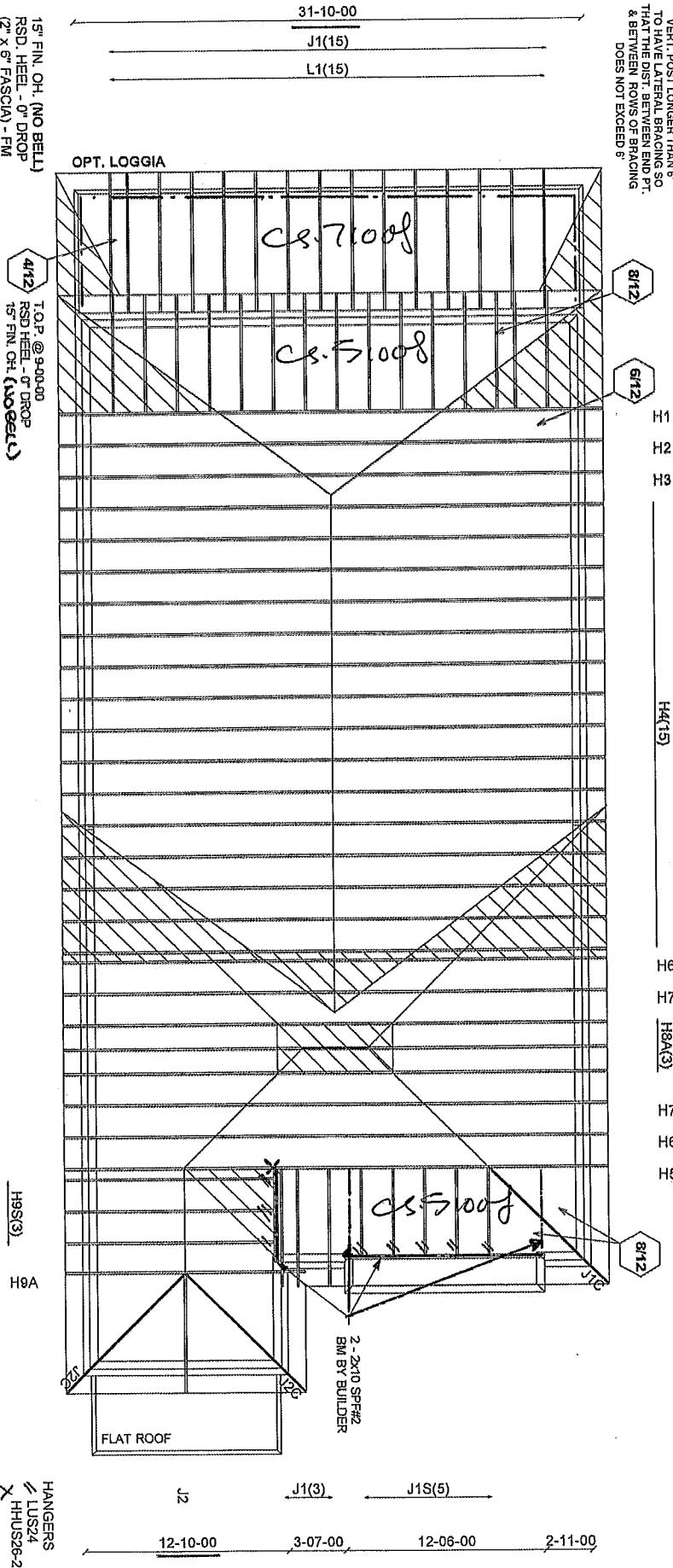


ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH 2010 IBC (2006 EDITION) ROOF TRUSSES TO BE 24X SPF #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'



15' FIN. OH. (NO BELL)
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK

TOP @ 900.00
RSD HEEL - 0" DROP
15' FIN. OH. (NO BELL)

A-18023209 - A-18023212
A-18023228 - A-18023233

CONVENTIONAL
FRAMING BY
OTHERS

EDGE BRACK

2nd OPT LOGGIA

4005 / C OR OPT 5 BDRM



Job Track 45147
Layout ID: 291807
Plan Log 95233

Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 12/4/2017 Designer: AMANDA

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.

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (LATEST EDITION) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #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'

1-07-00 5-01-00



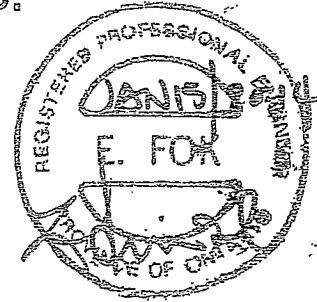
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALFA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALFA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALFA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

/COPT TRAY LOGEIN

02 OCT 56DCM QZ QRT

Stracon Engineering Inc.

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



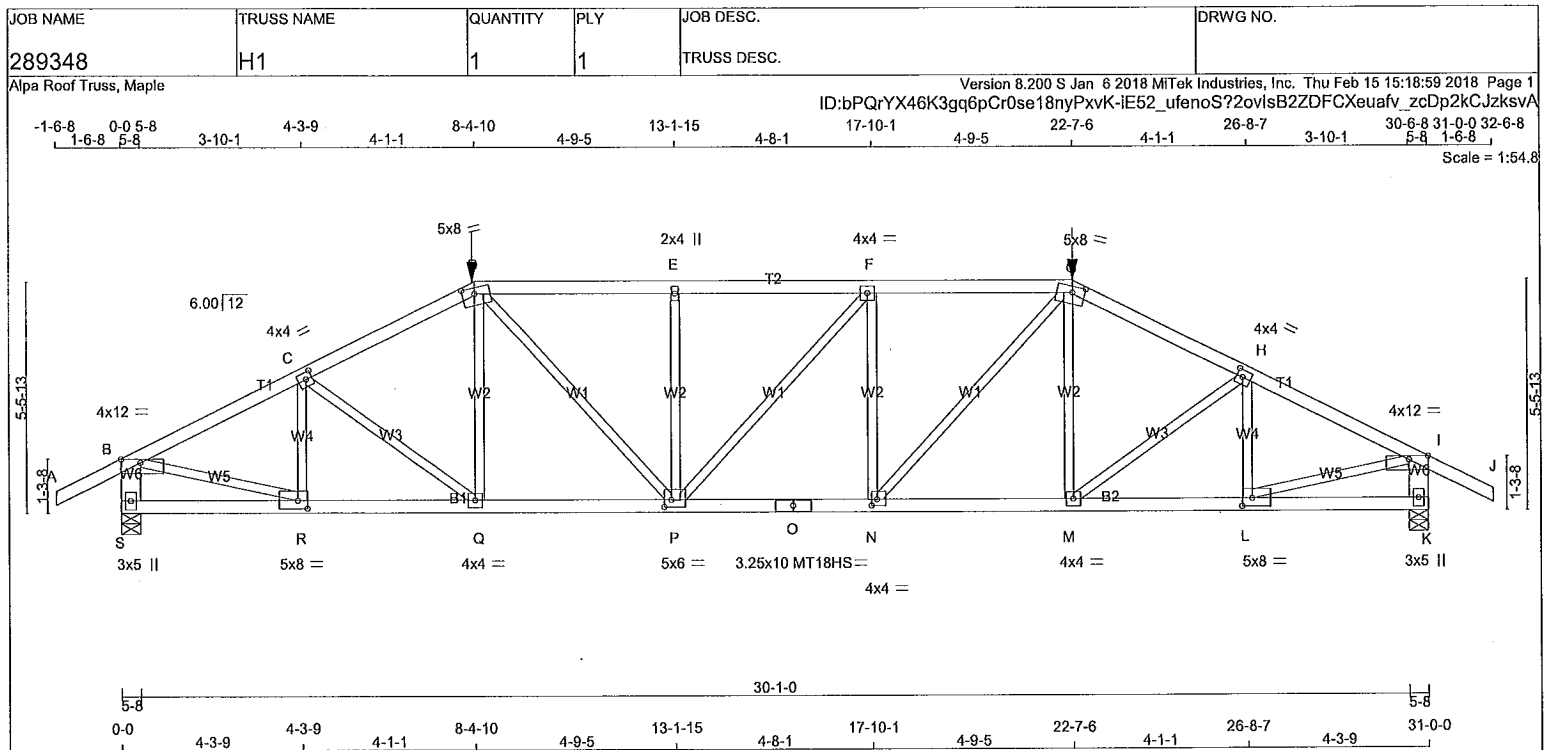
RESPONSIBILITIES

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



TOTAL WEIGHT = 132 lb (M)

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
G - J	2x4	DRY	No.2	SPF	
S - B	2x6	DRY	No.2	SPF	
K - I	2x6	DRY	No.2	SPF	
S - O	2x4	DRY	No.2	SPF	
O - 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	TMVW-p	MT20	4.0	12.0	1.00	5.50
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TTVW-m	MT20	5.0	8.0	1.75	3.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTVW-m	MT20	5.0	8.0	1.75	3.50
H	TMVW-t	MT20	4.0	4.0	2.00	1.75
I	TMVW-p	MT20	4.0	12.0	1.00	5.50
K	BMV1+p	MT20	3.0	5.0		
L	BMVW-t	MT20	5.0	8.0	2.25	2.75
M	BMVW-t	MT20	4.0	4.0		
N	BMVW-t	MT20	4.0	4.0	1.75	1.50
O	BS-t	MT18HS	3.25	10.0		
P	BMVW-t	MT20	5.0	6.0	2.00	2.00
Q	BMVW-t	MT20	4.0	4.0		
R	BMVW-t	MT20	5.0	8.0	2.25	2.75
S	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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
S	2912	0	2912	0	5-8	3-15	3-15	
K	2912	0	2912	0	5-8	3-15	3-15	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
S	2077	1264 / 0	0 / 0	0 / 0	813 / 0	0 / 0	0 / 0
K	2077	1264 / 0	0 / 0	0 / 0	813 / 0	0 / 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 = 2.23 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)	MAX. FACTORED VERT. LOAD LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 28	-78.0	-78.0 0.16 (1)	10.00	R-C	-658 / 0	0.14 (1)
B-C	-3940 / 0	-78.0	-78.0 0.48 (1)	3.15	C-Q	0 / 261	0.06 (1)
C-D	-4208 / 0	-78.0	-78.0 0.50 (1)	3.02	Q-D	0 / 153	0.06 (4)
D-E	-4621 / 0	-153.5	-153.5 0.93 (1)	2.27	D-P	0 / 1291	0.32 (1)
E-F	-4621 / 0	-153.5	-153.5 0.93 (1)	2.23	P-E	-782 / 0	0.36 (1)
F-G	-4624 / 0	-153.5	-153.5 0.94 (1)	2.23	P-F	-4 / 0	0.00 (1)
G-H	-4205 / 0	-78.0	-78.0 0.50 (1)	3.02	N-F	-783 / 0	0.36 (1)
H-I	-3941 / 0	-78.0	-78.0 0.48 (1)	3.15	N-G	0 / 1296	0.32 (1)
I-J	0 / 28	-78.0	-78.0 0.16 (1)	10.00	M-G	0 / 153	0.06 (4)
S-B	-2840 / 0	0.0	0.0 0.20 (1)	6.17	M-H	0 / 261	0.06 (1)
K-I	-2840 / 0	0.0	0.0 0.20 (1)	6.17	L-H	-657 / 0	0.14 (1)
					B-R	0 / 3628	0.90 (1)
					L-I	0 / 3628	0.90 (1)
S-R	0 / 0	-36.4	-36.4 0.16 (4)	10.00			
R-Q	0 / 3537	-36.4	-36.4 0.72 (1)	10.00			
Q-P	0 / 3746	-36.4	-36.4 0.75 (1)	10.00			
P-O	0 / 4624	-36.4	-36.4 0.90 (1)	10.00			
O-N	0 / 4624	-36.4	-36.4 0.90 (1)	10.00			
N-M	0 / 3746	-36.4	-36.4 0.75 (1)	10.00			
M-L	0 / 3537	-36.4	-36.4 0.71 (1)	10.00			
L-K	0 / 0	-36.4	-36.4 0.15 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
D	8-4-10	-477	-477	---	FRONT	VERT	TOTAL
G	22-7-6	-477	-477	---	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: 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.

