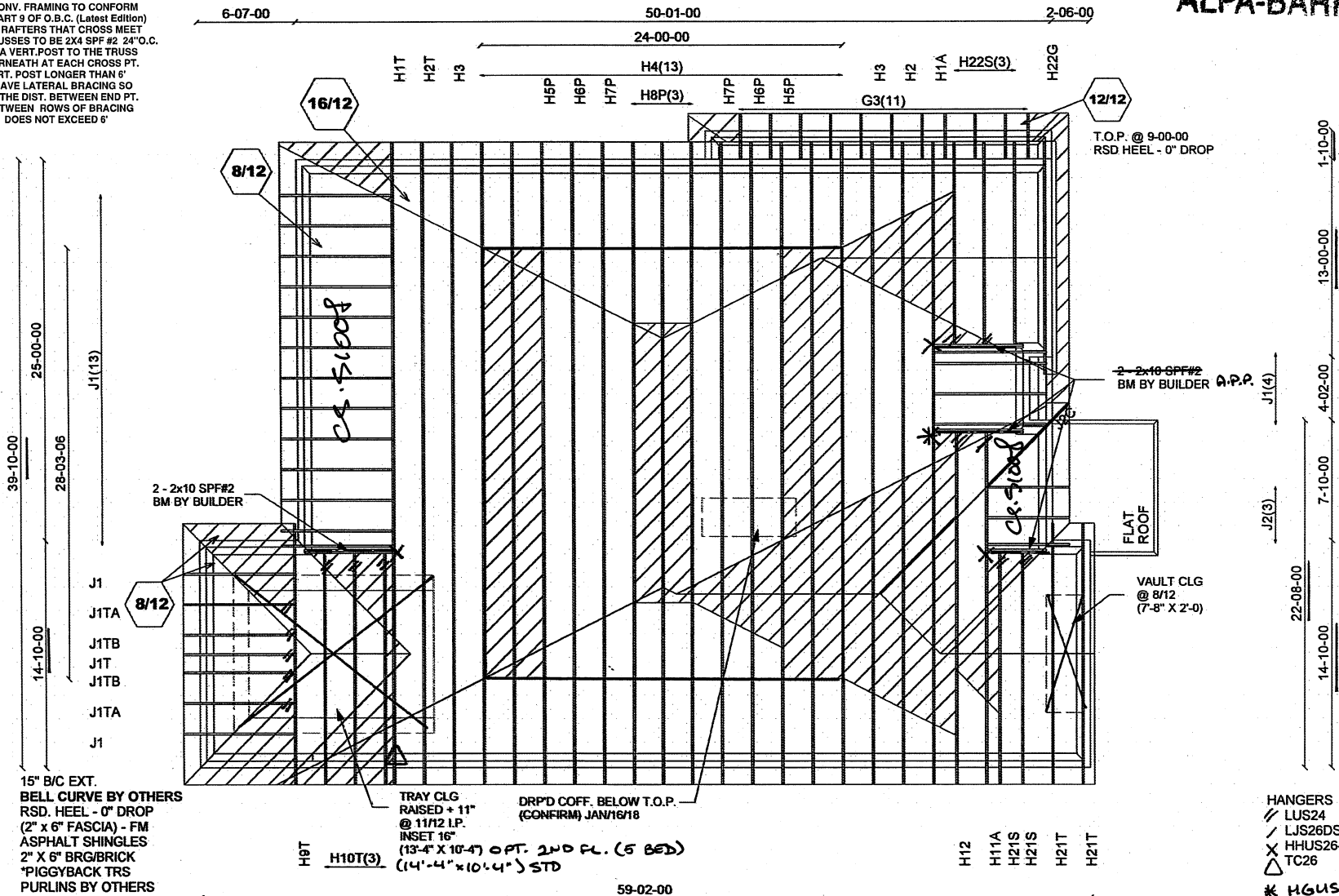


ALPA-BARRIE

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 ROWS OF BRACING DOES NOT EXCEED 6'



15" B/C EXT. BELL CURVE BY OTHERS RSD. HEEL - 0" DROP (2" x 6" FASCIA) - FM ASPHALT SHINGLES 2" X 6" BRG/BRICK "PIGGYBACK TRS PURLINS BY OTHERS

TRAY CLG RAISED + 11" @ 11/12 LP. INSET 16" (13'-4" X 10'-4") OPT. 2ND FL. (5 BED) (14'-4" X 10'-4") STD

DRPD COFF. BELOW T.O.P. (CONFIRM) JAN/16/18

CONFIRM TRUSS LAYOUT/DIRECTION P.L. 95914

HANGERS
 // LUS24
 / LJS26DS
 X HHUS26-2
 Δ TC26
 * HGUS26-3

CONVENTIONAL FRAMING BY OTHERS

P.L. 99352, 100885, 101745, 105728

CAK GROVE

	Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN		Model / Elevation: 5003 REV1		STD w/ OR OPT LOGGIA (FLAT) / B OPT TRAY MST	
	Layout ID: 292640	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: 1/19/2018	Designer: AMANDA				

ALPA-BARRIE

 CONVENTIONAL FRAMING BY OTHERS

A-18023875 - A-18023881
A-18023896 - A-18023900
A-18023903 - A-18023912

OAK GROVE

Model / Elevation:

5003 REV1

STD

02 OPT LOGGIA (FLAT)

/ B OPT TRAYS w/ SITTING CLG

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 1/19/2018	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.

P.L. 99352, 100885, 101745, 105728.

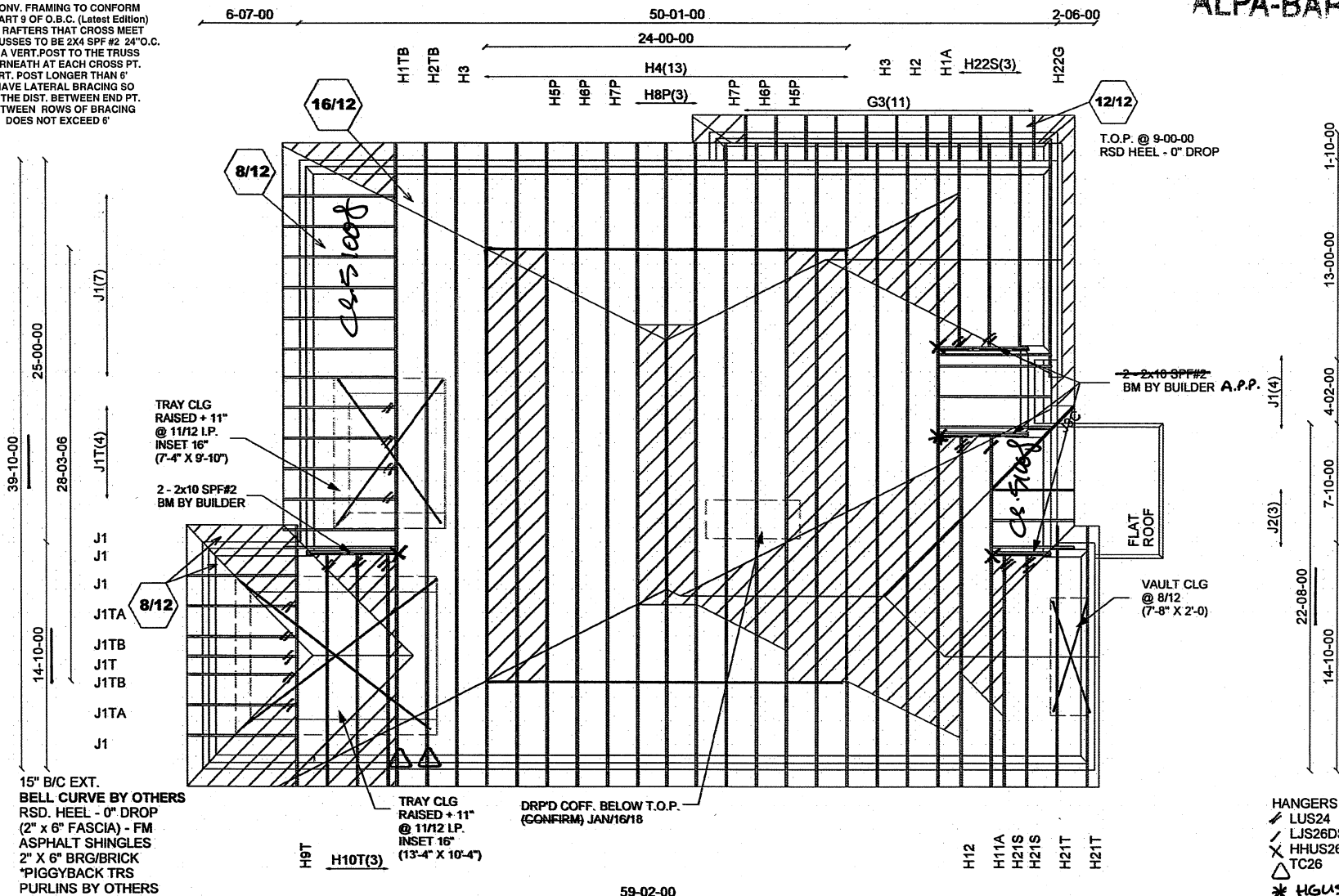
Job Track: **45147**

Layout ID: 292642

Plan Log: 95914

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 ROWS OF BRACING
DOES NOT EXCEED 6'



CONFIRM TRUSS LAYOUT/DIRECTION
P.L. 95914

A-18023875 - A-18023881
A-18023896 - A-18023900
A-18023904 - A-18023912

HANGERS
✓ LUS24
✓ LJS26DS
X HHUS26-2
△ TC26
* HGUS26-3

CONVENTIONAL
FRAMING BY
OTHERS

P.L. 99352, 100885, 101745, 105728

OAKGROVE



Job Track: 45147
Layout ID: 292643
Plan Log: 95914

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 1/19/2018 Designer: AMANDA

Model / Elevation:

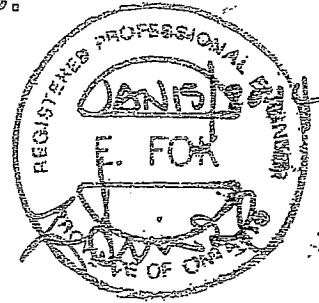
5003 REV1

OPT. 2ND FL (5BD) OR OPT LCGGIA (FLAT)
/ B OPT TRAY 8 5BD W/SITTING CLG

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

Stracon Engineering Inc.

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



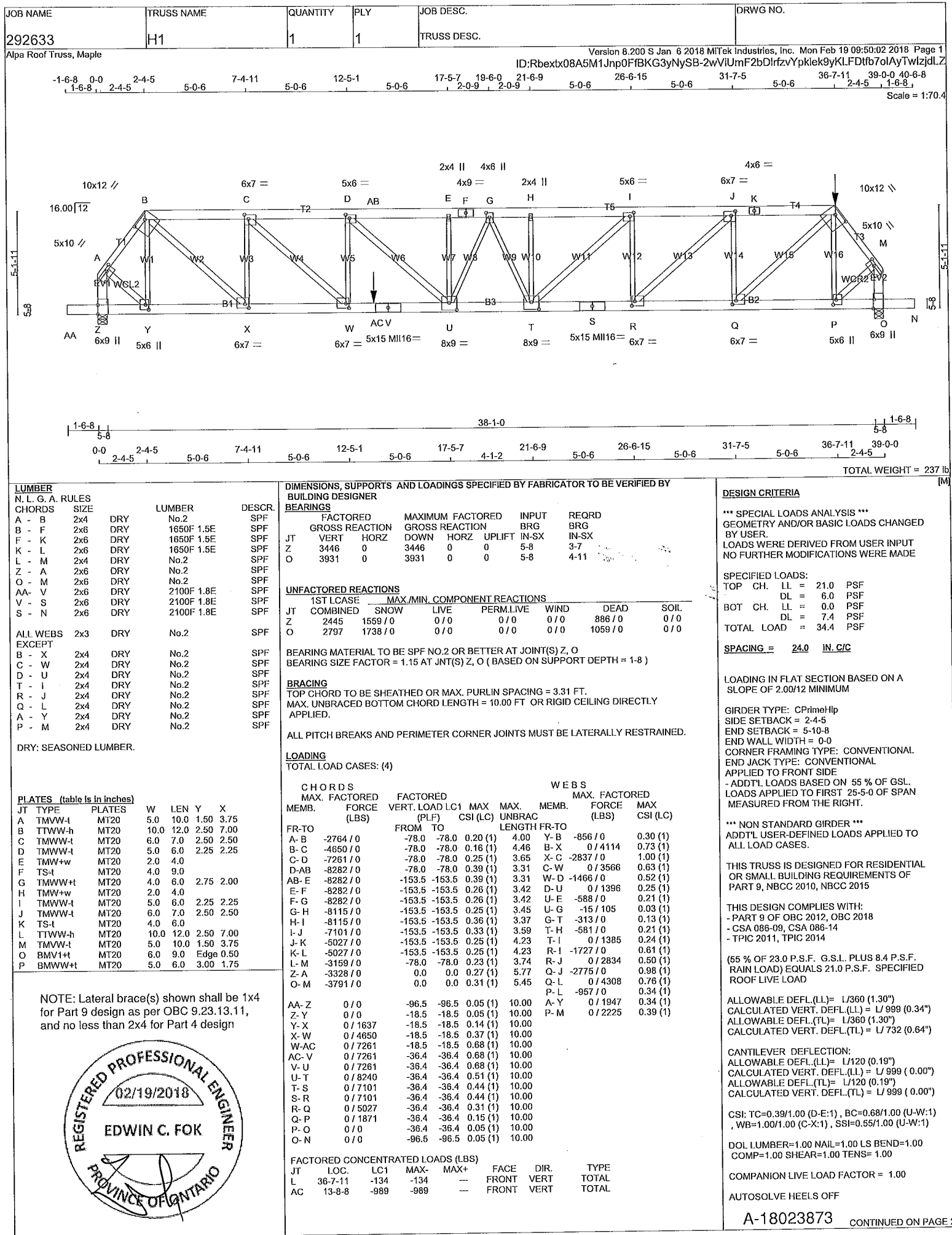
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H1	1	1	TRUSS DESC.	

