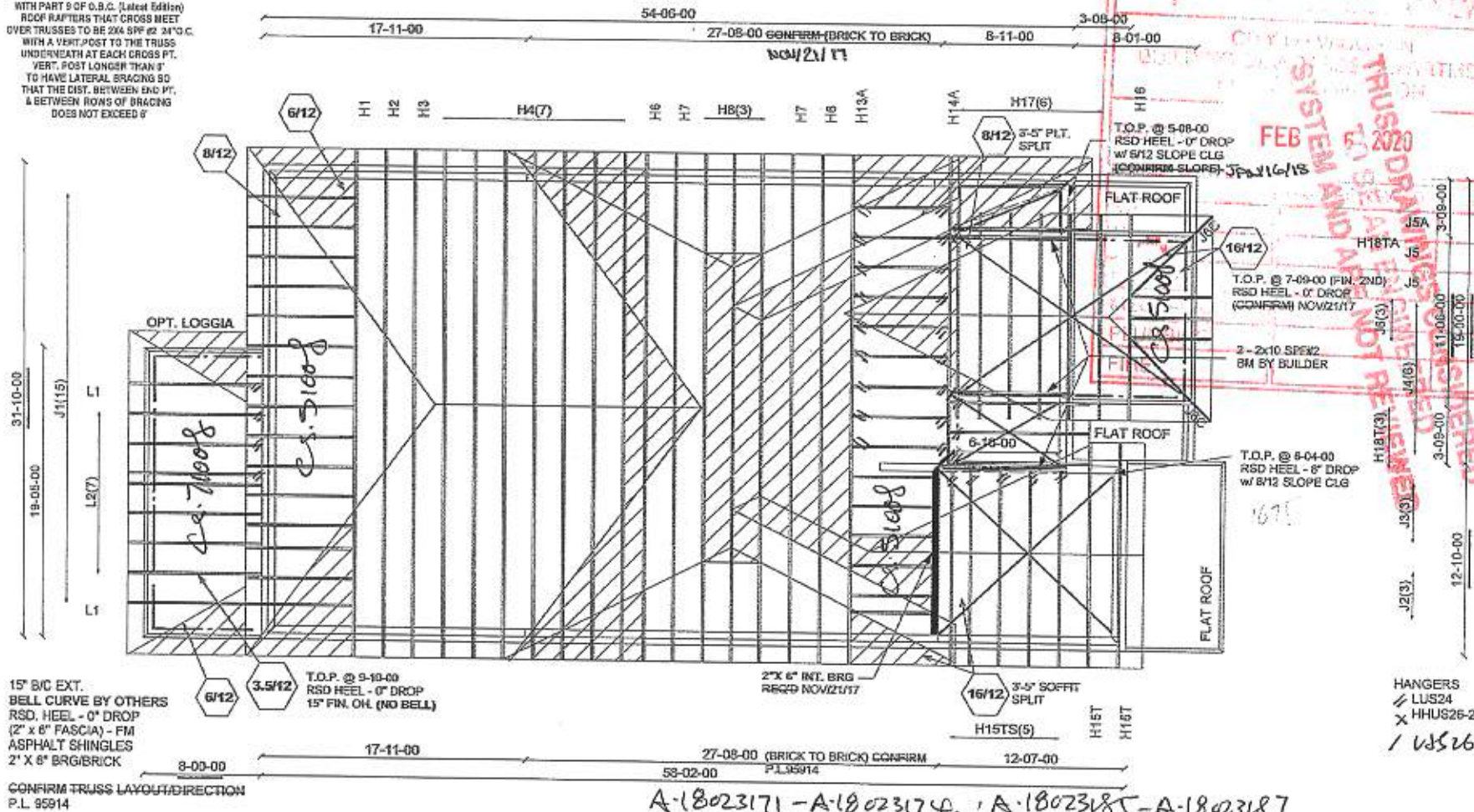


ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X6 SPP @ 24" O.C. WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'



A-18023171-A-18023174, A-18023185-A-18023187
A-18023195-A-18023208

HANGERS
✓ LUS24
X HHUS26-2
/ US2605

CONVENTIONAL FRAMING BY OTHERS



Job Track: 45147
Layout No: 292578
Plan No: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN
Project: **PINE VALLEY**
Date: 1/2/2018 Designer: AMANDA

GLENARDEN

Model / Elevation:
4003 REV1 / B

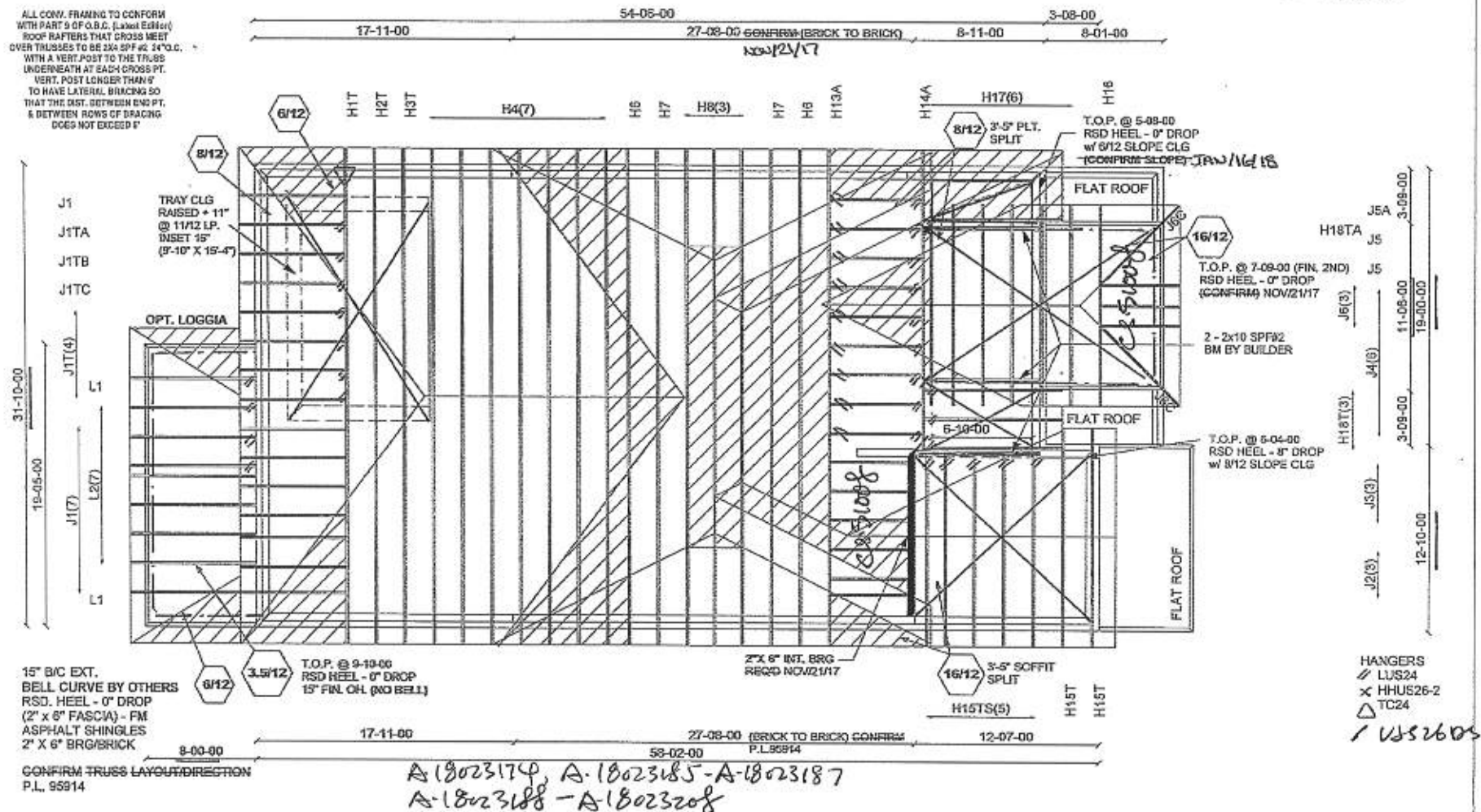
STD OR OPT LOGGIA

THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA 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 ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

20-120003-GLD-00-CM

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Local Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2x4 SPF #2 24" O.C. WITH A VERT. POST TO THE TRUSSES UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 9' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 9'



CONVENTIONAL FRAMING BY OTHERS

GLENARDEN



Job Track: 45147
Layout ID: 292579
Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN
Project: **PINE VALLEY**
Date: 1/3/2018 Designer: AMANDA

Model / Elevation:
4003 REV1 / B OPT TRAY
OR OPT LOGGIA

THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA 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 ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

Stracon Engineering Inc.

69 Graydon Crescent
Richmond Hill, Ontario
L4B 3W7
(905) 832-2250 Fax (905) 832-0286



RESPONSIBILITIES

1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities with jurisdictions.
3. All dimensions are to be verified by owner contractor, architect or other authority before manufacture.
4. Stracon Engineering Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Stracon Engineering Inc. drawings is specified for the truss as a component only and forms an integral part of the truss design.
5. It is the truss manufacture's responsibility to ensure that trusses are manufactured in conformance with Stracon Engineering Inc. specifications outlined below.

SPECIFICATIONS

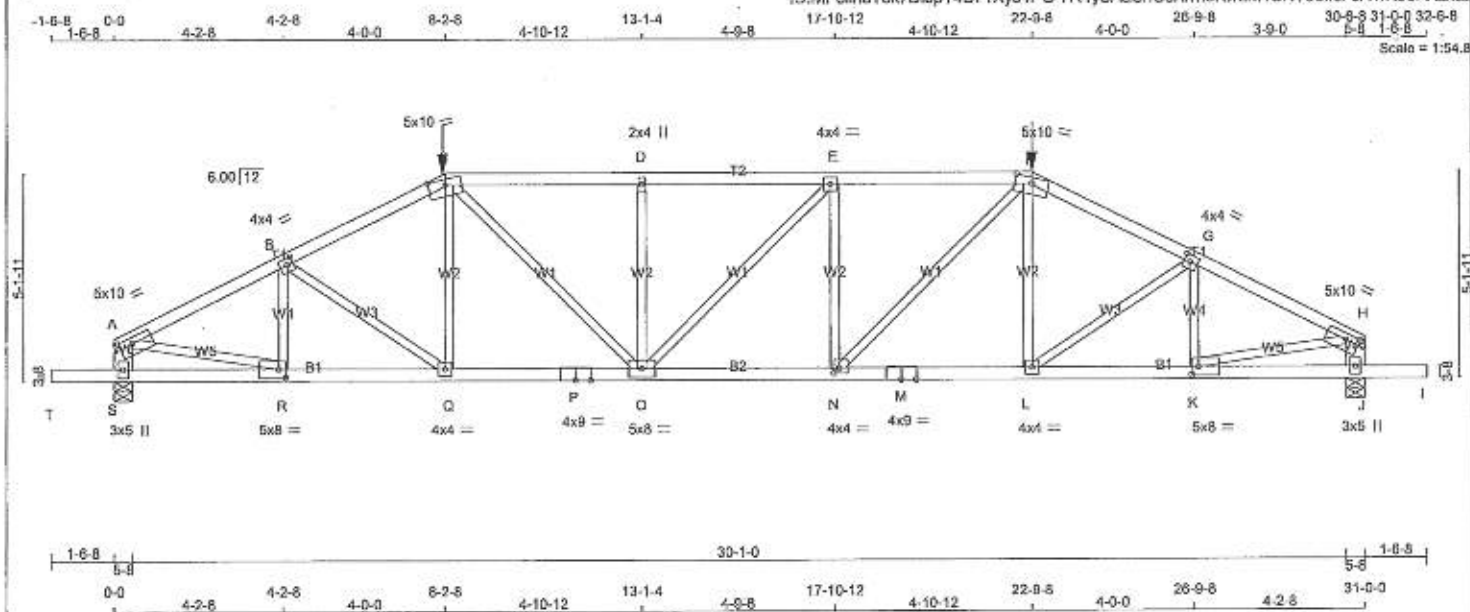
1. Trusses designed by Stracon Engineering Inc. conforms to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type indicated on the drawings as well as to the procedures established by the truss plate institute of Canada. Unit stresses used are as per CSA-086-09.
2. Lumber is to be the sizes and grade specified.
3. Moisture content of lumber is not to exceed 19% in service unless otherwise specified.
4. Lumber not to be treated with chemicals unless otherwise specified.
5. Plates shall be applied to both faces of the truss at each joint and shall be positioned as specified.
6. The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals not exceeding 12.5 times in thickness.
7. Where not rigid ceiling is attached directly to the bottom chord, laterally brace the chords at intervals not exceeding 3M (10') o.c.

January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292576	H1	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 Mitek Industries, Inc. Thu Feb 15 14:05:53 2018 Page 1
ID:MF8iiriaTok7DilpT4971Xys4PG-7R4ySAsShCsKmbKw2M1Siky3effcFJA1fRbeFXzktz



TOTAL WEIGHT = 128 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	BUILDING DESIGNER				SPECIFIED LOADS:			
CHORDS				REARINGS				TOP CH. LL = 21.0 PSF			
A - C	2x4	DRY	No.2	FACTORED				DL = 8.0 PSF			
C - F	2x4	DRY	1600F 1.5E	GROSS REACTION				BOT CH. LL = 0.0 PSF			
F - H	2x4	DRY	No.2	DOWN HORZ UPLIFT				DL = 7.4 PSF			
S - A	2x6	DRY	No.2	J T 2839 0 2839 0 0 5-8 3-13				TOTAL LOAD = 34.4 PSF			
J - H	2x6	DRY	No.2	J 2839 0 2839 0 0 5-8 3-13				SPACING = 24.0 IN. C/C			
T - P	2x4	DRY	No.2	UNFACTORED REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
P - M	2x4	DRY	No.2	1ST CASE MAX/MIN COMPONENT REACTIONS				ORDER TYPE: CPrimeHip			
M - I	2x4	DRY	No.2	J T COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOL				SIDE SETBACK = 8-2-8			
ALL WEBS	2x3	DRY	No.2	S 2088 1263 / 0 0 / 0 0 / 0 836 / 0 0 / 0				END SETBACK = 5-10-8			
EXCEPT				J 2088 1263 / 0 0 / 0 0 / 0 836 / 0 0 / 0				END WALL WIDTH = 0-0			
DRY: SEASONED LUMBER.				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, J				CORNER FRAMING TYPE: CONVENTIONAL			
				BRACING				END JACK TYPE: CONVENTIONAL			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94 FT.				APPLIED TO FRONT SIDE			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.				- ADDTL LOADS BASED ON 65 % OF GSL			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015			
				LOADING				THIS DESIGN COMPLIES WITH:			
				TOTAL LOAD CASES: (4)				- PART 9 OF ORC 2012, CBC 2018			
								- CSA 086-09, CSA 086-14			
								- TPIC 2011, TPIC 2014			
								(65 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD			
								ALLOWABLE DEFL.(LL) = L/360 (1.03')			
								CALCULATED VERT. DEFL.(LL) = L/999 (0.23')			
								ALLOWABLE DEFL.(TL) = L/360 (1.03')			
								CALCULATED VERT. DEFL.(TL) = L/817 (0.49')			
								CANTILEVER DEFLECTION:			
								ALLOWABLE DEFL.(LL) = L/120 (0.19')			
								CALCULATED VERT. DEFL.(LL) = L/999 (0.01')			
								ALLOWABLE DEFL.(TL) = L/120 (0.19')			
								CALCULATED VERT. DEFL.(TL) = L/999 (0.01')			
								CSI TC=0.68/1.00 (E-F), BC=0.66/1.00 (N-O:1),			
								WD=0.66/1.00 (H-K:1), SS=0.38/1.00 (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 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)			
								MAX MIN MAX MIN MAX MIN			
								MT20 618 354 1067 768 1967 1656			
								A-18023171			
								CONTINUED ON PAGE 2			

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TMWW-I	MT20	5.0	10.0	1.75	4.00
B TMWW-I	MT20	4.0	4.0	2.00	1.75
C TTWW-m	MT20	5.0	10.0	1.75	5.00
D TMWW-w	MT20	2.0	4.0		
E TMWW-I	MT20	4.0	4.0		
F TTWW-m	MT20	5.0	10.0	1.75	5.00
G TMWW-I	MT20	4.0	4.0	2.00	1.75
H TMWW-I	MT20	5.0	10.0	1.75	4.00
J BMV1+p	MT20	3.0	5.0		
K BMWW-I	MT20	5.0	8.0	2.50	2.00
L BMWW-I	MT20	4.0	4.0		
M BS-I	MT20	4.0	9.0		
N BMWW-I	MT20	4.0	4.0	1.50	1.50
O BMWW-I	MT20	5.0	8.0		
P BS-I	MT20	4.0	9.0		
Q BMWW-I	MT20	4.0	4.0		
R BMWW-I	MT20	5.0	8.0	2.50	2.00
S BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

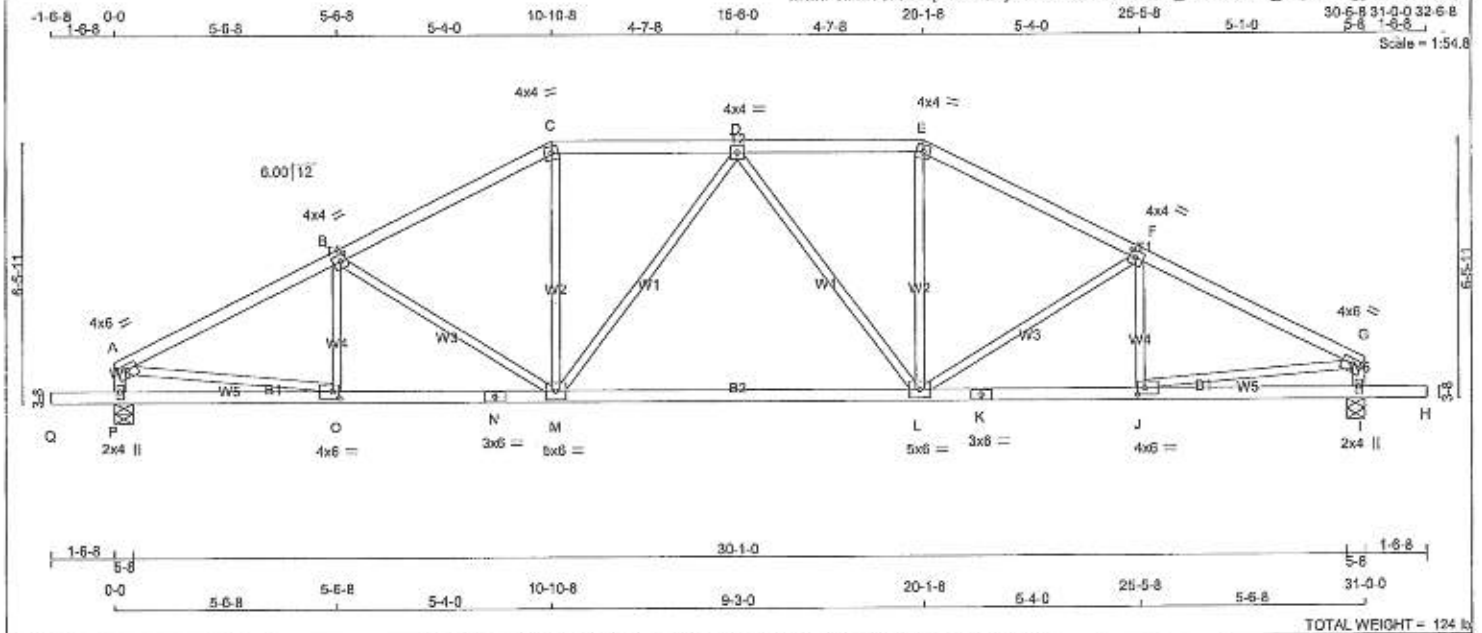
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292576	H2	1	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 8.200 8 Jan 6 2018 MITek Industries, Inc. Thu Feb 15 14:05:40 2018 Page 1
ID:MF8ilriaTok7DibpT4B71Xys4PG-FUQkJF8xden_7hNAQ2seE_AapoKmlgyTFUeOJzkyz



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	No.2	SPF	
P - A	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
K - 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
A	TMWV-1	MT20	4.0	6.0	1.50	2.75
B	TMWV-1	MT20	4.0	4.0	2.00	1.75
C	TTW-m	MT20	4.0	4.0		
D	TMWV-1	MT20	4.0	4.0		
E	TTW-m	MT20	4.0	4.0		
F	TMWV-1	MT20	4.0	4.0	2.00	1.75
G	TMWV-1	MT20	4.0	6.0	1.50	2.75
I	BMV1+p	MT20	2.0	4.0		
J	BMWV-1	MT20	4.0	6.0	2.00	2.00
K	BS-1	MT20	3.0	6.0		
L	BMWVW-1	MT20	5.0	6.0		
M	BMWVW-1	MT20	5.0	6.0		
N	BS-1	MT20	3.0	6.0		
O	BMWV-1	MT20	4.0	6.0	2.00	2.00
P	BMV1+p	MT20	2.0	4.0		