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) = $L/902$ (0.41")

CSI: TC=0.94/1.00 (F-G:1), BC=0.90/1.00 (N-P:1), WB=0.90/1.00 (L-L:1), SSI=0.37/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656
MT18HS 511 354 2455 1382 3004 2010

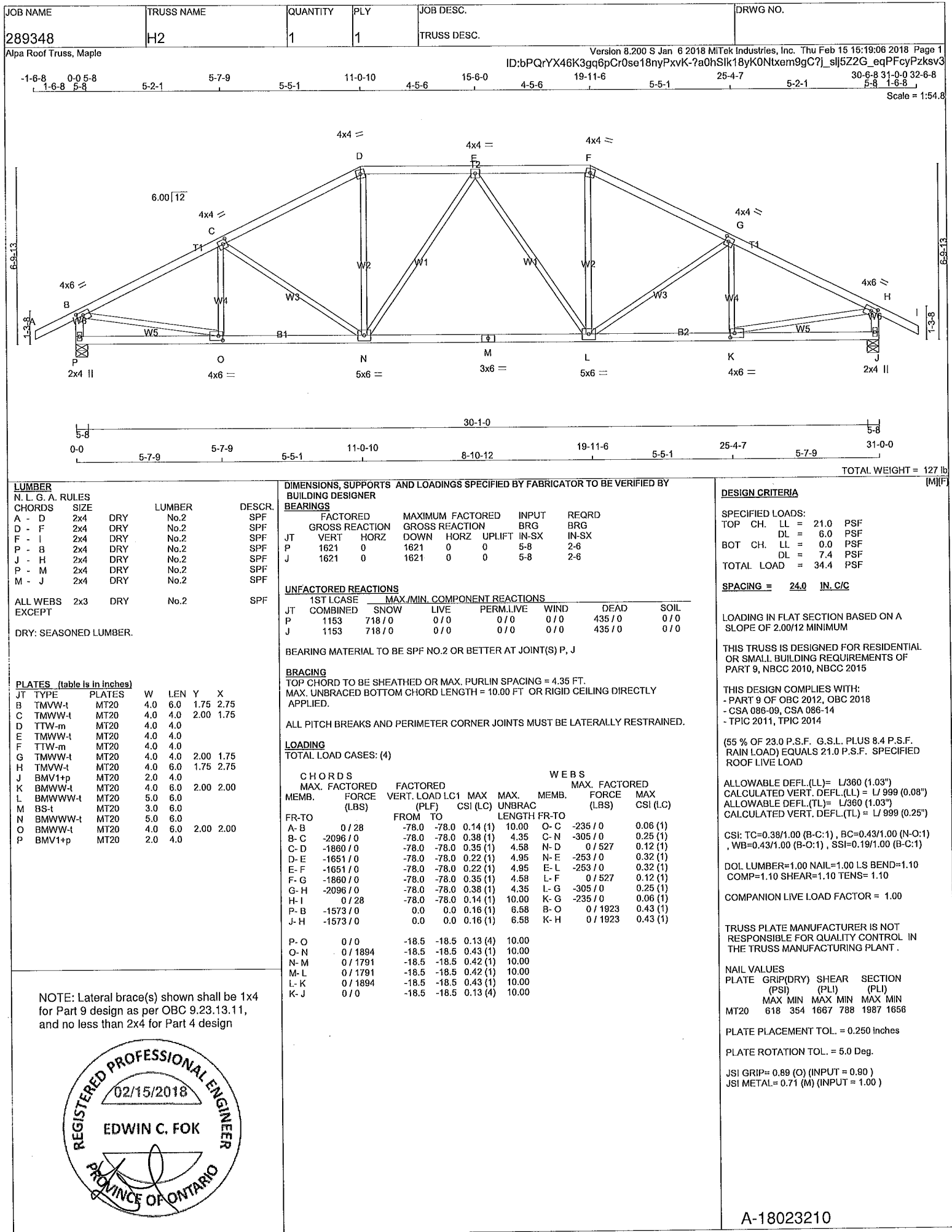
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

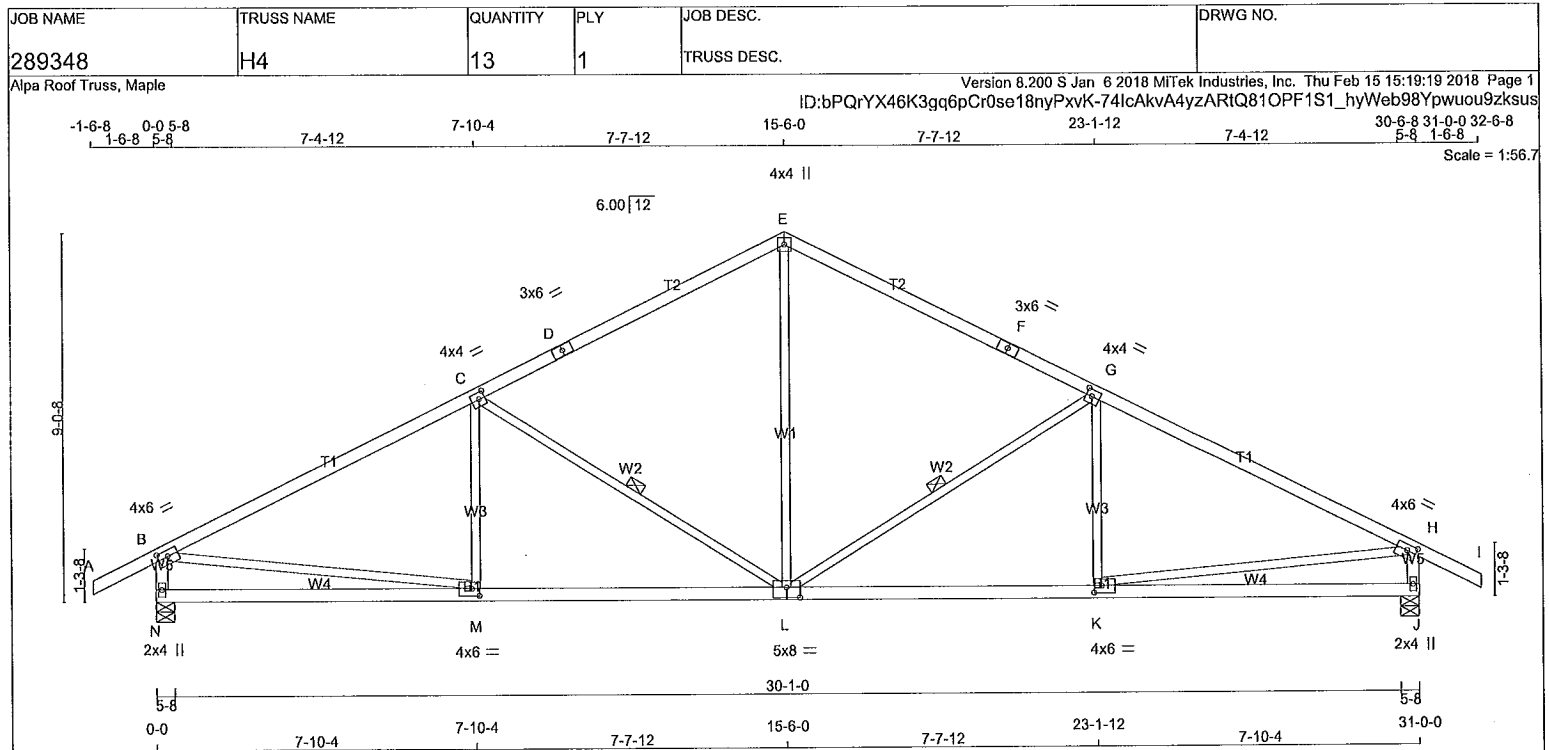
JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.87 (O) (INPUT = 1.00)

A-18023209 CONTINUE ON PAGE 2





		A-10025211
--	--	------------



LUMBER
N. L. G. A. RULES

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

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	REQ'D BRG
	VERT	HORZ	DOWN	HORZ		
N	1621	0	1621	0	5-8	2-6
J	1621	0	1621	0	5-8	2-6

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
N	1153	718 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
J	1153	718 / 0	0 / 0	0 / 0	0 / 0	435 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-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) = 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 (0.25")

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

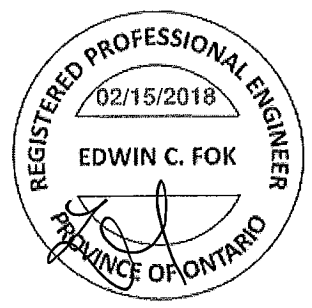
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