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
Q	BMWW-I	MT20	6.0	7.0	2.25	2.25
R	BMWW-I	MT20	6.0	7.0	2.75	1.75
S	BS-I	MII16	5.0	15.0		
T	BMWWWW-I	MT20	8.0	9.0	4.25	4.50
U	BMWWWW-I	MT20	8.0	9.0	4.25	4.50
V	BS-I	MII16	5.0	15.0		
W	BMWW-I	MT20	6.0	7.0	2.75	1.75
X	BMWW-I	MT20	6.0	7.0	2.25	2.25
Y	BMWW-I	MT20	5.0	6.0	3.00	1.75
Z	BMV1-I	MT20	6.0	9.0	Edge	

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) 134.1 lbs FACTORED DOWN AT 36-7-11 ON TOP CHORD, AND 988.9 lbs FACTORED DOWN AT 13-8-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

REGISTERED PROFESSIONAL ENGINEER

02/19/2018

EDWIN C. FOK

PROVINCE OF ONTARIO

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
MT20	618	354	1667
MII16	438	276	2341

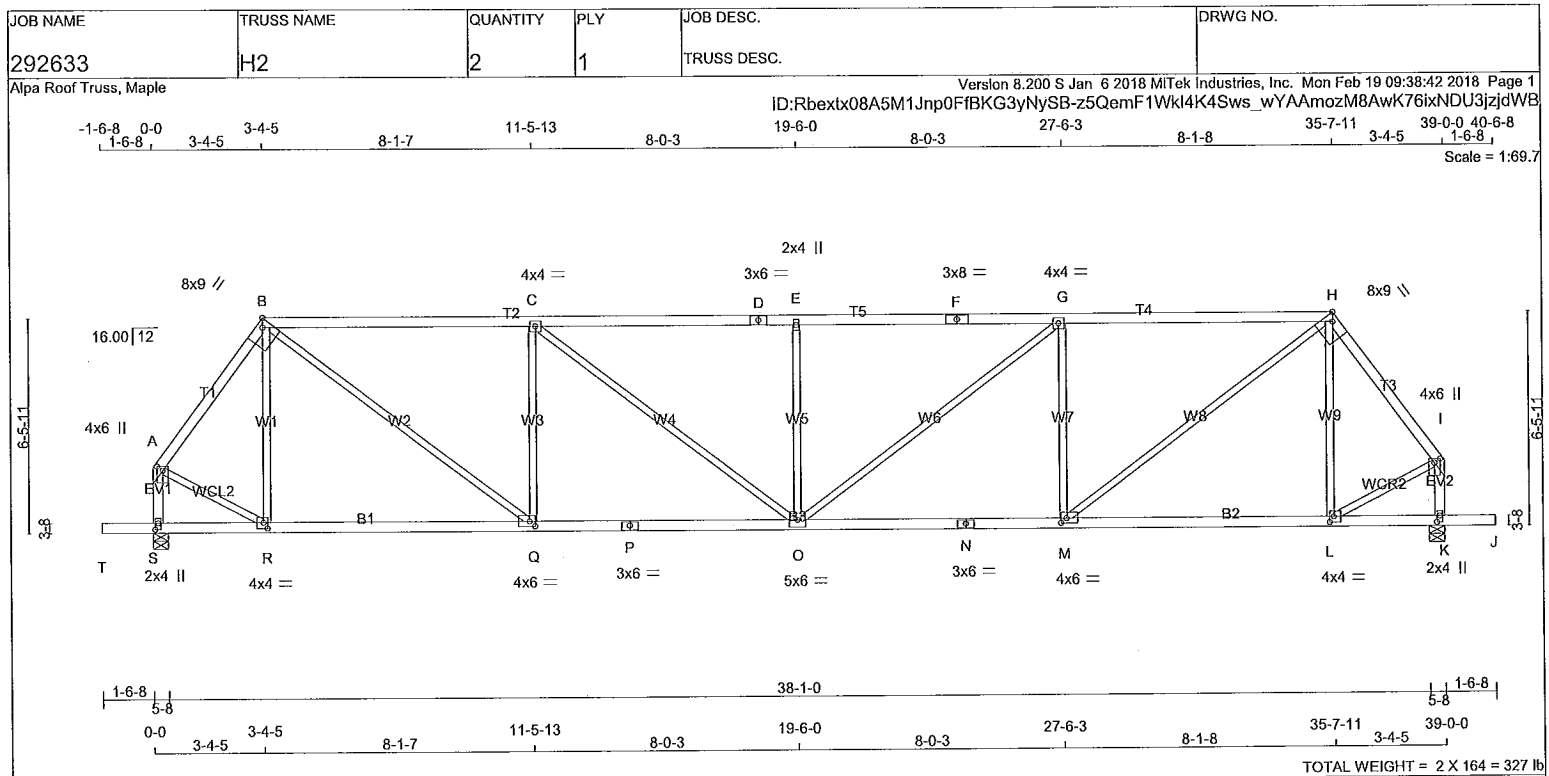
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.85 (V) (INPUT = 1.00)

A-18023873(2)



LUMBER				DESCR.	
N. L. G. A. RULES	SIZE	LUMBER			
CHORDS					
A - B	2x4	DRY	No.2	SPF	
B - D	2x4	DRY	1650F 1.5E	SPF	
D - F	2x4	DRY	1650F 1.5E	SPF	
F - H	2x4	DRY	1650F 1.5E	SPF	
H - I	2x4	DRY	No.2	SPF	
S - A	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
T - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - 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+p	MT20	4.0	6.0	1.50 2.00
B	TTWW-h	MT20	8.0	9.0	Edge 2.75
C	TMWW-t	MT20	4.0	4.0	
D	TS-t	MT20	3.0	6.0	
E	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	3.0	8.0	
G	TMWW-t	MT20	4.0	4.0	
H	TTWW-h	MT20	8.0	9.0	Edge 2.75
I	TMVW+p	MT20	4.0	6.0	1.50 2.00
K	BMV1+p	MT20	2.0	4.0	2.25 1.00
L	BMWW-t	MT20	4.0	4.0	2.00 1.50
M	BMWW-t	MT20	4.0	6.0	1.75 2.00
N	BS-t	MT20	3.0	6.0	
O	BMWW-t	MT20	5.0	6.0	
P	BS-t	MT20	3.0	6.0	
Q	BMWW-t	MT20	4.0	6.0	1.75 2.00
R	BMWW-t	MT20	4.0	4.0	2.00 1.50
S	BMV1+p	MT20	2.0	4.0	2.25 1.00

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 IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
S	2030	0	2030	0	5-8	3-0
K	2030	0	2030	0	5-8	3-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
S	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0
K	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 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 = 3.56 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 LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-1614 / 0	-78.0	-78.0 0.21 (1)	5.02	R-B	-318 / 0	0.22 (1)
B-C	-2566 / 0	-78.0	-78.0 0.92 (1)	3.86	B-Q	0 / 2018	0.45 (1)
C-D	-3036 / 0	-78.0	-78.0 1.00 (1)	3.56	Q-C	-1065 / 0	0.73 (1)
D-E	-3036 / 0	-78.0	-78.0 1.00 (1)	3.56	C-O	0 / 592	0.13 (1)
E-F	-3036 / 0	-78.0	-78.0 1.00 (1)	3.56	O-E	-577 / 0	0.39 (1)
F-G	-3036 / 0	-78.0	-78.0 1.00 (1)	3.56	G-O	0 / 592	0.13 (1)
G-H	-2566 / 0	-78.0	-78.0 0.92 (1)	3.86	M-G	-1065 / 0	0.73 (1)
H-I	-1614 / 0	-78.0	-78.0 0.21 (1)	5.02	M-H	0 / 2018	0.45 (1)
S-A	-1873 / 0	0.0	0.0 0.22 (1)	6.13	L-H	-318 / 0	0.22 (1)
K-I	-1873 / 0	0.0	0.0 0.22 (1)	6.13	A-R	0 / 1060	0.24 (1)
					L-I	0 / 1060	0.24 (1)
T-S	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
S-R	0 / 0	-18.5	-18.5 0.18 (4)	10.00			
R-Q	0 / 956	-18.5	-18.5 0.33 (4)	10.00			
Q-P	0 / 2567	-18.5	-18.5 0.54 (1)	10.00			
P-O	0 / 2567	-18.5	-18.5 0.54 (1)	10.00			
O-N	0 / 2567	-18.5	-18.5 0.54 (1)	10.00			
N-M	0 / 2567	-18.5	-18.5 0.54 (1)	10.00			
M-L	0 / 956	-18.5	-18.5 0.33 (4)	10.00			
L-K	0 / 0	-18.5	-18.5 0.18 (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

(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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.35")

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 (C-E:1), BC=0.54/1.00 (M-O:1), WB=0.73/1.00 (G-M:1), SS=0.30/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

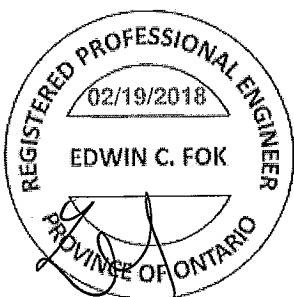
PLATE PLACEMENT TOL. = 0.250 inches

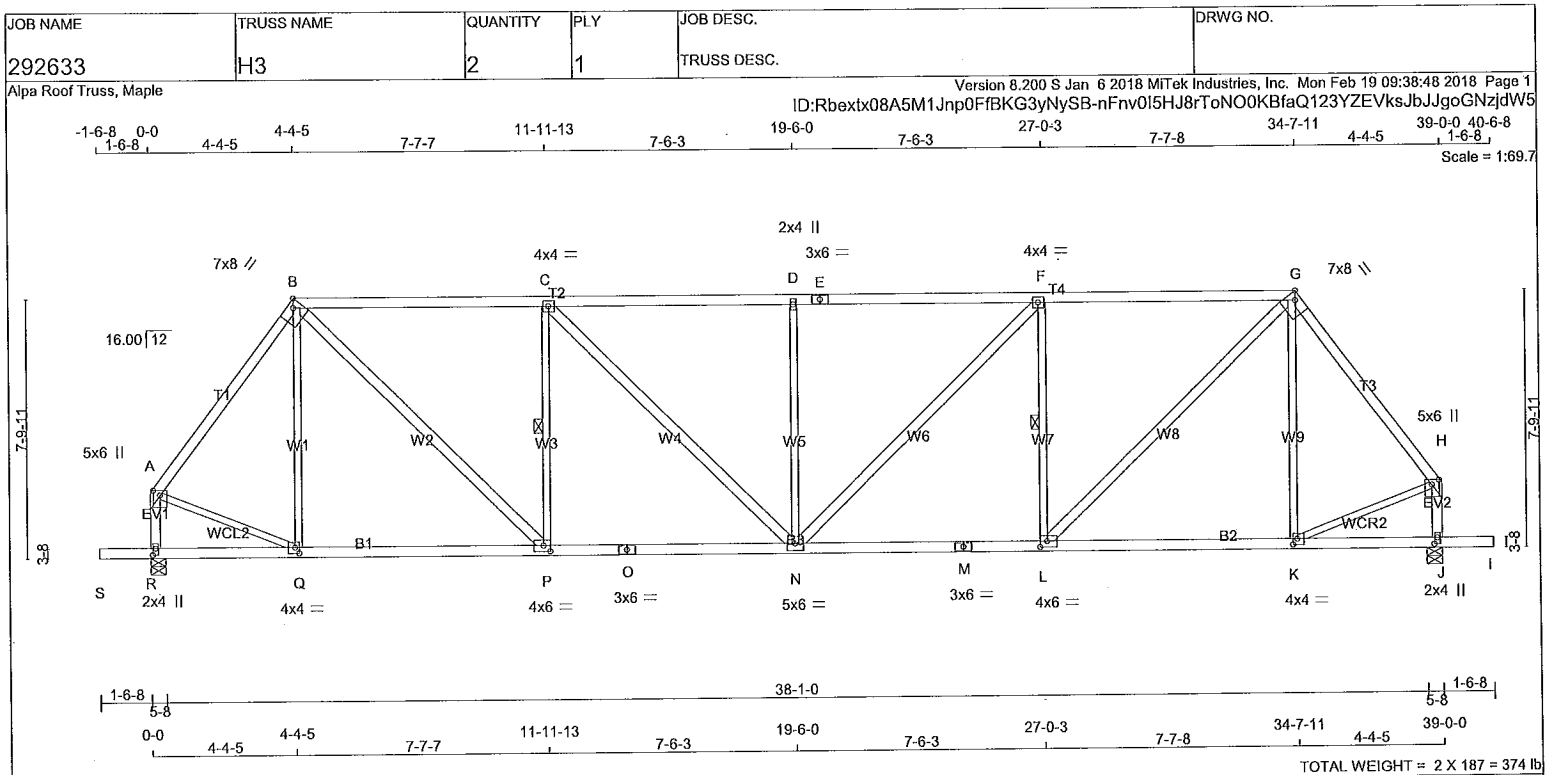
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.85 (P) (INPUT = 1.00)

A-18023875

CONTINUED ON PAGE 2





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

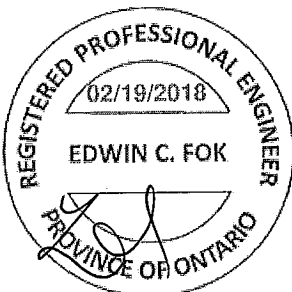
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	1.75	2.50
B	TTWW-h	MT20	7.0	8.0	Edge	2.75
C	TMWW-t	MT20	4.0	4.0		
D	TMW-w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TTWW-h	MT20	7.0	8.0	Edge	2.75
H	TMVW+p	MT20	5.0	6.0	1.75	2.50
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BMWW-t	MT20	4.0	4.0	2.00	1.50
L	BMWW-t	MT20	4.0	6.0	2.00	2.50
M	BS-t	MT20	3.0	6.0		
N	BMWWW-t	MT20	5.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMWW-t	MT20	4.0	6.0	2.00	2.50
Q	BMWW-t	MT20	4.0	4.0	2.00	1.50
R	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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



