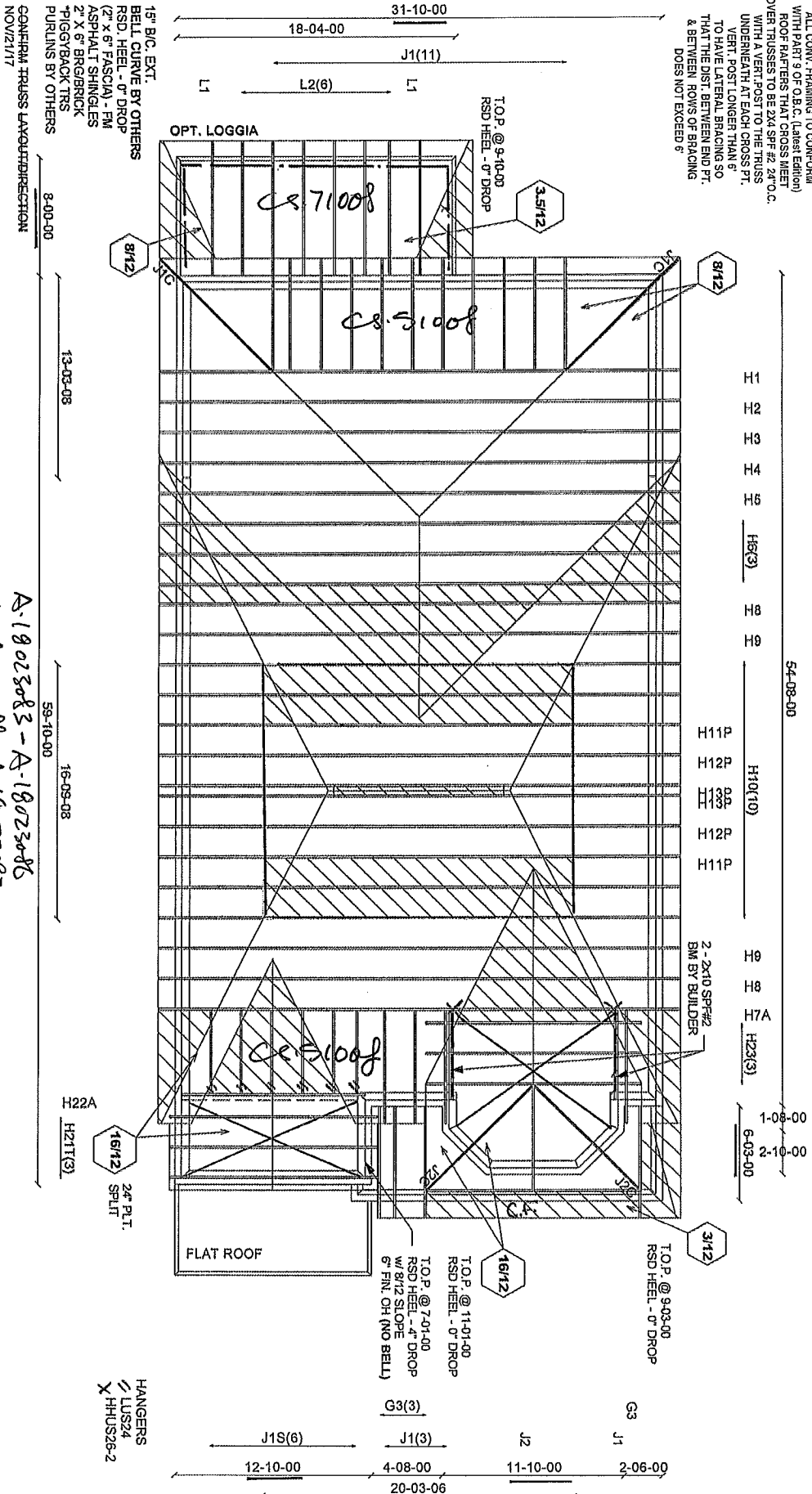


ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 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 JOINS OF BRACING DOES NOT EXCEED 6'



A-18023083 - A-18023086
A-18023088 - A-18023093
A-18023106 - A-18023107
A-18023141 - A-18023144

CONVENTIONAL
FRAMING BY
OTHERS

DALE RIDGE

Model / Elevation

4004

/ B

STD OR CRT 2ND FLR (5'2\"/>



Job Track 45147

Layout ID: 289346

Plan Log: 94839

Builder / Location

GOLD PARK HOMES / VAUGHAN

Project PINE VALLEY

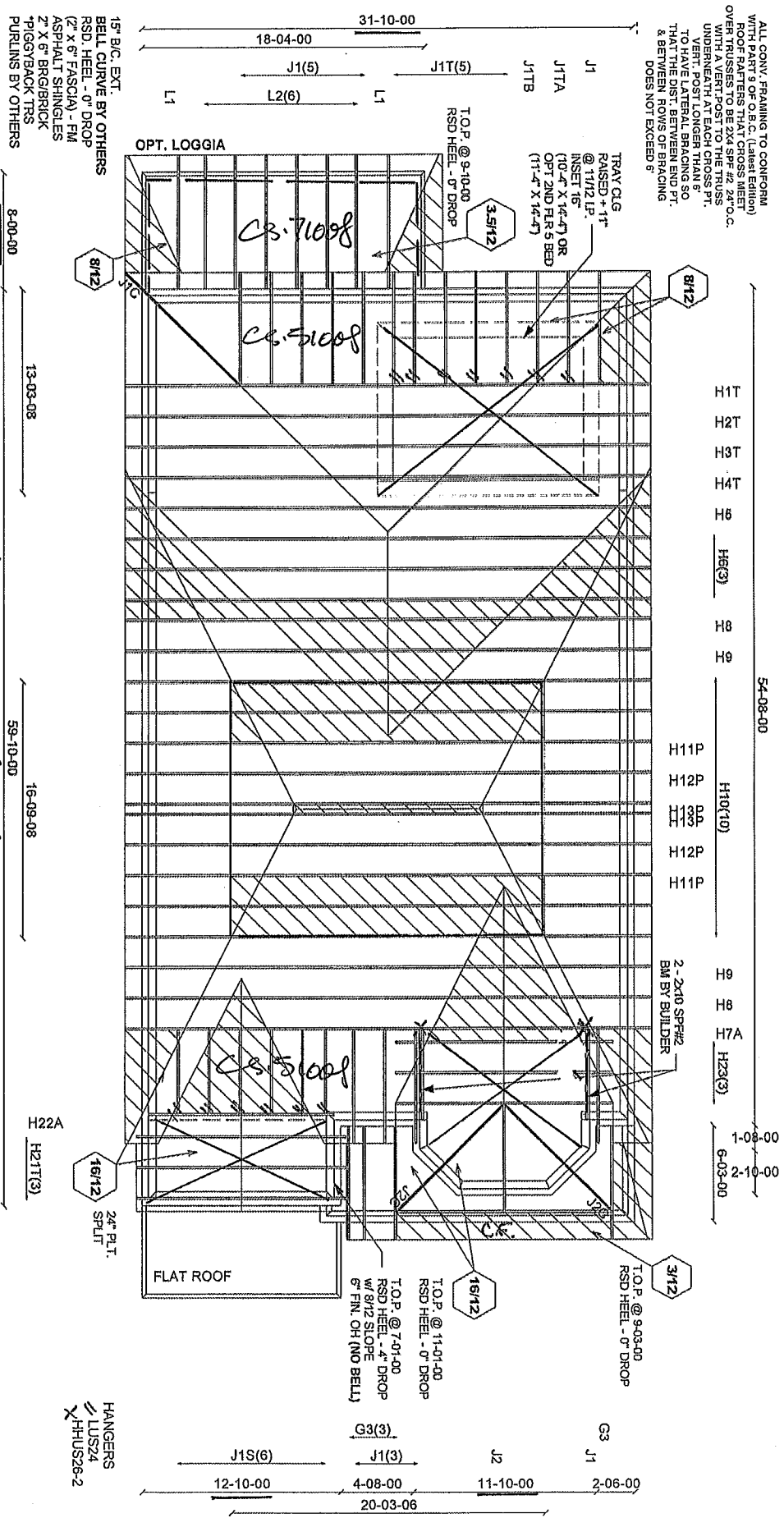
Date: 1/16/2018

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.

ALPA-BARRIER

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF PARTS THAT CROSS WITH TRUSSES SHALL BE FRAMED TO TRUSSES WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'



A-18023087-A-18023093
A-18023103-A-18023107
A-18023137-A-18023144

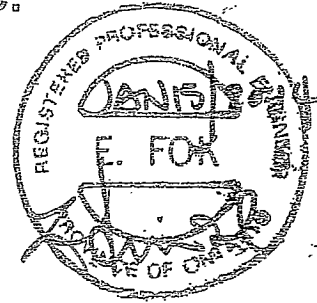
CONVENTIONAL FRAMING BY OTHERS



Job Track:	45147	Builder / Location:	GOLD PARK HOMES / VAUGHAN	Model / Elevation:	4004 / B OPT TRAY
Layout ID:	292582	Project:	PINE VALLEY	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.	
Plan Log:	95914	Date:	1/16/2018	Designer:	AMANDA

Stracon Engineering Inc.

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



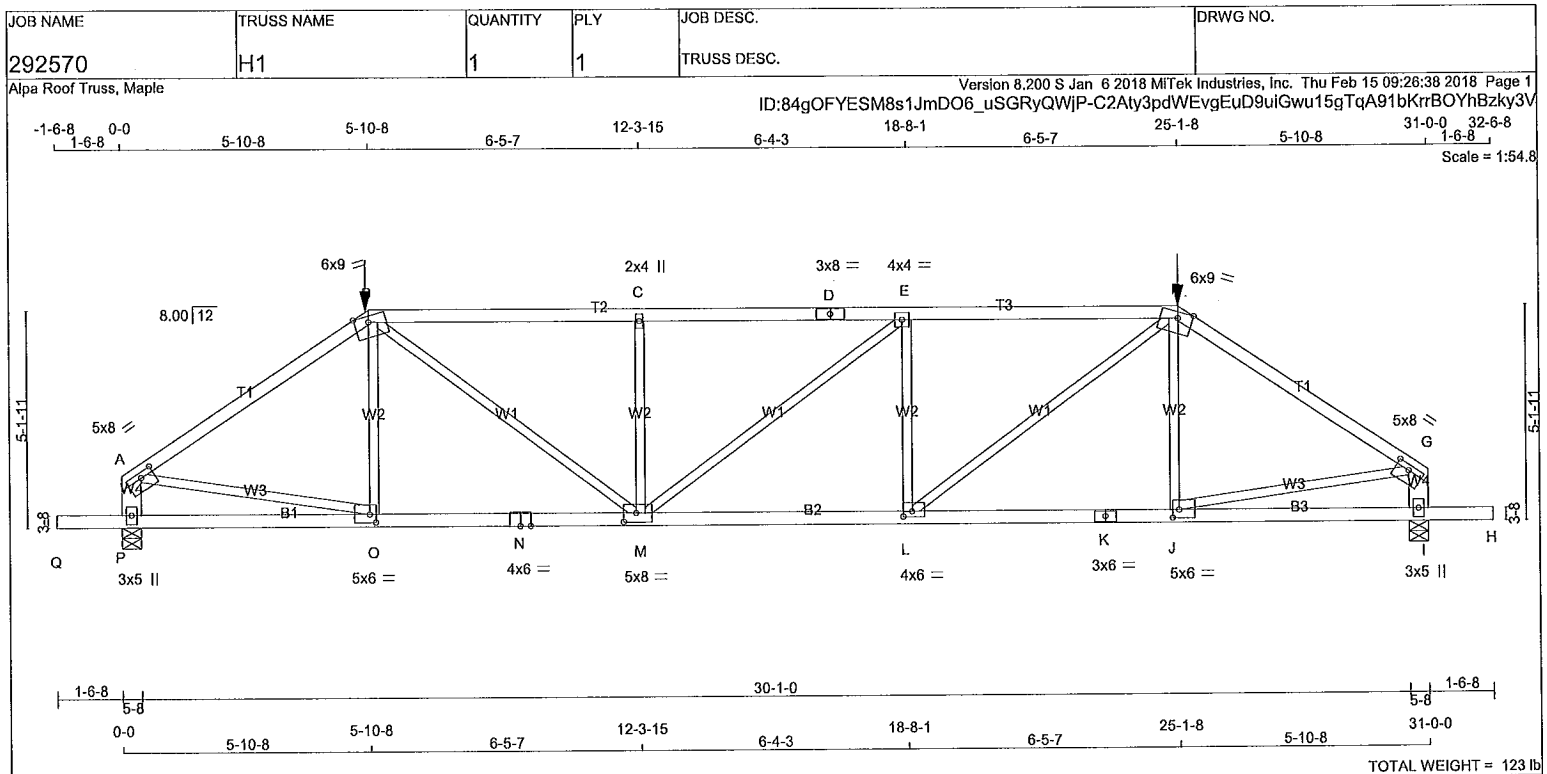
RESPONSIBILITIES

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 = 123 lb

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

DRY: SEASONED LUMBER.

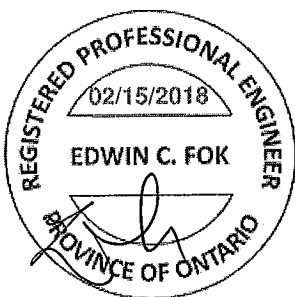
PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	5.0	8.0	1.50	3.75
B	TTWW-m	MT20	6.0	9.0	1.75	4.00
C	TMW+w	MT20	2.0	4.0		
D	TS-I	MT20	3.0	8.0		
E	TMWW-I	MT20	4.0	4.0		
F	TTWW-m	MT20	6.0	9.0	1.75	4.00
G	TMVW-I	MT20	5.0	8.0	1.50	3.75
I	BMV1+p	MT20	3.0	5.0		
J	BMWW-I	MT20	5.0	6.0	2.25	1.75
K	BS-I	MT20	3.0	6.0		
L	BMWW-I	MT20	4.0	6.0	1.50	2.50
M	BMWWW-I	MT20	5.0	8.0	2.50	3.50
N	BS-I	MT20	4.0	6.0		
O	BMWW-I	MT20	5.0	6.0	2.25	1.75
P	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQ'D IN-SX	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
P	2983	0	2983	0	0	5-8	3-15		
I	2983	0	2983	0	0	5-8	3-15		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
P	2129	1287 / 0	0 / 0	0 / 0	0 / 0	842 / 0	0 / 0		
I	2129	1287 / 0	0 / 0	0 / 0	0 / 0	842 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.98 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.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-3695 / 0	-78.0 -78.0	0.74 (1)	3.56	O-B	-211 / 102	0.09 (1)
B-C	-4787 / 0	-153.5 -153.5	0.96 (1)	2.98	B-M	0 / 2150	0.53 (1)
C-D	-4787 / 0	-153.5 -153.5	0.96 (1)	2.98	M-C	-1064 / 0	0.43 (1)
D-E	-4787 / 0	-153.5 -153.5	0.96 (1)	2.98	M-E	-1 / 0	0.00 (1)
E-F	-4787 / 0	-153.5 -153.5	0.97 (1)	2.98	L-E	-1064 / 0	0.43 (1)
F-G	-3695 / 0	-78.0 -78.0	0.74 (1)	3.56	L-F	0 / 2151	0.53 (1)
P-A	-2747 / 0	0.0 0.0	0.20 (1)	6.26	J-F	-212 / 103	0.09 (1)
I-G	-2747 / 0	0.0 0.0	0.20 (1)	6.26	A-O	0 / 3105	0.77 (1)
					J-G	0 / 3105	0.77 (1)
Q-P	0 / 0	-96.5 -96.5	0.17 (1)	10.00			
P-O	0 / 0	-36.4 -36.4	0.36 (4)	10.00			
O-N	0 / 3066	-36.4 -36.4	0.74 (1)	10.00			
N-M	0 / 3066	-36.4 -36.4	0.74 (1)	10.00			
M-L	0 / 4788	-36.4 -36.4	0.99 (1)	10.00			
L-K	0 / 3066	-36.4 -36.4	0.74 (1)	10.00			
K-J	0 / 3066	-36.4 -36.4	0.74 (1)	10.00			
J-I	0 / 0	-36.4 -36.4	0.36 (4)	10.00			
I-H	0 / 0	-96.5 -96.5	0.17 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	5-10-8	-334	-334	---	FRONT	VERT	TOTAL
F	25-1-8	-334	-334	---	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 = 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
- ADD'L LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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/872 (0.43")

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=0.97/1.00 (E-F:1), BC=0.99/1.00 (L-M:1), WB=0.77/1.00 (A-O:1), SSI=0.50/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

