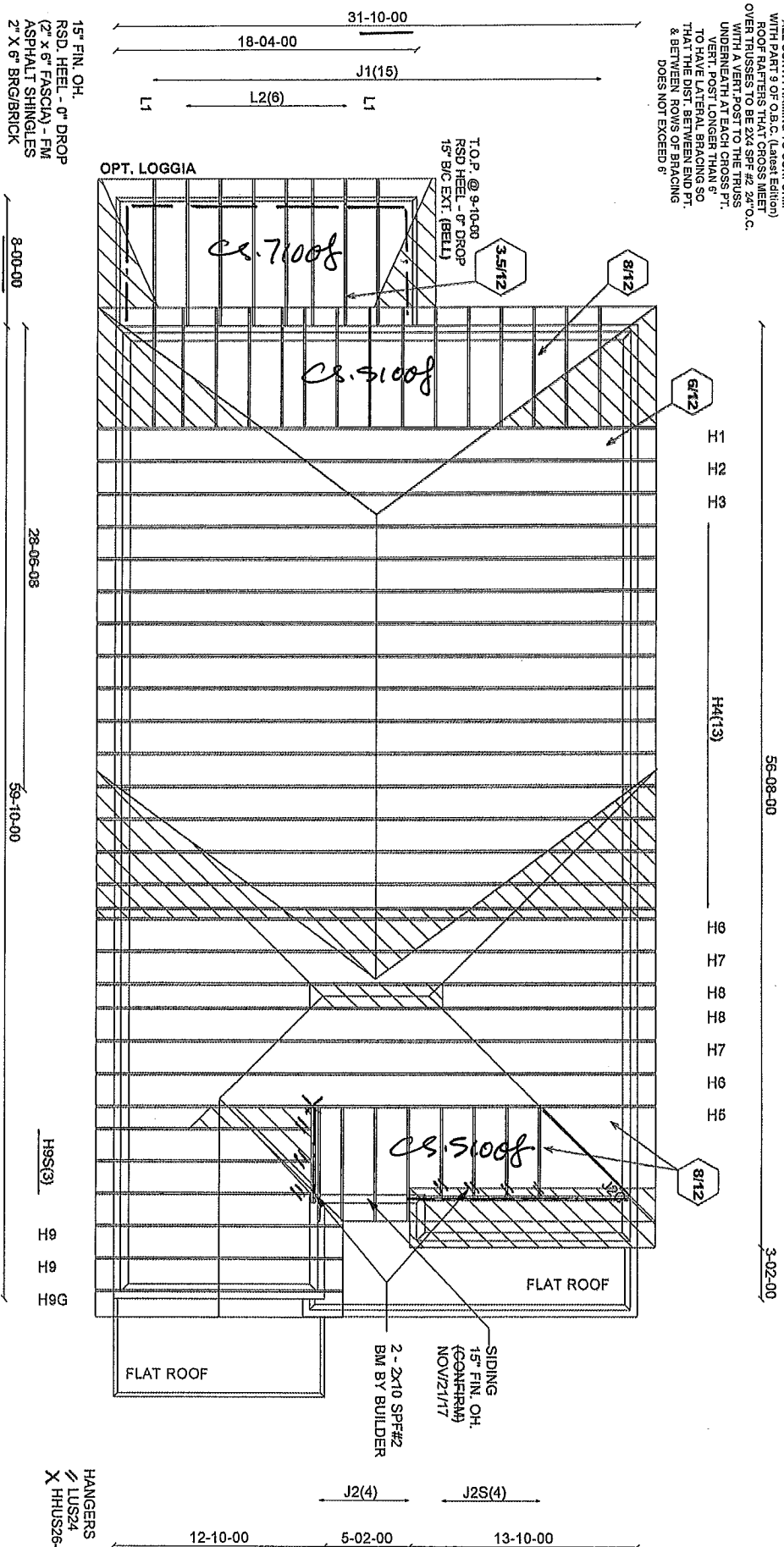


ALL CONV. FRAMING TO CONFORM WITH 2018 IBC (SEEN) ROOF TRUSSES TO BE 2X4 SPS #2 24" O.C. WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



CONVENTIONAL FRAMING BY OTHERS

OFFICE USE ONLY
ENGINEERED FROM
A-18023209 TO
A-18023219

DALE RIDGE

STO OR CRT 2ND FLR (5.560) OR CRT LUGGIP



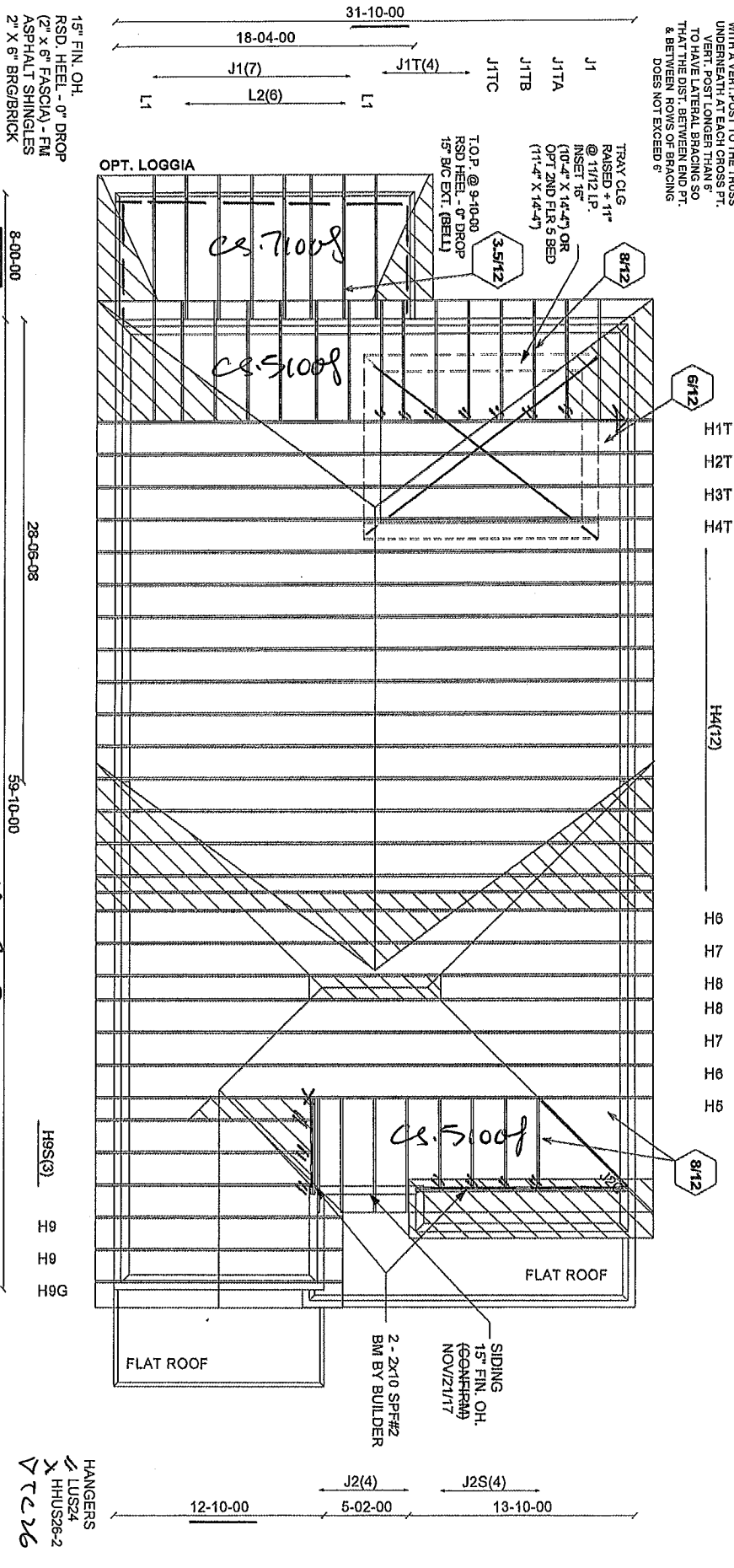
Job Track: 45147
Layout ID: 2893348
Plan Log: 94839

Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/16/2018
Designer: AMANDA

Model / Elevator: 4004 / C
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.

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (LATEST EDITION) ROOF TRUSSES THAT CROSS MEET OVER TRUSSES BE 2X6 SPACED @ 24" O.C. UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



Job Track: 45147
Layout ID: 292583
Plan Log: 95914

Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/16/2018
Designer: AMANDA

Model / Elevator: 4004 / C OPT TRAY OR LOGGIA
2x10 2ND FLR (5x6) OR
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.

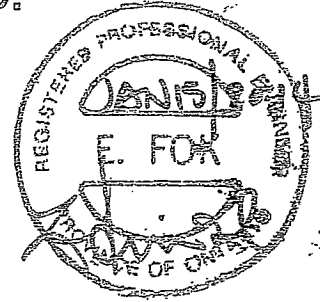
DALEGRIDGE

CONVENTIONAL FRAMING BY OTHERS

A. (Borzar) - A. (Borzar)

Stracon Engineering Inc.

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



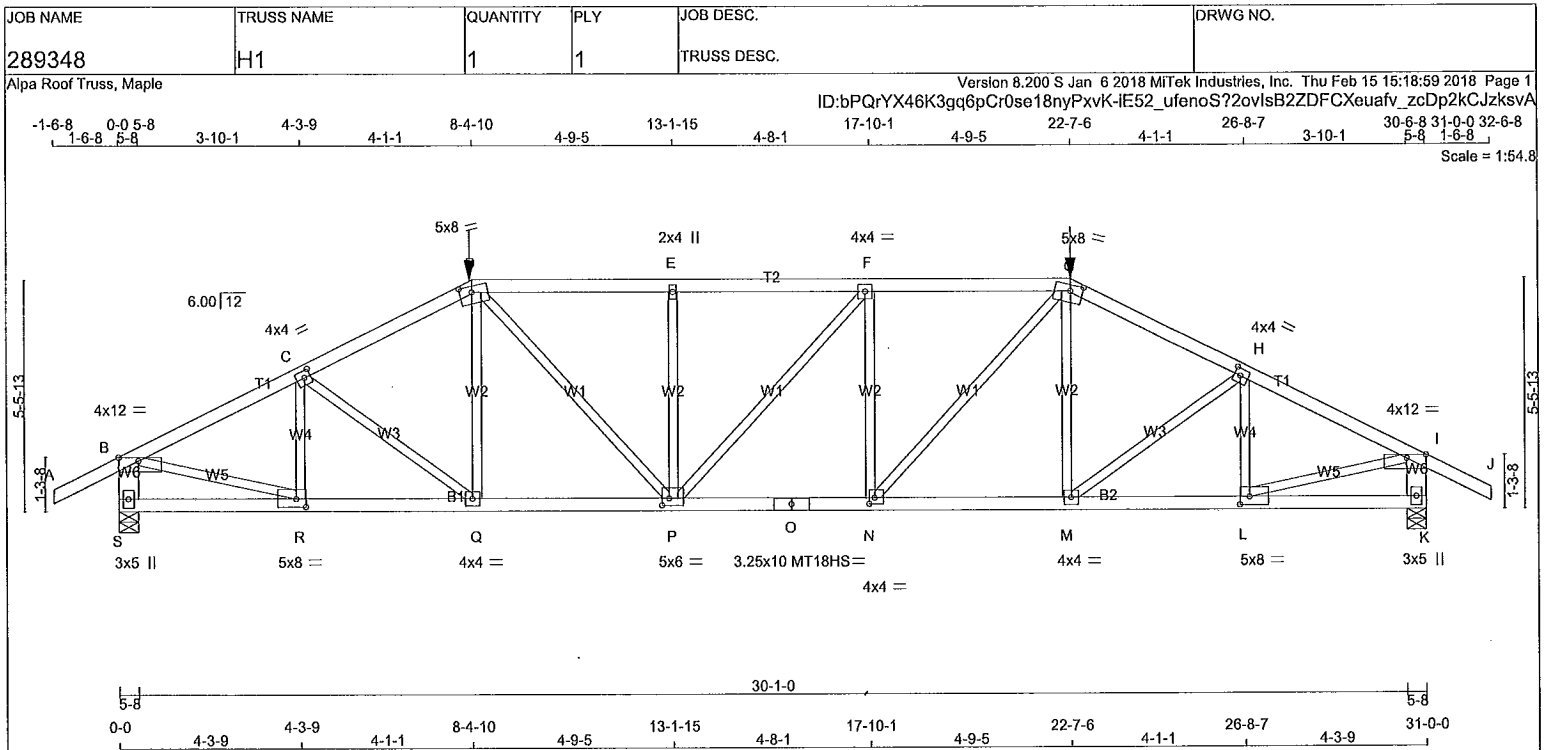
RESPONSIBILITIES

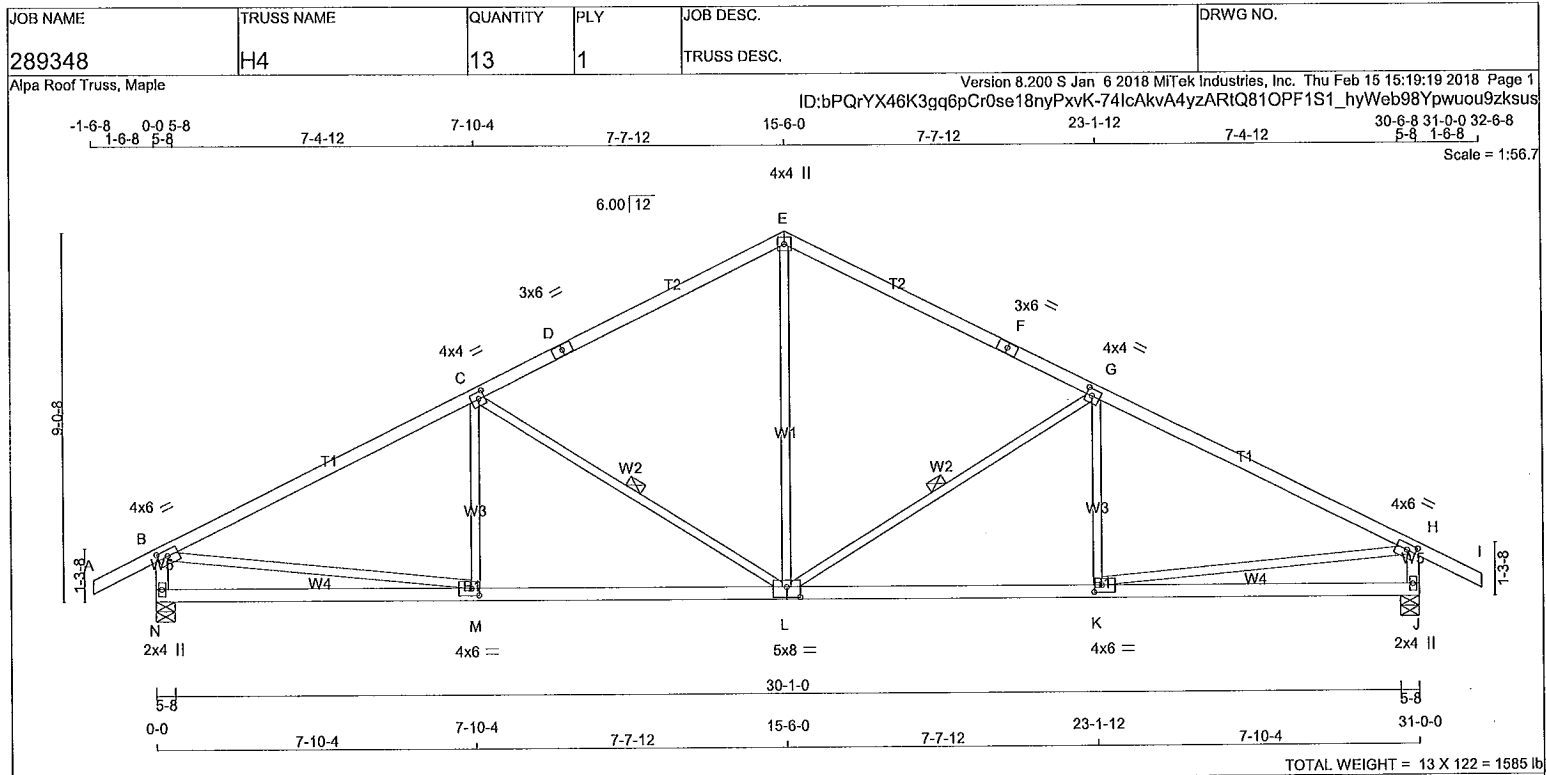
1. Stracon Engineering Inc. is responsible for the design of trusses as individual components.
2. It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building 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