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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
R	2030	0	2030	0	0	5-8	3-0		
J	2030	0	2030	0	0	5-8	3-0		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0
J	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1657 / 0	-78.0 -78.0	0.37 (1)	Q-B	-232 / 0	0.26 (1)	
B-C	-2152 / 0	-78.0 -78.0	0.72 (1)	B-P	0 / 1633	0.26 (1)	
C-D	-2490 / 0	-78.0 -78.0	0.76 (1)	P-C	-999 / 0	0.38 (1)	
D-E	-2490 / 0	-78.0 -78.0	0.76 (1)	C-N	0 / 478	0.08 (1)	
E-F	-2490 / 0	-78.0 -78.0	0.76 (1)	N-D	-541 / 0	0.62 (1)	
F-G	-2152 / 0	-78.0 -78.0	0.72 (1)	N-F	0 / 478	0.08 (1)	
G-H	-1657 / 0	-78.0 -78.0	0.37 (1)	L-F	-999 / 0	0.38 (1)	
R-A	-1855 / 0	0.0 0.0	0.21 (1)	L-G	0 / 1633	0.26 (1)	
J-H	-1855 / 0	0.0 0.0	0.21 (1)	K-G	-232 / 0	0.26 (1)	
				A-Q	0 / 1051	0.24 (1)	
				K-H	0 / 1051	0.24 (1)	
S-R	0 / 0	-96.5 -96.5	0.16 (1)				
R-Q	0 / 0	-18.5 -18.5	0.16 (4)				
Q-P	0 / 986	-18.5 -18.5	0.31 (4)				
P-O	0 / 2152	-18.5 -18.5	0.46 (1)				
O-N	0 / 2152	-18.5 -18.5	0.46 (1)				
N-M	0 / 2152	-18.5 -18.5	0.46 (1)				
M-L	0 / 2152	-18.5 -18.5	0.46 (1)				
L-K	0 / 986	-18.5 -18.5	0.31 (4)				
K-J	0 / 0	-18.5 -18.5	0.16 (4)				
J-I	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 (1.30")
CALCULATED VERT. DEFL.(LL)= L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL)= L/999 (0.25")

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=0.76/1.00 (D-F:1), BC=0.46/1.00 (L-N:1), WB=0.62/1.00 (D-N:1), SSI=0.28/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR 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.

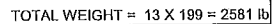
JSI GRIP= 0.87 (L) (INPUT = 0.90)
JSI METAL= 0.69 (O) (INPUT = 1.00)

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-0_qJvNCwCvzCNmalMaJiHwvebBKHLyUvNCMn4LzjdVy

Scale = 1:69.7


$$[M][F]$$

DRY: SEASONED LUMBER.

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

BUILDING DESIGNER
READINGS

UNFACTORED REACTIONS

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

BRACING

FOR SECTION B-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.68
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-Q, C-P, D-N, F-L, G-K.

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

LOADING

LOADING
TOTAL LOAD CASES: (4)

S-R	0/0	-96.5	-96.5	0.16 (1)	10.00
R-Q	0/0	-18.5	-18.5	0.17 (4)	10.00
Q-P	0/1062	-18.5	-18.5	0.29 (4)	10.00
P-O	0/1992	-18.5	-18.5	0.42 (1)	10.00
O-N	0/1992	-18.5	-18.5	0.42 (1)	10.00
N-M	0/1992	-18.5	-18.5	0.42 (1)	10.00
M-L	0/1992	-18.5	-18.5	0.42 (1)	10.00
L-K	0/1062	-18.5	-18.5	0.29 (4)	10.00
K-J	0/0	-18.5	-18.5	0.17 (4)	10.00
J-I	0/0	-96.5	-96.5	0.16 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

ALLOWABLE DEFL.(LL)= L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.22")

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=0.61/1.00 (B-C:1), BC=0.42/1.00 (N-P:1),
WB=0.55/1.00 (F-L:1), SS=0.29/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT'20	618	354	1667	788	1987 1656

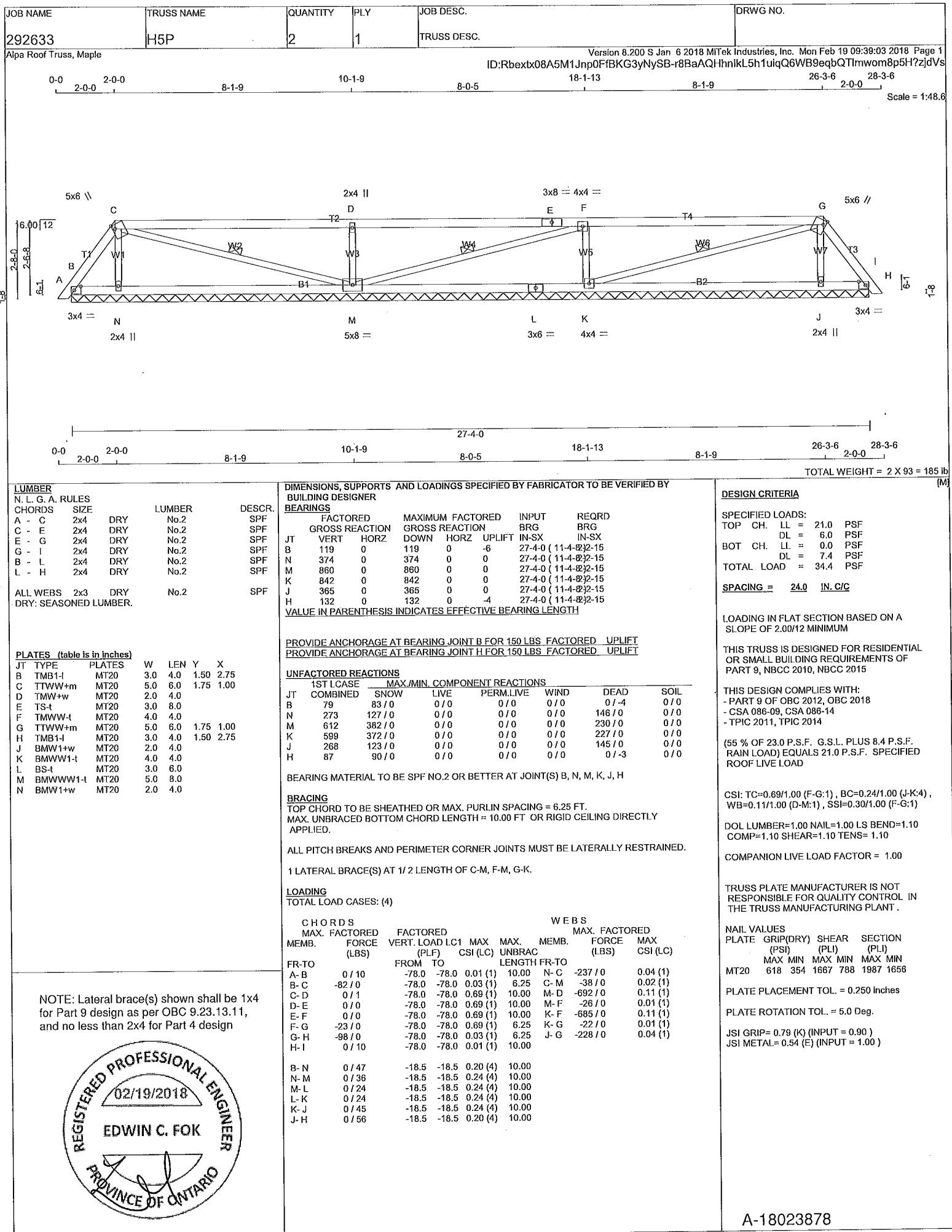
PLATE PLACEMENT TOL. = 0.250 inches

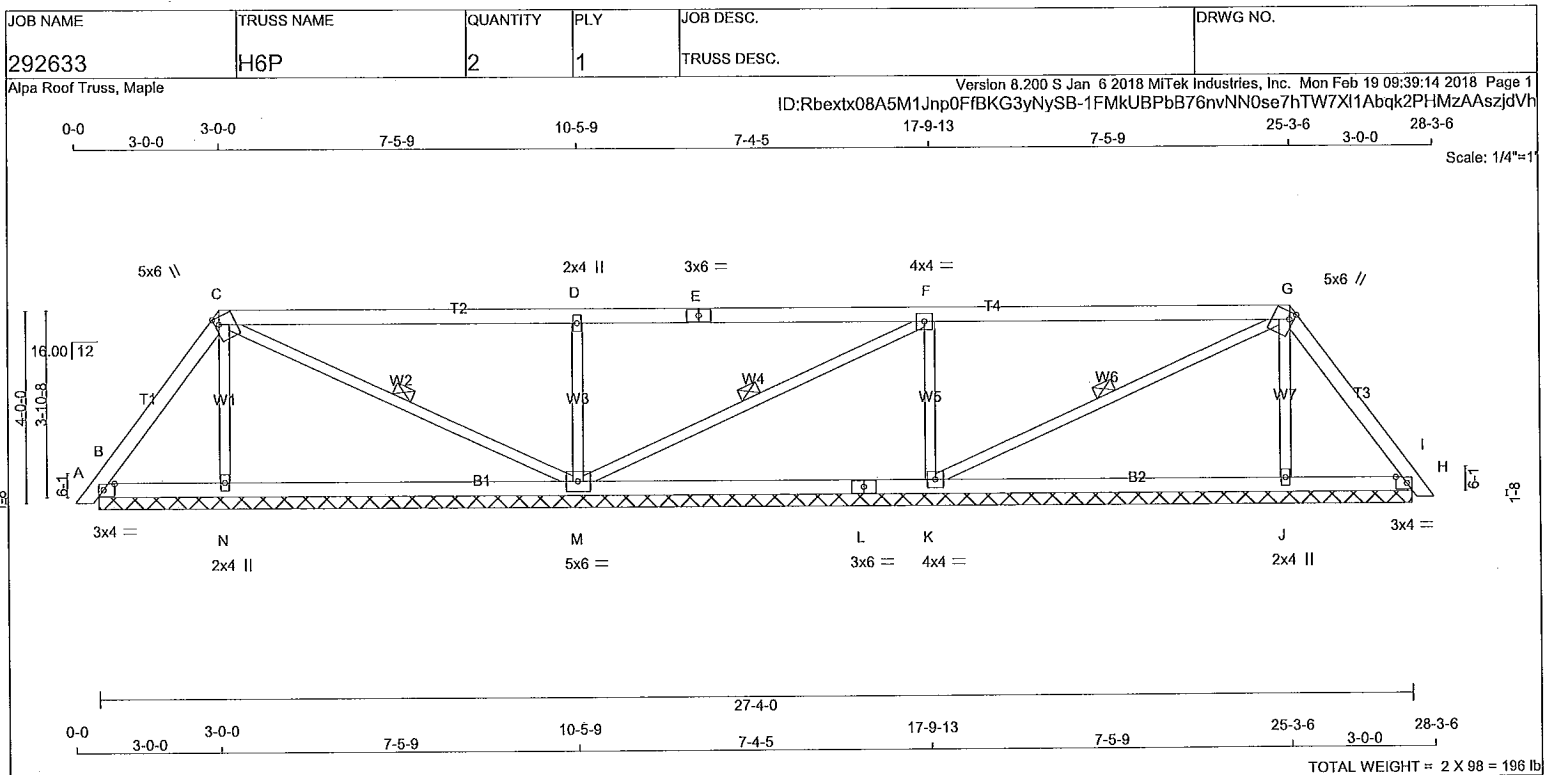
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90)
JSI METAL= 0.61 (O) (INPUT = 1.00)

A-18023877

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

G - I

2x4

DRY

No.2

SPF

B - L

2x4

DRY

No.2

SPF

L - H

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

B

TMB1-I

MT20

3.0

4.0

1.50

2.75

C

TTWW+m

MT20

5.0

6.0

1.75

1.00

D

TMW+w

MT20

2.0

4.0

E

TS-t

MT20

3.0

6.0

F

TMWW-t

MT20

4.0

4.0

G

TTWW+m

MT20

5.0

6.0

1.75

1.00

H

TMB1-I

MT20

3.0

4.0

1.50

2.75

J

BMW1+w

MT20

2.0

4.0

K

BMWW1-t

MT20

4.0

4.0

L

BS-t

MT20

3.0

6.0

M

BMWW1-t

MT20

5.0

6.0

N

BMW1+w

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

REGISTERED PROFESSIONAL ENGINEER

02/19/2018

EDWIN C. FOK

PROVING OF ONTARIO

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

BEARINGS

FACTORED

GROSS REACTION

MAXIMUM FACTORED

GROSS REACTION

INPUT

REQRD

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

B

200

0

200

0

0

27-4-0 (11-4-8)0-10

N

341

0

341

0

0

27-4-0 (11-4-8)0-10

M

833

0

833

0

0

27-4-0 (11-4-8)0-10

K

759

0

759

0

0

27-4-0 (11-4-8)0-10

J

331

0

331

0

0

27-4-0 (11-4-8)0-10

H

227

0

227

0

0

27-4-0 (11-4-8)0-10

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN

COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

B

138

108 / 0

0 / 0

0 / 0

0 / 0

31 / 0

0 / 0

N

248

122 / 0

0 / 0

0 / 0

0 / 0

126 / 0

0 / 0

M

592

373 / 0

0 / 0

0 / 0

0 / 0

218 / 0

0 / 0

K

541

334 / 0

0 / 0

0 / 0

0 / 0

207 / 0

0 / 0

J

242

117 / 0

0 / 0

0 / 0

0 / 0

124 / 0

0 / 0

H

157

122 / 0

0 / 0

0 / 0

0 / 0

35 / 0

0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

MEMB.