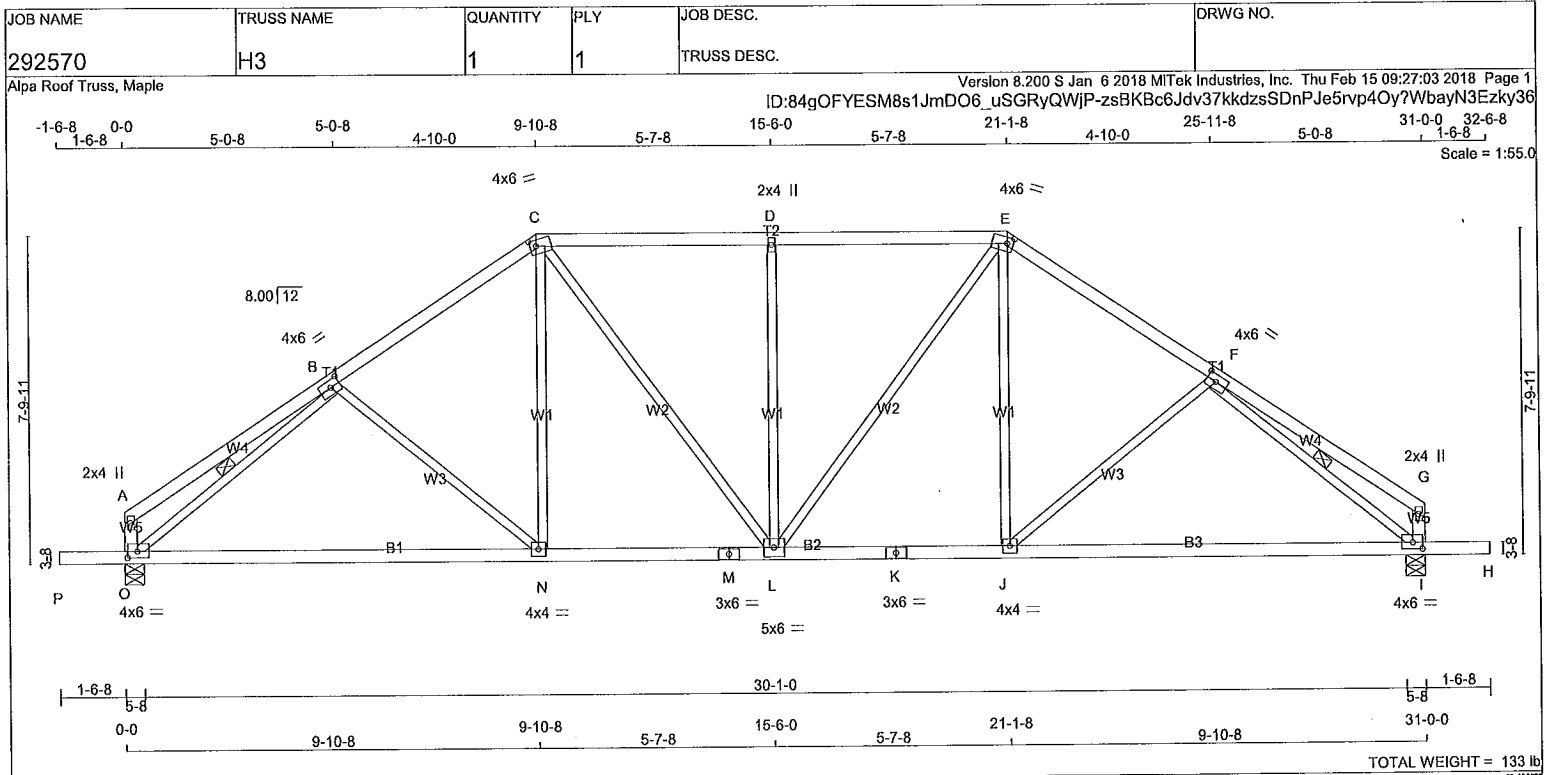
AUTOSOLVE HEELS OFF

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

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

A-18023083

CONTINUED ON PAGE 2



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
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	TTWW-t	MT20	4.0	6.0	2.00	2.75
C	TTWW-m	MT20	4.0	6.0	1.75	1.75
D	TMW+w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	1.75
F	TTWW-t	MT20	4.0	6.0	2.00	2.75
G	TMV+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	6.0	1.75	2.75
J	BMVW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVWW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMVW-t	MT20	4.0	6.0	1.75	2.75

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	HORZ	BRG	UPLIFT	IN-SX	IN-SX
O	1644	0	1644	0	0	5-8	1-12		
I	1644	0	1644	0	0	5-8	1-12		

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0/24	-78.0 -78.0	0.30 (1)	B-N	-176/0	0.14 (1)	
B-C	-1662/0	-78.0 -78.0	0.27 (1)	N-C	0/307	0.08 (4)	
C-D	-1579/0	-78.0 -78.0	0.35 (1)	C-L	0/356	0.08 (1)	
D-E	-1579/0	-78.0 -78.0	0.35 (1)	L-D	-536/0	0.61 (1)	
E-F	-1662/0	-78.0 -78.0	0.27 (1)	L-E	0/356	0.08 (1)	
F-G	0/24	-78.0 -78.0	0.30 (1)	J-E	0/307	0.08 (4)	
O-A	-148/0	0.0	0.02 (1)	J-F	-176/0	0.14 (1)	
I-G	-148/0	0.0	0.02 (1)	O-B	-1964/0	0.56 (1)	
				F-I	-1964/0	0.56 (1)	
P-O	0/0	-96.5 -96.5	0.16 (1)				
O-N	0/1496	-18.5 -18.5	0.54 (4)				
N-M	0/1365	-18.5 -18.5	0.54 (4)				
M-L	0/1365	-18.5 -18.5	0.54 (4)				
L-K	0/1365	-18.5 -18.5	0.54 (4)				
K-J	0/1365	-18.5 -18.5	0.54 (4)				
J-I	0/1496	-18.5 -18.5	0.54 (4)				
I-H	0/0	-96.5 -96.5	0.16 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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) = $L/999$ (0.07")
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 (C-D:1), BC=0.54/1.00 (J-L:4), WB=0.61/1.00 (D-L:1), SSI=0.21/1.00 (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

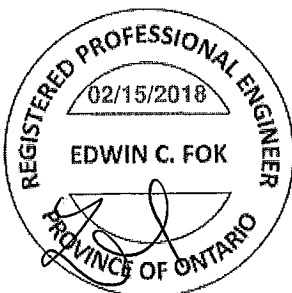
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987
			1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.47 (F) (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

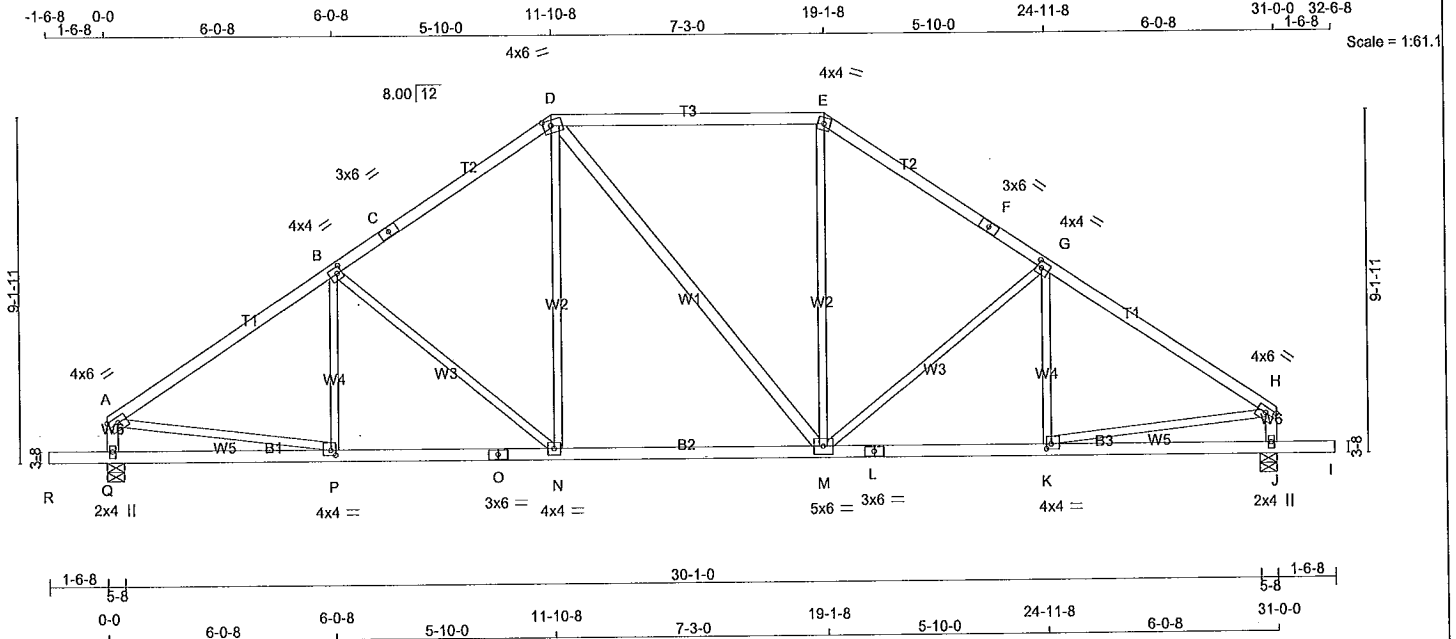


A-18023085

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H4	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:27:11 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-kOgMLCKIN3_hyEVK7Mfk_zSR7b2GcvIRquoLmzky3



TOTAL WEIGHT = 137 lb [M/F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	2100F 1.8E	SPF	
E - F	2x4	DRY	No.2	SPF	
F - H	2x4	DRY	No.2	SPF	
Q - A	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - L	2x4	DRY	No.2	SPF	
L - I	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT D - M	2x3	DRY	No.2	SPF	
	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	Edge
B	TMVW-t	MT20	4.0	4.0	2.00	1.50
C	TS-t	MT20	3.0	6.0		
D	TTWW-m	MT20	4.0	6.0	1.75	2.50
E	TTW-m	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	4.0	6.0	1.75	Edge
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0	1.50	1.50
L	BS-t	MT20	3.0	6.0		
M	BMVWW-t	MT20	5.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BMV1+p	MT20	2.0	4.0		

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
Q	1644	0	1644	0	5-8	2-7
J	1644	0	1644	0	5-8	2-7

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1172	715/0	0/0	0/0	0/0	457/0	0/0
J	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) Q, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 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)

FR-TO	CHORDS		WEBS	
	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MAX. FACTORED MEMB. FORCE (LBS)
A-B	-1836/0	-78.0	-78.0 0.44 (1)	4.52
B-C	-1528/0	-78.0	-78.0 0.40 (1)	4.89
C-D	-1528/0	-78.0	-78.0 0.40 (1)	4.89
D-E	-1249/0	-78.0	-78.0 0.36 (1)	6.25
E-F	-1528/0	-78.0	-78.0 0.40 (1)	4.89
F-G	-1528/0	-78.0	-78.0 0.40 (1)	4.89
G-H	-1835/0	-78.0	-78.0 0.44 (1)	4.52
Q-A	-1448/0	0.0	0.0 0.15 (1)	6.79
J-H	-1448/0	0.0	0.0 0.15 (1)	6.79
R-Q	0/0	-96.5	-96.5 0.16 (1)	10.00
Q-P	0/0	-18.5	-18.5 0.14 (4)	10.00
P-O	0/1553	-18.5	-18.5 0.34 (1)	10.00
O-N	0/1553	-18.5	-18.5 0.34 (1)	10.00
N-M	0/1248	-18.5	-18.5 0.29 (1)	10.00
M-L	0/1553	-18.5	-18.5 0.34 (1)	10.00
L-K	0/1553	-18.5	-18.5 0.34 (1)	10.00
K-J	0/0	-18.5	-18.5 0.14 (4)	10.00
J-I	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

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 (0.15")

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=0.44/1.00 (A-B:1), BC=0.34/1.00 (K-M:1), WB=0.49/1.00 (B-N:1), SSI=0.22/1.00 (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.

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

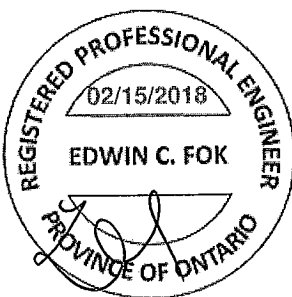
PLATE PLACEMENT TOL. = 0.250 inches

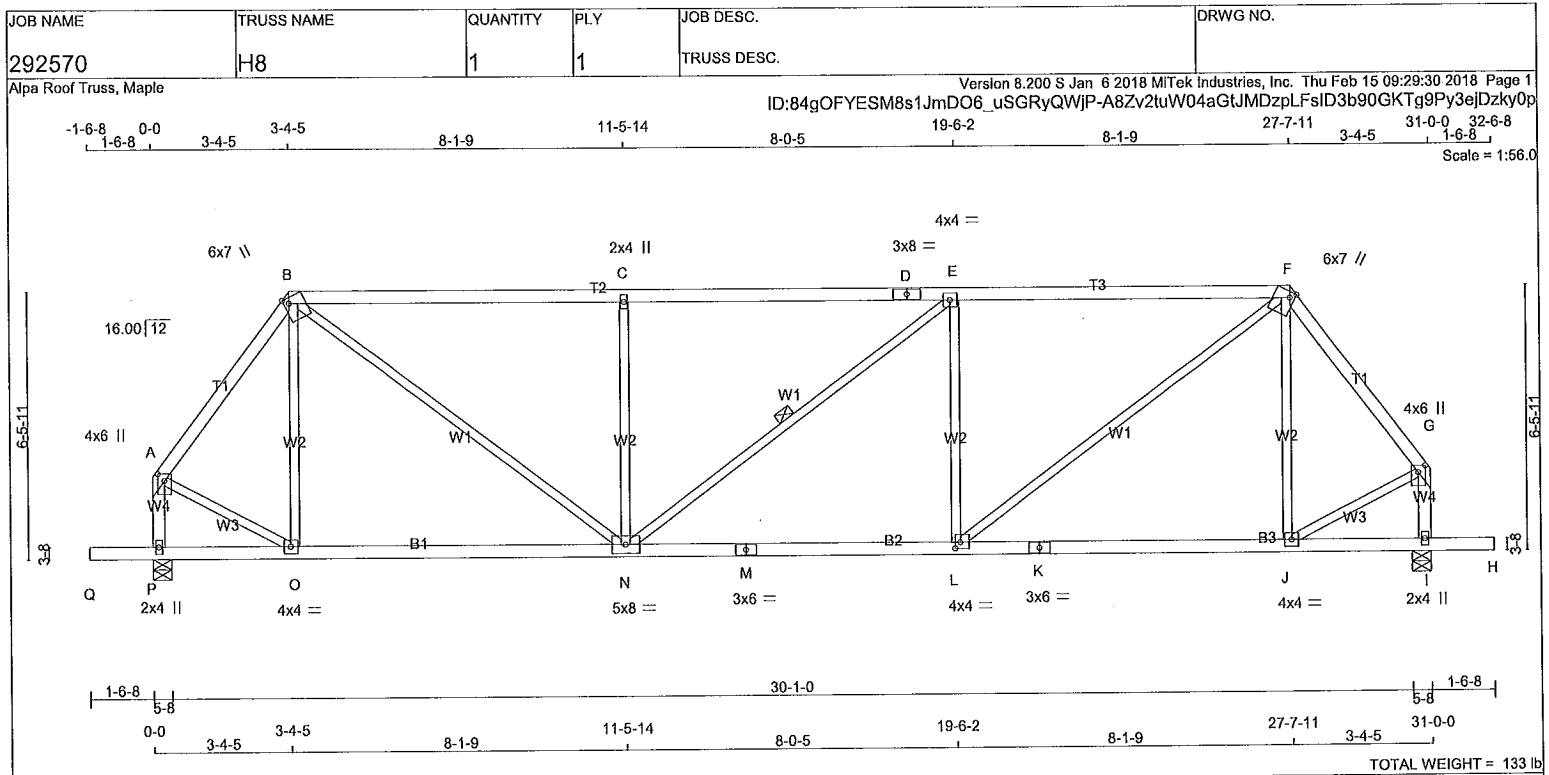
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.58 (P) (INPUT = 1.00)

A-18023086

CONTINUED ON PAGE 2





LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
P - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
Q - 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	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0	1.75	1.50
M	BS-t	MT20	3.0	6.0		
N	BMWWW-t	MT20	5.0	8.0		
O	BMWW-t	MT20	4.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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

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

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
P	1644	0	1644	0	0	5-8	2-7	2-7
I	1644	0	1644	0	0	5-8	2-7	2-7

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH	FR-TO	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
FR-TO										
A-B	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	O-B	-219 / 2	0.15 (1)		
B-C	-1844 / 0	-78.0	-78.0	0.99 (1)	3.69	B-N	0 / 1378	0.31 (1)		
C-D	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67	N-C	-680 / 0	0.46 (1)		
D-E	-1844 / 0	-78.0	-78.0	0.99 (1)	3.67	N-E	-1 / 0	0.00 (1)		
E-F	-1845 / 0	-78.0	-78.0	1.00 (1)	3.67	L-E	-680 / 0	0.46 (1)		
F-G	-1256 / 0	-78.0	-78.0	0.19 (1)	5.54	L-F	0 / 1379	0.31 (1)		
P-A	-1487 / 0	0.0	0.0	0.17 (1)	6.72	J-F	-219 / 2	0.15 (1)		
I-G	-1486 / 0	0.0	0.0	0.17 (1)	6.72	A-O	0 / 825	0.19 (1)		
						J-G	0 / 825	0.19 (1)		

Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00
P-O	0 / 0	-18.5	-18.5	0.18 (4)	10.00
O-N	0 / 745	-18.5	-18.5	0.31 (4)	10.00
N-M	0 / 1845	-18.5	-18.5	0.43 (1)	10.00
M-L	0 / 1845	-18.5	-18.5	0.43 (1)	10.00
L-K	0 / 744	-18.5	-18.5	0.31 (4)	10.00
K-J	0 / 744	-18.5	-18.5	0.31 (4)	10.00
J-I	0 / 0	-18.5	-18.5	0.18 (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 (0.19")

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=1.00/1.00 (E-F:1), BC=0.43/1.00 (L-N:1), WB=0.46/1.00 (E-L:1), SSI=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

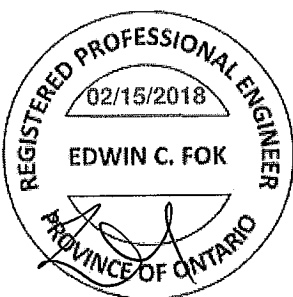
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

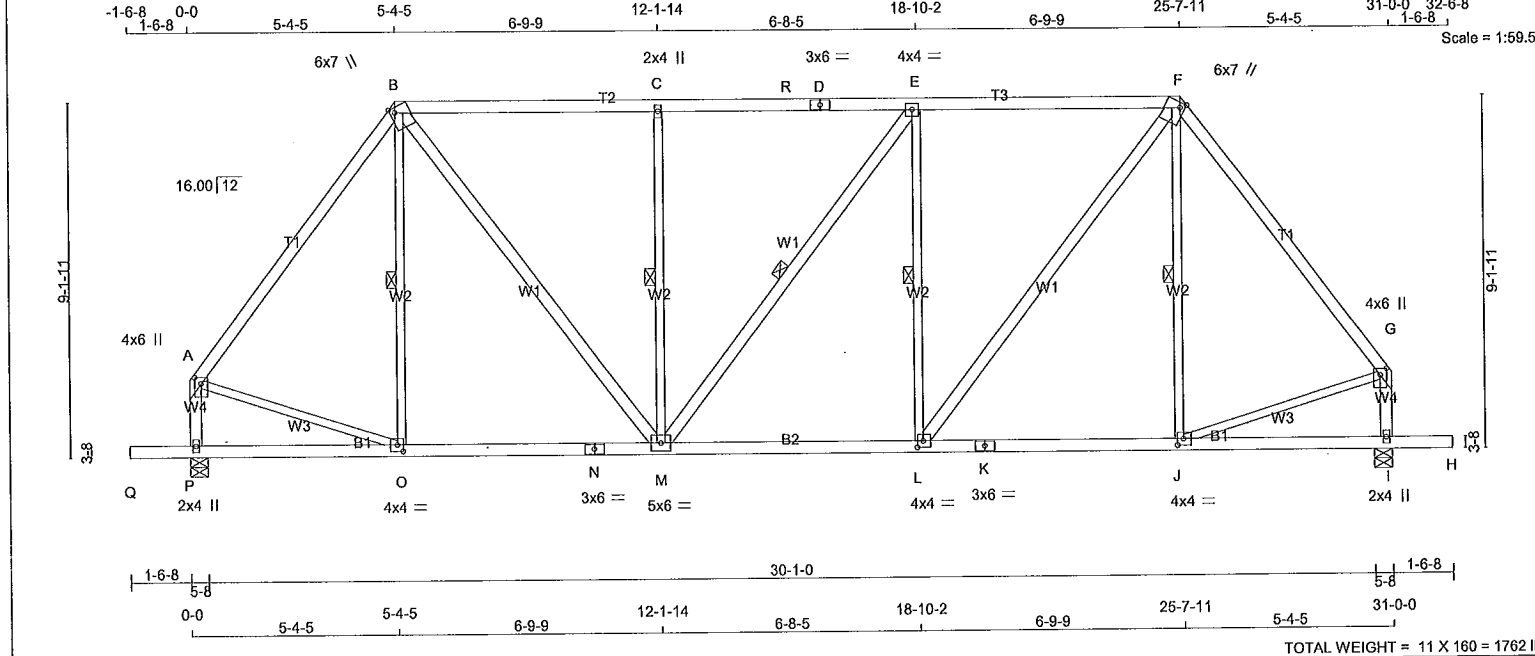
JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.64 (M) (INPUT = 1.00)

A-18023088

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-18023089 CONTINUED ON PAGE 2



TOTAL WEIGHT = 11 X 160 = 1762 lb [M/F]

LUMBER
N. L. G. A. RULES

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

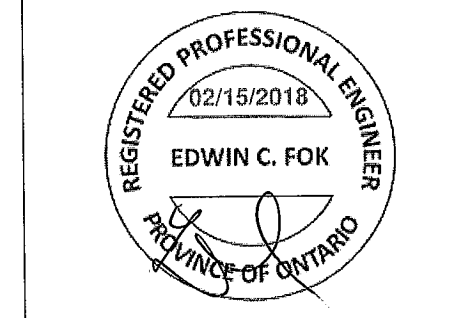
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J, L, O						
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
P	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1720	0	1720	0	5-8	2-9
I	1720	0	1720	0	5-8	2-9

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
P	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0
I	1233	715 / 0	0 / 0	0 / 0	0 / 0	518 / 0	0 / 0

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

BRACING
FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-O, C-M, E-M, E-L, F-J.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MAX. FACTORED		FACTORED			MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX	
(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)		
FR-TO	FROM	TO	LENGTH	FR-TO				
A-B	-1355 / 0	-78.0	-78.0	0.37 (1)	5.22	O-B	-112 / 36	0.06 (1)
B-C	-1383 / 0	-85.5	-85.5	0.49 (1)	2.00	B-M	0 / 941	0.15 (1)
C-R	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-C	-622 / 0	0.34 (1)
R-D	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	M-E	-2 / 0	0.00 (1)
D-E	-1383 / 0	-85.5	-85.5	0.45 (1)	2.00	L-E	-622 / 0	0.34 (1)
E-F	-1384 / 0	-85.5	-85.5	0.49 (1)	2.00	L-F	0 / 944	0.15 (1)
F-G	-1354 / 0	-78.0	-78.0	0.37 (1)	5.22	J-F	-113 / 36	0.06 (1)
P-A	-1533 / 0	0.0	0.0	0.18 (1)	6.64	A-O	0 / 844	0.19 (1)
I-G	-1533 / 0	0.0	0.0	0.18 (1)	6.64	J-G	0 / 843	0.19 (1)

Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00
P-O	0 / 0	-18.5	-18.5	0.16 (4)	10.00
O-N	0 / 808	-18.5	-18.5	0.25 (4)	10.00
N-M	0 / 808	-18.5	-18.5	0.25 (4)	10.00
M-L	0 / 1385	-18.5	-18.5	0.31 (1)	10.00
L-K	0 / 808	-18.5	-18.5	0.25 (4)	10.00
K-J	0 / 808	-18.5	-18.5	0.25 (4)	10.00
J-I	0 / 0	-18.5	-18.5	0.16 (4)	10.00
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 6.0 PSF
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 PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
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=0.49/1.00 (E-F:1), BC=0.31/1.00 (L-M:1), WB=0.34/1.00 (E-L:1), SS=0.27/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

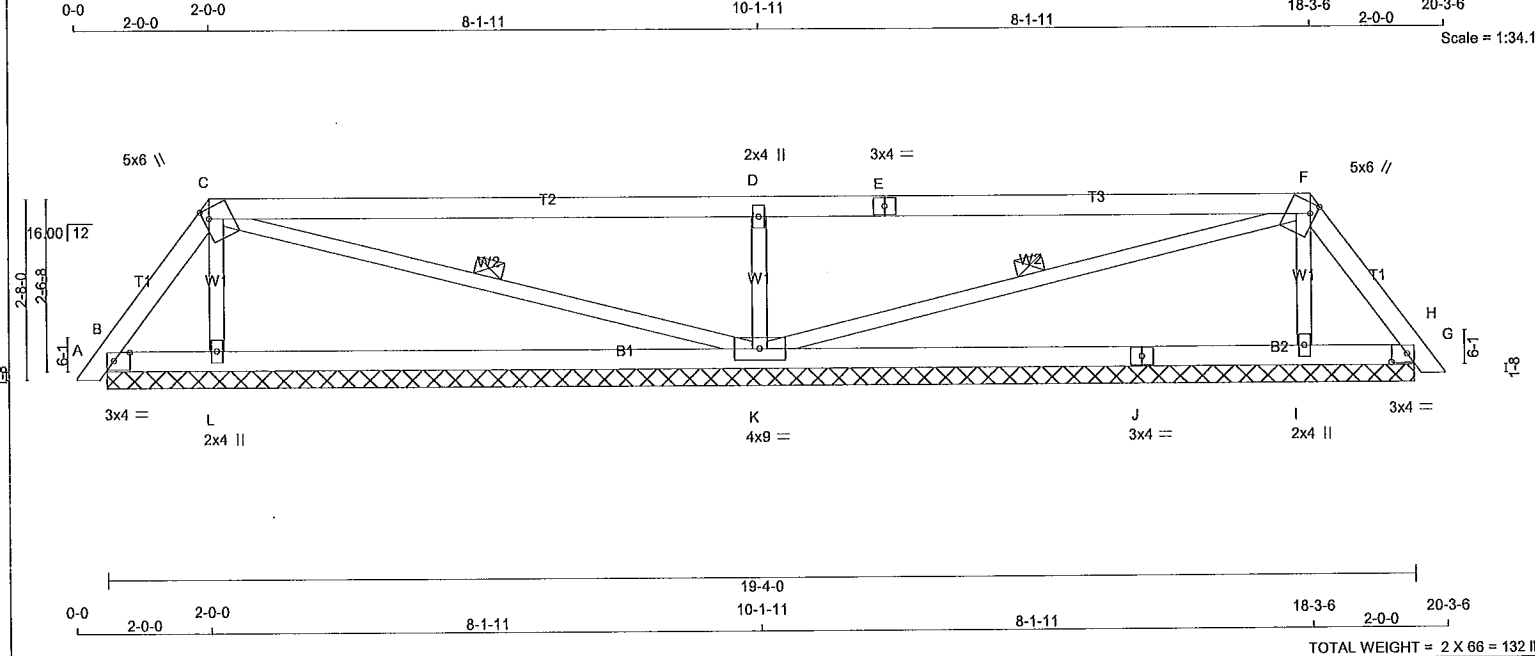
NAIL VALUES

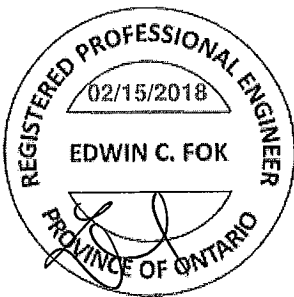
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	
MT20	618	354	1667 788 1987 1656

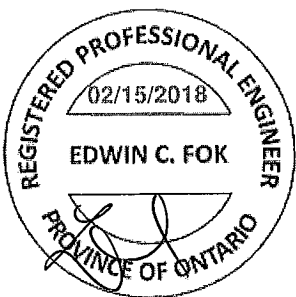
PLATE PLACEMENT TOL. = 0.250 Inches

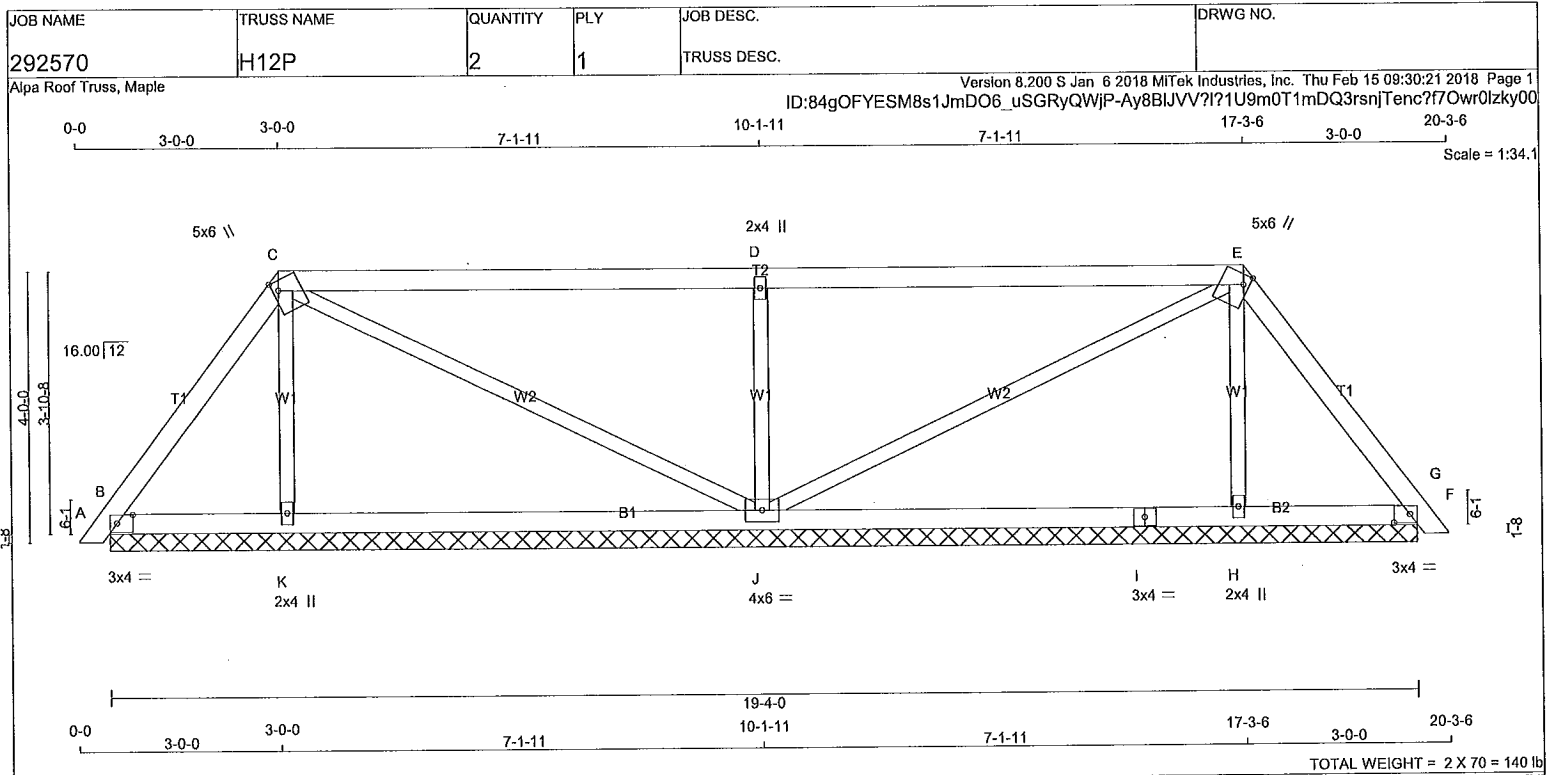
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.47 (A) (INPUT = 1.00)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS						DESIGN CRITERIA																																																																																																																													
A - C	2x4	DRY	No.2		SPF	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD		SPECIFIED LOADS:																																																																																																																											
C - E	2x4	DRY	No.2		SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	TOP CH. LL = 21.0 PSF																																																																																																																											
E - F	2x4	DRY	No.2		SPF	B	139	0	139	0	0	19-4-0	(4-0-0)-11-14	DL = 6.0 PSF																																																																																																																											
F - H	2x4	DRY	No.2		SPF	L	344	0	344	0	0	19-4-0	(4-0-0)-11-14	BOT CH. LL = 0.0 PSF																																																																																																																											
B - J	2x4	DRY	No.2		SPF	K	953	0	953	0	0	19-4-0	(4-0-0)-11-14	DL = 7.4 PSF																																																																																																																											
J - G	2x4	DRY	No.2		SPF	I	344	0	344	0	0	19-4-0	(4-0-0)-11-14	TOTAL LOAD = 34.4 PSF																																																																																																																											
						G	139	0	139	0	0	19-4-0	(4-0-0)-11-14																																																																																																																												
ALL WEBS 2x3 DRY: SEASONED LUMBER.						VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH																																																																																																																																			
PLATES (table is in inches)						UNFACTORED REACTIONS																																																																																																																																			
JT	TYPE	PLATES	W	LEN	Y X	JT	1ST LCASE MAX/MIN. COMPONENT REACTIONS																																																																																																																																		
B	TMB1-I	MT20	3.0	4.0	1.50 2.75		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																												
C	TTVW+m	MT20	5.0	6.0	1.75 1.00	B	93	93/0	0/0	0/0	0/0	0/-0	0/0																																																																																																																												
D	TMW+w	MT20	2.0	4.0		L	253	113/0	0/0	0/0	0/0	140/0	0/0																																																																																																																												
E	TS-I	MT20	3.0	4.0		K	677	429/0	0/0	0/0	0/0	248/0	0/0																																																																																																																												
F	TTVW+m	MT20	5.0	6.0	1.75 1.00	I	253	113/0	0/0	0/0	0/0	140/0	0/0																																																																																																																												
G	TMB1-I	MT20	3.0	4.0	1.50 2.75	G	93	93/0	0/0	0/0	0/0	0/-0	0/0																																																																																																																												
I	BMW1+w	MT20	2.0	4.0		BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, L, K, I, G																																																																																																																																			
J	BS-I	MT20	3.0	4.0		BRACING																																																																																																																																			
K	BMWW1-I	MT20	4.0	9.0		TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.																																																																																																																																			
L	BMW1+w	MT20	2.0	4.0		MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.																																																																																																																																			
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.																																																																																																																																									
1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-K, F-K.																																																																																																																																									
LOADING																																																																																																																																									
TOTAL LOAD CASES: (4)																																																																																																																																									
<table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED CSI (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED CSI (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>A-B</td><td>0/10</td><td>-78.0 -78.0</td><td>0.01 (1)</td><td>L-C</td><td>-210/0</td><td>0.03 (1)</td><td></td></tr><tr><td>B-C</td><td>-104/0</td><td>-78.0 -78.0</td><td>0.03 (1)</td><td>C-K</td><td>-8/0</td><td>0.00 (1)</td><td></td></tr><tr><td>C-D</td><td>-41/0</td><td>-78.0 -78.0</td><td>0.88 (1)</td><td>K-D</td><td>-793/0</td><td>0.13 (1)</td><td></td></tr><tr><td>D-E</td><td>-43/0</td><td>-78.0 -78.0</td><td>0.88 (1)</td><td>K-F</td><td>-8/0</td><td>0.00 (1)</td><td></td></tr><tr><td>E-F</td><td>-43/0</td><td>-78.0 -78.0</td><td>0.88 (1)</td><td>I-F</td><td>-210/0</td><td>0.03 (1)</td><td></td></tr><tr><td>F-G</td><td>-104/0</td><td>-78.0 -78.0</td><td>0.03 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>G-H</td><td>0/10</td><td>-78.0 -78.0</td><td>0.01 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>B-L</td><td>0/60</td><td>-18.5 -18.5</td><td>0.19 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>L-K</td><td>0/50</td><td>-18.5 -18.5</td><td>0.26 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>K-J</td><td>0/50</td><td>-18.5 -18.5</td><td>0.26 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>J-I</td><td>0/50</td><td>-18.5 -18.5</td><td>0.26 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>I-G</td><td>0/60</td><td>-18.5 -18.5</td><td>0.19 (4)</td><td></td><td></td><td></td><td></td></tr></table>																		CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		FR-TO		FROM TO		FR-TO				A-B	0/10	-78.0 -78.0	0.01 (1)	L-C	-210/0	0.03 (1)		B-C	-104/0	-78.0 -78.0	0.03 (1)	C-K	-8/0	0.00 (1)		C-D	-41/0	-78.0 -78.0	0.88 (1)	K-D	-793/0	0.13 (1)		D-E	-43/0	-78.0 -78.0	0.88 (1)	K-F	-8/0	0.00 (1)		E-F	-43/0	-78.0 -78.0	0.88 (1)	I-F	-210/0	0.03 (1)		F-G	-104/0	-78.0 -78.0	0.03 (1)					G-H	0/10	-78.0 -78.0	0.01 (1)					B-L	0/60	-18.5 -18.5	0.19 (4)					L-K	0/50	-18.5 -18.5	0.26 (4)					K-J	0/50	-18.5 -18.5	0.26 (4)					J-I	0/50	-18.5 -18.5	0.26 (4)					I-G	0/60	-18.5 -18.5	0.19 (4)				
CHORDS				WEBS																																																																																																																																					
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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						COMPANION LIVE LOAD FACTOR = 1.00																																																																																																																																			
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						NAIL VALUES																																																																																																																																			
						PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)																																																																																																																																			
						MAX MIN MAX MIN MAX MIN																																																																																																																																			
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						A-18023091																																																																																																																																			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

