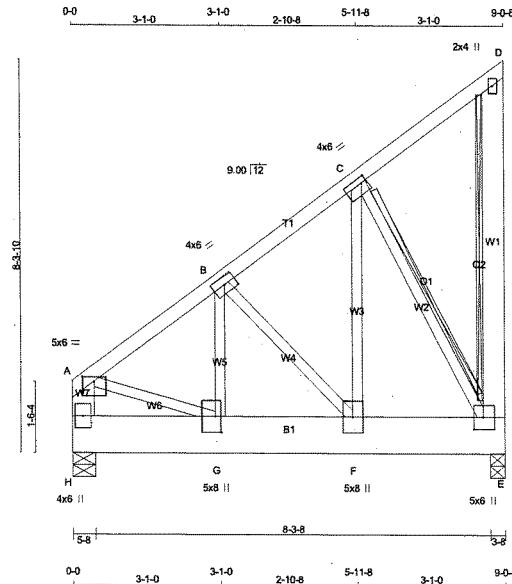
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (G) (INPUT = 0.90)

JSI METAL= 0.49 (G) (INPUT = 1.00)

Alpa Roof Truss, Maple

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Scale = 1/32.0

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
E - D	2x8	DRY	No.2
H - A	2x6	DRY	No.2
H - E	2x10	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 4 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-E	2	12	TOP
H-A	2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
H-E	5	4	SIDE(1468.7)
WEBS : (0.122"x3") SPIRAL NAILS			
2x3	1	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

IN ADDITION, PRE-DRILL ONE 0.56" DIAM. HOLE IN EACH CHORD PANEL AND INSTALL 0.50" DIAM. ASTM A307 BOLTS WITH WASHERS, BOTH SIDES. FOR OTHER BOLT TYPES SEE CSA086 3.3.2.

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	5.0	6.0	1.25 3.00
B	TMVW-H	MT20	4.0	6.0	1.50 1.50
C	TMVW-H	MT20	4.0	6.0	1.50 1.50
D	TMV-p	MT20	2.0	4.0	
E	BMVW1-p	MT20	5.0	6.0	3.00 2.25
F	BMVW-H	MT20	5.0	8.0	
G	BMVW-H	MT20	5.0	8.0	4.00 1.50
H	BMV1-p	MT20	4.0	6.0	

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

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
E	9576	0	9588	0	-408	3-8
H	9576	0	9588	261	-303	5-8
						2-10
						2-10

PROVIDE ANCHORAGE AT BEARING JOINT E FOR 408 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT H FOR 303 LBS. FACTORED UPLIFT

PROVIDE FOR 261 LBS. FACTORED HORIZONTAL REACTION AT JOINT H

UNFACTORED REACTIONS							
1ST LCASE	MAX	MIN	COMPONENT	REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	OEAD	SOIL
E	7059	4252 / 0	1237 / 0	0 / 0	1375 / -1307	1579 / 0	0 / 0
H	7059	4252 / 0	1237 / 0	0 / 0	1335 / -1231	1579 / 0	0 / 0

HORIZONTAL REACTIONS					
H	0 / 0	0 / 0	0 / 0	186 / -122	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 4.52 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.

2x8 DRY SPF No.2 T-BRACE AT D-E, C-E

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 MAX. (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	-7267 / 229	-120.3 -120.3	0.15 (2)	4.52	G-B	-139 / 4041	0.23 (1)
B-C	-4352 / 181	-120.3 -120.3	0.09 (2)	5.58	B-F	-3479 / 213	0.25 (2)
C-D	-79 / 103	-120.3 -120.3	0.06 (2)	6.25	F-C	-286 / 8335	0.47 (2)
D-E	-156 / 82	0.0 0.0	0.03 (1)	7.81	C-E	-7089 / 382	0.42 (2)
H-A	-6353 / 213	0.0 0.0	0.11 (2)	7.48	A-G	-187 / 6078	0.34 (2)
H-G	-250 / 166	-1997.8-1997.8	0.22 (2)	6.25			
G-F	-299 / 5808	-1997.8-1997.8	0.35 (2)	6.25			
F-E	-182 / 3509	-1997.8-1997.8	0.31 (2)	6.25			

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING AS PER NBCC 4.1.8.2 (9)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe} BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM). INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSlGirder
START DISTANCE = 0-0
END DISTANCE = 9-0-8
END DISTANCE = 50-1-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL. LOADS BASED ON 83 % OF GSL.
(DEFINED BY USER)

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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.30")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.03")
ALLOWABLE DEFL.(TL) = $L/180$ (0.60")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.04")

CSI: TC=0.15/1.00 (A-B-2), BC=0.35/1.00 (F-G-2), WB=0.47/1.00 (C-F-2), SSI=0.40/1.00 (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

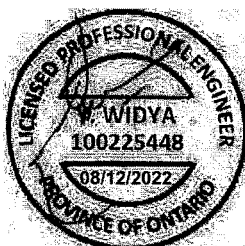
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION	(PSI)	(PL)
MT20	650	371	1747	788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

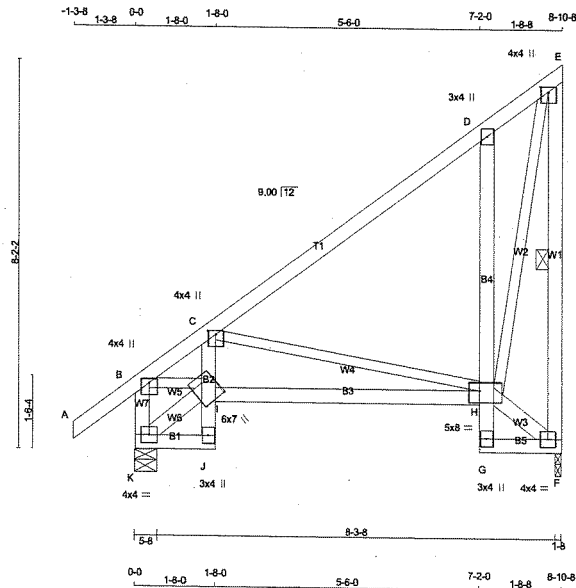
JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.52 (G) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.
428114	T29S		1	TRUSS DESC.	JT 53080	E22085394

Alpa Roof Truss, Maple

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Scale = 1.36.9

LUMBER					DESIGN CRITERIA										TOTAL WEIGHT = 4 X 59 = 235 lb	
N. L. G. A. RULES					DESIGNED FOR										[MIF]	
CHORDS SIZE					SPECIFIED LOADS											
LUMBER					TOP CH. LL = 26.7 PSF											
DESCR.					BDT CH. DL = 6.0 PSF											
SPF					LL = 0.0 PSF											
No.2					TOTAL LOAD = 40.1 PSF											
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TOTAL WEIGHT = 4 X 59 = 235 lb
(MIF)

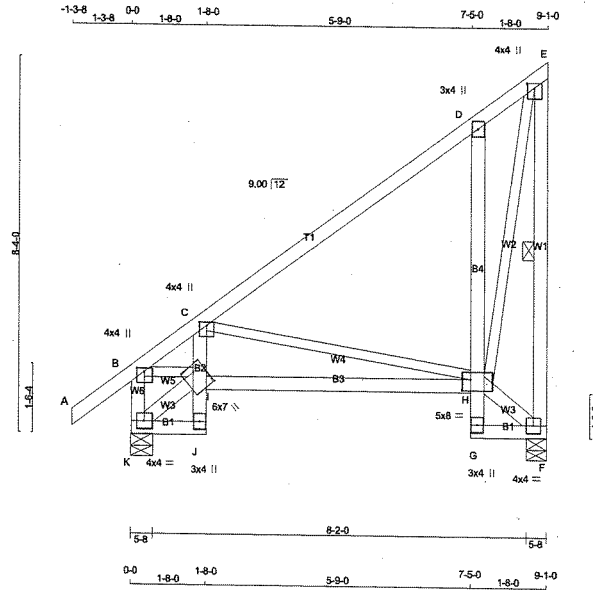
PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	4.0	4.0	1.00	2.00
C TMVW+p	MT20	4.0	4.0	1.00	2.00
D TMV+p	MT20	3.0	4.0		
E TMVW+p	MT20	4.0	4.0	1.25	2.00
F BMVW1-I	MT20	4.0	4.0		
G BMV+p	MT20	3.0	4.0		
H BVMMWW-I	MT20	5.0	8.0	3.00	2.50
I BVMMWW-w	MT20	6.0	7.0	3.00	5.25
J BMV+p	MT20	3.0	4.0		
K BMVW1-I	MT20	4.0	4.0		

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-F.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING				CHORDS				WEBS			
TOTAL LOAD CASES: (4)				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO											
A-B	0 / 39	-95.2	-95.2 0.13 (1)	10.00	C-H	-506 / 0	0.31 (1)				
B-C	-738 / 0	-95.2	-95.2 0.21 (1)	6.25	H-F	-28 / 0	0.00 (1)				
C-D	-190 / 0	-95.2	-95.2 0.26 (1)	6.25	H-E	0 / 640	0.14 (1)				
D-E	-257 / 0	-95.2	-95.2 0.23 (1)	6.25	K-I	-30 / 0	0.00 (1)				
E-F	-464 / 0	0.0	0.0 0.14 (1)	6.25	B-I	0 / 624	0.14 (1)				
K-B	-614 / 0	0.0	0.0 0.06 (1)	7.81							
K-J	0 / 24	-18.5	-18.5 0.01 (4)	10.00							
J-I	0 / 16	0.0	0.0 0.04 (1)	10.00							
I-C	0 / 72	0.0	0.0 0.05 (1)	10.00							
I-H	0 / 648	-18.5	-18.5 0.23 (4)	10.00							
G-H	0 / 16	0.0	0.0 0.04 (1)	10.00							
H-D	-476 / 0	0.0	0.0 0.16 (1)	7.81							
G-F	0 / 25	-18.5	-18.5 0.02 (4)	10.00							

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1/8" = 1'-0"

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
K - B	2x4	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	
J - C	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	2x3	DRY	No.2	SPF	
EXCEPT					
H - F	2x4	DRY	No.2	SPF	
K - I	2x4	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
C	TMVW+p	MT20	4.0	4.0	1.00	2.00
D	TMVW+p	MT20	3.0	4.0		
E	TMVW+p	MT20	4.0	4.0	1.25	2.00
F	BMVW1-I	MT20	4.0	4.0		
G	BMVW+p	MT20	3.0	4.0		
H	BMVWVW1-I	MT20	5.0	8.0	3.00	2.25
I	BMVWVW-w	MT20	6.0	7.0	3.00	5.25
J	BMVW+p	MT20	3.0	4.0		
K	BMVW1-I	MT20	4.0	4.0		

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

BUILDING DESIGNER		CHECKED BY							DESIGNED BY		VERIFICATION TO BE VERIFIED BY	
BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		RECORD				
JT	VERT	GROSS REACTION	DOWN	GROSS REACTION	BRG	IN-SX	BRG	IN-SX				
F	506	0	506	0	0	5-8	1-8					
K	658	0	658	0	0	5-8	1-8					

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
F	358	237 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
K	462	322 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0

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

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 E-F.

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.		WEBS	
FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD LC1	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00
B-C	-769 / 0	-95.2	-95.2	0.24 (1)	6.25
C-D	-190 / 0	-95.2	-95.2	0.28 (1)	6.25
D-E	-286 / 0	-95.2	-95.2	0.25 (1)	6.25
F-E	-475 / 0	0.0	0.0	0.15 (1)	6.25
K-B	-624 / 0	0.0	0.0	0.07 (1)	7.81
K-J	0 / 25	-18.5	-18.5	0.01 (4)	10.00
J-I	0 / 16	0.0	0.0	0.04 (1)	10.00
I-C	0 / 74	0.0	0.0	0.05 (1)	10.00
I-H	0 / 680	-18.5	-18.5	0.25 (4)	10.00
G-H	0 / 15	0.0	0.0	0.04 (1)	10.00
H-D	-503 / 0	0.0	0.0	0.20 (1)	7.81
G-F	0 / 26	-18.5	-18.5	0.01 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 28.7 PSF

BOT CH. LL = 6.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, ABC 2019

- PART 9 OF CBC 2012 (2019 AMENDMENT)

- CSA 088-14

- TPC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 25.7 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 (0.08")

CSI: TC=0.28/1.00 (C-D:1), BC=0.25/1.00 (H-I:4), WS=0.38/1.00 (C-H:1), SSI=0.18/1.00 (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) SHEAR SECTION (PSI) (PL) (PL)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

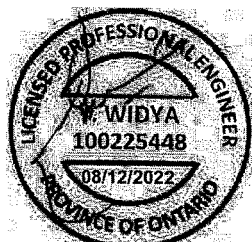
PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.90)

JSI METAL= 0.25 (H) (INPUT = 1.00)

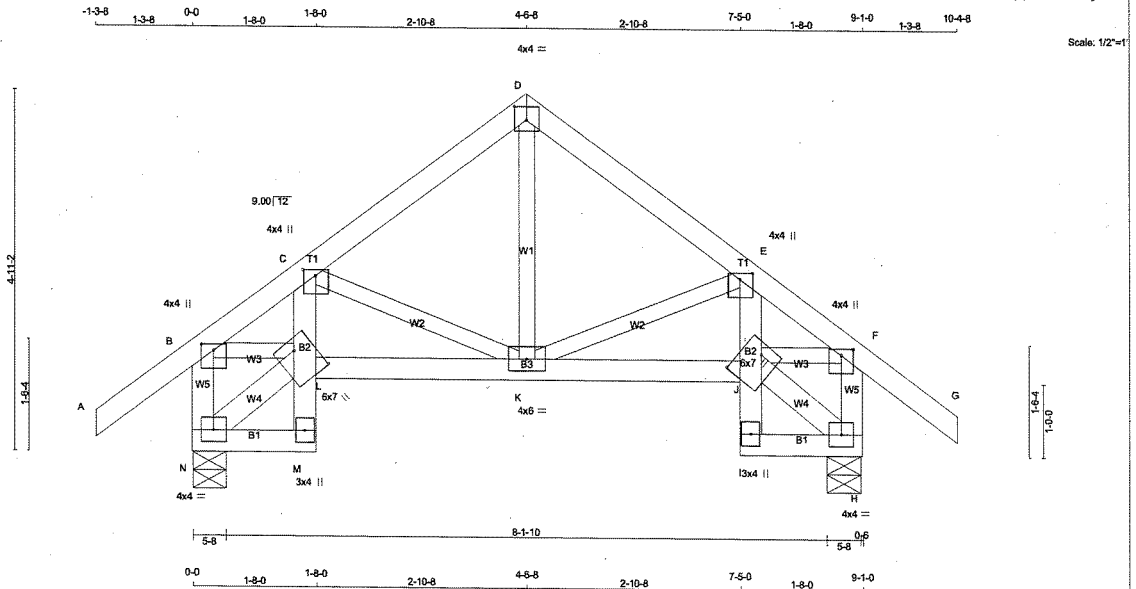
LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	ORWG NO.
428114	T31S	1		GREEN PARK HOMES JT 53080	E22085396

Alpa Roof Truss, Maple

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ID:119f019GMykJZRh3S23hYkyvFa-3BjGeogImb6ahmt8mcSQ1009z0TjqbxYwEvXydw3



LUMBER	SIZE	LUMBER	DESCR.
N. L. G. A. RULES			
CHOROS			
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
N - B	2x4	DRY	No.2
H - F	2x4	DRY	No.2
N - M	2x4	DRY	No.2
M - C	2x4	DRY	No.2
L - J	2x4	DRY	No.2
I - E	2x4	DRY	No.2
I - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
N - L	2x4	DRY	No.2
J - H	2x4	DRY	No.2

DRY, SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
B, C, E, F				
B TMVW+p	MT20	4.0	4.0	1.00 2.00
D TTW-p	MT20	4.0	4.0	2.25 2.00
H BMVW-t	MT20	4.0	4.0	
I BMV+p	MT20	3.0	4.0	
J BMVW-w	MT20	6.0	7.0	3.00 5.25
K BMVW-t	MT20	4.0	6.0	
L BMVW-w	MT20	6.0	7.0	3.00 5.25
M BMV+p	MT20	3.0	4.0	
N BMVW-t	MT20	4.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REORD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
N	648	0	648	0
H	648	0	648	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
N	455	317 / 0	0 / 0
H	455	317 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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.	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	FACTORED	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	FACTORED	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)
FR-TO					FROM				TO			
A-B	0 / 39	-95.2	-95.2	0.13 (1)	10.00	K-D	0 / 203	0.05 (1)				
B-C	-645 / 0	-95.2	-95.2	0.10 (1)	6.25	K-E	-238 / 0	0.05 (1)				
C-D	-392 / 0	-95.2	-95.2	0.11 (1)	6.25	C-K	-238 / 0	0.05 (1)				
D-E	-392 / 0	-95.2	-95.2	0.11 (1)	6.25	N-L	-26 / 0	0.00 (1)				
E-F	-645 / 0	-95.2	-95.2	0.10 (1)	6.25	B-L	0 / 503	0.11 (1)				
F-G	0 / 39	-95.2	-95.2	0.13 (1)	10.00	J-H	-26 / 0	0.00 (1)				
N-B	-618 / 0	0.0	0.0	0.06 (1)	7.81	J-F	0 / 503	0.11 (1)				
H-F	-618 / 0	0.0	0.0	0.06 (1)	7.81							
N-M	0 / 21	-18.5	-18.5	0.01 (4)	10.00							
M-L	0 / 16	0.0	0.0	0.04 (1)	10.00							
L-C	0 / 41	0.0	0.0	0.04 (1)	10.00							
L-K	0 / 524	-18.5	-18.5	0.11 (1)	10.00							
K-J	0 / 524	-18.5	-18.5	0.11 (1)	10.00							
I-J	0 / 16	0.0	0.0	0.04 (1)	10.00							
J-E	0 / 41	0.0	0.0	0.04 (1)	10.00							
I-H	0 / 21	-18.5	-18.5	0.01 (4)	10.00							

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 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=0.13/1.00 (A-B:1), BC=0.11/1.00 (J-K:1), WB=0.11/1.00 (F-J:1), SSI=0.10/1.00 (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 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)	(PLI)
MAX	MIN	MAX	MIN
650	371	1747	768

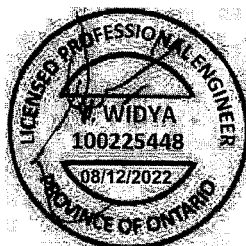
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (B) (INPUT = 0.90)

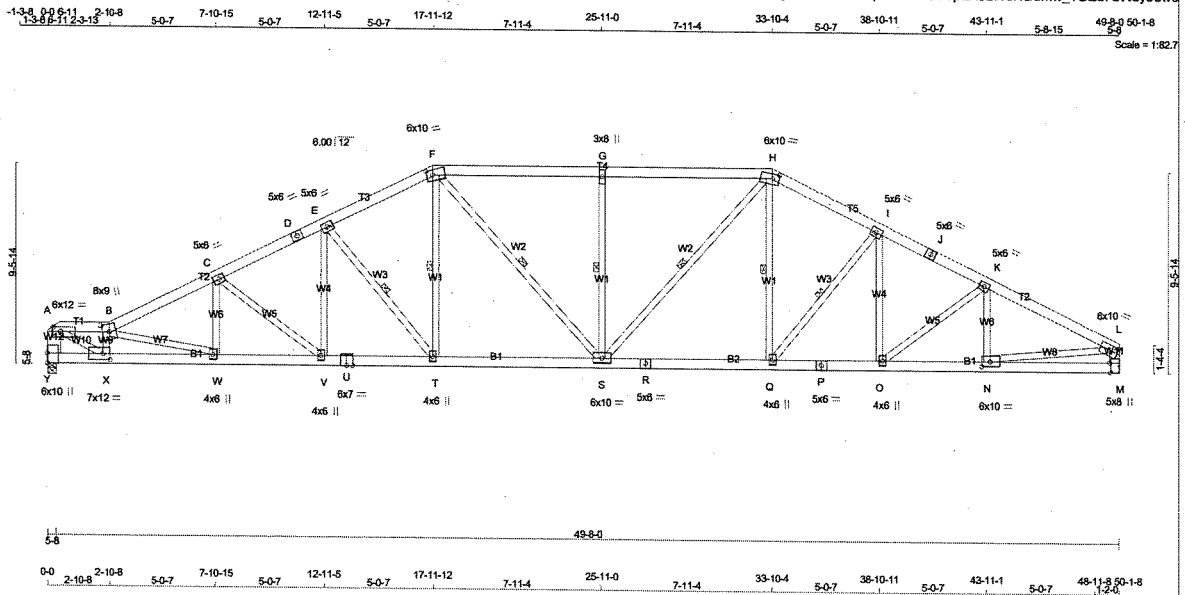
JSI METAL= 0.19 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpa Roof Truss, Maple

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ID:119019GMykZRh3S23hYkyvFa-UmPPGqIA2dzhR8VSpuA92Wei4Bumw_1OEu7uWsyow0



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x6	DRY	No.2
B - D	2x6	DRY	No.2
D - F	2x6	DRY	No.2
F - H	2x6	DRY	No.2
H - J	2x6	DRY	No.2
J - L	2x6	DRY	No.2
Y - A	2x6	DRY	No.2
M - L	2x6	DRY	No.2
Y - U	2x6	DRY	1650F 1.5E
U - R	2x6	DRY	1650F 1.5E
R - P	2x6	DRY	1650F 1.5E
P - M	2x6	DRY	1650F 1.5E
ALL WEBS	2x4	DRY	No.2
EXCEPT			
A - X	2x4	DRY	1650F 1.5E

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
A	TMWV-1	MT20	8.0	12.0 2.50 4.00
B	TTWW-1	MT20	8.0	9.0 4.50 3.75
C	E-I-K			
C	TMWV-1	MT20	5.0	6.0
D	TS-I			
D	TS-I	MT20	5.0	8.0
F	TTWW-1	MT20	8.0	10.0 3.00 3.25
G	TMWV-1	MT20	3.0	8.0
H	TTWW-1	MT20	6.0	10.0 2.75 3.50
J	TS-I			
J	TS-I	MT20	5.0	6.0
L	TMWV-1	MT20	6.0	10.0 2.75 4.50
M	BMV-1	MT20	5.0	8.0 Edge 0.50
N	BMWV-1	MT20	6.0	10.0 2.75 4.75
O	Q, T, V, W			
O	BMWV-1	MT20	4.0	6.0
P	BS-I			
P	BS-I	MT20	5.0	8.0
R	BS-I			
R	BS-I	MT20	5.0	6.0
S	BMWV-1	MT20	6.0	10.0
U	BS-I			
U	BS-I	MT20	6.0	10.0
X	BMWV-1	MT20	7.0	12.0 3.50 4.00
Y	BMV-1	MT20	6.0	10.0 5.50

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		REQ'D	
		GROSS REACTION		DOWN		UP/LIFT		BRG	
JT	VERT	HORZ		HORZ		IN-SX		IN-SX	
Y	4004	0	4004	-130	-305	5-8		5-8	
M	4004	0	4004	0	-296	MECHANICAL			

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

PROVIDE ANCHORAGE AT BEARING JOINT Y FOR 305 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT M FOR 296 LBS FACTORED UPLIFT

PROVIDE FOR 130 LBS FACTORED HORIZONTAL REACTION AT JOINT Y

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE
Y	2957	1759 / 0	526 / 0
M	2957	1759 / 0	526 / 0

HORIZONTAL REACTIONS

JT	COMBINED	SNOW	LIVE	PERMILIVE	WIND	DEAD	SOIL
Y	2957	1759 / 0	526 / 0	0 / 0	210 / -650	672 / 0	0 / 0
M	2957	1759 / 0	526 / 0	0 / 0	118 / -644	872 / 0	0 / 0