FORCE (LBS)

VERT. LOAD (PLF)

CS1 (LC)

UNBRAC

LENGTH

FR-TO

FORCE (LBS)

MAX CS1 (LC)

A-B

0 / 10

-78.0

-78.0

0.01 (1)

10.00

N-C

-227 / 0

0.05 (1)

B-C

-91 / 0

-78.0

-78.0

0.08 (1)

6.25

C-M

-71 / 0

0.03 (1)

C-D

0 / 19

-78.0

-78.0

0.59 (1)

10.00

M-D

-835 / 0

0.15 (1)

D-E

0 / 18

-78.0

-78.0

0.59 (1)

10.00

M-F

-63 / 0

0.03 (1)

E-F

0 / 18

-78.0

-78.0

0.59 (1)

10.00

K-F

-607 / 0

0.14 (1)

F-G

-38 / 0

-78.0

-78.0

0.59 (1)

6.25

K-G

-30 / 0

0.01 (1)

G-H

-125 / 0

-78.0

-78.0

0.09 (1)

6.25

J-G

-218 / 0

0.05 (1)

H-I

0 / 10

-78.0

-78.0

0.01 (1)

10.00

B-N

0 / 53

-18.5

-18.5

0.15 (4)

10.00

N-M

0 / 46

-18.5

-18.5

0.21 (4)

10.00

M-L

0 / 39

-18.5

-18.5

0.21 (4)

10.00

L-K

0 / 39

-18.5

-18.5

0.21 (4)

10.00

K-J

0 / 66

-18.5

-18.5

0.21 (4)

10.00

J-H

0 / 73

-18.5

-18.5

0.15 (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=0.59/1.00 (D-F:1), BC=0.21/1.00 (J-K:4), WB=0.15/1.00 (D-M:1), SSI=0.27/1.00 (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

MAX MIN

MT20

618

354

1667

788

1987

1656

PLATE PLACEMENT TOL. = 0.250 inches

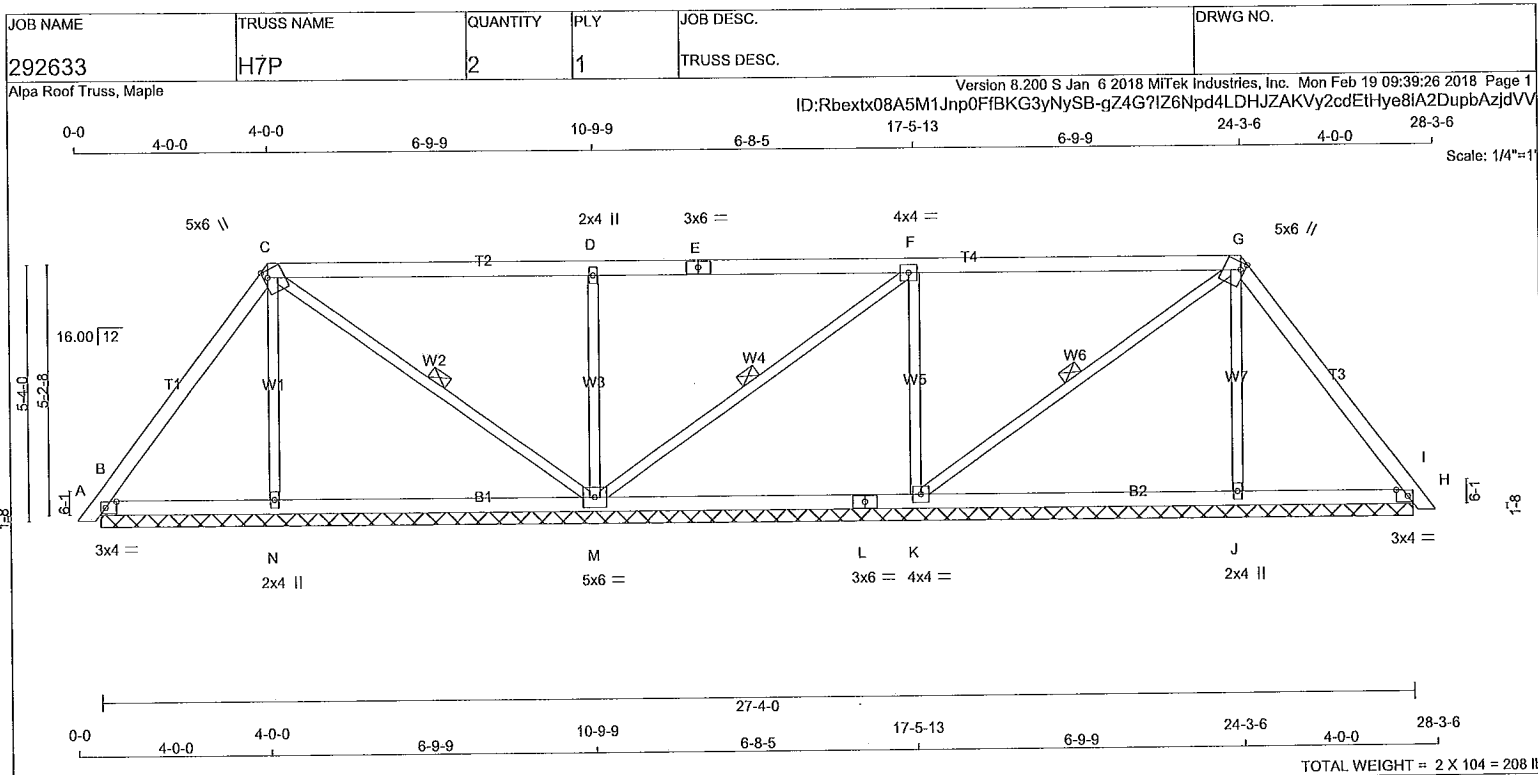
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (M) (INPUT = 0.90)

JSI METAL= 0.14 (E) (INPUT = 1.00)

A-18023879

A-18023879



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
G - I	2x4	DRY	No.2	SPF
B - L	2x4	DRY	No.2	SPF
L - H	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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		DOWN		BRG		BRG	
		VERT	HORZ	DOWN	HORZ	UP	IN-SX	IN-SX	
JT									
B	258	0	258	0	0	27-4-0	(11-4-8)	11-3	
N	321	0	321	0	0	27-4-0	(11-4-8)	11-3	
M	831	0	831	0	0	27-4-0	(11-4-8)	11-3	
K	665	0	665	0	0	27-4-0	(11-4-8)	11-3	
J	315	0	315	0	0	27-4-0	(11-4-8)	11-3	
H	303	0	303	0	0	27-4-0	(11-4-8)	11-3	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
		SNOW		LIVE		PERM.LIVE		WIND	
		DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP
JT	COMBINED								
B	180	129 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	52 / 0	0 / 0
N	234	115 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	119 / 0	0 / 0
M	589	379 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	209 / 0	0 / 0
K	474	290 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0
J	230	112 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
H	211	153 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0

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

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

LOADING

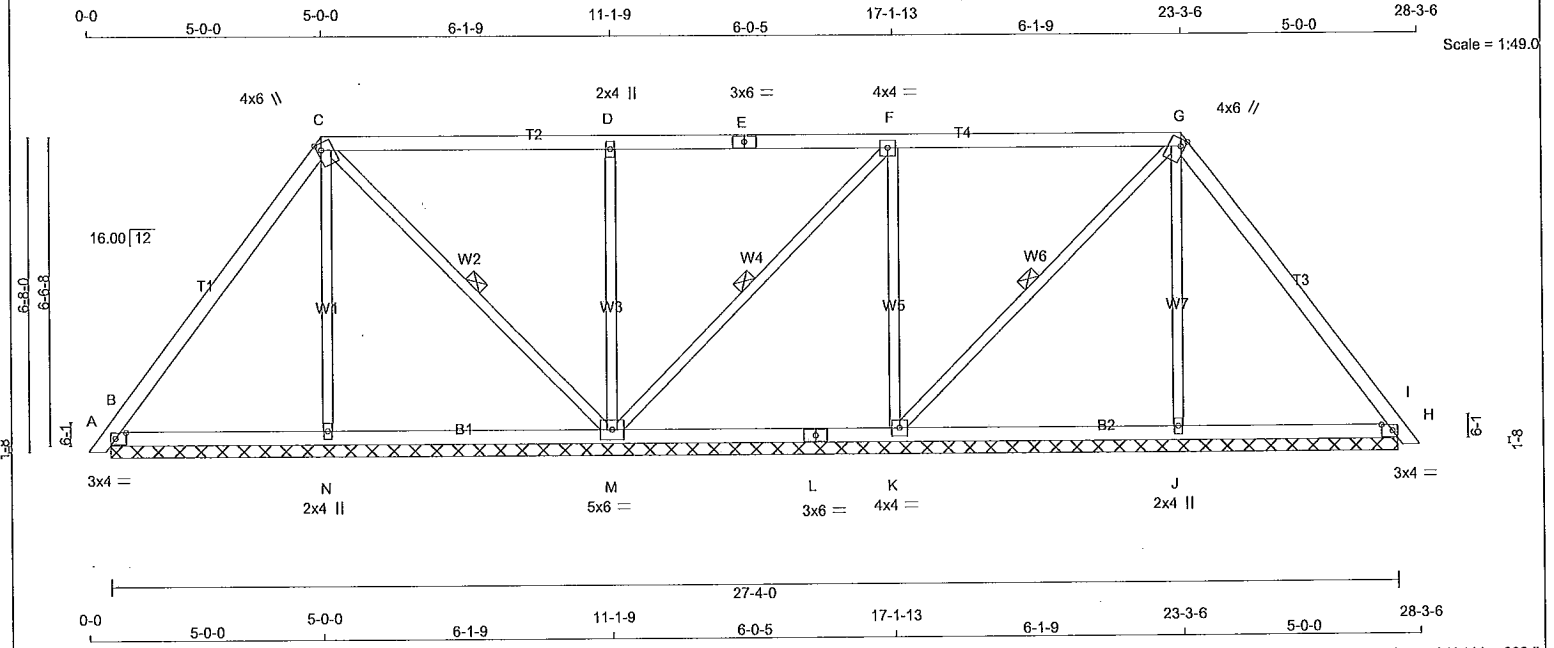
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE	VERT. LOAD	LC1	MAX.	MEMB.	FORCE	MAX.
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	N-C	-213 / 0
B-C	-92 / 0	-78.0	-78.0	0.17 (1)	6.25	C-M	-107 / 0
C-D	0 / 38	-78.0	-78.0	0.49 (1)	10.00	M-D	-578 / 0
D-E	0 / 38	-78.0	-78.0	0.49 (1)	10.00	M-F	-107 / 0
E-F	0 / 38	-78.0	-78.0	0.49 (1)	10.00	K-F	-514 / 0
F-G	-48 / 0	-78.0	-78.0	0.48 (1)	6.25	K-G	-41 / 0
G-H	-147 / 0	-78.0	-78.0	0.17 (1)	6.25	J-G	-207 / 0
H-I	0 / 10	-78.0	-78.0	0.01 (1)	10.00		
B-N	0 / 54	-18.5	-18.5	0.13 (4)	10.00		
N-M	0 / 49	-18.5	-18.5	0.17 (4)	10.00		
M-L	0 / 48	-18.5	-18.5	0.17 (4)	10.00		
L-K	0 / 48	-18.5	-18.5	0.17 (4)	10.00		
K-J	0 / 82	-18.5	-18.5	0.17 (4)	10.00		
J-H	0 / 86	-18.5	-18.5	0.13 (4)	10.00		

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H8P	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FtBKg3yNySB-rgERi3h0nB0WAvdRiz14vMZWrJ14j5MoaR2uU1zjdVK



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
G - I	2x4	DRY	No.2	SPF
B - L	2x4	DRY	No.2	SPF
L - H	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
B	306	0	306	0	0	27-4-0 (12-4-0)	11-10		
N	308	0	308	0	0	27-4-0 (12-4-0)	11-10		
M	834	0	834	0	0	27-4-0 (12-4-0)	11-10		
K	572	0	572	0	0	27-4-0 (12-4-0)	11-10		
J	307	0	307	0	0	27-4-0 (12-4-0)	11-10		
H	365	0	365	0	0	27-4-0 (12-4-0)	11-10		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	215	148 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
N	225	107 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
M	590	389 / 0	0 / 0	0 / 0	0 / 0	201 / 0	0 / 0
K	408	248 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
J	224	106 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
H	256	179 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 10	-78.0	-78.0 0.01 (1)	10.00	N-C	-199 / 0	0.14 (1)
B-C	-87 / 0	-78.0	-78.0 0.27 (1)	6.25	C-M	-139 / 0	0.07 (1)
C-D	0 / 50	-78.0	-78.0 0.40 (1)	10.00	M-D	-521 / 0	0.36 (1)
D-E	0 / 49	-78.0	-78.0 0.40 (1)	10.00	M-F	-142 / 0	0.07 (1)
E-F	0 / 49	-78.0	-78.0 0.40 (1)	10.00	K-F	-418 / 0	0.29 (1)
F-G	-49 / 0	-78.0	-78.0 0.39 (1)	6.25	K-G	-59 / 0	0.03 (1)
G-H	-160 / 0	-78.0	-78.0 0.28 (1)	6.25	J-G	-198 / 0	0.14 (1)
H-I	0 / 10	-78.0	-78.0 0.01 (1)	10.00			
B-N	0 / 52	-18.5	-18.5 0.13 (4)	10.00			
N-M	0 / 48	-18.5	-18.5 0.14 (4)	10.00			
M-L	0 / 50	-18.5	-18.5 0.14 (4)	10.00			
L-K	0 / 50	-18.5	-18.5 0.14 (4)	10.00			
K-J	0 / 91	-18.5	-18.5 0.14 (4)	10.00			
J-H	0 / 94	-18.5	-18.5 0.13 (4)	10.00			

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 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=0.40/1.00 (D-F:1), BC=0.14/1.00 (J-K:4), WB=0.36/1.00 (D-M:1), SSI=0.22/1.00 (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.