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1644	0	1644	0	5-8	2-7
I	1644	0	1644	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1172	715/0	0/0	0/0	0/0	457/0	0/0
I	1172	715/0	0/0	0/0	0/0	457/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.23 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)	LOAD LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO			FR-TO			
A-B	-2244 / 0	-78.0	-78.0	0.37 (1)	4.23	O-B	-176 / 4	0.04 (1)	
B-C	-1949 / 0	-78.0	-78.0	0.34 (1)	4.51	B-M	-361 / 0	0.27 (1)	
C-D	-1731 / 0	-78.0	-78.0	0.24 (1)	4.83	M-C	0 / 564	0.13 (1)	
D-E	-1731 / 0	-78.0	-78.0	0.24 (1)	4.83	M-D	-271 / 0	0.32 (1)	
E-F	-1949 / 0	-78.0	-78.0	0.34 (1)	4.51	D-L	-271 / 0	0.32 (1)	
F-G	-2244 / 0	-78.0	-78.0	0.37 (1)	4.23	L-E	0 / 564	0.13 (1)	
P-A	-1447 / 0	0.0	0.0	0.15 (1)	6.79	L-F	-361 / 0	0.27 (1)	
I-G	-1447 / 0	0.0	0.0	0.15 (1)	6.79	J-F	-176 / 4	0.04 (1)	
Q-P	0 / 0	-95.5	-95.5	0.16 (1)	10.00	A-Q	0 / 2043	0.46 (1)	
P-O	0 / 0	-18.5	-18.5	0.13 (4)	10.00	J-G	0 / 2043	0.46 (1)	
O-N	0 / 2026	-18.5	-18.5	0.46 (1)	10.00				
N-M	0 / 2026	-18.5	-18.5	0.46 (1)	10.00				
M-L	0 / 1892	-18.5	-18.5	0.44 (1)	10.00				
L-K	0 / 2026	-18.5	-18.5	0.46 (1)	10.00				
K-J	0 / 2026	-18.5	-18.5	0.46 (1)	10.00				
J-I	0 / 0	-18.5	-18.5	0.13 (4)	10.00				
I-H	0 / 0	-95.5	-95.5	0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. CG

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2015
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = 1/360 (1.03")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.09")
ALLOWABLE DEFL.(TL) = 1/360 (1.03")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.09")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = 1/120 (0.19")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.09")
ALLOWABLE DEFL.(TL) = 1/120 (0.19")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.09")

CSI: TC=0.37/1.00 (F-G:1), BC=0.46/1.00 (J-L:1), WS=0.46/1.00 (G-J:1), SSI=0.18/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 L.S BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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

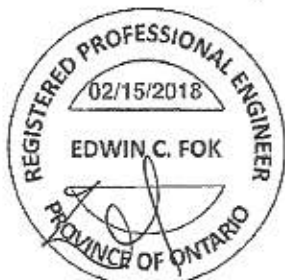
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1687 788 1687 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.83 (N) (INPUT = 1.00)

A-18023172



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292576	H3	1	1	TRUSS DESC.	

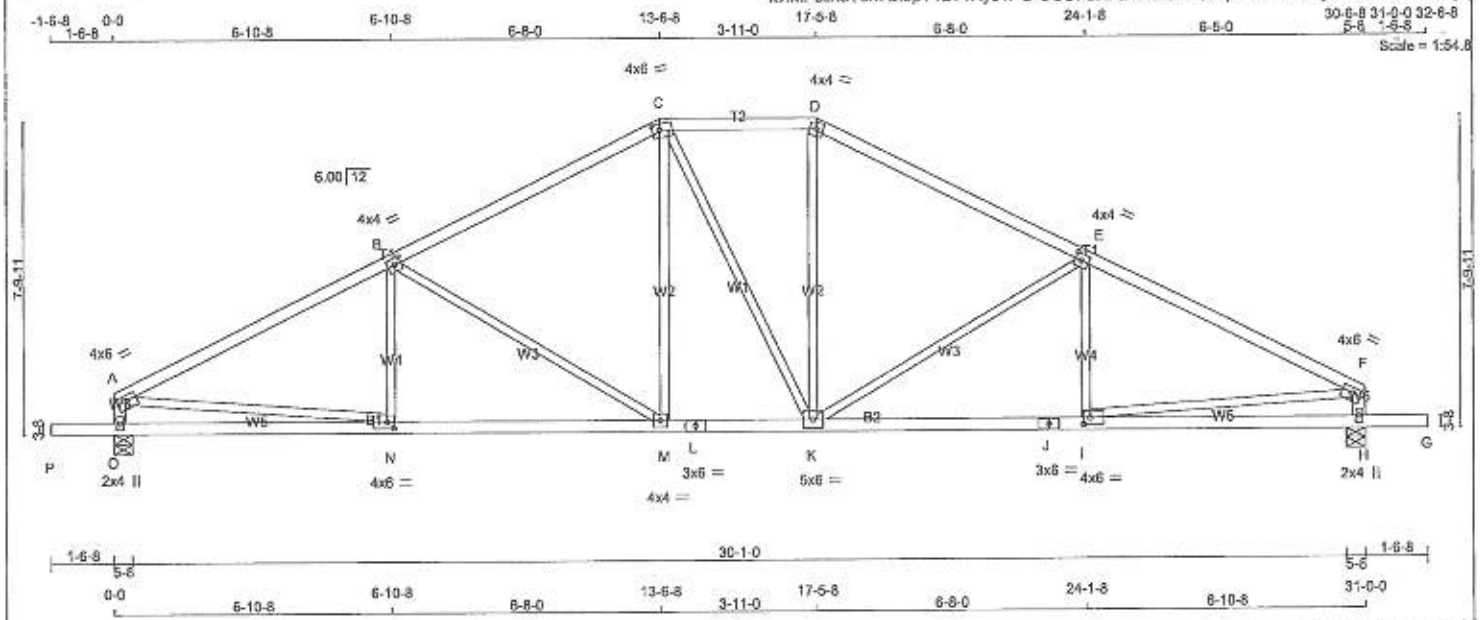
Alpha Roof Truss, Maple

Version 8.200 5 Jan 6 2018 MITek Industries, Inc. Thu Feb 15 14:05:49 2018 Page 1

ID:MF8iiraTok7DibpT4B71Xys4PG-UCS7CkFaVPwOZnT5CpM9k7sefRuyNhrGX99cDizkyq

30-6-8 31-0-0 32-6-8

Scale = 1:54.8

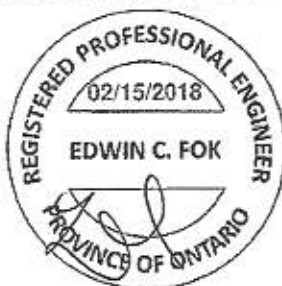


TOTAL WEIGHT = 127 lb

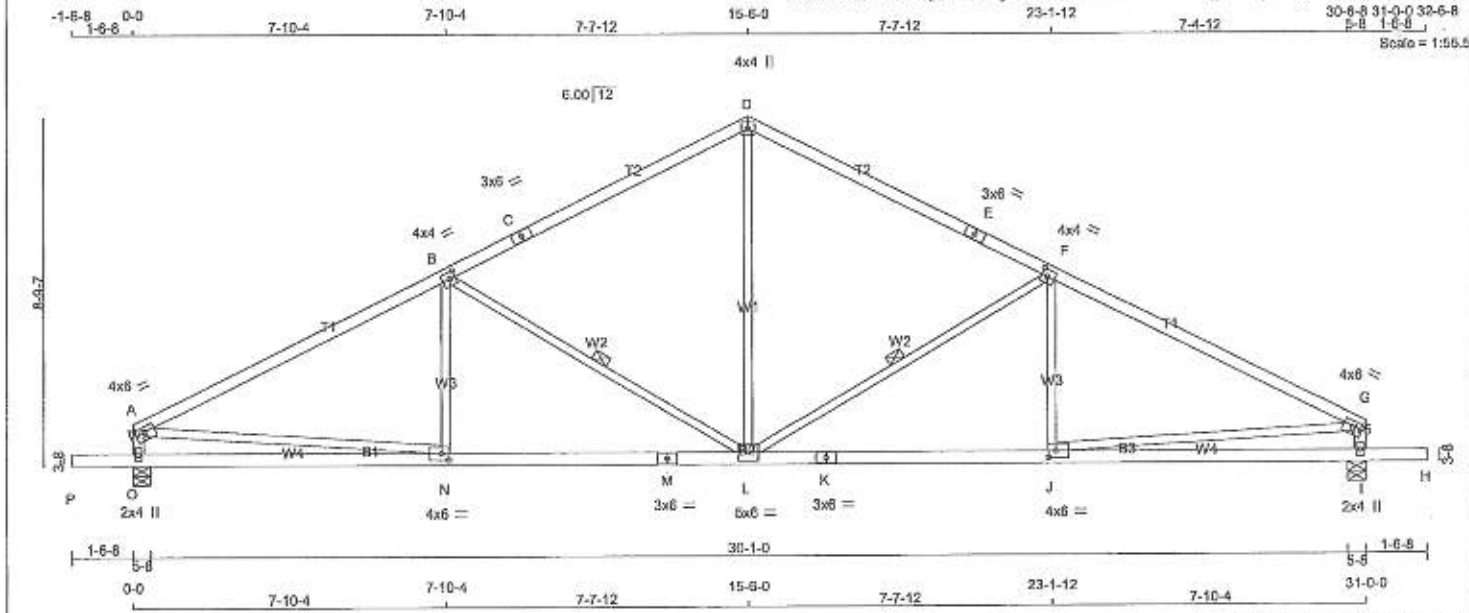
[M/F]

LUMBER				DESIGN CRITERIA			
N.L.G.A. RULES				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	TOP CH. LL = 21.0 PSF			
A - C	2x4	DRY	No.2	DL = 6.0 PSF			
C - D	2x4	DRY	No.2	BOT CH. LL = 0.0 PSF			
D - F	2x4	DRY	No.2	DL = 7.4 PSF			
O - A	2x4	DRY	No.2	TOTAL LOAD = 34.4 PSF			
H - F	2x4	DRY	No.2	SPACING = 24.0 IN. C/C			
P - L	2x4	DRY	No.2	LOADING IN FLAT SECTION BASED ON A			
L - J	2x4	DRY	No.2	SLOPE OF 2.00/12 MINIMUM			
J - G	2x4	DRY	No.2	THIS TRUSS IS DESIGNED FOR RESIDENTIAL			
ALL WEBS	2x3	DRY	No.2	OR SMALL BUILDING REQUIREMENTS OF			
EXCEPT				PART 9, NBCC 2010, NBCC 2015			
DRY, SEASONED LUMBER.				THIS DESIGN COMPLIES WITH:			
				- PART 9 OF OBC 2012, OBC 2018			
				- CSA 088-09, CSA 088-14			
				- TPIC 2011, TPIC 2014			
				(55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F.			
				RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED			
				ROOF LIVE LOAD			
				ALLOWABLE DEFL.(LL) = L/360 (1.03")			
				CALCULATED VERT. DEFL.(LL) = L/899 (0.09")			
				ALLOWABLE DEFL.(TL) = L/360 (1.03")			
				CALCULATED VERT. DEFL.(TL) = L/999 (0.21")			
				CANTILEVER DEFLECTION:			
				ALLOWABLE DEFL.(LL) = L/120 (0.19")			
				CALCULATED VERT. DEFL.(LL) = L/999 (0.01")			
				ALLOWABLE DEFL.(TL) = L/120 (0.19")			
				CALCULATED VERT. DEFL.(TL) = L/999 (0.01")			
				CS: TC=0.61/1.00 (A-B:1), BC=0.43/1.00 (M-N:1)			
				WB=0.81/1.00 (B-M:1), SB=0.73/1.00 (E-F:1)			
				DOL LUMBER=1.00 NAIL=1.00 L.S BEND=1.10			
				COMP=1.10 SHEAR=1.10 TENS=1.10			
				COMPANION LIVE LOAD FACTOR = 1.00			
				TRUSS PLATE MANUFACTURER IS NOT			
				RESPONSIBLE FOR QUALITY CONTROL IN			
				THE TRUSS MANUFACTURING PLANT.			
				NAIL VALUES			
				PLATE GRIP(DRY) SHEAR SECTION			
				(PSI) (PLI) (PLI)			
				MAX MIN MAX MIN MAX MIN			
				MT20 618 354 1667 788 1587 1658			
				PLATE PLACEMENT TOL. = 0.250 inches			
				PLATE ROTATION TOL. = 5.0 Deg.			
				JSI GRIP= 0.85 (N) (INPUT = 0.80)			
				JSI METAL= 0.63 (J) (INPUT = 1.00)			

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023173



LUMBER

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

DRY, SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-1	MT20	4.0	6.0	1.50	2.75
B	TMWV-1	MT20	4.0	4.0	2.00	1.75
C	TS-1	MT20	3.0	6.0		
D	TTWV-p	MT20	4.0	4.0		
F	TS-1	MT20	3.0	6.0		
G	TMWV-1	MT20	4.0	4.0	2.00	1.75
I	TMWV-1	MT20	4.0	6.0	1.50	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BMWV-1	MT20	4.0	6.0	2.00	2.25
L	BS-1	MT20	3.0	6.0		
M	BMWVW-1	MT20	5.0	6.0		
N	BS-1	MT20	3.0	6.0		
O	BMWV-1	MT20	4.0	6.0	2.00	2.25
O	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	VERT	HCRZ	DOWN	HCRZ	UPLIFT	IN-SX	BRG	IN-SX
O	1644	0	1644	0	0	5-8	2-7	2-7
I	1644	0	1644	0	0	5-8	2-7	2-7

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
O	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0
I	1172	715 / 0	0 / 0	0 / 0	0 / 0	457 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.64 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 F-L, B-L.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRACED LENGTH	MEMB.	WEBS		MAX. UNBRACED LENGTH
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. FACTORED FORCE (LBS)			MAX. CSI (LC)		
FR-TO		FROM TO				FR-TO			
A-B	-2233 / 0	-78.0 -78.0	0.83 (1)	3.84		L-D	0 / 928	0.21 (1)	
B-C	-1572 / 0	-78.0 -78.0	0.70 (1)	4.33		L-F	-760 / 0	0.42 (1)	
C-D	-1572 / 0	-78.0 -78.0	0.70 (1)	4.33		J-F	-30 / 109	0.04 (1)	
D-E	-1572 / 0	-78.0 -78.0	0.70 (1)	4.33		B-L	-760 / 0	0.42 (1)	
E-F	-1572 / 0	-78.0 -78.0	0.70 (1)	4.33		N-B	-30 / 109	0.04 (1)	
F-G	-2233 / 0	-78.0 -78.0	0.83 (1)	3.84		A-N	0 / 2035	0.46 (1)	
O-A	-1435 / 0	0.0 0.0	0.14 (1)	6.82		J-G	0 / 2035	0.46 (1)	
I-G	-1435 / 0	0.0 0.0	0.14 (1)	6.82					
P-O	0 / 0	-96.5 -96.5	0.16 (1)	10.00					
O-N	0 / 0	-18.5 -18.5	0.26 (4)	10.00					
N-M	0 / 2026	-18.5 -18.5	0.46 (1)	10.00					
M-L	0 / 2026	-18.5 -18.5	0.46 (1)	10.00					
L-K	0 / 2026	-18.5 -18.5	0.46 (1)	10.00					
K-J	0 / 2026	-18.5 -18.5	0.46 (1)	10.00					
J-I	0 / 0	-18.5 -18.5	0.26 (4)	10.00					
I-H	0 / 0	-96.5 -96.5	0.16 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	6.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD = 34.4 PSF				

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 8, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2016
- CSA 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (1.03")

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

ALLOWABLE DEFL.(TL) = $L/360$ (1.03")

CALCULATED VERT. DEFL.(TL) = $L/999$ (0.22")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL) = $L/120$ (0.10")

CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")

ALLOWABLE DEFL.(TL) = $L/120$ (0.10")

CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.83/1.00 (F-G:1), BC=0.46/1.00 (J-L:1), WB=0.48/1.00 (G-J:1), SS=0.28/1.00 (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 (PSI)	SECTION (PL)	(PL)	(PL)
MT20	618	354	1687	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.62 (M) (INPUT = 1.00)

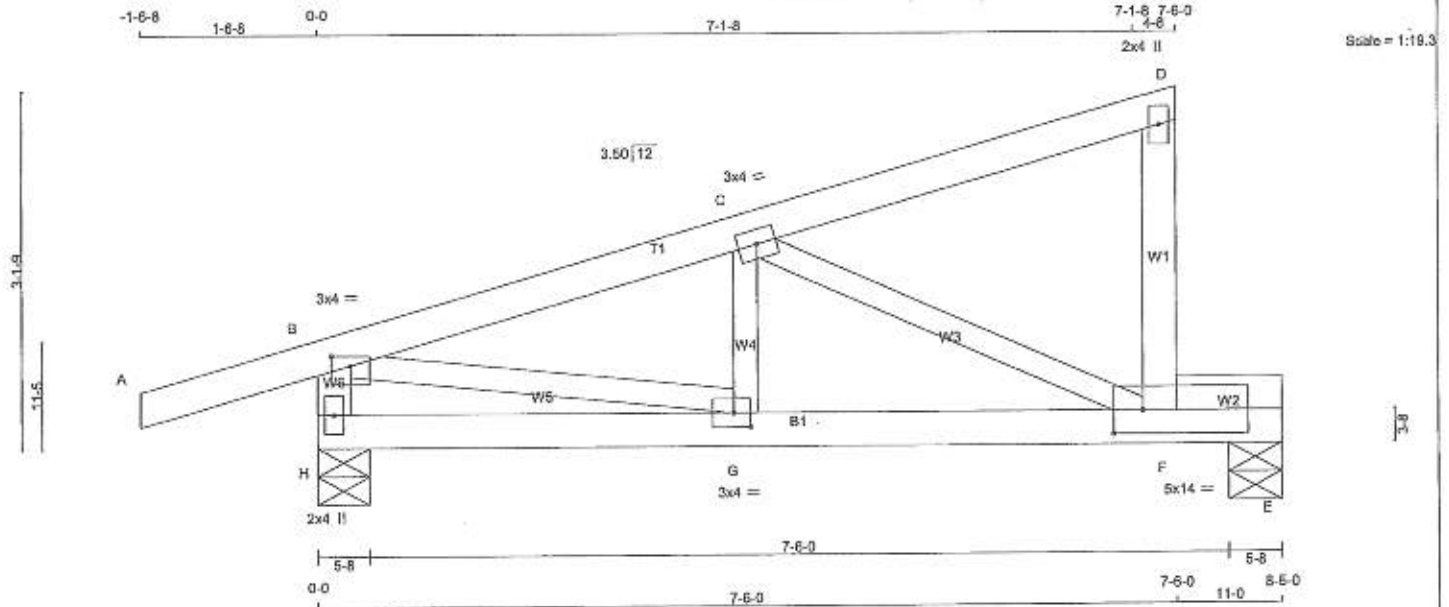
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292576	L2	4	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 8.200 3 Jan 6 2018 MTek Industries, Inc. Thu Feb 15 14:23:02 2018 Page 1
ID:MF8IrlaTok7DlbpT4B71Xys4PG-V0zQ01vMMVKovm5ifJKUf1SgyNrvAUH1MctOzktjd



TOTAL WEIGHT = 4 X 32 = 127 lb

LUMBER

N.L.G.A. RULES

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
R	TMVW-p	MT20	3.0	4.0	1.00 2.00
C	TMVW-4	MT20	3.0	4.0	
D	TMV-p	MT20	2.0	4.0	
F	BMVW-4	MT20	5.0	14.0	2.50 3.00
G	BMVW-4	MT20	3.0	4.0	1.50 1.75
H	BMV1-p	MT20	2.0	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	RECORD BRG
	VERT	HORZ	DOWN	HORZ
JT	525	0	525	0
H	525	0	525	0
E	338	0	338	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOL
JT	COMBINED	SNOW	LIVE	PERM.LIVE	
H	372	241 / 0	0 / 0	0 / 0	131 / 0
E	243	140 / 0	0 / 0	0 / 0	102 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, 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)	MAX. CSF (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSF (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 17	-78.0 -78.0	0.14 (1)	10.00	G-C	0 / 102	0.04 (4)
B-C	-812 / 0	-78.0 -78.0	0.13 (1)	6.25	B-G	0 / 605	0.14 (1)
C-D	-9 / 0	-78.0 -78.0	0.12 (1)	10.00	C-F	-857 / 0	0.18 (1)
F-D	-115 / 0	0.0 0.0	0.02 (1)	7.61			
H-B	-614 / 0	0.0 0.0	0.05 (1)	7.61			
H-G	0 / 0	-18.5 -18.5	0.12 (4)	10.00			
G-F	0 / 588	-18.5 -18.5	0.51 (1)	10.00			
F-E	0 / 0	-18.5 -18.5	0.17 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 34.4 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBC 2012, OBC 2018
- CSA 088-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/812 (0.11")