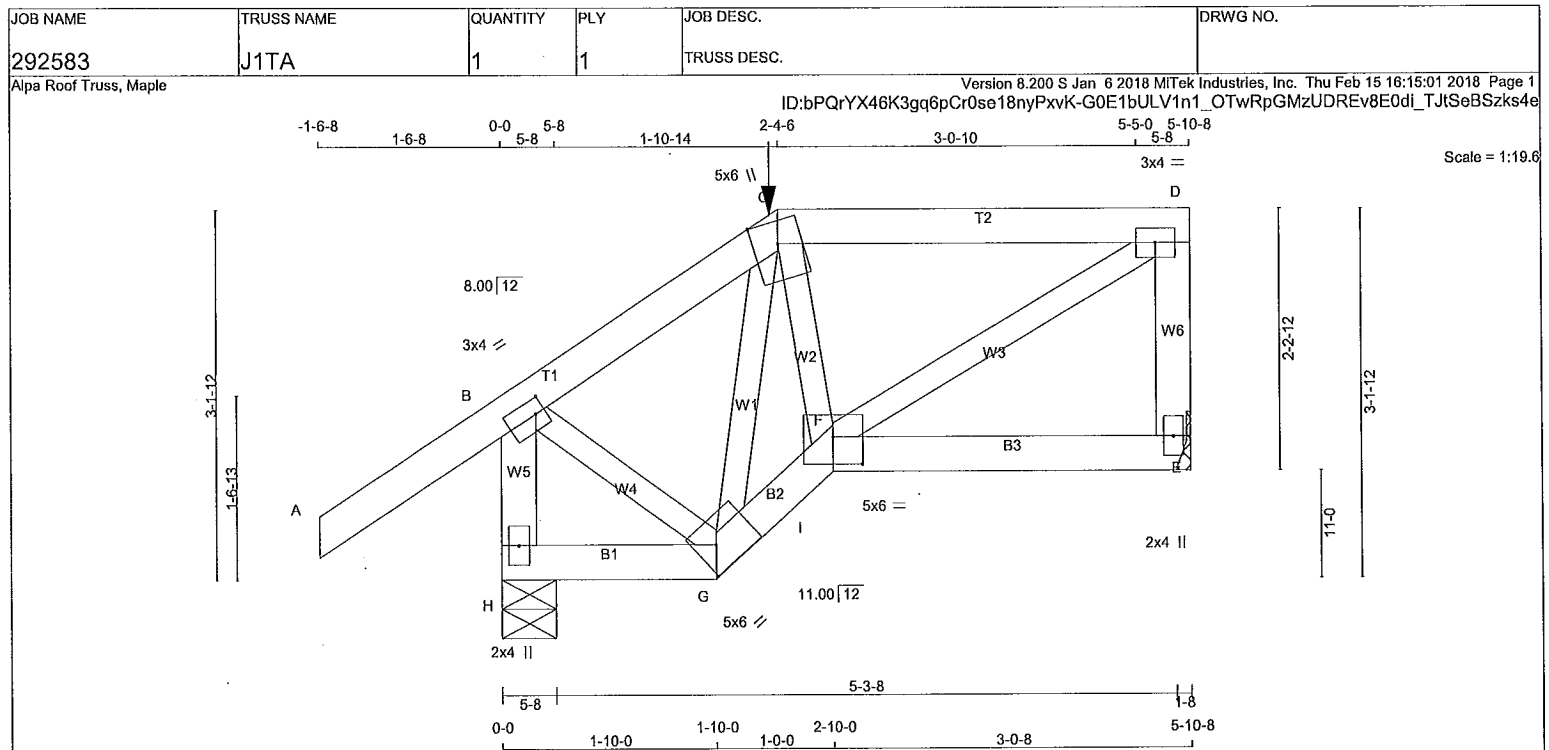
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.58 (B) (INPUT = 1.00)

A-18023212





LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
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)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.00
C	TTVW+m	MT20	5.0	6.0	Edge	
D	TMVW-I	MT20	3.0	4.0		
E	BMV1+p	MT20	2.0	4.0		
F	BBWW-I	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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
E	416	0	5-8	1-8
H	508	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
E	296	182 / 0	0 / 0	0 / 0	114 / 0	0 / 0
H	360	232 / 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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
MEMB.									
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

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
- ADD'L 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

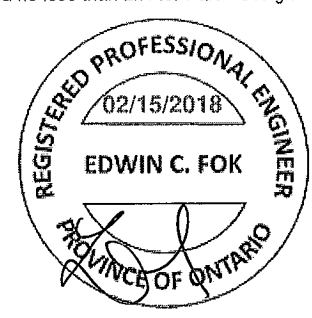
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



Scale = 1:25.3

<

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



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)

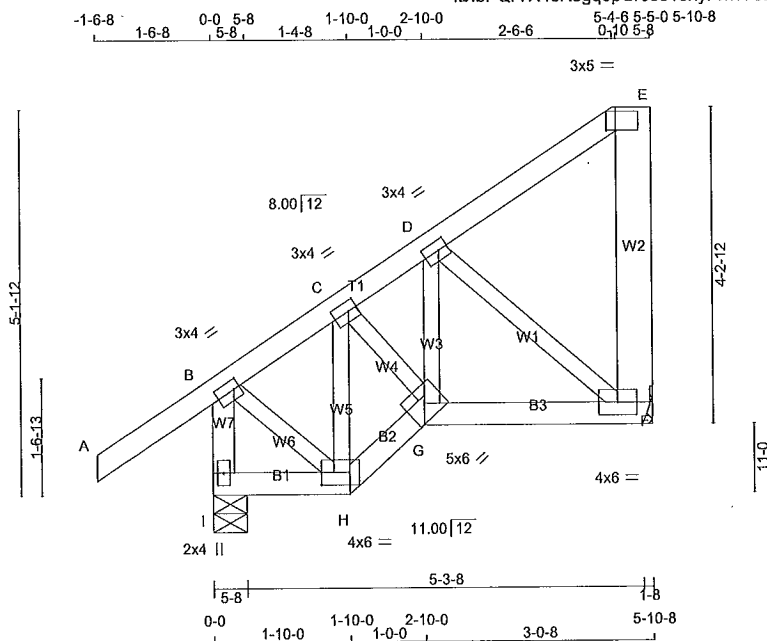
JSI METAL= 0.10 (B) (INPUT = 1.00)

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-JLgrgUe6zLlOOGijlOFIVaik0n3qMlqVrBL1hzks00



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 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.00
C	TMWW-I	MT20	3.0	4.0	1.50	1.50
D	TMWW-I	MT20	3.0	4.0	1.50	1.50
E	TVM-p	MT20	3.0	5.0	0.25	1.50
F	BMVW1-I	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	DOWN	IN-SX	IN-SX
F	266	0	266	0
I	427	0	427	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
F	190	114 / 0	0 / 0	0 / 0	76 / 0	0 / 0
I	302	201 / 0	0 / 0	0 / 0	101 / 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				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	H-C	-139 / 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	0.05 (1)
F-E	-93 / 0	0.0	0.0	0.02 (1)	7.81	B-H	0 / 129	0.03 (1)
I-B	-410 / 0	0.0	0.0	0.04 (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=0.05/1.00 (D-F:1), SS=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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



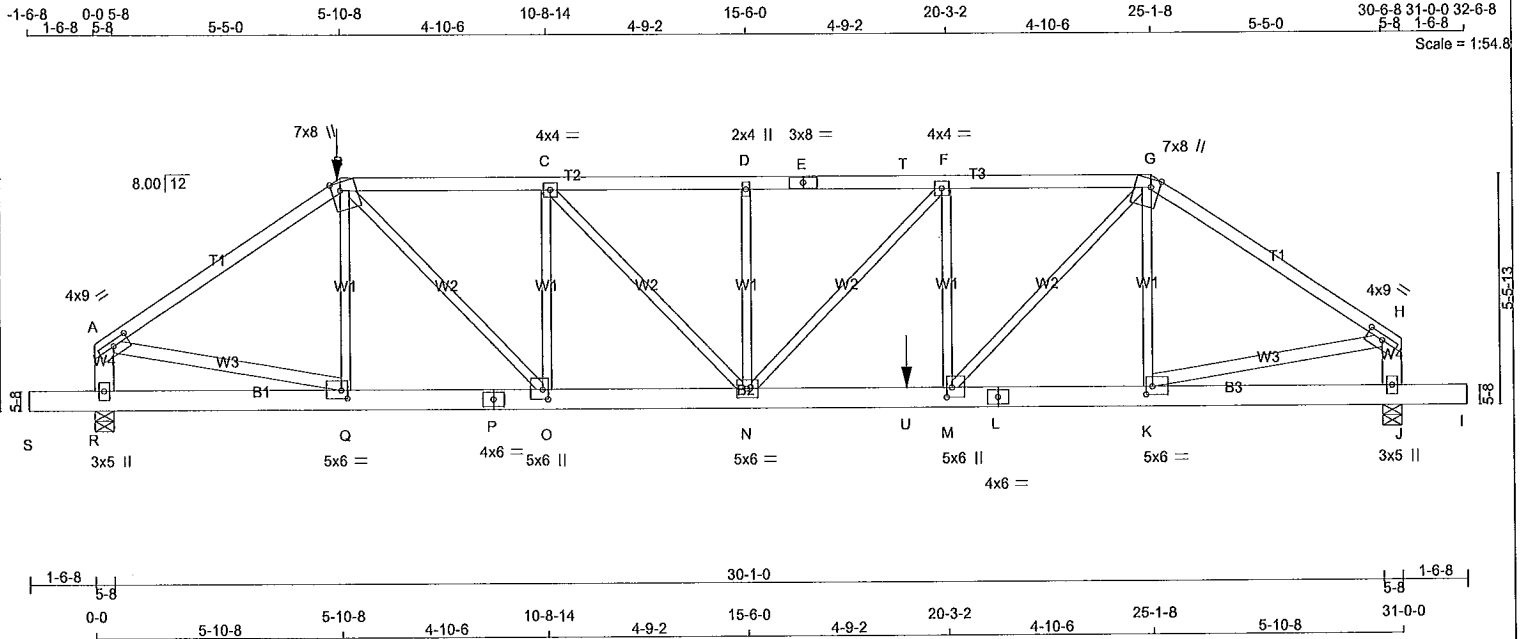
A-18023227

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
291807	H5A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 17:02:07 2018 Page 1

ID:84gOFYESM8s1JmD06_uSGRyQWJP-Xi?NioY9V34?QmyaMn3g0AU3LJYcmhrR8Y0ANfzkrOU



TOTAL WEIGHT = 157 lb

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

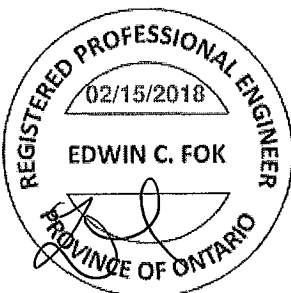
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMW-t	MT20	4.0	9.0	1.50	4.50
B	TTWW+m	MT20	7.0	8.0	Edge	2.50
C	TMW-t	MT20	4.0	4.0		
D	TMW-w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
F	TMW-t	MT20	4.0	4.0		
G	TTWW+m	MT20	7.0	8.0	Edge	2.50
H	TMW-t	MT20	4.0	9.0	1.50	4.50
J	BMV1+p	MT20	3.0	5.0		
K	BMWW-t	MT20	5.0	6.0	2.25	1.75
L	BS-t	MT20	4.0	6.0		
M	BMWW-t	MT20	5.0	6.0	2.75	1.50
N	BMWW-t	MT20	5.0	6.0	2.75	1.50
O	BMWW-t	MT20	5.0	6.0	2.75	1.50
P	BS-t	MT20	4.0	6.0		
Q	BMWW-t	MT20	5.0	6.0	2.25	1.75
R	BMV1+p	MT20	3.0	5.0		