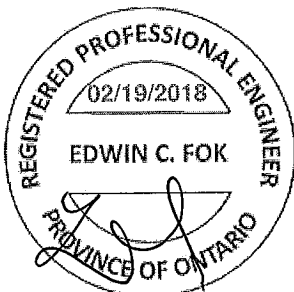
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

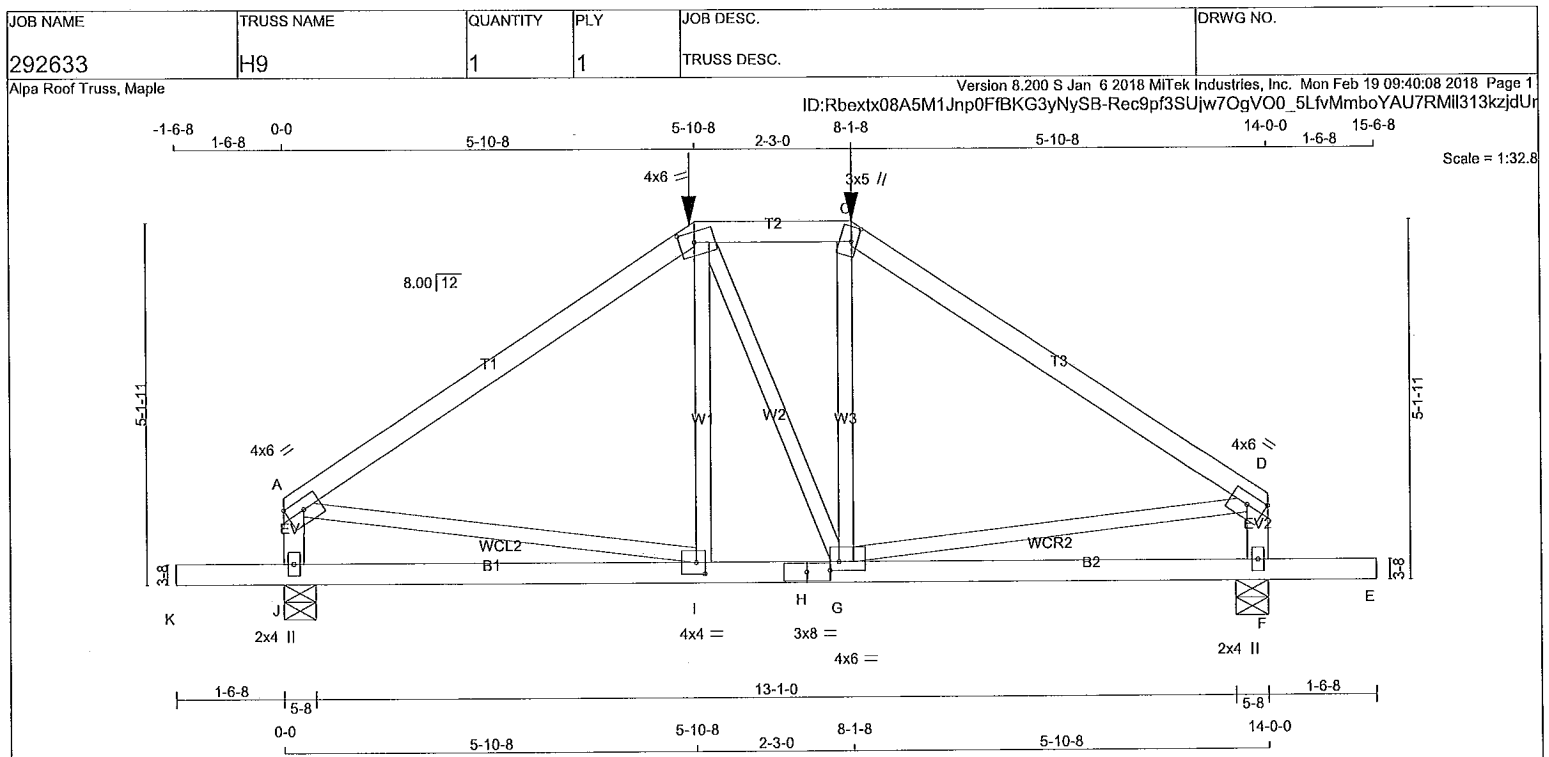
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.64 (G) (INPUT = 0.90)
JSI METAL=0.19 (E) (INPUT = 1.00)

A-18023881





LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
J - A	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
H - 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-I	MT20	4.0	6.0 1.75 Edge
B	TTWW-m	MT20	4.0	6.0 1.75 2.50
C	TTW+m	MT20	3.0	5.0 2.50 1.00
D	TMVW-I	MT20	4.0	6.0 1.75 Edge
F	BMV1+p	MT20	2.0	4.0
G	BMVWW-I	MT20	4.0	6.0 1.50 1.50
H	BS-I	MT20	3.0	8.0
I	BMVW-I	MT20	4.0	4.0 2.00 1.50
J	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) 334.0 lbs FACTORED DOWN AT 8-1-8, AND 334.0 lbs FACTORED DOWN AT 5-10-8 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

	FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
	GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
J	1368	0	1368	0	0	5-8	2-0	
F	1368	0	1368	0	0	5-8	2-0	

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	978	584 / 0	0 / 0	0 / 0	0 / 0	394 / 0	0 / 0
F	978	584 / 0	0 / 0	0 / 0	0 / 0	394 / 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 = 4.77 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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 CSI (LC)	
FR-TO		FROM TO		UNBRAC LENGTH FR-TO			
A-B	-1318 / 0	-78.0 -78.0	0.62 (1)	4.77	I-B	-5 / 117	0.04 (4)
B-C	-1097 / 0	-153.5 -153.5	0.16 (1)	5.82	B-G	0 / 4	0.00 (4)
C-D	-1320 / 0	-78.0 -78.0	0.62 (1)	4.77	G-C	-2 / 121	0.05 (4)
J-A	-1128 / 0	0.0 0.0	0.13 (1)	7.45	A-I	0 / 1108	0.27 (1)
F-D	-1127 / 0	0.0 0.0	0.13 (1)	7.45	G-D	0 / 1109	0.27 (1)
K-J	0 / 0	-96.5 -96.5	0.17 (1)	10.00			
J-I	0 / 0	-36.4 -36.4	0.29 (4)	10.00			
I-H	0 / 1096	-36.4 -36.4	0.40 (4)	10.00			
H-G	0 / 1096	-36.4 -36.4	0.40 (4)	10.00			
G-F	0 / 0	-36.4 -36.4	0.30 (4)	10.00			
F-E	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
C	8-1-8	-334	-334	—	FRONT	VERT	TOTAL

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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 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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

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 (C-D:1), 8C=0.40/1.00 (G-I:4), WB=0.27/1.00 (D-G:1), SS=0.19/1.00 (F-G:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

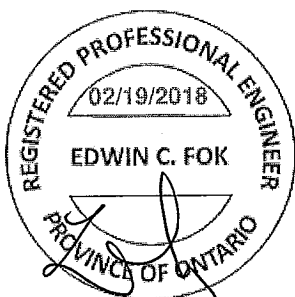
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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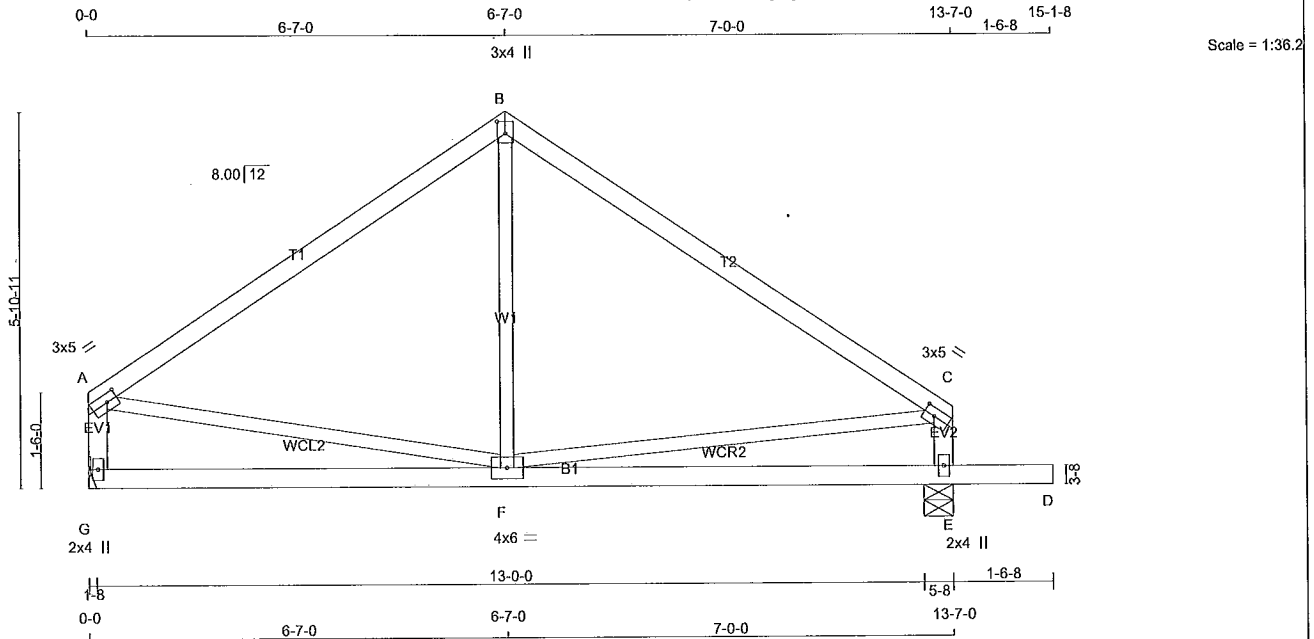
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H10	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Mon Feb 19 09:40:16 2018 Page 1
ID:Rbextx08A5M1Jnp0FfBKG3yNySB-CB5AU09UbAw_Lv6wUgED_bhCY1KWLnDXy??SLGzjdUJ



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	1650F 1.5E	SPF	
B - C	2x4	DRY	2100F 1.8E	SPF	
G - A	2x4	DRY	No.2	SPF	
E - C	2x4	DRY	No.2	SPF	
G - D	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-I	MT20	3.0	5.0	1.50	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-I	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-I	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
G	655	0	655	0
E	804	0	804	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	467	285 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
E	573	350 / 0	0 / 0	0 / 0	0 / 0	223 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 MAX (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	-502 / 0	-78.0 -78.0 0.37 (1)	F-B	0 / 121
B-C	-502 / 0	-78.0 -78.0 0.32 (1)	A-F	0 / 424
G-A	-610 / 0	0.0 0.0 0.06 (1)	F-C	0 / 421
E-C	-605 / 0	0.0 0.0 0.06 (1)		
G-F	0 / 0	-18.5 -18.5 0.25 (4)		
F-E	0 / 0	-18.5 -18.5 0.25 (4)		
E-D	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

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

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

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

ALLOWABLE DEFL.(LL)= 1/360 (0.45")
CALCULATED VERT. DEFL.(LL)= 1/999 (0.01")
ALLOWABLE DEFL.(TL)= 1/360 (0.45")
CALCULATED VERT. DEFL.(TL)= 1/999 (0.06")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(LL)= 1/999 (0.01")
ALLOWABLE DEFL.(TL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(TL)= 1/999 (0.01")

CSI: TC=0.37/1.00 (A-B:1), BC=0.25/1.00 (F-G:4), WB=0.10/1.00 (A-F:1), SSI=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

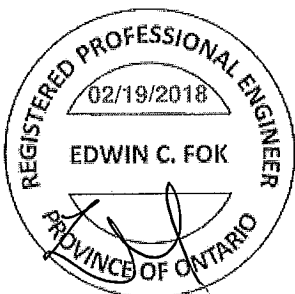
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

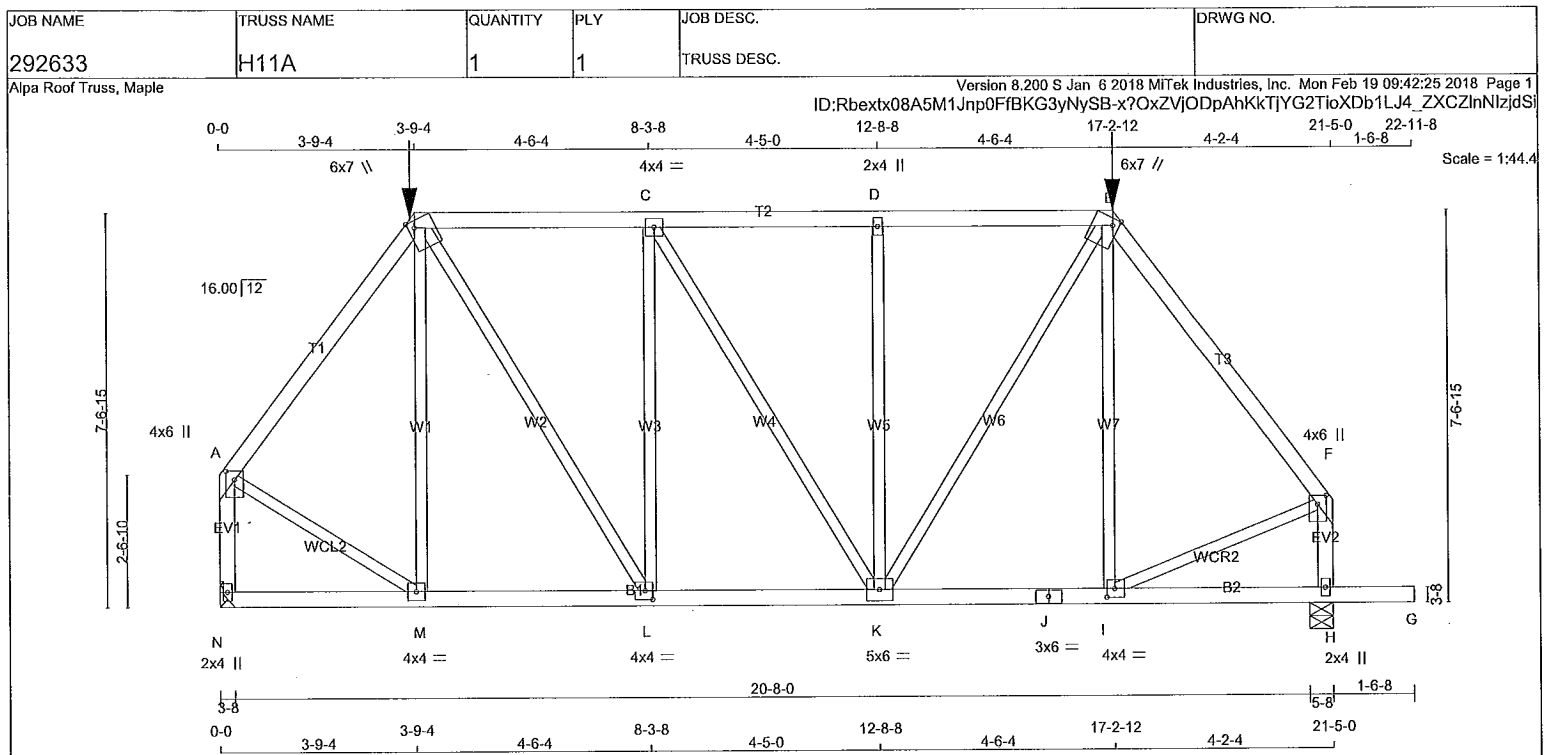
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.58 (F) (INPUT = 0.90)
JSI METAL= 0.20 (C) (INPUT = 1.00)