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		
B	213	0	213	0	19-4-0 (4-0-0) J-9-7	
K	310	0	310	0	19-4-0 (4-0-0) J-9-7	
J	875	0	875	0	19-4-0 (4-0-0) J-9-7	
H	310	0	310	0	19-4-0 (4-0-0) J-9-7	
F	213	0	213	0	19-4-0 (4-0-0) J-9-7	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					WIND	DEAD	SOIL
		SNOW	LIVE	PERM.LIVE					
B	148	113/ 0	0/ 0	0/ 0	0/ 0	0/ 0	35/ 0	0/ 0	
K	226	109/ 0	0/ 0	0/ 0	0/ 0	0/ 0	116/ 0	0/ 0	
J	620	396/ 0	0/ 0	0/ 0	0/ 0	0/ 0	224/ 0	0/ 0	
H	226	109/ 0	0/ 0	0/ 0	0/ 0	0/ 0	116/ 0	0/ 0	
F	148	113/ 0	0/ 0	0/ 0	0/ 0	0/ 0	35/ 0	0/ 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, K, J, 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)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO			FR-TO			
A- B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	K- C	-203 / 0	0.05 (1)
B- C	-104 / 0	-78.0	-78.0	0.09 (1)	6.25	C- J	-46 / 0	0.06 (1)
C- D	-13 / 0	-78.0	-78.0	0.68 (1)	6.25	J- D	-895 / 0	0.16 (1)
D- E	-13 / 0	-78.0	-78.0	0.68 (1)	6.25	J- E	-46 / 0	0.06 (1)
E- F	-104 / 0	-78.0	-78.0	0.09 (1)	6.25	H- E	-203 / 0	0.05 (1)
F- G	0 / 10	-78.0	-78.0	0.01 (1)	10.00			
B- K	0 / 60	-18.5	-18.5	0.14 (4)	10.00			
K- J	0 / 54	-18.5	-18.5	0.21 (4)	10.00			
J- I	0 / 54	-18.5	-18.5	0.21 (4)	10.00			
I- H	0 / 54	-18.5	-18.5	0.21 (4)	10.00			
H- F	0 / 60	-18.5	-18.5	0.14 (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

(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=0.68/1.00 (C-D:1), BC=0.21/1.00 (H-J:4), WB=0.16/1.00 (D-J:1), SSI=0.27/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

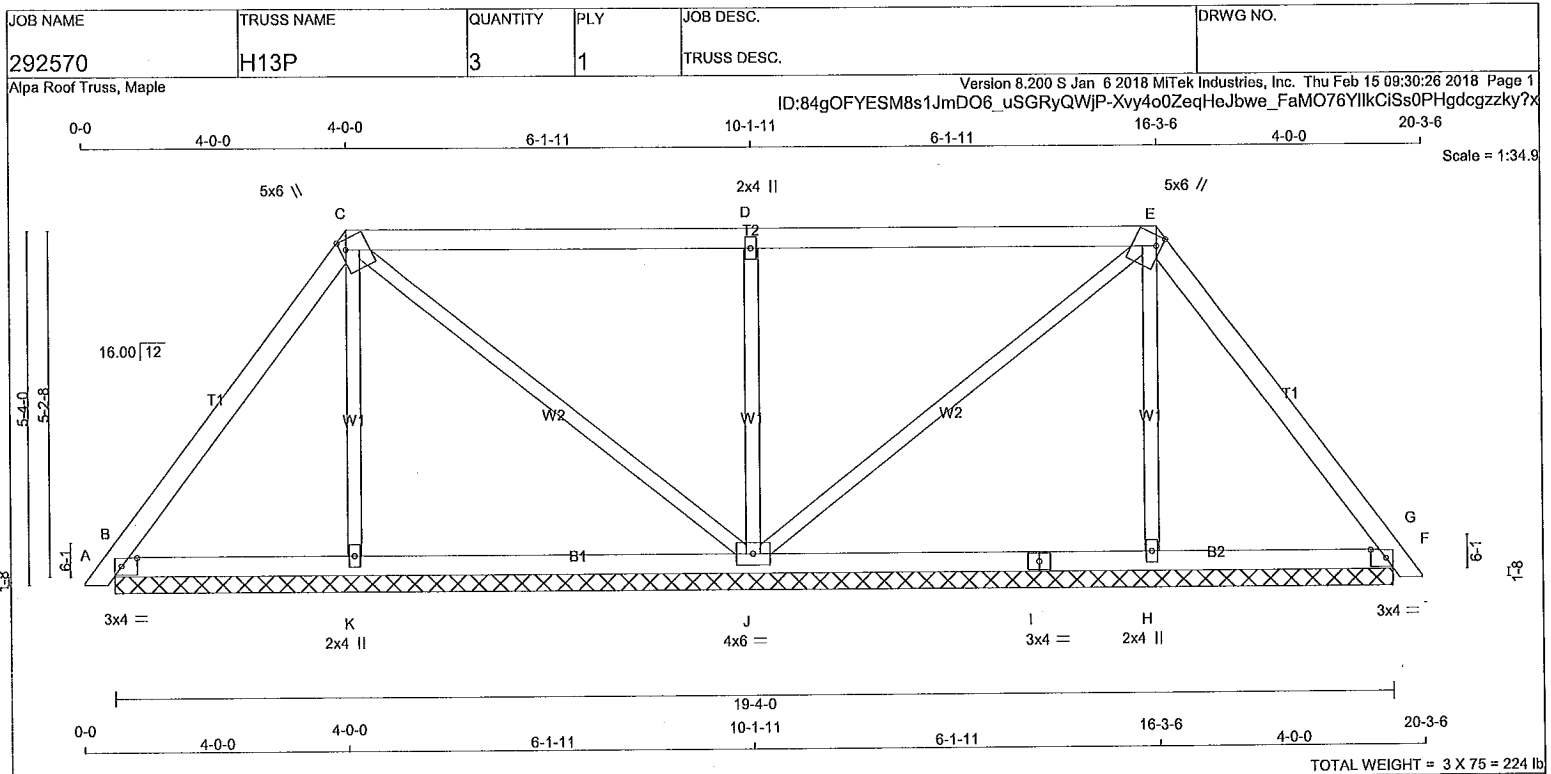
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.15 (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-18023092



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
B - I	2x4	DRY	No.2
I - F	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	275	0	275	0	19'-4-0 (5'-4-0) 1'-8	1'-8
K	283	0	283	0	19'-4-0 (5'-4-0) 1'-8	1'-8
J	803	0	803	0	19'-4-0 (5'-4-0) 1'-8	1'-8
H	283	0	283	0	19'-4-0 (5'-4-0) 1'-8	1'-8
F	275	0	275	0	19'-4-0 (5'-4-0) 1'-8	1'-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	193	137 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0
K	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
J	569	369 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0
H	207	99 / 0	0 / 0	0 / 0	0 / 0	107 / 0	0 / 0
F	193	137 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, K, J, 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)	LC1	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO			FR-TO			
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	K-C	-184 / 0	0.07 (1)	
B-C	-110 / 0	-78.0	-78.0	0.17 (1)	6.25	C-J	-71 / 0	0.09 (1)	
C-D	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-D	-598 / 0	0.24 (1)	
D-E	-4 / 0	-78.0	-78.0	0.50 (1)	10.00	J-E	-71 / 0	0.09 (1)	
E-F	-110 / 0	-78.0	-78.0	0.17 (1)	6.25	H-E	-184 / 0	0.07 (1)	
F-G	0 / 10	-78.0	-78.0	0.01 (1)	10.00				
B-K	0 / 64	-18.5	-18.5	0.11 (4)	10.00				
K-J	0 / 60	-18.5	-18.5	0.15 (4)	10.00				
J-I	0 / 60	-18.5	-18.5	0.15 (4)	10.00				
I-H	0 / 60	-18.5	-18.5	0.15 (4)	10.00				
H-F	0 / 64	-18.5	-18.5	0.11 (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

(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=0.50/1.00 (C-D:1), BC=0.15/1.00 (J-K:4), WB=0.24/1.00 (D-J:1), SSI=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

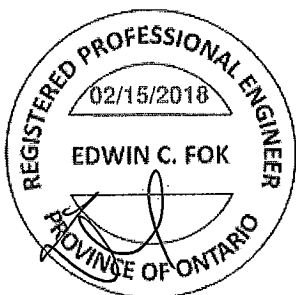
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

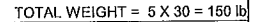
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)

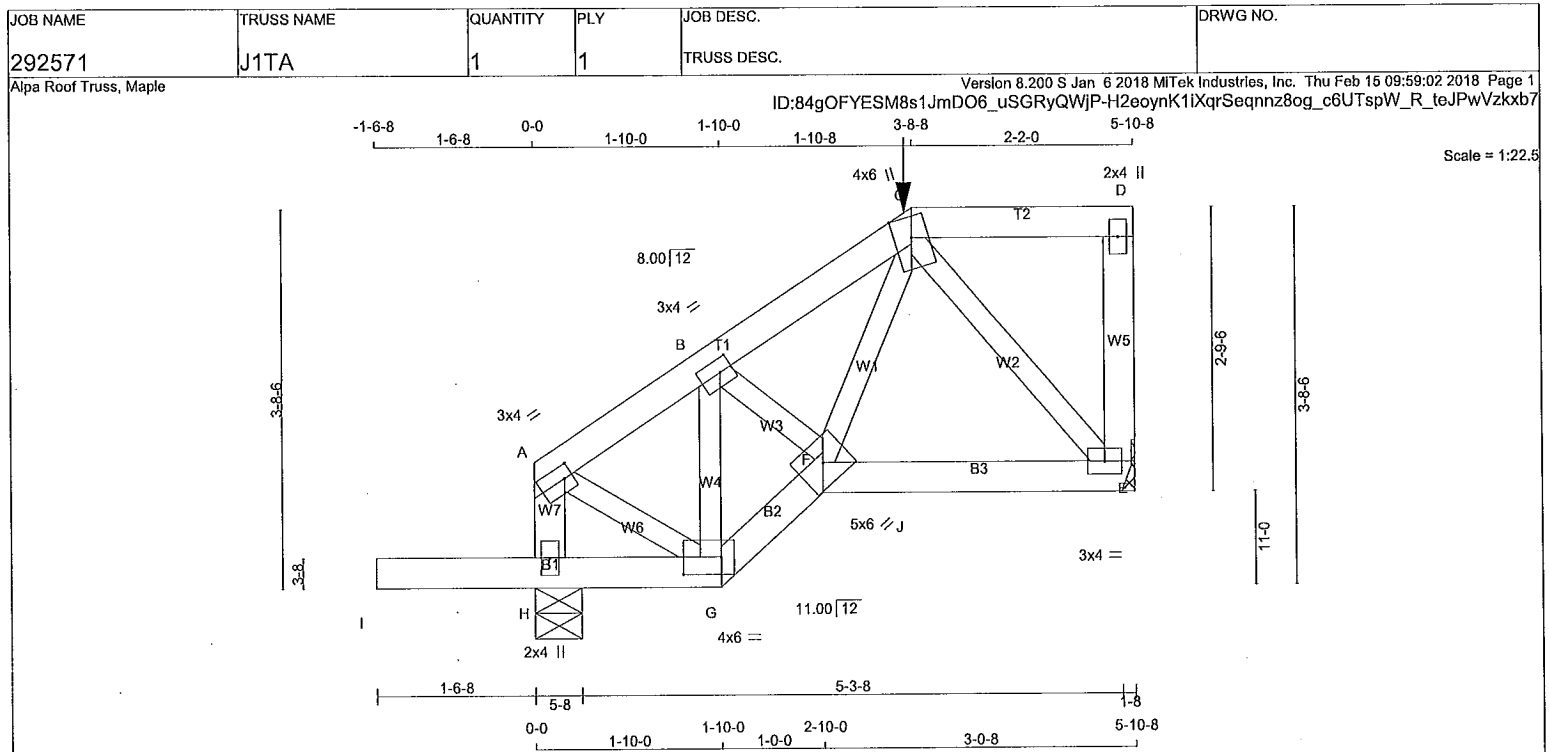
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023093



A-18023103



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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-1	MT20	3.0	4.0	1.50	1.00
B	TMVW-1	MT20	3.0	4.0	1.50	1.50
C	TTVW+m	MT20	4.0	6.0	Edge	
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-1	MT20	3.0	4.0		
F	BBVW-h	MT20	5.0	6.0		
G	BBVW-1	MT20	4.0	6.0	2.00	4.50
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) 106.4 lbs FACTORED DOWN AT 3-8-8 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	413	0	413	0	0	0
H	527	0	527	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. LIVE		PERM.LIVE		WIND	DEAD	SOIL
	SNOW								
E	294	183 / 0	0 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0	0 / 0
H	377	225 / 0	0 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 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			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	-243 / 0	-78.0	-78.0	0.04 (1)	6.25
B-C	-339 / 0	-78.0	-78.0	0.04 (1)	6.25
C-D	0 / 0	-111.3	-111.3	0.10 (1)	10.00
E-D	-121 / 0	0.0	0.0	0.02 (1)	7.81
H-A	-292 / 0	0.0	0.0	0.03 (1)	7.81
I-H	0 / 0	-96.5	-96.5	0.17 (1)	10.00
H-G	0 / 0	-26.4	-26.4	0.17 (1)	10.00
G-F	0 / 261	-26.4	-26.4	0.05 (1)	10.00
F-J	0 / 223	-26.4	-26.4	0.10 (4)	10.00
J-E	0 / 223	-26.4	-26.4	0.10 (4)	10.00