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 8.25 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-Q, I-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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	MAX. UNBRACED LENGTH (FT)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. UNBRACED LENGTH (FT)
FR-TO				FR-TO			
A-B	-6762 / 504	-120.3	-120.3 0.27 (2)	3.22	A-X	-555 / 7691	0.90 (1)
B-C	-7570 / 588	-120.3	-120.3 0.55 (2)	2.85	X-B	-3765 / 346	0.38 (1)
C-D	-6863 / 568	-120.3	-120.3 0.45 (2)	3.14	B-W	-413 / 54	0.14 (2)
D-E	-6663 / 568	-120.3	-120.3 0.45 (2)	3.14	W-C	0 / 456	0.07 (5)
E-F	-5752 / 533	-120.3	-120.3 0.38 (2)	3.42	C-V	-1184 / 155	0.58 (2)
F-G	-5666 / 533	-120.3	-120.3 0.92 (1)	2.73	V-E	-31 / 879	0.14 (2)
G-H	-5666 / 533	-120.3	-120.3 0.92 (1)	2.73	E-T	-1527 / 218	0.48 (2)
H-I	-5488 / 503	-120.3	-120.3 0.37 (3)	3.50	T-F	-85 / 1462	0.24 (2)
I-J	-6065 / 517	-120.3	-120.3 0.45 (3)	3.29	F-S	-187 / 1338	0.21 (3)
J-K	-6065 / 517	-120.3	-120.3 0.45 (3)	3.29	S-G	-1250 / 269	0.47 (10)
K-L	-6188 / 486	-120.3	-120.3 0.61 (3)	3.11	H-H	-188 / 1635	0.26 (2)
Y-A	-3805 / 301	0.0	0.0 0.19 (1)	6.18	Q-I	-55 / 1093	0.18 (3)
M-L	-3880 / 328	0.0	0.0 0.25 (1)	5.45	O-I	-74 / 378	0.06 (3)
Y-X	-99 / 137	-39.5	-39.5 0.18 (2)	6.25	O-K	-319 / 251	0.18 (3)
X-W	-618 / 7134	-39.5	-39.5 0.71 (1)	6.25	N-K	-604 / 142	0.10 (7)
W-V	-563 / 6794	-39.5	-39.5 0.55 (1)	6.25	N-L	-359 / 5608	0.90 (1)
V-U	-442 / 5964	-39.5	-39.5 0.52 (1)	6.25			
U-T	-442 / 5964	-39.5	-39.5 0.52 (1)	6.25			
T-S	-307 / 5140	-39.5	-39.5 0.46 (1)	6.25			
S-R	-197 / 4900	-39.5	-39.5 0.44 (1)	6.25			
R-O	-197 / 4900	-39.5	-39.5 0.44 (1)	6.25			
Q-P	-273 / 5420	-39.5	-39.5 0.48 (1)	6.25			
P-O	-273 / 5420	-39.5	-39.5 0.48 (1)	6.25			
O-N	-346 / 5554	-39.5	-39.5 0.47 (1)	6.25			
N-M	-5 / 10	-39.5	-39.5 0.10 (4)	10.00			

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 (7.5) PSF AT (30-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe}, BASED ON THE MAIN WIND FORCE RESISTING SYSTEM, INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 35.1 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
DL = 7.4 PSF
TOTAL LOAD = 59.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 9.00/12

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

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

DESIGN ASSUMPTIONS

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

(80 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.34")
ALLOWABLE DEFL.(TL) = L/180 (3.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.47")

CSI: TC=0.92/1.00 (F-G-1), BC=0.74/1.00 (W-X-1), WB=0.90/1.00 (L-N-1), SSI=0.36/1.00 (F-G-3)

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

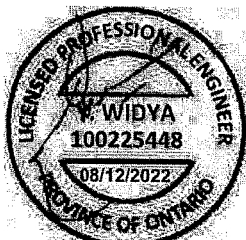
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

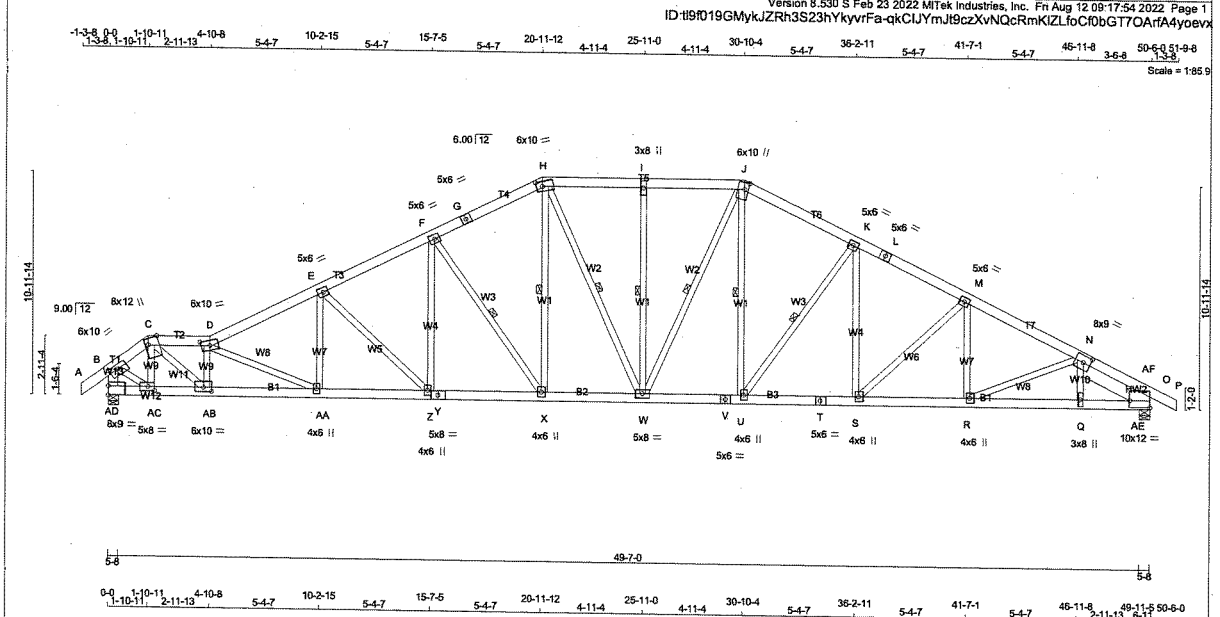
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (H) (INPUT = 0.90)
JSI METAL= 0.95 (P) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

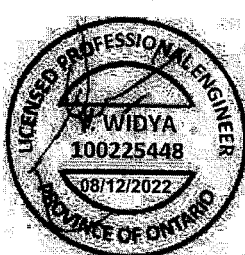


JOB NAME 428114	TRUSS NAME T33	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO. E22085398
Alpa Roof Truss, Maple			Version 8.530 S Feb 23 2022 MITek Industries, Inc. Fri Aug 12 09:17:54 2022 Page 1		
			ID:1191919GMykJZRh3S23hYkyvFa-qkCUYmJt9czXvNqCrnKIZLfoCfObG7TOArfA4yoevX		



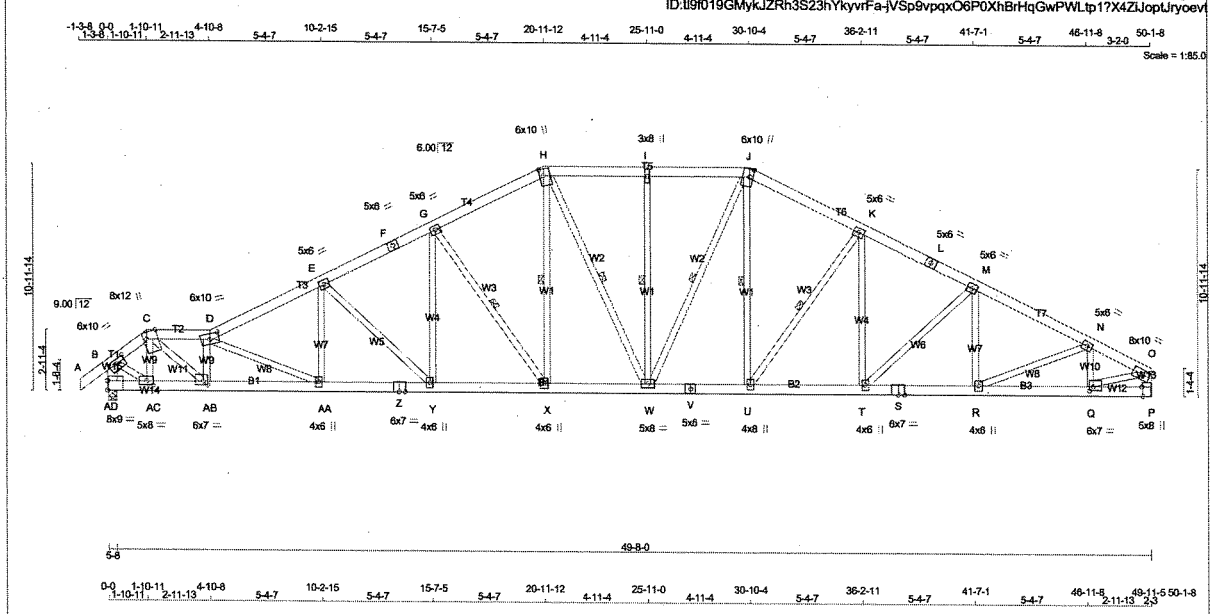
LUMBER N.L.G.A. RULES CHORDS A - C 2x6 DRY No.2 SPF C - D 2x6 DRY No.2 SPF D - G 2x6 DRY No.2 SPF G - H 2x6 DRY No.2 SPF H - J 2x6 DRY No.2 SPF J - L 2x6 DRY No.2 SPF L - P 2x6 DRY No.2 SPF AD - B 2x6 DRY No.2 SPF AD - Y 2x6 DRY 2100F 1.8E SPF Y - V 2x6 DRY 2100F 1.8E SPF V - T 2x6 DRY 2100F 1.8E SPF T - O 2x6 DRY 2100F 1.8E SPF REINFORCING MEMBERS HW2 2x8 DRY No.2 SPF ALL WEBS 2x4 DRY No.2 SPF EXCEPT E - Z 2x4 DRY 2100F 1.8E SPF DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table> <tr> <th></th><th>FACTORED</th><th>MAXIMUM FACTORED</th><th>INPUT</th><th>RECORD</th></tr> <tr> <th></th><th>GROSS REACTION</th><th>GROSS REACTION</th><th>BRG</th><th>BRG</th></tr> <tr> <th>AD</th><td>4268</td><td>0</td><td>4268</td><td>170</td></tr> <tr> <th>O</th><td>4263</td><td>0</td><td>4263</td><td>0</td></tr> </table> PROVIDE ANCHORAGE AT BEARING JOINT AD FOR 238 LBS. FACTORED UPLIFT PROVIDE ANCHORAGE AT BEARING JOINT O FOR 225 LBS. FACTORED UPLIFT PROVIDE FOR 170 LBS. FACTORED HORIZONTAL REACTION AT JOINT AD UNFACTORED REACTIONS <table> <tr> <th>1ST CASE</th><th>MAX. MIN. COMPONENT REACTIONS</th><th></th><th></th><th></th><th></th><th></th></tr> <tr> <th></th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM. LIVE</th><th>WIND</th><th>DEAD</th></tr> <tr> <th>AD</th><td>3146</td><td>1874 / 0</td><td>530 / 0</td><td>0 / 0</td><td>112 / -647</td><td>742 / 0</td></tr> <tr> <th>O</th><td>3142</td><td>1868 / 0</td><td>530 / 0</td><td>0 / 0</td><td>78 / -639</td><td>744 / 0</td></tr> </table> HORIZONTAL REACTIONS <table> <tr> <th></th><th></th><th></th><th></th><th></th><th></th></tr> <tr> <th>AD</th><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>122 / -119</td><td>0 / 0</td></tr> </table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) AD, O BRACING FOR SECTION H-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT. FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.91 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 F-X, H-X, H-W, F-W, J-W, J-U, K-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: (1B) <table> <tr> <th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr> <tr> <th>MEMB</th><th>FORCE (LBS)</th><th>FACTORED</th><th>VERT. LOAD LC1 MAX</th><th>MEMB</th><th>FORCE (LBS)</th><th>FACTORED</th><th>MAX</th></tr> <tr> <th></th><th></th><th></th><th>FROM TO</th><th></th><th></th><th></th><th>CS (LC)</th></tr> <tr> <td>FR-T</td><td>0 / 53</td><td>-120.3</td><td>-120.3 0.09 (1)</td><td>AC-C</td><td>-1206 / 61</td><td>0.14 (1)</td><td></td></tr> <tr> <td>A-B</td><td>-4007 / 228</td><td>-120.3</td><td>-120.3 0.15 (1)</td><td>C-AB</td><td>-218 / 5131</td><td>0.82 (1)</td><td></td></tr> <tr> <td>B-C</td><td>-6964 / 382</td><td>-120.3</td><td>-120.3 0.29 (1)</td><td>D-AA</td><td>-753 / 101</td><td>0.40 (1)</td><td></td></tr> <tr> <td>C-D</td><td>-7331 / 365</td><td>-120.3</td><td>-120.3 0.46 (1)</td><td>E-AA</td><td>-1357 / 192</td><td>0.33 (2)</td><td></td></tr> <tr> <td>D-E</td><td>-6386 / 341</td><td>-120.3</td><td>-120.3 0.39 (1)</td><td>F-Z</td><td>-51 / 1133</td><td>0.18 (2)</td><td></td></tr> <tr> <td>E-F</td><td>-5404 / 308</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>G-X</td><td>-1781 / 245</td><td>0.79 (2)</td><td></td></tr> <tr> <td>F-G</td><td>-5404 / 308</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>H-W</td><td>-412 / 998</td><td>0.29 (9)</td><td></td></tr> <tr> <td>G-H</td><td>-4999 / 278</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>I-W</td><td>-772 / 68</td><td>0.44 (1)</td><td></td></tr> <tr> <td>H-I</td><td>-4999 / 278</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>J-W</td><td>-269 / 1170</td><td>0.19 (10)</td><td></td></tr> <tr> <td>I-J</td><td>-5297 / 295</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>K-U</td><td>-119 / 1429</td><td>0.23 (3)</td><td></td></tr> <tr> <td>J-K</td><td>-6075 / 317</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>L-U</td><td>-1495 / 231</td><td>0.66 (3)</td><td></td></tr> <tr> <td>K-L</td><td>-6075 / 317</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>M-U</td><td>-31 / 808</td><td>0.13 (3)</td><td></td></tr> <tr> <td>L-M</td><td>-6075 / 317</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>N-U</td><td>-867 / 152</td><td>0.63 (3)</td><td></td></tr> <tr> <td>M-N</td><td>-6615 / 324</td><td>-120.3</td><td>-120.3 0.45 (1)</td><td>O-U</td><td>-52 / 203</td><td>0.03 (17)</td><td></td></tr> <tr> <td>N-AP</td><td>-2979 / 179</td><td>-120.3</td><td>-120.3 0.15 (3)</td><td>P-U</td><td>-113 / 3515</td><td>0.56 (1)</td><td></td></tr> <tr> <td>AP-O</td><td>-4647 / 215</td><td>-120.3</td><td>-120.3 0.14 (1)</td><td>Q-U</td><td>0 / 248</td><td>0.04 (17)</td><td></td></tr> <tr> <td>O-P</td><td>0 / 1</td><td>-120.3</td><td>-120.3 0.09 (3)</td><td>R-U</td><td>0 / 454</td><td>0.07 (2)</td><td></td></tr> <tr> <td>AD-B</td><td>-4318 / 254</td><td>0.0</td><td>0.0 0.28 (1)</td><td>AE-AF</td><td>-89 / 2277</td><td>0.00 (1)</td><td></td></tr> <tr> <td>AD-AC</td><td>-189 / 161</td><td>-39.5</td><td>-39.5 0.07 (1)</td><td>AE-N</td><td>-3792 / 152</td><td>0.35 (1)</td><td></td></tr> <tr> <td>AC-AB</td><td>-257 / 3080</td><td>-39.5</td><td>-39.5 0.25 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>AB-AA</td><td>-435 / 7167</td><td>-39.5</td><td>-39.5 0.45 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>AA-Z</td><td>-343 / 6584</td><td>-39.5</td><td>-39.5 0.35 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Z-Y</td><td>-212 / 5714</td><td>-39.5</td><td>-39.5 0.31 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>Y-X</td><td>-212 / 5714</td><td>-39.5</td><td>-39.5 0.31 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>X-W</td><td>-73 / 4826</td><td>-39.5</td><td>-39.5 0.26 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>W-V</td><td>0 / 4727</td><td>-39.5</td><td>-39.5 0.26 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>V-U</td><td>0 / 4727</td><td>-39.5</td><td>-39.5 0.26 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>U-T</td><td>-36 / 5438</td><td>-39.5</td><td>-39.5 0.29 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>T-S</td><td>-36 / 5438</td><td>-39.5</td><td>-39.5 0.29 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>S-R</td><td>-146 / 5926</td><td>-39.5</td><td>-39.5 0.32 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>R-O</td><td>-219 / 5519</td><td>-39.5</td><td>-39.5 0.32 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>O-AE</td><td>-217 / 5526</td><td>-39.5</td><td>-39.5 0.33 (1)</td><td></td><td></td><td></td><td></td></tr> <tr> <td>AE-O</td><td>-102 / 2674</td><td>-39.5</td><td>-39.5 0.19 (1)</td><td></td><td></td><td></td><td></td></tr> </table>					FACTORED	MAXIMUM FACTORED	INPUT	RECORD		GROSS REACTION	GROSS REACTION	BRG	BRG	AD	4268	0	4268	170	O	4263	0	4263	0	1ST CASE	MAX. MIN. COMPONENT REACTIONS							COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	AD	3146	1874 / 0	530 / 0	0 / 0	112 / -647	742 / 0	O	3142	1868 / 0	530 / 0	0 / 0	78 / -639	744 / 0							AD	0 / 0	0 / 0	0 / 0	122 / -119	0 / 0	CHORDS				WEBS				MEMB	FORCE (LBS)	FACTORED	VERT. LOAD LC1 MAX	MEMB	FORCE (LBS)	FACTORED	MAX				FROM TO				CS (LC)	FR-T	0 / 53	-120.3	-120.3 0.09 (1)	AC-C	-1206 / 61	0.14 (1)		A-B	-4007 / 228	-120.3	-120.3 0.15 (1)	C-AB	-218 / 5131	0.82 (1)		B-C	-6964 / 382	-120.3	-120.3 0.29 (1)	D-AA	-753 / 101	0.40 (1)		C-D	-7331 / 365	-120.3	-120.3 0.46 (1)	E-AA	-1357 / 192	0.33 (2)		D-E	-6386 / 341	-120.3	-120.3 0.39 (1)	F-Z	-51 / 1133	0.18 (2)		E-F	-5404 / 308	-120.3	-120.3 0.45 (1)	G-X	-1781 / 245	0.79 (2)		F-G	-5404 / 308	-120.3	-120.3 0.45 (1)	H-W	-412 / 998	0.29 (9)		G-H	-4999 / 278	-120.3	-120.3 0.45 (1)	I-W	-772 / 68	0.44 (1)		H-I	-4999 / 278	-120.3	-120.3 0.45 (1)	J-W	-269 / 1170	0.19 (10)		I-J	-5297 / 295	-120.3	-120.3 0.45 (1)	K-U	-119 / 1429	0.23 (3)		J-K	-6075 / 317	-120.3	-120.3 0.45 (1)	L-U	-1495 / 231	0.66 (3)		K-L	-6075 / 317	-120.3	-120.3 0.45 (1)	M-U	-31 / 808	0.13 (3)		L-M	-6075 / 317	-120.3	-120.3 0.45 (1)	N-U	-867 / 152	0.63 (3)		M-N	-6615 / 324	-120.3	-120.3 0.45 (1)	O-U	-52 / 203	0.03 (17)		N-AP	-2979 / 179	-120.3	-120.3 0.15 (3)	P-U	-113 / 3515	0.56 (1)		AP-O	-4647 / 215	-120.3	-120.3 0.14 (1)	Q-U	0 / 248	0.04 (17)		O-P	0 / 1	-120.3	-120.3 0.09 (3)	R-U	0 / 454	0.07 (2)		AD-B	-4318 / 254	0.0	0.0 0.28 (1)	AE-AF	-89 / 2277	0.00 (1)		AD-AC	-189 / 161	-39.5	-39.5 0.07 (1)	AE-N	-3792 / 152	0.35 (1)		AC-AB	-257 / 3080	-39.5	-39.5 0.25 (1)					AB-AA	-435 / 7167	-39.5	-39.5 0.45 (1)					AA-Z	-343 / 6584	-39.5	-39.5 0.35 (1)					Z-Y	-212 / 5714	-39.5	-39.5 0.31 (1)					Y-X	-212 / 5714	-39.5	-39.5 0.31 (1)					X-W	-73 / 4826	-39.5	-39.5 0.26 (1)					W-V	0 / 4727	-39.5	-39.5 0.26 (1)					V-U	0 / 4727	-39.5	-39.5 0.26 (1)					U-T	-36 / 5438	-39.5	-39.5 0.29 (1)					T-S	-36 / 5438	-39.5	-39.5 0.29 (1)					S-R	-146 / 5926	-39.5	-39.5 0.32 (1)					R-O	-219 / 5519	-39.5	-39.5 0.32 (1)					O-AE	-217 / 5526	-39.5	-39.5 0.33 (1)					AE-O	-102 / 2674	-39.5	-39.5 0.19 (1)					DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 35.1 PSF DL = 8.0 PSF BOT CH. LL = 10.5 PSF DL = 7.4 PSF TOTAL LOAD = 59.0 PSF SPACING = 24.0 IN. C/C LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 6.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F. LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBC 2015 THIS DESIGN COMPLES WITH: - PART 4 OF CBC 2015, ABC 2019 - PART 4 OF CBC 2012 (2019 AMENDMENT) - CSA S86-14 - 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL. (LL) = L/360 (1.68") CALCULATED VERT. DEFL. (LL) = L/999 (0.29") ALLOWABLE DEFL. (TL) = L/180 (3.37") CALCULATED VERT. DEFL. (TL) = L/999 (0.40") CS: TC=0.54/1.00 (D-E:1), BC=0.45/1.00 (AA-AB:1), WB=0.82/1.00 (C-AB:1), SS=0.25/1.00 (J-3) DOL LUMBER=1.00 NAIL=1.00 LBS 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) SHEAR SECTION (PSI) (PLI) (F/L) <table> <tr> <th></th><th>MAX</th><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th><th>MIN</th></tr> <tr> <td>MT20</td><td>650</td><td>371</td><td>1747</td><td>788</td><td>1987</td><td>1873</td></tr> </table> PLATE PLACEMENT TOL. = 0.250 inches PLATE RDTATION TOL. = 5.0 Deg. JSI GRIP=0.90 (D) (INPUT=0.90) JSI METAL=0.99 (T) (INPUT=1.00)					MAX	MIN	MAX	MIN	MAX	MIN	MT20	650	371	1747	788	1987	1873
	FACTORED	MAXIMUM FACTORED	INPUT	RECORD																																																																																																																																																																																																																																																																																																																																																																																	
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AA-Z	-343 / 6584	-39.5	-39.5 0.35 (1)																																																																																																																																																																																																																																																																																																																																																																																		
Z-Y	-212 / 5714	-39.5	-39.5 0.31 (1)																																																																																																																																																																																																																																																																																																																																																																																		
Y-X	-212 / 5714	-39.5	-39.5 0.31 (1)																																																																																																																																																																																																																																																																																																																																																																																		
X-W	-73 / 4826	-39.5	-39.5 0.26 (1)																																																																																																																																																																																																																																																																																																																																																																																		
W-V	0 / 4727	-39.5	-39.5 0.26 (1)																																																																																																																																																																																																																																																																																																																																																																																		
V-U	0 / 4727	-39.5	-39.5 0.26 (1)																																																																																																																																																																																																																																																																																																																																																																																		
U-T	-36 / 5438	-39.5	-39.5 0.29 (1)																																																																																																																																																																																																																																																																																																																																																																																		
T-S	-36 / 5438	-39.5	-39.5 0.29 (1)																																																																																																																																																																																																																																																																																																																																																																																		
S-R	-146 / 5926	-39.5	-39.5 0.32 (1)																																																																																																																																																																																																																																																																																																																																																																																		
R-O	-219 / 5519	-39.5	-39.5 0.32 (1)																																																																																																																																																																																																																																																																																																																																																																																		
O-AE	-217 / 5526	-39.5	-39.5 0.33 (1)																																																																																																																																																																																																																																																																																																																																																																																		
AE-O	-102 / 2674	-39.5	-39.5 0.19 (1)																																																																																																																																																																																																																																																																																																																																																																																		
	MAX	MIN	MAX	MIN	MAX	MIN																																																																																																																																																																																																																																																																																																																																																																															
MT20	650	371	1747	788	1987	1873																																																																																																																																																																																																																																																																																																																																																																															

LATERAL BRACE(S) SHOWN SHALL BE 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 (7.5) PSF AT (30-0) FT IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe}, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM), INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2), BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1,000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.