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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	1.75	2.75
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TS-t	MT20	3.0	6.0		
E	TTW+p	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0	2.00	1.75
H	TMVW-t	MT20	4.0	6.0	1.75	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	6.0	2.00	2.25
L	BSWWW-t	MT20	5.0	8.0	3.00	4.00
M	BMVW-t	MT20	4.0	6.0	2.00	2.25
N	BMV1+p	MT20	2.0	4.0		

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
N	1621	0	1621	0	5-8	2-6	2-6
J	1621	0	1621	0	5-8	2-6	2-6

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		DEAD		SOIL	
JT	COMBINED	JT	SNOW	JT	WIND	JT	WIND
N	1153	718 / 0	0 / 0	0 / 0	435 / 0	0 / 0	0 / 0
J	1153	718 / 0	0 / 0	0 / 0	435 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF G-L, C-L.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX. FACTORED (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 28	-78.0	-78.0 0.14 (1)	10.00	L-E	0 / 879	0.20 (1)
B-C	-2121 / 0	-78.0	-78.0 0.81 (1)	3.74	L-G	-712 / 0	0.41 (1)
C-D	-1517 / 0	-78.0	-78.0 0.70 (1)	4.41	K-G	-67 / 105	0.04 (4)
D-E	-1517 / 0	-78.0	-78.0 0.70 (1)	4.41	C-L	-712 / 0	0.41 (1)
E-F	-1517 / 0	-78.0	-78.0 0.70 (1)	4.41	M-C	-67 / 105	0.04 (4)
F-G	-1517 / 0	-78.0	-78.0 0.70 (1)	4.41	B-M	0 / 1941	0.44 (1)
G-H	-2121 / 0	-78.0	-78.0 0.81 (1)	3.74	K-H	0 / 1941	0.44 (1)
H-I	0 / 28	-78.0	-78.0 0.14 (1)	10.00			
N-B	-1563 / 0	0.0	0.0 0.16 (1)	6.59			
J-H	-1563 / 0	0.0	0.0 0.16 (1)	6.59			
N-M	0 / 0	-18.5	-18.5 0.31 (4)	10.00			
M-L	0 / 1926	-18.5	-18.5 0.49 (4)	10.00			
L-K	0 / 1926	-18.5	-18.5 0.49 (4)	10.00			
K-J	0 / 0	-18.5	-18.5 0.31 (4)	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 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 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.25")

CSI: TC=0.81/1.00 (B-C:1) , BC=0.49/1.00 (L-M:4) , WB=0.44/1.00 (B-M:1) , SSI=0.26/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

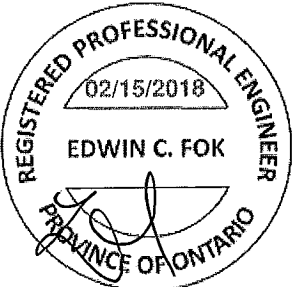
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

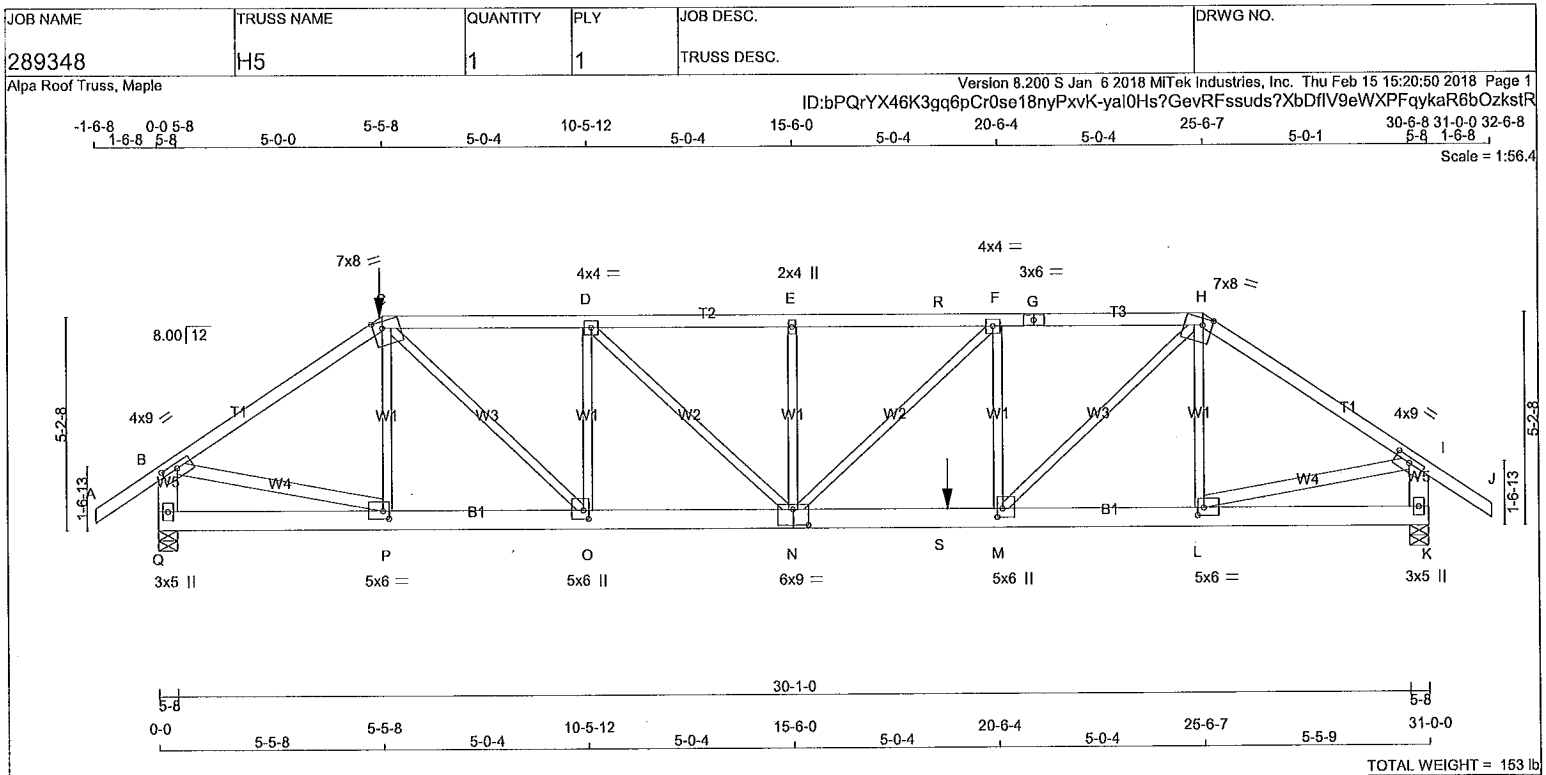
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.58 (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-18023212



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	No.2	SPF
A - C	2x4	DRY	1650F 1.5E	SPF	No.2	SPF	SPF
C - H	2x4	DRY	1650F 1.5E	SPF	No.2	SPF	SPF
H - J	2x4	DRY	No.2	SPF	No.2	SPF	SPF
K - I	2x6	DRY	No.2	SPF	No.2	SPF	SPF
Q - N	2x6	DRY	1650F 1.5E	SPF	No.2	SPF	SPF
N - K	2x6	DRY	1650F 1.5E	SPF	No.2	SPF	SPF
ALL WEBS	2x3	DRY	No.2	SPF	No.2	SPF	SPF
EXCEPT							
B - P	2x4	DRY	No.2	SPF	No.2	SPF	SPF
L - I	2x4	DRY	No.2	SPF	No.2	SPF	SPF

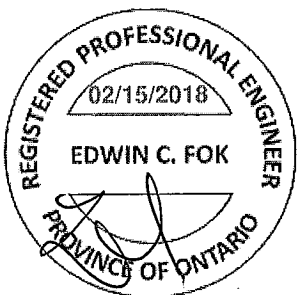
DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	9.0	1.50 4.50
C	TTWW-m	MT20	7.0	8.0	2.00 2.75
D	TMVW-t	MT20	4.0	4.0	
E	TMVW-w	MT20	2.0	4.0	
F	TMVW-t	MT20	4.0	4.0	
G	TS-t	MT20	3.0	6.0	
H	TTWW-m	MT20	7.0	8.0	2.00 2.75
I	TMVW-t	MT20	4.0	9.0	1.50 4.50
K	BMV1+p	MT20	3.0	5.0	
L	BMVW-t	MT20	5.0	6.0	2.25 1.75
M	BMVW-t	MT20	5.0	6.0	2.50 1.50
N	BSVWW-t	MT20	6.0	9.0	4.50 4.50
O	BMVW-t	MT20	5.0	6.0	2.50 1.50
P	BMVW-t	MT20	5.0	6.0	2.25 1.75
Q	BMV1+p	MT20	3.0	5.0	

HANGERS NOTES

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



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

BEARINGS

JT	FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
	GROSS REACTION		GROSS REACTION		BRG		BRG	
Q	3052	0	3052	0	5-8		4-7	
K	2699	0	2699	0	5-8		3-4	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
Q	2176	1329 / 0	0 / 0	0 / 0	0 / 0	847 / 0	0 / 0
K	1921	1189 / 0	0 / 0	0 / 0	0 / 0	732 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.81 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		MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED	
		VERT. LOAD (PLF)	LC1 MAX (LC)			VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
A-B	0 / 35	-78.0	-78.0 0.16 (1)	10.00	P-C	-400 / 0	0.16 (1)
B-C	-3600 / 0	-78.0	-78.0 0.91 (1)	2.92	C-O	0 / 2249	0.56 (1)
C-D	-4805 / 0	-153.5	-153.5 0.75 (1)	3.03	O-D	-1395 / 0	0.54 (1)
D-E	-5164 / 0	-153.5	-153.5 0.80 (1)	2.81	D-N	0 / 776	0.19 (1)
E-R	-5164 / 0	-153.5	-153.5 0.83 (1)	3.08	N-E	-741 / 0	0.29 (1)
R-F	-5164 / 0	-78.0	-78.0 0.83 (1)	3.08	N-F	0 / 784	0.19 (1)
F-G	-4599 / 0	-78.0	-78.0 0.51 (1)	3.37	M-F	-1059 / 0	0.41 (1)
G-H	-4599 / 0	-78.0	-78.0 0.51 (1)	3.37	M-H	0 / 2756	0.88 (1)
H-I	-3155 / 0	-78.0	-78.0 0.81 (1)	3.19	L-H	-529 / 0	0.21 (1)
I-J	0 / 35	-78.0	-78.0 0.16 (1)	10.00	B-P	0 / 3056	0.54 (1)
Q-B	-2967 / 0	0.0	0.0 0.22 (1)	6.06	L-I	0 / 2679	0.47 (1)
K-I	-2643 / 0	0.0	0.0 0.19 (1)	6.36			
Q-P	0 / 0	-36.4	-36.4 0.09 (4)	10.00			
P-O	0 / 2983	-36.4	-36.4 0.29 (1)	10.00			
O-N	0 / 4605	-36.4	-36.4 0.43 (1)	10.00			
N-S	0 / 4599	-36.4	-36.4 0.71 (1)	10.00			
S-M	0 / 4599	-18.5	-18.5 0.71 (1)	10.00			
M-L	0 / 2611	-18.5	-18.5 0.38 (1)	10.00			
L-K	0 / 0	-18.5	-18.5 0.05 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	MAX+	FACE	DIR.	TYPE
C	5-5-8	-310	-310	---	FRONT	VERT	TOTAL
S	19-3-8	-822	-822	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH.	LL	=	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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 5-5-8
RIGHT SETBACK = 5-5-9
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 19-1-8 OF SPAN MEASURED FROM THE LEFT.