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-8-8	-106	-106	-	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: CPrimeHlp
LEFT SETBACK = 3-8-8
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

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")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
ALLOWABLE DEFL.(TL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/617$ (0.03")

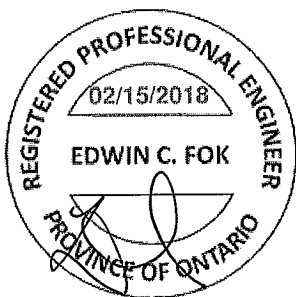
CSI: TC=0.10/1.00 (C-D:1), BC=0.17/1.00 (G-H:1),
WB=0.07/1.00 (C-E:1), SSI=0.13/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

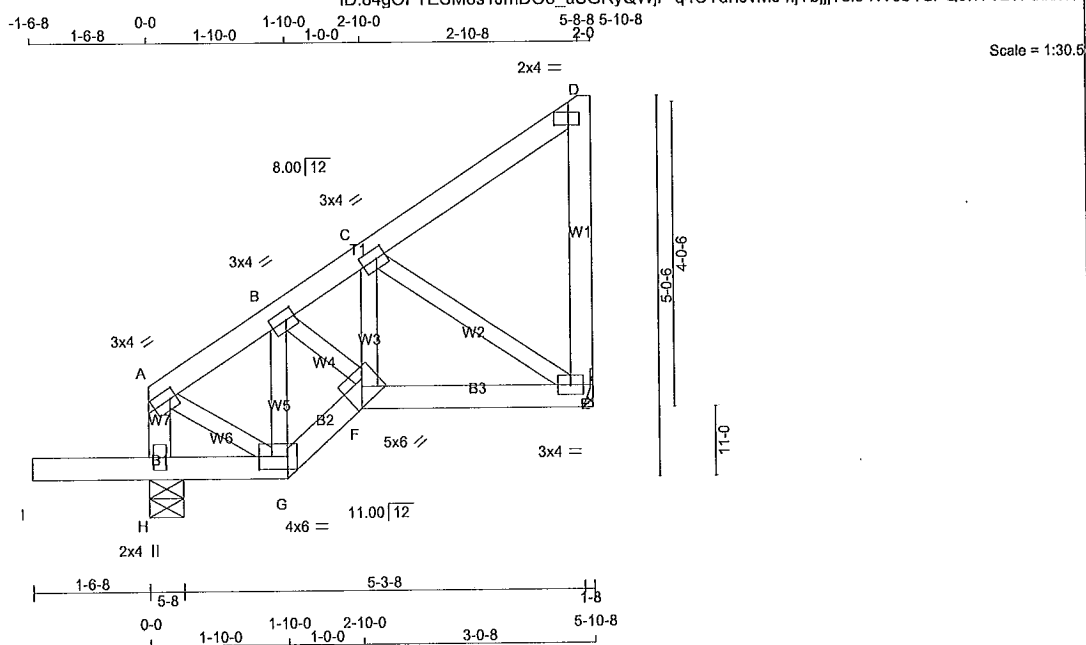
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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.
292571	J1TB	1	1	TRUSS DESC.	

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-q4UYdhJvMJ4JlYbjj?ei94W6bTdFQ0hTvZyFtzkxTP



TOTAL WEIGHT = 30 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
ALL WEBS 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	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TVM-p	MT20	2.0	4.0	0.50	2.25
E	BMVW1-t	MT20	3.0	4.0		
F	BBVW-h	MT20	5.0	6.0		
G	BBVW-l	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	DOWN	HORZ	IN-SX	IN-SX
E	264	0	264	0	0
H	452	0	452	0	0

UNFACTORED REACTIONS						
1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	COMBINED	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	MAX. FACTORED LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	-165 / 0	-78.0 -78.0	0.04 (1)	G-B	-220 / 0	0.03 (1)	
B-C	-239 / 0	-78.0 -78.0	0.08 (1)	B-F	0 / 130	0.03 (1)	
C-D	-11 / 0	-78.0 -78.0	0.08 (1)	F-C	0 / 63	0.02 (4)	
E-D	-95 / 0	0.0 0.0	0.03 (1)	C-E	-258 / 0	0.06 (1)	
H-A	-223 / 0	0.0 0.0	0.02 (1)	A-G	0 / 154	0.03 (1)	
I-H	0 / 0	-96.5 -96.5	0.16 (1)				
H-G	0 / 0	-18.5 -18.5	0.16 (1)				
G-F	0 / 173	-18.5 -18.5	0.03 (1)				
F-E	0 / 216	-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")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL)= L/588 (0.03")

CSI: TC=0.08/1.00 (B-C:1), BC=0.16/1.00 (G-H:1), WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

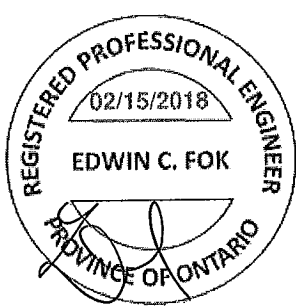
NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
			788
			1987
			1656

PLATE PLACEMENT TOL. = 0.250 inches

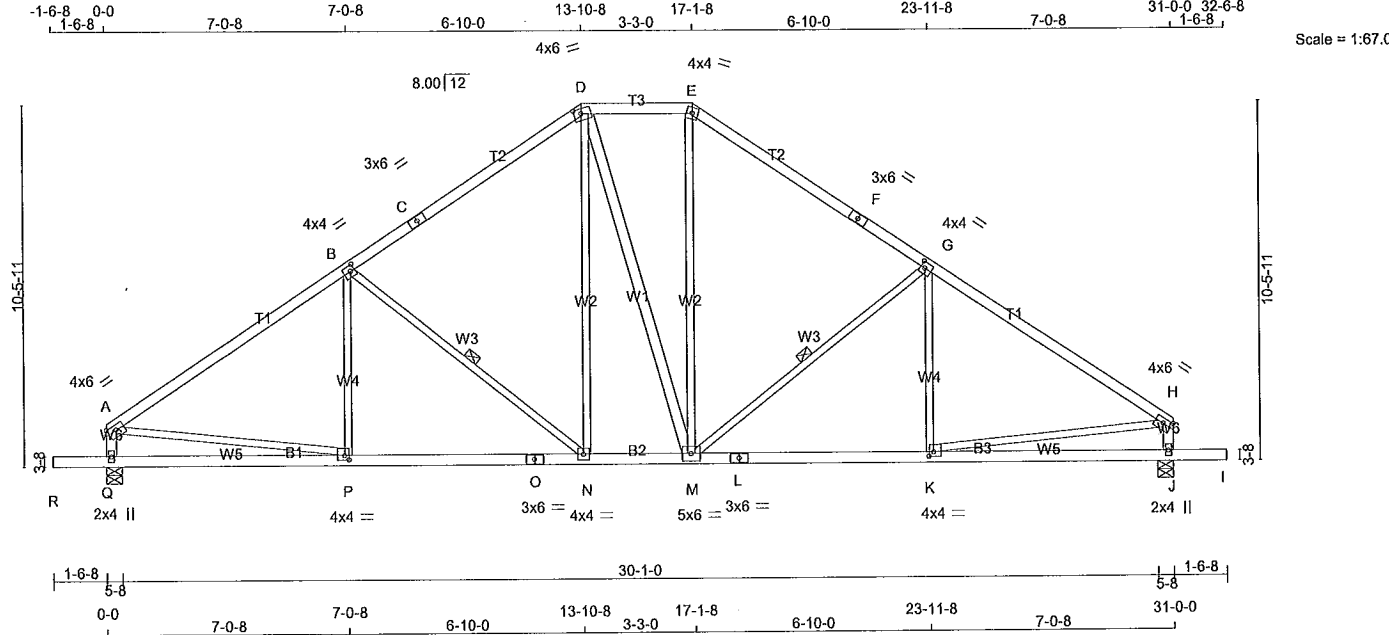
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (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-18023105



TOTAL WEIGHT = 144 lb

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2 SPF
C - D	2x4	DRY	No.2 SPF
D - E	2x4	DRY	No.2 SPF
E - F	2x4	DRY	No.2 SPF
F - H	2x4	DRY	No.2 SPF
Q - A	2x4	DRY	No.2 SPF
J - H	2x4	DRY	No.2 SPF
R - O	2x4	DRY	No.2 SPF
O - L	2x4	DRY	No.2 SPF
L - I	2x4	DRY	No.2 SPF
ALL WEBS	2x3	DRY	No.2 SPF
EXCEPT			
D - M	2x4	DRY	No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	Edge
B	TMVW-t	MT20	4.0	4.0	2.00	1.50
C	TS-t	MT20	3.0	6.0		
D	TTWW-m	MT20	4.0	6.0	1.75	2.50
E	TTW-m	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	4.0	6.0	1.75	Edge
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0	1.50	1.50
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	5.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
Q	1172	715/0	0/0	0/0	0/0	457/0	0/0
J	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) Q, J

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 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-N, G-M.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	-1829/0	-78.0 -78.0 0.62 (1)	4.28	P-B -50/92 0.03 (4)
B-C	-1393/0	-78.0 -78.0 0.56 (1)	4.83	B-N -546/0 0.30 (1)
C-D	-1393/0	-78.0 -78.0 0.56 (1)	4.83	N-D 0/424 0.10 (1)
D-E	-1132/0	-78.0 -78.0 0.12 (1)	5.85	D-M 0/4 0.00 (1)
E-F	-1394/0	-78.0 -78.0 0.56 (1)	4.83	M-E 0/428 0.10 (1)
F-G	-1394/0	-78.0 -78.0 0.56 (1)	4.83	M-G -544/0 0.30 (1)
G-H	-1828/0	-78.0 -78.0 0.62 (1)	4.28	K-G -52/91 0.03 (4)
Q-A	-1443/0	0.0 0.0 0.15 (1)	6.81	A-P 0/1564 0.35 (1)
J-H	-1442/0	0.0 0.0 0.15 (1)	6.81	K-H 0/1564 0.35 (1)

R-Q	0/0	-96.5 -96.5 0.16 (1)	10.00
Q-P	0/0	-18.5 -18.5 0.23 (4)	10.00
P-O	0/1552	-18.5 -18.5 0.38 (4)	10.00
O-N	0/1552	-18.5 -18.5 0.38 (4)	10.00
N-M	0/1131	-18.5 -18.5 0.25 (1)	10.00
M-L	0/1551	-18.5 -18.5 0.37 (4)	10.00
L-K	0/1551	-18.5 -18.5 0.37 (4)	10.00
K-J	0/0	-18.5 -18.5 0.23 (4)	10.00
J-I	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

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 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

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=0.62/1.00 (A-B:1), BC=0.38/1.00 (N-P:4), WB=0.35/1.00 (A-P:1), SS=0.22/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(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= 0.87 (P) (INPUT = 0.90)
JSI METAL= 0.58 (P) (INPUT = 1.00)

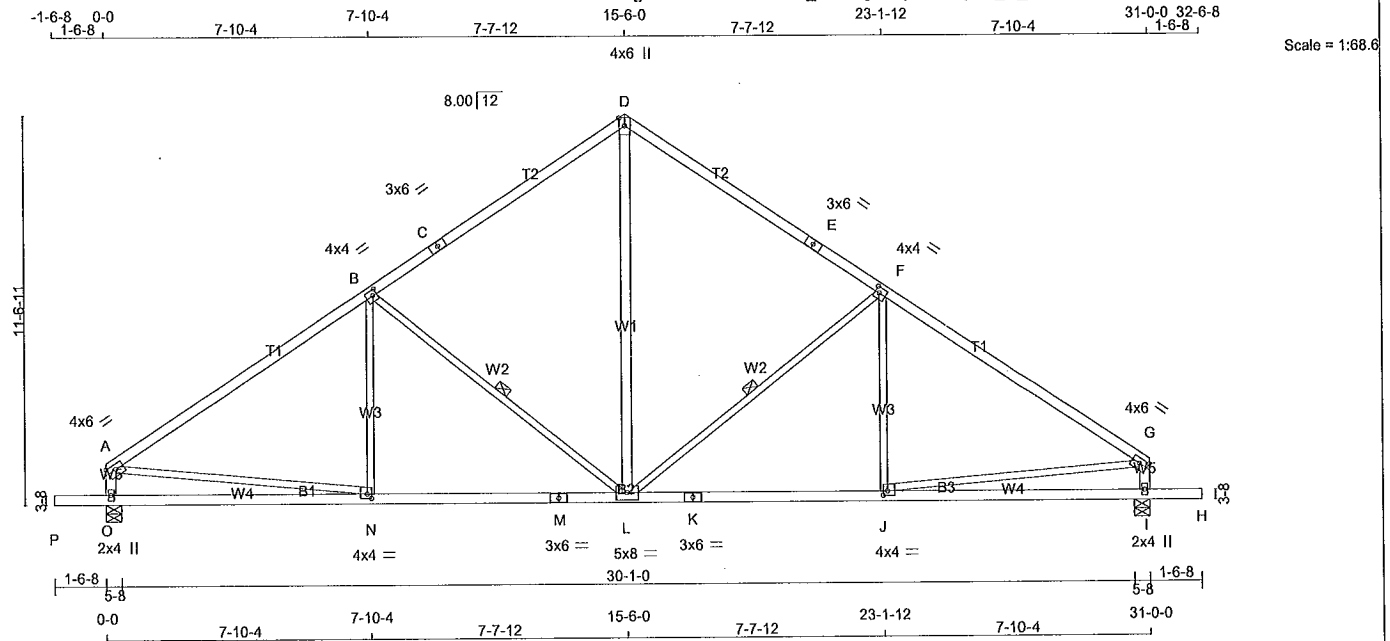


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292572	H6	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 2 X 133 = 266 lb

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

DRY: SEASONED LUMBER.

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	UP	IN-SX
O	1644	0	0	5-8
I	1644	0	0	5-8

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
MEMB.	FORCE	VERT. LOAD	(PLF)	CS1	(LC)	UNBRAC	MEMB.	FORCE	MAX
FR-TO	(LBS)	FROM	TO	LENGTH	FR-TO	FR-TO	MEMB.	FORCE	MAX
A-B	-1809/0	-78.0	-78.0	0.81 (1)	4.00	L-D	0/938	0.15 (1)	
B-C	-1290/0	-78.0	-78.0	0.70 (1)	4.69	L-F	-642/0	0.44 (1)	
C-D	-1290/0	-78.0	-78.0	0.70 (1)	4.69	J-F	-17/114	0.04 (4)	
D-E	-1290/0	-78.0	-78.0	0.70 (1)	4.69	B-L	-642/0	0.44 (1)	
E-F	-1290/0	-78.0	-78.0	0.70 (1)	4.69	N-B	-17/114	0.04 (4)	
F-G	-1809/0	-78.0	-78.0	0.81 (1)	4.00	A-N	0/1549	0.35 (1)	
O-A	-1436/0	0.0	0.0	0.15 (1)	6.81	J-G	0/1549	0.35 (1)	
I-G	-1436/0	0.0	0.0	0.15 (1)	6.81				

P-O	0/0	-96.5	-96.5	0.16 (1)	10.00
O-N	0/0	-18.5	-18.5	0.27 (4)	10.00
N-M	0/1539	-18.5	-18.5	0.42 (4)	10.00
M-L	0/1539	-18.5	-18.5	0.42 (4)	10.00
L-K	0/1539	-18.5	-18.5	0.42 (4)	10.00
K-J	0/1539	-18.5	-18.5	0.42 (4)	10.00
J-I	0/0	-18.5	-18.5	0.27 (4)	10.00
I-H	0/0	-96.5	-96.5	0.16 (1)	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 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 (0.07")
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=0.81/1.00 (A-B:1), BC=0.42/1.00 (J-L:4), WB=0.44/1.00 (B-L:1), SI=0.25/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

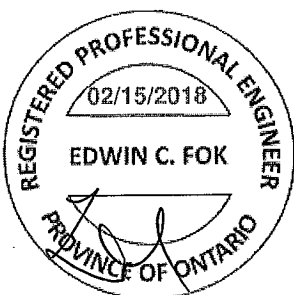
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (J) (INPUT = 0.90)
JSI METAL= 0.58 (J) (INPUT = 1.00)