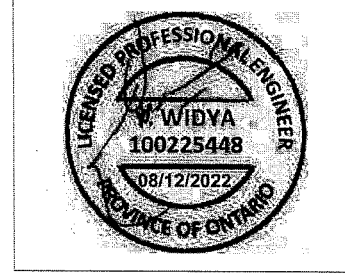
Scale = 1:85.0 TOTAL WEIGHT = 6 X 347 = 2079 lb

LUMBER			
N.L.G.A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x6	DRY	SPF
C - D	2x6	DRY	No.2
D - F	2x6	DRY	No.2
F - H	2x6	DRY	No.2
H - J	2x6	DRY	No.2
J - L	2x6	DRY	No.2
L - O	2x6	DRY	No.2
AD - B	2x6	DRY	No.2
P - O	2x6	DRY	No.2
AD - Z	2x6	DRY	2100F 1.8E
Z - V	2x6	DRY	2100F 1.8E
V - S	2x6	DRY	2100F 1.8E
S - P	2x6	DRY	2100F 1.8E
ALL WEBS	2x4	DRY	No.2
EXCEPT			
E - Y	2x4	DRY	2100F 1.8E
SPF			
DRY, SEASONED LUMBER.			

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMW-1	MT20	6.0	10.0	2.50 5.00
C TTWW+m	MT20	8.0	12.0	Edge 6.25
D TTWW-m	MT20	8.0	10.0	3.25 5.00
E G, K, M, N				
E TMW-1	MT20	5.0	6.0	
F TS-1	MT20	5.0	6.0	
H TTWW+m	MT20	6.0	10.0	4.00 2.00
I TMW+m	MT20	3.0	8.0	
J TTWW+m	MT20	6.0	10.0	4.50 1.75
L TS-1	MT20	5.0	6.0	
O TMW-1	MT20	6.0	10.0	2.75 4.50
P BMV-1	MT20	5.0	6.0	Edge 0.50
O BMW-1	MT20	6.0	7.0	2.50 2.25
R, T, U, X, Y, AA				
R BMW+m	MT20	4.0	6.0	
S BS-1	MT20	6.0	7.0	
V BS-1	MT20	5.0	6.0	
W BMW+m	MT20	5.0	6.0	
Z BS-1	MT20	6.0	7.0	
AB BMW-1	MT20	6.0	7.0	2.25 2.25
AC BMW-1	MT20	5.0	8.0	2.50 3.50
AD BMV-1	MT20	8.0	9.0	5.50

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

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					
BEARINGS					
	FACTORED	GROSS REACTION	MAXIMUM FACTORED	INPUT	RECORD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
AD	4238	0	4238	172	-237
P	4065	0	4065	0	-195

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

PROVIDE ANCHORAGE AT BEARING JOINT AD FOR 237 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT P FOR 195 LBS FACTORED UPLIFT

PROVIDE FOR 172 LBS FACTORED HORIZONTAL REACTION AT JOINT AD

UNFACTORED REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
AD	3124	1860 / 0	528 / 0	0 / 0	112 / -643	737 / 0
P	3008	1757 / 0	526 / 0	0 / 0	81 / -604	722 / 0

HORIZONTAL REACTIONS					
AD	0 / 0	0 / 0	0 / 0	123 / -118	0 / 0

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

BRACING
FOR SECTION H-J, MAX. UNBRACED TOP CHORD LENGTH = 2.00 FT.
FOR OTHER SECTIONS, MAX. UNBRACED TOP CHORD LENGTH = 2.93 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 G-X, H-X, H-W, I-W, J-W, J-U, K-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 53	-120.3	-120.3	0.09 (1)	10.00	AC-C	-1196 / 61
B-C	-3978 / 228	-120.3	-120.3	0.15 (1)	4.23	C-AB	-218 / 5087
C-D	-6907 / 361	-120.3	-120.3	0.29 (1)	3.17	AB-D	-3360 / 218
D-E	-7264 / 364	-120.3	-120.3	0.53 (1)	2.93	DA-A	-754 / 101
E-F	-6318 / 340	-120.3	-120.3	0.45 (1)	3.21	AA-E	0 / 801
F-G	-5335 / 307	-120.3	-120.3	0.38 (1)	3.53	E-Y	-1359 / 182
G-H	-4924 / 277	-132.8	-132.8	0.34 (1)	2.00	G-X	-1779 / 244
H-I	-4924 / 277	-132.8	-132.8	0.34 (1)	2.00	X-H	-131 / 1665
I-J	-5199 / 290	-120.3	-120.3	0.39 (1)	3.57	H-W	-427 / 967
J-K	-5918 / 309	-120.3	-120.3	0.44 (1)	3.33	W-I	-772 / 66
K-L	-5918 / 309	-120.3	-120.3	0.44 (1)	3.33	W-J	-242 / 1188
L-M	-6344 / 309	-120.3	-120.3	0.44 (1)	3.23	U-J	-115 / 1381
M-N	-5423 / 267	-120.3	-120.3	0.24 (3)	3.64	U-K	-1410 / 226
N-O	-4287 / 253	0.0	0.0	0.28 (1)	5.21	T-K	-26 / 716
O-P	-3975 / 203	0.0	0.0	0.25 (1)	5.39	T-M	-739 / 145
AD-AC	-161 / 160	-39.5	-39.5	0.07 (1)	6.25	R-M	-184 / 139
AC-AB	-258 / 3055	-39.5	-39.5	0.24 (1)	6.25	N-N	0 / 891
AB-AA	-436 / 7108	-39.5	-39.5	0.45 (1)	8.25	Q-N	-1289 / 130
AA-Z	-344 / 6524	-39.5	-39.5	0.35 (1)	6.25	Q-O	-218 / 5064
Z-Y	-344 / 6524	-39.5	-39.5	0.35 (1)	6.25		
Y-X	-212 / 5652	-39.5	-39.5	0.31 (1)	6.25		
X-W	-73 / 4766	-39.5	-39.5	0.28 (1)	8.25		
W-V	0 / 4638	-39.5	-39.5	0.25 (1)	10.00		
V-U	0 / 4638	-39.5	-39.5	0.25 (1)	10.00		
U-T	-43 / 5297	-39.5	-39.5	0.29 (1)	6.25		
T-S	-148 / 5684	-39.5	-39.5	0.31 (1)	8.25		
S-R	-148 / 5684	-39.5	-39.5	0.31 (1)	8.25		
R-O	-200 / 4856	-39.5	-39.5	0.30 (1)	6.25		
Q-P	-5 / 10	-39.5	-39.5	0.04 (1)	10.00		

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 (7.5) PSF AT (30-0) FT IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, C_{pe}, BASED ON THE MAIN WIND FORCE RESISTING SYSTEM. INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL	= 35.1 PSF
DL	= 8.0 PSF
BOT CH. LL	= 10.5 PSF
DL	= 7.4 PSF
TOTAL LD	= 59.0 PSF
SPACING = 24.0 IN. C/C	

LOADING IN HIGHEST FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND 8.00/12 AND RESPECTIVE HEEL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 5.0 P.S.F.

LOADING IN OTHER FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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

THIS DESIGN COMPLIES WITH:
- PART 4 OF BC8C 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 35.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.28")
ALLOWABLE DEFL.(TL) = L/180 (3.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.40")

CSI: TC=0.53/1.00 (D-E-1), BC=0.45/1.00 (AA-AB-1), WB=0.82/1.00 (C-AB-1), SSI=0.25/1.00 (I-J-3)

DOL LUMBER=1.00 NAIL=1.00 LBS 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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

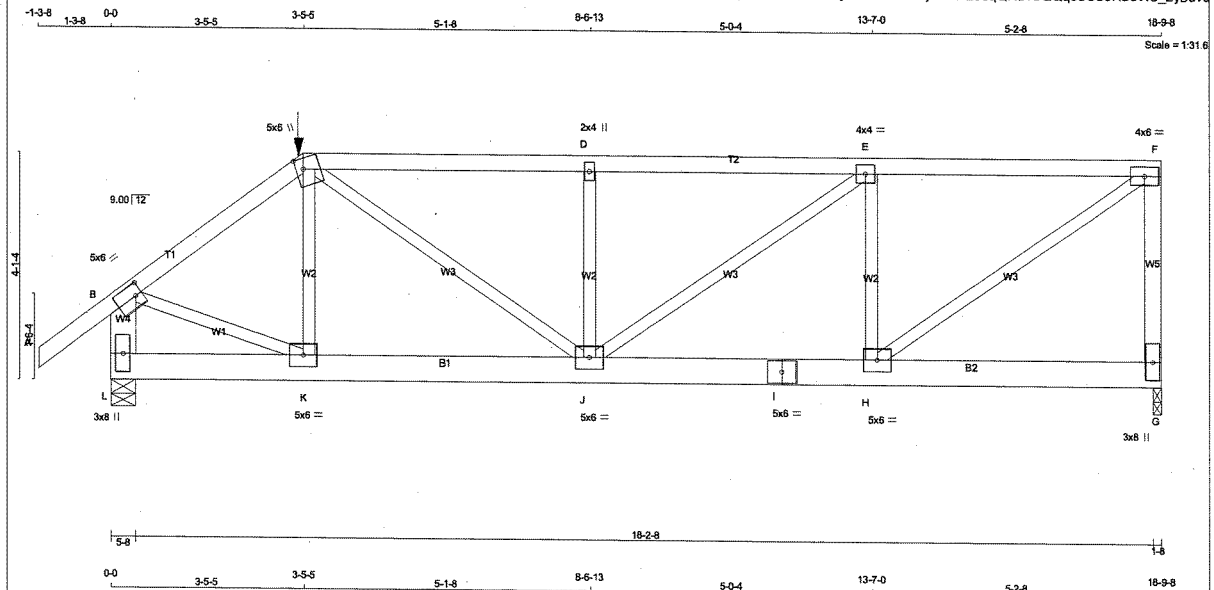
JSI GRIP= 0.89 (H) (INPUT = 0.90)

JSI METAL= 0.97 (Z) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN PARK HOMES	DRWG NO.	E22085400
428114	T35		2	TRUSS DESC.	JT 53080		

Alpa Roof Truss, Maple

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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - F	2x4	DRY	No.2	SPF	
G - F	2x4	DRY	No.2	SPF	
L - B	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-F 1	12	SIDE(46.1)
F-G 1	12	TOP
L-B 2	12	TOP
BOTTOM CHORDS: (0.122"x3") SPIRAL NAILS		
L-I 2	12	SIDE(10.0)
I-G 2	12	SIDE(10.0)
WEBS: (0.122"x3") SPIRAL NAILS		
K-C 1	6	SIDE(16.3)
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 TRANSFERRING. 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
B TMWV-t	MT20	5.0	6.0	2.50	1.50
C TTWV-w	MT20	5.0	6.0	2.25	1.50
D TMWV-w	MT20	2.0	4.0		
E TMWV-t	MT20	4.0	4.0		
F TMWV-t	MT20	4.0	6.0		
G BMV1+p	MT20	3.0	6.0		
H BMWV-t	MT20	5.0	6.0		
I BS-t	MT20	5.0	6.0		
J BMWVW-t	MT20	5.0	6.0		
K BMWV-t	MT20	5.0	6.0		
L BMV1+p	MT20	3.0	6.0		

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REORD
JT	VERT	HORZ	DOWN	HORZ
G	2118	0	2118	0
L	2141	0	2141	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED
G	1495
L	1511

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 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 MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	FR-TO	MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
A-B	0/39	-95.2	-95.2	0.07 (1)	10.00	K-C	-328 / 26
B-C	-2118 / 0	-95.2	-95.2	0.13 (1)	5.96	B-K	0 / 1769
C-D	-2780 / 0	-187.4	-187.4	0.40 (1)	5.00	H-F	0 / 2805
D-E	-2780 / 0	-187.4	-187.4	0.41 (1)	4.97	C-J	0 / 1360
E-F	-2281 / 0	-187.4	-187.4	0.40 (1)	5.38	H-E	-1426 / 0
G-F	-2030 / 0	0.0	0.0	0.25 (1)	7.74	J-D	-1024 / 0
L-B	-2098 / 0	0.0	0.0	0.08 (1)	7.81	J-E	0 / 622
L-K	0 / 0	-36.4	-36.4	0.04 (4)	10.00		
K-J	0 / 1679	-36.4	-36.4	0.15 (1)	10.00		
J-I	0 / 2281	-36.4	-36.4	0.19 (1)	10.00		
I-H	0 / 2281	-36.4	-36.4	0.19 (1)	10.00		
H-G	0 / 0	-36.4	-36.4	0.05 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	3-5-5	-239	-239		FRONT	VERT	TOTAL		

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 3-5-5
RIGHT SETBACK = 0-0
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
-ADDTL LOADS BASED ON 55 % OF GSL.

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 088-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.63")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI TC=0.41/1.00 (D-E:1), BC=0.19/1.00 (H-J:1), WB=0.35/1.00 (F-H:1), SS=0.25/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

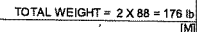
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.87 (C) (INPUT = 0.90)
JSI METAL = 0.31 (F) (INPUT = 1.00)

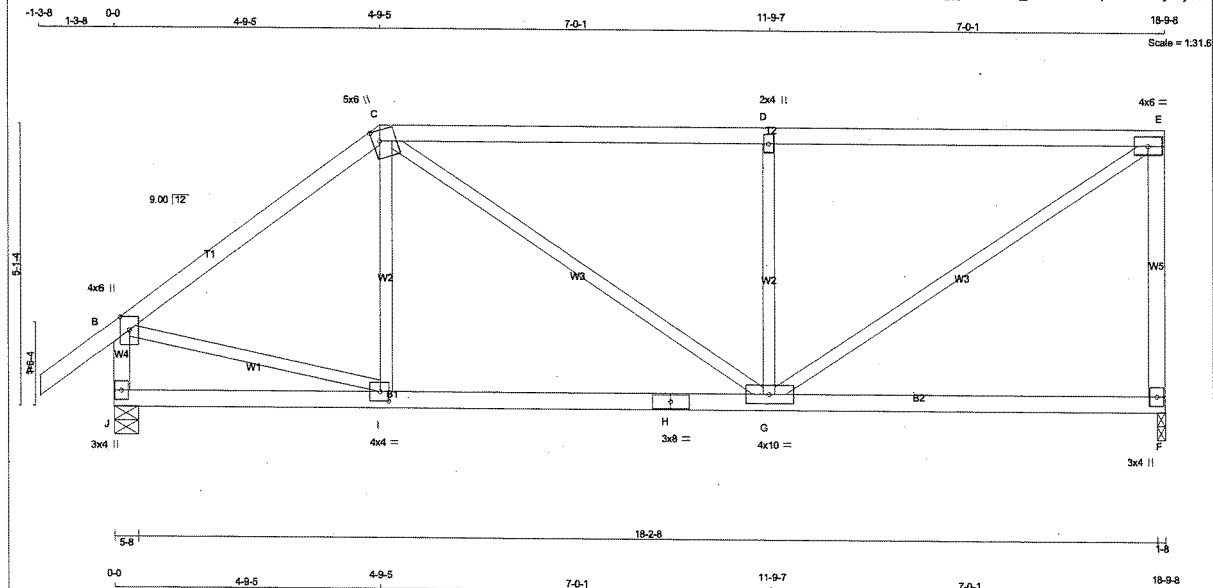
TOTAL WEIGHT = 2 X 89 = 178 lb



JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.34 (F) (INPUT = 1.00)

Alpa Roof Truss, Maple

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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
F - E	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
J - H	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 TMW+p	MT20	4.0	6.0	Edge	
C TTWW+m	MT20	5.0	6.0	2.25	1.50
D TMW+w	MT20	2.0	4.0		
E TMW-w	MT20	4.0	6.0		
F BMV+p	MT20	3.0	4.0		
G BMWW-t	MT20	4.0	10.0		
H BS-t	MT20	3.0	8.0		
I BMWW-t	MT20	4.0	4.0	2.00	1.75
J BMV+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		REORD	
JT	VERT	GROSS REACTION	DOWN	HORZ	UP/LIFT	IN-SX	BRG	IN-SX	
F	1068	0	1068	0	0	1-8		1-8	
J	1200	0	1200	0	0	5-8		1-8	

<u>UNFACTORED REACTIONS</u>							
1ST LCASE		<u>MAX / MIN. COMPONENT REACTIONS</u>					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
J	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

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

BRACINGS

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.26 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.		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
A-B	0 / 39	A-B	-81 / 61	A-B	0 / 372
B-C	-1013 / 0	B-C	0 / 372	B-C	0 / 372
C-D	-1113 / 0	C-D	-827 / 0	C-D	0 / 372
D-E	-1114 / 0	D-E	0 / 1348	D-E	0 / 372
E-F	-1015 / 0	E-F	0 / 833	E-F	0 / 372
F-G	-1166 / 0	F-G	0 / 833	F-G	0 / 372
G-H	0 / 0	G-H	0 / 833	G-H	0 / 372
H-I	0 / 807	H-I	0 / 833	H-I	0 / 372
I-J	0 / 807	I-J	0 / 833	I-J	0 / 372
J-K	0 / 0	J-K	0 / 833	J-K	0 / 372

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 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, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.63")

CALCULATED VERT. DEFL. (LL) = L/999 (0.04")

ALLOWABLE DEFL. (TL) = L/360 (0.63")

CALCULATED VERT. DEFL. (TL) = L/999 (0.10")

CSI: TC=0.89/1.00 (D-E-1), BC=0.29/1.00 (G-I-4), WB=0.32/1.00 (D-G-1), SB=0.32/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MT20	650	371	1747
			768
			1987
			1873

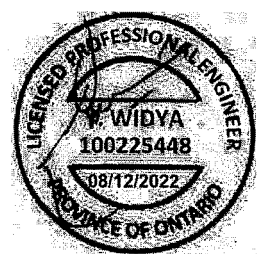
PLATE PLACEMENT TOL. = 0.250 inches

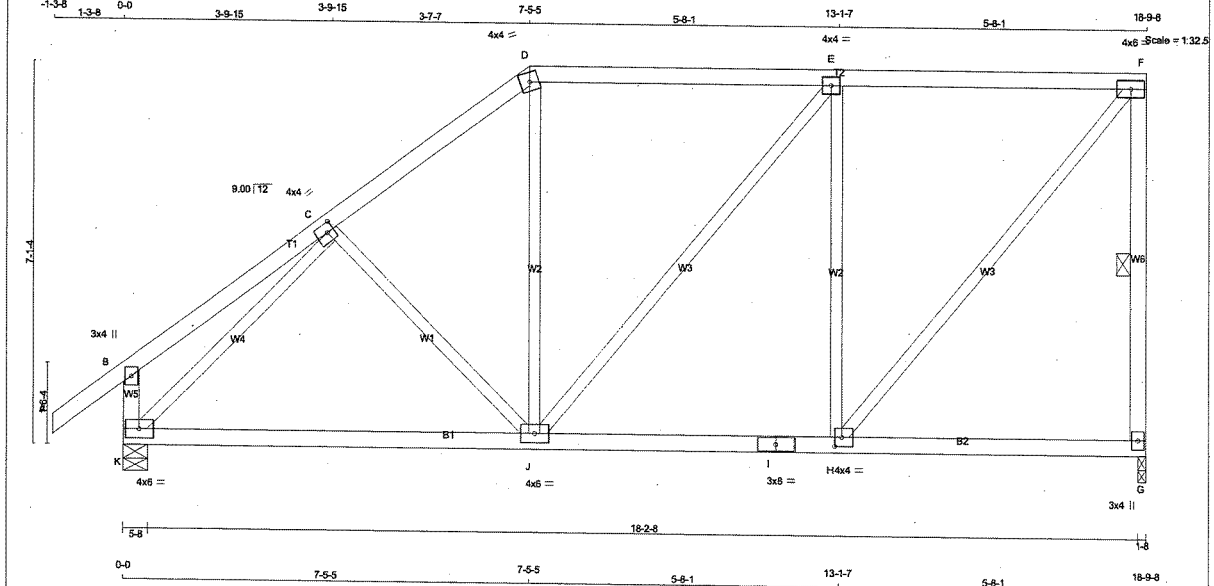
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (B) (INPUT = 0.90)

JSI METAL= 0.54 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N.L.G.A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
K - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
I - G	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	TMVW+4	MT20	4.0	4.0	2.00	1.50
D	TTW-m	MT20	4.0	4.0		
E	TMVW+4	MT20	4.0	4.0		
F	TMVW+4	MT20	4.0	6.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVW+4	MT20	4.0	4.0	2.00	1.50
I	BS-4	MT20	3.0	6.0		
J	BMVW+4	MT20	4.0	6.0		
K	BMVW+4	MT20	4.0	6.0		

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD BRG
JT	VERT	HORZ	DOWN	HORZ
G	1068	0	1068	0
K	1200	0	1200	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW
G	754	502/0
K	844	576/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.10 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 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	LENGTH FR-TO
FR-TO							
A-B	0/39	-95.2	-95.2 0.13 (1)	C-J	-142/2	0.07 (1)	
B-C	0/24	-95.2	-95.2 0.21 (1)	J-D	0/199	0.04 (1)	
C-D	-923/0	-95.2	-95.2 0.22 (1)	J-E	0/58	0.01 (4)	
D-E	-720/0	-95.2	-95.2 0.54 (1)	H-F	-713/0	0.82 (1)	
E-F	-685/0	-95.2	-95.2 0.54 (1)	H-F	0/1066	0.24 (1)	
G-F	-1023/0	0.0	0.0 0.23 (1)	K-C	-1196/0	0.57 (1)	
K-B	-267/0	0.0	0.0 0.03 (1)				
K-J	0/816	-18.5	-18.5 0.28 (4)				
J-I	0/685	-18.5	-18.5 0.27 (4)				
I-H	0/685	-18.5	-18.5 0.27 (4)				
H-G	0/0	-18.5	-18.5 0.13 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 26.7 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 40.1 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.63")

CALCULATED VERT. DEFL.(LL) = $L/999$ (0.03")

ALLOWABLE DEFL.(TL) = $L/360$ (0.63")

CALCULATED VERT. DEFL.(TL) = $L/999$ (0.11")

CS1: TC=0.54/1.00 (D-E-1), BC=0.28/1.00 (J-K-4), WB=0.62/1.00 (E-H-1), SS=0.26/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

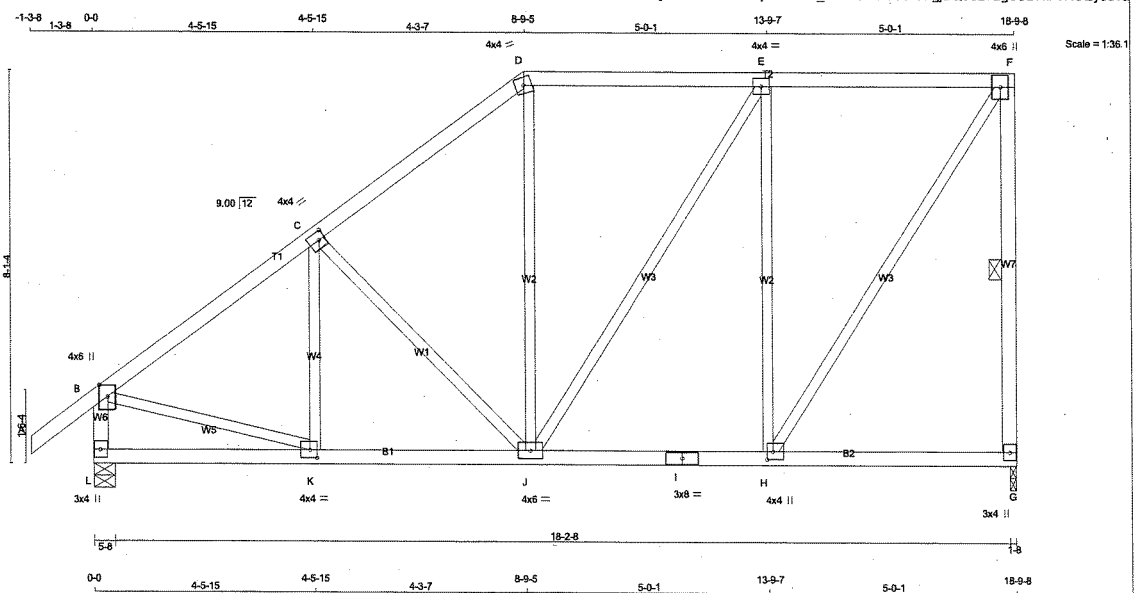
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (H) (INPUT = 0.90)