CSE TC=0.14/1.00 (A-B:1), BC=0.81/1.00 (F-O:1),
WB=0.18/1.00 (C-F:1), SS=0.13/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LB 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 (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1687 788	1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

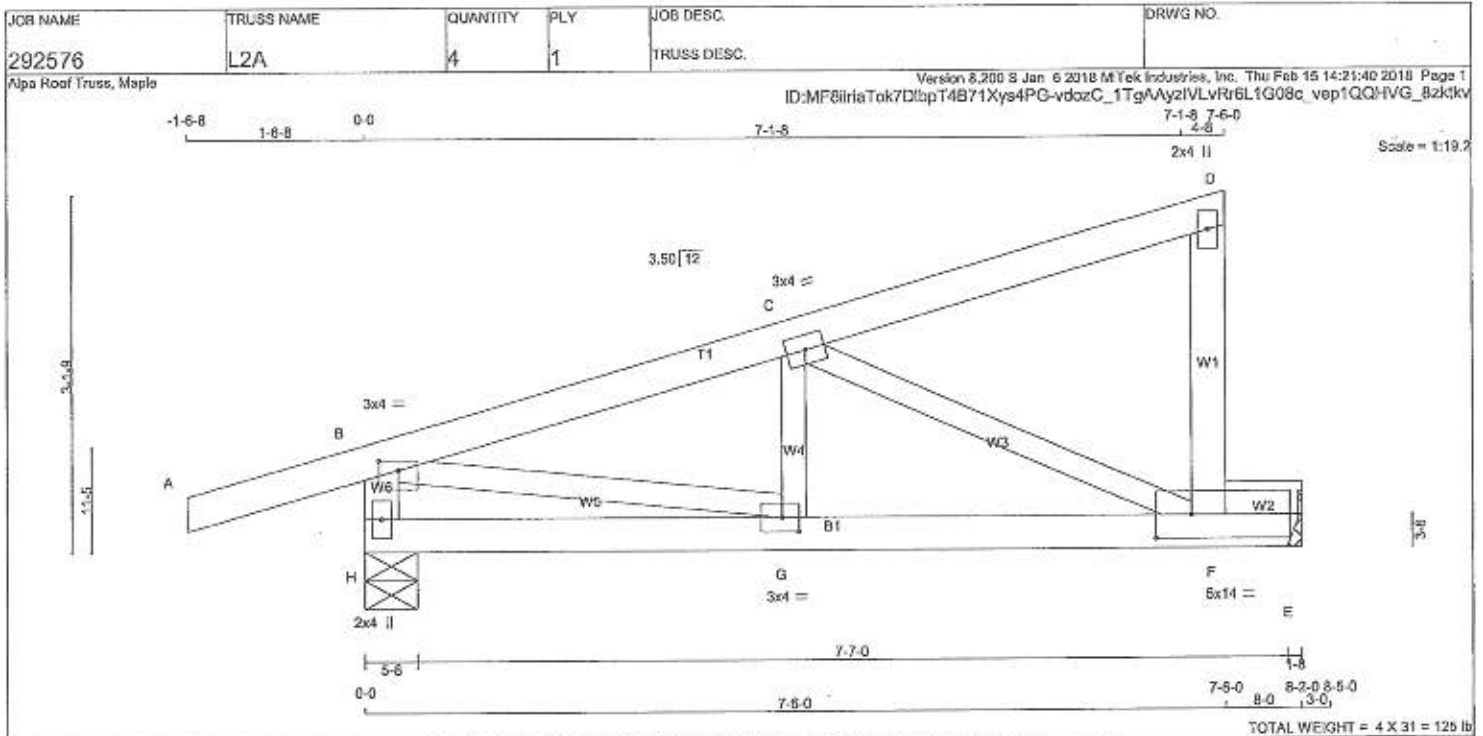
JSI GRIP= 0.84 (G) (INPUT = 0.80)

JSI METAL= 0.23 (B) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023186



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

PLATES (table is in inches)	JT TYPE	PLATES	W	L	Y	X
B	TMVW-p	MT20	3.0	4.0	1.00	2.00
C	TMVW-1	MT20	3.0	4.0		
D	TMVW-p	MT20	2.0	4.0		
F	BMVWV-1	MT20	5.0	14.0	2.50	3.75
G	BMVW-1	MT20	3.0	4.0	1.50	1.75
H	BMV1-p	MT20	2.0	4.0		

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

BEARINGS								
JT	FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	515	0		515	0	0	5-8	1-8
E	344	0		344	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOL
H	365	237 / 0	0 / 0	0 / 0	0 / 0	128 / 0	0 / 0
E	248	145 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO		FROM TO			FR-TO		
A-B	0 / 17	-75.0	-75.0	0.14 (1)	10.00	G-C	0 / 91
B-C	-575 / 0	-75.0	-75.0	0.13 (1)	6.25	B-G	0 / 572
C-D	-9 / 0	-75.0	-75.0	0.13 (1)	10.00	C-F	-521 / 0
F-D	-114 / 0	0.0	0.0	0.02 (1)	7.81		
H-B	-199 / 0	0.0	0.0	0.05 (1)	7.81		
H-G	0 / 0	-18.5	-18.5	0.11 (4)	10.00		
G-F	0 / 584	-18.5	-18.5	0.40 (1)	10.00		
F-E	0 / 0	-18.5	-18.5	0.13 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH	LL =	21.0	PSF
	DL =	6.0	PSF
BOT CH	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, CBC 2018
- CSA 086-09, CSA 085-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.27")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.14/1.00 (A-B:1), BC=0.40/1.00 (F-G:1), WB=0.17/1.00 (C-F:1), SB=0.13/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE 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)	(PL)
MAX	MIN	MAX	MIN
MT20	516	354	1557
	1557	789	1557

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

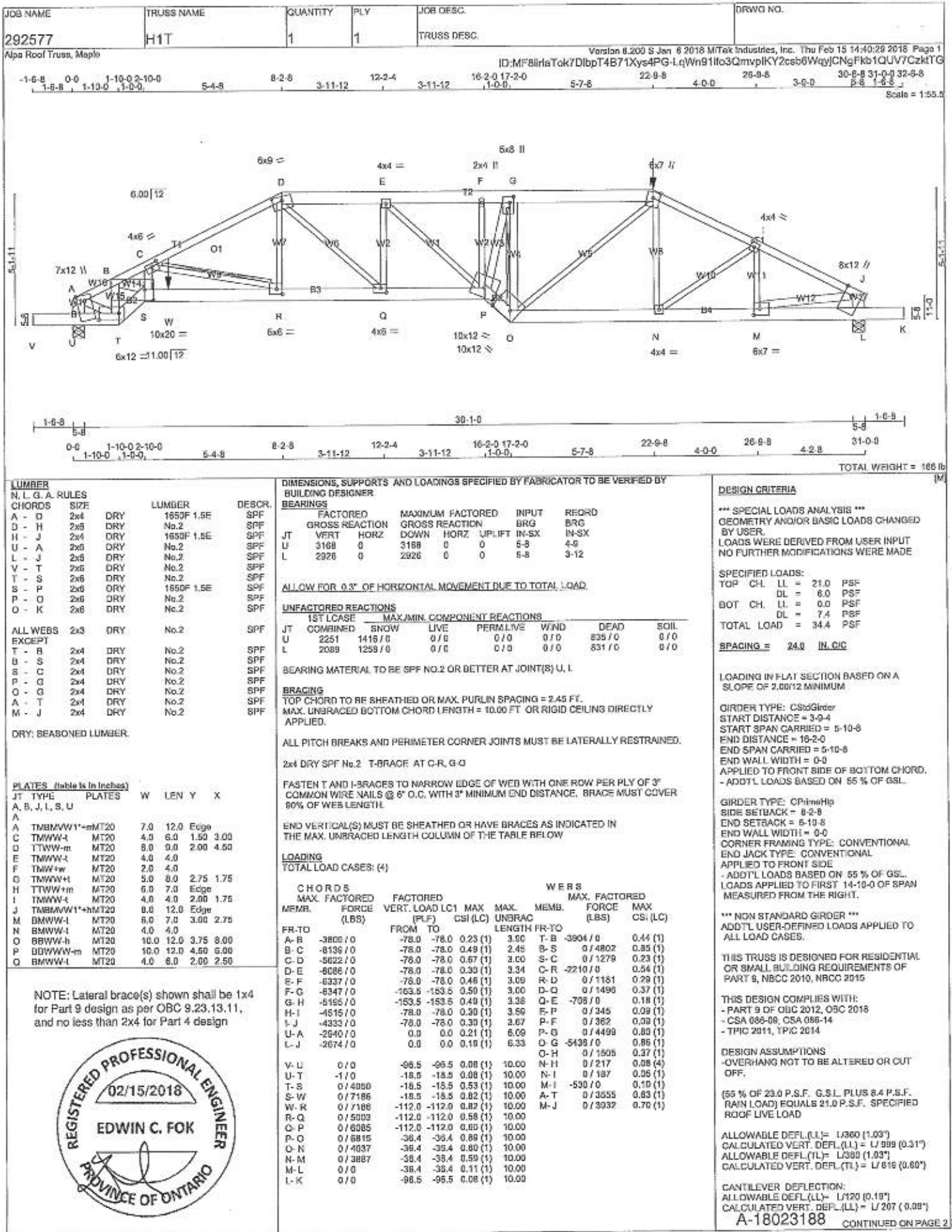
JSI GRIP= 0.79 (G) (INPUT = 0.99)

JSI METAL= 0.21 (B) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023187



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292577	H1T	1	1	TRUSS DESC.	

Alpe Roof Truss, Maple

Version 6.200 8 Jan 6 2018 Mitek Industries, Inc. Thu Feb 15 14:40:29 2018 Page 2
ID:MF8IriaTok7DlbpT4B71Xys4PG-LqWn91lfo3QmvpIKY2csb5WqyCNgFkb1QUV7Czk1TG

PLATES (Table is in inches) <table border="1"> <tr> <th>JT</th> <th>TYPE</th> <th>PLATES</th> <th>W</th> <th>LEN</th> <th>Y</th> <th>X</th> </tr> <tr> <td>R</td> <td>BMWV-I</td> <td>MT20</td> <td>6.0</td> <td>6.0</td> <td>2.50</td> <td>2.50</td> </tr> <tr> <td>S</td> <td>TMBBWWV-I</td> <td>MT20</td> <td>10.0</td> <td>20.0</td> <td>5.00</td> <td>4.25</td> </tr> <tr> <td>T</td> <td>BBWW-I</td> <td>MT20</td> <td>6.0</td> <td>12.0</td> <td>3.00</td> <td>9.50</td> </tr> </table>		JT	TYPE	PLATES	W	LEN	Y	X	R	BMWV-I	MT20	6.0	6.0	2.50	2.50	S	TMBBWWV-I	MT20	10.0	20.0	5.00	4.25	T	BBWW-I	MT20	6.0	12.0	3.00	9.50	FACTORED CONCENTRATED LOADS (LBS) <table border="1"> <tr> <th>JT</th> <th>LOC.</th> <th>LC1</th> <th>MAX-</th> <th>MAX+</th> <th>FACE</th> <th>DIR.</th> <th>TYPE</th> </tr> <tr> <td>H</td> <td>22-8-8</td> <td>-467</td> <td>-467</td> <td>-</td> <td>FRONT</td> <td>VERT</td> <td>TOTAL</td> </tr> <tr> <td>W</td> <td>3-8-4</td> <td>-467</td> <td>-467</td> <td>-</td> <td>FRONT</td> <td>VERT</td> <td>TOTAL</td> </tr> </table>		JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	H	22-8-8	-467	-467	-	FRONT	VERT	TOTAL	W	3-8-4	-467	-467	-	FRONT	VERT	TOTAL	ALLOWABLE DEFL.(TL)= L/120 (0.18") CALCULATED VERT. DEFL.(TL) = L/120 (0.17") CSI: TC=0.67/1.00 (C-D:1) , BC=0.88/1.00 (D-P:1) , WB=0.88/1.00 (G-O:1) , SSI=0.41/1.00 (F-O:1) OOL 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 HFFLS OFF TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES <table border="1"> <tr> <th>PLATE</th> <th>GRIP(DRY)</th> <th>SHEAR</th> <th>SECTION</th> </tr> <tr> <td></td> <td>(PSI)</td> <td>(PLI)</td> <td>(PLI)</td> </tr> <tr> <td></td> <td>MAX MIN</td> <td>MAX MIN</td> <td>MAX MIN</td> </tr> <tr> <td>MT20</td> <td>618 354</td> <td>1667 789</td> <td>1887 1858</td> </tr> </table>		PLATE	GRIP(DRY)	SHEAR	SECTION		(PSI)	(PLI)	(PLI)		MAX MIN	MAX MIN	MAX MIN	MT20	618 354	1667 789	1887 1858
JT	TYPE	PLATES	W	LEN	Y	X																																																																			
R	BMWV-I	MT20	6.0	6.0	2.50	2.50																																																																			
S	TMBBWWV-I	MT20	10.0	20.0	5.00	4.25																																																																			
T	BBWW-I	MT20	6.0	12.0	3.00	9.50																																																																			
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE																																																																		
H	22-8-8	-467	-467	-	FRONT	VERT	TOTAL																																																																		
W	3-8-4	-467	-467	-	FRONT	VERT	TOTAL																																																																		
PLATE	GRIP(DRY)	SHEAR	SECTION																																																																						
	(PSI)	(PLI)	(PLI)																																																																						
	MAX MIN	MAX MIN	MAX MIN																																																																						
MT20	618 354	1667 789	1887 1858																																																																						

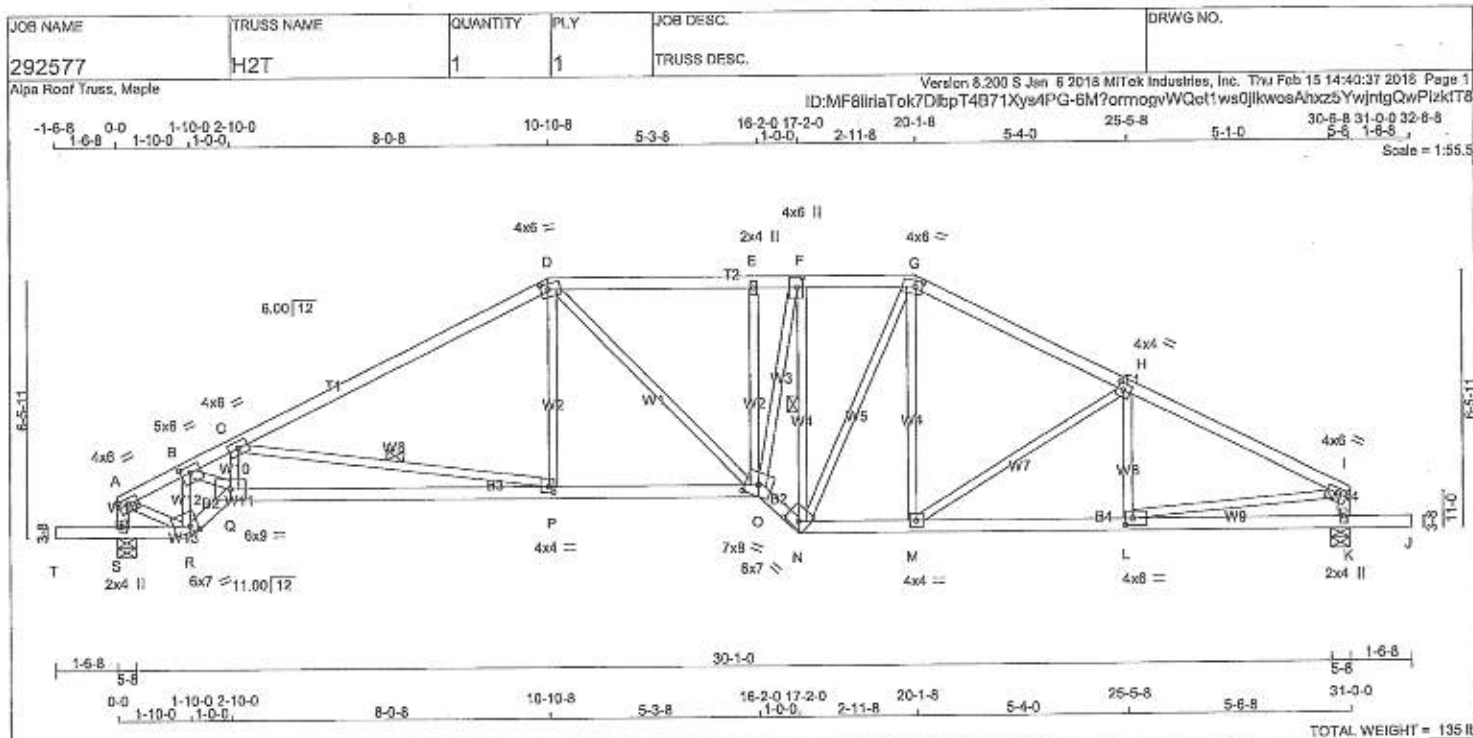
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

HANGERS NOTES
 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 466.7 lbs FACTORED DOWN AT 22-8-8 ON TOP CHORD, AND 467.4 lbs FACTORED DOWN AT 3-8-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023188(2)



LUMBER			
N.L.G.A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
S - A	2x4	DRY	No.2
K - I	2x4	DRY	No.2
T - R	2x4	DRY	No.2
R - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - N	2x4	DRY	No.2
N - J	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	TMVW-I	MT20	4.0	8.0	1.75 Edge
B	TMVW-I	MT20	5.0	6.0	2.00 2.75
C	TMVW-I	MT20	4.0	6.0	
D	TTWW-m	MT20	4.0	6.0	1.75 2.25
E	TMVW-w	MT20	2.0	4.0	
F	TMVW-h	MT20	4.0	6.0	3.00 1.50
G	TTWW-m	MT20	4.0	6.0	1.75 2.25
H	TMVW-I	MT20	4.0	4.0	2.00 1.75
I	TMVW-I	MT20	4.0	6.0	1.50 2.75
K	BMV1+p	MT20	2.0	4.0	
L	BMVW-I	MT20	4.0	6.0	2.00 2.00
M	BMVW-I	MT20	4.0	4.0	
N	BMVW-h	MT20	6.0	7.0	2.00 4.00
O	BSVW-m	MT20	7.0	8.0	3.25 4.00
P	BMVW-I	MT20	4.0	4.0	1.50 1.50
Q	BSVW-I	MT20	6.0	9.0	
R	BSVW-m	MT20	6.0	7.0	1.75 2.25
S	BMV1+p	MT20	2.0	4.0	

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

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	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
S	1648	0	1648	0	0	5-8	2-7		
K	1640	0	1640	0	0	5-8	2-7		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN		COMPONENT REACTIONS		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERALIVE	WIND				
S	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0		
K	1169	714 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.01 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 C, P, F-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	-1851 / 0	-78.0 -78.0 0.18 (1)	5.00	R-B	-1810 / 0	0.26 (1)	
B-C	-3640 / 0	-78.0 -78.0 0.81 (1)	3.01	Q-Q	0 / 2462	0.55 (1)	
C-D	-2273 / 0	-78.0 -78.0 0.81 (1)	3.69	Q-C	0 / 123	0.04 (4)	
D-E	-2230 / 0	-78.0 -78.0 0.33 (1)	4.28	C-P	-1453 / 0	0.67 (1)	
E-F	-2223 / 0	-78.0 -78.0 0.21 (1)	4.40	P-D	0 / 358	0.08 (4)	
F-G	-1861 / 0	-78.0 -78.0 0.11 (1)	4.84	D-O	0 / 301	0.07 (1)	
G-H	-1829 / 0	-78.0 -78.0 0.34 (1)	4.53	O-E	-364 / 0	0.17 (1)	
H-I	-2243 / 0	-78.0 -78.0 0.37 (1)	4.23	C-F	0 / 1915	0.43 (1)	
S-A	-1419 / 0	0.0 0.0 0.14 (1)	6.84	N-F	-1853 / 0	0.53 (1)	
K-I	-1447 / 0	0.0 0.0 0.16 (1)	6.79	N-G	0 / 350	0.08 (1)	
				M-G	0 / 279	0.08 (1)	
T-S	0 / 0	-98.5 -98.5 0.16 (1)	10.00	M-H	-381 / 0	0.29 (1)	
S-R	0 / 0	-18.5 -18.5 0.12 (1)	10.00	L-H	-188 / 25	0.04 (1)	
R-Q	0 / 1789	-18.5 -18.5 0.29 (1)	10.00	A-R	0 / 1549	0.35 (1)	
Q-P	0 / 3444	-18.5 -18.5 0.71 (1)	10.00	L-I	0 / 2042	0.46 (1)	
P-O	0 / 2016	-18.5 -18.5 0.48 (1)	10.00				
O-N	0 / 2480	-18.5 -18.5 0.40 (1)	10.00				
N-M	0 / 1709	-18.5 -18.5 0.32 (1)	10.00				
M-L	0 / 2025	-18.5 -18.5 0.37 (1)	10.00				
L-K	0 / 0	-18.5 -18.5 0.12 (1)	10.00				
K-J	0 / 0	-98.5 -98.5 0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/599 (0.37")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/404 (0.09")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/208 (0.09")

CSI: TC=0.81/1.00 (C-D-1), BC=0.71/1.00 (P-Q-1), WB=0.87/1.00 (C-P-1), SSI=0.37/1.00 (B-C-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) (FLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 6.0 Deg.