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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 (0.21")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/894 (0.42")

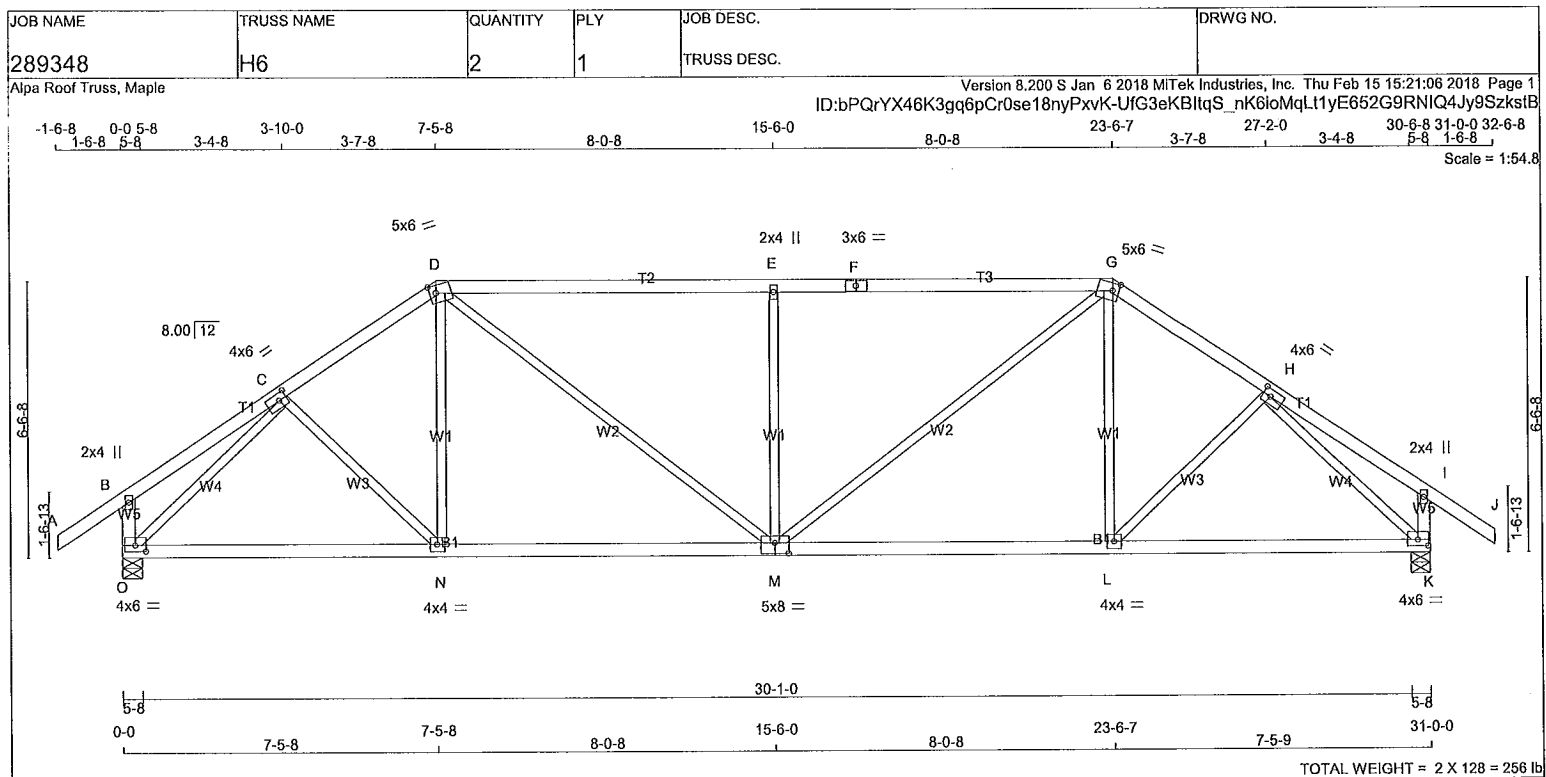
CSI: TC=0.91/1.00 (B-C:1), BC=0.71/1.00 (M-N:1)
WB=0.68/1.00 (H-M:1), SSI=0.48/1.00 (M-N:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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



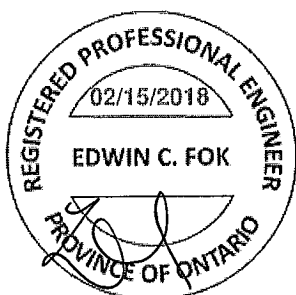
TOTAL WEIGHT = 2 X 128 = 256 lb

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.		
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	1650F 1.5E	SPF	
F - G	2x4	DRY	1650F 1.5E	SPF	
G - J	2x4	DRY	No.2	SPF	
O - B	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
O - M	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMWW-t	MT20	4.0	6.0	2.00 2.25
D	TTWW-m	MT20	5.0	6.0	2.25 1.75
E	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	3.0	6.0	
G	TTWW-m	MT20	5.0	6.0	2.25 1.75
H	TMWW-t	MT20	4.0	6.0	2.00 2.25
I	TMV+p	MT20	2.0	4.0	
K	BMVW1-t	MT20	4.0	6.0	1.75 3.00
L	BMWW-t	MT20	4.0	4.0	
M	BSWWW-t	MT20	5.0	8.0	3.00 4.00
N	BMWW-t	MT20	4.0	4.0	
O	BMVW1-t	MT20	4.0	6.0	1.75 3.00

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



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

BEARINGS	FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
	GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
O	1622	0	1622	0	0	5-8	1-12	
K	1622	0	1622	0	0	5-8	1-12	

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	1154	719 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
K	1154	719 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 35	-78.0	-78.0 0.15 (1)	C-N	0 / 77	0.03 (4)	
B-C	0 / 17	-78.0	-78.0 0.16 (1)	N-D	0 / 146	0.05 (4)	
C-D	-1678 / 0	-78.0	-78.0 0.20 (1)	D-M	0 / 722	0.16 (1)	
D-E	-1952 / 0	-78.0	-78.0 0.91 (1)	M-E	-772 / 0	0.54 (1)	
E-F	-1952 / 0	-78.0	-78.0 0.91 (1)	M-G	0 / 722	0.16 (1)	
F-G	-1952 / 0	-78.0	-78.0 0.91 (1)	L-G	0 / 146	0.05 (4)	
G-H	-1678 / 0	-78.0	-78.0 0.20 (1)	L-H	0 / 77	0.03 (4)	
H-I	0 / 17	-78.0	-78.0 0.16 (1)	O-C	-1877 / 0	0.84 (1)	
I-J	0 / 35	-78.0	-78.0 0.15 (1)	H-K	-1877 / 0	0.84 (1)	
O-B	-241 / 0	0.0	0.0 0.03 (1)				
K-I	-241 / 0	0.0	0.0 0.03 (1)				
O-N	0 / 1326	-18.5	-18.5 0.44 (4)				
N-M	0 / 1381	-18.5	-18.5 0.46 (4)				
M-L	0 / 1381	-18.5	-18.5 0.46 (4)				
L-K	0 / 1326	-18.5	-18.5 0.44 (4)				

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 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 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.91/1.00 (E-G:1), BC=0.46/1.00 (L-M:4), WB=0.84/1.00 (H-K:1), SSI=0.30/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

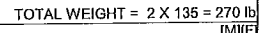
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.46 (H) (INPUT = 1.00)

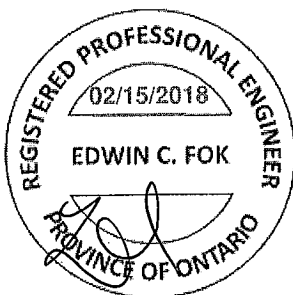
A-18023214

Alpa Roof Truss, Maple

Version 8.200 S Jan 6'2018 MiTek Industries, Inc. Thu Feb 15 15:21:26 2018 Page 1
ID:bPQRyX46K3gg6pCr0se18nyPxvK-vWtdq9RrAzz9AOeYzZB1gEnn?9sErXuF0B90rlzksst



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



CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		LENGTH FR-TO				
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	C-M	-80 / 30	0.06 (1)
B-C	0 / 23	-78.0	-78.0	0.28 (1)	10.00	M-D	0 / 239	0.07 (4)
C-D	-1608 / 0	-78.0	-78.0	0.25 (1)	4.97	D-L	0 / 406	0.09 (1)
D-E	-1573 / 0	-78.0	-78.0	0.40 (1)	4.81	L-E	-577 / 0	0.67 (1)
E-F	-1573 / 0	-78.0	-78.0	0.40 (1)	4.81	F-F	0 / 406	0.09 (1)
F-G	-1608 / 0	-78.0	-78.0	0.25 (1)	4.97	K-F	0 / 239	0.07 (4)
G-H	0 / 23	-78.0	-78.0	0.28 (1)	10.00	K-G	-80 / 30	0.06 (1)
H-I	0 / 35	-78.0	-78.0	0.15 (1)	10.00	N-C	-1880 / 0	0.53 (1)
N-B	-268 / 0	0.0	0.0	0.03 (1)	7.81	G-J	-1880 / 0	0.53 (1)
J-H	-268 / 0	0.0	0.0	0.03 (1)	7.81			
N-M	0 / 1376	-18.5	-18.5	0.50 (4)	10.00			
M-L	0 / 1320	-18.5	-18.5	0.50 (4)	10.00			
L-K	0 / 1320	-18.5	-18.5	0.50 (4)	10.00			
K-J	0 / 1376	-18.5	-18.5	0.50 (4)	10.00			

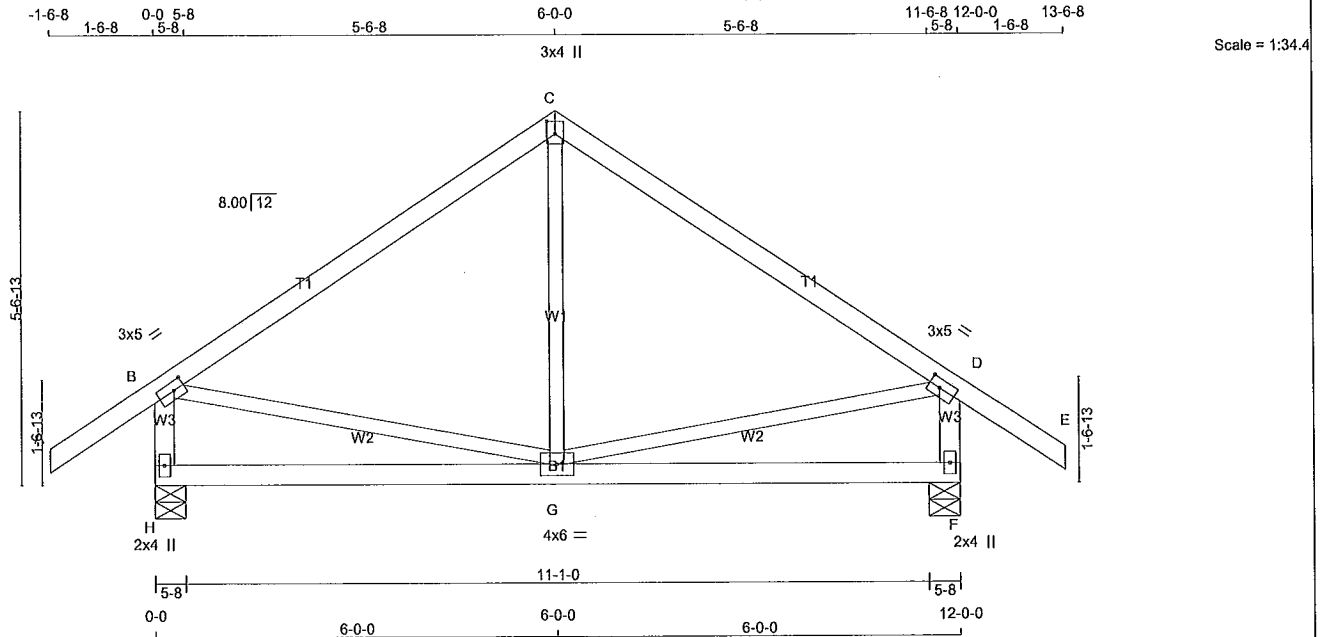
JSI GRIP= 0.87 (C) (INPUT = 0.90)
JSI METAL= 0.46 (G) (INPUT = 1.00)

A-18023215

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
289348	H9	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 15:21:37 2018 Page 1
ID:bPQrYX46K3gq6pCr0se18nyPxvK-4den8wZkaL.Mb74_f7MtdZkgralgwetsYOK5k9zkssf



TOTAL WEIGHT = 2 X 51 = 101 lb
(M)(F)

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	5.0	1.50	2.00
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-I	MT20	3.0	5.0	1.50	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-I	MT20	4.0	6.0		
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG
H	705	0	705	0	0	5-8	1-8	1-8	
F	705	0	705	0	0	5-8	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
H	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
F	500	320 / 0	0 / 0	0 / 0	0 / 0	180 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 35	-78.0	-78.0	0.15 (1)	G-C	-7 / 94	0.03 (4)
B-C	-416 / 0	-78.0	-78.0	0.36 (1)	B-G	0 / 353	0.08 (1)
C-D	-416 / 0	-78.0	-78.0	0.36 (1)	G-D	0 / 353	0.08 (1)
D-E	0 / 35	-78.0	-78.0	0.15 (1)			
H-B	-663 / 0	0.0	0.0	0.07 (1)			
F-D	-663 / 0	0.0	0.0	0.07 (1)			
H-G	0 / 0	-18.5	-18.5	0.19 (4)			
G-F	0 / 0	-18.5	-18.5	0.19 (4)			

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

(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 (0.03")

CSI: TC=0.36/1.00 (B-C:1), BC=0.19/1.00 (G-H:4), WB=0.08/1.00 (B-G:1), SSI=0.15/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

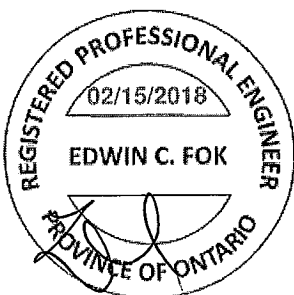
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

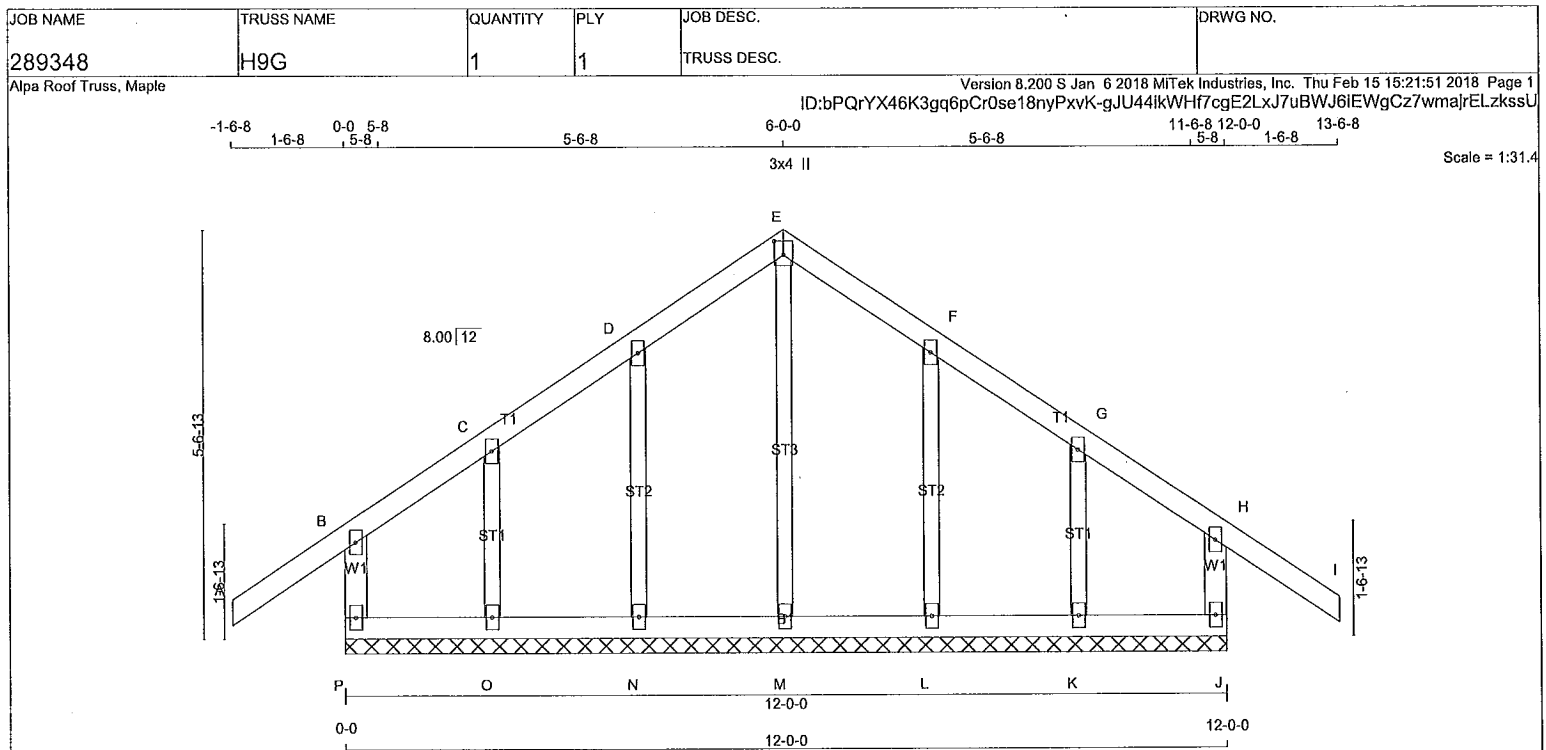
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.61 (D) (INPUT = 0.90)
JSI METAL= 0.18 (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-18023217



LUMBER				
N. I. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2'-0" OC.				