JSI METAL= 0.40 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER

N. L. G. A. RULES

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge
C	TMVW-i	MT20	4.0	4.0	2.00 1.50
D	TTW-m	MT20	4.0	4.0	
E	TMVW-i	MT20	4.0	4.0	
F	TMVW+p	MT20	4.0	6.0	
G	BMV1+p	MT20	3.0	4.0	
H	BMVW-i	MT20	4.0	4.0	2.00 1.50
I	BS-i	MT20	3.0	8.0	
J	BMVW-i	MT20	4.0	6.0	
K	BMVW-i	MT20	4.0	4.0	2.00 1.75
L	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REORD BRG
JT	VERT	HORZ	DOWN	UPLIFT
G	1068	0	1068	0
L	1200	0	1200	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM. LIVE WIND DEAD SOIL
G	754	502 / 0 0 / 0 0 / 0 0 / 0 252 / 0 0 / 0
L	844	576 / 0 0 / 0 0 / 0 0 / 0 268 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.72 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TD		FROM TO	LENGTH FR-TD				
A-B	0 / 39	-95.2 -95.2	0.13 (1) 10.00	K-C	-137 / 28	0.05 (1)	
B-C	-1039 / 0	-95.2 -95.2	0.34 (1) 5.72	C-J	-309 / 0	0.22 (1)	
C-D	-833 / 0	-95.2 -95.2	0.32 (1) 6.21	J-D	0 / 150	0.04 (4)	
D-E	-643 / 0	-95.2 -95.2	0.41 (1) 6.25	J-E	0 / 181	0.04 (1)	
E-F	-547 / 0	-95.2 -95.2	0.41 (1) 6.25	H-E	-742 / 0	0.94 (1)	
G-F	-1030 / 0	0.0 0.0	0.31 (1) 6.18	H-F	0 / 1008	0.23 (1)	
L-B	-1164 / 0	0.0 0.0	0.12 (1) 7.39	B-K	0 / 885	0.20 (1)	
L-K	0 / 0	-18.5 -18.5	0.08 (4) 10.00				
K-J	0 / 855	-18.5 -18.5	0.18 (1) 10.00				
J-I	0 / 547	-18.5 -18.5	0.16 (4) 10.00				
I-H	0 / 547	-18.5 -18.5	0.16 (4) 10.00				
H-G	0 / 0	-18.5 -18.5	0.11 (4) 10.00				

TOTAL WEIGHT = 2 X 96 = 192 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	DL
LL	= 26.7	PSF
DL	= 6.0	PSF
BOT CH.	LL	DL
LL	= 0.0	PSF
DL	= 7.4	PSF
TOTAL LOAD	= 40.1	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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.63")

CALCULATED VERT. DEFL. (LL) = $L/999$ (0.03")

ALLOWABLE DEFL. (TL) = $L/360$ (0.63")

CALCULATED VERT. DEFL. (TL) = $L/999$ (0.05")

CSI: TC=0.41/1.00 (D-E-1), BC=0.18/1.00 (J-K-1), WB=0.94/1.00 (E-H-1), SS=0.23/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	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)

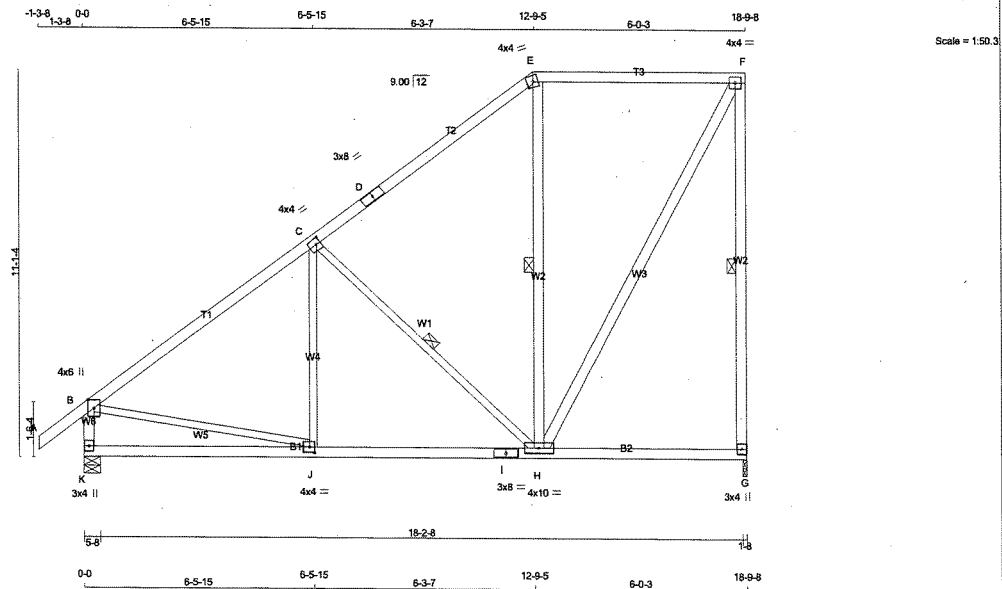
JSI METAL= 0.55 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



Alpha Roof Truss, Maple

Version 8.530 S Feb 23 2022 MITek Industries, Inc. Fri Aug 12 09:18:25 2022 Page 1
ID:119f019GMyk.JZRh3S23hYkyvFa-Qia0q88iahWalgFNwSpcW68w7hIQMP0hWUromnyoevS



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

DRY, SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	Edge	
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	8.0		
E	TTW-m	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	BMV1+p	MT20	3.0	4.0		
H	BMVWW-t	MT20	4.0	10.0		
I	BS-t	MT20	3.0	8.0		
J	BMVW-t	MT20	4.0	4.0	2.00	1.75
K	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	HORZ	DOWN	HORZ	UPLIFT
G	1068	0	1068	0	1-8
K	1200	0	1200	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	754	502 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
K	844	576 / 0	0 / 0	0 / 0	0 / 0	268 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.44 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 F-G, C-H, E-H.

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. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FR-TO	FR-TO	FR-TO
A-B	0 / 39	J-C	-22 / 99
B-C	-1005 / 0	C-H	-599 / 0
C-D	-552 / 0	H-E	-206 / 13
D-E	-552 / 0	E-F	0 / 842
E-F	-401 / 0	F-G	0 / 854
F-G	-1025 / 0	G-H	0 / 854
G-H	-1151 / 0	H-I	0 / 854
H-I	0 / 0	I-J	0 / 854
I-J	0 / 840	J-K	0 / 854
J-K	0 / 840	K-L	0 / 854
K-L	0 / 0	L-M	0 / 854
L-M	0 / 0	M-N	0 / 854
M-N	0 / 0	N-O	0 / 854
N-O	0 / 0	O-P	0 / 854
O-P	0 / 0	P-Q	0 / 854
P-Q	0 / 0	Q-R	0 / 854
Q-R	0 / 0	R-S	0 / 854
R-S	0 / 0	S-T	0 / 854
S-T	0 / 0	T-U	0 / 854
T-U	0 / 0	U-V	0 / 854
U-V	0 / 0	V-W	0 / 854
V-W	0 / 0	W-X	0 / 854
W-X	0 / 0	X-Y	0 / 854
X-Y	0 / 0	Y-Z	0 / 854
Y-Z	0 / 0	Z-A	0 / 854

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF NBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.63")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.65/1.00 (F-G-1), BC=0.25/1.00 (H-I-4), WB=0.32/1.00 (C-H-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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	650	371	1747
		768	1587
		1873	

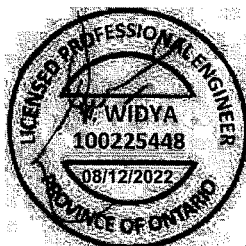
PLATE PLACEMENT TOL. = 0.250 inches

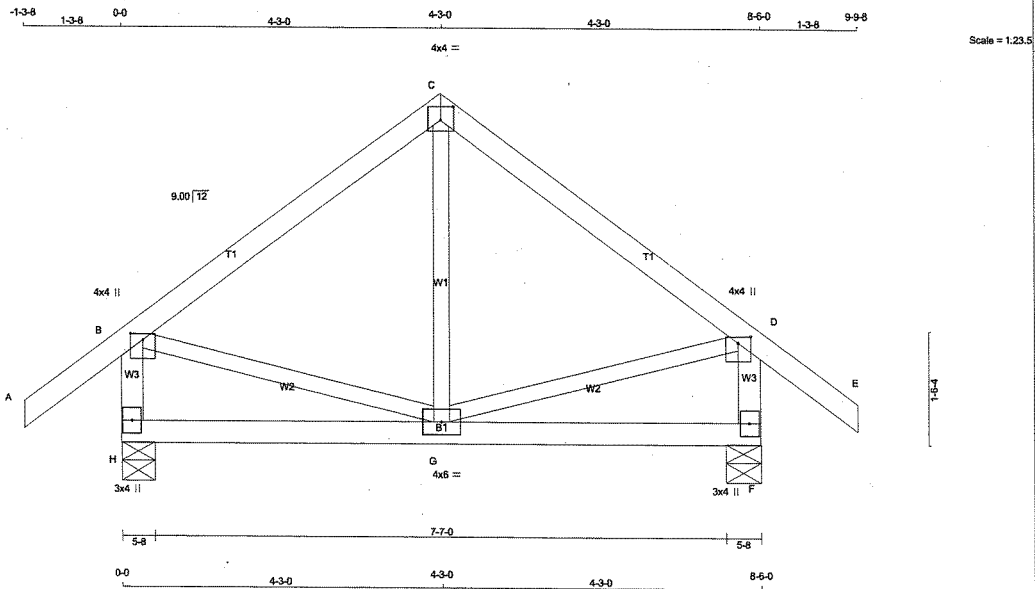
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)

JSI METAL= 0.56 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 3 X 38 = 115 lb
(M/F)

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - C	2x4	DRY	SPF
C - E	2x4	DRY	No.2
H - B	2x4	DRY	No.2
F - D	2x4	DRY	No.2
H - F	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
DRY, SEASONED LUMBER.			

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

BEARINGS							
FACTORED				MAXIMUM FACTORED			
GROSS REACTION				BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	615	0	615	0	0	5-8	1-8
F	615	0	615	0	0	5-8	1-8

UNFACTORED REACTIONS							
1ST LCASE MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	431	301/0	0/0	0/0	0/0	130/0	0/0
F	431	301/0	0/0	0/0	0/0	130/0	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 = 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO				FR-TO			
A-B	0/39	-95.2	-95.2 0.13 (1)	G-C	-40/60	0.02 (4)	
B-C	-304/0	-95.2	-95.2 0.22 (1)	B-G	0/252	0.06 (1)	
C-D	-304/0	-95.2	-95.2 0.22 (1)	G-D	0/252	0.06 (1)	
D-E	0/39	-95.2	-95.2 0.13 (1)				
H-B	-564/0	0.0	0.0 0.06 (1)				
F-D	-564/0	0.0	0.0 0.06 (1)				
H-G	0/0	-18.5	-18.5 0.09 (4)				
G-F	0/0	-18.5	-18.5 0.09 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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

(5% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 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=0.22/1.00 (B-C-1) BC=0.09/1.00 (G-H-4)
WB=0.06/1.00 (D-G-1) SSI=0.13/1.00 (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)	(PL)
MT20	650	371	1747	788	1987 1873

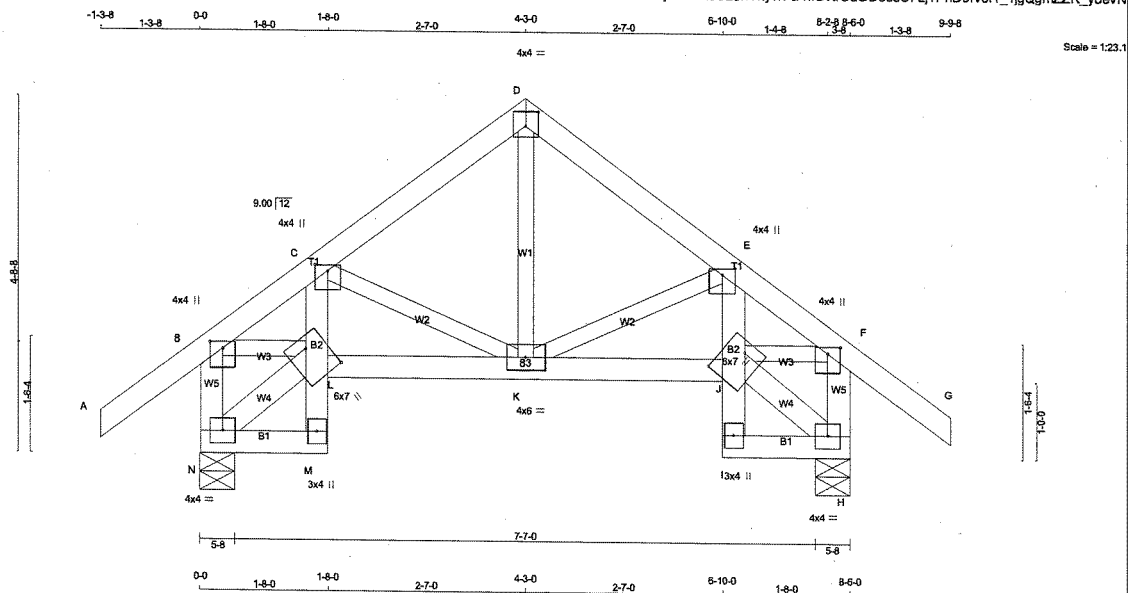
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.50 (D) (INPUT=0.90)
JSI METAL=0.13 (D) (INPUT=1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



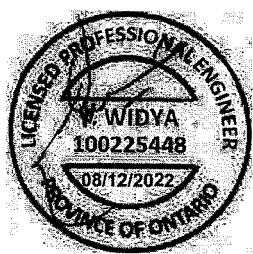


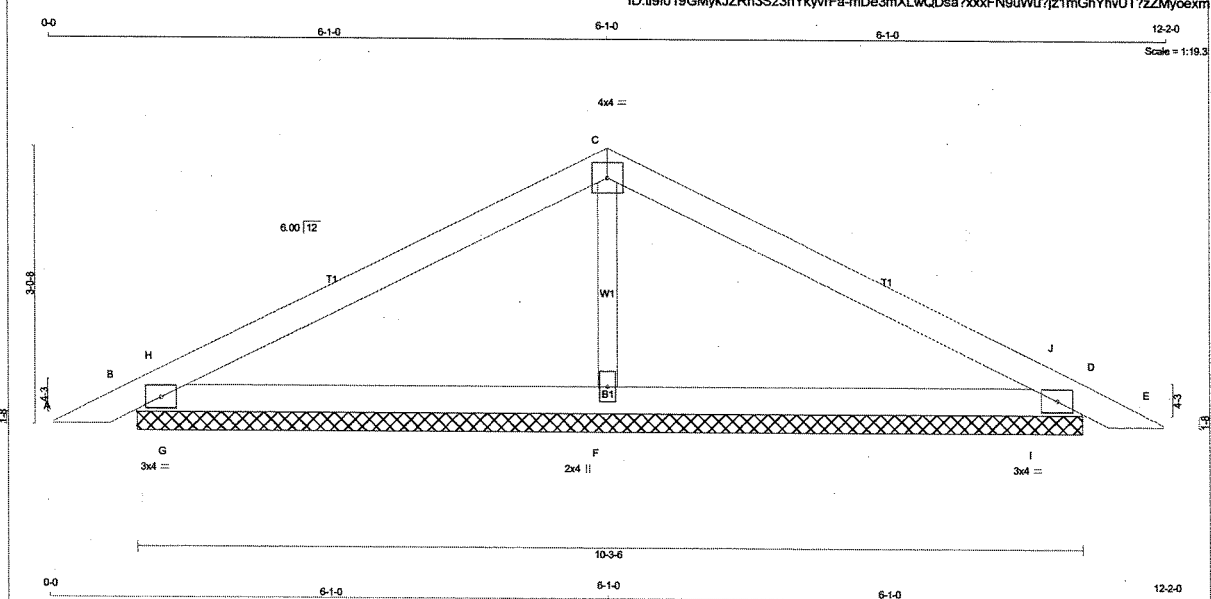
LUMBER										TOTAL WEIGHT = 2 X 45 = 91 lb																			
N. L. G. A. RULES										BUILDING DESIGNER										[MIF]									
CHORDS		SIZE		LUMBER		DESCR.		SPF		FACTORED		MAXIMUM FACTORED		INPUT		RECORD		DESIGN CRITERIA											
A - D		2x4		DRY		No.2		SPF		GROSS REACTION		GROSS REACTION		BRG		BRG		SPECIFIED LOADS.											
D - G		2x4		DRY		No.2		SPF		JT		DOWN		HORZ		UPLIFT		TOP CH. LL = 26.7 PSF											
N - B		2x4		DRY		No.2		SPF		H		615		0		615		DL = 6.0 PSF											
H - F		2x4		DRY		No.2		SPF		N		615		0		615		BOT CH. LL = 0.0 PSF											
N - M		2x4		DRY		No.2		SPF		H		615		0		615		DL = 7.4 PSF											
M - C		2x4		DRY		No.2		SPF		UNFACTORED REACTIONS		1ST LCASE		MAX/MIN		COMPONENT REACTIONS		TOTAL LOAD = 40.1 PSF											
L - J		2x4		DRY		No.2		SPF		JT		COMBINED		SNOW		LIVE		SPACING = 24.0 IN. C/C											
I - E		2x4		DRY		No.2		SPF		N		431		301/0		0/0		THIS TRUSS IS DESIGNED FOR RESIDENTIAL											
I - H		2x4		DRY		No.2		SPF		H		431		301/0		0/0		OR SMALL BUILDING REQUIREMENTS OF PART											
ALL WEBS		2x3		DRY		No.2		SPF		BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, H		BRACING		THIS DESIGN COMPLIES WITH:		- PART 9 OF CBCS 2018, ABC 2019													
EXCEPT																													
N - L		2x4		DRY		No.2		SPF																					
J - H		2x4		DRY		No.2		SPF																					
DRY: SEASONED LUMBER.																													

- PART 9 OF OBC 2012 (2019 AMENDMENT)					
- CSA 086-14					
- TPIC 2014					
DESIGN ASSUMPTIONS					
-OVERHANG NOT TO BE ALTERED OR CUT OFF.					
(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD					
ALLOWABLE DEFL.(LL)= L/360 (0.28")					
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")					
ALLOWABLE DEFL.(TL)= L/360 (0.28")					
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")					
CSI: TC=0.13/1.00 (A-B:1), BC=0.10/1.00 (J-K:1), WB=0.10/1.00 (F-J: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 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 650 371 1747 788 1987 1873					
PLATE PLACEMENT TOL = 0.250 inches					
PLATE ROTATION TOL = 5.0 Deg.					
JSI GRIP= 0.67 (B) (INPUT = 0.80)					
JSI METAL= 0.18 (B) (INPUT = 1.00)					

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT									
MAX. UNBRIDGED BOTTOM CHORD DEFLATION = 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		FACTORED		MEMB.		MAX. FACTORED	
		FORCE (LBS)		VERT. LOAD (PLF)				FORCE (LBS)	
FR-TO				CS1 (LC)		UNBRAC		FR-TO	
A-B		0/39		-95.2 -95.2 0.13 (1)		10.00		K-D 0/187	
B-C		-584/0		-95.2 -95.2 0.10 (1)		6.25		C-K -208/0	
C-D		-359/0		-95.2 -95.2 0.09 (1)		6.25		C-K -208/0	
D-E		-359/0		-95.2 -95.2 0.09 (1)		6.25		N-L -24/0	
E-F		-584/0		-95.2 -95.2 0.10 (1)		6.25		B-L 0/449	
F-G		0/39		-95.2 -95.2 0.13 (1)		10.00		J-H -24/0	
N-B		-586/0		0.0 0.0 0.06 (1)		7.81		J-F 0/449	
H-F		-586/0		0.0 0.0 0.06 (1)		7.81			
N-M		0/19		-18.5 -18.5 0.01 (4)		10.00			
M-L		0/16		0.0 0.0 0.03 (1)		10.00			
L-C		0/39		0.0 0.0 0.04 (1)		10.00			
L-K		0/468		-18.5 -18.5 0.01 (1)		10.00			
K-J		0/469		-18.5 -18.5 0.10 (1)		10.00			
I-J		0/16		0.0 0.0 0.03 (1)		10.00			
J-E		0/39		0.0 0.0 0.04 (1)		10.00			
I-H		0/19		-18.5 -18.5 0.01 (4)		10.00			

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY				DESIGN CRITERIA			
N. L. G. A. RULES				BUILDING DESIGNER				SPECIFIED LOADS:			
CHORDS SIZE				BEARINGS				TOP CH. LL = 26.7 PSF			
A - C	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQD	DL = 8.0 PSF		
C - E	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	BOT CH. LL = 0.0 PSF		
B - D	2x4	DRY	No.2	SPF	JT VERT	JT HORZ	DOWN	HORZ	DL = 7.4 PSF		
ALL WEBS 2x3 DRY				SPF	B 418	0	418	0	TOTAL LOAD = 40.1 PSF		
DRY, SEASONED LUMBER.				SPF	D 418	0	418	0	SPACING = 24.0 IN. C/C		
				SPF	F 493	0	493	0	THIS TRUSS IS DESIGNED FOR RESIDENTIAL		

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1+4	MT20	3.0	4.0	
C	TTW-p	MT20	4.0	4.0	
D	TMB1+4	MT20	3.0	4.0	
F	BMV1+w	MT20	2.0	4.0	

UNFACTORED REACTIONS							
1ST LCASE	MAX	MIN	COMPONENT	REACTIONS			
JT COMBINED	SNOW	LIVE	PERM	LIVE	WIND	DEAD	SOIL
B	293	210 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
D	293	210 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
F	361	219 / 0	0 / 0	0 / 0	0 / 0	131 / 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							
CHORDS				WEBS			
MEMB.	FORCE	FACTORED	VERT. LOAD	MEMB.	FORCE	FACTORED	MAX
(LBS)	(PLF)	CS1 (LC)	UNBRAC	(LBS)	(LBS)	CS1 (LC)	(LC)
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
A-B	0 / 17	-95.2	-95.2 0.05 (1)	10.00	F-C	-257 / 0	0.04 (1)
B-H	-53 / 0	-95.2	-95.2 0.13 (1)	6.25	G-H	-494 / 0	0.00 (1)
H-C	-179 / 0	-95.2	-95.2 0.30 (1)	6.25	I-J	-494 / 0	0.00 (1)
C-J	-179 / 0	-95.2	-95.2 0.30 (1)	6.25			
J-D	-53 / 0	-95.2	-95.2 0.13 (1)	6.25			
D-E	0 / 17	-95.2	-95.2 0.05 (1)	10.00			
B-G	0 / 152	-18.5	-18.5 0.28 (1)	10.00			
G-F	0 / 152	-18.5	-18.5 0.28 (1)	10.00			
F-I	0 / 152	-18.5	-18.5 0.28 (1)	10.00			
I-D	0 / 152	-18.5	-18.5 0.28 (1)	10.00			

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55% OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.30/1.00 (C-H-1), BC=0.28/1.00 (B-G-1), WB=0.04/1.00 (C-F-1), SSI=0.37/1.00 (D-I-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	MAX MIN
MT20	650 371	1747 788	1987 1873