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

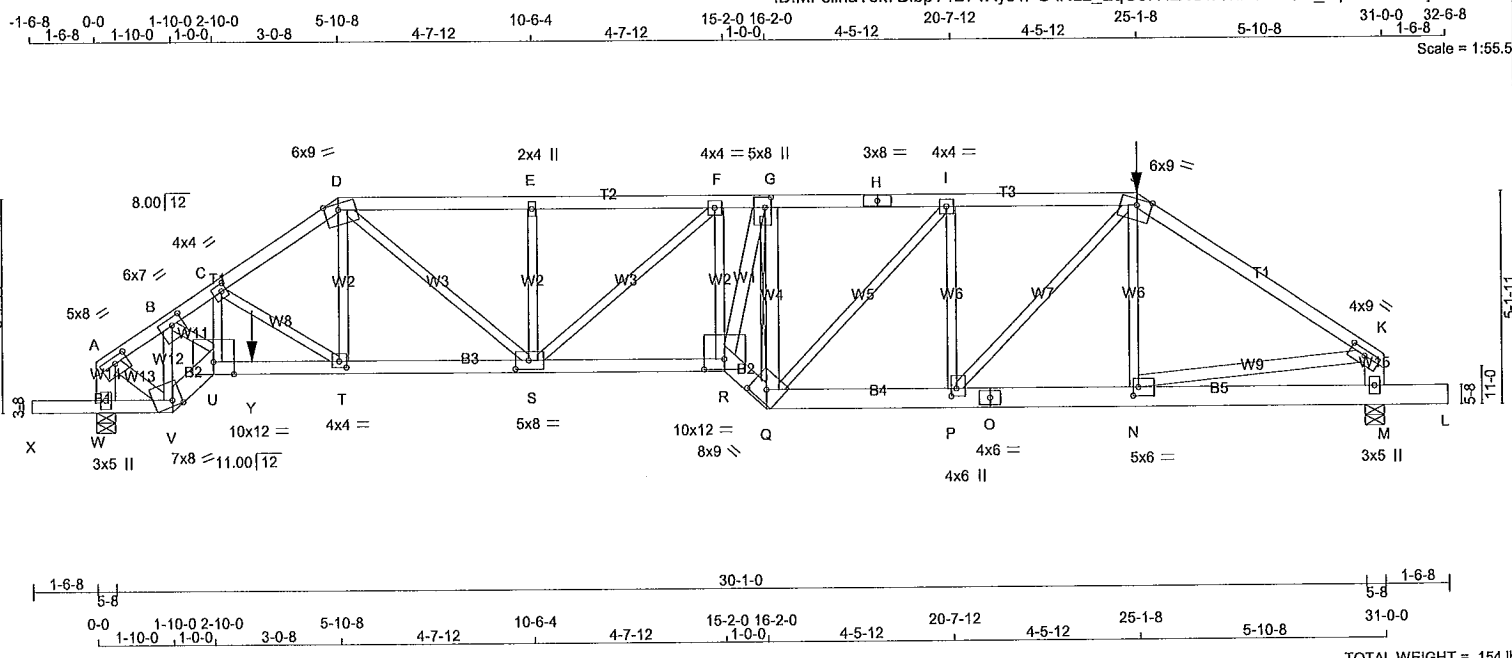


A-18023107

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292581	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8llriaTok7DlbpT4B71Xys4PG-INL2_EqGo7NzXOWV2BbLZQx2_vqCMXVKELj9FRzkvY5



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS					*** SPECIAL LOADS ANALYSIS ***				
A - D	2x4	DRY	1650F 1.5E	SPF	FACTORED MAXIMUM FACTORED INPUT REQD					GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.				
D - H	2x4	DRY	1650F 1.5E	SPF	GROSS REACTION GROSS REACTION					LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE				
H - J	2x4	DRY	1650F 1.5E	SPF	VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX					SPECIFIED LOADS:				
J - K	2x4	DRY	1650F 1.5E	SPF	JT W M					TOP CH. LL = 21.0 PSF				
W - A	2x6	DRY	No.2	SPF	2992 0 2992 0 0 5-8 4-8 4-0					DL = 6.0 PSF				
M - K	2x6	DRY	No.2	SPF						BOT CH. LL = 0.0 PSF				
X - V	2x4	DRY	No.2	SPF						DL = 7.4 PSF				
V - U	2x6	DRY	No.2	SPF						TOTAL LOAD = 34.4 PSF				
U - R	2x4	DRY	2100F 1.8E	SPF						SPACING = 24.0 IN. C/C				
R - Q	2x6	DRY	No.2	SPF						LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM				
Q - O	2x6	DRY	No.2	SPF						GIRDER TYPE: CStdGirder				
O - L	2x6	DRY	No.2	SPF						START DISTANCE = 3-9-4				
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF						START SPAN CARRIED = 5-10-8				
R - G	2x4	DRY	No.2	SPF						END DISTANCE = 15-2-0				
Q - G	2x4	DRY	No.2	SPF						END SPAN CARRIED = 5-10-8				
A - V	2x4	DRY	No.2	SPF						END WALL WIDTH = 0-0				
N - K	2x4	DRY	No.2	SPF						APPLIED TO FRONT SIDE OF BOTTOM CHORD.				
DRY: SEASONED LUMBER.										- ADD'L LOADS BASED ON 55 % OF GSL.				
										GIRDER TYPE: CPrimeHlp				
										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				
										- ADD'L LOADS BASED ON 55 % OF GSL.				
										LOADS APPLIED TO FIRST 15-10-0 OF SPAN				
										MEASURED FROM THE RIGHT.				
										*** 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				
										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 (0.31")				
										ALLOWABLE DEFL.(TL) = L/360 (1.03")				
										CALCULATED VERT. DEFL.(TL) = L/609 (0.61")				
										CANTILEVER DEFLECTION:				
										ALLOWABLE DEFL.(LL) = L/120 (0.19")				
										CALCULATED VERT. DEFL.(LL) = L/443 (0.04")				
										A-18023137 CONTINUE ON PAGE 2				

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.
292581	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8iiriaTok7DlbpT4B71Xys4PG-INL2 EqGo7NzXOwV2BbLZQx2_vqCMXVKELJ9FRzkvY5

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S	BMWWW-I	MT20	5.0	8.0	2.50	3.75
T	BMWW-I	MT20	4.0	4.0	1.75	2.00
U	BBWW-I	MT20	10.0	12.0	Edge	
V	BBWW-m	MT20	7.0	8.0	Edge	2.75
W	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 334.0 lbs FACTORED DOWN AT 25-1-8 ON TOP CHORD, AND 423.2 lbs FACTORED DOWN AT 3-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
J	25-1-8	-334	-334	—	FRONT	VERT	TOTAL
Y	3-9-4	-423	-423	—	FRONT	VERT	TOTAL

ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 228 (0.08")

CSI: TC=0.75/1.00 (J-K:1) , BC=0.85/1.00 (Q-R:1) ,
WB=0.78/1.00 (G-R:1) , SSI=0.36/1.00 (I-J: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

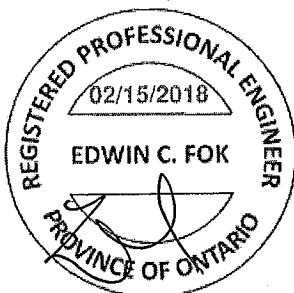
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (T) (INPUT = 0.90)
JSI METAL= 0.96 (R) (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

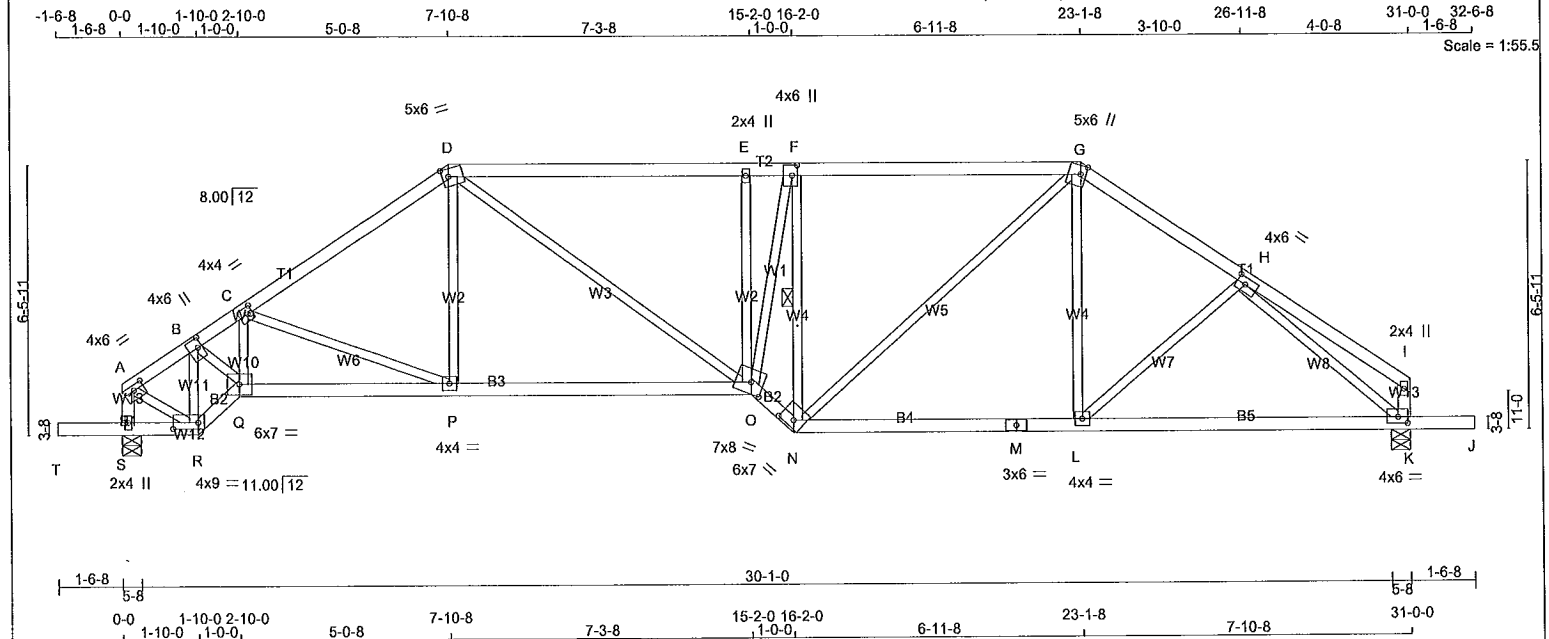


A-18023137(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292581	H2T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 12:18:55 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-2JhHSevf8GGzTSyry9D_LukHdkJsVhTMrwv17XzkvY



TOTAL WEIGHT = 135 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
S - A	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
T - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - J	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	4.0	6.0	1.50	3.00
B	TMWW-I	MT20	4.0	6.0	2.75	1.25
C	TMWW-I	MT20	4.0	4.0	2.00	1.50
D	TTWW-m	MT20	5.0	6.0	2.25	1.75
E	TMW-w	MT20	2.0	4.0		
F	TMWW-I	MT20	4.0	6.0	3.00	1.50
G	TTWW-m	MT20	5.0	6.0	2.50	1.50
H	TMWW-I	MT20	4.0	6.0	2.00	2.50
I	TMV-p	MT20	2.0	4.0		
K	BMVW-I	MT20	4.0	6.0	1.75	2.75
L	BMWW-I	MT20	4.0	4.0		
M	BS-I	MT20	3.0	6.0		
N	BBWW-h	MT20	6.0	7.0	2.00	4.00
O	BBWW-m	MT20	7.0	8.0	3.25	3.50
P	BMWW-I	MT20	4.0	4.0		
Q	BBWW-I	MT20	6.0	7.0		
R	BBWW-I	MT20	4.0	9.0	1.75	7.25
S	BMV-I	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	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT	1648	0	1648	0	5-8	2-7
S	1640	0	1640	0	5-8	1-12
K	1640	0	1640	0	5-8	1-12

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
S	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0
K	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO					FR-TO		
A-B	-1404 / 0	-78.0	-78.0	0.10 (1)	5.41	R-B	-1574 / 0
B-C	-2426 / 0	-78.0	-78.0	0.23 (1)	4.22	B-Q	0 / 1460
C-D	-2028 / 0	-78.0	-78.0	0.29 (1)	4.50	Q-C	-3 / 46
D-E	-2274 / 0	-78.0	-78.0	0.60 (1)	3.92	C-P	-464 / 0
E-F	-2267 / 0	-78.0	-78.0	0.48 (1)	3.99	P-D	0 / 294
F-G	-1935 / 0	-78.0	-78.0	0.50 (1)	4.31	D-O	0 / 737
G-H	-1748 / 0	-78.0	-78.0	0.17 (1)	4.90	O-E	-363 / 0
H-I	0 / 18	-78.0	-78.0	0.18 (1)	10.00	E-F	0 / 1782
S-A	-1419 / 0	0.0	0.0	0.14 (1)	6.84	F-G	-2118 / 0
K-I	-121 / 0	0.0	0.0	0.01 (1)	7.81	N-G	0 / 661
T-S	0 / 0	-96.5	-96.5	0.16 (1)	10.00	L-G	0 / 187
S-R	0 / 0	-18.5	-18.5	0.12 (1)	10.00	L-H	-35 / 39
R-Q	0 / 1456	-18.5	-18.5	0.24 (1)	10.00	A-R	0 / 1279
Q-P	0 / 2102	-18.5	-18.5	0.46 (1)	10.00	H-K	-1965 / 0
P-O	0 / 1675	-18.5	-18.5	0.39 (1)	10.00		
O-N	0 / 2577	-18.5	-18.5	0.42 (1)	10.00		
N-M	0 / 1440	-18.5	-18.5	0.44 (4)	10.00		
M-L	0 / 1440	-18.5	-18.5	0.44 (4)	10.00		
L-K	0 / 1463	-18.5	-18.5	0.43 (4)	10.00		
K-J	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

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 (0.30")

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/761 (0.02")

CSI: TC=0.60/1.00 (D-E:1), BC=0.46/1.00 (P-Q:1), WB=0.89/1.00 (H-K:1), SSI=0.26/1.00 (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

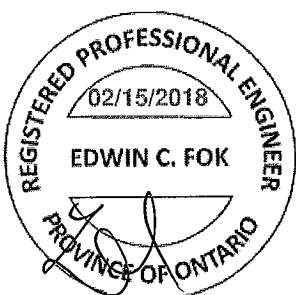
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

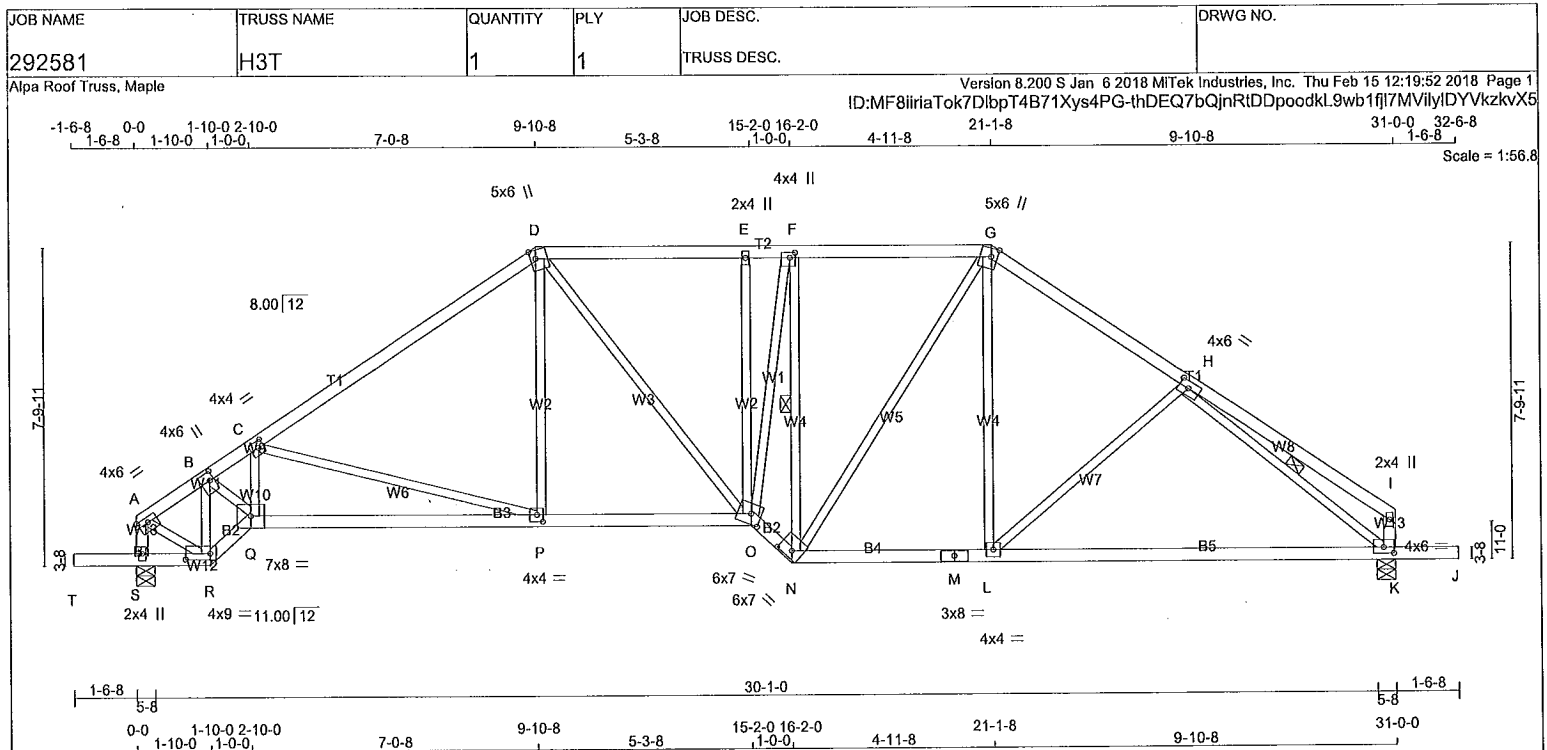
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (H) (INPUT = 0.90)
JSI METAL= 0.48 (H) (INPUT = 1.00)





LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
S - A	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
T - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
M - J	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	4.0	6.0	1.50	3.00
B	TMVW-t	MT20	4.0	6.0	2.50	1.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TTVW+m	MT20	5.0	6.0	2.50	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0	1.50	1.50
G	TTVW+m	MT20	5.0	6.0	Edge	1.75
H	TMVW-t	MT20	4.0	6.0	2.00	2.75
I	TMV+p	MT20	2.0	4.0		
K	BMVW1-t	MT20	4.0	6.0	1.75	3.00
L	BMVW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	8.0		
N	BBVW-h	MT20	6.0	7.0	2.00	4.00
O	BBVW-m	MT20	6.0	7.0	3.00	3.00
P	BMVW-t	MT20	4.0	4.0	2.00	1.75
Q	BBVW-t	MT20	7.0	8.0		
R	BBVW-t	MT20	4.0	9.0	1.75	7.25
S	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

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	1648	0	1648	0	5-8	2-7		
K	1640	0	1640	0	5-8	1-12		

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ
S	1175		717 / 0		0 / 0		0 / 0		0 / 0		458 / 0		0 / 0	
K	1169		714 / 0		0 / 0		0 / 0		0 / 0		456 / 0		0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF F-N, H-K.