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C, D, F, G				
C	TMW+w	MT20	2.0	4.0
E	TTW+p	MT20	3.0	4.0
H	TMV+p	MT20	2.0	4.0
J	BMV1+p	MT20	2.0	4.0
K, L, M, N, O				
K	BMW1+w	MT20	2.0	4.0
P	BMV1+p	MT20	2.0	4.0

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

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

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

LOADING

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH
FR-TO		FROM TO			FR-TO				
P-B	-206 / 0	0.0	0.0	0.06 (1)	7.81	M-E	-205 / 0	0.09 (1)	
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	N-D	-168 / 0	0.05 (1)	
B-C	0 / 23	-78.0	-78.0	0.09 (1)	10.00	O-C	-118 / 0	0.02 (1)	
C-D	0 / 45	-78.0	-78.0	0.05 (1)	10.00	L-F	-168 / 0	0.05 (1)	
D-E	0 / 43	-78.0	-78.0	0.05 (1)	10.00	K-G	-118 / 0	0.02 (1)	
E-F	0 / 43	-78.0	-78.0	0.05 (1)	10.00				
F-G	0 / 45	-78.0	-78.0	0.05 (1)	10.00				
G-H	0 / 23	-78.0	-78.0	0.09 (1)	10.00				
H-I	0 / 35	-78.0	-78.0	0.15 (1)	10.00				
J-H	-206 / 0	0.0	0.0	0.06 (1)	7.81				
P-O	-30 / 0	-18.5	-18.5	0.02 (4)	6.25				
O-N	-34 / 0	-18.5	-18.5	0.02 (4)	6.25				
N-M	-37 / 0	-18.5	-18.5	0.01 (4)	6.25				
M-L	-37 / 0	-18.5	-18.5	0.01 (4)	6.25				
L-K	-34 / 0	-18.5	-18.5	0.02 (4)	6.25				
K-J	-30 / 0	-18.5	-18.5	0.02 (4)	6.25				

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.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.15/1.00 (H-I:1), BC=0.02/1.00 (N-O:4), WB=0.09/1.00 (E-M:1), SSI=0.08/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

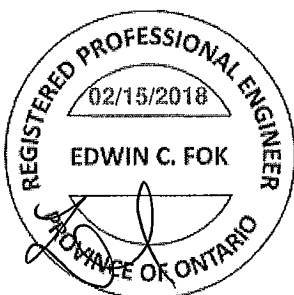
NAIL VALUES		PLATE GRIP(DRY) SHEAR		SECTION	
(PSI)	(PLI)	(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

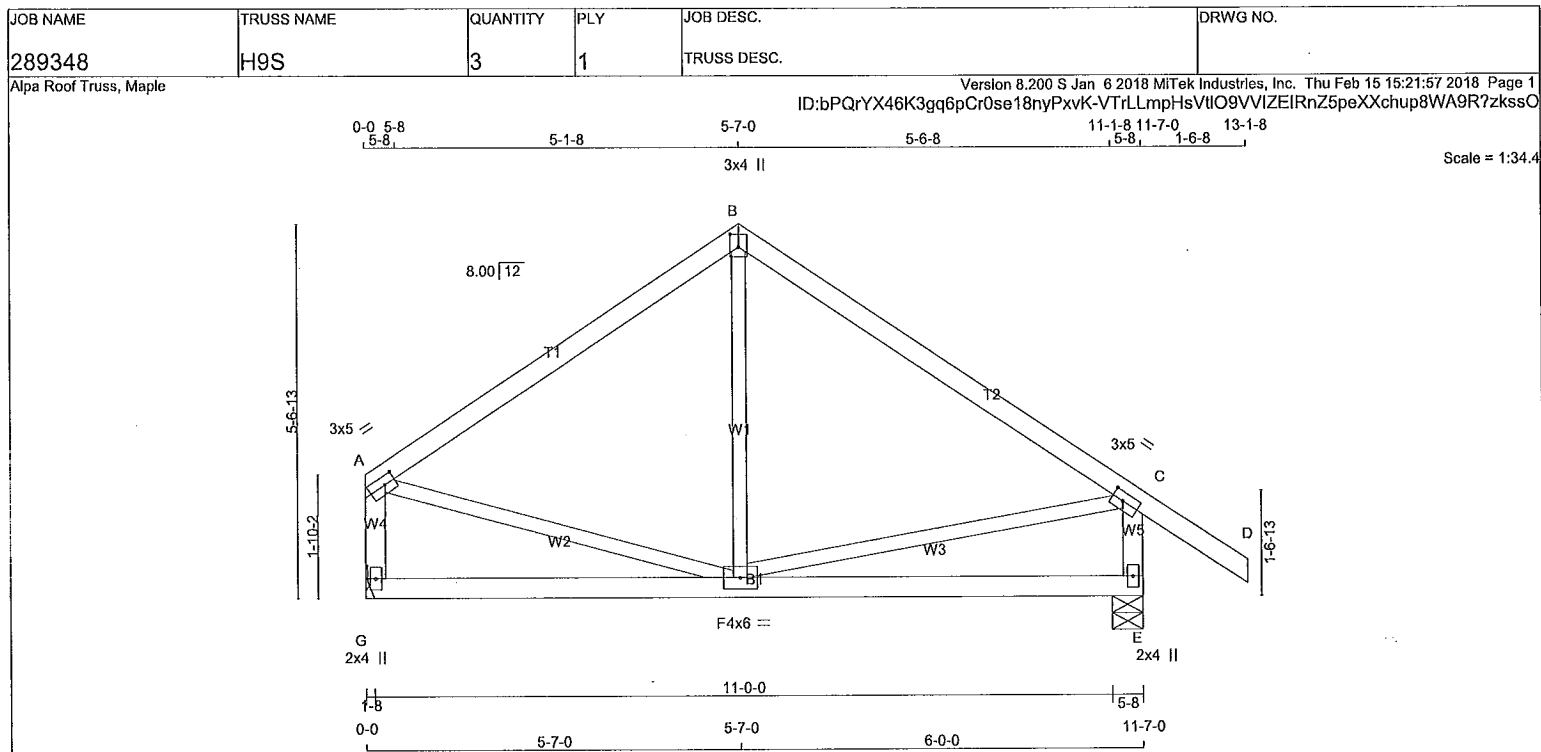
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (E) (INPUT = 0.90)
JSI METAL = 0.09 (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-18023218



TOTAL WEIGHT = 3 X 48 = 143 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
G	559	0	559	0	0	5-8	1-8	5-8	1-8
E	685	0	685	0	0	5-8	1-8	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	398	243 / 0	0 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
E	486	311 / 0	0 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
A-B	-386 / 0	-78.0	-78.0	0.31 (1)	6.25	F-B	-23 / 84	0.03 (4)
B-C	-387 / 0	-78.0	-78.0	0.36 (1)	6.25	A-F	0 / 334	0.08 (1)
C-D	0 / 35	-78.0	-78.0	0.15 (1)	10.00	F-C	0 / 328	0.07 (1)
G-A	-523 / 0	0.0	0.0	0.06 (1)	7.81			
E-C	-640 / 0	0.0	0.0	0.07 (1)	7.81			
G-F	0 / 0	-18.5	-18.5	0.18 (4)	10.00			
F-E	0 / 0	-18.5	-18.5	0.18 (4)	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 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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.36/1.00 (B-C:1), BC=0.18/1.00 (E-F:4), WB=0.08/1.00 (A-F:1), SSI=0.15/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.58 (C) (INPUT = 0.90)
JSI METAL= 0.18 (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-18023219

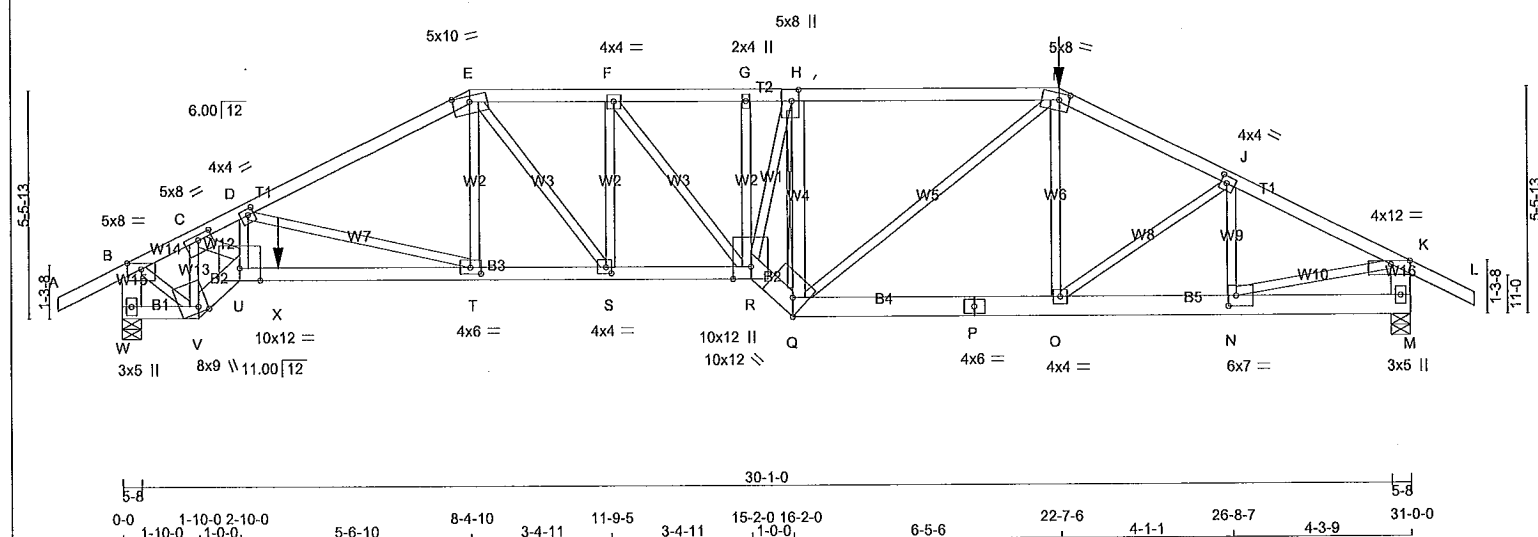
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292583	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 16:18:37 2018 Page 1

ID: bPQrYX46K3gq6pCr0se18nyPxxK-xalhwLy_98FKlgQyTdEcEmOzyCkeECeGzUn3nxzks1G

-1-6-8 0-0-5-8 1-10-0 2-10-0 5-6-10 8-4-10 3-4-11 11-9-5 3-4-11 15-2-0 16-2-0 6-5-6 22-7-6 4-1-1 26-8-7 3-10-1 30-6-8 31-0-0 32-6-8 5-8 1-6-8
Scale = 1:55.5



TOTAL WEIGHT = 149 lb

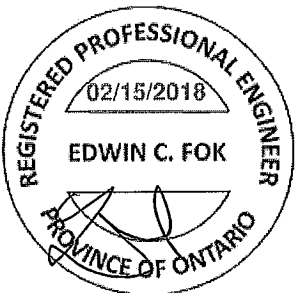
LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	1650F 1.5E	SPF	
E - I	2x4	DRY	2100F 1.8E	SPF	
I - L	2x4	DRY	1650F 1.5E	SPF	
W - B	2x6	DRY	No.2	SPF	
M - K	2x6	DRY	No.2	SPF	
W - V	2x4	DRY	No.2	SPF	
V - U	2x6	DRY	No.2	SPF	
U - R	2x4	DRY	2100F 1.8E	SPF	
R - Q	2x6	DRY	No.2	SPF	
Q - P	2x6	DRY	No.2	SPF	
P - M	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
C - U	2x4	DRY	No.2	SPF	
Q - H	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-p	MT20	5.0	8.0	1.75 4.00
C	TMVW-t	MT20	5.0	8.0	1.50 4.00
D	TMVW-t	MT20	4.0	4.0	1.75 1.75
E	TTVW-m	MT20	5.0	10.0	1.75 5.00
F	TMVW-t	MT20	4.0	4.0	
G	TMVW-w	MT20	2.0	4.0	
H	TMVW-t	MT20	5.0	8.0	3.25 2.00
I	TTVW-m	MT20	5.0	8.0	2.00 3.00
J	TMVW-t	MT20	4.0	4.0	2.00 1.75
K	TMVW-p	MT20	4.0	12.0	1.00 5.50
M	BMV1+p	MT20	3.0	5.0	
N	BMVW-t	MT20	6.0	7.0	3.00 2.25
O	BMVW-t	MT20	4.0	4.0	
P	BS-t	MT20	4.0	6.0	
Q	BBVW-h	MT20	10.0	12.0	4.00 Edge
R	BBVW+p	MT20	10.0	12.0	Edge 5.25
S	BMVW-t	MT20	4.0	4.0	1.75 1.50
T	BMVW-t	MT20	4.0	6.0	1.75 3.00
U	BBVW-t	MT20	10.0	12.0	Edge
V	BBVW+m	MT20	8.0	9.0	Edge 2.75

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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
W	3153	0	3153	0	0	5-8	4-12	
M	2899	0	2899	0	0	5-8	3-15	

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD.