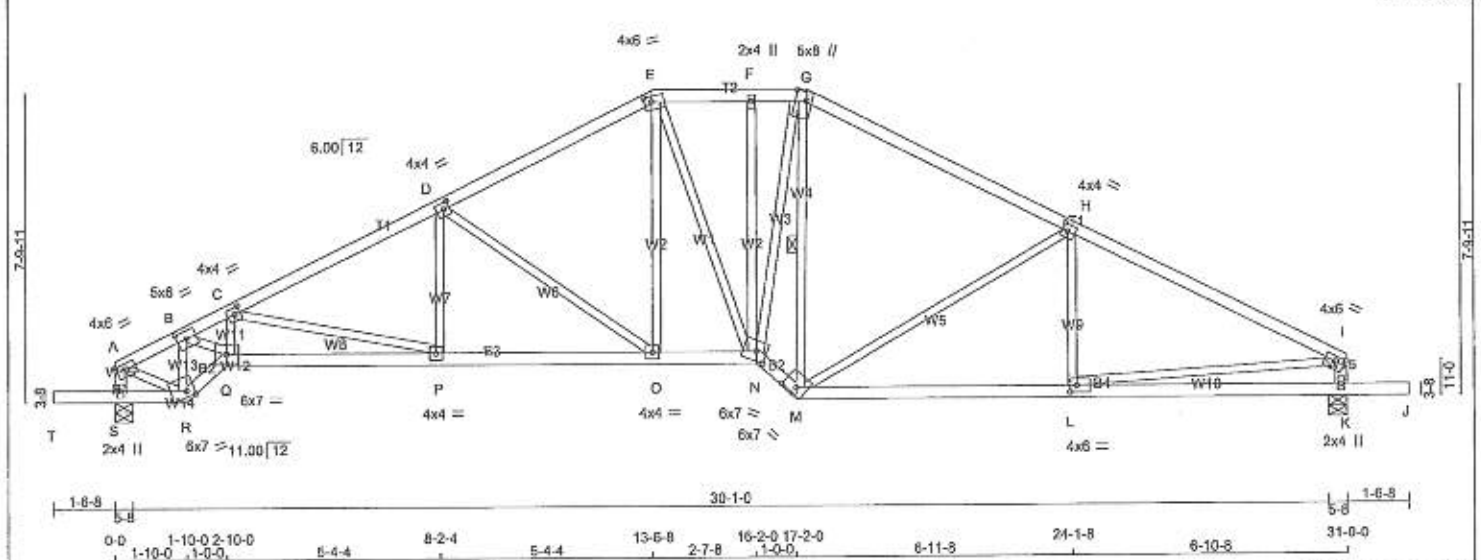
JSI GRIP= 0.80 (B) (INPUT = 0.90)
JSI METAL= 0.59 (Q) (INPUT = 1.00)

A-18023189

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292577	H3T	1	1	TRUSS DESC.	
Alpe Roof Truss, Maple					
Version 5.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 14:40:47 2018 Page 1					
ID:MF8iriaTok7DibpT4971Xys4PG-pHcax3wxYahD3shnbqw4KvGwJzQctOQFADrSIAzktT					
-1-6-8	0-0	1-10-0	2-10-0	5-4-4	8-2-4
1-6-8	1-10-0	1-10-0			
13-6-8 2-7-8 16-2-0 17-5-8 6-8-0 24-1-8 6-5-0 30-6-8 31-0-0 32-6-8					
5-8 1-8-8					
Scale = 1:66.6					



LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - E	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
S - A	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
T - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-I	MT20	4.0	8.0	1.75	Edge
B	TMWW-I	MT20	5.0	6.0	2.25	3.00
C, D, H						
C	TMWW-I	MT20	4.0	4.0	2.00	1.75
E	TTWW-m	MT20	4.0	6.0	1.75	2.25
F	TMWW-m	MT20	2.0	4.0		
G	TTWW-m	MT20	5.0	8.0	Edge	3.50
I	TMWW-I	MT20	4.0	6.0	1.60	2.75
K	BMV1-p	MT20	2.0	4.0		
L	BMVW-I	MT20	4.0	6.0	2.00	2.00
M	BRWW-h	MT20	6.0	7.0	2.00	4.00
N	BRWWW-m	MT20	6.0	7.0	2.75	3.00
O	BMVW-I	MT20	4.0	4.0		
P	BMVW-I	MT20	4.0	4.0		
Q	BRWW-I	MT20	6.0	7.0		
R	BRWW-m	MT20	6.0	7.0	1.75	2.25
S	BMV1-p	MT20	2.0	4.0		

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
JT	1648	0	1648	0
S	1648	0	1648	0
K	1640	0	1640	0

UNFACTORED REACTIONS

	1ST CASE	MAX MIN	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM LIVE	WIND	DEAD	SOIL
JT	1175	717.0	0.0	0.0	0.0	458.0	0.0
S	1175	717.0	0.0	0.0	0.0	458.0	0.0
K	1160	714.0	0.0	0.0	0.0	456.0	0.0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.65 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-M.

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 (L)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (L)	
FR-TQ		FROM TO			FR-TQ			
A-B	-1687.0	-78.0	-78.0	0.11 (1)	5.03	R-B	-1871.0	0.27 (1)
B-C	-3481.0	-78.0	-78.0	0.18 (1)	3.65	B-Q	0.2082	0.46 (1)
C-D	-2621.0	-78.0	-78.0	0.37 (1)	3.87	Q-C	0.279	0.06 (1)
D-E	-1941.0	-78.0	-78.0	0.33 (1)	4.53	C-P	-788.0	0.39 (1)
E-F	-1750.0	-78.0	-78.0	0.12 (1)	4.85	P-D	0.282	0.07 (1)
F-G	-1748.0	-78.0	-78.0	0.07 (1)	5.00	D-O	-790.0	0.65 (1)
G-H	-1710.0	-78.0	-78.0	0.53 (1)	4.60	O-E	0.526	0.12 (1)
H-I	-2251.0	-78.0	-78.0	0.61 (1)	3.85	E-N	0.66	0.01 (1)
I-J	-1419.0	0.0	0.0	0.14 (1)	6.84	N-F	-113.0	0.09 (1)
J-K	-1441.0	0.0	0.0	0.14 (1)	6.81	N-G	0.1461	0.33 (1)
						M-G	-957.0	0.37 (1)
T-S	0.0	-86.5	-96.5	0.16 (1)	10.00	M-H	-623.0	0.84 (1)
S-R	0.0	-18.5	-18.5	0.12 (1)	10.00	L-H	-70.96	0.03 (1)
R-Q	0.1881	-18.5	-18.5	0.30 (1)	10.00	A-R	0.1802	0.36 (1)
Q-P	0.1326	-18.5	-18.5	0.57 (1)	10.00	L-I	0.2050	0.46 (1)
P-O	0.2359	-18.5	-18.5	0.44 (1)	10.00			
O-N	0.1725	-18.5	-18.5	0.32 (1)	10.00			
N-M	0.1988	-18.5	-18.5	0.32 (1)	10.00			
M-L	0.2039	-18.5	-18.5	0.45 (1)	10.00			
L-K	0.0	-18.5	-18.5	0.24 (1)	10.00			
K-J	0.0	-56.5	-96.5	0.18 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C.C.

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

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

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

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

(66 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.15")
CALCULATED VERT. DEFL.(LL) = L/611 (0.03")
ALLOWABLE DEFL.(TL) = L/120 (0.15")
CALCULATED VERT. DEFL.(TL) = L/304 (0.08")

CSI: TC=0.81/1.00 (H-I:1), BC=0.57/1.00 (P-Q:1), WB=0.84/1.00 (H-M:1), SS=0.23/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.03

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1957 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.85 (R) (INPUT = 0.80)
JSI METAL= 0.59 (I) (INPUT = 1.00)

A-18023190

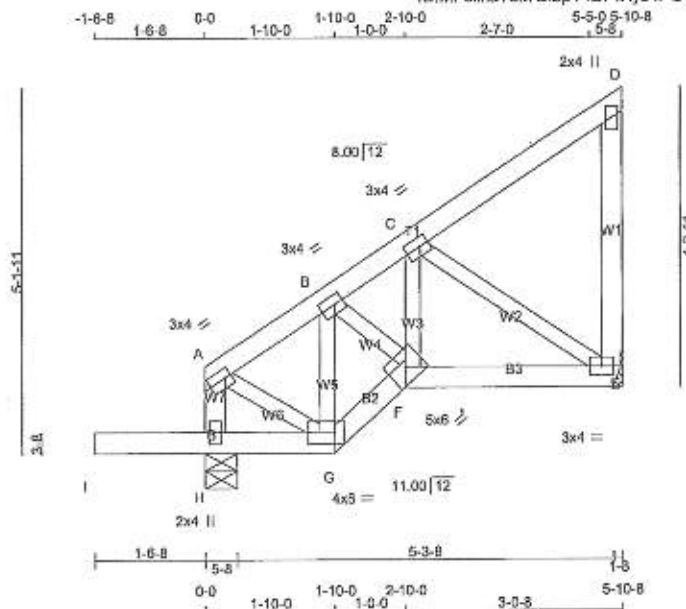
CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292577	J1T	4	1	TRUSS DESC.	

Alps Roof Truss, Maple

Version 8.200 5 Jan 6 2018 MITK Industries, Inc. Thu Feb 15 14:42:07 2018 Page 1
ID:MF8llriaTok7DlbpT4B71Xys4PG-TgRqkXu7jAmsgsc9HdMrZnaNDQldnY12gDgYXzkIRk



Scale = 1:31.0

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

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	3.0	4.0	1.50	1.00	
B	TMVW-I	MT20	3.0	4.0	1.50	1.50	
C	TMVW-I	MT20	3.0	4.0	1.50	1.50	
D	TMV-p	MT20	2.0	4.0			
E	BMVW-I	MT20	3.0	4.0			
F	BMVW-I	MT20	5.0	6.0			
G	BMVW-I	MT20	4.0	6.0	2.00	4.50	
H	BMV1-p	MT20	2.0	4.0			

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	452	0	452	0	0	5-8	1-8
E	284	0	284	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS		MAX/MIN COMPONENT REACTIONS					
JT	1ST CASE COMBINED	SNOW	LIVE	PERMLIVE	WIND	DEAD	SOIL
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0
E	168	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		FACTORED				W E B S			
MEMS.	MAX. FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMS.	MAX. FACTORED		
	FORCE	(PLF)		CSI (LC)	UNBRAC		FORCE	MAX	
	(LBS)				LENGTH		(LBS)	CSI (LC)	
FR-TO		FROM	TO			FR-TO			
H-A	-223 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 154	0.03 (1)	
A-B	-165 / 0	-78.0	-78.0	0.04 (1)	6.25	C-B	-220 / 0	0.03 (1)	
B-C	-238 / 0	-78.0	-78.0	0.08 (1)	6.25	D-F	0 / 130	0.03 (1)	
C-D	-11 / 0	-78.0	-78.0	0.08 (1)	6.25	F-C	0 / 63	0.02 (4)	
E-D	-95 / 0	0.0	0.0	0.03 (1)	7.81	C-E	-259 / 0	0.06 (1)	
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (1)	10.00				
G-F	0 / 173	-18.5	-18.5	0.03 (1)	10.00				
F-E	0 / 215	-18.5	-18.5	0.07 (1)	10.00				

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 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")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL. (LL) = $L/120$ (0.16")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.02")
ALLOWABLE DEFL. (TL) = $L/120$ (0.16")
CALCULATED VERT. DEFL. (TL) = $L/999$ (0.03")

CS1: TC=0.08/1.00 (B-C-1), BC=0.16/1.00 (C-H-1), WS=0.08/1.00 (C-E-1), SS=0.12/1.00 (H-I-1)

DO: 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 818 354 1987 768 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (E) (INPUT = 1.00)

A-18023191



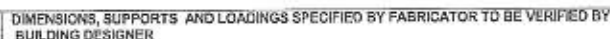
TOTAL WEIGHT = 28 lb

ALL WEBS 2x3 DRY
EXCEPT
DRY SEASONED LUMBER

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 71.7 lbs FACTORED DOWN AT 2-6-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



UNFACTORED REACTIONS

BEARING MATERIAL TO BE SFE NO.2 OR BETTER AT JOINT(S) G

BRACING

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

ALL DITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

FACTORED CONCENTRATED LOADS (LBS)

JT	LDC.	LC1	MAX-	MAX+	FACE	OIR.	TYPE
B	2-0-0	-72	-72	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	=	21.0 PSF
	DL	=	8.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.4 PSF
TOTAL LOAD		=	34.4 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 2-6-0
RIGHT SETBACK = 0-0
END SETBACK = 3-8-8
END WALL WIDTH = 6-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADOTS LOADS BASED ON 55 % OF GSI

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

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

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT
OFF

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = 1/360 (0.20")
CALCULATED VERT. DEFL.(LL) = 1/990 (0.00")
ALLOWABLE DEFL.(TL) = 1/360 (0.20")
CALCULATED VERT. DEFL.(TL) = 1/990 (0.01")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = $L^3/20 (0.19")$
CALCULATED VERT. DEFL.(LL) = $L^3/999 (0.02")$
ALLOWABLE DEFL.(TL) = $L^3/120 (0.19")$
CALCULATED VERT. DEFL.(TL) = $L^3/624 (0.03")$

CS=TC=0.24/1.00 (B-C:1), BC=0.17/1.00 (F-G:1),
WB=0.09/1.00 (C-E:1), SS=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 L8 BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLV® RIGHT HEEL ONLY

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

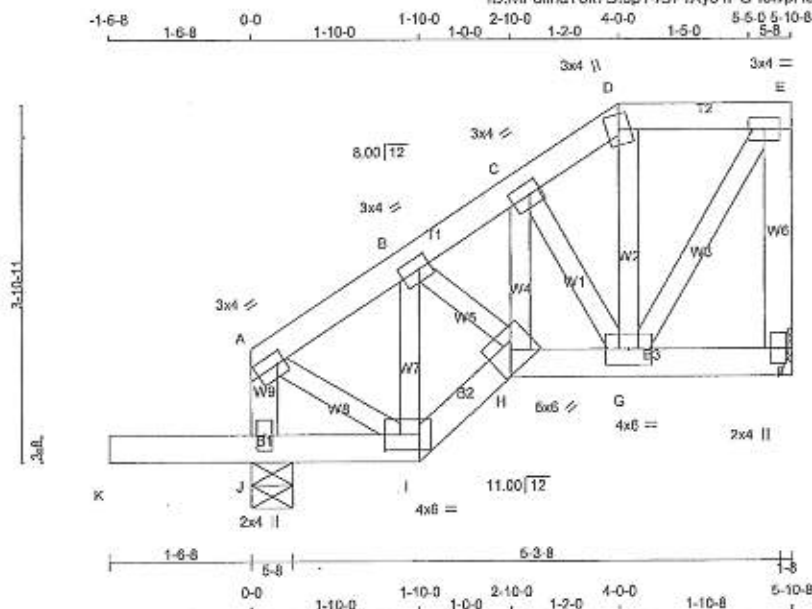
A-18023192

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292577	J1TB	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 6.200 S Jan 6 2018 MTek Industries, Inc. Thu Feb 15 14:41:22 2018 Page 1
ID:MF8lrlaTok7DlbpT4371Xys4PG-10DplH9LuJL5FmrysW8g3HFHD2F4TDaQXPDaAqoUczkISR



Scale: 1/2"=1'

TOTAL WEIGHT = 32 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
J - A	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
I - H	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMWW-1	MT20	3.0	4.0	1.50	1.00
B	TMWW-1	MT20	3.0	4.0	1.50	1.50
C	TMWW-1	MT20	3.0	4.0	1.50	1.50
D	TTW+m	MT20	3.0	4.0		
E	TMWW-1	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMWWV-1	MT20	4.0	6.0		
H	BBWWV-h	MT20	5.0	6.0		
I	BBWWV-1	MT20	4.0	6.0	2.00	4.50
J	BMV1+p	MT20	2.0	4.0		

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

MEMB.	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	RECORD BRG
	VERT	HORZ	DOWN	HORZ		
JT	264	0	264	0	0	0
F	264	0	264	0	0	0
J	452	0	452	0	0	0

UNFACTORED REACTIONS

MEMB.	1ST CASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOL
	COMBINED	SNOW	LIVE	PERM.LIVE			
JT	188	115/0	0/0	0/0	0/0	73/0	0/0
F	322	187/0	0/0	0/0	0/0	125/0	0/0
J	322	187/0	0/0	0/0	0/0	125/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 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.	CHORDS		FACTORED		MAX. UNBRACED LENGTH	MEMB.	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD	LC1 MAX			MAX. FACTORED	FORCE (LBS)
FR-TO								
A-B	-168/0	-78.0	-78.0	0.03 (1)	6.25	B-H	-227/0	0.04 (1)
B-C	-237/0	-78.0	-78.0	0.02 (1)	6.25	B-H	0/86	0.02 (1)
C-D	-144/0	-78.0	-78.0	0.01 (1)	6.25	H-C	0/64	0.02 (1)
D-E	-116/0	-78.0	-78.0	0.05 (1)	6.25	C-G	-138/0	0.02 (1)
F-E	-248/0	0.0	0.0	0.04 (1)	7.81	G-D	32/7	0.01 (1)
J-A	-223/0	0.0	0.0	0.02 (1)	7.81	G-E	0/211	0.05 (1)
K-J	0/0	-96.5	-96.5	0.16 (1)	10.00	A-I	0/159	0.04 (1)
J-I	0/0	-18.5	-18.5	0.16 (1)	10.00			
I-H	0/179	-18.5	-18.5	0.03 (1)	10.00			
H-G	0/188	-18.5	-18.5	0.03 (1)	10.00			
G-F	0/0	-18.5	-18.5	0.01 (4)	10.00			

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 34.4	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 085-09, CSA 088-14
- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(88% OF 23.0 P.S.F. G.S.I., PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 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 (0.00")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/899 (0.02")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/588 (0.03")

CSE TO=0.05/1.00 (D-E:1), BC=0.16/1.00 (I-J:1),
WB=0.05/1.00 (E-G:1), SSI=0.12/1.00 (J-K:1)

DOI 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	618	354	1687
	788	788	1687

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

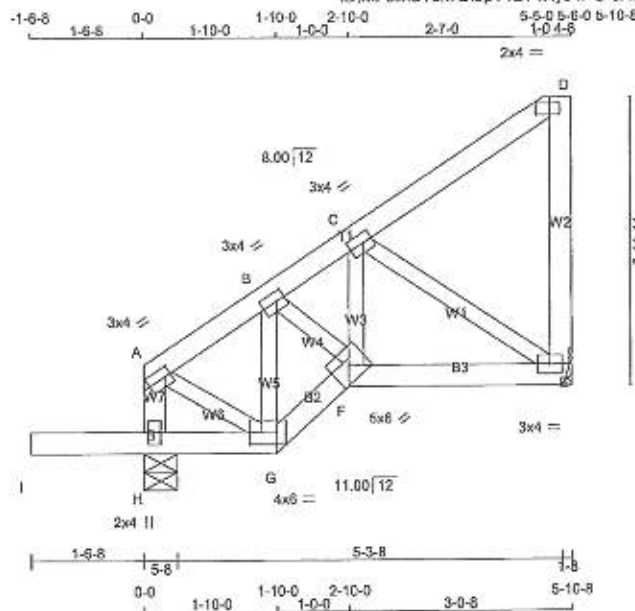
JSI GRIP= 0.52 (A) (INPUT = 0.90)
JSI METAL= 0.08 (A) (INPUT = 1.00)

A-18023193

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292577	J1TC	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 8 2018 MTEK Industries, Inc. Thu Feb 15 14:41:28 2018 Page 1
ID:MF8lr1aTok7DlbpT4B71Xys4PG-6Aa4YCCfuBrOUJgVx9nUYT2DVWd_BuHb8H8hHzkSL



Scale = 1:30.3

TOTAL WEIGHT = 30 lb

LUMBER

N.L.G.A. RULES

CHORDS

SIZE

LUMBER

DESCR.