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		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	3074	0	0	3074	0	0	5-8	4-4	
J	2751	0	0	2751	0	0	5-8	3-4	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	2188	1353 / 0	0 / 0	0 / 0	0 / 0	0 / 0	835 / 0	0 / 0	
J	1951	1247 / 0	0 / 0	0 / 0	0 / 0	0 / 0	704 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	-3628 / 0	-78.0 -78.0	0.73 (1)	3.59	Q-B	-346 / 43	0.15 (1)
B-C	-4429 / 0	-153.5 -153.5	0.67 (1)	3.18	B-O	0 / 2057	0.51 (1)
C-D	-4937 / 0	-153.5 -153.5	0.71 (1)	2.97	O-C	-1368 / 0	0.59 (1)
D-E	-4937 / 0	-153.5 -153.5	0.54 (1)	3.22	C-N	0 / 746	0.18 (1)
E-F	-4937 / 0	-153.5 -153.5	0.54 (1)	3.22	N-D	-703 / 0	0.31 (1)
F-G	-4937 / 0	-78.0 -78.0	0.54 (1)	3.22	N-F	0 / 681	0.17 (1)
G-H	-4473 / 0	-78.0 -78.0	0.48 (1)	3.43	M-F	-1017 / 0	0.44 (1)
H-I	-3230 / 0	-78.0 -78.0	0.68 (1)	3.81	M-G	0 / 2604	0.64 (1)
R-A	-2834 / 0	0.0 0.0	0.21 (1)	6.18	K-G	-473 / 0	0.21 (1)
J-H	-2548 / 0	0.0 0.0	0.19 (1)	6.45	A-Q	0 / 3072	0.54 (1)
					K-H	0 / 2735	0.48 (1)
S-R	0 / 0	-96.5 -96.5	0.08 (1)	10.00			
R-Q	0 / 0	-36.4 -36.4	0.14 (4)	10.00			
Q-P	0 / 3008	-36.4 -36.4	0.47 (1)	10.00			
P-O	0 / 3008	-36.4 -36.4	0.47 (1)	10.00			
O-N	0 / 4429	-36.4 -36.4	0.65 (1)	10.00			
N-U	0 / 4473	-36.4 -36.4	0.95 (1)	10.00			
U-M	0 / 4473	-18.5 -18.5	0.95 (1)	10.00			
M-L	0 / 2675	-18.5 -18.5	0.53 (1)	10.00			
L-K	0 / 2675	-18.5 -18.5	0.53 (1)	10.00			
K-J	0 / 0	-18.5 -18.5	0.08 (4)	10.00			
J-I	0 / 0	-96.5 -96.5	0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	5-10-8	-334	-334	-	FRONT	VERT	TOTAL
U	19-3-8	-844	-844	-	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: CPrimeHip
SIDE SETBACK = 5-10-8
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 19-3-8 OF SPAN
MEASURED FROM THE LEFT.

*** 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

(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 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/991 (0.38")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

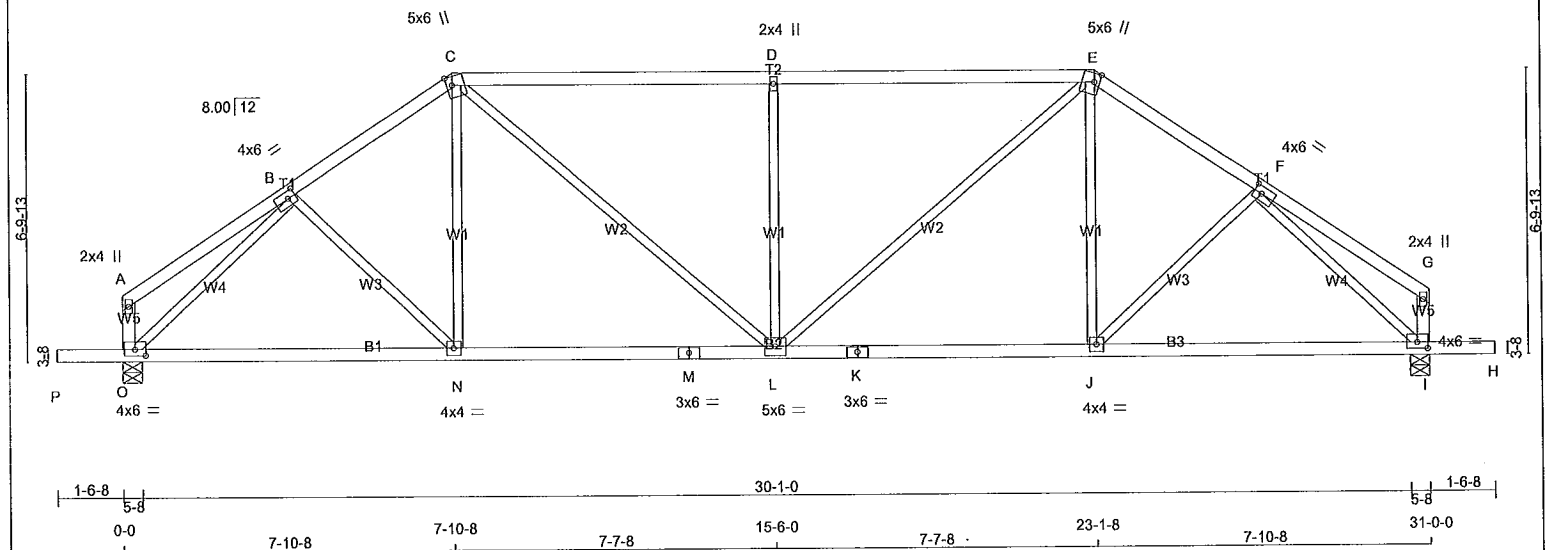
CSI: TC=0.73/1.00 (A-B:1) , BC=0.95/1.00 (M-N:1)
WB=0.64/1.00 (G-M:1) , SS=0.51/1.00 (M-N:1)

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

A18023228 CONTINUED ON PAGE 2



LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.25
C	TTWW+m	MT20	5.0	6.0	2.50	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.50	1.50
F	TMWW-t	MT20	4.0	6.0	2.00	2.25
G	TMV+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	6.0	1.75	3.00
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	4.0	4.0		
O	BMVW-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1644	0	1644	0	5-8	1-12
I	1644	0	1644	0	5-8	1-12

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
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 = 4.06 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	VERT. LOAD	LC1	MAX	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0 / 18	-78.0	-78.0	0.18 (1)	10.00	B-N	0 / 66	0.02 (4)
B-C	-1663 / 0	-78.0	-78.0	0.17 (1)	5.00	N-C	0 / 140	0.05 (4)
C-D	-1870 / 0	-78.0	-78.0	0.68 (1)	4.06	C-L	0 / 660	0.15 (1)
D-E	-1870 / 0	-78.0	-78.0	0.68 (1)	4.06	L-D	-732 / 0	0.57 (1)
E-F	-1663 / 0	-78.0	-78.0	0.17 (1)	5.00	L-E	0 / 660	0.15 (1)
F-G	0 / 18	-78.0	-78.0	0.18 (1)	10.00	J-E	0 / 140	0.05 (4)
O-A	-120 / 0	0.0	0.0	0.01 (1)	7.81	J-F	0 / 66	0.02 (4)
I-G	-120 / 0	0.0	0.0	0.01 (1)	7.81	O-B	-1876 / 0	0.93 (1)
						F-I	-1876 / 0	0.93 (1)
P-O	0 / 0	-96.5	-96.5	0.16 (1)	10.00			
O-N	0 / 1338	-18.5	-18.5	0.40 (4)	10.00			
N-M	0 / 1368	-18.5	-18.5	0.42 (4)	10.00			
M-L	0 / 1368	-18.5	-18.5	0.42 (4)	10.00			
L-K	0 / 1368	-18.5	-18.5	0.42 (4)	10.00			
K-J	0 / 1368	-18.5	-18.5	0.42 (4)	10.00			
J-I	0 / 1338	-18.5	-18.5	0.40 (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

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 (0.16")

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 (D-E:1), BC=0.42/1.00 (J-L:4), WB=0.93/1.00 (F-I:1), SSI=0.29/1.00 (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.

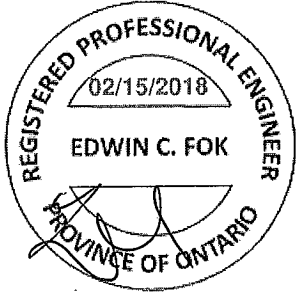
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