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



A-18023883



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
N - A	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
N - J	2x4	DRY	No.2	SPF
J - G	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	TMWW-t	MT20	4.0	4.0
D	TMW+w	MT20	2.0	4.0
E	TTWW+m	MT20	6.0	7.0 Edge 1.50
F	TMVW+p	MT20	4.0	6.0 2.00 2.00
H	BMV1+p	MT20	2.0	4.0
I	BMWW-t	MT20	4.0	4.0 2.00 1.75
J	BS-t	MT20	3.0	6.0
K	BMWWW-t	MT20	5.0	6.0
L	BMWW-t	MT20	4.0	4.0 2.00 1.75
M	BMWW-t	MT20	4.0	4.0
N	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) 146.2 lbs FACTORED DOWN AT 17-2-12, AND 131.7 lbs FACTORED DOWN AT 3-9-4 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.2.3.13.11, and no less than 2x4 for Part 4 design

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
N	1571	0	1571	0	0
H	1712	0	1712	0	0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
N	1121	681 / 0	0 / 0	0 / 0	0 / 0	440 / 0
H	1222	742 / 0	0 / 0	0 / 0	0 / 0	480 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 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		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	-1217 / 0	-78.0 -78.0 0.26 (1)	5.49	M-B	-271 / 0
B-C	-1181 / 0	-120.6 -120.6 0.39 (1)	5.32	B-L	0 / 867
C-D	-1199 / 0	-120.6 -120.6 0.39 (1)	5.29	L-C	-609 / 0
D-E	-1198 / 0	-120.6 -120.6 0.38 (1)	5.31	C-K	0 / 34
E-F	-1318 / 0	-78.0 -78.0 0.34 (1)	5.25	K-D	-575 / 0
N-A	-1529 / 0	0.0 0.0 0.22 (1)	6.61	K-E	0 / 782
H-F	-1516 / 0	0.0 0.0 0.19 (1)	6.64	I-E	-150 / 44
				A-M	0 / 831
				I-F	0 / 840
N-M	0 / 0	-28.6 -28.6 0.13 (4)	10.00		
M-L	0 / 722	-28.6 -28.6 0.20 (1)	10.00		
L-K	0 / 1181	-28.6 -28.6 0.27 (1)	10.00		
K-J	0 / 785	-28.6 -28.6 0.23 (4)	10.00		
J-I	0 / 785	-28.6 -28.6 0.23 (4)	10.00		
I-H	0 / 0	-28.6 -28.6 0.14 (4)	10.00		
H-G	0 / 0	-96.5 -96.5 0.17 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	3-9-4	-132	-132	---	FRONT	VERT	TOTAL
E	17-2-12	-146	-146	---	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
LEFT SETBACK = 3-9-4
RIGHT SETBACK = 4-2-4
END SETBACK = 4-2-4
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.71")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.71")
CALCULATED VERT. DEFL.(TL)= L/999 (0.07")

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")

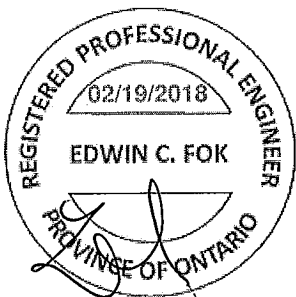
CSI: TC=0.39/1.00 (B-C:1), BC=0.27/1.00 (K-L:1), WB=0.65/1.00 (C-L:1), SSI=0.28/1.00 (B-C:1)

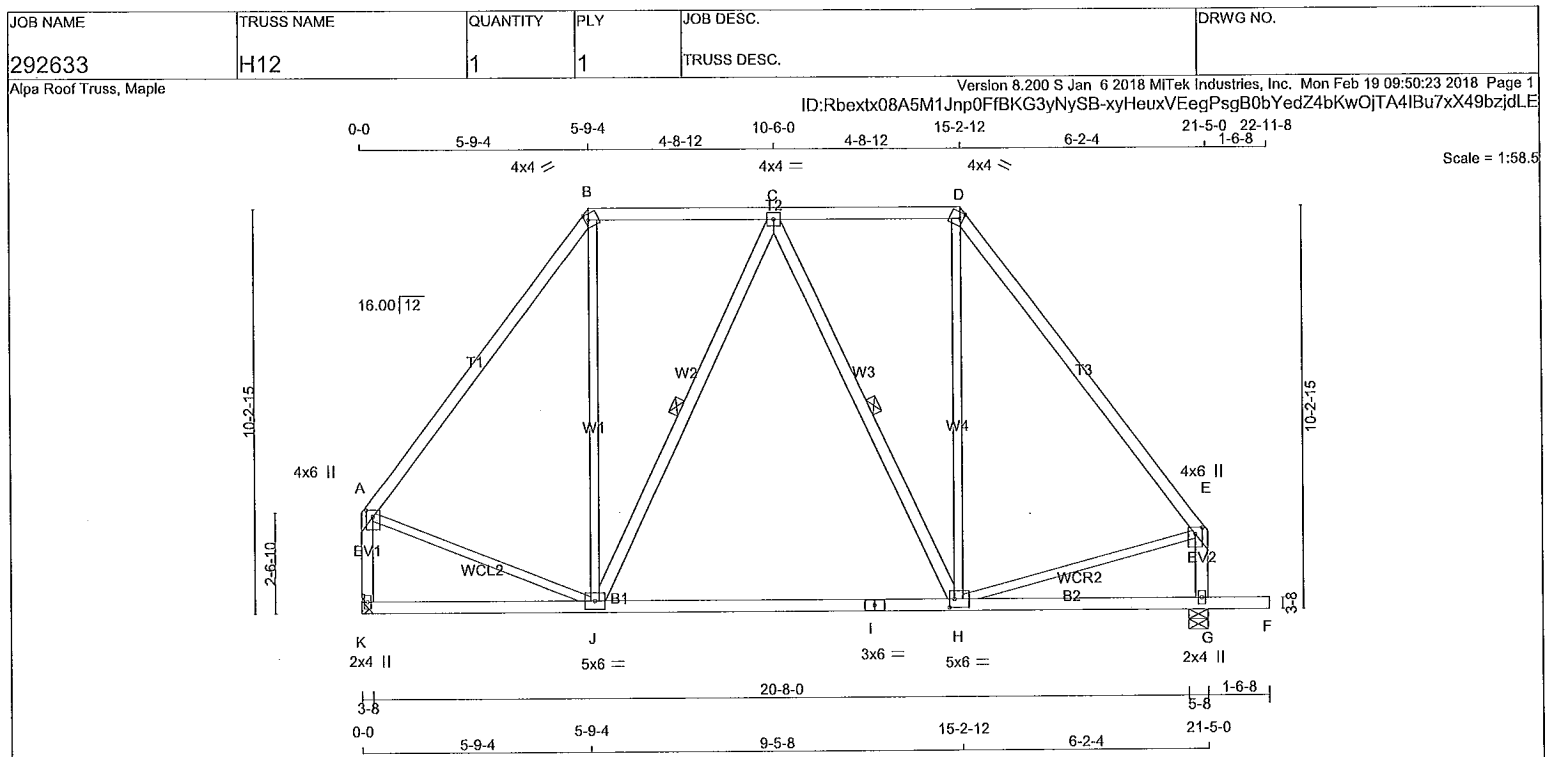
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

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

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





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 - E	2x4	DRY	2100F 1.8E	SPF							
K - A	2x4	DRY	No.2	SPF							
G - E	2x4	DRY	No.2	SPF							
K - I	2x4	DRY	No.2	SPF							
I - F	2x4	DRY	No.2	SPF							

ALL WEBS EXCEPT		2x3		DRY		No.2		SPF		DESCR.	
J - C	2x4	DRY	No.2	SPF							
C - H	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	TTW-m	MT20	4.0	4.0	1.75	1.00							
C	MTWV-l	MT20	4.0	4.0									
D	TTW-m	MT20	4.0	4.0	1.75	1.00							
E	TMVW+p	MT20	4.0	6.0	2.00	2.00							
G	BMV1+p	MT20	2.0	4.0									
H	BMVWW-t	MT20	5.0	6.0	2.50	1.50							
I	BS-t	MT20	3.0	6.0									
J	BMVWW-t	MT20	5.0	6.0									
K	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	1033	0	1033	0	0	0	0	0
K	HORZ	0	0	0	0	0	0	0	0
G	UPLIFT	0	0	0	0	0	0	0	0

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	737	450 / 0	0 / 0	0 / 0	287 / 0	0 / 0	0 / 0	0 / 0
K	SNOW	843	514 / 0	0 / 0	0 / 0	328 / 0	0 / 0	0 / 0	0 / 0
G	LIVE								

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-J, C-H.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MEMB.		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX LC1 (LC)		MAX. UNBRACED LENGTH		WEBS		MEMB.		MAX. FACTORED FORCE (LBS)		MAX LC1 (LC)	
FR-TO												FR-TO							
A-B	-756 / 0			-78.0	-78.0	0.36 (1)	6.25	J-B	0 / 237	0.06 (4)									
B-C	-454 / 0			-78.0	-78.0	0.22 (1)	6.25	J-C	-270 / 0	0.18 (1)									
C-D	-473 / 0			-78.0	-78.0	0.22 (1)	6.25	C-H	-224 / 0	0.15 (1)									
D-E	-788 / 0			-78.0	-78.0	0.27 (1)	6.25	H-D	0 / 246	0.06 (4)									
K-A	-998 / 0			0.0	0.0	0.14 (1)	7.81	A-J	0 / 482	0.11 (1)									
G-E	-994 / 0			0.0	0.0	0.11 (1)	7.81	H-E	0 / 486	0.11 (1)									

K-J	0 / 0	-18.5	-18.5	0.27 (4)	10.00															
J-I	0 / 568	-18.5	-18.5	0.33 (4)	10.00															
I-H	0 / 568	-18.5	-18.5	0.33 (4)	10.00															
H-G	0 / 0	-18.5	-18.5	0.28 (4)	10.00															
G-F	0 / 0	-96.5	-96.5	0.16 (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 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 (0.71")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.71")
CALCULATED VERT. DEFL.(TL)= L/999 (0.12")

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=0.36/1.00 (A-B:1), BC=0.33/1.00 (H-J:4), WB=0.18/1.00 (C-J:1), SSI=0.18/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

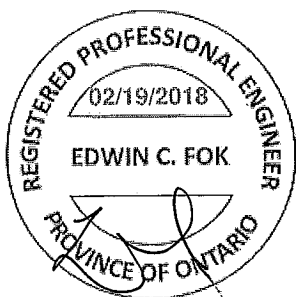
NAIL VALUES		PLATE GRIP(DRY)		SHEAR (PSI)		SECTION (PLI)	
		MAX	MIN	MAX	MIN	MAX	MIN
MT20		618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (J) (INPUT = 0.90)
JSI METAL= 0.31 (E) (INPUT = 1.00)

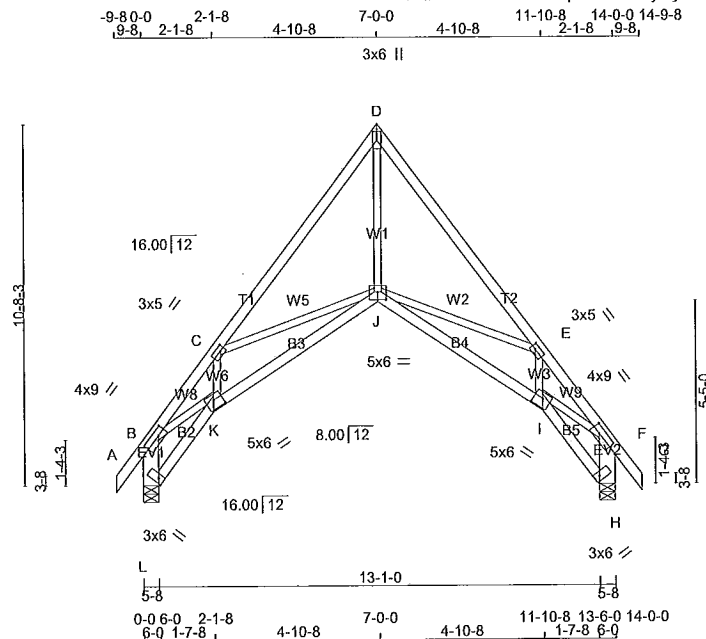
A-18023885



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H13T	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-64RoBle722nlUtMihSJ81vHrT8FB9GBVf8i92Szjdl.3