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2245	1390 / 0	0 / 0	0 / 0	0 / 0	854 / 0	0
M	2068	1254 / 0	0 / 0	0 / 0	0 / 0	815 / 0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.54 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT H-Q

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
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	0 / 28	-78.0	-78.0	0.13 (1)	10.00	V-C	-3741 / 0	0.61 (1)
B-C	-3216 / 0	-78.0	-78.0	0.26 (1)	4.15	C-U	0 / 4117	0.73 (1)
C-D	-6436 / 0	-78.0	-78.0	0.42 (1)	2.86	U-D	0 / 474	0.12 (1)
D-E	-5080 / 0	-78.0	-78.0	0.62 (1)	3.21	D-T	-1344 / 0	0.80 (1)
E-F	-5307 / 0	-78.0	-78.0	0.24 (1)	3.64	T-E	0 / 1027	0.25 (1)
F-G	-5666 / 0	-78.0	-78.0	0.34 (1)	3.42	E-S	0 / 1208	0.30 (1)
G-H	-5679 / 0	-153.5	-153.5	0.76 (1)	2.54	S-F	-809 / 0	0.26 (1)
H-I	-4859 / 0	-153.5	-153.5	0.99 (1)	2.86	F-R	0 / 572	0.14 (1)
I-J	-4258 / 0	-78.0	-78.0	0.31 (1)	3.69	R-G	0 / 506	0.13 (1)
J-K	-3984 / 0	-78.0	-78.0	0.30 (1)	3.81	R-H	0 / 3636	0.90 (1)
K-L	0 / 28	-78.0	-78.0	0.13 (1)	10.00	Q-H	-4827 / 0	0.86 (1)
W-B	-3136 / 0	0.0	0.0	0.22 (1)	5.92	Q-I	0 / 1355	0.34 (1)
M-K	-2799 / 0	0.0	0.0	0.20 (1)	6.21	O-I	0 / 218	0.08 (4)
						Q-J	0 / 268	0.07 (1)
W-V	0 / 0	-18.5	-18.5	0.02 (4)	10.00	N-J	-663 / 0	0.14 (1)
V-U	0 / 3519	-18.5	-18.5	0.46 (1)	10.00	B-V	0 / 3136	0.78 (1)
U-X	0 / 5826	-18.5	-18.5	0.97 (1)	10.00	N-K	0 / 3653	0.90 (1)
X-T	0 / 5826	-112.0	-112.0	0.97 (1)	10.00			
T-S	0 / 4555	-112.0	-112.0	0.79 (1)	10.00			
S-R	0 / 5308	-112.0	-112.0	0.58 (1)	10.00			
R-Q	0 / 6273	-36.4	-36.4	0.82 (1)	10.00			
Q-P	0 / 3794	-36.4	-36.4	0.57 (1)	10.00			
P-O	0 / 3794	-36.4	-36.4	0.57 (1)	10.00			
O-N	0 / 3575	-36.4	-36.4	0.54 (1)	10.00			
N-M	0 / 0	-36.4	-36.4	0.11 (4)	10.00			

DESIGN CRITERIA

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

SPECIFIED LOADS:

TOP CH. LL = 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

GIRDER TYPE: CStdGirder
START DISTANCE = 3-9-4
START SPAN CARRIED = 5-10-8
END DISTANCE = 15-2-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL. LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 8-4-10
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL. LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 15-10-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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

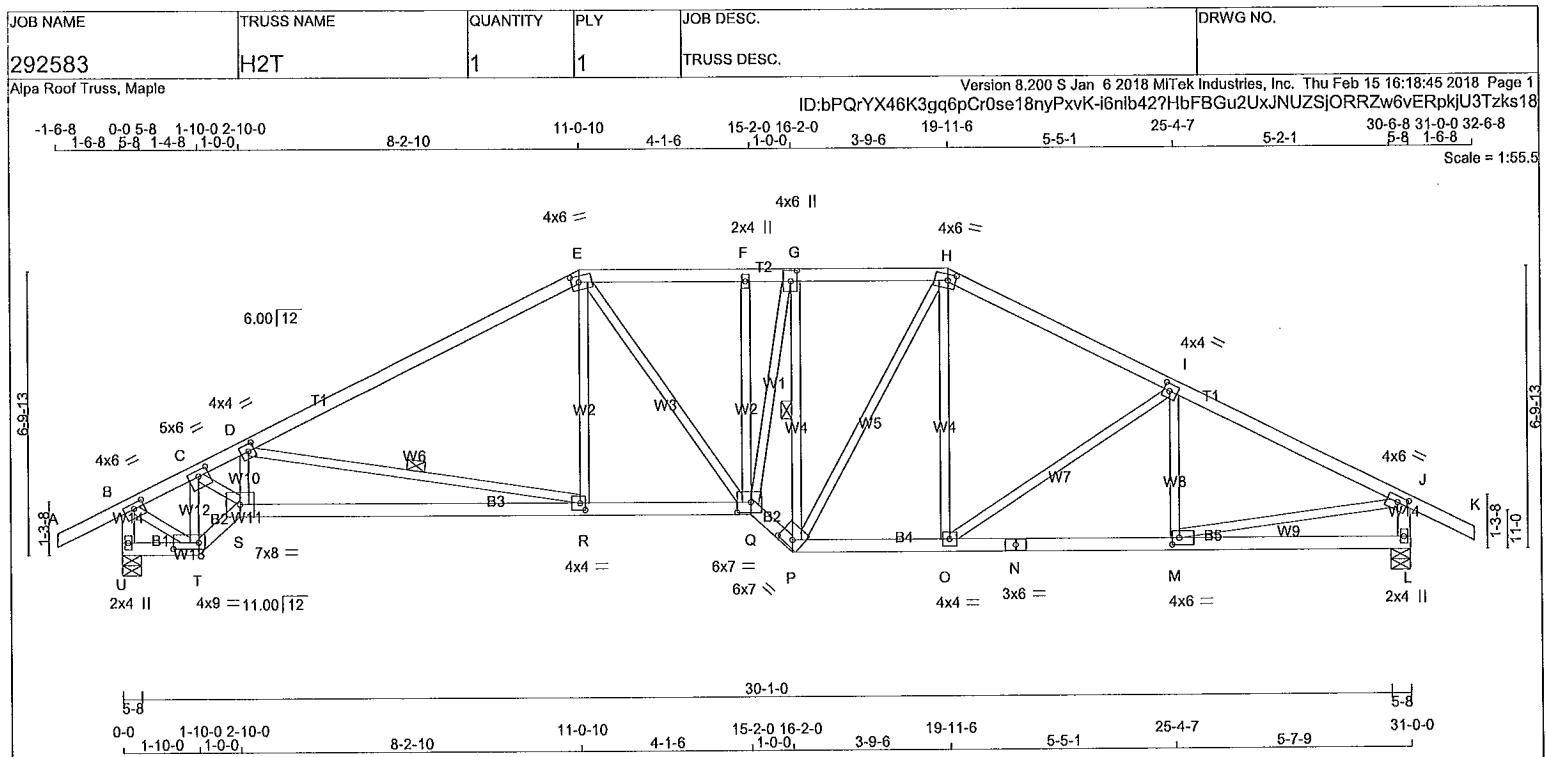
ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.29")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/660 (0.56")

CSI: TC=0.99/1.00 (H-I:1), BC=0.97/1.00 (T-U:1), WB=0.90/1.00 (K-N:1), SSI=0.64/1.00 (G-H:1)

A-18023220

CONTINUED ON PAGE 2

PLATES (table is in inches)							FACTORED CONCENTRATED LOADS (LBS)							DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00									
JT	TYPE	PLATES	W	LEN	Y	X	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE									
W	BMV1+p	MT20	3.0	5.0			I	22-7-6	-477	-477	—	FRONT	VERT	TOTAL									
							X	3-9-4	-415	-415	—	FRONT	VERT	TOTAL									
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) 476.7 lbs FACTORED DOWN AT 22-7-6 ON TOP CHORD, AND 415.2 lbs FACTORED DOWN AT 3-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.																							



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF			
E - H	2x4	DRY	No.2	SPF			
H - K	2x4	DRY	No.2	SPF			
U - B	2x4	DRY	No.2	SPF			
L - J	2x4	DRY	No.2	SPF			
U - T	2x4	DRY	No.2	SPF			
T - S	2x4	DRY	No.2	SPF			
S - Q	2x4	DRY	No.2	SPF			
Q - P	2x4	DRY	No.2	SPF			
P - N	2x4	DRY	No.2	SPF			
N - L	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-t	MT20	4.0	6.0 1.50 3.00
C	TMVW-t	MT20	5.0	6.0 1.75 3.00
D	TMVW-t	MT20	4.0	4.0 2.00 1.75
E	TTVW-m	MT20	4.0	6.0 1.75 2.25
F	TMVW-w	MT20	2.0	4.0
G	TMVW-t	MT20	4.0	6.0 3.00 1.75
H	TTVW-m	MT20	4.0	6.0 1.75 2.25
I	TMVW-t	MT20	4.0	4.0 2.00 1.75
J	TMVW-t	MT20	4.0	6.0 1.75 2.75
L	BMV1+p	MT20	2.0	4.0
M	BMVW-t	MT20	4.0	6.0 2.00 2.00
N	BS-t	MT20	3.0	6.0
O	BMVW-t	MT20	4.0	4.0
P	BBVW-h	MT20	6.0	7.0 2.00 4.00
Q	BBVW-w-p	MT20	6.0	7.0 3.00 4.00
R	BMVW-t	MT20	4.0	4.0 2.00 1.50
S	BBVW-t	MT20	7.0	8.0
T	BBVW-t	MT20	4.0	9.0 1.75 7.25
U	BMV1+p	MT20	2.0	4.0

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	UP	BRG	IN-SX	BRG
U	1624	0	0	1624	0	0	5-8	2-6	2-6
L	1617	0	0	1617	0	0	5-8	2-6	2-6

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	1155	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
L	1151	716 / 0	0 / 0	0 / 0	0 / 0	434 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 3.29 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 D-R, G-P.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT.	LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	T-C	-1671 / 0	0.25 (1)	
B-C	-1451 / 0	-78.0	-78.0	0.18 (1)	5.24	C-S	0 / 2253	0.51 (1)	
C-D	-2981 / 0	-78.0	-78.0	0.62 (1)	3.29	S-D	-299 / 8	0.04 (1)	
D-E	-2156 / 0	-78.0	-78.0	0.83 (1)	3.72	D-R	-1021 / 0	0.50 (1)	
E-F	-2078 / 0	-78.0	-78.0	0.22 (1)	4.52	R-E	0 / 322	0.08 (4)	
F-G	-2074 / 0	-78.0	-78.0	0.15 (1)	4.60	E-Q	0 / 285	0.06 (1)	
G-H	-1790 / 0	-78.0	-78.0	0.15 (1)	4.88	Q-F	-172 / 0	0.09 (1)	
H-I	-1844 / 0	-78.0	-78.0	0.35 (1)	4.60	Q-G	0 / 1618	0.36 (1)	
I-J	-2094 / 0	-78.0	-78.0	0.38 (1)	4.35	P-G	-1840 / 0	0.55 (1)	
J-K	0 / 28	-78.0	-78.0	0.14 (1)	10.00	P-H	0 / 313	0.07 (1)	
U-B	-1607 / 0	0.0	0.0	0.16 (1)	6.52	O-H	0 / 265	0.06 (1)	
L-J	-1572 / 0	0.0	0.0	0.16 (1)	6.58	O-I	-321 / 0	0.27 (1)	
						M-I	-219 / 2	0.06 (1)	
U-T	0 / 0	-18.5	-18.5	0.02 (4)	10.00	B-T	0 / 1397	0.31 (1)	
T-S	0 / 1551	-18.5	-18.5	0.25 (1)	10.00	M-J	0 / 1922	0.43 (1)	
S-R	0 / 2906	-18.5	-18.5	0.62 (1)	10.00				
R-Q	0 / 1908	-18.5	-18.5	0.46 (4)	10.00				
Q-P	0 / 2388	-18.5	-18.5	0.39 (1)	10.00				
P-O	0 / 1632	-18.5	-18.5	0.31 (1)	10.00				
O-N	0 / 1893	-18.5	-18.5	0.36 (1)	10.00				
N-M	0 / 1893	-18.5	-18.5	0.36 (1)	10.00				
M-L	0 / 0	-18.5	-18.5	0.13 (4)	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 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)= 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 (0.33")

CSI: TC=0.83/1.00 (D-E:1), BC=0.62/1.00 (R-S:1), WB=0.55/1.00 (G-P:1), SSI=0.42/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

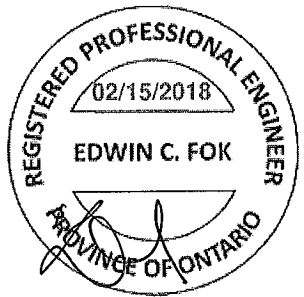
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (Q) (INPUT = 0.90)
JSI METAL= 0.59 (N) (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

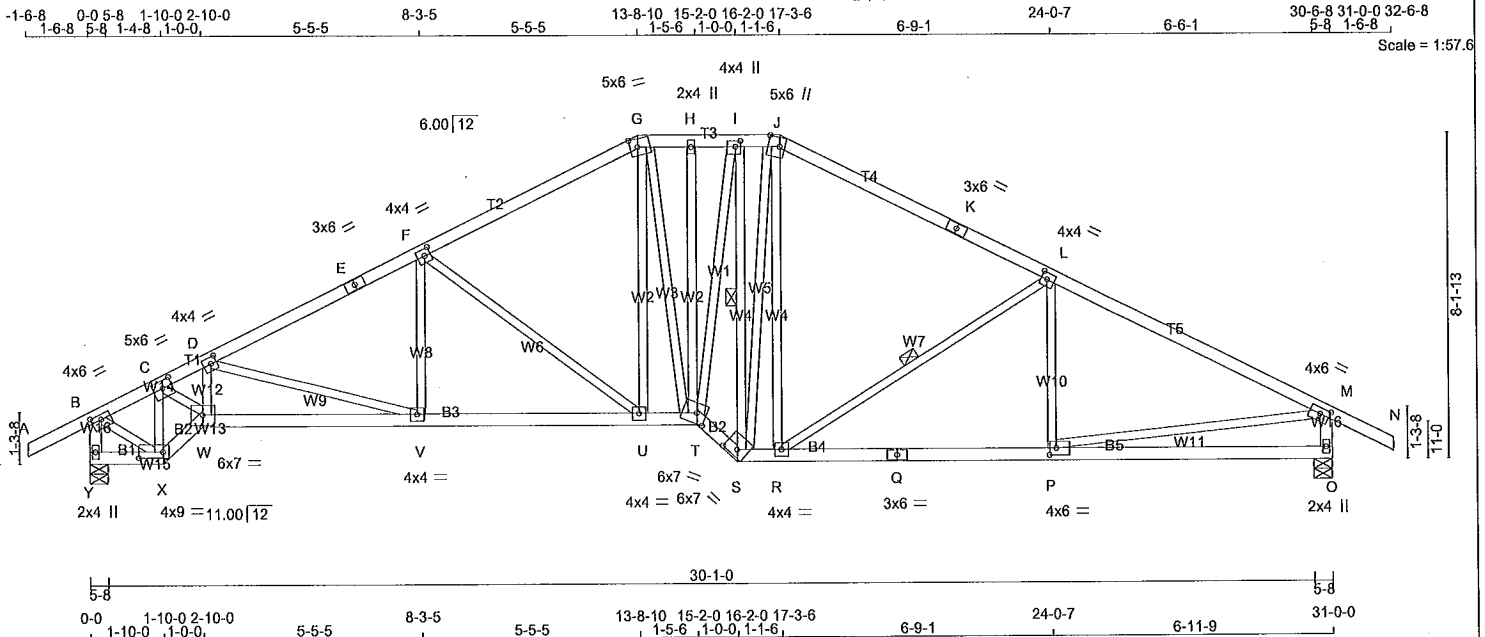


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292583	H3T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 16:18:51 2018 Page 1

ID:bPQrYX46K3gq6pCr0se18nyPvxK-XG8zs77msR?L_pVeHZUuoJzSNreSWb_KBfApH7zks12



TOTAL WEIGHT = 155 lb

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
G - J	2x4	DRY	No.2
J - K	2x4	DRY	No.2
K - N	2x4	DRY	No.2
Y - B	2x4	DRY	No.2
O - M	2x4	DRY	No.2
Y - X	2x4	DRY	No.2
X - W	2x4	DRY	No.2
W - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF

DRY: SEASONED LUMBER.