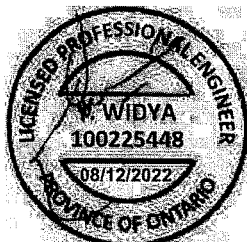
PLATE PLACEMENT TOL. = 0.250 inches

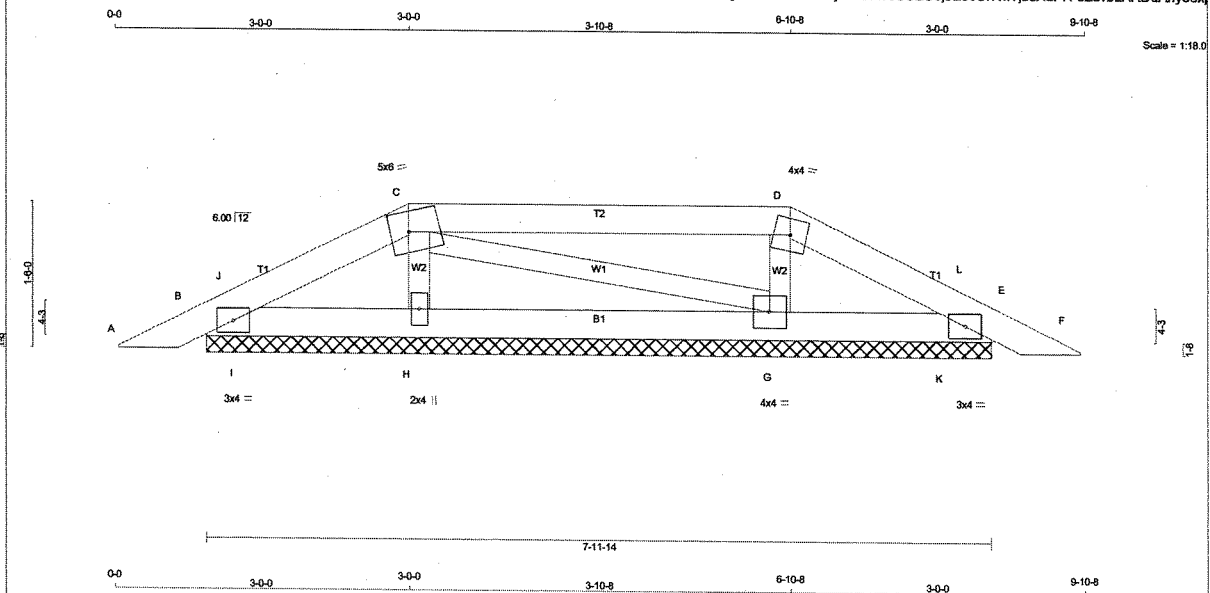
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.36 (D) (INPUT = 0.90)

JSI METAL= 0.09 (D) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				TOTAL WEIGHT = 2 X 25 = 51 lb			
N L G A RULES	SIZE	LUMBER	DESCR.	BEARINGS				DESIGN CRITERIA			
A - C	2x4	ORY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REORD	SPECIFIED LOADS:			
B - D	2x4	ORY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 26.7 PSF			
D - F	2x4	ORY	No.2	VERT	COVN	HORZ	UPLIFT	LL = 8.0 PSF			
B - E	2x4	ORY	No.2	212	0	0	0	BOT CH. LL = 0.0 PSF			
ALL WEBS	2x3	ORY	No.2	207	0	207	0	DL = 7.4 PSF			
DRY: SEASONED LUMBER.				319	0	319	0	TOTAL LOAD = 40.1 PSF			
				330	0	330	0	SPACING = 24.0 IN. C/C			

PLATES (table is in inches)				UNFACTORED REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
JT TYPE	PLATES	W	LEN Y X	1ST LCASE	MAX/MIN	COMPONENT REACTIONS		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
B	TMB1-I	MT20	3.0 4.0	COMBINED	SNOW	LIVE	PERM.LIVE	THIS DESIGN COMPLIES WITH:			
C	TTWW-m	MT20	6.0 6.0 2.50 2.25	147	112 / 0	0 / 0	0 / 0	- PART 9 OF CBC 2018, ABC 2019			
E	TMB1-I	MT20	4.0 4.0	144	110 / 0	0 / 0	0 / 0	- PART 9 OF CBC 2012 (2019 AMENDMENT)			
H	BMW1-I	MT20	4.0 4.0	227	145 / 0	0 / 0	0 / 0	- CSA 086-14			
H	BMW1-w	MT20	2.0 4.0	234	151 / 0	0 / 0	0 / 0	- TPIC 2014			

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)
FR-TO				FR-TO				FR-TO				FR-TO			
A-B	0 / 17	-95.2	-95.2 0.05 (1)	A-B	0 / 17	-95.2	-95.2 0.05 (1)	A-B	0 / 17	-95.2	-95.2 0.05 (1)	A-B	0 / 17	-95.2	-95.2 0.05 (1)
B-J	-53 / 0	-95.2	-95.2 0.00 (1)	B-J	-53 / 0	-95.2	-95.2 0.00 (1)	B-J	-53 / 0	-95.2	-95.2 0.00 (1)	B-J	-53 / 0	-95.2	-95.2 0.00 (1)
J-C	-51 / 0	-95.2	-95.2 0.04 (1)	J-C	-51 / 0	-95.2	-95.2 0.04 (1)	J-C	-51 / 0	-95.2	-95.2 0.04 (1)	J-C	-51 / 0	-95.2	-95.2 0.04 (1)
C-D	-12 / 0	-95.2	-95.2 0.24 (1)	C-D	-12 / 0	-95.2	-95.2 0.24 (1)	C-D	-12 / 0	-95.2	-95.2 0.24 (1)	C-D	-12 / 0	-95.2	-95.2 0.24 (1)
D-L	-40 / 0	-95.2	-95.2 0.04 (1)	D-L	-40 / 0	-95.2	-95.2 0.04 (1)	D-L	-40 / 0	-95.2	-95.2 0.04 (1)	D-L	-40 / 0	-95.2	-95.2 0.04 (1)
L-E	-42 / 0	-95.2	-95.2 0.00 (1)	L-E	-42 / 0	-95.2	-95.2 0.00 (1)	L-E	-42 / 0	-95.2	-95.2 0.00 (1)	L-E	-42 / 0	-95.2	-95.2 0.00 (1)
E-F	0 / 17	-95.2	-95.2 0.05 (1)	E-F	0 / 17	-95.2	-95.2 0.05 (1)	E-F	0 / 17	-95.2	-95.2 0.05 (1)	E-F	0 / 17	-95.2	-95.2 0.05 (1)
B-I	0 / 45	-18.5	-18.5 0.05 (1)	B-I	0 / 45	-18.5	-18.5 0.05 (1)	B-I	0 / 45	-18.5	-18.5 0.05 (1)	B-I	0 / 45	-18.5	-18.5 0.05 (1)
I-H	0 / 45	-18.5	-18.5 0.05 (1)	I-H	0 / 45	-18.5	-18.5 0.05 (1)	I-H	0 / 45	-18.5	-18.5 0.05 (1)	I-H	0 / 45	-18.5	-18.5 0.05 (1)
H-G	0 / 22	-18.5	-18.5 0.04 (4)	H-G	0 / 22	-18.5	-18.5 0.04 (4)	H-G	0 / 22	-18.5	-18.5 0.04 (4)	H-G	0 / 22	-18.5	-18.5 0.04 (4)
G-K	0 / 36	-18.5	-18.5 0.05 (1)	G-K	0 / 36	-18.5	-18.5 0.05 (1)	G-K	0 / 36	-18.5	-18.5 0.05 (1)	G-K	0 / 36	-18.5	-18.5 0.05 (1)
K-E	0 / 36	-18.5	-18.5 0.05 (1)	K-E	0 / 36	-18.5	-18.5 0.05 (1)	K-E	0 / 36	-18.5	-18.5 0.05 (1)	K-E	0 / 36	-18.5	-18.5 0.05 (1)

CSL TC=0.24/1.00 (C-D:1), BC=0.05/1.00 (B-I:1), WB=0.03/1.00 (D-G:1), SS=0.14/1.00 (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)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747
	788	1967	1873

PLATE PLACEMENT TOL. = 0.250 inches

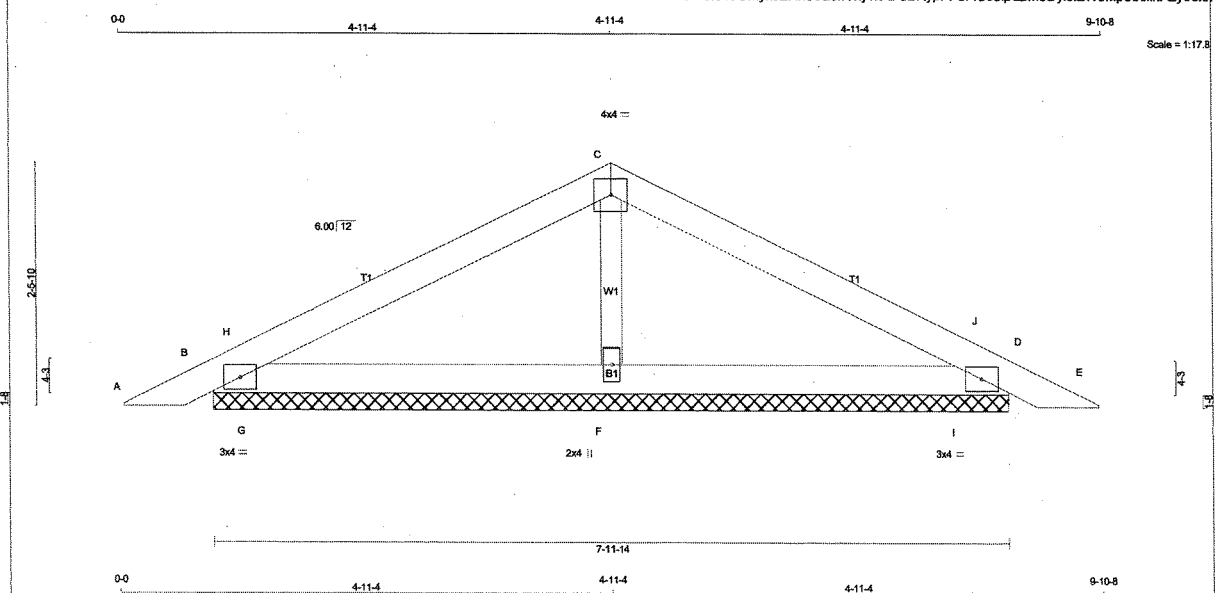
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)

JSI METAL= 0.05 (H) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





Scale = 1:17.8 TOTAL WEIGHT = 14 X 23 = 322 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	ORY	No.2	SPF	
DRY: SEASONED LUMBER					

PLATES (table 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			

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	DOWN	UP	BRG
JT	VERT	HORZ	DOWN	HORZ
B	333	0	333	0
D	333	0	333	0
F	403	0	403	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
B	233	168 / 0	0 / 0
D	233	168 / 0	0 / 0
F	296	160 / 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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC)	UNBRACED LENGTH FR-TO	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
A-B	0 / 17	-95.2	-95.2	0.05 (1)	10.00	F-C	-215 / 0	0.03 (1)		
B-H	-95 / 0	-95.2	-95.2	0.07 (1)	6.25	G-H	-313 / 0	0.00 (1)		
H-C	-117 / 0	-95.2	-95.2	0.18 (1)	6.25	I-J	-313 / 0	0.00 (1)		
C-J	-117 / 0	-95.2	-95.2	0.18 (1)	6.25					
J-D	-95 / 0	-95.2	-95.2	0.07 (1)	6.25					
D-E	0 / 17	-95.2	-95.2	0.05 (1)	10.00					
B-G	0 / 99	-18.5	-18.5	0.18 (1)	10.00					
G-F	0 / 99	-18.5	-18.5	0.18 (1)	10.00					
F-I	0 / 99	-18.5	-18.5	0.18 (1)	10.00					
I-D	0 / 99	-18.5	-18.5	0.18 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAO = 40.1 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.18/1.00 (C-H1), BC=0.18/1.00 (F-G:1), WB=0.03/1.00 (C-F:1), SSI=0.23/1.00 (D-I: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(ORY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

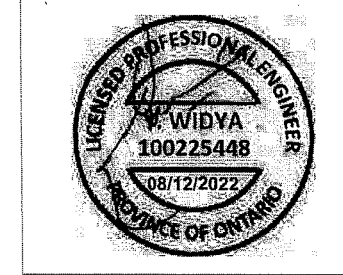
PLATE PLACEMENT TOL. = 0.250 inches

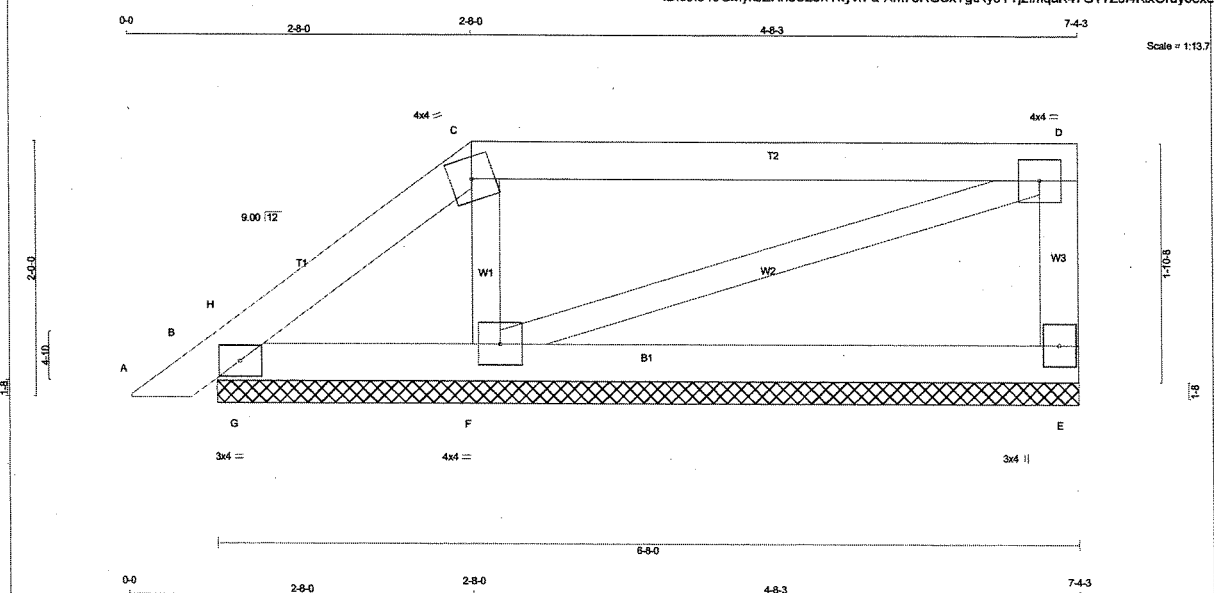
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (D) (INPUT = 0.90)

JSI METAL= 0.06 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





TOTAL WEIGHT = 3 X 23 = 68 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
E - D	2x4	DRY	No.2
B - E	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	
C	TTW-m	MT20	4.0	4.0	
O	TMW-I	MT20	4.0	4.0	
E	BMV1+p	MT20	3.0	4.0	
F	BMVW1-I	MT20	4.0	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	REORD BRG
JT	VERT	DOWN	0	0
E	262	0	0	0
B	177	0	0	0
F	374	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM. LIVE WIND DEAD SOIL
E	184	128 / 0 0 / 0 0 / 0 0 / 0 56 / 0 0 / 0
B	122	99 / 0 0 / 0 0 / 0 0 / 0 23 / 0 0 / 0
F	267	160 / 0 0 / 0 0 / 0 0 / 0 107 / 0 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, B, 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH FR-TO				
A-B	0 / 15	-95.2 -95.2	0.02 (1)	10.00	F-C	-271 / 0 0.04 (1)	
B-H	-14 / 10	-95.2 -95.2	0.02 (1)	6.25	F-D	0 / 18 0.00 (1)	
H-C	-48 / 0	-95.2 -95.2	0.04 (1)	6.25	G-H	-145 / 0 0.00 (1)	
C-D	-17 / 0	-95.2 -95.2	0.35 (1)	6.25			
E-D	-229 / 0	0.0 0.0	0.02 (1)	7.81			
B-G	0 / 35	-18.5 -18.5	0.05 (1)	10.00			
G-F	0 / 35	-18.5 -18.5	0.09 (4)	10.00			
F-E	0 / 0	-16.5 -16.5	0.09 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 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, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2015, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.35/1.00 (C-D-1), BC=0.09/1.00 (F-G-4), WB=0.04/1.00 (C-F-1), SS=0.17/1.00 (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) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN 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 (C) (INPUT = 0.90)
JSI METAL= 0.04 (F) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



LUMBER

PLATES (table is in inches)

BUILDING DESIGNER BEARINGS

FA

UNFACTORED REACTIONS

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS

CHORDS	WEBS
MAY FACTORED	FACTORED

SPECIFIED LOADS:

SPECIFIED LOADS:

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE

THIS TRUSS IS DESIGNED FOR RESIDENTIAL

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 201B, ABC 2019
PART 9 OF CBC 201B (2018 AMENDMENT)

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F.

CSI: TC=0.62/1.00 (C-D:1), BC=0.11/1.00 (H-I:4),

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT

NAIL VALUES

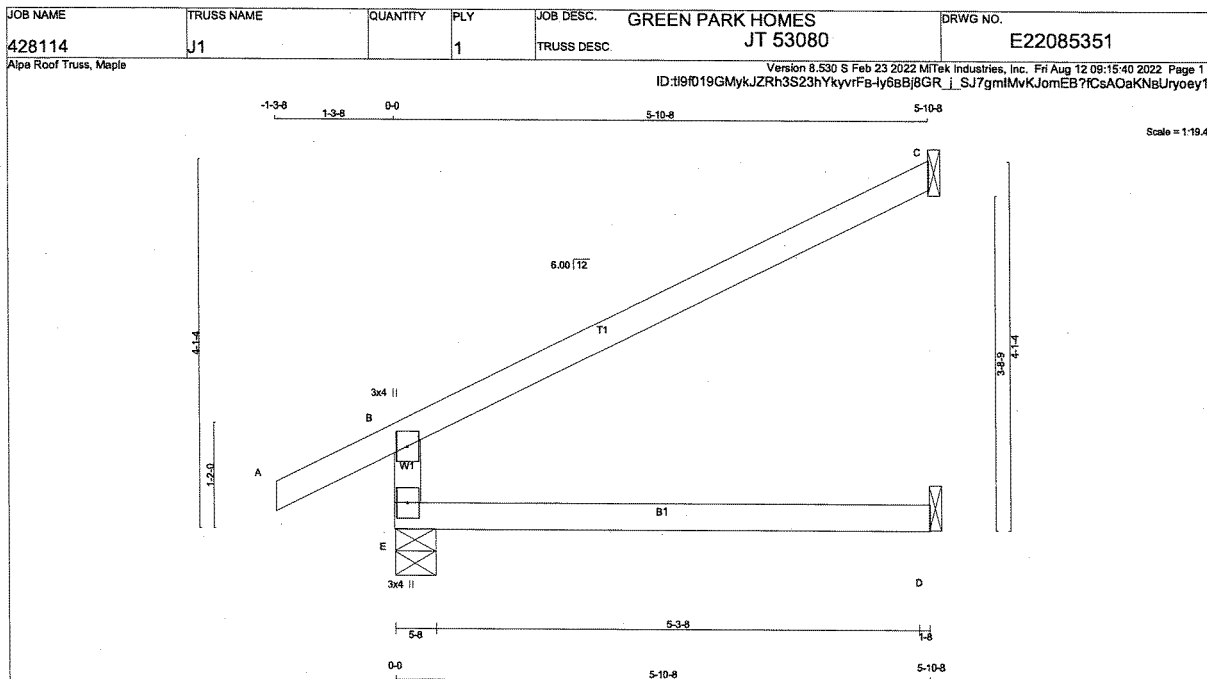
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (D) (INPUT = 0.90)

LATERAL BRACE(S) SHOWN SHALL BE





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

BUILDING DESIGNER								
DESCR.	BEARINGS							
SPF	FACTORED			MAXIMUM FACTORED			INPUT	REQRD
SPF	GROSS REACTION			GROSS REACTION			BRG	BRG
SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
	E	542	0	542	0	0	5-8	1-8
	C	210	0	210	0	0	1-8	1-8
	D	45	0	50	0	0	1-8	1-8

SEE MITEX STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	380	269 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
C	144	118 / 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					WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM TO					
E-B	-479 / 0	0.0 0.0	0.13 (4)	7.81			
A-B	0 / 29	-95.2 -95.2	0.12 (1)	10.00			
B-C	-31 / 0	-95.2 -95.2	0.56 (1)	6.25			
E-D	0 / 0	-18.5 -18.5	0.13 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 26.7 PSF
DL	= 6.0 PSF
BDT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 40.1 PSF

SPACING = 24.0 IN./C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 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=0.56/1.00 (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)	SHEAR (PSI)	SECTION (PL)	MAX MIN	MAX MIN	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 (E) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



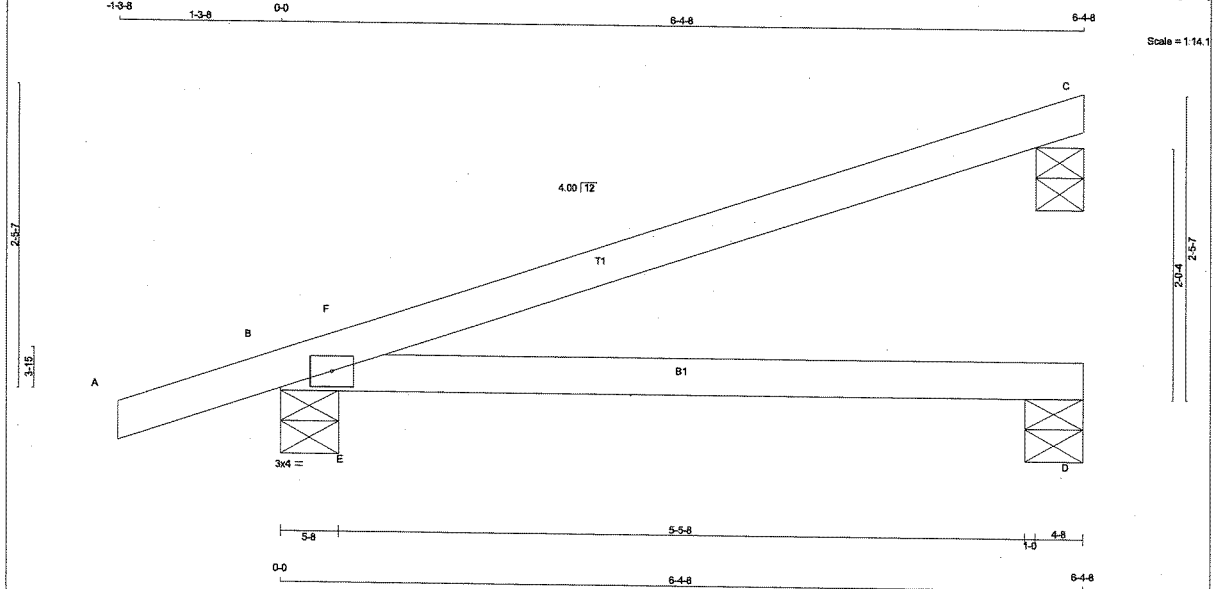


[M]

JSI GRIP= 0.31 (B) (INPUT = 0.90)
JSI METAL= 0.0B (B) (INPUT = 1.00)

JOB NAME 428114	TRUSS NAME J3W	QUANTITY 1	PLY 1	JOB DESC. GREEN PARK HOMES	DRWG NO. E22085353
TRUSS DESC. JT 53080		Version 8.530 5 Feb 23 2022 MITek Industries, Inc. Fri Aug 12 09:15:45 2022 Page 1			

Alpa Roof Truss, Maple ID:19R019GMykJRh3S23hYkyvrFa-6wvXERCOFXLHZ50dYsx41MVDvCISi7P7kb5L62yoexy