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)	FACTORED LC1 MAX (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-1393 / 0	-78.0	-78.0 0.14 (1)	5.38	R-B	-1548 / 0	0.24 (1)
B-C	-2434 / 0	-78.0	-78.0 0.45 (1)	3.92	B-Q	0 / 1629	0.37 (1)
C-D	-1865 / 0	-78.0	-78.0 0.57 (1)	4.34	Q-C	-119 / 41	0.02 (1)
D-E	-1779 / 0	-78.0	-78.0 0.30 (1)	4.71	C-P	-709 / 0	0.75 (1)
E-F	-1775 / 0	-78.0	-78.0 0.23 (1)	4.79	P-D	0 / 317	0.07 (4)
F-G	-1564 / 0	-78.0	-78.0 0.23 (1)	5.05	D-O	0 / 395	0.09 (1)
G-H	-1656 / 0	-78.0	-78.0 0.27 (1)	4.90	O-E	-241 / 0	0.19 (1)
H-I	0 / 24	-78.0	-78.0 0.30 (1)	10.00	O-F	0 / 1413	0.32 (1)
S-A	-1419 / 0	0.0	0.0 0.14 (1)	6.84	N-F	-1694 / 0	0.65 (1)
K-I	-153 / 0	0.0	0.0 0.02 (1)	7.81	N-G	0 / 372	0.08 (1)
					L-G	0 / 297	0.07 (4)
T-S	0 / 0	-96.5	-96.5 0.16 (1)	10.00	L-H	-181 / 0	0.14 (1)
S-R	0 / 0	-18.5	-18.5 0.12 (1)	10.00	A-R	0 / 1257	0.28 (1)
R-Q	0 / 1431	-18.5	-18.5 0.23 (1)	10.00	H-K	-1955 / 0	0.58 (1)
Q-P	0 / 2209	-18.5	-18.5 0.48 (1)	10.00			
P-O	0 / 1531	-18.5	-18.5 0.37 (1)	10.00			
O-N	0 / 2090	-18.5	-18.5 0.34 (1)	10.00			
N-M	0 / 1359	-18.5	-18.5 0.53 (4)	10.00			
M-L	0 / 1359	-18.5	-18.5 0.53 (4)	10.00			
L-K	0 / 1492	-18.5	-18.5 0.53 (4)	10.00			
K-J	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

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

(65% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

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/697 (0.03")

CSI: TC=0.57/1.00 (C-D:1), BC=0.53/1.00 (L-N:4), WB=0.75/1.00 (C-P:1), SSI=0.28/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

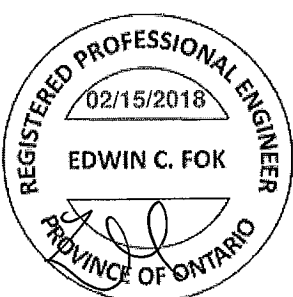
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.90 (K) (INPUT = 0.90)
JSI METAL=0.74 (M) (INPUT = 1.00)

A-18023139 CONTINUE ON PAGE 2

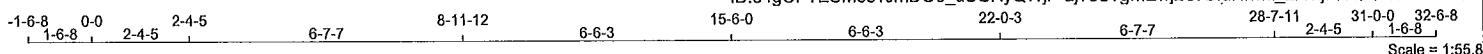


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
289346	H7A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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

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

BUILDING DESIGNER							
BEARINGS							
	FACTORED		MAXIMUM FACTORED		INPUT	REQRD	
	GROSS REACTION		GROSS REACTION		BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	3816	0	3816	0	0	5-8	5-8
J	3313	0	3313	0	0	5-8	5-0

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
R	2694	1795 / 0	0 / 0	0 / 0	0 / 0	898 / 0	0 / 0
J	2353	1485 / 0	0 / 0	0 / 0	0 / 0	868 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J
BEARING SIZE FACTOR = 1.15 AT JNT(S) R (BASED ON SUPPORT DEPTH = 1-8)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED
	FORCE (LBS)	VERT. LOAD (LBS)	VERT. LOAD (LBS)	MAX. FACTORED			FORCE (LBS)	MAX. FACTORED	
FR-TO						FR-TO			
A-B	-3001 / 0	-78.0	-78.0	0.22 (1)	3.84	Q-B	-62 / 0	0.02 (1)	
B-C	-4658 / 0	-78.0	-78.0	0.41 (1)	3.70	B-P	0 / 3502	0.87 (1)	
C-T	-5951 / 0	-78.0	-78.0	0.52 (1)	3.21	P-C	-1508 / 0	0.53 (1)	
T-D	-5951 / 0	-153.5	-153.5	0.52 (1)	3.21	C-N	0 / 1592	0.39 (1)	
D-E	-5951 / 0	-153.5	-153.5	0.82 (1)	2.77	N-D	-837 / 0	0.30 (1)	
E-F	-5951 / 0	-153.5	-153.5	0.82 (1)	3.28	F-N	0 / 1588	0.39 (1)	
F-G	-4661 / 0	-153.5	-153.5	0.70 (1)	3.28	L-F	-2084 / 0	0.74 (1)	
G-H	-2668 / 0	-78.0	-78.0	0.19 (1)	4.06	L-G	0 / 3767	0.93 (1)	
R-A	-3608 / 0	0.0	0.0	0.29 (1)	5.57	K-G	-677 / 0	0.24 (1)	
J-H	-3216 / 0	0.0	0.0	0.26 (1)	5.86	A-Q	0 / 2114	0.37 (1)	
						K-H	0 / 1879	0.33 (1)	
S-R	0 / 0	-96.5	-96.5	0.06 (1)	10.00				
R-Q	0 / 0	-36.4	-36.4	0.03 (4)	10.00				
Q-P	0 / 1797	-18.5	-18.5	0.35 (1)	10.00				
P-U	0 / 4658	-18.5	-18.5	0.94 (1)	10.00				
U-O	0 / 4658	-36.4	-36.4	0.94 (1)	10.00				
O-N	0 / 4658	-36.4	-36.4	0.94 (1)	10.00				
N-M	0 / 4661	-36.4	-36.4	0.66 (1)	10.00				
M-L	0 / 4661	-36.4	-36.4	0.66 (1)	10.00				
L-K	0 / 1584	-36.4	-36.4	0.25 (1)	10.00				
K-J	0 / 0	-36.4	-36.4	0.12 (1)	10.00				
J-I	0 / 0	-96.5	-96.5	0.06 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
G	28-7-11	-134	-134	---	FRONT	VERT	TOTAL
Q	2-7-8	-1028	-1028	---	FRONT	VERT	TOTAL
U	13-4-6	-1028	-1028	---	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
SIDE SETBACK = 2-4-5
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 17-8-0 OF SPAN
MEASURED FROM THE RIGHT.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 2-4-5
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 2-4-5 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 (0.29")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/718 (0.52")

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")

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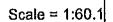
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NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



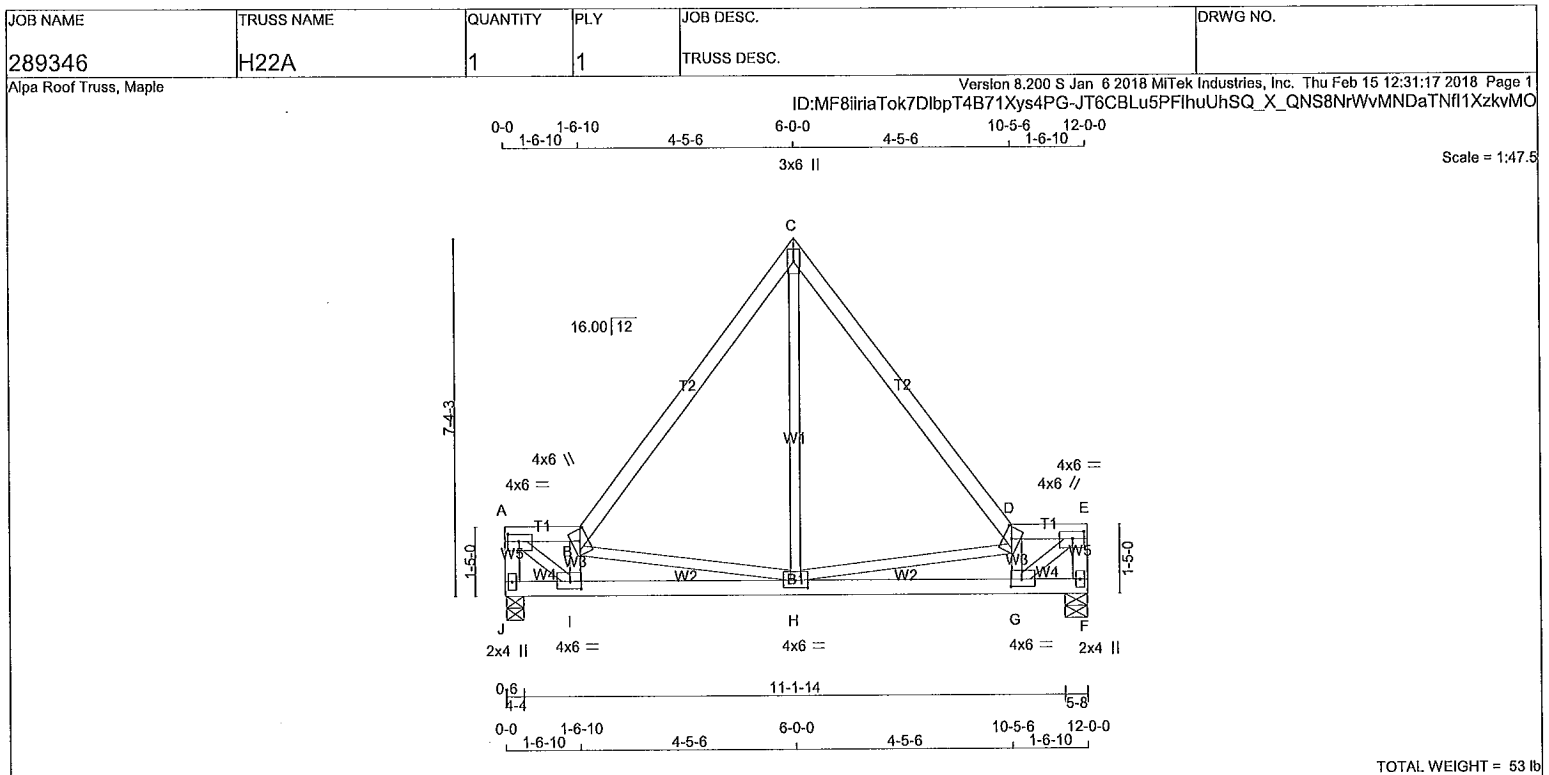
Alpa Roof Truss, Maple

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TOTAL WEIGHT = $3 \times 60 = 181 \text{ lb}$

A-18023142



TOTAL WEIGHT = 53 lb (M)

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

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
J	1140	0	1140	0	4-4	1-8		
F	1140	0	1140	0	5-8	1-11		

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
J	812	496 / 0	0 / 0	0 / 0	0 / 0	317 / 0	0 / 0
F	812	496 / 0	0 / 0	0 / 0	0 / 0	317 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

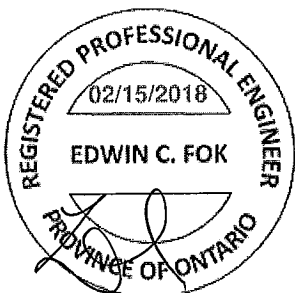
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX.	MEMB.	WEBS		MAX.
	MAX. FACTORED	FORCE	VERT. LOAD	LC1	MAX.		MAX. FACTORED	FORCE	
	(LBS)	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	(LBS)	CSI (LC)
FR-TO			FROM	TO	LENGTH	FR-TO			
J-A	-1103 / 0		0.0	0.0	0.12 (1)	7.51	A-I	0 / 1769	0.44 (1)
A-B	-1397 / 0		-78.0	-78.0	0.08 (1)	5.44	I-B	-749 / 0	0.12 (1)
B-C	-872 / 0		-78.0	-78.0	0.34 (1)	6.10	B-H	-969 / 0	0.37 (1)
C-D	-872 / 0		-78.0	-78.0	0.34 (1)	6.10	H-C	0 / 1045	0.26 (1)
D-E	-1397 / 0		-78.0	-78.0	0.06 (1)	5.44	H-D	-969 / 0	0.37 (1)
E-F	-1103 / 0		0.0	0.0	0.12 (1)	7.51	G-D	-749 / 0	0.12 (1)
							G-E	0 / 1769	0.44 (1)
J-I	0 / 0		-112.0	-112.0	0.10 (1)	10.00			
I-H	0 / 1468		-112.0	-112.0	0.62 (1)	10.00			
H-G	0 / 1468		-112.0	-112.0	0.62 (1)	10.00			
G-F	0 / 0		-112.0	-112.0	0.10 (1)	10.00			

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



DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CSldGirder
START DISTANCE = 0-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 12-0-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- 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 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.34/1.00 (C-D:1), BC=0.62/1.00 (H-I:1), WB=0.44/1.00 (A-I:1), SSI=0.25/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES				
PLATE	GRIP(DRY)	SHEAR	SECTION	
(PSI)	(PLI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN	MAX
MIN	MAX	MIN	MAX	MIN
MT20	618	354	1687	788
			1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

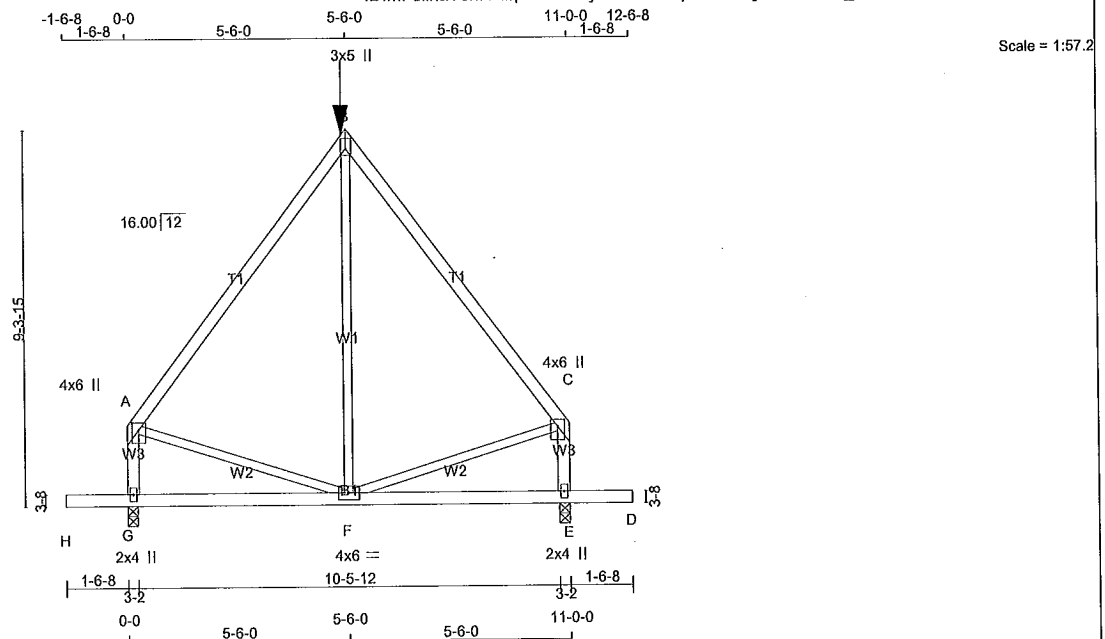
JSI GRIP= 0.89 (G) (INPUT = 0.90)
JSI METAL= 0.52 (B) (INPUT = 1.00)