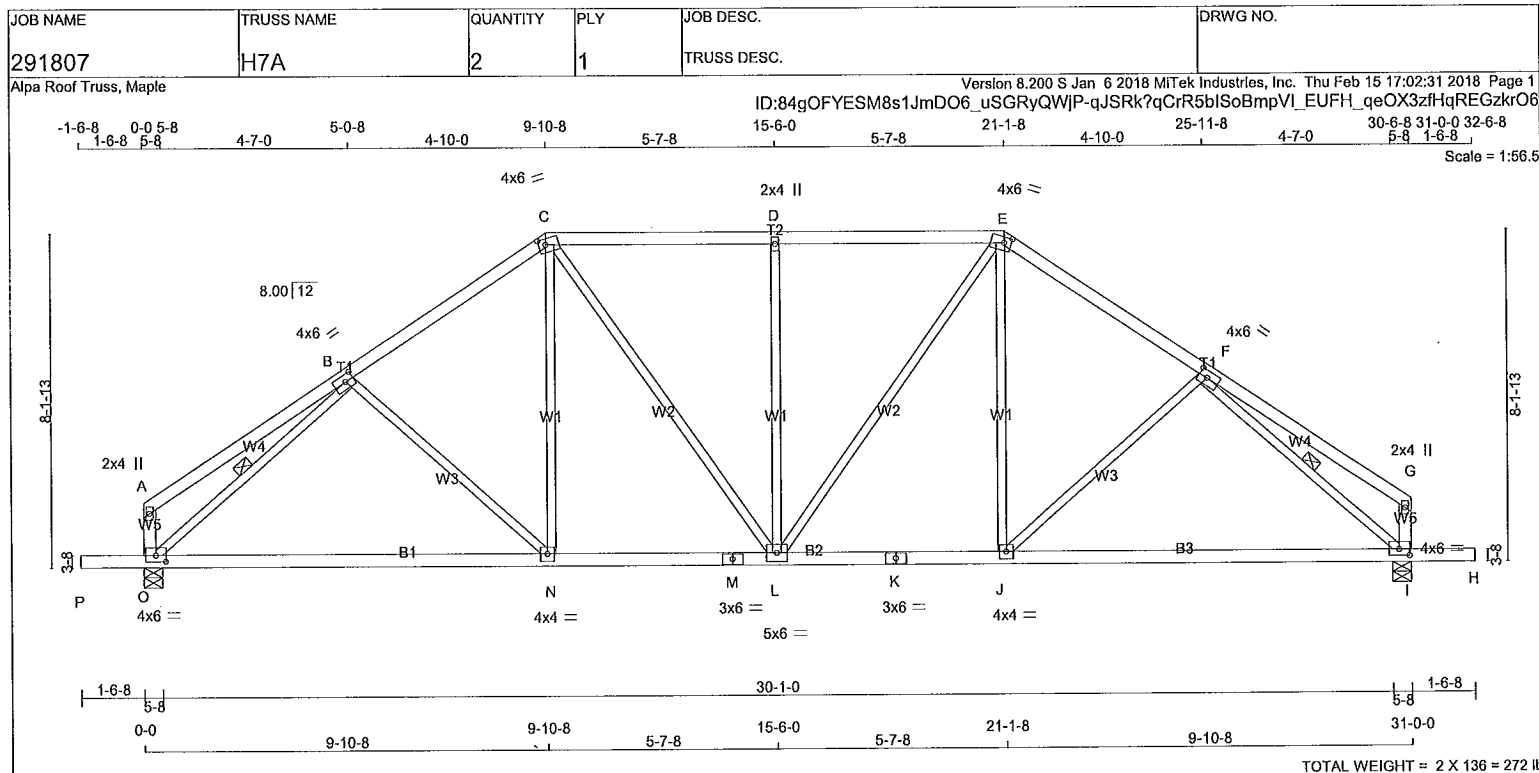
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (I) (INPUT = 0.90)
JSI METAL= 0.46 (B) (INPUT = 1.00)

A-18023229





LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - C	2x4	DRY	No.2	SPF
C - 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 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.50
C	TTWW-m	MT20	4.0	6.0	1.75	2.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.00
F	TMWW-t	MT20	4.0	6.0	2.00	2.50
G	TMV+p	MT20	2.0	4.0		
I	BMVW1-t	MT20	4.0	6.0	1.75	3.00
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
O	1644	0	1644	0	5-8	1-12
I	1644	0	1644	0	5-8	1-12

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM.LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. 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 = 4.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-O, F-I.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED L.C.1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 25	-78.0	-78.0 0.30 (1)	10.00	B-N	-110 / 22	0.09 (1)
B-C	-1591 / 0	-78.0	-78.0 0.27 (1)	4.97	N-C	0 / 268	0.07 (4)
C-D	-1510 / 0	-78.0	-78.0 0.35 (1)	4.97	C-L	0 / 351	0.08 (1)
D-E	-1510 / 0	-78.0	-78.0 0.35 (1)	4.97	L-D	-536 / 0	0.69 (1)
E-F	-1591 / 0	-78.0	-78.0 0.27 (1)	4.97	L-E	0 / 351	0.08 (1)
F-G	0 / 25	-78.0	-78.0 0.30 (1)	10.00	J-E	0 / 268	0.07 (4)
O-A	-148 / 0	0.0	0.0 0.02 (1)	7.81	J-F	-110 / 22	0.09 (1)
I-G	-148 / 0	0.0	0.0 0.02 (1)	7.81	O-B	-1879 / 0	0.57 (1)
					F-I	-1879 / 0	0.57 (1)
P-O	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
O-N	0 / 1383	-18.5	-18.5 0.53 (4)	10.00			
N-M	0 / 1305	-18.5	-18.5 0.54 (4)	10.00			
M-L	0 / 1305	-18.5	-18.5 0.54 (4)	10.00			
L-K	0 / 1305	-18.5	-18.5 0.54 (4)	10.00			
K-J	0 / 1305	-18.5	-18.5 0.54 (4)	10.00			
J-I	0 / 1383	-18.5	-18.5 0.53 (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

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 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.31")

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=0.35/1.00 (D-E:1), BC=0.54/1.00 (J-L:4), WB=0.69/1.00 (D-L:1), SSI=0.21/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

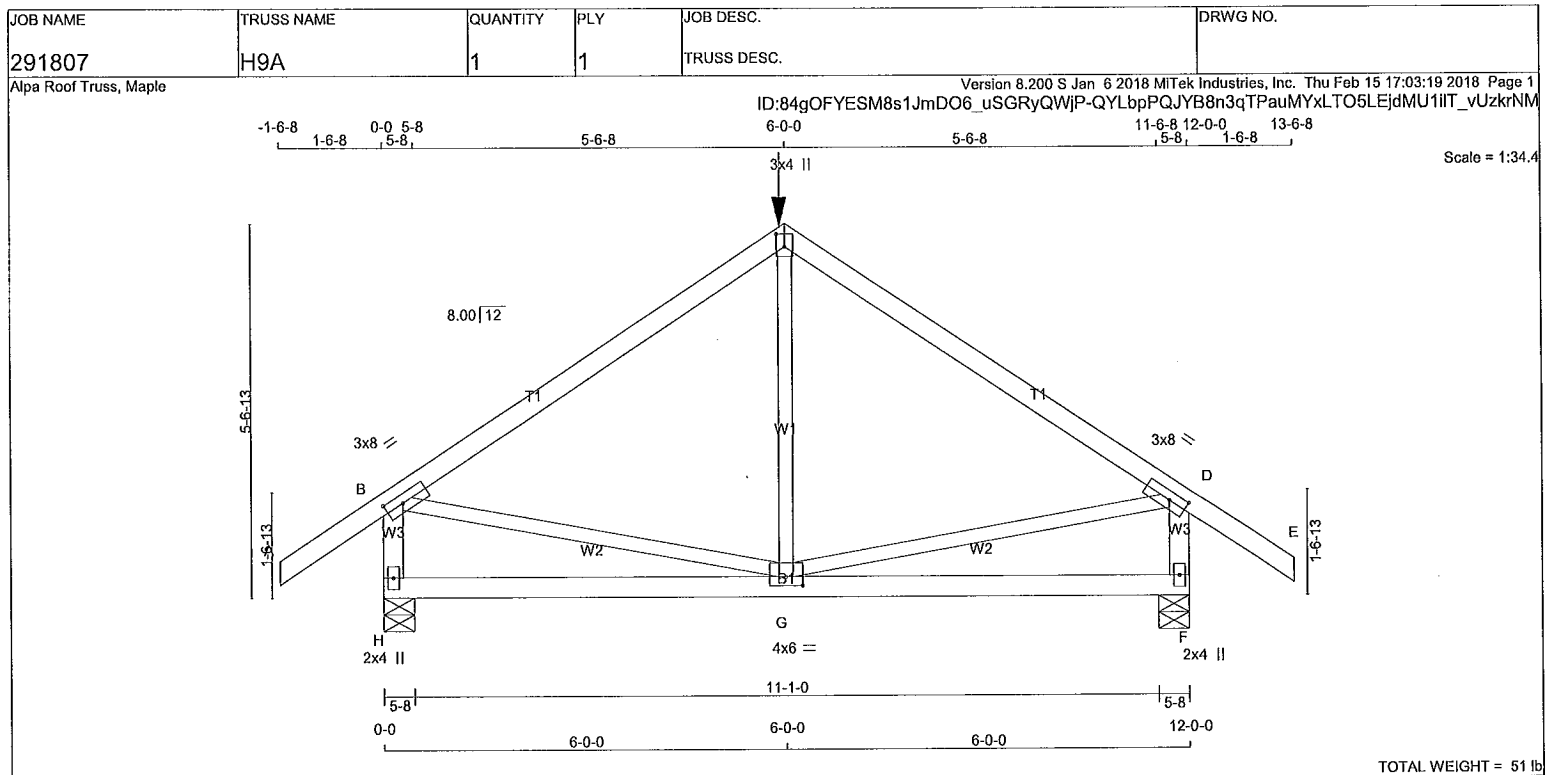
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.46 (F) (INPUT = 1.00)

A.18023230





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	8.0	1.50	3.25
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-t	MT20	3.0	8.0	1.50	3.25
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	4.0	6.0	1.50	3.00
H	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 701.7 lbs FACTORED DOWN AT 6'-0" 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		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	UPLIFT	IN-SX
H		1167	0	0	5-8
F		1167	0	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX / MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	832	509 / 0	0 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0
F	832	509 / 0	0 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.32 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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 35	-78.0	-78.0 0.16 (1)	10.00	G-C	-69 / 176	0.07 (4)
B-C	-992 / 0	-78.0	-78.0 0.61 (1)	5.32	B-G	0 / 843	0.21 (1)
C-D	-992 / 0	-78.0	-78.0 0.61 (1)	5.32	G-D	0 / 843	0.21 (1)
D-E	0 / 35	-78.0	-78.0 0.16 (1)	10.00			
H-B	-1082 / 0	0.0	0.0 0.12 (1)	7.56			
F-D	-1082 / 0	0.0	0.0 0.12 (1)	7.56			
H-G	0 / 0	-37.0	-37.0 0.42 (4)	10.00			
G-F	0 / 0	-37.0	-37.0 0.42 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	6'-0"	-702	-702	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
SIDE SETBACK = 6'-0"
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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6'-0"
END SETBACK = 6'-0"
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.