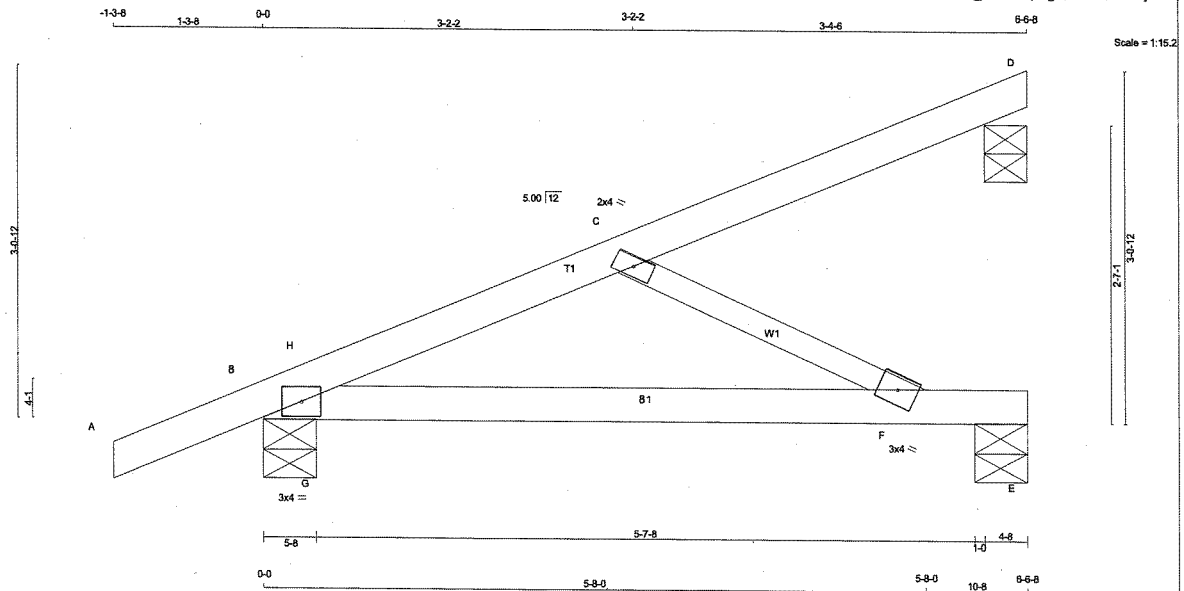
Scale = 1/4" = 1'-0" TOTAL WEIGHT = 6 X 17 = 102 lb [MIF]

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			
BEARINGS							
	FACTORED	MAXIMUM FACTORED		INPUT		RECORD	
JT	GROSS REACTION	GROSS REACTION		BRG		BRG	
C	VERT	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
B	265	0	265	0	-125	4-8	
D	490	0	490	120	-184	5-8	
	97	0	97	0	-66	1-8	
BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): C							
PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT							
PROVIDE ANCHORAGE AT BEARING JOINT B FOR 184 LBS. FACTORED UPLIFT							
PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS. FACTORED UPLIFT							
PROVIDE FOR 120 LBS. FACTORED HORIZONTAL REACTION AT JOINT B							
UNFACTORED REACTIONS							
	1ST CASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	183	144/0	0/0	0/0	0/-117	39/0	0/0
B	343	242/0	0/0	0/0	0/-196	101/0	0/0
D	72	26/0	0/0	0/0	0/-77	48/0	0/0
HORIZONTAL REACTIONS							
B	0/0	0/0	0/0	86/0	0/0	0/0	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: (12)							
	CHORDS	FACTORED		WEBS			
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LBS)
FR-TO		FROM TO	LENGTH FR-TO				
A-B	0/19	-95.2 -95.2	0.12 (1)	10.00	E-F	-425/164	0.00 (1)
B-F	-111/39	-95.2 -95.2	0.09 (3)	6.25			
F-C	-51/2	-95.2 -95.2	0.50 (1)	6.25			
B-E	0/0	-18.5 -18.5	0.34 (1)	10.00			
E-D	0/0	-18.5 -18.5	0.35 (1)	10.00			
WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF (7.5) PSF AT (30'-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 3), BUILDING MAY BE LOCATED ON (ROUGH TERRAIN) AT MINIMUM (1.000) MILES DISTANCE FROM 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 6.0 PSF AND 7.4 PSF RESPECTIVELY.							
DESIGN CRITERIA							
SPECIFIED LOADS:							
TOP	CH.	LL	=	26.7	PSF		
		DL	=	6.0	PSF		
BOT	CH.	LL	=	0.0	PSF		
		DL	=	7.4	PSF		
TOTAL	LOAD	=	40.1	PSF			
SPACING = 24.0 IN. C/C							
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD							
ALLOWABLE DEFL.(LL)= L/360 (0.21")							
CALCULATED VERT. DEFL.(LL)= L/712 (0.11")							
ALLOWABLE DEFL.(TL)= L/360 (0.21")							
CALCULATED VERT. DEFL.(TL)= L/376 (0.20")							
CSI: TC=0.50/1.00 (C-F.1), BC=0.35/1.00 (D-E.1), WB=0.00/1.00 (E-F.1), SS=0.33/1.00 (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)	SHEAR	SECTION				
	(PSI)	(PLI)	(PLI)				
MT20	650	371	1747	788	1987	1973	
PLATE PLACEMENT TOL = 0.250 inches							
PLATE ROTATION TOL = 5.0 Deg							
JSI GRIP= 0.33 (B) (INPUT = 0.90)							
JSI METAL= 0.08 (B) (INPUT = 1.00)							

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2

Alpa Roof Truss, Maple

Version 8.530 S Feb 23 2022 MITek Industries, Inc. Fri Aug 12 09:15:48 2022 Page 1
ID:19f019GMykZRh3S23hYkyvFa-WVbfrSEHyskrQYICE_Vne77CpPgQ4SoaQZJ?Inyoexv



LUMBER	DESCR.
N. L. G. A. RULES	SPF
CHORDS SIZE	SPF
A - D 2x4 DRY	No.2
B - E 2x4 DRY	No.2
ALL WEBS 2x3 DRY	No.2
ORY: SEASONED LUMBER	

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE	MT20	3.0	4.0	
B TMB1-I	MT20	2.0	4.0	
C TMW+w	MT20	3.0	4.0	
F BMW+w	MT20	3.0	4.0	

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	RECORD
JT	VERT	HORZ	DOWN	HORZ
D	144	0	144	0
B	500	0	500	0
E	228	0	228	0

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

UNFACTORED REACTIONS	1ST CASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
D	99	80 / 0	0 / 0
B	351	247 / 0	0 / 0
E	163	95 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D, B, 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.	FACTORED	FORCE	VERT. LOAD	LC1	MAX	MAX	UNBRAC	LENGTH	FR-TO	WEBS	MEMB.	FACTORED	FORCE	MAX
			(LBS)			(PLF)	CSI (LC)							(LBS)	CSI (LC)
A-B	0 / 23	-95.2	-95.2	0.12	(1)	10.00	C-F	-443 / 0	0.09 (1)					0 / 221	0.00 (1)
B-H	-543 / 0	-95.2	-95.2	0.14	(1)	6.25	G-H	0 / 221	0.00 (1)						
H-C	-387 / 0	-95.2	-95.2	0.20	(1)	6.25									
C-D	-7 / 0	-95.2	-95.2	0.14	(1)	10.00									
B-G	0 / 383	-18.5	-18.5	0.14	(1)	10.00									
G-F	0 / 383	-18.5	-18.5	0.39	(1)	10.00									
F-E	0 / 0	-18.5	-18.5	0.33	(1)	10.00									

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS D/F 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.22")
CALCULATED VERT. DEFL. (LL) = L/999 (0.07")
ALLOWABLE DEFL. (TL) = L/360 (0.22")
CALCULATED VERT. DEFL. (TL) = L/485 (0.16")

CSI: TC=0.20/1.00 (C-H 1), BC=0.39/1.00 (F-G 1), WB=0.09/1.00 (C-F 1), SSI=0.21/1.00 (B-H 1)

D/L 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.

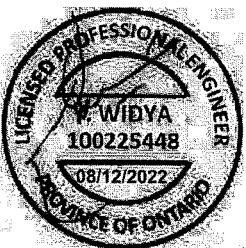
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

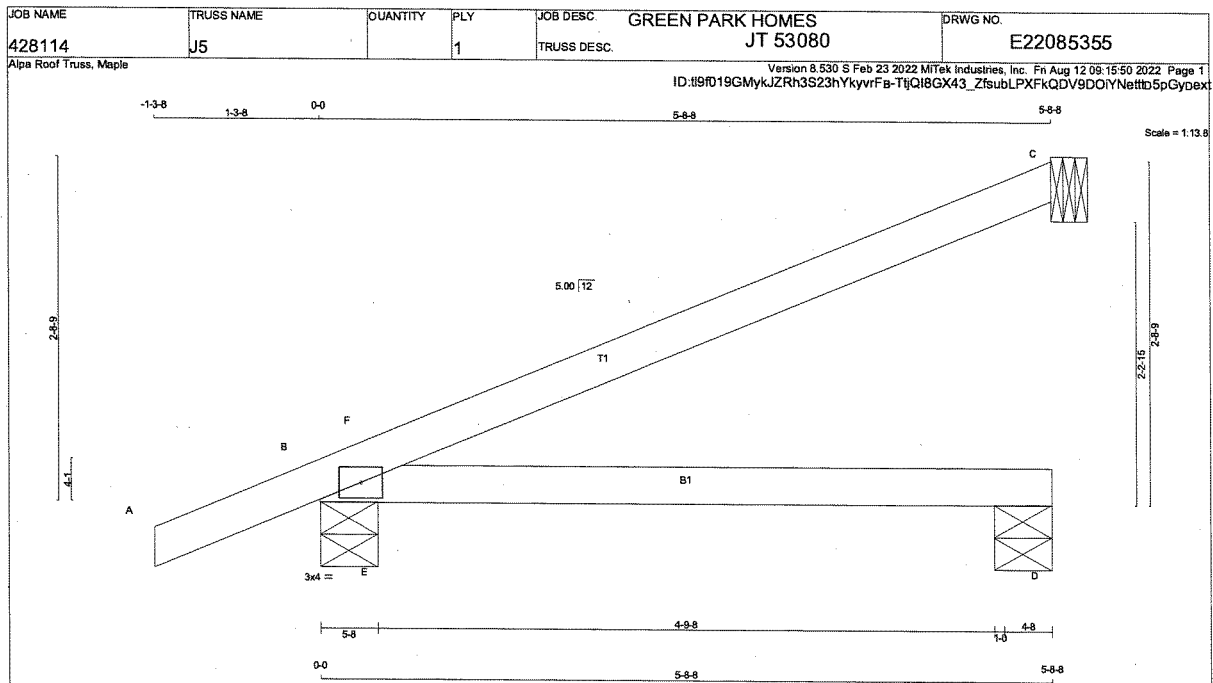
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.33 (C) (INPUT = 0.90)
JSI METAL= 0.22 (C) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2





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

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
B TMB14 MT20 3.0 4.0

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

JT	VERT	HORZ	FACTOREO		MAXIMUM FACTORED		INPUT		REORD	
			GROSS REACTION	DOWN	GROSS REACTION	HORZ	UPLIFT	IN-SX	BRG	IN-SX
C	238	0	238	0	0	0	4-8	1-8		
B	453	0	453	0	0	0	5-8	1-8		
D	87	0	87	0	0	0	5-8	1-8		

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

JT	COMBINED	SNOW	MAX / MIN COMPONENT REACTIONS				WIND	DEAD	SOIL
			LIVE	PERM.	LIVE	WIND			
C	164	129 / 0	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0	
B	317	225 / 0	0 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0	
D	65	23 / 0	0 / 0	0 / 0	0 / 0	0 / 0	42 / 0	0 / 0	

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

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)

MEMB.	FORCE (LBS)	VERT	FACTORED		MAX	MAX	MEMB.	FORCE (LBS)	MAX	MEMB.	FORCE (LBS)	MAX
			(PLF)	LC1	LC1	LC1			LC1			LC1
FR-TO							FR-TO					
A-B	0 / 23	-95.2	-95.2	0.12 (1)	10.00		E-F	-399 / 12	0.00 (1)			
B-F	-24 / 51	-95.2	-95.2	0.09 (1)	6.25							
F-C	-4 / 2	-95.2	-95.2	0.40 (1)	10.00							
B-E	0 / 0	-18.5	-18.5	0.27 (1)	10.00							
E-D	0 / 0	-18.5	-18.5	0.28 (1)	10.00							

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2015, ABC 2019
- PART 9 OF CBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/523 (0.13")

CSI: TC=0.40/1.00 (C-F:1), BC=0.28/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SS=0.33/1.00 (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.

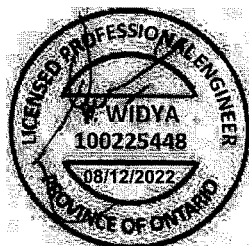
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

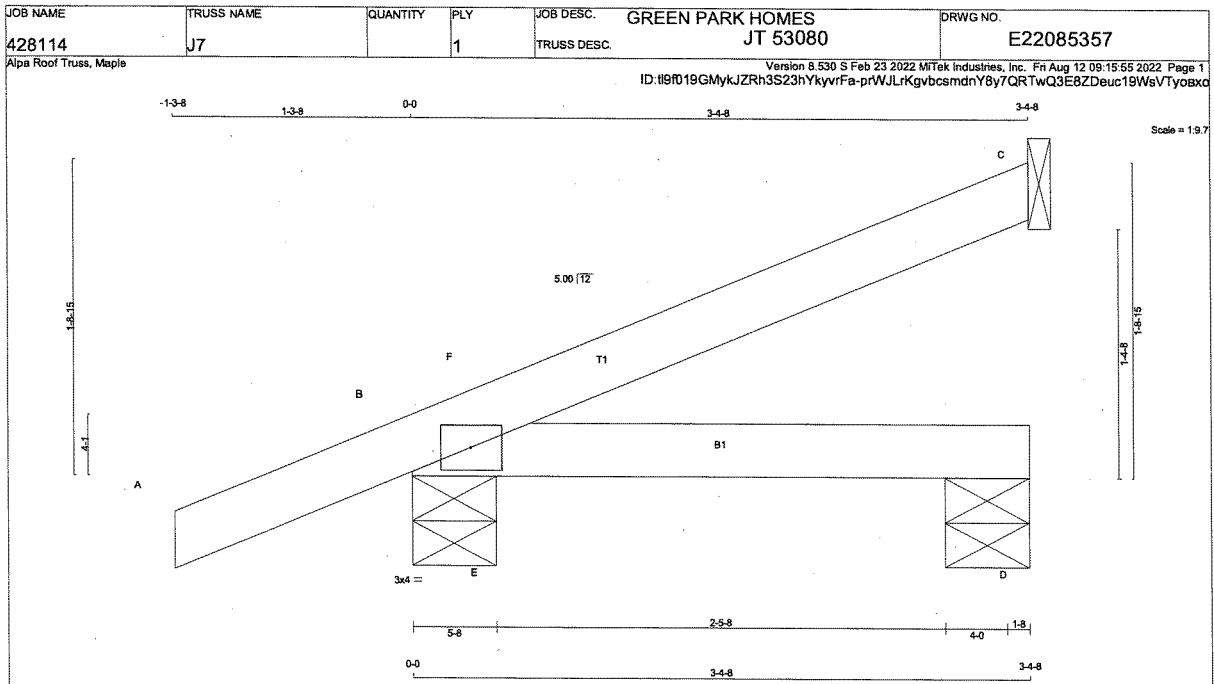
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE
2X4 SPF#2





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

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
B TMB1-H MT20 3.0 4.0

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
C	138	0	138	0	0	1-8	1-8	
B	320	0	320	0	0	5-8	1-8	
D	54	0	54	0	0	5-8	1-8	

SEE MITEK STANOARO DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C

UNFACTORED REACTIONS

JT	1ST LCASE		MAX / MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
C	96	75 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0
B	224	162 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
D	40	15 / 0	0 / 0	0 / 0	0 / 0	25 / 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 = 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)

MEMB.	CHORDS		FACTORED		WEBS		MAX. FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	MEMB. FORCE (LBS)	UNBRACED LENGTH	FORCE (LBS)	MAX. FACTORED
A-B	0 / 23	-95.2	-95.2	0.13 (5)	10.00	E-F	-155 / 5	0.00 (1)
B-F	-12 / 0	-95.2	-95.2	0.03 (4)	6.25			
F-C	0 / 2	-95.2	-95.2	0.14 (1)	10.00			
B-E	0 / 0	-18.5	-18.5	0.11 (1)	10.00			
E-D	0 / 0	-18.5	-18.5	0.11 (1)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

PATTERN-LOADING CHECK APPLIED TO THIS TRUSS.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 26.7 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 40.1 PSF

SPACING = 24.0 IN C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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 33.4 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 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) = $L/999$ (0.02")

CSI: TC=0.14/1.00 (C-F:1), BC=0.11/1.00 (B-E:1), WB=0.00/1.00 (E-F:1), SSI=0.13/1.00 (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)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	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 (B) (INPUT = 0.90)
JSI METAL = 0.05 (B) (INPUT = 1.00)

LATERAL BRACE(S) SHOWN SHALL BE 2X4 SPF#2



EWP DESIGN INC.

(905) 832-2250

FAX (905) 832-0286

RESPONSIBILITIES AND SPECIFICATIONS

RESPONSIBILITIES

1. EWP DESIGN 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 each drawing meet or exceed the actual dead load imposed by the structure, the live load imposed by the intended use and the snow load imposed by local building code or authorities with jurisdictions.
3. All dimensions are to be verified by the owner, contractor, architect or other authorities with jurisdictions before truss fabrication.
4. EWP DESIGN INC. bears no responsibility for the erection of trusses. Persons erecting trusses are cautioned to seek professional advice regarding the temporary and permanent bracing for the system. Bracing shown on EWP DESIGN INC. drawing is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacturer's responsibility to ensure that trusses are manufactured in conformance with specifications of EWP DESIGN INC. as outlined below.

SPECIFICATIONS

1. Trusses designed by EWP DESIGN INC. conform to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type, as indicated on the EWP DESIGN INC. drawings, and conform to the design procedures established by the Truss Plate Institute of Canada. Unit stresses used for truss designs are as per the edition of CSA-O86 shown on EWP DESIGN INC. drawings.
2. Lumber is to be the size, species and grade as specified on EWP DESIGN INC. drawings.
3. Moisture content of lumber shall not exceed 19% in service unless specified otherwise.
4. Metal connector plates shall be applied to both faces of truss at each joint and shall be positioned as specified.
5. Top chords of trusses are assumed to be continuously braced laterally by roof sheathing or by purlins at intervals not exceeding 12.5 times the thickness of top chord member.
6. Bottom chords shall be laterally braced at intervals not exceeding 3M (10') o.c., where rigid ceiling is not applied directly to the underside of chords.

THESE DRAWINGS CONSTITUTE THE PROPERTY OF EWP DESIGN INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY THE ALPA LUMBER GROUP, AND WILL BE RETRACTED BY EWP DESIGN INC. IF UTILIZED FOR ANY OTHER PURPOSE.

February 1, 2019

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

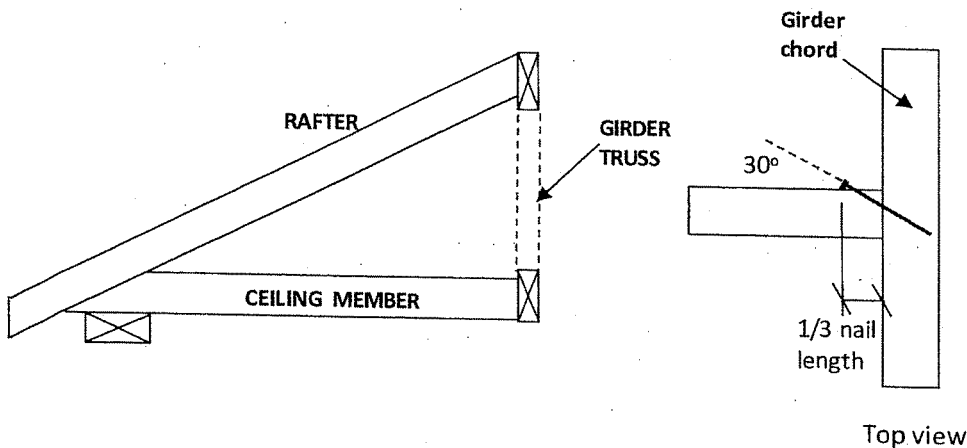


Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss

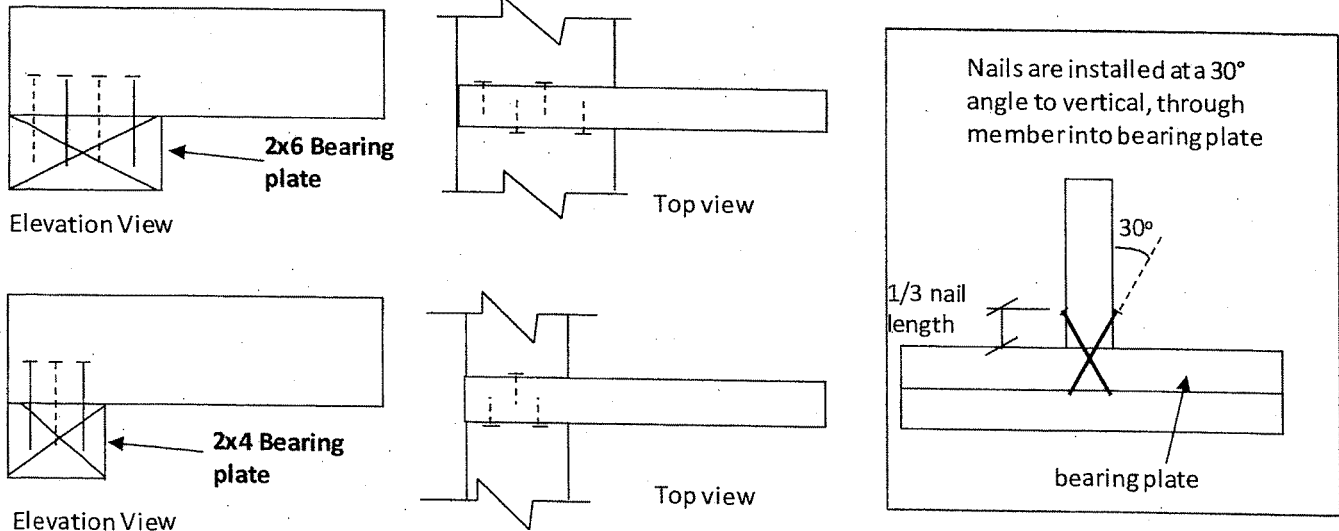
PEO
Certificate No. 10889485



December 21, 2020

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_0 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



LUL/LUS/LJS/HUS/HHUS/HGUS

SIMPSON
Strong-Tie

Standard and Double-Shear Joist Hangers



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.

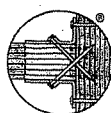
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 18–20.

Installation:

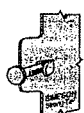
- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for 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:

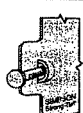
- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on pp. 105–107.