A-18023143

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
289346	H23	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 12:32:38 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-S2VpB2svK8yB6xN0fVU_CSJyFUDSr5aV5Tn4OKzkvL7



TOTAL WEIGHT = 3 X 57 = 172 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF	
B - C	2x4	DRY	No.2	SPF	
G - A	2x4	DRY	No.2	SPF	
E - C	2x4	DRY	No.2	SPF	
H - D	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+p	MT20	4.0	6.0	2.00	2.00
B	TTW+p	MT20	3.0	5.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMWWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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) 571.8 lbs FACTORED DOWN AT 5-6-0 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	DOWN	HORZ
G	1054	0	1054	0
E	1054	0	1054	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
G	753	450 / 0 0 / 0 0 / 0 0 / 0 304 / 0 0 / 0
E	753	450 / 0 0 / 0 0 / 0 0 / 0 304 / 0 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G, 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	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. MEMB. FORCE (LBS)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-634 / 0	-78.0	-78.0	0.51 (1)	6.25	F-B	0 / 179
B-C	-634 / 0	-78.0	-78.0	0.51 (1)	6.25	A-F	0 / 396
G-A	-833 / 0	0.0	0.0	0.10 (1)	7.81	F-C	0 / 396
E-C	-833 / 0	0.0	0.0	0.10 (1)	7.81		
H-G	0 / 0	-96.5	-96.5	0.17 (1)	10.00		
G-F	0 / 0	-34.7	-34.7	0.33 (4)	10.00		
F-E	0 / 0	-34.7	-34.7	0.33 (4)	10.00		
E-D	0 / 0	-96.5	-96.5	0.17 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR	TYPE
B	5-6-0	-572	-572		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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 5-6-0
END SETBACK = 5-6-0
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 (0.37")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

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=0.51/1.00 (B-C:1), BC=0.33/1.00 (F-G:4), WB=0.10/1.00 (A-F:1), SSI=0.18/1.00 (E-F: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

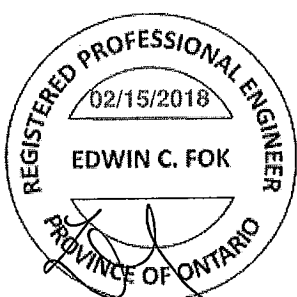
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

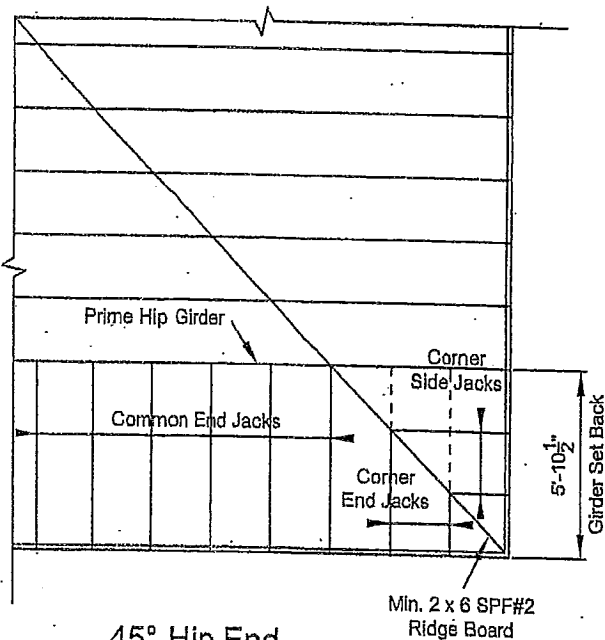
JSI GRIP= 0.65 (F) (INPUT = 0.90)
JSI METAL= 0.25 (A) (INPUT = 1.00)

A-18023144

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



STRACON ENGINEERING INC.



45° Hip End

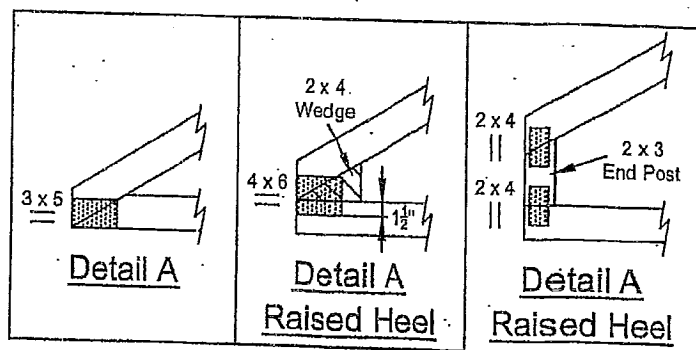
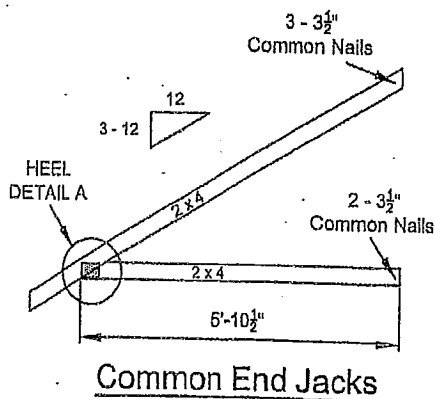
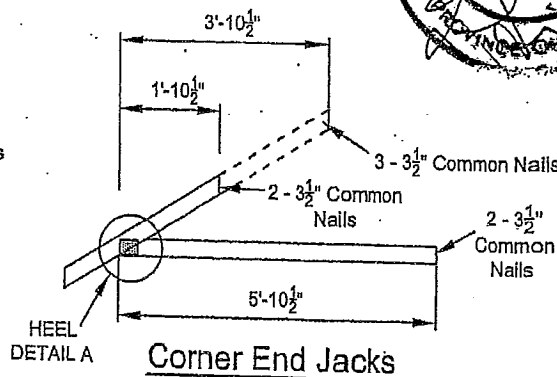
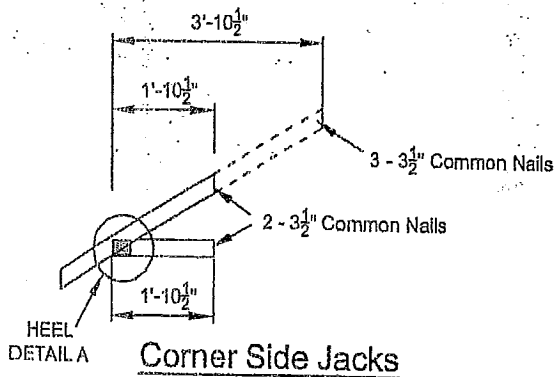
LUMBER SPECIFICATION

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.

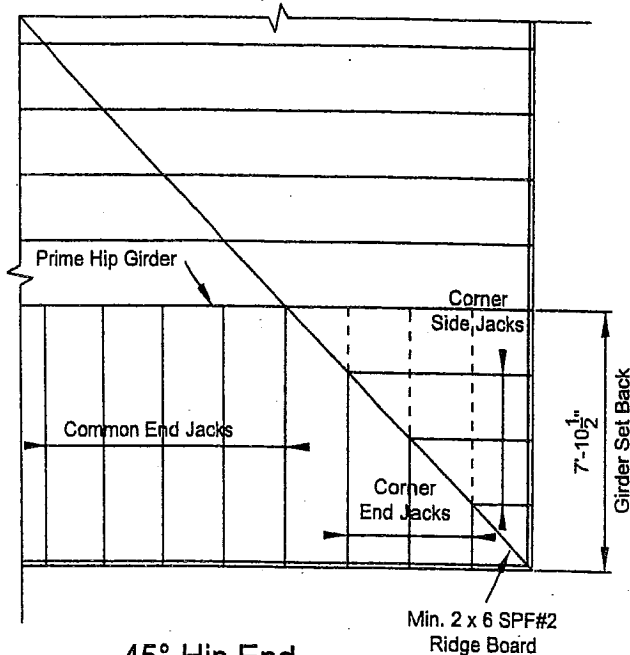
TOTAL LOAD : 50.5 P.S.F



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

CS-51008

STRACON ENGINEERING INC.



45° Hip End

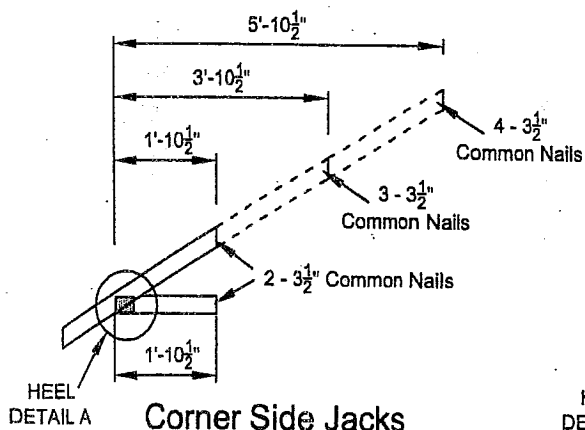
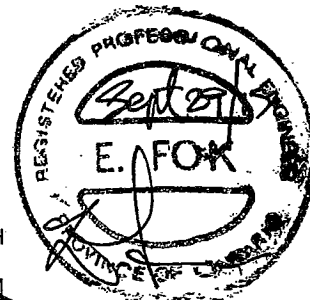
LUMBER SPECIFICATION

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

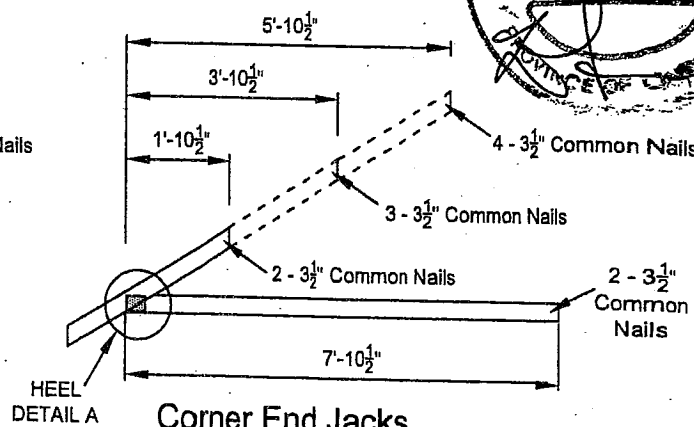
DESIGN LOAD

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.

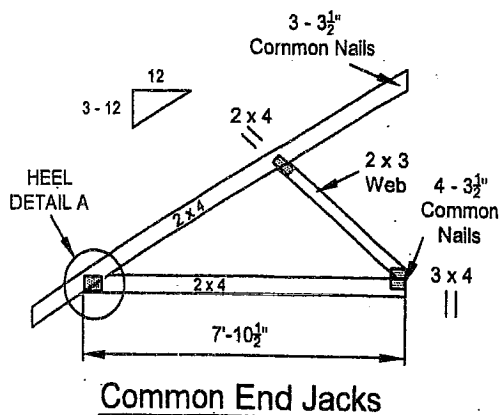
TOTAL LOAD : 44.8 P.S.F



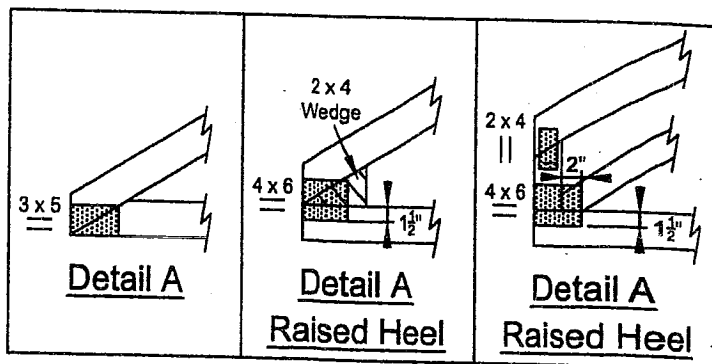
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-71008N

LUS – Double Shear Joist Hangers

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

Material: 18 gauge

Finish: G90 galvanized

Design:

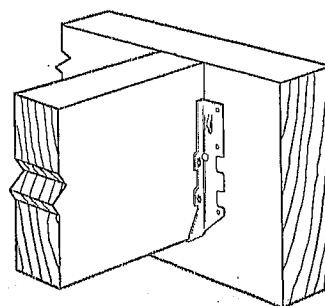
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

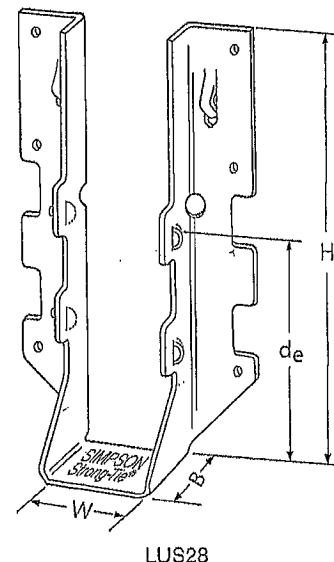
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



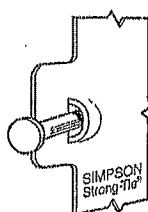
Typical LUS
Installation



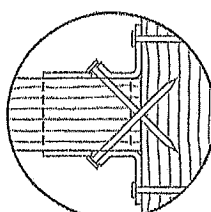
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (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	590	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

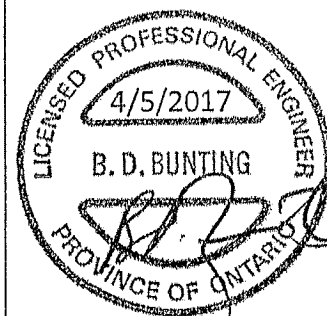
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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 31, 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.

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LUSPEC LUS17-3/17 exp 6/19

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strongtie.com

HHUS – Double Shear Joist Hangers



All HHUS hangers have double shear nailing. This patented innovation distributes the load through two points on each joist nail for greater strength. It also allows the use of fewer nails, faster installation and the use of common nails for all connections. Do not bend or remove tabs.

Material: 14 gauge

Finish: G90 galvanized

Design:

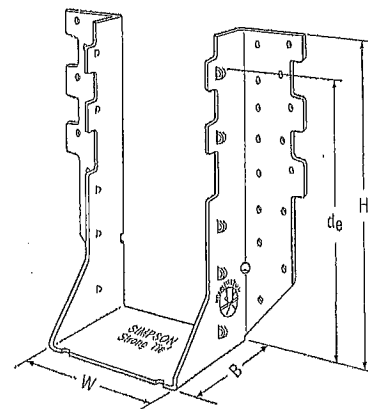
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

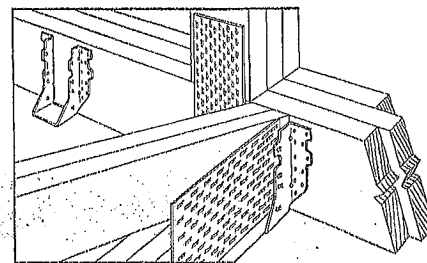
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

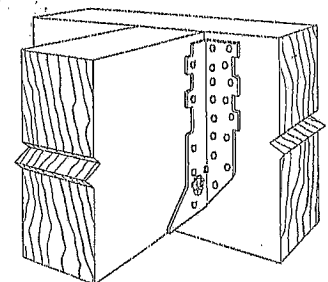
- See current catalogue for options



HHUS410



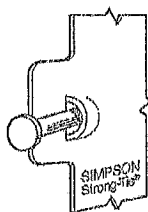
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



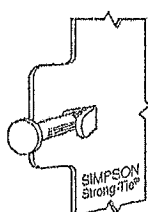
Typical HHUS Installation

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _p =1.00)	Uplift (K _u =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 5/16	5 15/16	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 5/2	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	5 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 5/8	5 15/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 5/8	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	7850

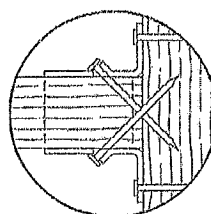
1. d_g is the distance from the seat of the hanger to the highest joist nail.



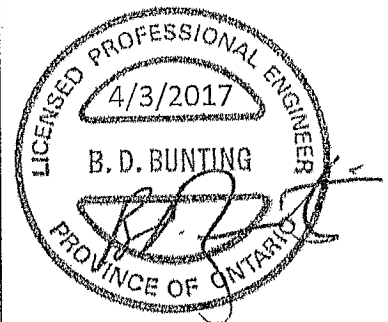
Double Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,680



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



Double Shear Nailing Top View.



LIMIT
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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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