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 (0.07")

CSI: TC=0.61/1.00 (C-D:1), BC=0.42/1.00 (F-G:4)
WB=0.21/1.00 (B-G:1), SSI=0.20/1.00 (F-G:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 Inches

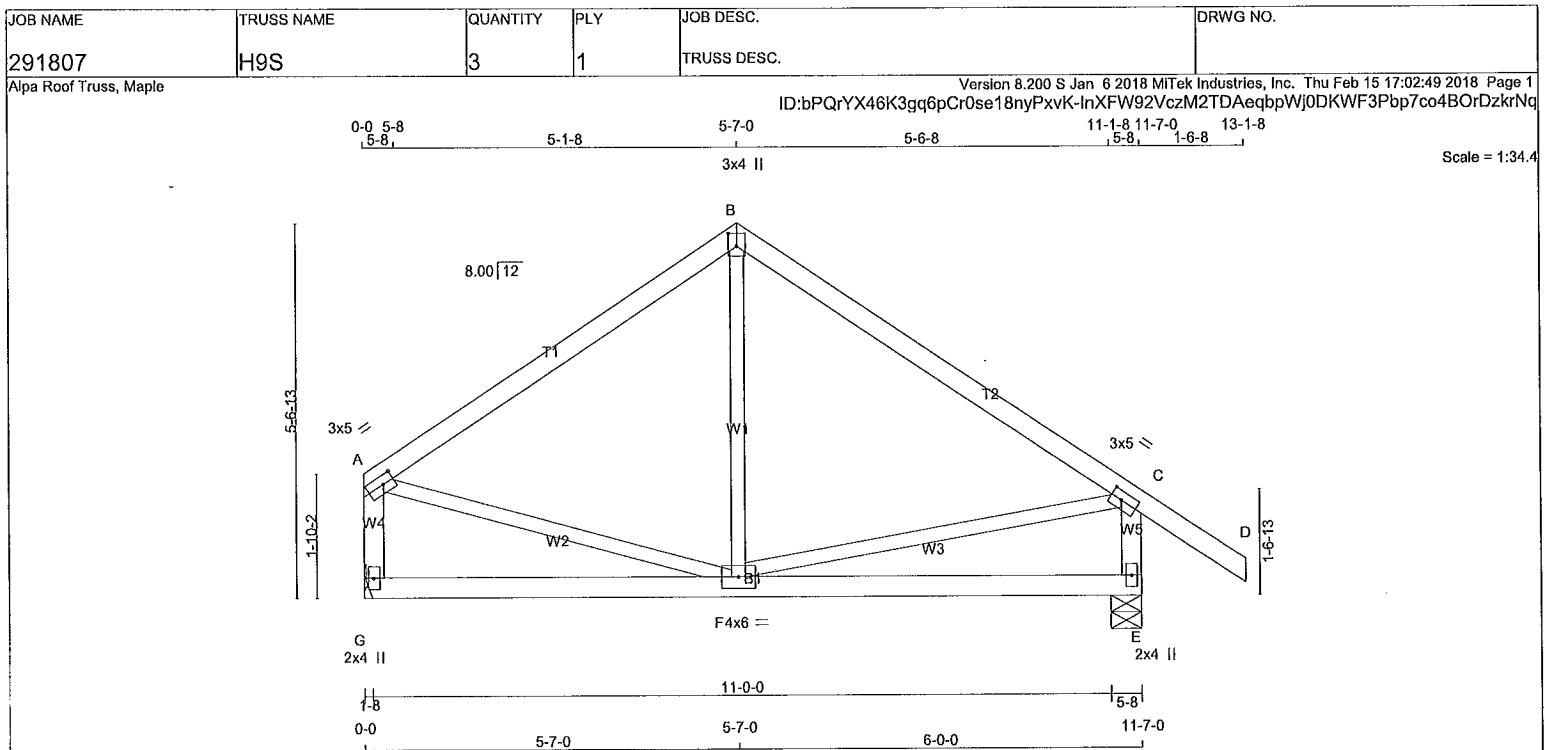
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.23 (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



A18028232



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-I	MT20	3.0	5.0	1.50	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-I	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-I	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
G	559	0	559	0	0
E	685	0	685	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	398	243 / 0	0 / 0	0 / 0	0 / 0	155 / 0	0 / 0
E	486	311 / 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)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	-386 / 0	F-B	-23 / 84
B-C	-387 / 0	A-F	0 / 334
C-D	0 / 35	F-C	0 / 328
G-A	-523 / 0		
E-C	-640 / 0		
G-F	0 / 0		
F-E	0 / 0		

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.

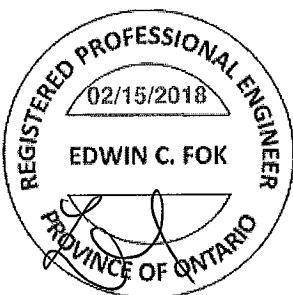
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

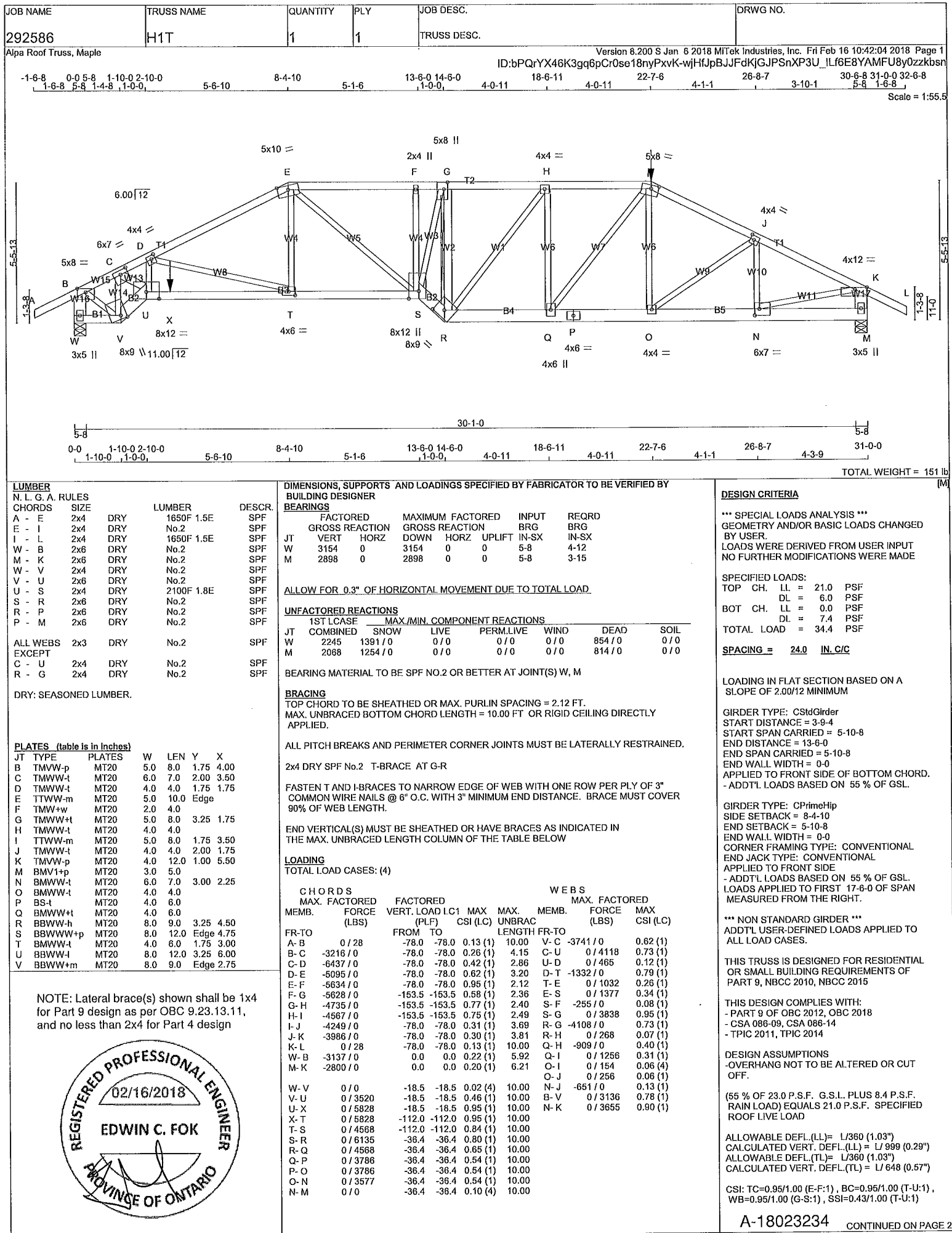
PLATE ROTATION TOL. = 5.0 Deg.

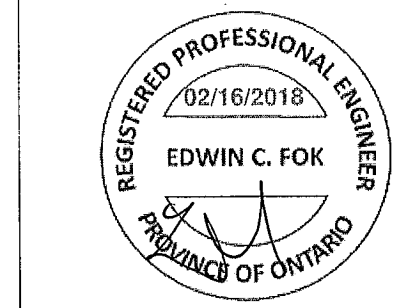
JSI GRIP= 0.58 (C) (INPUT = 0.90)
JSI METAL = 0.18 (C) (INPUT = 1.00)

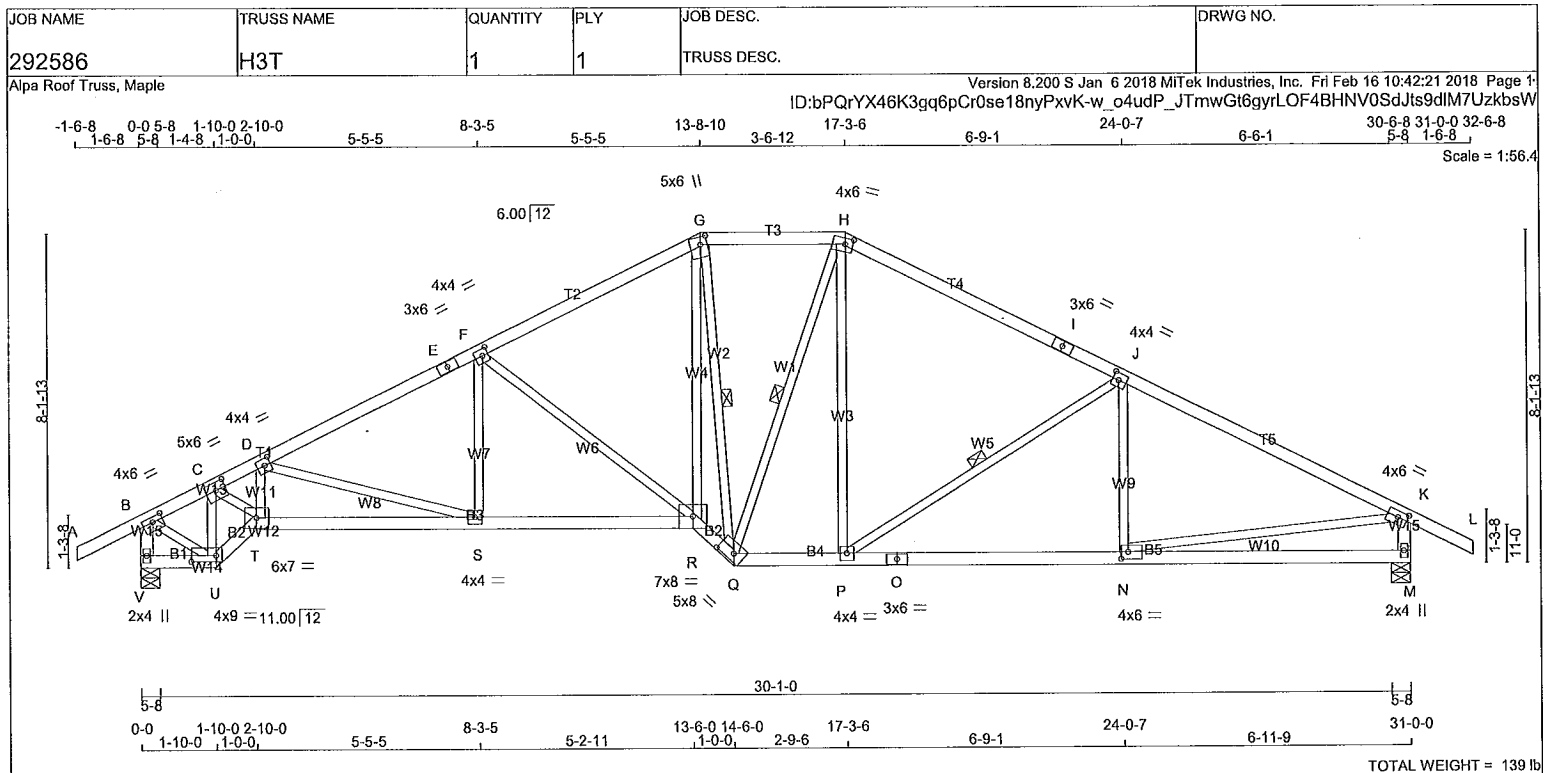
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