Double-Shear Nailing Top View

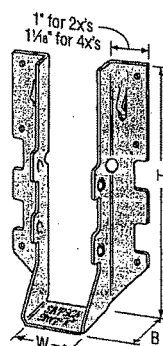
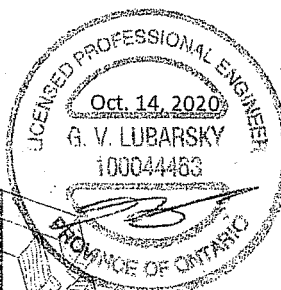
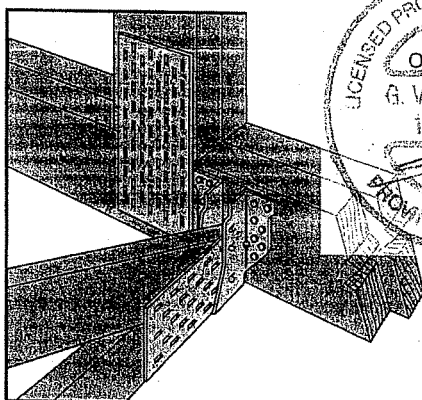


Double-Shear Nailing Side View, Do not bend tab

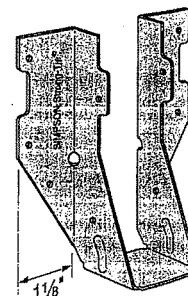


Dome Double-Shear Nailing Side View (available on some models)

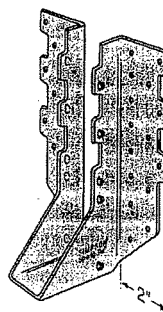
Typical HUS26 Installation with Reduced Heel Height
(Truss Designer to provide fastener quantity for connecting multiple members together)



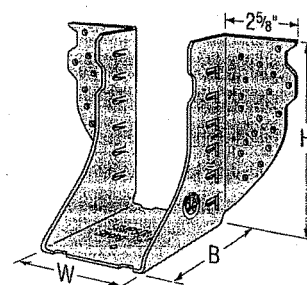
✓ LUS28



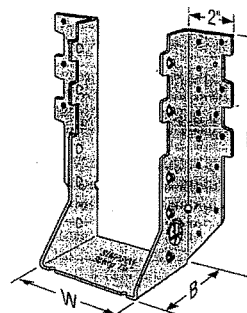
LU26L



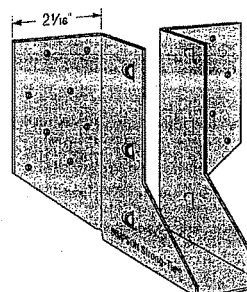
✓ HUS210
(HUS26, HUS28, and HHUS similar)



✓ HGUS28-2



✓ HHUS210-2



LJS26DS

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:

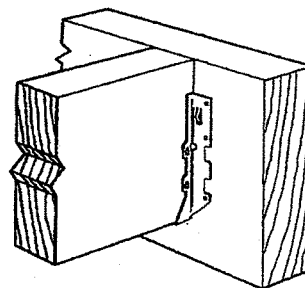
- Factored resistances are in accordance with CSA 086-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

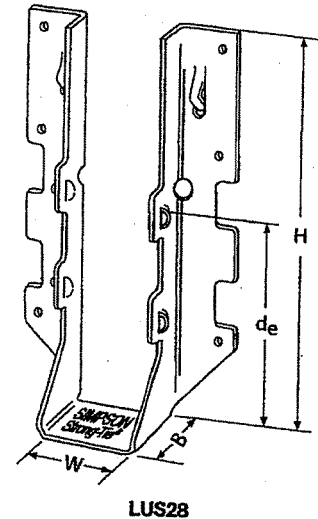
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

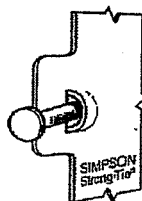


Typical LUS Installation

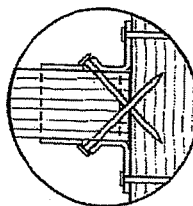


Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift	Normal	Uplift	Normal
LUS24	18	1 1/16	3 1/8	1 3/4	1 15/16	(4) 10d	(2) 10d		710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 15/16	(4) 16d	(2) 16d		835	2020	590	1435
LUS26	18	1 1/8	4 1/4	1 3/4	3 3/8	(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 1/8	4 3/4	2	3 1/4	(4) 16d	(4) 16d		1720	2595	1545	2340
LUS28	18	1 1/8	6 3/8	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 1/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d		1720	3325	1545	2375
LUS210	18	1 1/8	7 1/4	1 3/4	3 3/8	(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 1/8	8 3/4	2	5 1/4	(8) 16d	(6) 16d		2580	3345	2320	2375

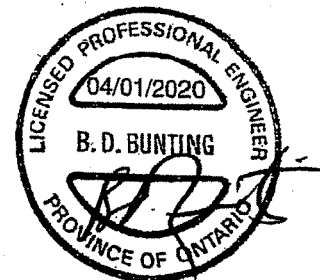
1. d_o is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,680



Double Shear Nailing Top View.



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-SPEC LUS20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

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:

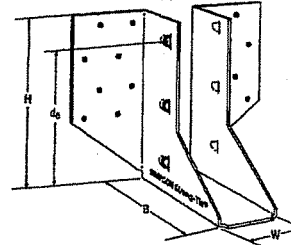
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

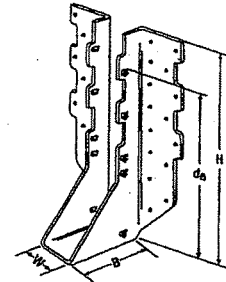
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

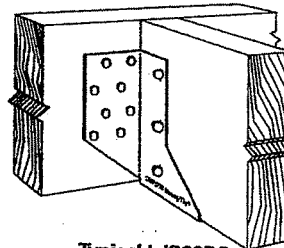
- See current catalogue for options



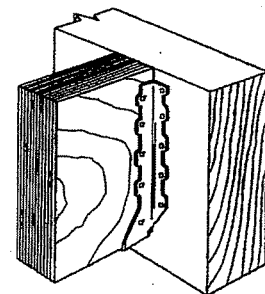
LJS26DS



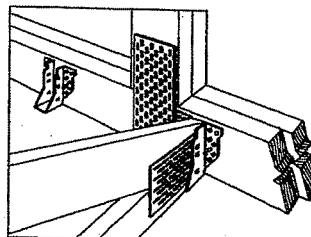
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



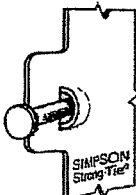
Typical HUS
Installation



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

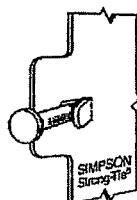
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _b ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _p =1.00)	Uplift (K _u =1.15)	Normal (K _p =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 1/8	5 3/8	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 1/8	7 3/32	3	6 7/32	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 1/8	9 3/32	3	7 51/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 1/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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

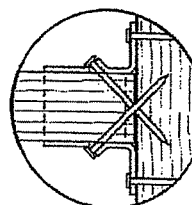


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

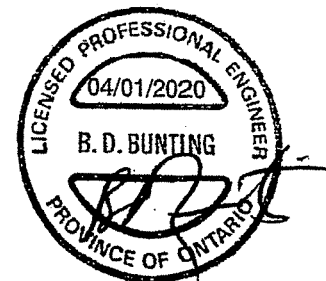
U.S. Patent
5,803,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



**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-SPECHUS20 3/20 exp. 6/22

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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:

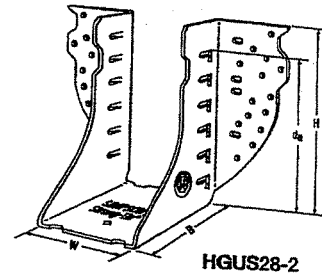
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

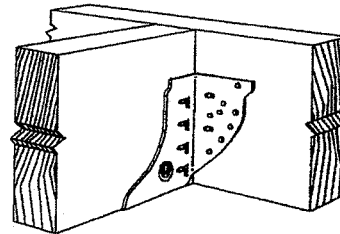
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

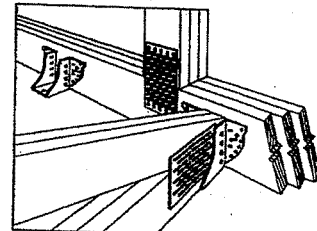
- See current catalogue for options



HGUS28-2



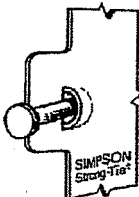
Typical HGUS Installation



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

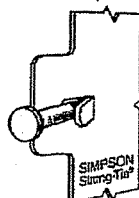
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
HGUS26	12	1 1/4	5 1/4	5	4 1/2	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3 1/8	5 1/8	4	4 1/4	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4 15/16	5 1/2	4	4 1/4	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6 1/8	5 1/8	4	4 1/4	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1 1/4	7 1/4	5	6 1/4	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3 1/8	7 1/8	4	6 1/4	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4 15/16	7 1/4	4	6 1/4	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6 1/8	7 1/8	4	6 1/4	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210	12	1 1/4	9 1/4	5	7 1/4	(46) 16d	(16) 16d	3535	11070	2510	8090
HGUS210-2	12	3 1/8	9 1/8	4	8 1/4	(46) 16d	(16) 16d	6840	14015	4855	10270
HGUS210-3	12	4 15/16	9 1/4	4	8 1/4	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6 1/8	9 1/8	4	8 1/4	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6 1/8	10 1/4	4	10 1/4	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6 1/8	12 1/4	4	11 1/4	(66) 16d	(22) 16d	10130	16400	7195	11645

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

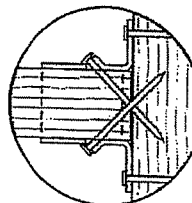


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

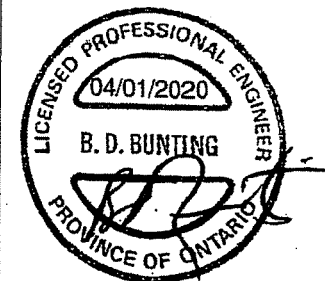
U.S. Patent
5,603,580



Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

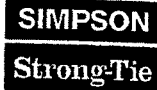
This technical bulletin is effective until June 30, 2022, and reflects information available as of April 1, 2020. This information is updated periodically and should not be relied upon after June 30, 2022. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

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T-SPECHGUS20 3/20 exp. 6/22

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strongtie.com

HHUS – Double Shear Joist Hangers



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:

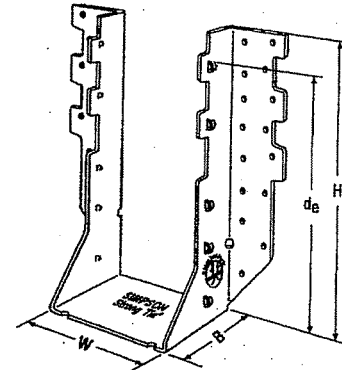
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

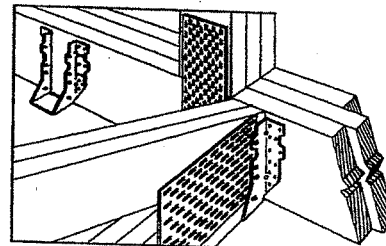
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



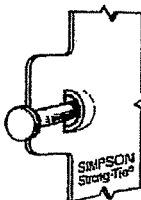
HHUS410



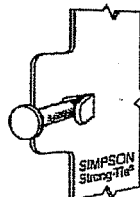
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
HHUS26-2	14	3⅞	5⅞	3	3⅞	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3⅞	7⅞	3	6⅞	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3⅞	9⅞	3	8	(30) 16d	(10) 16d	4670	9660	4235	7000
HHUS210-3	14	4⅞	9	3	7⅞	(30) 16d	(10) 16d	4670	9670	4235	6865
HHUS210-4	14	6⅞	8⅞	3	7⅞	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS46	14	3⅞	5⅞	3	3⅞	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3⅞	7⅞	3	6⅞	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS410	14	3⅞	9	3	8	(30) 16d	(10) 16d	4670	9855	4235	7000
HHUS5.50/10	14	5⅞	9	3	8	(30) 16d	(10) 16d	4670	10155	4235	7210
HHUS7.25/10	14	7⅞	9	3⅞	7⅞	(30) 16d	(10) 16d	4670	10155	3370	7210

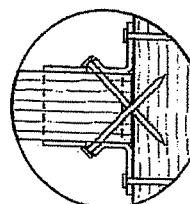
1. d_e is the distance from the seat of the hanger to the highest joist nail.



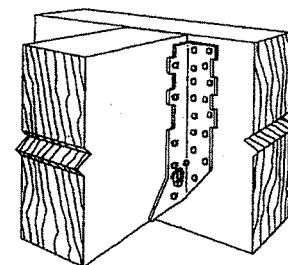
Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,580



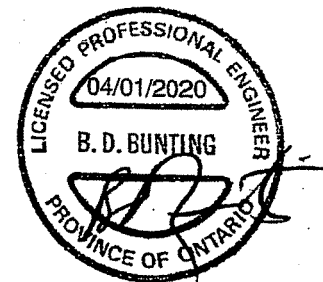
Double Shear Nailing Side View. Do not bend tab back.



Double Shear Nailing Top View.



Typical HHUS Installation



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.

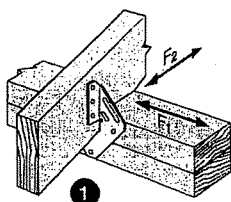
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T-SPECHHUS20 3/20 exp. 6/22

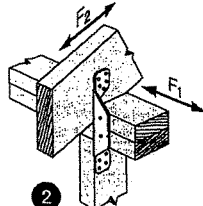
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strongtie.com

H/TSP

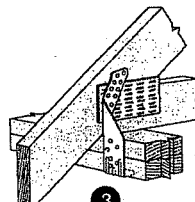
Seismic and Hurricane Ties (cont.)



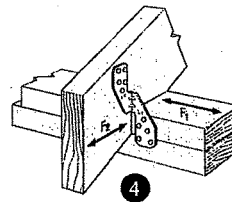
1 H1 Installation



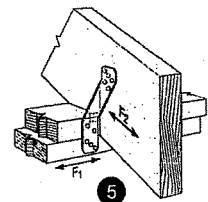
2 H2A Installation



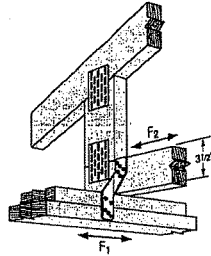
3 TSP Installation



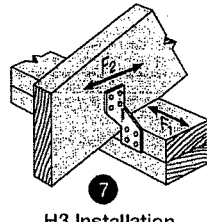
4 H2.5A Installation
(Nails into both top plates)



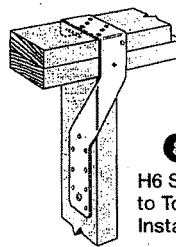
5 H2.5T Installation
(Nails into both top plates)



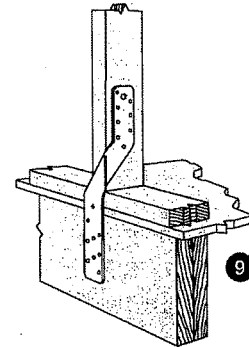
6 H2.5T Installation



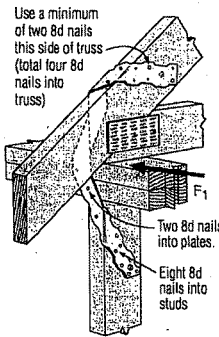
7 H3 Installation
(Nails into upper top plate)



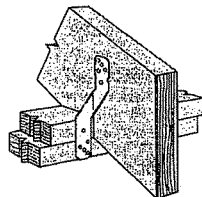
8 H6 Stud to Top Plate Installation



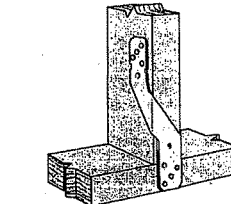
9 H6 Stud to Band Joist Installation



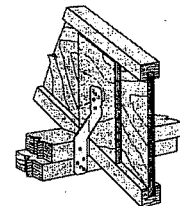
10 H7Z Installation



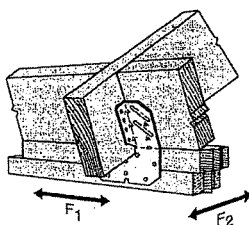
11 H8 Attaching Rafter to Double Top Plates



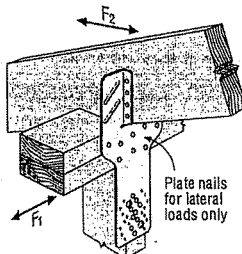
12 H8 attaching Stud to Sill
(4) 8d into plate, (5) 8d into stud



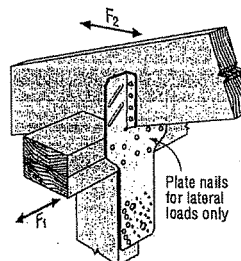
13 H8 attaching I-Joist to Double Top Plates



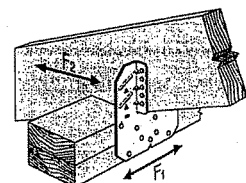
14 H10A Field-Bent Installation



15 H10S Installation

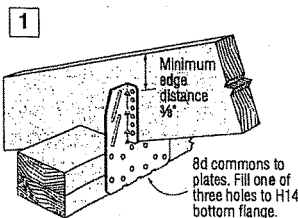


16 H10S Installation with Stud Offset

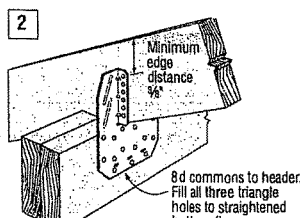


17 H10A Installation

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.

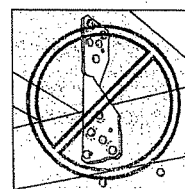


18 H14 Installation to Double Top Plates



19 H14 Installation to Double 2x Header

Avoid a Misinstallation



Do not make new holes or overdrive nails.

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.

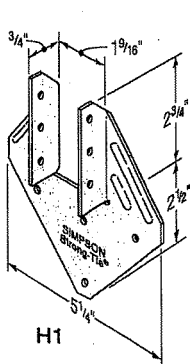
- H10AR — The heavy-duty design of the H10A available with a 2" wide throat to accommodate rough lumber
- H10A-2 — The H10A design with a 3" throat for double 2x members
- H2ASS, H2.5ASS and H10ASS — Popular ties now available in stainless steel

Material: See table

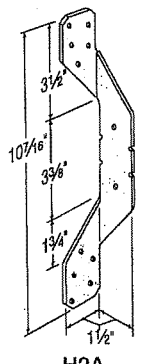
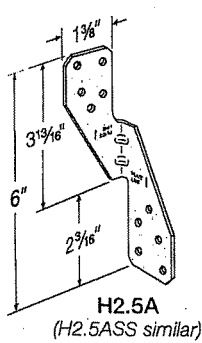
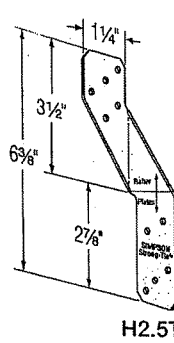
Finish: Galvanized. H7Z and H11Z — ZMAX® coating. Some models available in stainless steel or ZMAX; see Corrosion Information, pp. 20–24 or visit strongtie.com.

Installation:

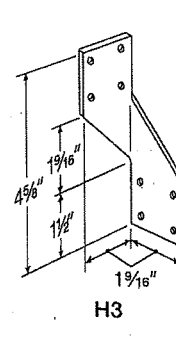
- Use all specified fasteners; see General Notes.
- H1 can be installed with flanges facing inward (reverse of H1 installation drawing; number 1).
- H2.5T, H3 and H6 ties are shipped in equal quantities of right and left versions (right versions shown).
- Hurricane ties do not replace solid blocking.
- 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.



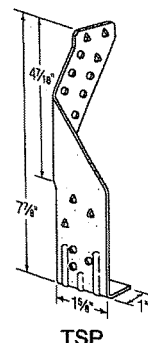
H1

H2A
(H2ASS similar)H2.5A
(H2.5ASS similar)

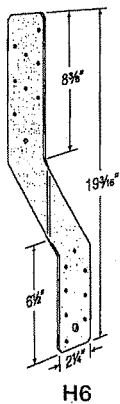
H2.5T



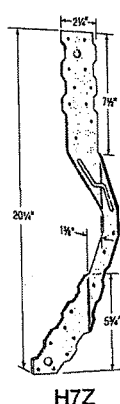
H3



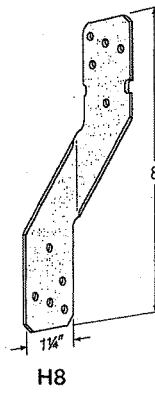
TSP



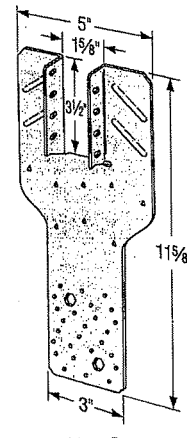
H6



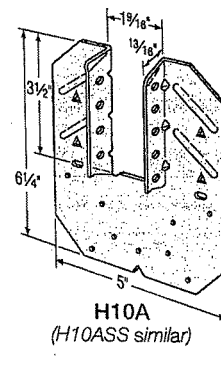
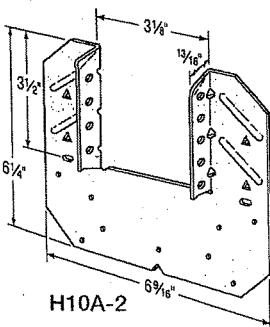
H7Z



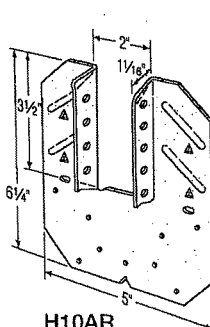
H8



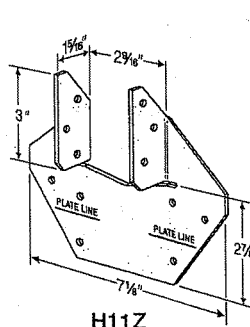
H10S

H10A
(H10ASS similar)

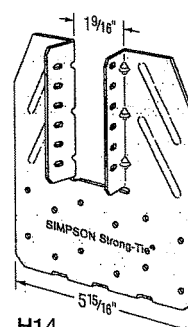
H10A-2



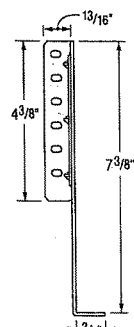
H10AR



H11Z



H14

H14
Profile

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

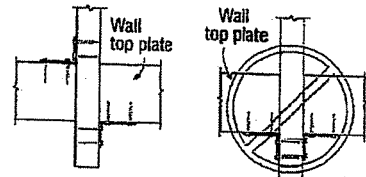
Design: • Factored resistances are in accordance with CSA O86-14
• Factored resistances have been increased 15%. No further increase is permitted.

Installation: • Use all specified fasteners

- Nails: $8d = 0.131"$ dia. x $2\frac{1}{2}"$ long common wire, $8d \times 1\frac{1}{2}" = 0.131" \times 1\frac{1}{2}"$ long, $10d \times 1\frac{1}{2}" = 0.146" \times 1\frac{1}{2}"$ long
- H1 can be installed with flanges facing outwards
- Hurricane ties do not replace solid blocking

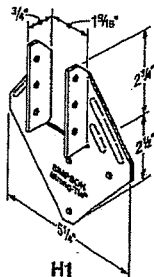
Factored resistances for more than one direction for a single connection cannot be added together. A factored load which can be divided into components in the directions given must be evaluated as follows: Factored Shear/Resisting Shear + Factored Tension/Resisting Tension ≤ 1.0 .

Hurricane Tie Installations to Achieve Twice the Load (Top View)

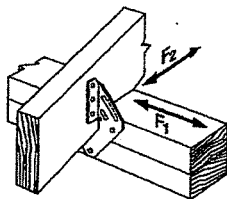


Install diagonally across from each other for minimum 2x truss.

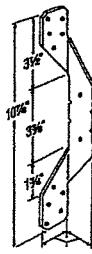
Nailing into both sides of a single ply 2x truss may cause the wood to split.



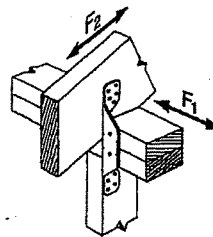
H1



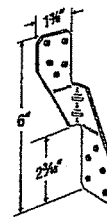
H1 Installation



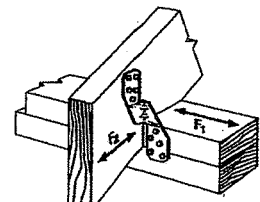
H2A



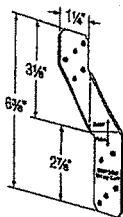
H2A Installation



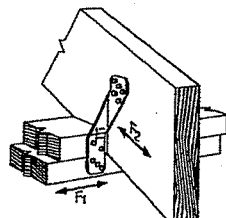
H2.5A



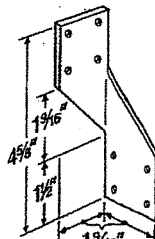
H2.5A Installation



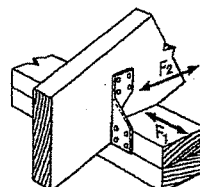
H2.5T



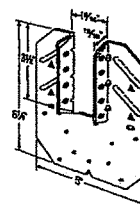
H2.5T Installation
(Nails into both top plates)



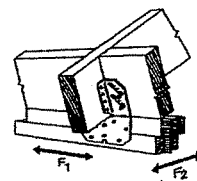
H3



H3 Installation



H10A



H10A Installation

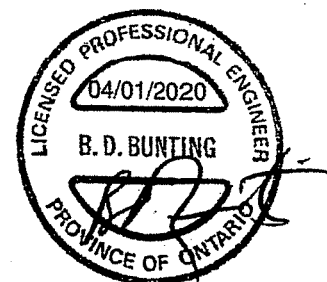
Model No.	Ga.	Fasteners			Factored Resistance (lb.)					
		To Rafter	To Plates	To Studs	D.Fir-L			S-P-F		
					Uplift	Normal		Uplift	Normal	
						F ₁	F ₂		F ₁	F ₂
H1	18	(6) 8d x 1 1/2"	(4) 8d	—	(K ₀ =1.15)			(K ₀ =1.15)		
H2A	18	(5) 8d x 1 1/2"	(2) 8d x 1 1/2"	(5) 8d x 1 1/2"	740	685	300	680	485	215
H2.5A	18	(5) 8d	(5) 8d	—	830	220	75	590	155	55
H2.5T	18	(5) 8d	(5) 8d	—	805	160	160	755	160	160
H3	18	(4) 8d	(4) 8d	—	835	175	240	740	160	210
H10A	18	(9) 10d x 1 1/2"	(9) 10d x 1 1/2"	—	740	180	265	615	125	190
					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 2 1/2" 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.