TOTAL WEIGHT = 2 X 74 = 149 lb

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
L - B	2x6	DRY	No.2	SPF
H - F	2x6	DRY	No.2	SPF
L - K	2x4	DRY	No.2	SPF
K - J	2x4	DRY	No.2	SPF
J - I	2x4	DRY	No.2	SPF
I - H	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	9.0	2.00	3.00
C	TMVW-I	MT20	3.0	5.0	1.50	1.50
D	TTW+p	MT20	3.0	6.0		
E	TMVW-I	MT20	3.0	5.0	1.50	1.50
F	TMVW-I	MT20	4.0	9.0	2.00	3.00
H	BVM1+I	MT20	3.0	6.0	Edge	
I	BBVW-I	MT20	5.0	6.0	3.00	3.00
J	BBVWV-p	MT20	5.0	6.0	2.75	3.00
K	BBVW-I	MT20	5.0	6.0	3.00	3.00
L	BVM1+I	MT20	3.0	6.0	Edge	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
	VERT	HORZ	DOWN	HORZ
JT	746	0	5-8	1-8
L	746	0	5-8	1-8
H	746	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	530	332 / 0	0 / 0	0 / 0	0 / 0	198 / 0	0 / 0
L	530	332 / 0	0 / 0	0 / 0	0 / 0	198 / 0	0 / 0
H	530	332 / 0	0 / 0	0 / 0	0 / 0	198 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.37 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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-78.0 -78.0	0.05 (1)	J-D	0 / 987	0.22 (1)	
B-C	-1380 / 0	-78.0 -78.0	0.17 (1)	J-E	-388 / 0	0.18 (1)	
C-D	-836 / 0	-78.0 -78.0	0.24 (1)	I-E	0 / 55	0.02 (4)	
D-E	-836 / 0	-78.0 -78.0	0.24 (1)	C-J	-388 / 0	0.18 (1)	
E-F	-1381 / 0	-78.0 -78.0	0.17 (1)	K-C	0 / 55	0.02 (4)	
F-G	0 / 28	-78.0 -78.0	0.05 (1)	B-K	0 / 1000	0.23 (1)	
L-B	-726 / 0	0.0 0.0	0.05 (1)	I-F	0 / 1000	0.23 (1)	
H-F	-726 / 0	0.0 0.0	0.05 (1)				
L-K	0 / 0	-18.5 -18.5	0.02 (4)				
K-J	0 / 1028	-18.5 -18.5	0.24 (1)				
J-I	0 / 1028	-18.5 -18.5	0.24 (1)				
I-H	0 / 0	-18.5 -18.5	0.02 (4)				

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

(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 (0.47")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.24/1.00 (D-E:1), BC=0.24/1.00 (I-J:1), WB=0.23/1.00 (F-I:1), SSI=0.10/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

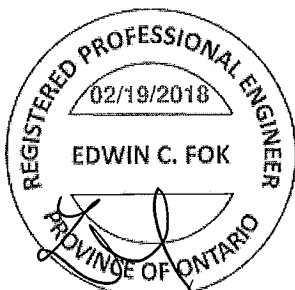
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.25 (B) (INPUT = 1.00)

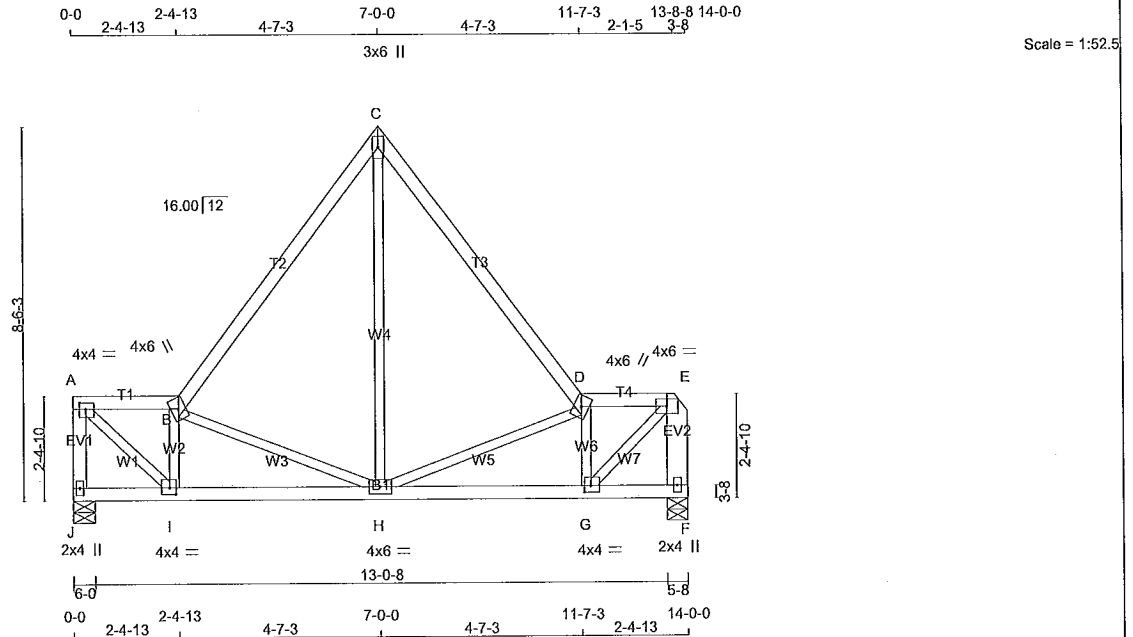
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H14A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 66 lb

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	
F - E	2x6	DRY	No.2	SPF	
J - F	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TTWW-I	MT20	4.0	4.0	1.75	1.75
B	TTWW+m	MT20	4.0	6.0		
C	TTW+p	MT20	3.0	6.0		
D	TTWW+m	MT20	4.0	6.0		
E	TTWW-I	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-I	MT20	4.0	4.0	1.75	1.75
H	BMWWW-I	MT20	4.0	6.0		
I	BMWW-I	MT20	4.0	4.0	1.75	1.75
J	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
J	921	0	0	6-0
F	921	0	0	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	657	401 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0
F	657	401 / 0	0 / 0	0 / 0	0 / 0	256 / 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 = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

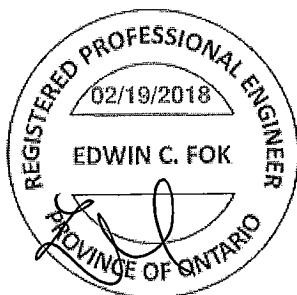
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

FR-TO	CHORDS				WEBS			
	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	UNBRACED LENGTH
J-A	-880 / 0	0.0	0.0	0.12 (1)	7.81	A-I	0 / 1194	0.30 (1)
A-B	-883 / 0	-78.0	-78.0	0.09 (1)	6.25	I-B	-612 / 0	0.10 (1)
B-C	-682 / 0	-78.0	-78.0	0.35 (1)	6.25	B-H	-550 / 0	0.24 (1)
C-D	-682 / 0	-78.0	-78.0	0.35 (1)	6.25	H-C	0 / 729	0.18 (1)
D-E	-883 / 0	-78.0	-78.0	0.09 (1)	6.25	H-D	-551 / 0	0.24 (1)
F-E	-880 / 0	0.0	0.0	0.08 (1)	7.81	G-D	-612 / 0	0.10 (1)
						G-E	0 / 1194	0.30 (1)
J-I	0 / 0	-53.7	-53.7	0.08 (4)	10.00			
I-H	0 / 914	-53.7	-53.7	0.33 (1)	10.00			
H-G	0 / 914	-53.7	-53.7	0.33 (1)	10.00			
G-F	0 / 0	-53.7	-53.7	0.08 (4)	10.00			

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



DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 3-5-8
END DISTANCE = 14-0-0
END SPAN CARRIED = 3-5-8
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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.35/1.00 (B-C:1), BC=0.33/1.00 (G-H:1), WB=0.30/1.00 (E-G:1), SSI=0.12/1.00 (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

AUTOSOLVE LEFT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.39 (E) (INPUT = 1.00)

A-18023887

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H15T	2	1	TRUSS DESC.	

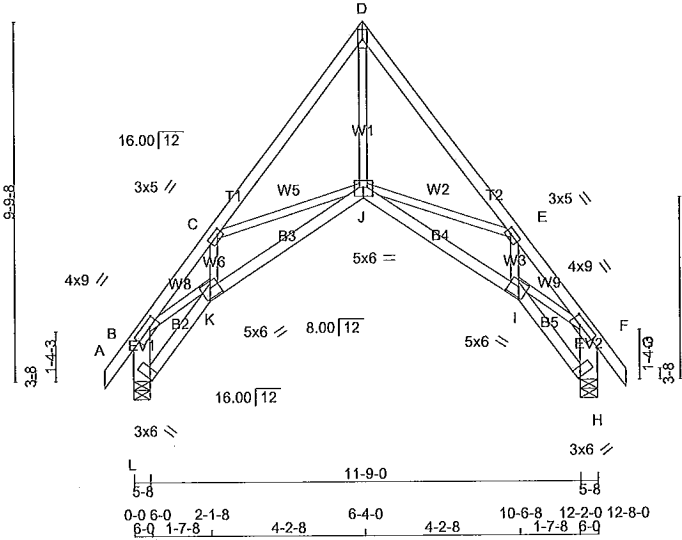
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 09:50:59 2018 Page 1
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-9-8 0-0 2-1-8 4-2-8 6-4-0 4-2-8 10-6-8 12-8-0 13-5-8
9-8 2-1-8 4-2-8 2-1-8 9-8

3x6 ||

Scale = 1:62.9



TOTAL WEIGHT = 2 X 68 = 137 lb

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

DRY: SEASONED LUMBER.

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	HORZ	DOWN	HORZ
L	682	0	682	0
H	682	0	682	0

UNFACTORED REACTIONS

1ST LCASE	SNOW	MAX/MIN. COMPONENT REACTIONS	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	485	304 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0
L	485	304 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.71 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	0 / 28	-78.0 -78.0 0.05 (1)	J-D	0 / 900
B-C	-1208 / 0	-78.0 -78.0 0.12 (1)	J-E	-316 / 0
C-D	-752 / 0	-78.0 -78.0 0.18 (1)	I-E	0 / 51
D-E	-752 / 0	-78.0 -78.0 0.18 (1)	C-J	-316 / 0
E-F	-1208 / 0	-78.0 -78.0 0.12 (1)	K-C	0 / 51
F-G	0 / 28	-78.0 -78.0 0.05 (1)	B-K	0 / 869
L-B	-662 / 0	0.0 0.0 0.05 (1)	I-F	0 / 869
H-F	-662 / 0	0.0 0.0 0.05 (1)		
L-K	0 / 0	-18.5 -18.5 0.02 (4)		
K-J	0 / 893	-18.5 -18.5 0.20 (1)		
J-I	0 / 893	-18.5 -18.5 0.20 (1)		
I-H	0 / 0	-18.5 -18.5 0.02 (4)		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.18/1.00 (D-E:1), BC=0.20/1.00 (I-J:1), WB=0.20/1.00 (D-J:1), SSI=0.09/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.67 (J) (INPUT = 0.90)
JSI METAL= 0.22 (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

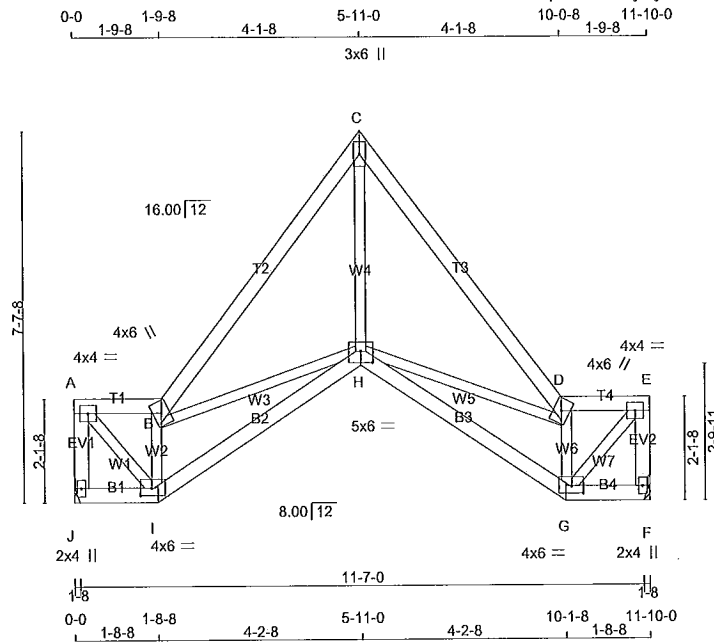


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H16T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 56 lb

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		
F - E	2x4 DRY	No.2	SPF		
J - I	2x4 DRY	No.2	SPF		
I - H	2x4 DRY	No.2	SPF		
H - G	2x4 DRY	No.2	SPF		
G - F	2x4 DRY	No.2	SPF		
ALL WEBS	2x3 DRY	No.2	SPF		
DRY: SEASONED LUMBER.					