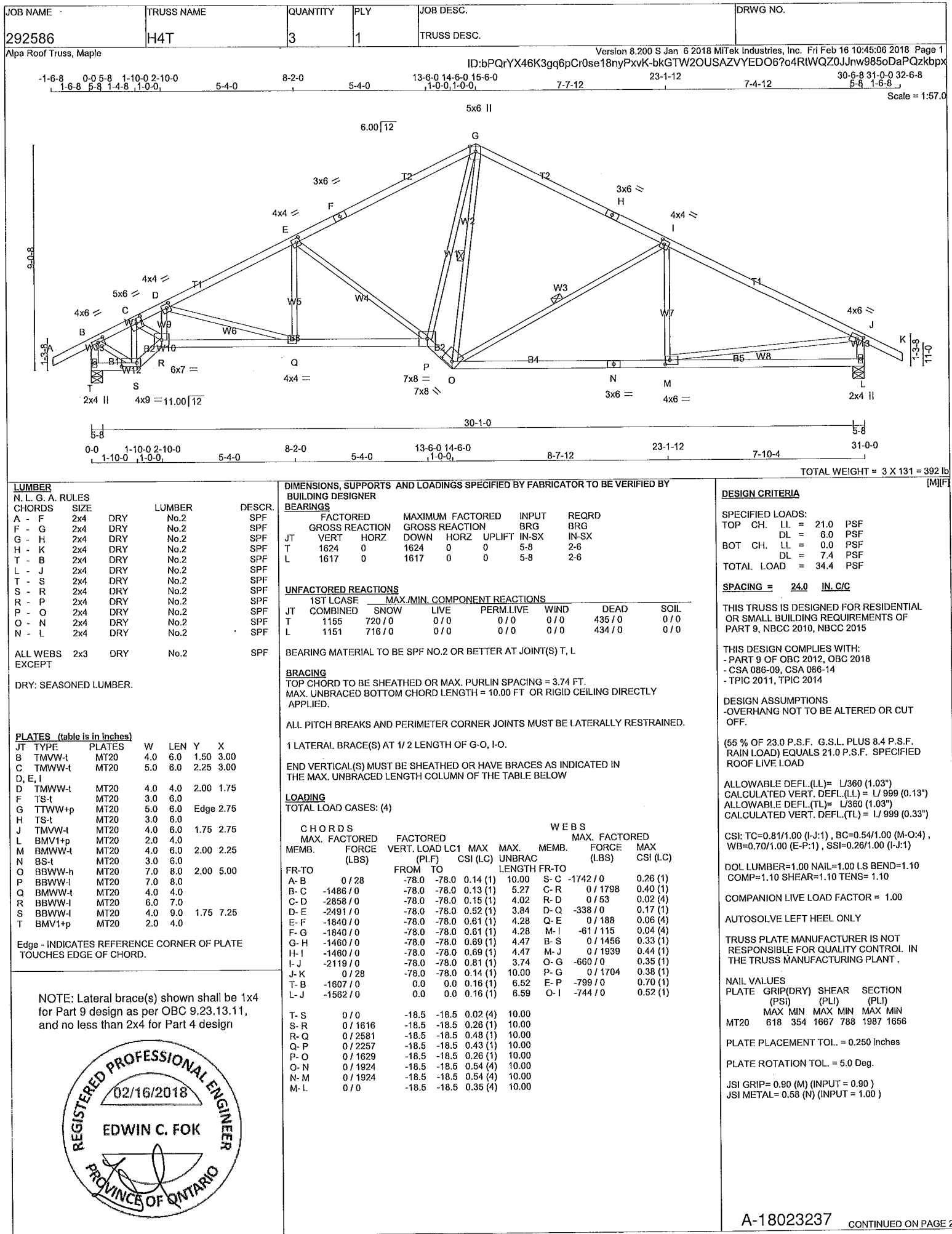


A18023233

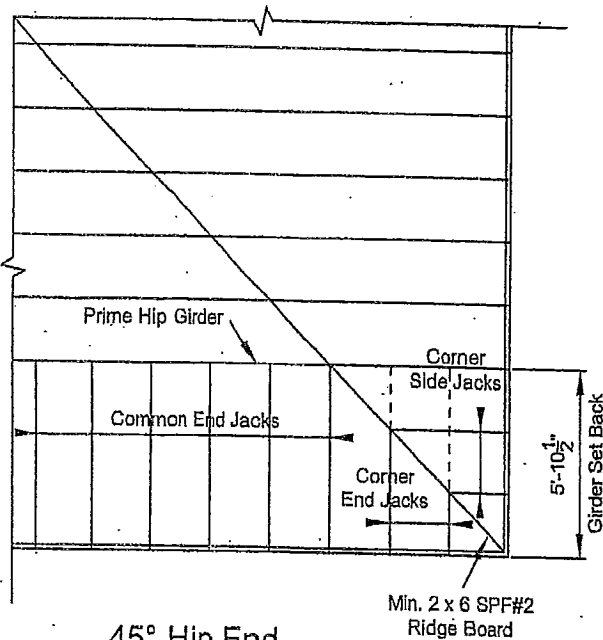








STRACON ENGINEERING INC.



45° Hip End

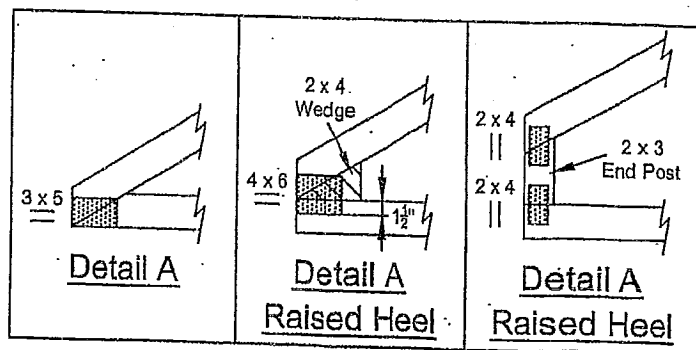
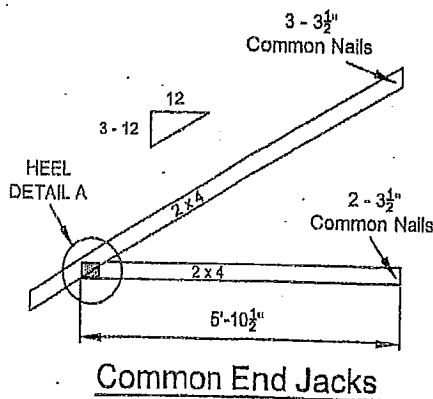
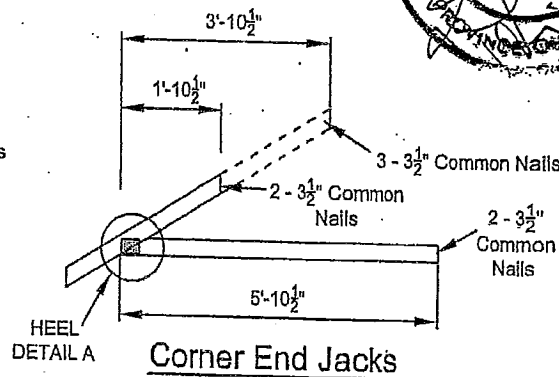
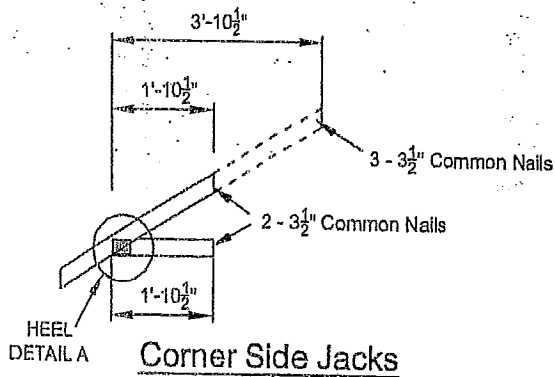
LUMBER SPECIFICATION

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.

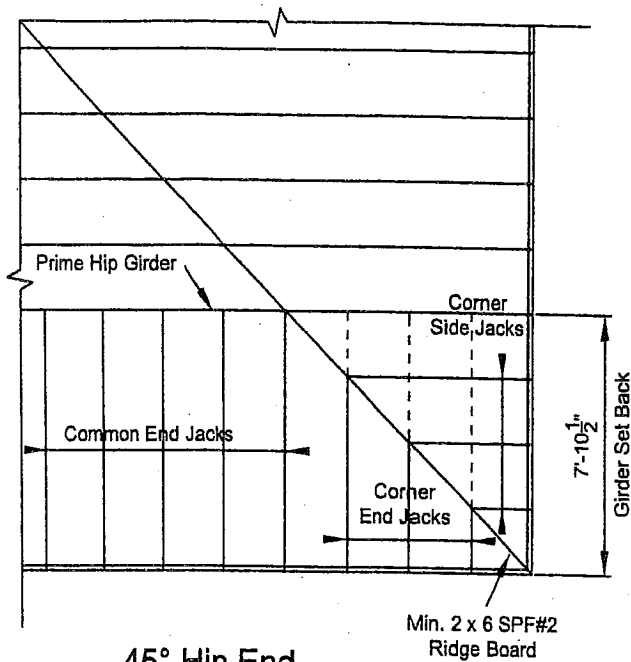
TOTAL LOAD : 50.5 P.S.F



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

CS-51008

STRACON ENGINEERING INC.