A - D

2x4

DRY

No.2

SPF

E - D

2x4

DRY

No.2

SPF

H - A

2x4

DRY

No.2

SPF

I - G

2x4

DRY

No.2

SPF

G - F

2x4

DRY

No.2

SPF

F - E

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

A

TMVW-1

MT20

3.0

4.0

1.50

1.00

B

TMWW-1

MT20

3.0

4.0

1.50

1.50

C

TMWW-1

MT20

3.0

4.0

1.50

1.50

D

TMVp

MT20

2.0

4.0

0.50

2.25

E

BMVW-1-1

MT20

3.0

4.0

F

BBWW-h

MT20

5.0

6.0

G

BRWW-1

MT20

4.0

6.0

2.00

4.50

H

BMV1-p

MT20

2.0

4.0

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

BEARINGS

FACTORED

GROSS REACTION

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

HANGER BY OTHERS

MIN. SEAT SIZE: 1-8

5-8

1-8

JT

COMBINED

SNOW

LIVE

PERM. LIVE

WIND

DEAD

SOIL

E

188

115 / 0

0 / 0

0 / 0

0 / 0

73 / 0

0 / 0

H

322

197 / 0

0 / 0

0 / 0

0 / 0

125 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 8.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= 1/360 (0.20")

CALCULATED VERT. DEFL.(LL)= 1/999 (0.00")

ALLOWABLE DEFL.(TL)= 1/360 (0.20")

CALCULATED VERT. DEFL.(TL)= 1/999 (0.01")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= 1/120 (0.19")

CALCULATED VERT. DEFL.(LL)= 1/999 (0.02")

ALLOWABLE DEFL.(TL)= 1/120 (0.19")

CALCULATED VERT. DEFL.(TL)= 1/588 (0.03")

CS: TC=0.08/1.00 (B-C:1), RC=0.16/1.00 (G-H:1)

, WB=0.06/1.00 (C-E:1), SS=0.12/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

FORCE

MAX

CS1 (LC)

FR-TO

FROM

TO

LENGTH

FR-TO

A-B

-165 / 0

-78.0

-78.0

0.04

(1)

6.25

G-B

-220 / 0

0.03

(1)

B-C

-239 / 0

-78.0

-78.0

0.08

(1)

6.25

B-F

0 / 130

0.03

(1)

C-D

-11 / 0

-78.0

-78.0

0.08

(1)

6.25

F-C

0 / 63

0.02

(4)

E-D

-95 / 0

0.0

0.0

0.03

(1)

7.81

C-E

-258 / 0

0.06

(1)

H-A

-223 / 0

0.0

0.0

0.02

(1)

7.81

A-G

0 / 154

0.03

(1)

I-H

0 / 0

-98.5

-98.5

0.16

(1)

10.00

H-G

0 / 0

-18.5

-18.5

0.16

(1)

10.00

G-F

0 / 173

-18.5

-18.5

0.03

(1)

10.00

F-E

0 / 216

-18.5

-18.5

0.07

(4)

10.00

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023194

Alpa Roof Truss, Maple

Version 8.200 8 Jan 6 2018 Mitek Industries, Inc. Thu Feb 15 14:50:48 2018 Page 1
ID:MFB\riaTck7Dlbp14B71Xys4PG-B5_9H1CZnYXol5UsFkFjsGfVowNxm3sbuglGzdkJa

-1-6-8 0-0 3-1-13 11-6-0 19-7-0 27-10-3 30-6-8 31-0-0 32-6-8
1-6-8 3-1-13 8-3-3 8-1-15 6-8 1-6-8

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



DRY, SEASONED LUMBER	BEARING MATERIAL TO BE SPF NO 2 OR BETTER AT JOINT(S) P.	THIS TRUSS IS DESIGNED FOR RESIDENTIAL
----------------------	--	--

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY

JOINT TYPE	PLATES	N	LEN	P	X
A. TMWV+p	MT20	4.0	8.0	2.00	2.00
B. TTMWV	MT20	3.2	7.0	Edges 1.50	

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

- TPIC 2011, TPIC 2014

D	15-L	MT20	3.0	6.0	END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW.	FOOT LBS./SQ. FT. OF ROOF LIVE LOAD
E	TMMW-1	MT20	4.0	4.0		
F	TMMW-2	MT20	6.0	3.0		

1	BMV1-P	MT20	2.0	4.0	
2	BMV1-P	MT20	2.0	4.0	
3	BMV1-P	MT20	2.0	4.0	
4	BMV1-P	MT20	2.0	4.0	
5	BMV1-P	MT20	2.0	4.0	
6	BMV1-P	MT20	2.0	4.0	
7	BMV1-P	MT20	2.0	4.0	
8	BMV1-P	MT20	2.0	4.0	
9	BMV1-P	MT20	2.0	4.0	
10	BMV1-P	MT20	2.0	4.0	
11	BMV1-P	MT20	2.0	4.0	
12	BMV1-P	MT20	2.0	4.0	
13	BMV1-P	MT20	2.0	4.0	
14	BMV1-P	MT20	2.0	4.0	
15	BMV1-P	MT20	2.0	4.0	
16	BMV1-P	MT20	2.0	4.0	
17	BMV1-P	MT20	2.0	4.0	
18	BMV1-P	MT20	2.0	4.0	
19	BMV1-P	MT20	2.0	4.0	
20	BMV1-P	MT20	2.0	4.0	
21	BMV1-P	MT20	2.0	4.0	
22	BMV1-P	MT20	2.0	4.0	
23	BMV1-P	MT20	2.0	4.0	
24	BMV1-P	MT20	2.0	4.0	
25	BMV1-P	MT20	2.0	4.0	
26	BMV1-P	MT20	2.0	4.0	
27	BMV1-P	MT20	2.0	4.0	
28	BMV1-P	MT20	2.0	4.0	
29	BMV1-P	MT20	2.0	4.0	
30	BMV1-P	MT20	2.0	4.0	
31	BMV1-P	MT20	2.0	4.0	
32	BMV1-P	MT20	2.0	4.0	
33	BMV1-P	MT20	2.0	4.0	
34	BMV1-P	MT20	2.0	4.0	
35	BMV1-P	MT20	2.0	4.0	
36	BMV1-P	MT20	2.0	4.0	
37	BMV1-P	MT20	2.0	4.0	
38	BMV1-P	MT20	2.0	4.0	
39	BMV1-P	MT20	2.0	4.0	
40	BMV1-P	MT20	2.0	4.0	
41	BMV1-P	MT20	2.0	4.0	
42	BMV1-P	MT20	2.0	4.0	
43	BMV1-P	MT20	2.0	4.0	
44	BMV1-P	MT20	2.0	4.0	
45	BMV1-P	MT20	2.0	4.0	
46	BMV1-P	MT20	2.0	4.0	
47	BMV1-P	MT20	2.0	4.0	
48	BMV1-P	MT20	2.0	4.0	
49	BMV1-P	MT20	2.0	4.0	
50	BMV1-P	MT20	2.0	4.0	
51	BMV1-P	MT20	2.0	4.0	
52	BMV1-P	MT20	2.0	4.0	
53	BMV1-P	MT20	2.0	4.0	
54	BMV1-P	MT20	2.0	4.0	
55	BMV1-P	MT20	2.0	4.0	
56	BMV1-P	MT20	2.0	4.0	
57	BMV1-P	MT20	2.0	4.0	
58	BMV1-P	MT20	2.0	4.0	
59	BMV1-P	MT20	2.0	4.0	
60	BMV1-P	MT20	2.0	4.0	
61	BMV1-P	MT20	2.0	4.0	
62	BMV1-P	MT20	2.0	4.0	
63	BMV1-P	MT20	2.0	4.0	
64	BMV1-P	MT20	2.0	4.0	
65	BMV1-P	MT20	2.0	4.0	
66	BMV1-P	MT20	2.0	4.0	
67	BMV1-P	MT20	2.0	4.0	
68	BMV1-P	MT20	2.0	4.0	
69	BMV1-P	MT20	2.0	4.0	
70	BMV1-P	MT20	2.0	4.0	
71	BMV1-P	MT20	2.0	4.0	

M	BS-4	MY20	3.0	8.0	MAX. FACTORED	FACTORED	MAX. FACTORED	CANTILEVER DEFLECTION
N	BMW/VW-V4	MY20	5.0	8.0	MEMB.	FORCE	VERT. LOAD LC1	MAX. MEMB. FORCE
								ALLOWABLE DEFL.(LL)= 1/120 (0.19")
								CALCULATED MEMB. DEF. 0.13 = 1/1000 (0.001)

Edge - INDICATES REFERENCE CORNER OF PLATE	A-B	-1247 / 0	-78.0	-78.0	0.18 (1)	5.58	Q-B	-235 / 0	0.14 (1)
	B-C	-1328 / 0	-78.0	-78.0	0.79 (1)	4.44	B-N	0 / 1480	0.33 (1)

E-F	-1930 / 0	-78.0	-78.0	0.79 (1)	4.44	L-E	-8917 / 0	0.42 (1)
F-G	-1247 / 0	-78.0	-78.0	0.16 (1)	5.58	L-F	0 / 1481	0.33 (1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

Q-P	0/0	-96.5	-93.5	0.16 (1)	10.00	J-G	07/828	0.19 (1)	COMPANION LINE LOAD FACTOR = 1.00
-----	-----	-------	-------	----------	-------	-----	--------	----------	-----------------------------------

NOTE: Data at brace(s) shown only for Part 9 design as per OBC 9.23.13.11,	N-M	0/1931	-18.5	-18.5	0.44 (1)	10.00	RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
	M-L	0/1931	-10.5	-10.5	0.44 (1)	10.00	

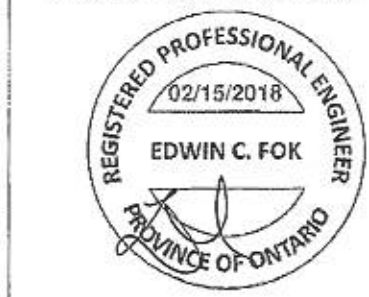
J-I	0/0	-18.5	-18.5	0.19 (4)	10.00	PLATE GRIP (DRY) SHEAR SECTION (PSI) (PLI) (PLI)
I-H	0/0	-98.5	-98.5	0.16 (1)	10.00	

02/15/2018

EG	EDWIN C. FOK	VEE	JSI GRIP= 0.88 (L) (INPUT = 0.90)
----	--------------	-----	-----------------------------------



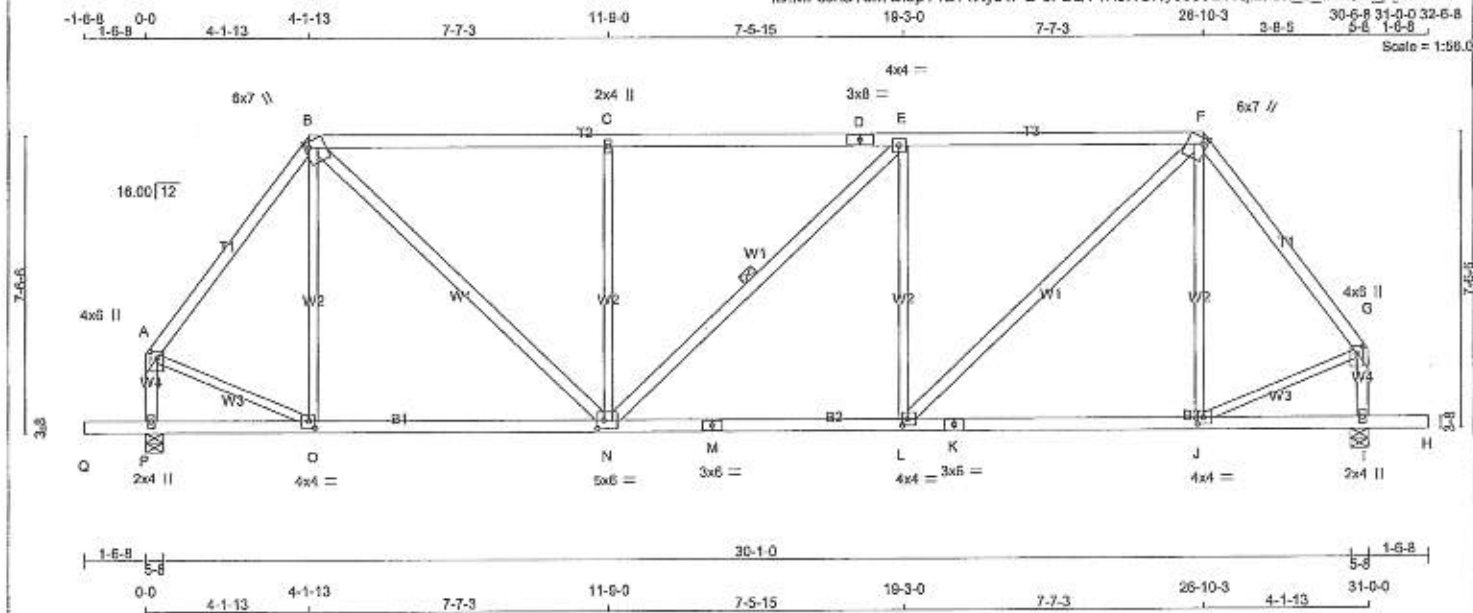
A 18022105



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	H7	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITOK Industries, Inc. Thu Feb 15 14:50:55 2018 Page 1
ID:MF8BriaTok7DlbpT4B71Xys4PG-0FLQY4HJNOHy009pDWqfz7Sn_3_wLQvK_p7dswzktJU



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N, L, G, A, RULES	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
A - B	2x4	DRY	No.2	FACTORED				TOP CH. LL = 21.0 PSF			
B - D	2x4	DRY	No.2	GROSS REACTION				DL = 6.0 PSF			
D - F	2x4	DRY	No.2	DOWN				BOT CH. LL = 0.0 PSF			
F - G	2x4	DRY	No.2	UP				DL = 7.4 PSF			
P - A	2x4	DRY	No.2	UNFACTORED REACTIONS				TOTAL LOAD = 34.4 PSF			
I - G	2x4	DRY	No.2	1ST LCASE				SPACING = 24.0 IN. C/C			
Q - M	2x4	DRY	No.2	SNOW				LOADING IN FLAT SECTION BASED ON A SLOPE OF 12/12 MINIMUM			
M - K	2x4	DRY	No.2	LIVE				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015			
K - H	2x4	DRY	No.2	PERM. LIVE				THIS DESIGN COMPLIES WITH:			
ALL WEBS	2x3	DRY	No.2	WIND				- PART 9 OF OBC 2012, OBC 2018			
EXCEPT				DEAD				- CSA 086-08, CSA 086-14			
B - N	2x4	DRY	No.2	SOIL				- TPIC 2011, TPIC 2014			
N - E	2x4	DRY	No.2					(5% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD			
L - F	2x4	DRY	No.2					ALLOWABLE DEFL.(LL) = 1/360 (1.03")			
								CALCULATED VERT. DEFL.(LL) = 1/999 (0.06")			
								ALLOWABLE DEFL.(TL) = 1/360 (1.03")			
								CALCULATED VERT. DEFL.(TL) = 1/999 (0.14")			
								CANTILEVER DEFLECTION:			
								ALLOWABLE DEFL.(LL) = 1/120 (0.19")			
								CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")			
								ALLOWABLE DEFL.(TL) = 1/120 (0.19")			
								CALCULATED VERT. DEFL.(TL) = 1/999 (0.01")			
								CS: TC=0.79/1.00 (E-F:1), BC=0.37/1.00 (L-N:1), WB=0.65/1.00 (E-L:1), SS=0.28/1.00 (E-F:1)			
								DOL LUMBER=1.00 NAIL=1.00 LS RFEND=1.10			
								COMP=1.10 SHEAR=1.10 TENS= 1.10			
								COMPANION LIVE LOAD FACTOR = 1.00			

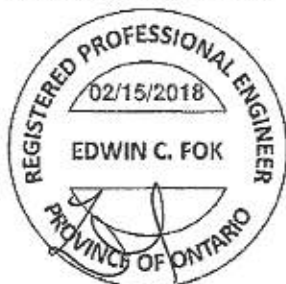
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMWV+p	MT20	4.0	6.0	2.00	2.00
B - TTWW+m	MT20	6.0	7.0	Edge	1.50
C - TMWV+p	MT20	2.0	4.0		
D - TS-1	MT20	3.0	8.0		
E - TMWV-1	MT20	4.0	4.0		
F - TTWW+m	MT20	6.0	7.0	Edge	1.50
G - TMWV+p	MT20	4.0	6.0	2.00	2.00
I - BMV1+p	MT20	2.0	4.0		
J - BMWV-1	MT20	4.0	4.0	2.00	1.75
K - BS-1	MT20	3.0	6.0		
L - BMWV-1	MT20	4.0	4.0	2.00	1.50
M - BS-1	MT20	3.0	6.0		
N - BMWVW-1	MT20	6.0	6.0	2.50	2.00
O - BMWV-1	MT20	4.0	4.0	2.00	1.75
P - BMV1+p	MT20	2.0	4.0		

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



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)	VERT. LOAD LC1 (PLF)	MAX. CS (I/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (I/C)	
FR-TO		FROM TO		FR-TO			
A-B	-1275 / 0	-78.0 -78.0 0.29 (1)	5.40	O-B	-164 / 23	0.17 (1)	
B-C	-1578 / 0	-78.0 -78.0 0.79 (1)	4.24	B-N	0 / 1130	0.18 (1)	
C-D	-1578 / 0	-78.0 -78.0 0.79 (1)	4.22	N-C	-835 / 0	0.65 (1)	
D-E	-1578 / 0	-78.0 -78.0 0.79 (1)	4.22	N-E	-1 / 0	0.00 (1)	
E-F	-1580 / 0	-78.0 -78.0 0.79 (1)	4.22	L-E	-636 / 0	0.65 (1)	
F-G	-1275 / 0	-78.0 -78.0 0.29 (1)	5.40	L-F	0 / 1131	0.18 (1)	
P-A	-1472 / 0	0.0 0.0 0.17 (1)	6.74	J-F	-165 / 23	0.17 (1)	
I-G	-1472 / 0	0.0 0.0 0.17 (1)	6.74	A-O	0 / 813	0.18 (1)	
				J-G	0 / 813	0.18 (1)	
Q-P	0 / 0	-96.5 -96.5 0.16 (1)	10.00				
P-O	0 / 0	-18.5 -18.5 0.16 (4)	10.00				
O-N	0 / 758	-18.5 -18.5 0.28 (4)	10.00				
N-M	0 / 1580	-18.5 -18.5 0.37 (1)	10.00				
M-L	0 / 1580	-18.5 -18.5 0.37 (1)	10.00				
L-K	0 / 758	-18.5 -18.5 0.28 (4)	10.00				
K-J	0 / 758	-18.5 -18.5 0.28 (4)	10.00				
J-I	0 / 0	-18.5 -18.5 0.16 (4)	10.00				
I-H	0 / 0	-96.5 -96.5 0.16 (1)	10.00				

A-18023196

CONTINUED ON PAGE 2

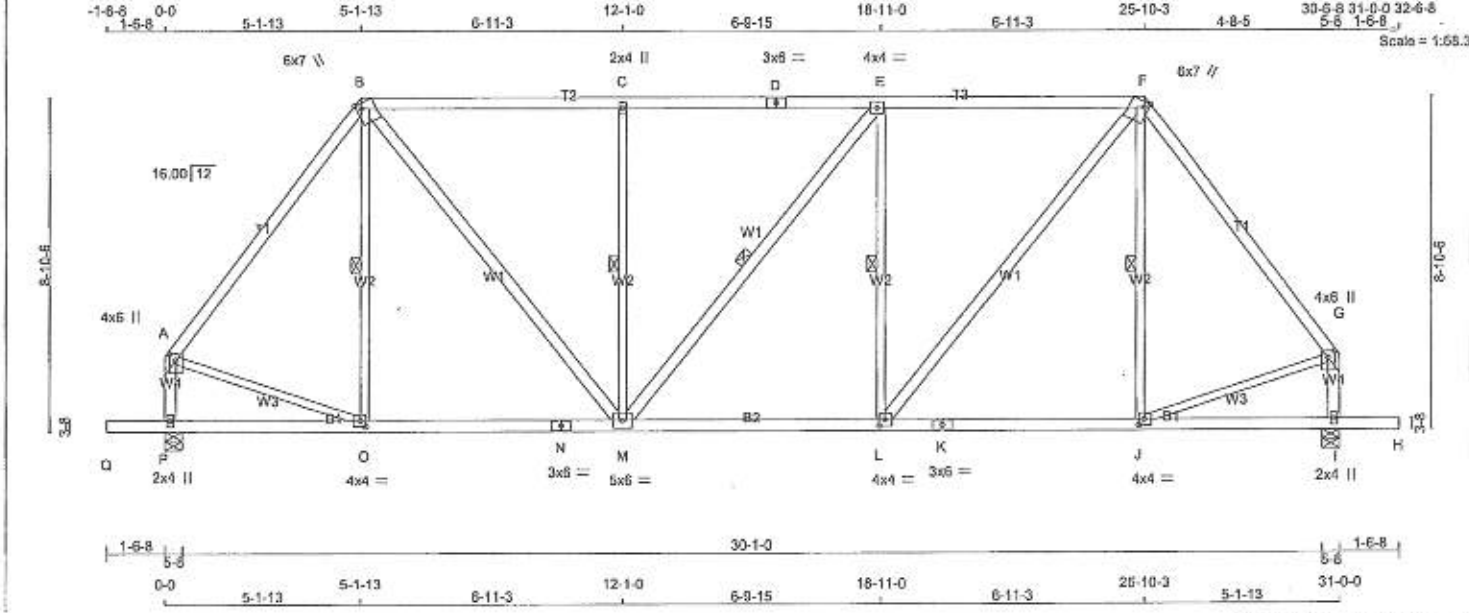
Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			
Building number, street name		Unit no.	Lot/con.
Municipality Vaughan, ON	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name Allan Whiting		Firm Hunt Design Associates Inc.	
Street address 8966 Woodbine Ave.		Unit no. Suite 200	Lot/con.
Municipality Markham	Postal code L3R 0J7	Province Ontario	E-mail
Telephone number (905) 737-5133	Fax number (905) 737-7326	Cell number ()	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 of Division C]			
☒ House	☐ HVAC – House	☐ Building Structural	
☐ Small Buildings	☐ Building Services	☐ Plumbing – House	
☐ Large Buildings	☐ Detection, Lighting and Power	☐ Plumbing – All Buildings	
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems	
Description of designer's work Spatial separation calculations for rear elevation WOB conditions for certified models 4001, 4002, 4003, 4201, 4204, 5001, 5002, 5006			
D. Declaration of Designer			
I, <u>Allan Whiting</u> declare that (choose one as appropriate): (print name)			
☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: <u>23177</u> Firm BCIN: <u>19695</u>			
☐ I review and take responsibility for the design work and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: _____ Basis for exemption from registration: _____			
☐ The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge.			
2. I have submitted this application with the knowledge and consent of the firm.			
March 3, 2020		<u>AW</u>	
Date		Signature of Designer	

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d) of Division C, Article 3.2.5.1, of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.



LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV+P	MT20	4.0	6.0	2.00	2.00
B	TTWV+m	MT20	6.0	7.0	Edge	1.50
C	TMWV+w	MT20	2.0	4.0		
O	TS-I	MT20	3.0	6.0		
E	TMWV-I	MT20	4.0	4.0		
F	TTWV+m	MT20	6.0	7.0	Edge	1.50
G	TMWV+P	MT20	4.0	6.0	2.00	2.00
I	BMV1+P	MT20	2.0	4.0		
J, L, O						
J	BMWV-I	MT20	4.0	4.0	2.00	1.75
K	BS-I	MT20	3.0	6.0		
M	BMWVW-I	MT20	5.0	6.0		
N	BS-I	MT20	3.0	6.0		
P	BMV1+P	MT20	2.0	4.0		

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

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
P	1644	0	1644	0	5-8	2-7
I	1644	0	1644	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
P	1172	715/0	0/0	0/0	0/0	457/0	0/0
I	1172	715/0	0/0	0/0	0/0	457/0	0/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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 B-O, C-M, E-M, E-L, F-J.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				W/F B			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO		FROM TO			FR-TO		
A-B	-1278/0	-78.0 -78.0	0.49 (1)	5.18	O-B	-108/47	0.05 (1)
B-C	-1336/0	-78.0 -78.0	0.80 (1)	4.81	B-M	0/909	0.15 (1)
C-D	-1336/0	-78.0 -78.0	0.80 (1)	4.80	M-C	-579/0	0.29 (1)
D-E	-1336/0	-78.0 -78.0	0.60 (1)	4.80	M-E	-2/0	0.00 (1)
E-F	-1337/0	-78.0 -78.0	0.81 (1)	4.80	L-E	-579/0	0.29 (1)
F-G	-1278/0	-78.0 -78.0	0.49 (1)	5.18	L-F	0/911	0.15 (1)
P-A	-1469/0	0.0 0.0	0.17 (1)	6.77	J-F	-110/46	0.06 (1)
I-G	-1469/0	0.0 0.0	0.17 (1)	6.77	A-O	0/798	0.18 (1)
					J-G	0/798	0.18 (1)
Q-P	0/0	-96.5 -96.5	0.16 (1)	10.00			
P-O	0/0	-18.5 -18.5	0.18 (4)	10.00			
O-N	0/762	-18.5 -18.5	0.24 (4)	10.00			
N-M	0/762	-18.5 -18.5	0.24 (4)	10.00			
M-L	0/1337	-18.5 -18.5	0.31 (1)	10.00			
L-K	0/762	-18.5 -18.5	0.24 (4)	10.00			
K-J	0/762	-18.5 -18.5	0.24 (4)	10.00			
J-I	0/0	-18.5 -18.5	0.16 (4)	10.00			
I-H	0/0	-96.5 -96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
ROT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 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, NBC 2010, NBC 2015

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

(55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.15")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.15")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.61/1.00 (E-F:1), BC=0.31/1.00 (L-M:1), WR=0.29/1.00 (E-L:1), SS=0.25/1.00 (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

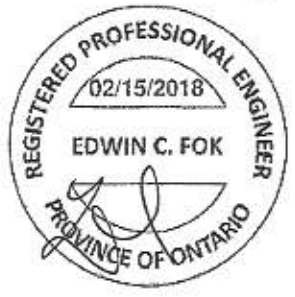
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 324 1657 788 1657 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (A) (INPUT = 0.80)
JSI METAL= 0.45 (A) (INPUT = 1.00)

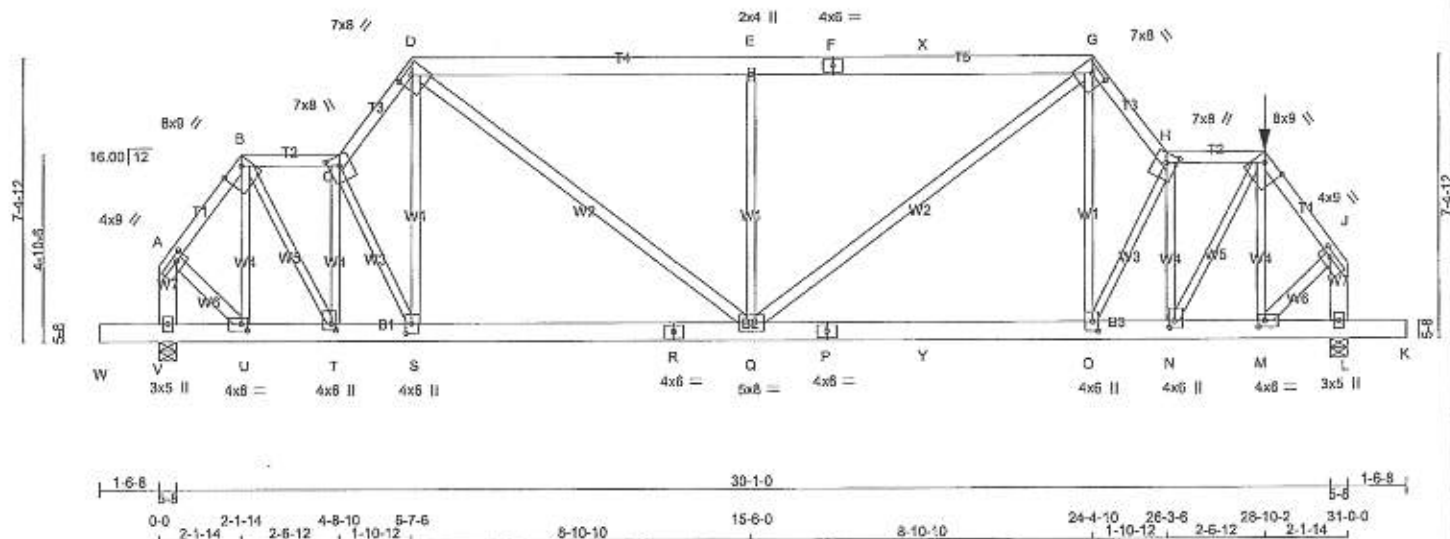


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	H13A	1	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 8.200 5 Jan 6 2018 Mittek Industries, Inc. Thu Feb 15 15:07:14 2018 Page 1
ID:MF6BlaTok7DlbpT4B71Xys4PG-rb7X0q7P0Bd1zSVo3dvE8aV3_1_7D8_r5dhwyzk14B

1-6-6 0-0 5-6 2-1-14 4-8-10 6-7-6 8-10-10 15-6-0 8-10-10 24-4-10 26-3-6 28-10-2 30-8-8 31-0-0 32-6-8
1-6-6 2-1-14 2-6-12 1-10-12 8-10-10 1-10-12 2-6-12 1-8-8 8-8 1-6-8
Scale = 1:57.6



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF	
B - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
D - E	2x6	DRY	No.2	SPF	
F - G	2x8	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
H - I	2x4	DRY	No.2	SPF	
I - J	2x4	DRY	No.2	SPF	
V - A	2x6	DRY	No.2	SPF	
L - J	2x6	DRY	No.2	SPF	
W - R	2x6	DRY	No.2	SPF	
R - P	2x8	DRY	No.2	SPF	
P - K	2x8	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
D - Q	2x4	DRY	No.2	SPF	
Q - G	2x4	DRY	No.2	SPF	
A - U	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMVW-1	MT20	4.0	9.0	1.50	3.00
B - TTWW-h	MT20	8.0	9.0	2.00	6.25
C - TTWW-m	MT20	7.0	8.0	3.00	3.25
D - TTWW-h	MT20	7.0	8.0	2.00	4.00
E - TMW-w	MT20	2.0	4.0		
F - TS-1	MT20	4.0	6.0		
G - TTWW-h	MT20	7.0	8.0	2.00	4.00
H - TTWW-m	MT20	7.0	8.0	3.00	3.25
I - TTWW-h	MT20	8.0	9.0	2.00	6.25
J - TMVW-1	MT20	4.0	9.0	1.50	3.00
L - BMV1-p	MT20	3.0	5.0		
M - BMWV-1	MT20	4.0	6.0	2.00	2.00
N - BMWV-1	MT20	4.0	6.0	2.00	1.50
O - BMWV-1	MT20	4.0	6.0	3.00	1.75
P - BS-1	MT20	4.0	6.0		
Q - BMWVW-1	MT20	5.0	8.0		

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
JT	VERT	HORZ	DOWN	HORZ
V	3260	0	3260	0
L	3128	0	3128	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE	
V	2325	1419 / 0	0 / 0	0 / 0	905 / 0
L	2231	1357 / 0	0 / 0	0 / 0	874 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX	MAX	WEBS	MAX. FACTORED FORCE (LBS)	MAX
MEMB.					MEMB.		
FR-TO		FROM TO			FR-TO		
A-B	-2478 / 0	-78.0	-78.0	0.16 (1)	4.23	U-B	-401 / 0
B-C	-2685 / 0	-78.0	-78.0	0.19 (1)	4.03	B-T	0 / 2527
C-D	-3956 / 0	-78.0	-78.0	0.26 (1)	3.33	T-C	-2551 / 0
D-E	-3688 / 0	-78.0	-78.0	0.05 (1)	3.39	C-S	-844 / 0
E-F	-3688 / 0	-78.0	-78.0	0.05 (1)	3.39	S-D	0 / 1835
F-X	-3688 / 0	-78.0	-78.0	0.05 (1)	3.39	D-Q	0 / 1600
X-G	-3688 / 0	-153.5	-153.5	0.05 (1)	3.39	Q-E	-962 / 0
G-H	-3813 / 0	-153.5	-153.5	0.30 (1)	3.34	Q-G	0 / 1720
H-I	-2642 / 0	-153.5	-153.5	0.20 (1)	3.86	O-G	0 / 1327
I-J	-2434 / 0	-78.0	-78.0	0.15 (1)	4.26	O-H	-948 / 0
V-A	-3070 / 0	0.0	0.0	0.25 (1)	5.97	N-H	-2510 / 0
L-J	-3017 / 0	0.0	0.0	0.24 (1)	6.02	N-I	0 / 2504
W-V	0 / 0	-95.5	-95.5	0.09 (1)	10.00	M-I	-635 / 0
V-U	0 / 0	-124.1	-124.1	0.18 (1)	10.00	A-U	0 / 1774
U-T	0 / 1462	-124.1	-124.1	0.38 (1)	10.00	M-J	0 / 1743
T-S	0 / 2745	-124.1	-124.1	0.80 (1)	10.00		
S-R	0 / 2426	-124.1	-124.1	0.88 (1)	10.00		
R-Q	0 / 2426	-124.1	-124.1	0.88 (1)	10.00		
Q-P	0 / 2332	-124.1	-124.1	0.87 (1)	10.00		
P-Y	0 / 2332	-124.1	-124.1	0.87 (1)	10.00		
Y-O	0 / 2332	-36.4	-36.4	0.87 (1)	10.00		
O-N	0 / 2701	-36.4	-36.4	0.53 (1)	10.00		
N-M	0 / 1430	-36.4	-36.4	0.36 (1)	10.00		
M-L	0 / 0	-36.4	-36.4	0.13 (1)	10.00		
L-K	0 / 0	-96.5	-96.5	0.09 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	FACE	DIR.	TYPE
I	28-10-2	-123	-123	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 21.0	PSF
	DL	= 6.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CStdGlrder
START DISTANCE = 0-0
STARTY SPAN CARRIED = 6-4-8
END DISTANCE = 20-0-0
END SPAN CARRIED = 8-4-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSI.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-1-14
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 GSI.
LOADS APPLIED TO FIRST 11-0-0 OF SPAN MEASURED FROM THE R-GHT.

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

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

(55 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEF.(LL) = L/360 (1.03")
CALCULATED VERT. DEF.(LL) = 1/999 (0.19")
ALLOWABLE DEF.(TL) = L/360 (1.03")
CALCULATED VERT. DEF.(TL) = 1/978 (0.38")

CANTILEVER DEFLECTION:
ALLOWABLE DEF.(LL) = L/120 (0.16")
CALCULATED VERT. DEF.(LL) = 1/999 (0.00")
ALLOWABLE DEF.(TL) = L/120 (0.16")
CALCULATED VERT. DEF.(TL) = 1/999 (0.00")

CSI: YC=0.85/1.00 (E-G-1), BC=0.88/1.00 (Q-S-1), WS=0.86/1.00 (C-T-1), SSI=0.37/1.00 (Q-S-1)

DOE LUMBER=1.00 NAIL=1.00 LB BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

A-18023198

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	H13A	1	1	TRUSS DESC.	

Alps Roof Truss, Maple

Version 8.200 S Jan 6 2018 MTek Industries, Inc. Thu Feb 15 16:07:14 2018 Page 2
ID:MF6iiaTgTgk7DlbpT4B71Xys4PG-rb7X0g7PpBd1zSVo3dvE8sV3 1 ?D8 r5drwyhzhk4B

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
R	BS-1	MT20	4.0	6.0		
S	BMWW+1	MT20	4.0	6.0	3.00	1.75
T	BMWW+1	MT20	4.0	6.0	2.00	1.50
U	BMWW+1	MT20	4.0	6.0	2.00	2.00
V	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 122.6 lbs FACTORED DOWN AT 28-10-2 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1557 788	1557 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

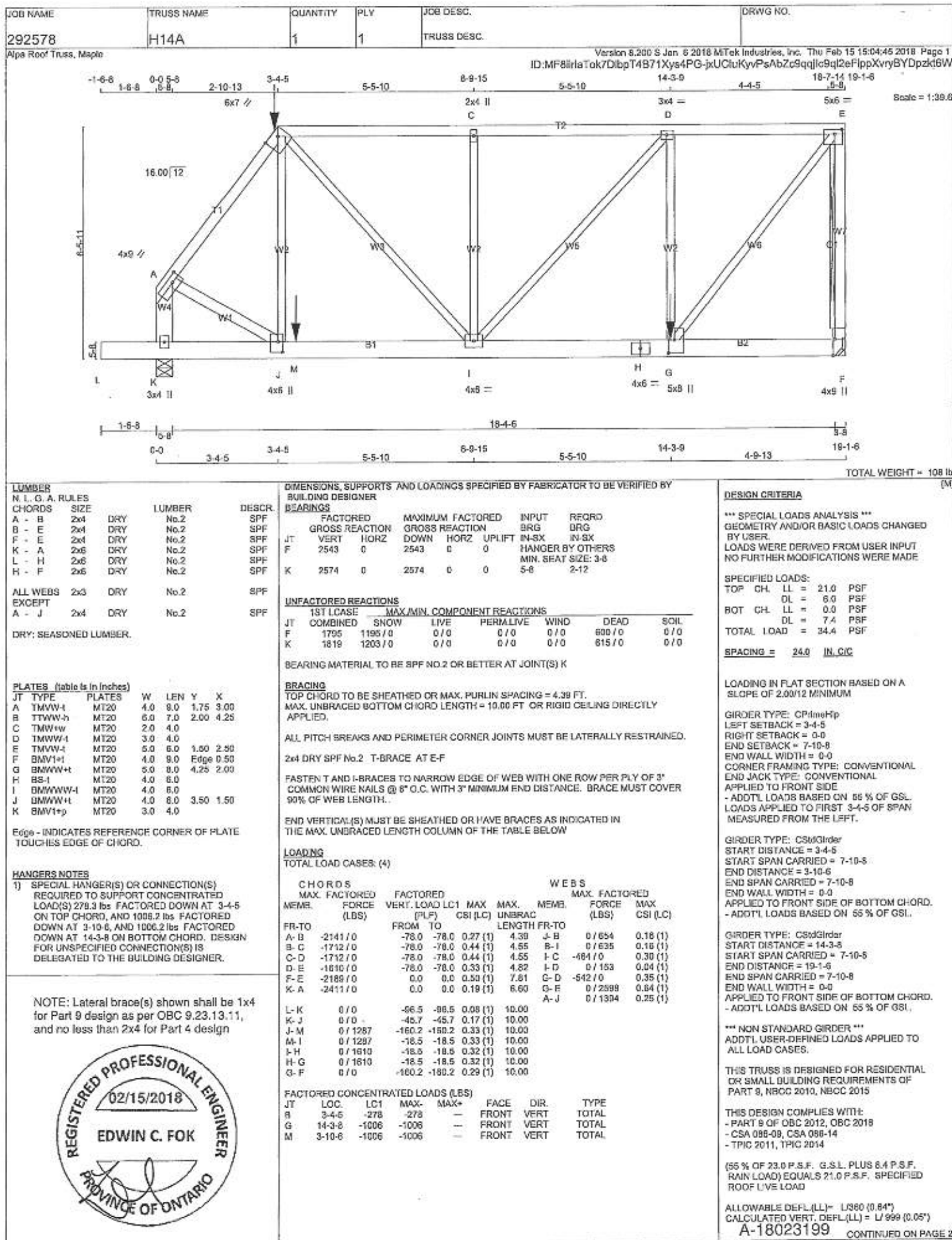
JSI GRIP = 0.88 (J) (INPUT = 0.90)

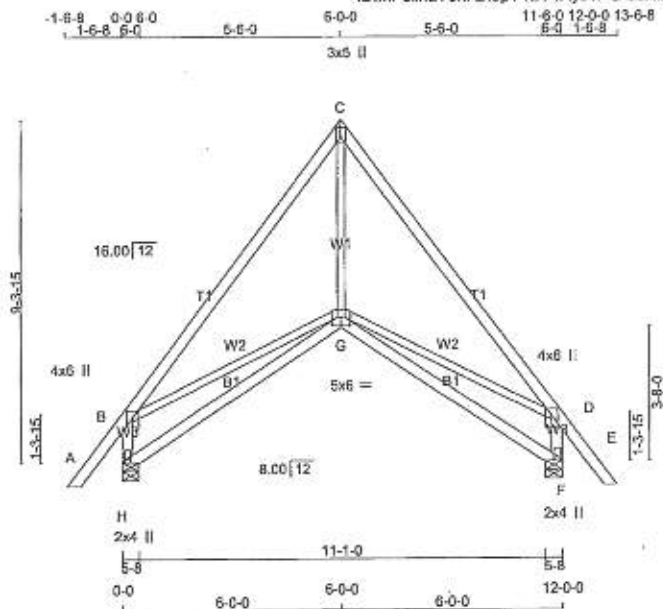
JSI METAL = 0.96 (D) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023198(2)





TOTAL WEIGHT = 2 X 62 = 124 lb

LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE						
A - C	2x4	DRY	2100F	1.8E			SPF
C - E	2x4	DRY	2100F	1.8E			SPF
H - B	2x4	DRY	No.2				SPF
F - D	2x4	DRY	No.2				SPF
H - G	2x4	DRY	No.2				SPF
G - F	2x4	DRY	No.2				SPF