PLATES (tablets in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	4.0	6.0	1.50	3.00
C TMWW-t	MT20	5.0	6.0	2.25	3.00
D, F, L					
D TMWW-t	MT20	4.0	4.0	2.00	1.75
E TS-t	MT20	3.0	6.0		
G TTWW-m	MT20	5.0	6.0	2.50	2.25
H TMW+w	MT20	2.0	4.0		
I TMWW-t	MT20	4.0	4.0	1.75	1.50
J TTWW+m	MT20	5.0	6.0	Edge	3.50
K TS-t	MT20	3.0	6.0		
M TMVW-t	MT20	4.0	6.0	1.75	2.75
O BMV1+p	MT20	2.0	4.0		
P BMWW-t	MT20	4.0	6.0	2.00	2.00
Q BS-t	MT20	3.0	6.0		
R, U, V					
R BMWW-t	MT20	4.0	4.0		
S BBWW-h	MT20	6.0	7.0	2.00	4.00
T BBWW-m	MT20	6.0	7.0	3.00	2.75
W BBWW-t	MT20	6.0	7.0		
X BBWW-t	MT20	4.0	9.0	1.75	7.25

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	REQRD BRG
JT	VERT	HORZ	DOWN	UP
Y	1624	0	0	5-8
O	1617	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	SOIL
Y	1155	720 / 0	0 / 0	0 / 0	0 / 0	0 / 0
O	1151	716 / 0	0 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.99 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 I-S, L-R.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-78.0 -78.0 0.14 (1)	10.00	X-C	-1732 / 0	0.26 (1)	
B-C	-1481 / 0	-78.0 -78.0 0.13 (1)	5.27	C-W	0 / 1862	0.42 (1)	
C-D	-2875 / 0	-78.0 -78.0 0.17 (1)	3.99	W-D	-30 / 45	0.02 (4)	
D-E	-2457 / 0	-78.0 -78.0 0.37 (1)	4.08	D-V	-434 / 0	0.23 (1)	
E-F	-2457 / 0	-78.0 -78.0 0.37 (1)	4.08	V-F	0 / 221	0.06 (4)	
F-G	-1853 / 0	-78.0 -78.0 0.33 (1)	4.62	F-U	-718 / 0	0.66 (1)	
G-H	-1657 / 0	-78.0 -78.0 0.11 (1)	5.07	U-G	0 / 482	0.11 (1)	
H-I	-1656 / 0	-78.0 -78.0 0.12 (1)	5.05	G-T	0 / 55	0.01 (1)	
I-J	-1465 / 0	-78.0 -78.0 0.07 (1)	5.36	T-H	-11 / 14	0.01 (1)	
J-K	-1654 / 0	-78.0 -78.0 0.54 (1)	4.53	T-I	0 / 1333	0.30 (1)	
K-L	-1654 / 0	-78.0 -78.0 0.54 (1)	4.53	S-I	-1366 / 0	0.57 (1)	
L-M	-2118 / 0	-78.0 -78.0 0.61 (1)	4.04	S-J	-15 / 50	0.02 (4)	
M-N	0 / 28	-78.0 -78.0 0.14 (1)	10.00	R-J	0 / 382	0.09 (1)	
Y-B	-1607 / 0	0.0 0.0 0.16 (1)	6.52	R-L	-558 / 0	0.25 (1)	
O-M	-1564 / 0	0.0 0.0 0.16 (1)	6.59	P-L	-127 / 60	0.04 (1)	
				B-X	0 / 1448	0.33 (1)	
Y-X	0 / 0	-18.5 -18.5 0.02 (4)	10.00	P-M	0 / 1939	0.44 (1)	
X-W	0 / 1607	-18.5 -18.5 0.26 (1)	10.00				
W-V	0 / 2627	-18.5 -18.5 0.49 (1)	10.00				
V-U	0 / 2210	-18.5 -18.5 0.42 (1)	10.00				
U-T	0 / 1645	-18.5 -18.5 0.30 (1)	10.00				
T-S	0 / 1962	-18.5 -18.5 0.32 (1)	10.00				
S-R	0 / 1456	-18.5 -18.5 0.30 (1)	10.00				
R-Q	0 / 1920	-18.5 -18.5 0.42 (1)	10.00				
Q-P	0 / 1920	-18.5 -18.5 0.42 (1)	10.00				
P-O	0 / 0	-18.5 -18.5 0.21 (4)	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 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) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.26")

CSI: TC=0.61/1.00 (L-M:1), BC=0.49/1.00 (V-W:1)
WB=0.66/1.00 (F-U:1), SI=0.23/1.00 (L-M:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

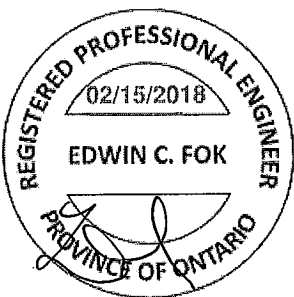
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

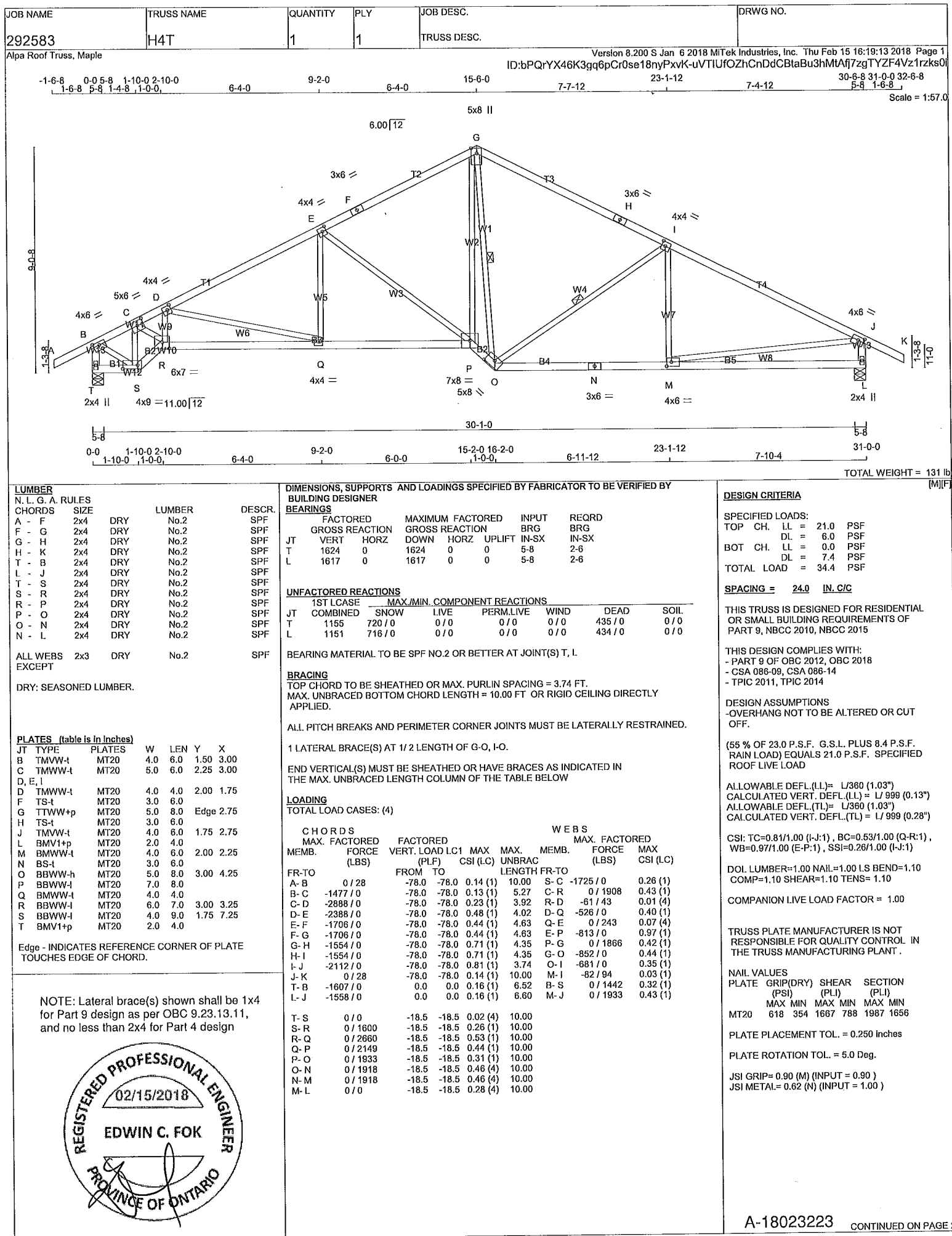
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (W) (INPUT = 0.90)
JSI METAL= 0.66 (Q) (INPUT = 1.00)



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CONTINUED ON PAGE 2

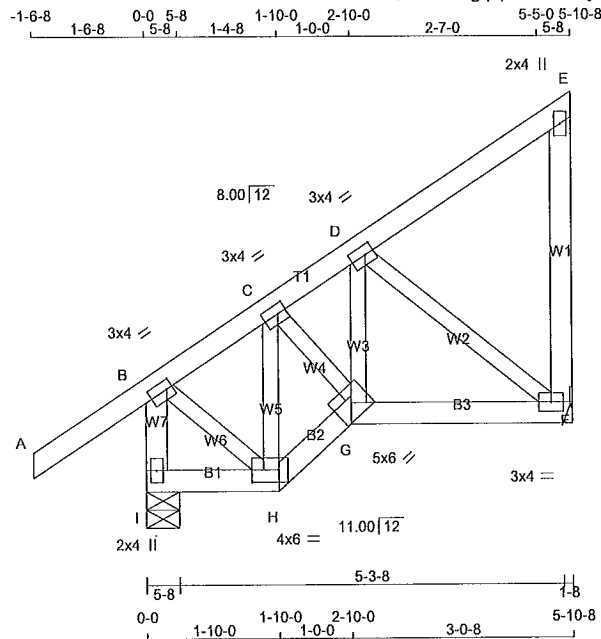


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292583	J1T	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 16:20:10 2018 Page 1

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Scale: 3/8\"=1'

TOTAL WEIGHT = 4 X 32 = 129 lb

LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	4.0	1.50	1.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BBWW-h	MT20	5.0	6.0		
H	BBWW-I	MT20	4.0	6.0	2.00	4.50
I	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
I	427	0	427	0
F	266	0	266	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
I	302	201 / 0	0 / 0	0 / 0	0 / 0	101 / 0
F	190	114 / 0	0 / 0	0 / 0	0 / 0	76 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH (FR-TO)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
I-B	-410 / 0	0.0	0.0	0.04 (1)	7.81	B-H	0 / 129	0.03 (1)	
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	H-C	-138 / 0	0.02 (1)	
B-C	-170 / 0	-78.0	-78.0	0.14 (1)	6.25	C-G	0 / 144	0.03 (1)	
C-D	-187 / 0	-78.0	-78.0	0.09 (1)	6.25	G-D	0 / 49	0.02 (4)	
D-E	-12 / 0	-78.0	-78.0	0.09 (1)	6.25	D-F	-238 / 0	0.06 (1)	
F-E	-93 / 0	0.0	0.0	0.03 (1)	7.81				
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00				
H-G	0 / 138	-18.5	-18.5	0.03 (1)	10.00				
G-F	0 / 188	-18.5	-18.5	0.07 (4)	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 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) = L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.15/1.00 (A-B:1), BC=0.07/1.00 (F-G:4), WB=0.08/1.00 (D-F:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

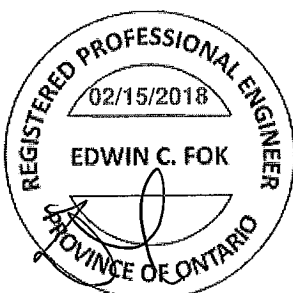
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