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

TC - Truss Connectors

SIMPSON
Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1/4". 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

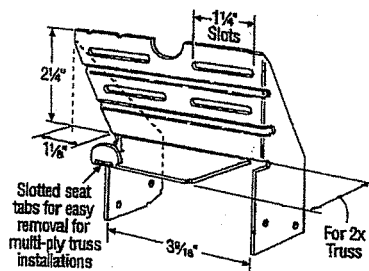
Design: Factored resistances are in accordance with CSA 086-14

Installation:

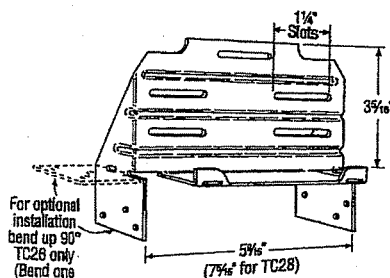
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

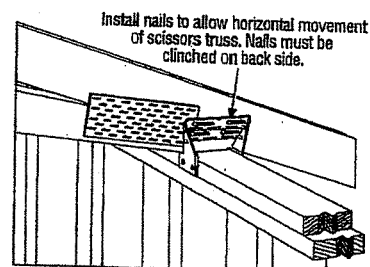
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



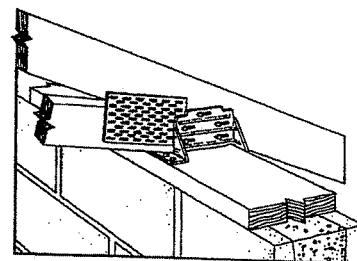
TC24
U.S. Patent 4,932,173



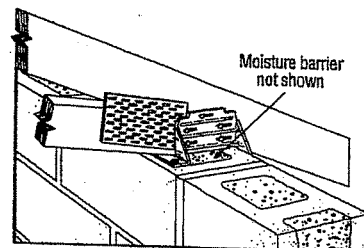
TC26
(TC28 Similar)



Typical TC24 Installation



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer
(8", 10", 12" Wall Installation Similar)



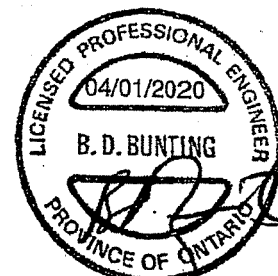
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift ($K_0=1.15$)	Uplift ($K_0=1.15$)
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 ($K_0=1.15$)	Uplift ($K_0=1.15$)
TC26	(5) 10d	(6) 10d x 1 1/2"	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) - 3/8" x 2 1/4" Titen screws has a factored uplift resistance of 275 lb.



**LIMIT
STATES
DESIGN**

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T-SPECTC20 3/20 exp. 6/22

(800) 999-5099
strongtie.com

HTU

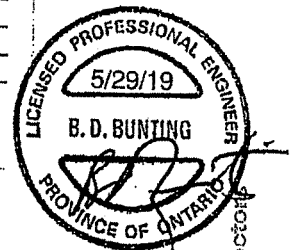
Face-Mount Truss Hanger (cont.)

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			
			Header	Joist	D.Fir-L		S-P-F	
					Uplift	Normal	Uplift	Normal
					(K _D = 1.15)	(K _D = 1.00)	(K _D = 1.15)	(K _D = 1.00)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
HTU26 (Min.)	3½"	(2) 2x4	(10) 16d	(14) 10d x 1½"	1740	3340	1235	2370
					7.74	14.86	5.49	10.54
HTU26 (Max.)	6½"	(2) 2x4	(10) 16d	(20) 10d x 1½"	2470	4015	1755	2850
					10.99	17.86	7.81	12.88
HTU28 (Max.)	3½"	(2) 2x6	(20) 16d	(26) 10d x 1½"	4150	6395	2945	4540
					18.46	28.45	13.10	20.19
HTU210 (Max.)	7¼"	(2) 2x6	(20) 16d	(32) 10d x 1½"	4150	6395	2945	4540
					18.46	28.45	13.10	20.19

See table footnotes on p. 280.

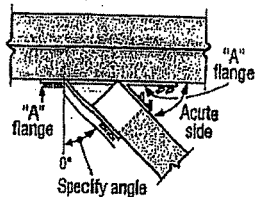


Hanger Options

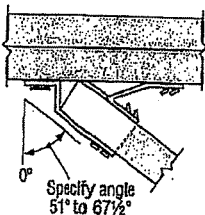
See Hanger Options Information on pp. 125-127.

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			
		Header	Joist	D.Fir-L		S-P-F	
				Uplift	Normal	Uplift	Normal
				(K _D = 1.15)	(K _D = 1.00)	(K _D = 1.15)	(K _D = 1.00)
				lbs	lbs	lbs	lbs
				kN	kN	kN	kN
HTU26	< 51	(20) 16d	(14) 10d x 1½"	1835	4110	1300	2905
				8.16	18.28	5.78	12.92
	51-67½	(20) 16d	(12) 10d x 1½"	1350	3620	955	2560
				6.01	16.10	4.25	11.39
HTU28	< 51	(26) 16d	(20) 10d x 1½"	2810	4270	1985	3030
				12.50	18.99	8.83	13.48
	51-67½	(26) 16d	(17) 10d x 1½"	2075	3930	1465	2780
				9.23	17.48	6.52	12.37
HTU210	< 51	(32) 16d	(26) 10d x 1½"	3785	4430	2675	3135
				16.84	19.71	11.90	13.95
	51-67½	(32) 16d	(22) 10d x 1½"	2795	4240	1980	3000
				12.43	18.86	8.81	13.35
HTU26-2	< 51	(20) 16d	(14) 10d	2140	3715	1515	2625
				9.52	16.63	6.74	11.68
	51-67½	(20) 16d	(12) 10d	1610	3920	1140	2785
				7.16	17.44	5.07	12.39
HTU28-2	< 51	(26) 16d	(20) 10d	3960	5425	2815	3855
				17.62	24.13	12.52	17.15
	51-67½	(26) 16d	(17) 10d	2385	5425	1695	3855
				10.61	24.13	7.54	17.15
HTU210-2	< 51	(32) 16d	(26) 10d	5025	6890	3570	4890
				22.35	30.65	15.88	21.75
	51-67½	(36) 16d	(22) 10d	3145	6680	2225	4745
				13.99	29.72	9.90	21.10

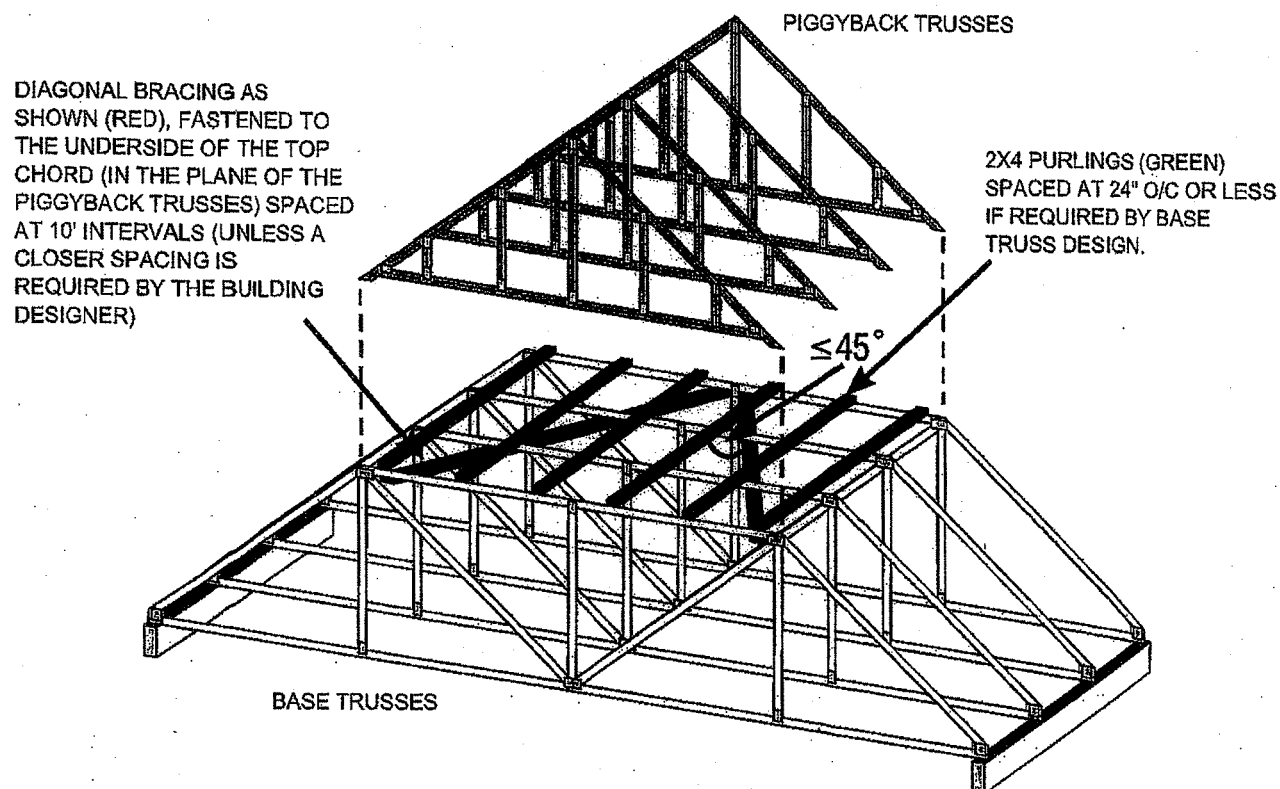
1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Reduced heel heights are not permitted for skewed HTU's.
3. Nails: 16d = 0.162" dia. x 3½" long, 10d x 1½" = 0.148" dia. x 1½" long, 10d = 0.148" dia. x 3" long. See pp. 27-28 for other nail sizes and information.

Overview:

Where piggybacks are connected ovetop 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

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.

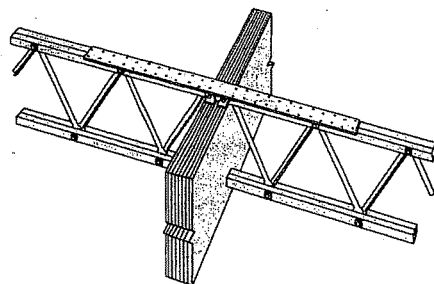
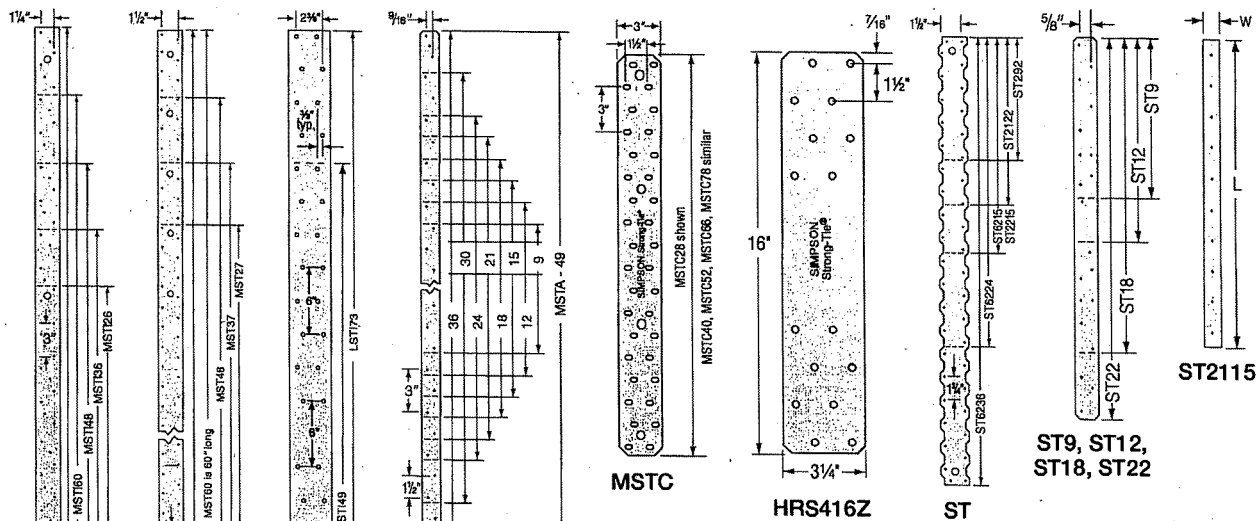
MSTC — High-capacity strap that utilizes a staggered nail pattern to help minimize wood splitting. Nail slots have been countersunk to provide a lower nail head profile.

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.

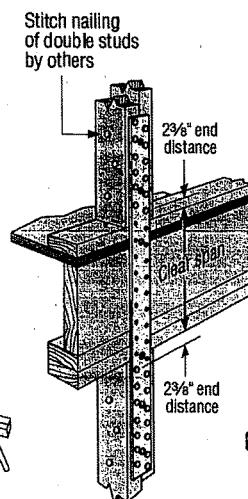
Installation: Use all specified fasteners; see General Notes

Options: Special sizes can be made to order; contact Simpson Strong-Tie for longer lengths

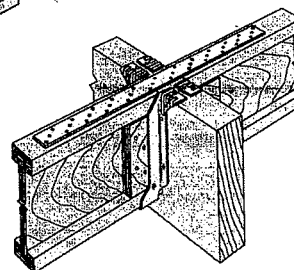
Straps and Ties



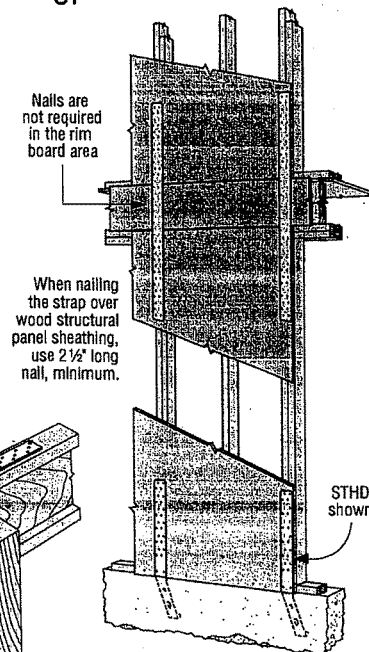
Typical LSTI Installation



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

HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI

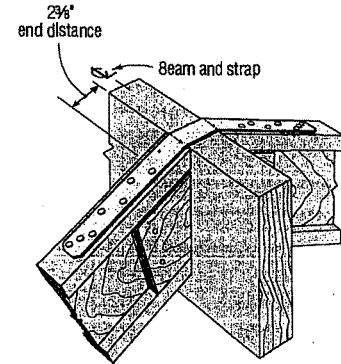
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.

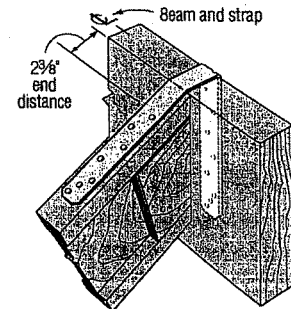


Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.)		Fasteners (Total)	Factored Tensile Resistance			
		W	L		D.Fir-L		S-P-F	
					(K ₀ = 1.00)	(K ₀ = 1.15)	(K ₀ = 1.00)	(K ₀ = 1.15)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
LSTA9	20	1¼	9	(6) 10d	600	690	555	635
					2.67	3.07	2.47	2.82
LSTA12		1¼	12	(8) 10d	800	920	735	845
					3.56	4.09	3.27	3.76
LSTA15		1¼	15	(10) 10d	1000	1150	920	1060
					4.45	5.12	4.09	4.72
LSTA18		1¼	18	(12) 10d	1200	1380	1105	1270
					5.34	6.14	4.92	5.65
LSTA21		1¼	21	(14) 10d	1400	1610	1290	1485
					6.23	7.16	5.74	6.61
LSTA24		1¼	24	(16) 10d	1600	1840	1475	1695
					7.12	8.19	6.56	7.54
ST292	20	2⅞	9⅞	(8) 8d	585	675	535	615
					2.60	3.00	2.38	2.74
ST2122		2⅞	12⅜	(12) 8d	940	1085	865	995
					4.18	4.83	3.85	4.43
ST2115		¾	16⅞	(8) 8d	670	770	615	710
					2.98	3.43	2.74	3.16
ST2215		2⅞	16⅞	(16) 8d	1335	1540	1235	1420
					5.94	6.85	5.49	6.32
LSTA30	18	1¼	30	(20) 10d	2235	2465	2075	2385
					9.94	10.97	9.23	10.61
LSTA36		1¼	36	(24) 10d	2465	2465	2465	2465
					10.97	10.97	10.97	10.97
LSTI49		¾	49	(32) 10d x 1½"	3115	3580	2852	3280
					13.86	15.93	12.69	14.59
LSTI73		¾	73	(48) 10d x 1½"	4670	5370	4280	4920
					20.77	23.89	19.04	21.89
MSTA9		1¼	9	(6) 10d	670	770	625	715
					2.98	3.43	2.78	3.18
MSTA12		1¼	12	(8) 10d	895	1030	830	955
					3.98	4.58	3.69	4.25
MSTA15	16	1¼	15	(10) 10d	1120	1285	1040	1195
					4.98	5.72	4.63	5.32
MSTA18		1¼	18	(12) 10d	1340	1545	1245	1430
					5.96	6.87	5.54	6.36
MSTA21		1¼	21	(14) 10d	1565	1800	1455	1670
					6.96	8.01	6.47	7.43
MSTA24		1¼	24	(16) 10d	1790	2060	1660	1910
					7.96	9.16	7.38	8.50
MSTA30		1¼	30	(20) 10d	2470	2840	2260	2595
					10.99	12.63	10.05	11.54
MSTA36		1¼	36	(24) 10d	2965	3070	2710	3070
					13.19	13.66	12.06	13.66
MSTA49	16	1¼	49	(28) 8d	2725	2725	2545	2725
					12.12	12.12	11.32	12.12
ST6215		2⅞	16⅞	(16) 8d	1405	1615	1300	1500
					6.25	7.18	5.78	6.67
ST6224		2⅞	23⅞	(24) 8d	2305	2650	2155	2475
					10.25	11.79	9.59	11.01
ST9		1¼	9	(6) 8d	525	605	490	560
					2.34	2.69	2.18	2.49
ST12		1¼	11⅞	(8) 8d	700	805	650	750
					3.11	3.58	2.89	3.34
ST18		1¼	17¾	(12) 8d	1050	1210	975	1125
					4.67	5.38	4.34	5.00
ST22	16	1¼	21⅞	(18) 8d	1580	1790	1485	1685
					7.03	7.96	6.52	7.50



Typical LSTA Installation
(hanger not shown)
Bend strap one time only



Typical LSTA Installation
(hanger not shown)
Bend strap one time only

- Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed.
- Use half of the nails in each member being connected to achieve the listed resistances.
- Nails: 10d = 0.148" dia. x 3" long, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long, 8d = 0.131" dia. x 2 1/2" long. See pp. 22–23 for other nail sizes and information.

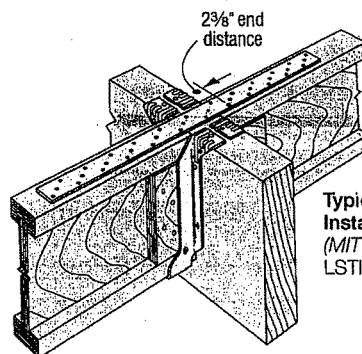
HRS/HST/ST/PS/LSTA/LSTI/MST/MSTA/MSTC/MSTI
Strap Ties (cont.)

These products are available with additional corrosion protection. For more information, see p. 20.

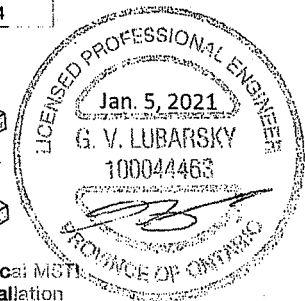
SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 366–370 for more information.

Model No.	Ga.	Dimensions (in.)		Fasteners (Total)	Factored Tensile Resistance			
		W	L		D.Fir-L		S-P-F	
					(K _D = 1.00)	(K _D = 1.15)	(K _D = 1.00)	(K _D = 1.15)
					lb.	lb.	lb.	lb.
					kN	kN	kN	kN
MSTC28	16	3	28¼	(32) 10d	3955	4545	3615	4155
					17.59	20.22	16.08	18.48
MSTC40		3	40¼	(48) 10d	5930	6820	5420	6235
					26.38	30.34	24.11	27.74
MSTC52		3	52¼	(54) 10d	6670	6940	6100	6940
					29.67	30.87	27.14	30.87
MSTC66	14	3	65¾	(66) 10d	8515	8565	7455	8565
					37.88	38.10	33.16	38.10
MSTC78		3	77¾	(66) 10d	8515	8565	7455	8565
					37.88	38.10	33.16	38.10
ST6236		2⅝	33⅞	(36) 8d	3735	4295	3270	3760
					16.61	19.11	14.55	16.73
MSTI26	12	2⅝	26	(22) 10d x 1 ½"	2825	3250	2475	2850
					12.57	14.46	11.01	12.68
MSTI36		2⅝	36	(32) 10d x 1 ½"	4110	4725	3600	4140
					18.28	21.02	16.01	18.42
MSTI48		2⅝	48	(44) 10d x 1 ½"	5650	6500	4955	5695
					25.13	28.91	22.04	25.33
MSTI60		2⅝	60	(56) 10d x 1 ½"	7195	7360	6305	7250
					32.01	32.74	28.05	32.25
MSTI72		2⅝	72	(68) 10d x 1 ½"	7360	7360	7240	7360
					32.74	32.74	32.21	32.74
MST27		2⅝	27	(26) 8d	2685	3090	2355	2710
					11.94	13.75	10.48	12.06
MST37		2⅝	37 ½	(38) 8d	3930	4515	3440	3960
					17.48	20.08	15.30	17.62
MST48		2⅝	48	(50) 8d	5170	5945	4530	5210
					23.00	26.45	20.15	23.18
HRS416Z		3¼	16	(16) ¼" x 1 ½" SDS	2400	2760	2120	2440
					10.68	12.28	9.43	10.85
MST60	10	2⅝	60	(64) 8d	6620	7610	5800	6670
					29.45	33.85	25.80	29.67
MST72		2⅝	72	(78) 8d	8065	9135	7065	8125
					35.88	40.64	31.43	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 1 1/2" = 0.148" dia. x 1 1/2" long, 8d = 0.131" dia. x 2 1/2" long. See pp. 22–23 for other nail sizes and information.

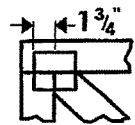


Typical MSTI
Installation
(MIT hanger shown)
LSTI similar

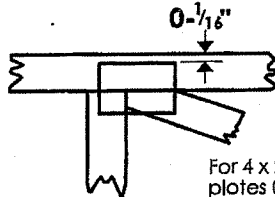


Symbols

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 0-1/16" 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

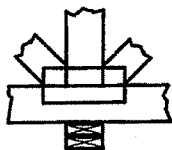
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

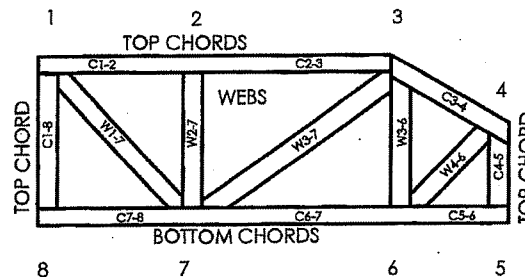
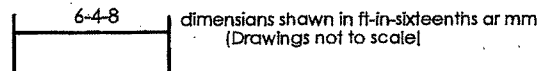


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

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



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: MII-7473C rev. 10-108

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.