ALL WEBS 2x3 DRY
EXCEPT

DRY: SEASONED LUMBER

PLATES (table is in inches)		W	LEN	Y	X
JT	TYPE	PLATES			
B	TMW+p	M720	4.0	6.0	2.00 2.00
C	TTW+p	M720	3.0	5.0	2.00 Edge
D	TMW+p	M720	4.0	6.0	2.00 2.00
F	BMV1+p	M720	2.0	4.0	Edge
G	3BWVW+p	M720	5.0	6.0	2.75 3.00
H	BMV1+p	M720	2.0	4.0	Fcse

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

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

BEARINGS			MAXIMUM FACTORED			INPUT	REQD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	686	0	686	0	0	5-3	1-8
F	686	0	686	0	0	5-3	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	
H	487	310 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0
F	487	310 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0

BEARING MATERIAL TO BE SFE 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 RITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX CSI (L/C)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (L/C)	
FR-TO		FROM	TO			FR-TO			
A-B	0/43	-78.0	-78.0	0.07 (1)	10.00	G-C	0/415	0.09 (1)	
B-C	-552/0	-78.0	-78.0	0.24 (1)	8.25	B-G	0/364	0.08 (1)	
C-D	-552/0	-78.0	-78.0	0.24 (1)	6.25	G-D	0/364	0.08 (1)	
D-E	0/43	-78.0	-78.0	0.07 (1)	10.00				
E-F	631/0	0.0	0.0	0.07 (1)	7.81				
F-D	-631/0	0.0	0.0	0.07 (1)	7.81				
H-G	0/0	-18.5	-18.5	0.20 (4)	10.00				
G-E	0/0	-18.5	-18.5	0.20 (4)	10.00				

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	21.0	PSF
	DL =	6.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2019
- CSA 086-09, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.24/1.00 (C-D:1), BC=0.20/1.00 (G-H:4)
WB=0.09/1.00 (C-G:1), SSI=0.11/1.00 (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)		(PL)		(PL)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	818	354	1667	708	1987 1659

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

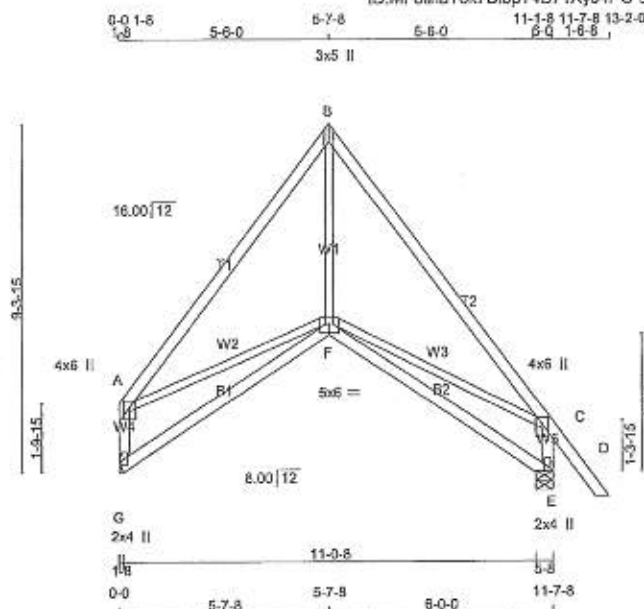
JSI GRIP= 0.81 (F) (INPUT = 0.80)
JSI METAL= 0.31 (F) (INPUT = 1.00)

A-18023200

Alpa Roof Truss, Maple

Version 0.200 S Jan 6 2018 Mitek Industries, Inc. Thu Feb 15 15:01:37 2018 Page 1
ID:MF8lttaTok7DlboT4B71Xvs4PG-Dm77Hc21AeAs1aE1aLMC V2bDs7smwkEclbldixt9S

Scale = 1:58.0



TOTAL WEIGHT = $5 \times 58 = 292$ lb

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
--------------------	-----	-----	------	-----

DRY: SEASONED LUMBER.

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

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

UNFACTORED REACTIONS

BEARING MATERIAL TO BE SPE 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

LOADING
TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC. LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM TO			FR-TO				
A-B	-517 / 0	-78.0	-78.0 0.53 (1)	6.25	F-B	0 / 378	0.08 (1)		
B-C	-517 / 0	-78.0	-78.0 0.24 (1)	6.25	A-F	0 / 335	0.08 (1)		
C-D	0 / 43	-78.0	-78.0 0.07 (1)	10.00	F-C	0 / 342	0.08 (1)		
G-A	-509 / 0	0.0	0.0 0.06 (1)	7.81					
E-C	-813 / 0	0.0	0.0 0.07 (1)	7.81					
G-F	0 / 0	-18.5	-18.5 0.17 (4)	10.00					
F-E	0 / 0	-18.5	-18.5 0.20 (4)	10.00					

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	21.0	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD	=	34.4	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI: TC=0.33/1.00 (A-B:1), BC=0.20/1.00 (E-F:4),
WB=0.08/1.00 (B-F:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

PLATE	GRIP (DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1855

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.78 (E) (INPUT = 0.90)
JSI METAL= 0.30 (E) (INPUT = 1.00)

A-18023201

Version 6.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 15:02:07 2018 Page 1
ID:MEBjdsYok7DlbnT4B71Xvs4PG-1 XxTasPr6svbdHXoseuFCqHm6vNfNlUCfVnV9hzzk19



TOTAL WEIGHT = 61.0

A-18023202 CONTINUED ON PAGE 2

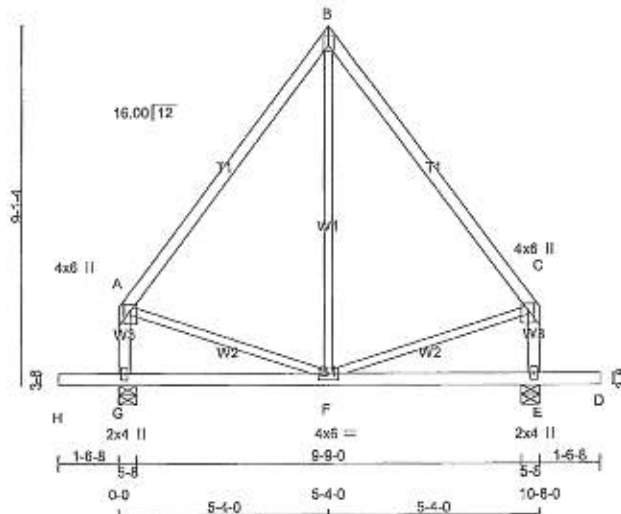
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	H17	6	1	TRUSS DESC.	

Alpe Roof Truss, Maple

Version 8.200 8 Jan 6 2018 MITok Industries, Inc. Thu Feb 15 15:02:12 2018 Page 1
ID:MF8llriaTok7DlbpT4B71Xys4PG-hVIMdZT_xPauk2QINCUCvu_b2z4gSm6OfedyLBzkfBv

1-6-8 0-0-5-8 4-10-8 5-4-0 4-10-8 10-2-8 10-6-0 12-2-8
1-6-8 5-8 5-8 5-8 5-8 5-8 5-8 5-8
3x5 II

Scale = 1:55.9



TOTAL WEIGHT = 6 X 56 = 334 lb (M/F)

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTW+p	MT20	3.0	3.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWVW-l	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
JT	663	0	663	0	5-8	1-8
G	663	0	663	0	5-8	1-8
E	663	0	663	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
JT	473	789 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0
G	473	789 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0
E	473	789 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0

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

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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-274 / 0	-78.0 -78.0	0.29 (1)	6.25	F-B	0 / 96	0.03 (4)
B-C	-274 / 0	-78.0 -78.0	0.29 (1)	6.25	A-F	0 / 172	0.04 (1)
G-A	-477 / 0	0.0 0.0	0.05 (1)	7.81	F-C	0 / 172	0.04 (1)
E-C	-477 / 0	0.0 0.0	0.05 (1)	7.81			
H-G	0 / 0	-96.5 -96.5	0.16 (1)	10.00			
G-F	0 / 0	-18.5 -18.5	0.15 (4)	10.00			
F-E	0 / 0	-18.5 -18.5	0.15 (4)	10.00			
E-D	0 / 0	-96.5 -96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
	DL = 6.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.4	PSF
TOTAL LOAD	= 34.4	PSF

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2015
- CSA 088-03, CSA 088-14
- TPIC 2011, TPIC 2014

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = $L/120$ (0.18")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/120$ (0.18")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.29/1.00 (A-B:1), BC=0.16/1.00 (D-E:1), WB=0.04/1.00 (C-F:1), SS=0.12/1.00 (G-H:1)

DOI 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

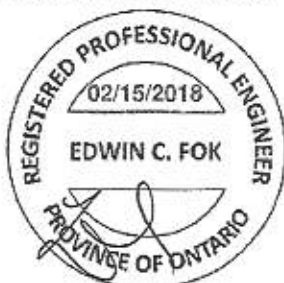
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PL)
MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1887 786

PLATE PLACEMENT TOL. = 0.250 inches

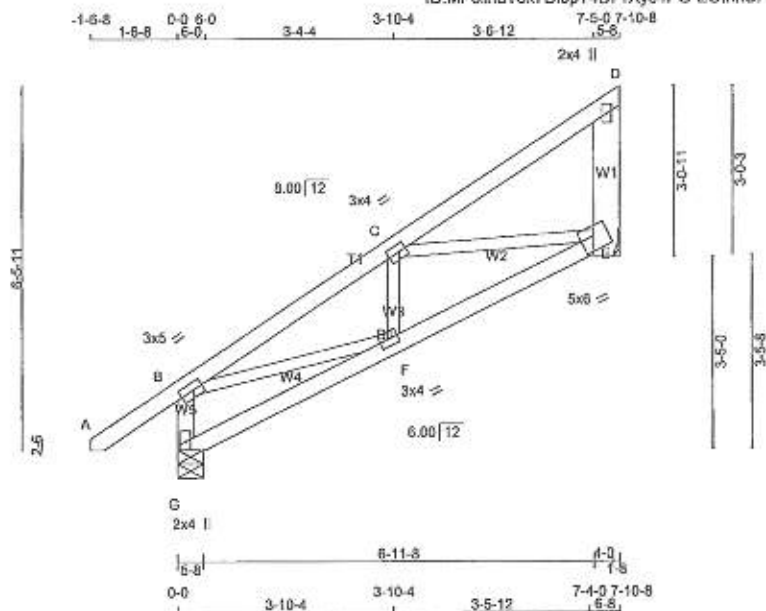
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (F) (INPUT = 0.90)
JSI METAL= 0.14 (C) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023203



Scale = 1:39.2

TOTAL WEIGHT = 3 X 36 = 107 lb

DA[F]

LUMBER

N. I. G. A. RULES		LUMBER		DESCR.
CHORDS	SIZE			
G - B	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x8	DRY	No.2	SPF
G - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3		No.2	SPF
DRY: SEASONED LUMBER				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	3.0	5.0	1.50	2.00
C	TMVW-4	MT20	3.0	4.0	1.50	1.50
D	TMV-tp	MT20	2.0	4.0		
E	BVMW-1	MT20	5.0	6.0	3.00	3.00
F	BVMW-1	MT20	3.0	4.0	1.50	1.75
G	BMV1-tp	MT20	2.0	4.0		Edges

Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD

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

BUILDING BEARINGS

JY	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	501	0	501	0	0	5-3	1-8
E	380	0	380	0	0	HANGER BY OTHERS	

UNFACTORED REACTIONS

1ST CASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	355	230 / 0	0 / 0	0 / 0	0 / 0	124 / 0	0 / 0
F	271	185 / 0	0 / 0	0 / 0	0 / 0	106 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
G-R	-473 / 0	0.0	0.0	0.05 (1)	7.81	F-C	-57 / 41	0.01 (4)	
A-B	0 / 34	-78.0	-78.0	0.13 (1)	10.00	B-F	0 / 51.9	0.12 (1)	
B-C	-592 / 0	-78.0	-76.0	0.15 (1)	6.25	C-E	-510 / 0	0.15 (1)	
C-D	-19 / 0	-78.0	-78.0	0.14 (1)	6.25				
E-D	-123 / 0	0.0	0.0	0.01 (1)	7.81				
G-F	0 / 4	-18.5	-18.5	0.07 (4)	10.00				
F-E	0 / 667	-18.5	-18.5	0.13 (1)	10.00				

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	21.0	PSF
	DL =	8.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.4	PSF
TOTAL LOAD =		34.4	PSF

SPACING = 24.0 IN. C/C

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.15/1.00 (B-C:1), BC=0.13/1.00 (E-F:1),
WFB=0.13/1.00 (C-E:1), SSI=0.12/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NO. 1 VALUES

PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)	(PSI)	(PLI)	(PLI)	(PLI)	(PLI)
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	818	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.78 (F) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)

A-18023204

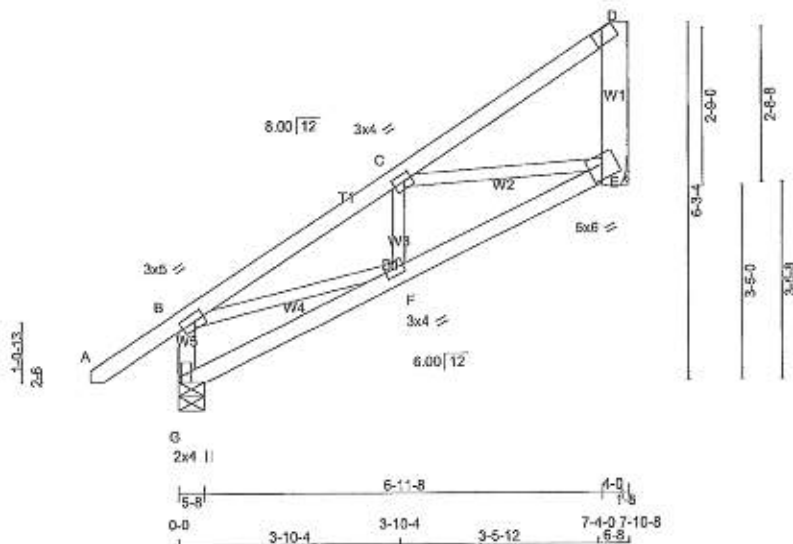
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	H18TA	1	1	TRUSS DESC.	

Alpha Roof Truss, Maple

Version 8.200 S Jan 8 2015 MITek Industries, Inc. Thu Feb 15 15:03:27 2018 Page 1
ID:MF8IriaTok7D/bpT4B71Xys4PG-7wnjNDN0GS1FEaIAGSK7SibRGChdX/HQvphIQUlZkt7k

-1-6-8 0-0 6-0 3-4-4 3-10-4 3-8-12 7-5-0 7-6-14 7-10-8
1-6-8 6-0 3-4-4 3-10-4 3-8-12 7-5-0 7-6-14 7-10-8
1-14 3-10

Scale = 1:38.5



TOTAL WEIGHT = 35 lb
[D/17]

LUMBER	N. I. G. A. RULES	LUMBER	DESCR
CHORDS	SIZE	No.2	SPF
A - D	2x4	DRY	No.2
E - H	2x6	DRY	No.2
I - L	2x4	DRY	No.2
M - P	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	3.0	5.0	1.50	2.00
C	TMVW-2	MT20	3.0	4.0	1.50	1.50
D	TMVH	MT20	3.0	5.0	1.50	1.75
E	BMVW-1	MT20	5.0	6.0	3.00	3.00
F	BMVW-1	MT20	3.0	4.0	1.50	1.75
G	BMV1+2	MT20	2.0	4.0	Edge	

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
G	501	0	501	0
E	380	0	380	0

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS
JT	COMBINED
G	355
E	271

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO					FR-TO		
A-B	0/34	-78.0	-78.0	0.13 (1)	10.00	F-C	-87/41
B-C	-582/0	-78.0	-78.0	0.15 (1)	6.25	B-F	0/519
C-D	-19/0	-78.0	-78.0	0.14 (1)	6.25	C-E	-510/0
E-D	-123/0	0.0	0.0	0.01 (1)	7.81		
G-H	-470/0	0.0	0.0	0.05 (1)	7.81		
G-F	0/4	-18.5	-18.5	0.07 (4)	10.00		
F-E	0/567	-18.5	-18.5	0.13 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 5.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

(58 % OF 23.0 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.15/1.00 (B-C:1), BC=0.13/1.00 (E-F:1), WB=0.13/1.00 (C-E:1), SS=0.12/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LB 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.

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	518 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (F) (INPUT = 0.90)
JSI METAL= 0.22 (D) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023205

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292578	J5	2	1	TRUSS DESC.	

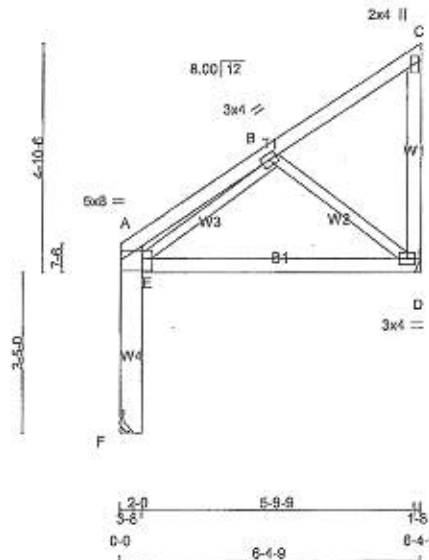
Alpha Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 14:52:47 2018 Page 1

ID:MF08lriaTok7DlbpT4B71Xys4PG-ko0m2Nda7pO3SDj9n1rwWk55LCFRaDIDkFFY0RzklE

0-06.8 5-5 2-9-12 3-3-4 2-7-12 5-11-1 6-4-9 5-5

Scale = 1/48.8



TOTAL WEIGHT = 2 X 33 = 67 lb
[M/F]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBWW1-1	MT20	5.0	8.0	3.00	2.50
B	TMBWW1-1	MT20	3.0	4.0		
C	TMBWW1-1	MT20	2.0	4.0		
D	TMBWW1-1	MT20	3.0	4.0		
E						

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	RECORD BRG
	VERT	HORZ	DOWN	HORZ		
D	297	0	297	0	0	
F	303	0	303	0	0	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOL
D	212	129 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
F	216	133 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0

BRACING

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.81 FT

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	0 / 34	-78.0	-78.0	0.11 (1)	10.00	F-E	-303 / 0	0.04 (1)	
B-C	-33 / 0	-78.0	-78.0	0.08 (1)	6.25	E-A	-82 / 0	0.01 (1)	
D-C	-100 / 0	0.0	0.0	0.10 (4)	7.81	E-B	-277 / 0	0.07 (1)	
E-D	0 / 198	-18.5	-18.5	0.16 (4)	10.00	B-D	-218 / 0	0.06 (1)	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0 PSF
DL	= 6.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.4 PSF
TOTAL LOAD	= 34.4 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 085-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % CF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.11/1.00 (A-B-1), BC=0.16/1.00 (D-E-4), WB=0.07/1.00 (B-E-1), SSI=0.09/1.00 (A-B-1)

COL 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)
MT20	618	354	1057

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (D) (INPUT = 0.80)
JSI METAL= 0.06 (A) (INPUT = 1.00)

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



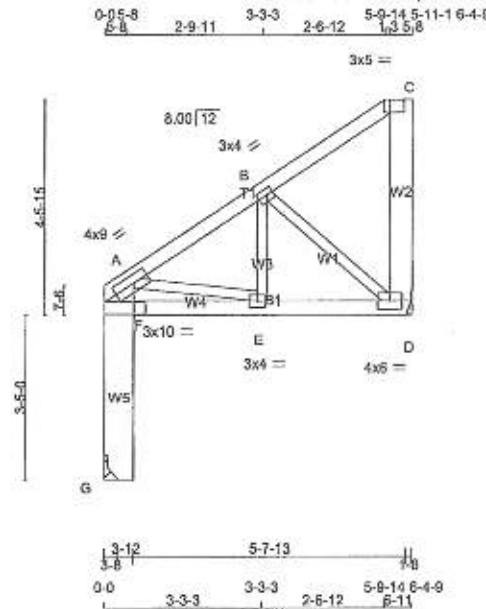
A-18023207

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRW/G NO.
292578	J5A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 5.206 S Jan 6 2018 M Tek Industries, Inc. Thu Feb 15 15:03:11 2018 Page 1

ID:MF8llrieTok7DibpT4B71Xys4PG-Trpg0IB_2X0WJ6Q5K52FokKqQIFvnSM4DKPZwGzkB



Scale = 1:15.8

TOTAL WEIGHT = 39 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF
A - C	2x4	DRY	No.2	SPF			
D - C	2x6	DRY	No.2	SPF			
F - D	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			
G - A	2x8	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-1	MT20	4.0	9.0	2.00	3.75
B	TMWW-1	MT20	3.0	4.0	1.50	1.50
C	TVM-p	MT20	3.0	5.0	Edge	1.50
D	BMWW-1	MT20	4.0	6.0		
E	BMWW-1	MT20	3.0	4.0		
F	BWM-1	MT20	3.0	10.0	1.50	2.75

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	HORZ
D	293	0	293	0
G	293	0	293	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX	MIN	COMPONENT REACTIONS
D	COMBINED	SNOW	LIVE	PERM.LIVE
G	209	128 / 0	0 / 0	0 / 0

BRACING

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

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.61 FT

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

LOADING

TOTAL LOAD CASES: (1)

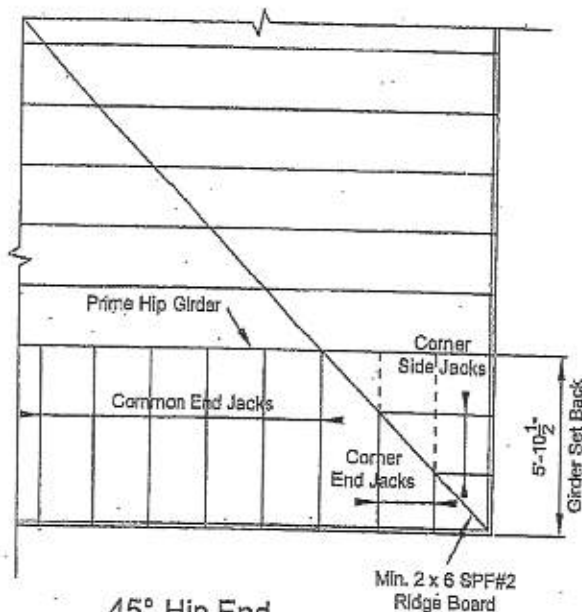
MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO						FR-TO			
A-B	-243 / 0	-78.0	-78.0	0.06 (1)	6.25	G-F	-293 / 0	0.03 (1)	
B-C	-23 / 0	-78.0	-78.0	0.06 (1)	6.25	F-A	-288 / 0	0.01 (1)	
D-C	-103 / 0	0.0	0.0	0.03 (1)	7.61	E-B	0 / 56	0.02 (4)	
F-E	0 / 0	-18.5	-18.5	0.04 (4)	10.00	B-D	-253 / 0	0.06 (1)	
E-D	0 / 214	-18.5	-18.5	0.06 (1)	10.00	A-E	0 / 217	0.05 (1)	

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023208

STRACON ENGINEERING INC.