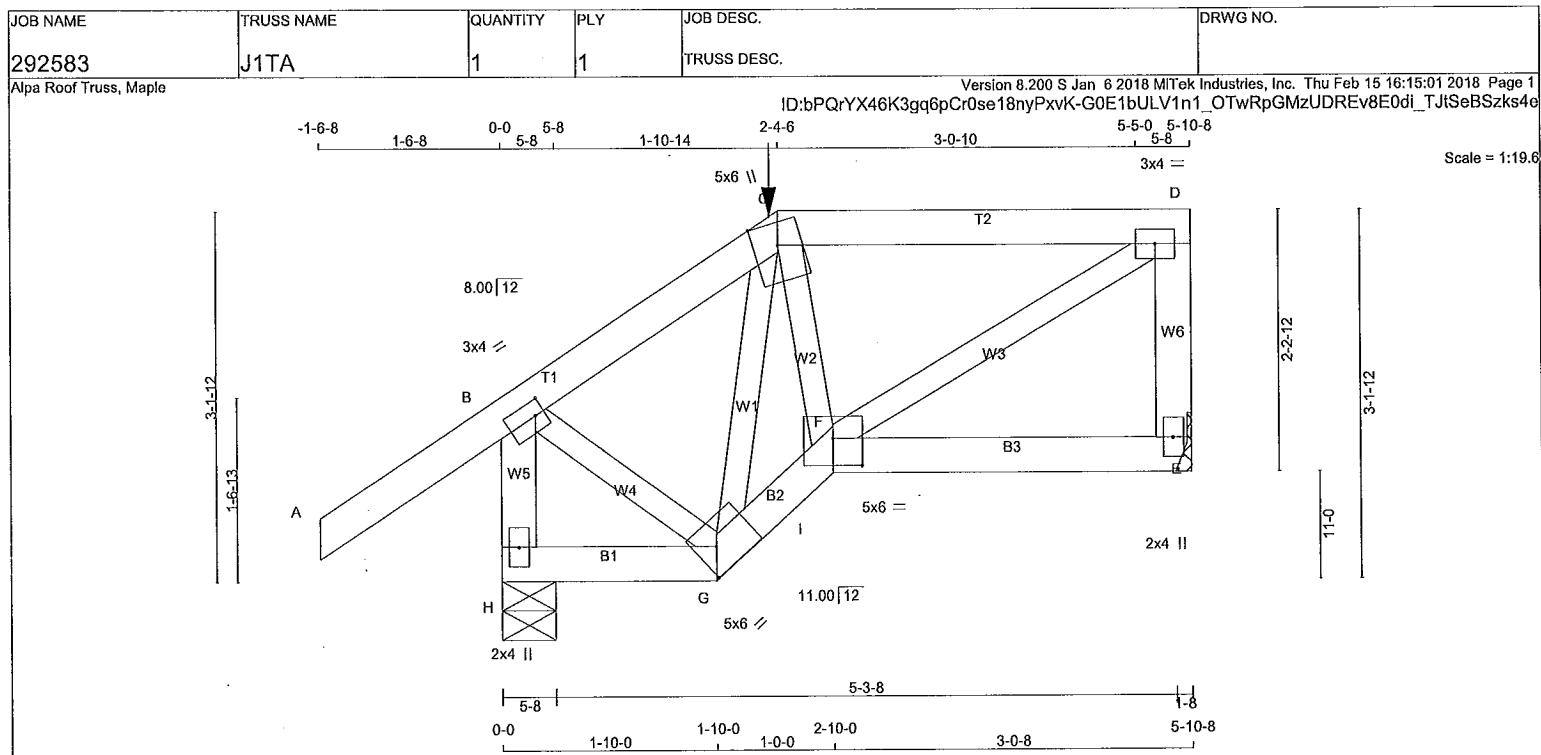
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.10 (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-18023224



LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE						
A - C	2x4	DRY	No.2	SPF			
C - D	2x4	DRY	No.2	SPF			
E - D	2x4	DRY	No.2	SPF			
H - B	2x4	DRY	No.2	SPF			
H - 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)		W		LEN		Y		X	
JT	TYPE	PLATES							
B	TMVW-t	MT20	3.0	4.0	1.50	1.00			
C	TTWW+m	MT20	5.0	6.0	Edge				
D	TMVW-t	MT20	3.0	4.0					
E	BMV1+p	MT20	2.0	4.0					
F	BBWW-l	MT20	5.0	6.0	2.75	3.00			
G	BBWW-h	MT20	5.0	6.0	2.50	2.00			
H	BMV1+p	MT20	2.0	4.0					

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 67.9 lbs FACTORED DOWN AT 2-4-6 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	416	0	416	0	0	HANGER BY OTHERS
H	508	0	508	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
E	296	182 / 0	0 / 0	0 / 0	0 / 0	114 / 0	0 / 0
H	360	232 / 0	0 / 0	0 / 0	0 / 0	128 / 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		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 35	-78.0	-78.0 0.16 (1)	10.00	G-C	-341 / 0	0.07 (1)
B-C	-239 / 0	-78.0	-78.0 0.08 (1)	6.25	C-F	0 / 115	0.03 (4)
C-D	-289 / 0	-111.3	-111.3 0.26 (1)	6.25	F-D	0 / 342	0.08 (1)
E-D	-376 / 0	0.0	0.0 0.05 (1)	7.81	B-G	0 / 238	0.06 (1)
H-B	-484 / 0	0.0	0.0 0.06 (1)	7.81			
H-G	0 / 0	-26.4	-26.4 0.03 (4)	10.00			
G-I	0 / 355	-26.4	-26.4 0.07 (1)	10.00			
I-F	0 / 355	-26.4	-26.4 0.07 (1)	10.00			
F-E	0 / 0	-26.4	-26.4 0.08 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-4-6	-68	-68	---	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 FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-4-6
RIGHT SETBACK = 0-0
END SETBACK = 3-8-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 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.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.26/1.00 (C-D:1), BC=0.08/1.00 (E-F:4), WB=0.08/1.00 (D-F:1), SSI=0.17/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.77 (B) (INPUT = 0.90)
JSI METAL= 0.14 (B) (INPUT = 1.00)

A-18023225

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

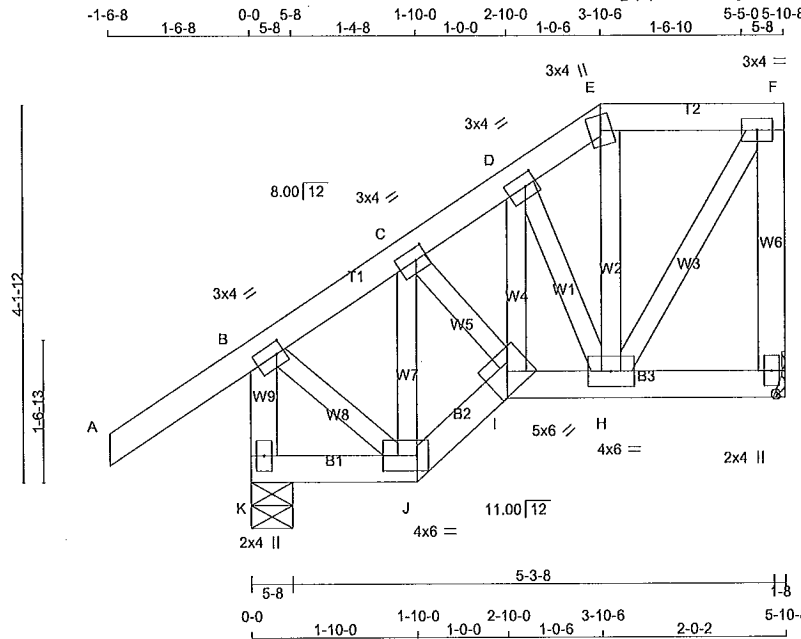


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292583	J1TB	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 6.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 16:19:26 2018 Page 1

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Scale = 1:25.3

TOTAL WEIGHT = 34 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	3.0	4.0	1.50 1.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.50
D	TMVW-t	MT20	3.0	4.0	1.50 1.50
E	TTW+m	MT20	3.0	4.0	
F	TMVW-t	MT20	3.0	4.0	
G	BMV1+p	MT20	2.0	4.0	
H	BMVWW-t	MT20	4.0	6.0	
I	BBWW-h	MT20	5.0	6.0	
J	BBWW-l	MT20	4.0	6.0	2.00 4.50
K	BMV1+p	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	HANGER BY OTHERS	
G	266	0		266	0	0		MIN. SEAT SIZE: 1-8	
K	427	0		427	0	0	5-8	1-8	

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	190	114 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
K	302	201 / 0	0 / 0	0 / 0	0 / 0	101 / 0	0 / 0

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

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		FACTORED	
MEMB.		MAX. FORCE (LBS)		MEMB.		MAX. FORCE (LBS)	
		VERT. LOAD LC1				MAX. CS1 (LC)	
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	0 / 35	-78.0	-78.0 0.15 (1)	10.00	J-C	-145 / 0	0.02 (1)
B-C	-172 / 0	-78.0	-78.0 0.14 (1)	6.25	C-I	0 / 102	0.02 (1)
C-D	-190 / 0	-78.0	-78.0 0.03 (1)	6.25	I-D	0 / 38	0.01 (4)
D-E	-142 / 0	-78.0	-78.0 0.01 (1)	6.25	D-H	-128 / 0	0.02 (1)
E-F	-111 / 0	-78.0	-78.0 0.05 (1)	6.25	H-E	-28 / 8	0.01 (1)
G-F	-249 / 0	0.0	0.0 0.04 (1)	7.81	H-F	0 / 204	0.05 (1)
K-B	-410 / 0	0.0	0.0 0.04 (1)	7.81	B-J	0 / 134	0.03 (1)
K-J	0 / 0	-18.5	-18.5 0.02 (4)	10.00			
J-I	0 / 143	-18.5	-18.5 0.03 (1)	10.00			
I-H	0 / 165	-18.5	-18.5 0.03 (1)	10.00			
H-G	0 / 0	-18.5	-18.5 0.01 (4)	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 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) = 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")

CSI: TC=0.15/1.00 (A-B:1), BC=0.03/1.00 (H-I:1), WB=0.05/1.00 (F-H:1), SSI=0.09/1.00 (B-C: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.

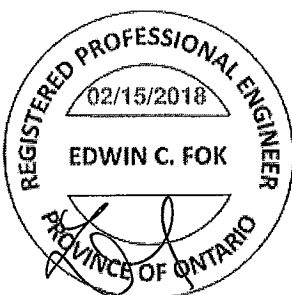
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.43 (B) (INPUT = 0.90)
JSI METAL= 0.10 (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-18023226

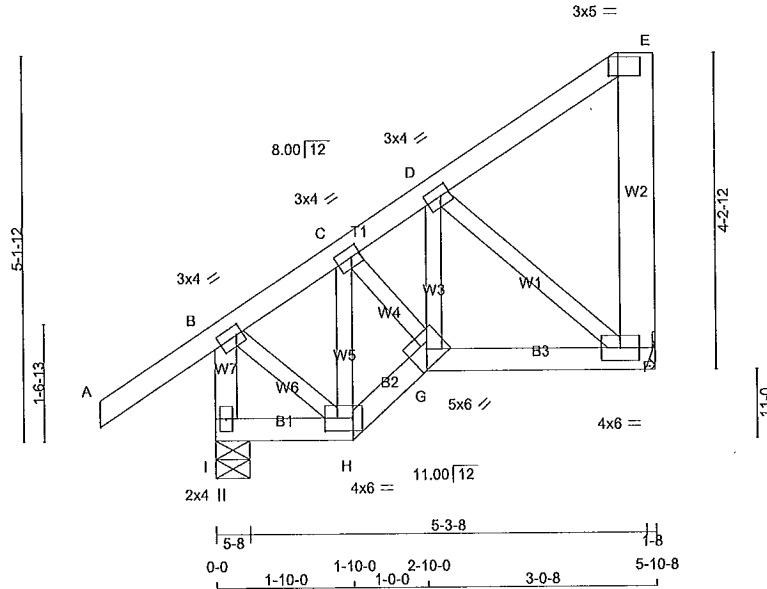
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292583	J1TC	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 16:19:33 2018 Page 1
ID:bPQrYX46K3gq6pCr0se18nyPxvK-JLgrgUe6zLI00GijlOFIValk0n3qMlqVrBL1hzks00

-1-6-8 1-6-8 0-0 5-8 1-4-8 1-10-0 2-10-0 2-6-6 5-4-6 5-5-0 5-10-8
5-8, 1-0-0, 0, 10 5-8

Scale = 1:30.8



TOTAL WEIGHT = 34 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	3.0	4.0	1.50	1.00
C	TMWW-1	MT20	3.0	4.0	1.50	1.50
D	TMWW-1	MT20	3.0	4.0	1.50	1.50
E	TVM-p	MT20	3.0	5.0	0.25	1.50
F	BMVW1-t	MT20	4.0	6.0		
G	BBWW-h	MT20	5.0	6.0		
H	BBWW-I	MT20	4.0	6.0	2.00	4.50
I	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	266	0	266	0
I	427	0	427	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED		
F	190	114 / 0	0 / 0
I	302	201 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	W E B S	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	0 / 35	-78.0 -78.0 0.15 (1)	H-C	-139 / 0
B-C	-170 / 0	-78.0 -78.0 0.14 (1)	C-G	0 / 144
C-D	-187 / 0	-78.0 -78.0 0.09 (1)	G-D	0 / 49
D-E	-12 / 0	-78.0 -78.0 0.09 (1)	D-F	-238 / 0
F-E	-93 / 0	0.0 0.0 0.02 (1)	B-H	0 / 129
I-B	-410 / 0	0.0 0.0 0.04 (1)		
I-H	0 / 0	-18.5 -18.5 0.02 (4)		
H-G	0 / 138	-18.5 -18.5 0.03 (1)		
G-F	0 / 188	-18.5 -18.5 0.07 (4)		

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.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.15/1.00 (A-B:1), BC=0.07/1.00 (F-G:4),
WB=0.05/1.00 (D-F:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

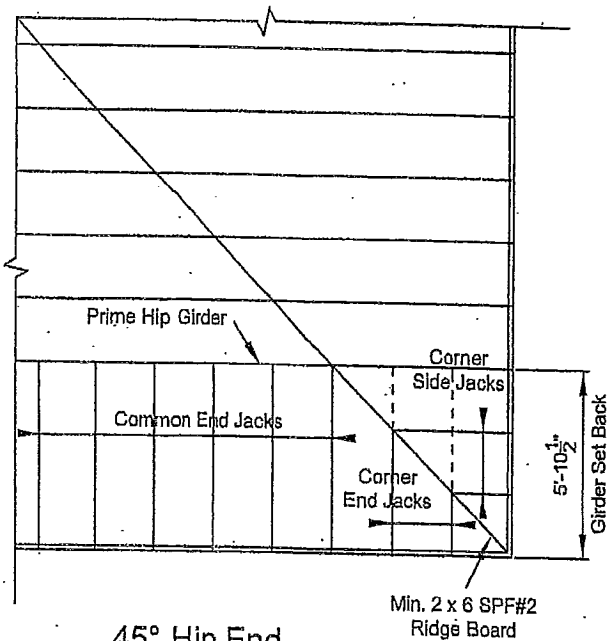
JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

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-18023227

STRACON ENGINEERING INC.