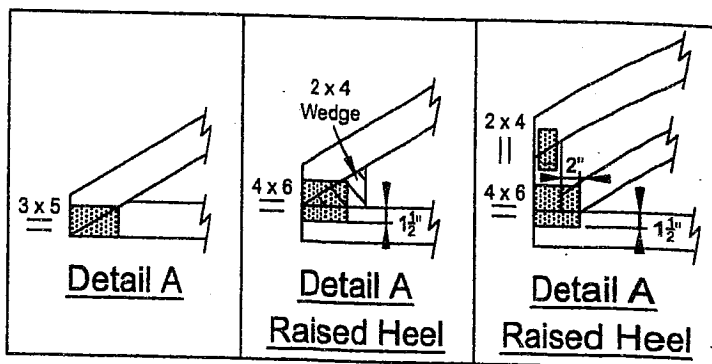
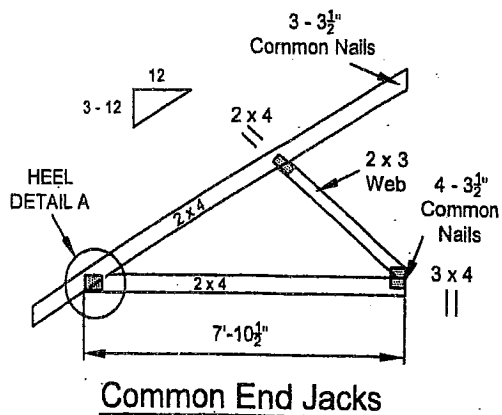
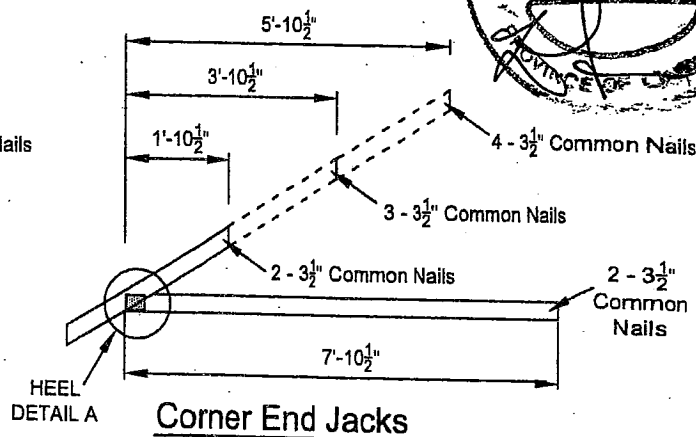
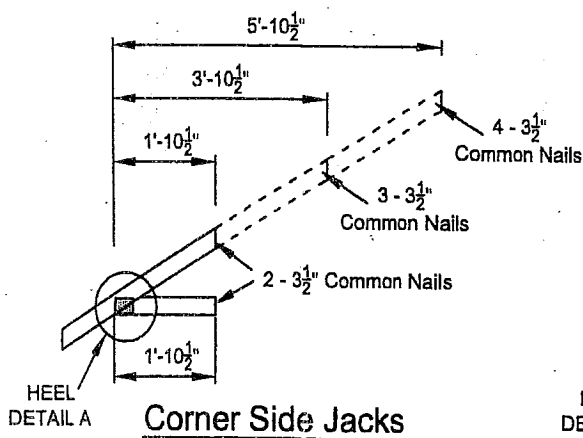
LUMBER SPECIFICATION

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:

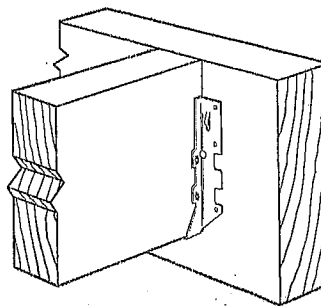
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

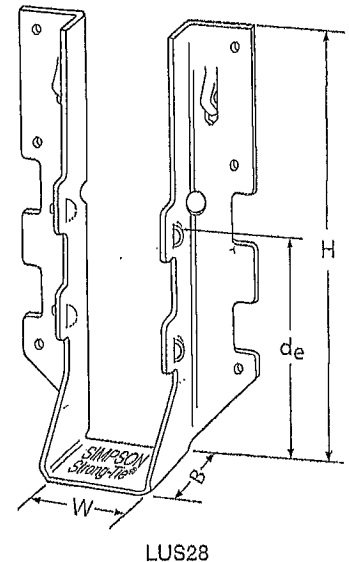
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

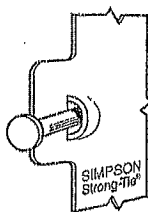


Typical LUS Installation



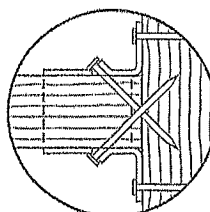
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1⅞	3⅞	1⅞	1⅞	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3⅞	3⅞	2	1⅞	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1⅞	4⅞	1⅞	3⅞	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3⅞	4⅞	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4⅞	4⅞	2	3⅞	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1⅞	6⅞	1⅞	3⅞	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3⅞	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4⅞	6⅞	2	3⅞	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1⅞	7⅞	1⅞	3⅞	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3⅞	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4⅞	8⅞	2	5⅞	(8) 16d	(6) 16d	2580	3345	2320	2375

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

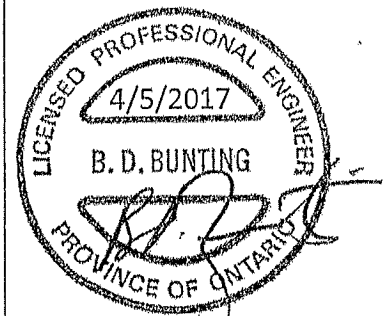


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



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 visit strongtie.com.

© 2017 Simpson Strong-Tie Company Inc.

1-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

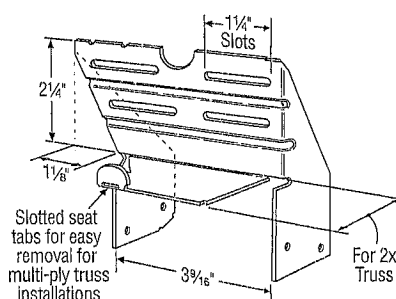
Design: Factored resistances are in accordance with CSA 086-14

Installation:

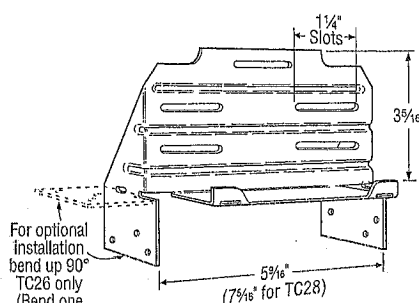
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow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

Optional TC Installation:

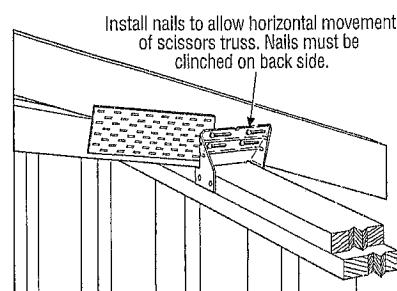
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



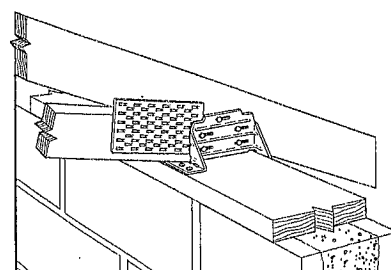
TC24
U.S. Patent 4,932,173



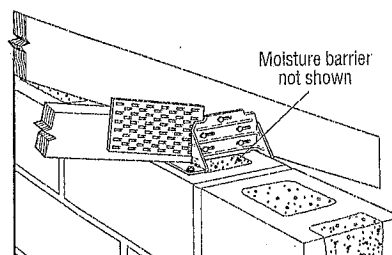
TC26
(TC28 Similar)



Typical TC24 Installation



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



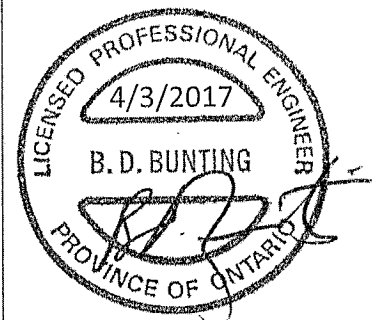
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K 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 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

© 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:

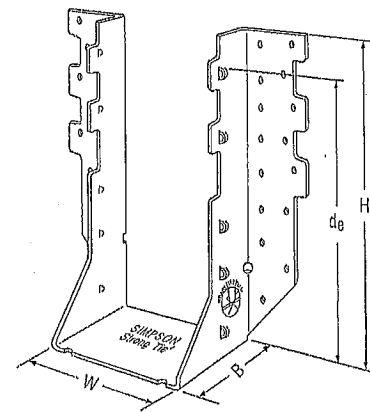
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

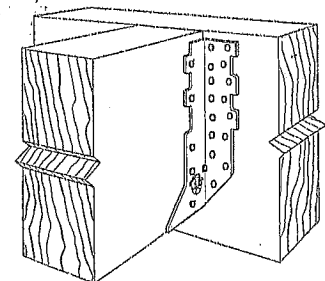
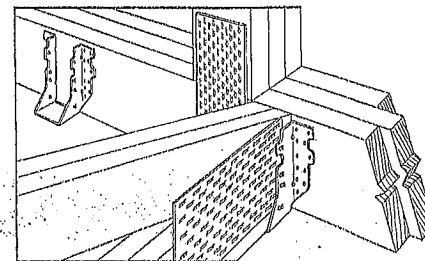
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options

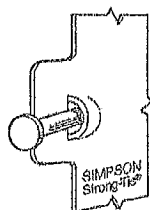


HHUS410



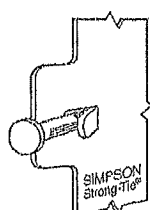
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 1/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 9/16	7 1/32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

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

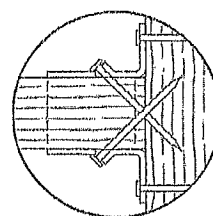


Double Shear Nailing prevents tabs breaking off (available on some models).

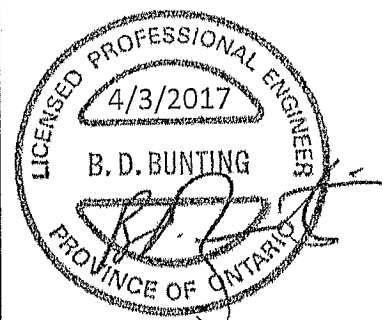
U.S. Patent 5,603,580



Double Shear Nailing Top View.



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.

© 2017 Simpson Strong-Tie Company Inc.

T-SPEC HHUS17-3/17 exp. 6/19

(800) 999-5099
strongtie.com