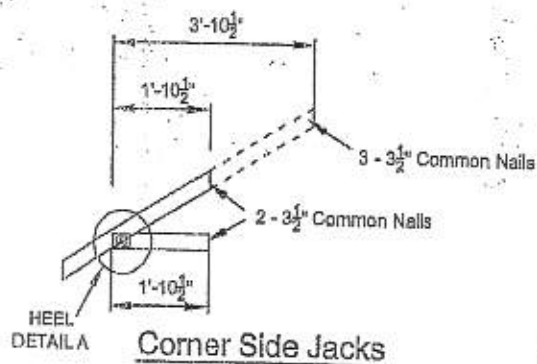
45° Hip End

LUMBER SPECIFICATION

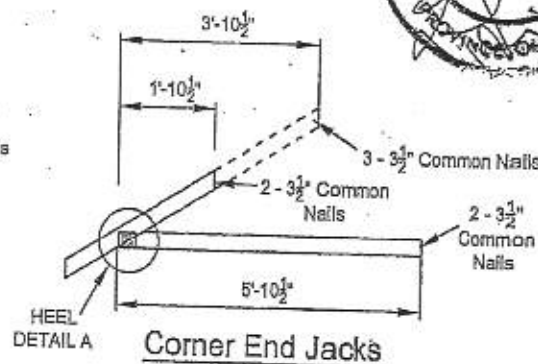
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

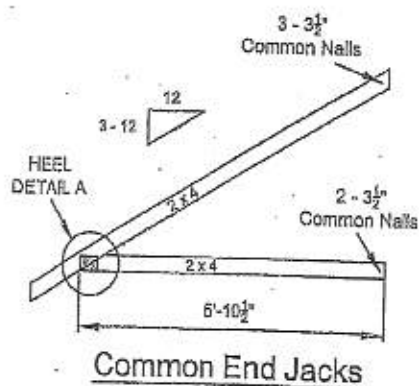
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



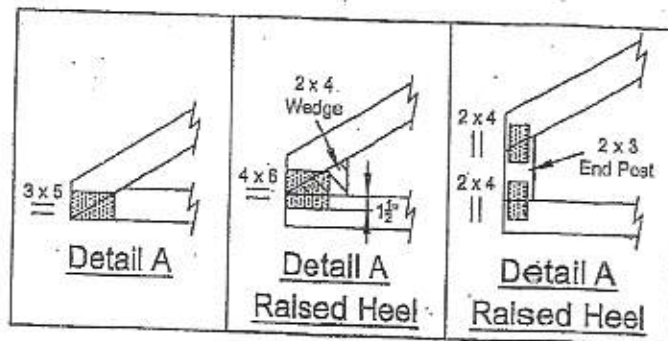
Corner Side Jacks



Corner End Jacks



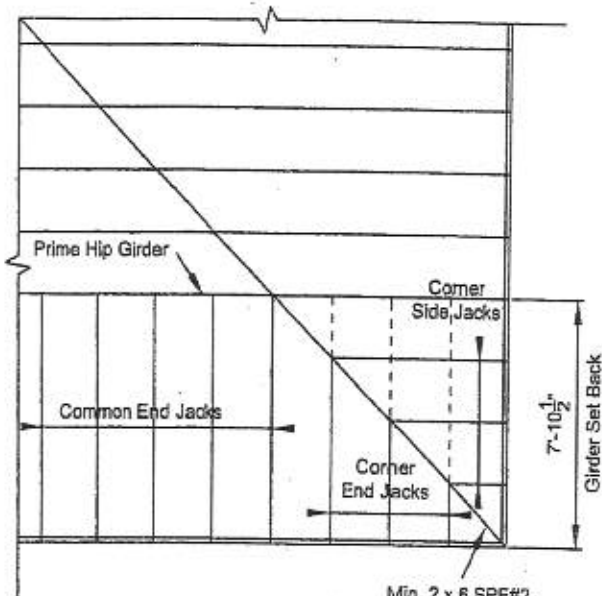
Common End Jacks



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

CS-51008

STRACON ENGINEERING INC.



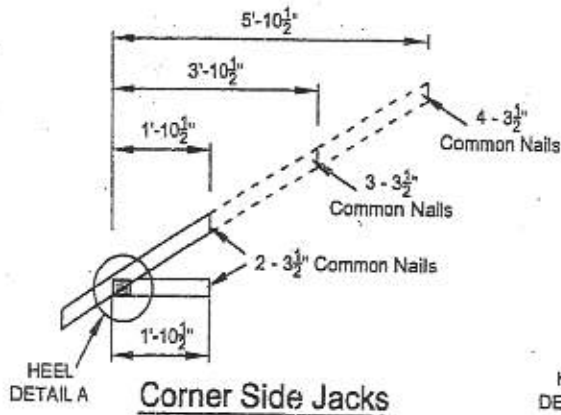
45° Hip End

LUMBER SPECIFICATION

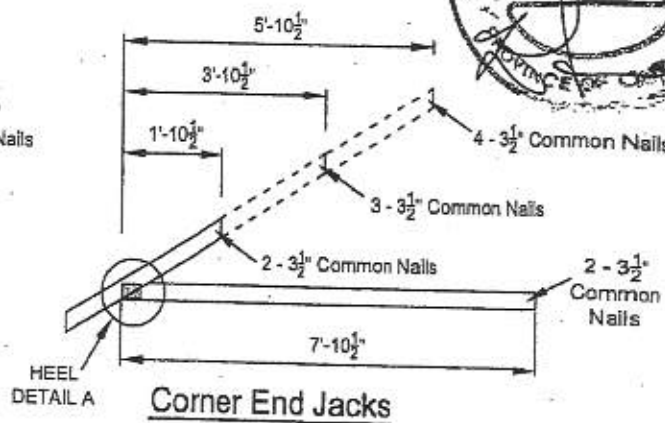
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

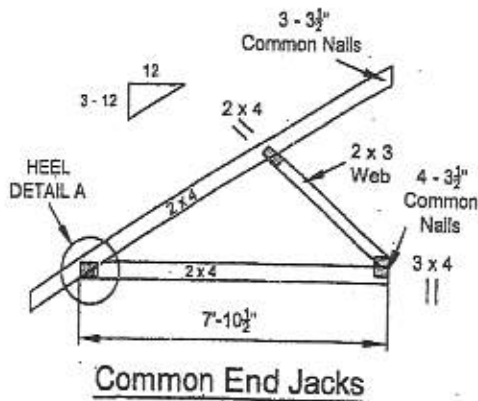
TOP CHORD SNOW LOAD : 34.8 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
TOTAL LOAD : 44.8 P.S.F.



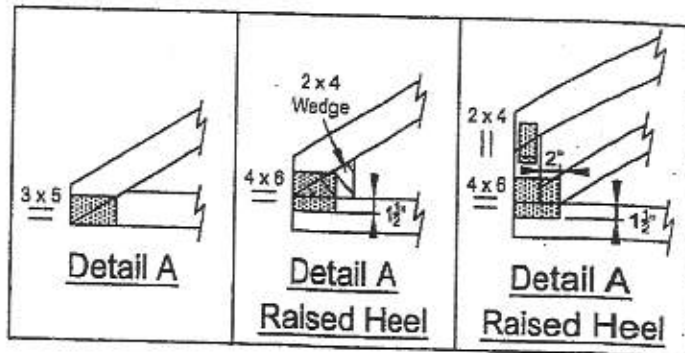
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-71008N

LUS – Double Shear Joist Hangers

All LUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections.

Material: 18 gauge

Finish: G90 galvanized

Design:

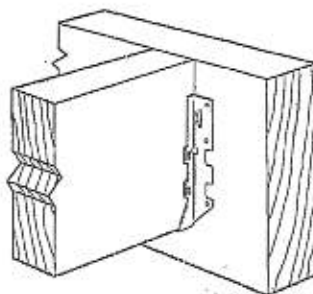
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

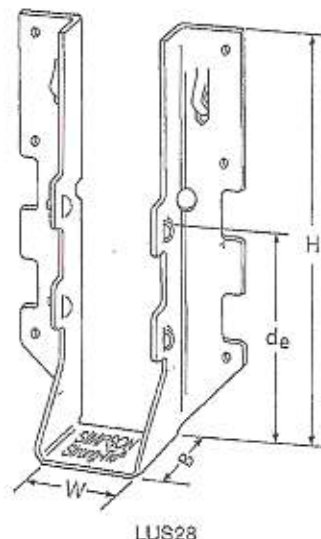
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

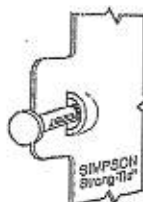


Typical LUS
Installation



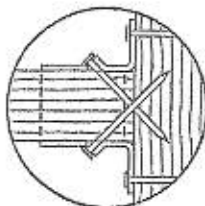
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
LUS24	18	1 1/8	3 1/4	1 1/4	1 1/8	(4) 10d	(2) 10d	710	1830	645	1155
LUS24-2	18	3 1/8	3 1/4	2	1 1/8	(4) 16d	(2) 16d	835	2020	690	1435
LUS26	18	1 1/8	4 1/4	1 1/4	3 3/8	(4) 10d	(4) 10d	1420	2170	1290	1830
LUS26-2	18	3 1/8	4 1/4	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4 1/8	4 1/4	2	3 3/4	(4) 16d	(4) 16d	1720	2505	1545	2340
LUS28	18	1 1/8	6 1/4	1 1/4	3 3/8	(8) 10d	(8) 10d	1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(8) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4 1/8	6 1/4	2	3 3/4	(8) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1 1/8	7 1/4	1 1/4	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 1/4	2	5 1/4	(8) 16d	(6) 16d	2580	3345	2320	2875

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
6,603,580



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

© 2017 Simpson Strong-Tie Company. All rights reserved. This document is the property of Simpson Strong-Tie Company. It is to be used for the project and location only. It is not to be reproduced or distributed without the written consent of Simpson Strong-Tie Company.

3331 Simpson Strong-Tie Company Road, Charlotte, NC 28226-1000

3331 Simpson Strong-Tie Company Road, Charlotte, NC 28226-1000

ISSUED 1/17 5/17 exp. 6/19

(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

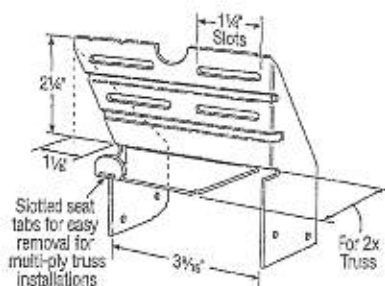
Design: Factored resistances are in accordance with CSA 086-14

Installation:

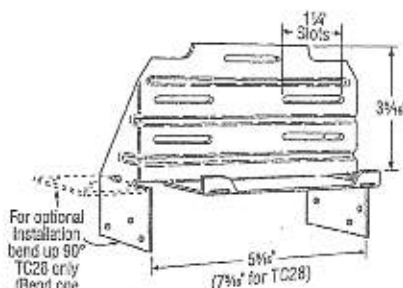
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1 1/2" = 0.148" dia. x 1 1/2" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into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

Optional TC Installation:

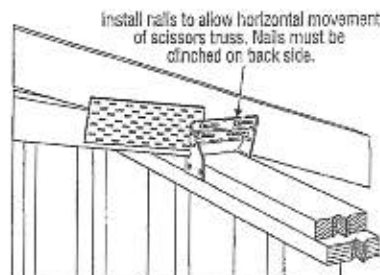
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



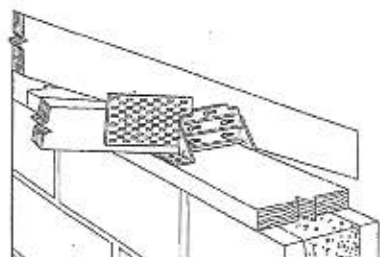
TC24
U.S. Patent 4,932,173



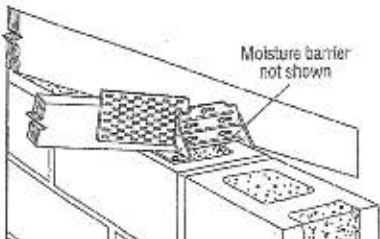
TC26
(TC28 Similar)



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) - 9/16" x 2 1/4" Titen screws has a factored uplift resistance of 275 lb.



LIMIT
STATES
DESIGN

This technical bulletin is effective until June 30, 2015, and reflects information available as of March 1, 2017. This information is updated periodically and should not be relied upon after June 30, 2019. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

© 2017 Simpson Strong-Tie Company Inc.

T-SPECTC17 3/17 exp. 6/19

(800) 999-5099
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:

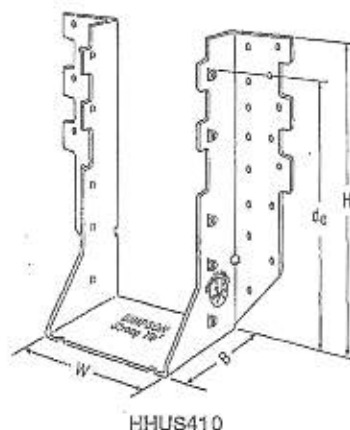
- Factored resistances are in accordance with CSA C86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

Installation:

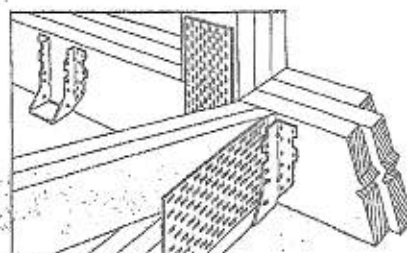
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/4" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or other applications

Options:

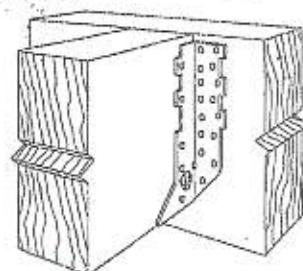
- See current catalogue for options



HHUS410



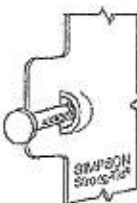
Typical HHUS Installation
(Truss Designer to provide
fastener quantity for connecting
multiple members together)



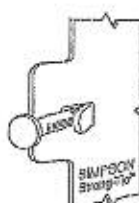
Typical HHUS
Installation

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HHUS25-2	14	3 1/4	5 1/4	3	3 1/4	(14) 16d	(3) 16d	2050	7335	2065	6205
HHUS28-2	14	3 3/4	7 1/4	3	6 1/4	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 3/4	9 1/4	3	8	(30) 16d	(10) 16d	4745	9850	4310	7000
HHUS210-3	14	4 1/4	9	3	7 1/4	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	5 1/4	8 3/4	3	7 3/4	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 3/4	5 1/4	3	3 1/4	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 3/4	7 1/4	3	6 1/4	(22) 16d	(8) 16d	3765	8945	2287	6345
HHUS410	14	3 3/4	9	3	8	(30) 16d	(10) 16d	4745	9855	4310	7000
HHUS6.50/10	14	5 1/4	9	3	8	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS7.25/10	14	7 1/4	9	3 3/4	7 3/4	(30) 16d	(10) 16d	4745	10770	4310	7850

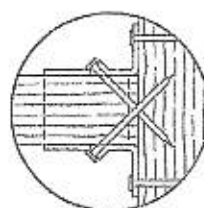
1. d₀ is the distance from the seat of the hanger to the highest joist nail.



Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,590



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

This technical bulletin is a code update and should be used in conjunction with the 2017 International Building Code and the 2017 International Residential Code. It is not intended to replace the code books. The code books should be consulted for the most current code requirements. © 2017 Simpson Strong-Tie Company Inc.

© 2017 Simpson Strong-Tie Company Inc.

TSPEC HHUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers

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:

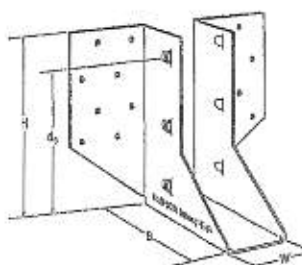
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

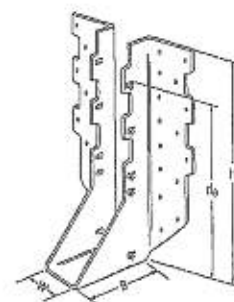
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

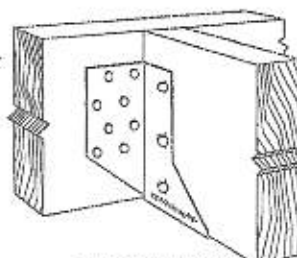
- See current catalogue for options



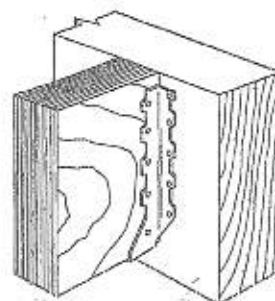
LJS26DS



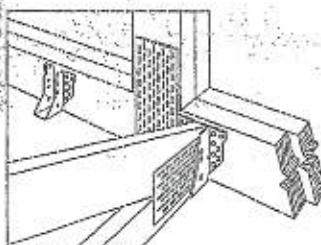
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



Typical HUS
Installation



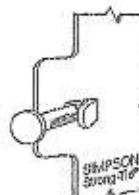
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁ ¹	Face	Joist	D.Fr-L		- S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
								lb.	lb.	lb.	lb.
LJS26DS	18	1 1/4	5	3 1/2	4 1/4	(16) 16d	(8) 16d	2055	4265	1480	4115
HUS26	18	1 1/4	5 1/2	3	3 1/4	(14) 16d	(8) 16d	2705	4940	2085	3875
HUS28	18	1 1/4	7 1/2	3	6 1/2	(22) 16d	(8) 16d	3605	5365	2875	4345
HUS210	18	1 1/4	9 1/2	3	7 1/2	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1,81/10	18	1 1/4	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

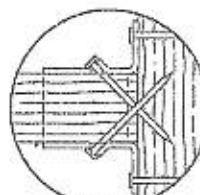
1. d₁ is the distance from the seat of the hanger to the highest joist nail.



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



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



Double
Shear
Nailing
Top View.



**LIMIT
STATES
DESIGN**

This technical bulletin is current as of June 30, 2017, and is for informational purposes only. It is not to be used as a substitute for the product literature or the product itself. The information is provided for informational purposes only and should not be used for design purposes. Contact Simpson Strong-Tie for current information and related warranty or safety information.

© 2017 Simpson Strong-Tie Company Inc.

T-SPECHUS17-3/17 exp. 6/19

(800) 999-5099
strongtie.com