45° Hip End

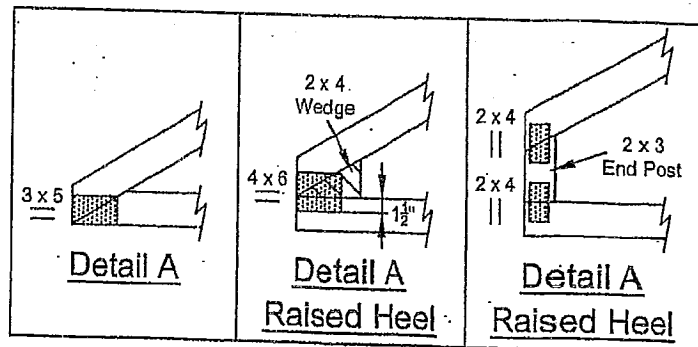
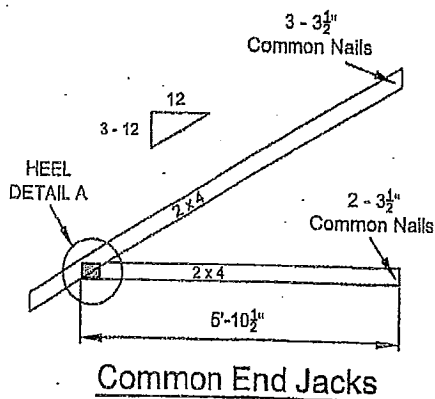
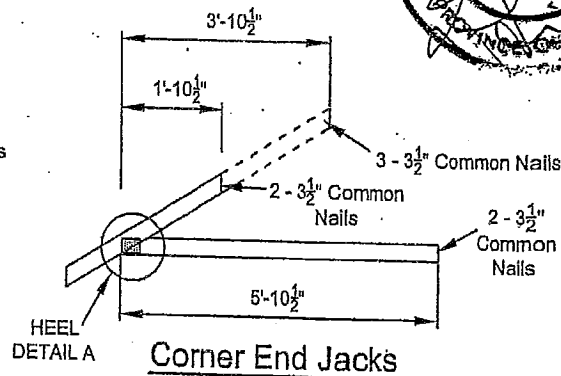
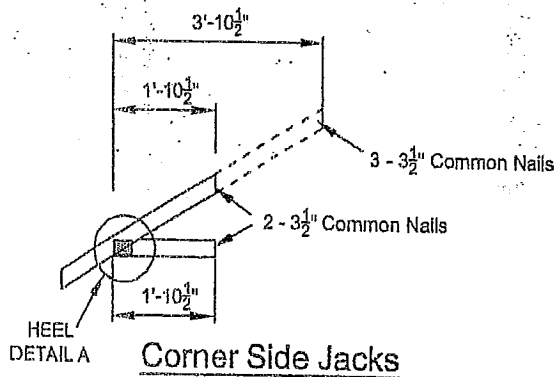
LUMBER SPECIFICATION

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.

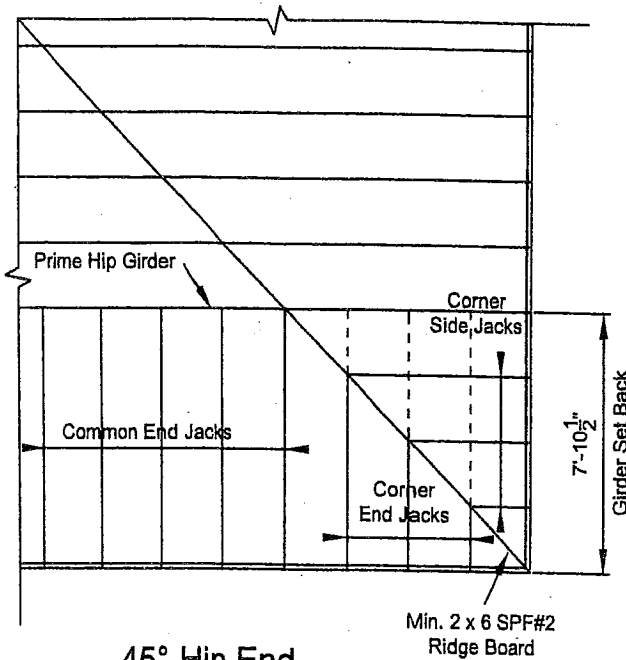
TOTAL LOAD : 50.5 P.S.F



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

CS-51008

STRACON ENGINEERING INC.



45° Hip End

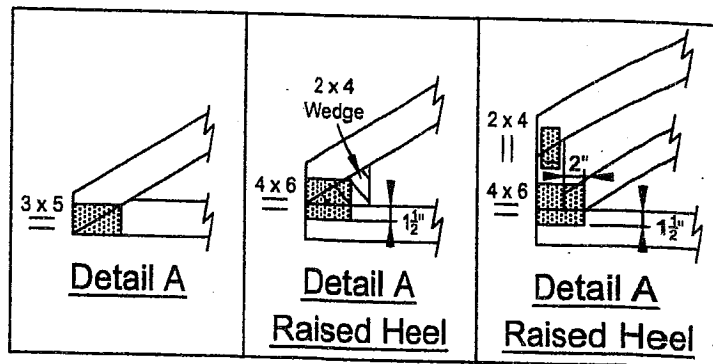
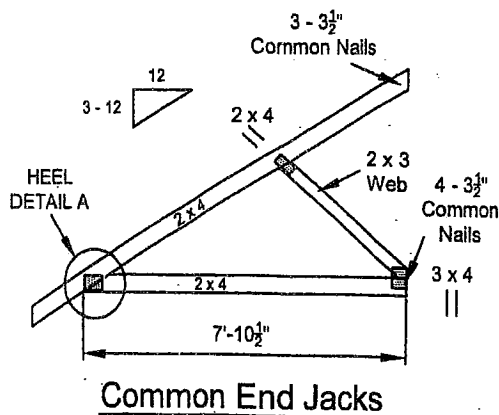
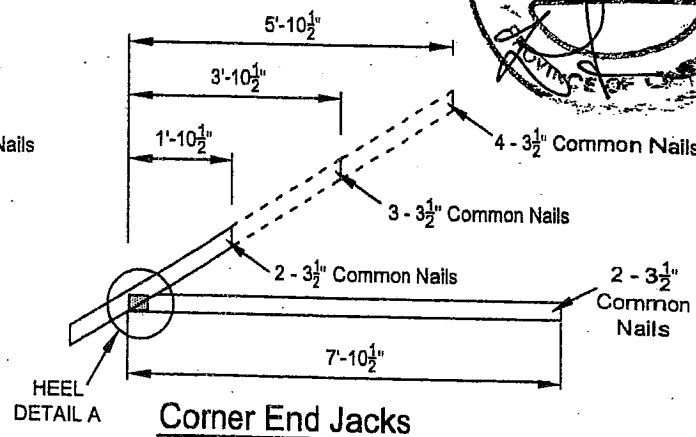
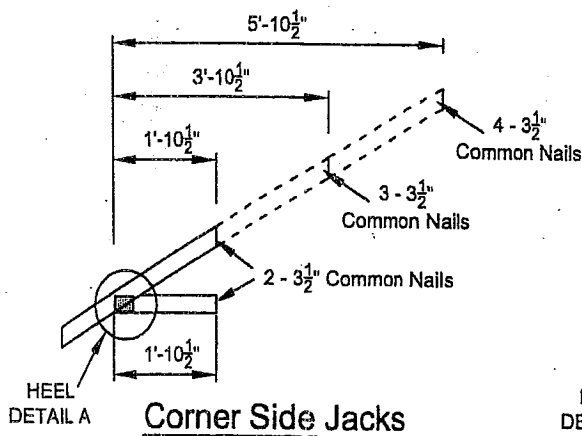
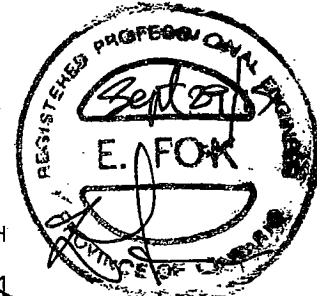
LUMBER SPECIFICATION

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



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:

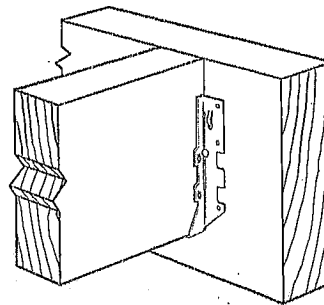
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

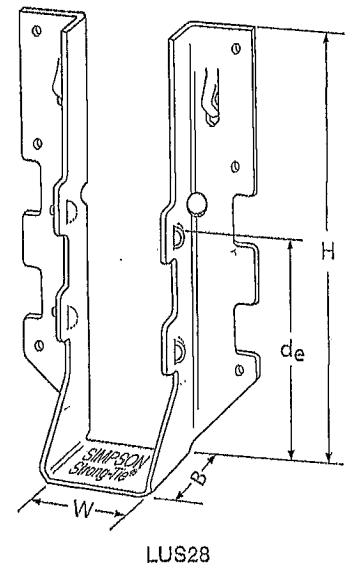
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or naller applications.

Options:

- These hangers cannot be modified



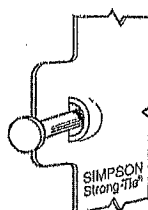
Typical LUS
Installation



LUS28

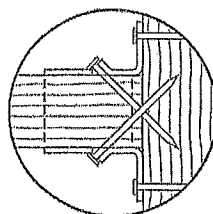
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d _e ¹	Face	Joist	Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1½	1½	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	(4) 16d	(2) 16d	835	2020	690	1435
LUS26	18	1½	4¾	1¾	3¾	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4¾	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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

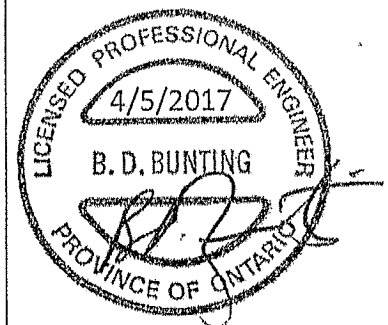


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,580



Double Shear Nailing
Top View.



**LIMIT
STATES
DESIGN**

This technical bulletin is effective until June 30, 2019, 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.

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T-SPEC/LUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com

TC – Truss Connectors



The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

Material: 16 gauge

Finish: G90 galvanized

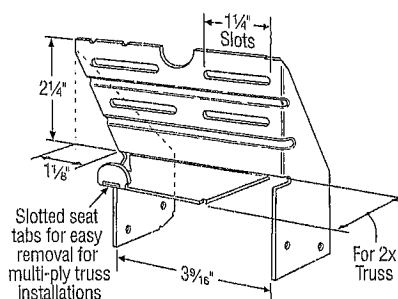
Design: Factored resistances are in accordance with CSA 086-14

Installation:

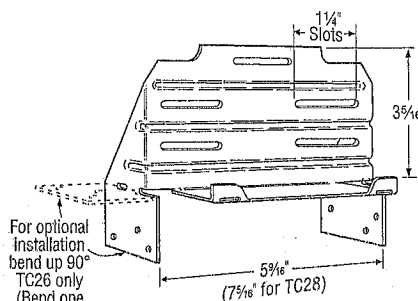
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

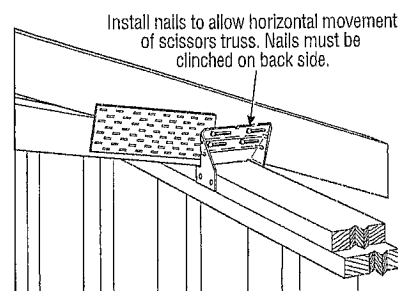
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



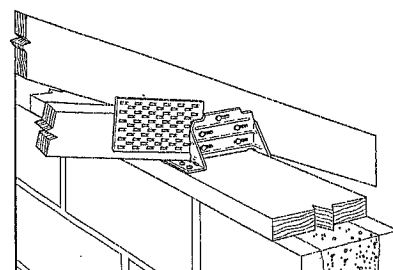
TC24
U.S. Patent 4,932,173



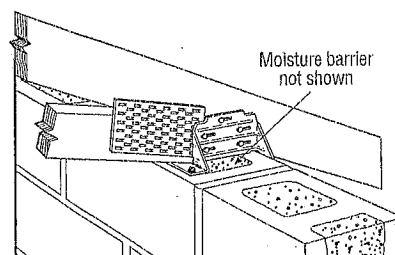
TC26
(TC28 Similar)



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 _D =1.15)	Uplift (K _D =1.15)
			lb.	lb.
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D =1.15)	Uplift (K _D =1.15)
			lb.	lb.
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) - ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT
STATES
DESIGN

This technical bulletin is effective until June 30, 2019, 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.

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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:

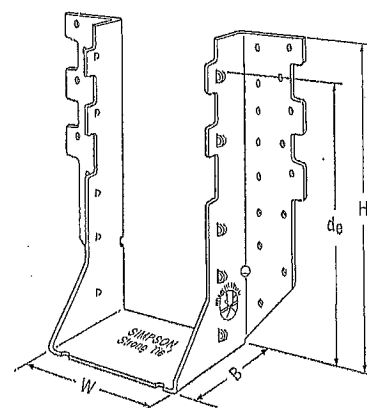
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

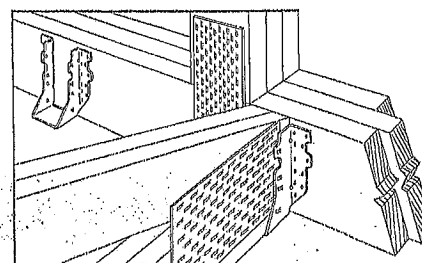
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

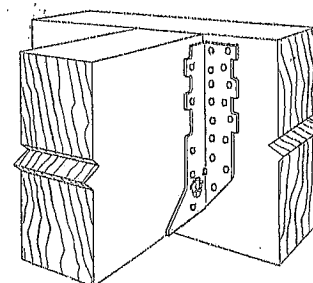
- See current catalogue for options



HHUS410



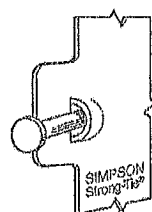
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

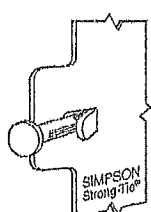
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	dg ¹	Face	Joist	Uplift (K _u =1.15)	Normal (K _p =1.00)	Uplift (K _u =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 5/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 1/2	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 3/2	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 11/16	9	3	7 15/16	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 3/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 3/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8945	2267	6345
HHUS410	14	3 5/8	9	3	8	(30) 16d	(10) 16d	4745	9855	4310	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS7.25/10	14	7 1/4	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4745	10770	4310	7650

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

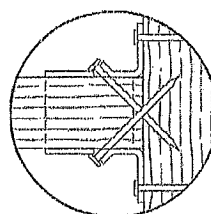


Double Double Shear Nailing prevents tabs breaking off (available on some models).

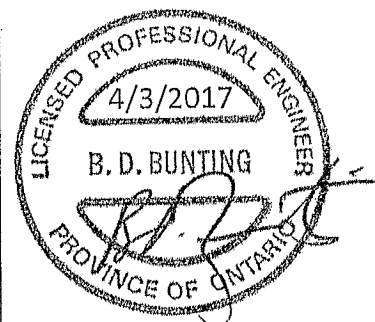
U.S. Patent 6,603,680



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

This technical bulletin is effective until June 30, 2019, 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.

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T-SPECHHUS17 3/17 exp. 6/19

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