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT 8RG	REQRD 8RG
JT	VERT	HORZ	DOWN	HORZ
J	571	0	571	0
F	571	0	571	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED						
J	407	248 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0
F	407	248 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO							FR-TO			
J-A	-555 / 0	0.0	0.0	0.06 (1)	7.81	A-I	0 / 683	0.15 (1)		
A-B	-468 / 0	-78.0	-78.0	0.03 (1)	6.25	I-B	-782 / 0	0.12 (1)		
B-C	-636 / 0	-78.0	-78.0	0.18 (1)	6.25	B-H	-124 / 0	0.04 (1)		
C-D	-636 / 0	-78.0	-78.0	0.18 (1)	6.25	H-C	0 / 692	0.16 (1)		
D-E	-468 / 0	-78.0	-78.0	0.03 (1)	6.25	H-D	-124 / 0	0.04 (1)		
F-E	-555 / 0	0.0	0.0	0.06 (1)	7.81	G-D	-782 / 0	0.12 (1)		
J-I	0 / 0	-18.5	-18.5	0.02 (4)	10.00	G-E	0 / 683	0.15 (1)		
I-H	0 / 607	-18.5	-18.5	0.15 (4)	10.00					
H-G	0 / 607	-18.5	-18.5	0.15 (4)	10.00					
G-F	0 / 0	-18.5	-18.5	0.02 (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 ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.18/1.00 (C-D:1), BC=0.15/1.00 (G-H:4), WB=0.16/1.00 (C-H:1), SSI=0.08/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

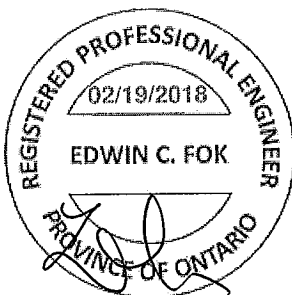
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.71 (A) (INPUT = 0.90)
JSI METAL= 0.20 (A) (INPUT = 1.00)

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



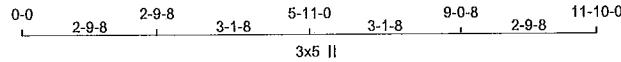
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H17	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:47.4

TOTAL WEIGHT = 2 X 62 = 124 lb

(M/F)

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	3.0	4.0	1.50	1.75
B	TTWW+m	MT20	4.0	6.0	2.50	2.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TTWW+m	MT20	4.0	6.0	2.50	2.00
E	TMVW-I	MT20	3.0	4.0	1.50	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BMVW-I	MT20	3.0	4.0	1.50	1.75
H	BMVW-I	MT20	3.0	4.0	1.50	1.75
I	BMVW-I	MT20	3.0	4.0	1.50	1.75
J	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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
J	571	0	571	0	0				
F	571	0	571	0	0				

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8
HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	407	248 / 0	0 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0
F	407	248 / 0	0 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	UNBRACED LENGTH (FR-TO)
FR-TO		FROM	TO	FR-TO			
J-A	-548 / 0	0.0	0.0 0.10 (1)	A-I	0 / 585	0.13 (1)	
A-B	-378 / 0	-78.0	-78.0 0.08 (1)	I-B	-391 / 0	0.08 (1)	
B-C	-389 / 0	-78.0	-78.0 0.10 (1)	B-H	-221 / 0	0.07 (1)	
C-D	-389 / 0	-78.0	-78.0 0.10 (1)	H-C	0 / 375	0.08 (1)	
D-E	-378 / 0	-78.0	-78.0 0.08 (1)	H-D	-221 / 0	0.07 (1)	
E-F	-548 / 0	0.0	0.0 0.10 (1)	G-D	-391 / 0	0.08 (1)	
				G-E	0 / 585	0.13 (1)	
J-I	0 / 0	-18.5	-18.5 0.03 (4)				
I-H	0 / 391	-18.5	-18.5 0.08 (1)				
H-G	0 / 391	-18.5	-18.5 0.08 (1)				
G-F	0 / 0	-18.5	-18.5 0.03 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.10/1.00 (A-J:1), BC=0.08/1.00 (G-H:1), WB=0.13/1.00 (E-G:1), SS=0.08/1.00 (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
MT20	618	354	1667
	788	1987	1656

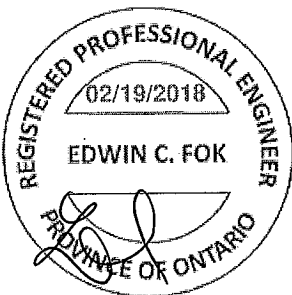
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.18 (G) (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

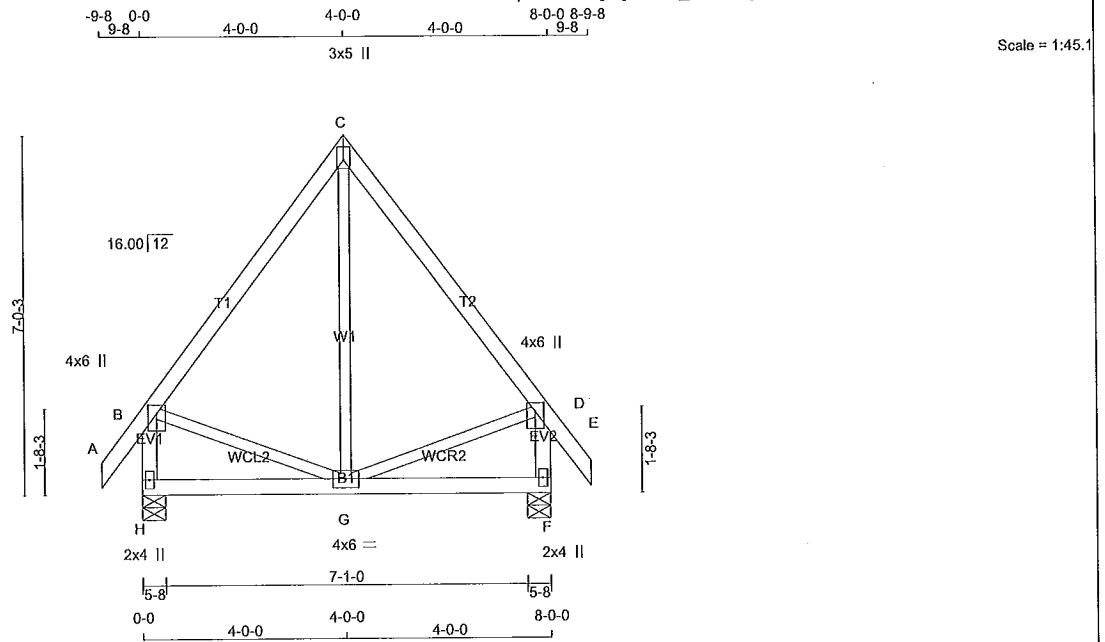


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H18	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 2 X 42 = 85 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00	
C	TTW+p	MT20	3.0	5.0	2.00	Edge	
D	TMVW+p	MT20	4.0	6.0	2.00	2.00	
F	BMV1+p	MT20	2.0	4.0			
G	BMVWW-t	MT20	4.0	6.0			
H	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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	HORZ	DOWN	UPLIFT
H	457	0	457	0
F	457	0	457	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	324	206 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
F	324	206 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX	CS1 (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)
FR-TO							FR-TO				
A-B	0 / 28	-78.0	-78.0	0.05 (1)	10.00		G-C	0 / 69	0.02 (4)		
B-C	-203 / 0	-78.0	-78.0	0.16 (1)	6.25		B-G	0 / 128	0.03 (1)		
C-D	-203 / 0	-78.0	-78.0	0.16 (1)	6.25		G-D	0 / 128	0.03 (1)		
D-E	0 / 28	-78.0	-78.0	0.05 (1)	10.00						
H-B	-428 / 0	0.0	0.0	0.05 (1)	7.81						
F-D	-428 / 0	0.0	0.0	0.05 (1)	7.81						
H-G	0 / 0	-18.5	-18.5	0.08 (4)	10.00						
G-F	0 / 0	-18.5	-18.5	0.08 (4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.27")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.16/1.00 (C-D:1), BC=0.08/1.00 (F-G:4), WB=0.03/1.00 (B-G:1), SSI=0.07/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

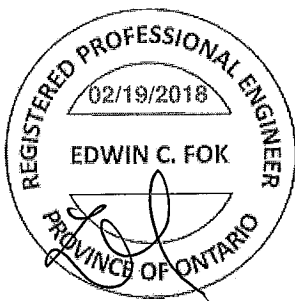
NAIL VALUES	PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)	(PLI)
	MAX	MIN	MAX	MIN
MT20	618	354	1667	788
			1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (D) (INPUT = 0.80)
JSI METAL= 0.12 (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-18023891

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H18G	1	1	TRUSS DESC.	

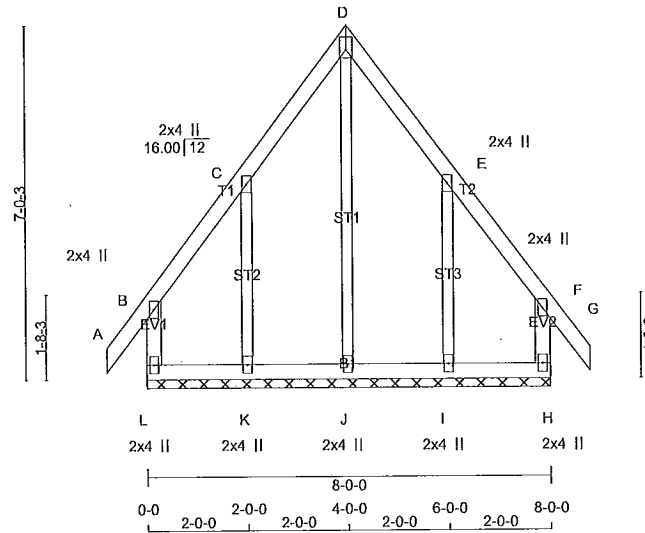
Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FBKG3yNySB-E6na3nCc_Vled6SxqfARqkwg5LdfYpQTya9CDZjdKk

9-8 0-0 2-0-0 2-0-0 4-0-0 2-0-0 6-0-0 2-0-0 8-0-0 8-9-8
 9-8 2-0-0 2-0-0 2-0-0 2-0-0 2-0-0 2-0-0 2-0-0 2-0-0
 3x5 II

Scale = 1:45.7



TOTAL WEIGHT = 42 lb

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

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TTW+w	MT20	2.0	4.0		
D	TTW+p	MT20	3.0	5.0	2.00	Edge
E	TMW+w	MT20	2.0	4.0		
F	TMV+p	MT20	2.0	4.0		
H	BMV1+p	MT20	2.0	4.0		
I, J, K						
I	BMV1+w	MT20	2.0	4.0		
L	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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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)	VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED LC1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0/28	-78.0	-78.0 0.05 (1)	J-D	-124/0	10.00	0.10 (1)
B-C	-35/0	-78.0	-78.0 0.03 (1)	K-C	-149/0	6.25	0.04 (1)
C-D	-26/0	-78.0	-78.0 0.04 (1)	I-E	-149/0	6.25	0.04 (1)
D-E	-26/0	-78.0	-78.0 0.04 (1)				
E-F	-35/0	-78.0	-78.0 0.03 (1)				
F-G	0/28	-78.0	-78.0 0.05 (1)				
L-B	-172/0	0.0	0.0 0.02 (1)				
H-F	-172/0	0.0	0.0 0.02 (1)				
L-K	0/21	-18.5	-18.5 0.02 (1)				
K-J	0/17	-18.5	-18.5 0.02 (4)				
J-I	0/17	-18.5	-18.5 0.02 (4)				
I-H	0/21	-18.5	-18.5 0.02 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.05/1.00 (A-B:1), BC=0.02/1.00 (H-I:1), WB=0.10/1.00 (D-J:1), SSI=0.04/1.00 (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

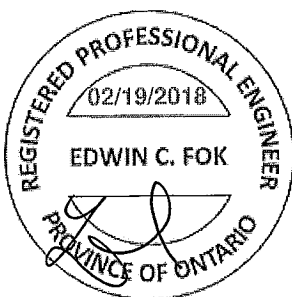
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
 JSI METAL= 0.09 (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-18023892

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H18S	2	1	TRUSS DESC.	

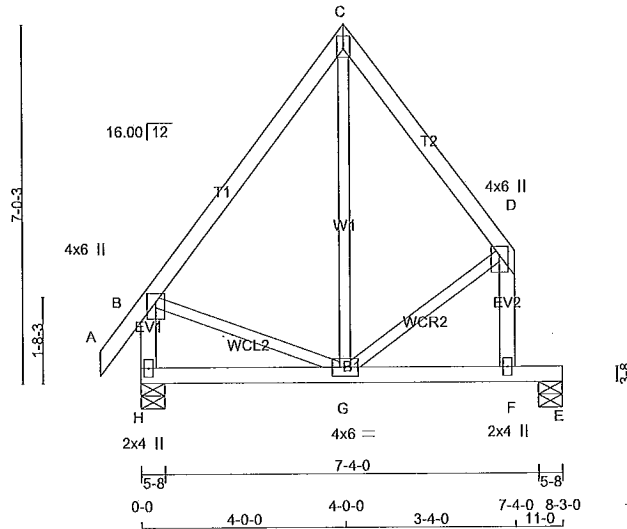
Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FIBKG3yNySB-bL6ugITPoFUWGU7zES3KKSeUzIbPWCfWNvJzyjdK

-9-8 0-0
9-8 4-0-0 4-0-0 3-4-0 7-4-0
3x5 II

Scale = 1:45.1



TOTAL WEIGHT = 2 X 41 = 82 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	4.0	6.0	2.00	2.00	
C	TTW+p	MT20	3.0	5.0	2.00	Edge	
D	TMW+p	MT20	4.0	6.0	2.00	2.00	
F	BMV+p	MT20	2.0	4.0			
G	BMWWW-t	MT20	4.0	6.0			
H	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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
H	469	0	469	0	0	5-8
E	398	0	398	0	0	5-8
						1-8
						1-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	333	211 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0
E	284	173 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO			FROM	TO			FR-TO			
A-B	0 / 28	-78.0	-78.0	0.05 (1)	10.00	G-C	0 / 92	0.03 (4)		
B-C	-232 / 0	-78.0	-78.0	0.22 (1)	6.25	B-G	0 / 146	0.03 (1)		
C-D	-232 / 0	-78.0	-78.0	0.15 (1)	6.25	G-D	0 / 166	0.04 (1)		
H-B	-457 / 0	0.0	0.0	0.05 (1)	7.81					
F-D	-406 / 0	0.0	0.0	0.06 (1)	7.81					
H-G	0 / 0	-18.5	-18.5	0.14 (1)	10.00					
G-F	0 / 0	-18.5	-18.5	0.44 (1)	10.00					
F-E	0 / 0	-96.5	-96.5	0.44 (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. G/C

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

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

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

ALLOWABLE DEFL.(LL)= 1/360 (0.27")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.05")
ALLOWABLE DEFL.(TL)= 1/360 (0.27")
CALCULATED VERT. DEFL.(TL) = 1/977 (0.10")

CSI: TC=0.22/1.00 (B-C:1), BC=0.44/1.00 (E-F:1), WB=0.04/1.00 (D-G:1), SSI=0.31/1.00 (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.

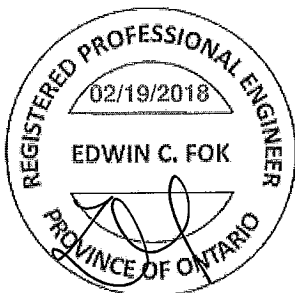
NAIL VALUES	PLATE GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (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



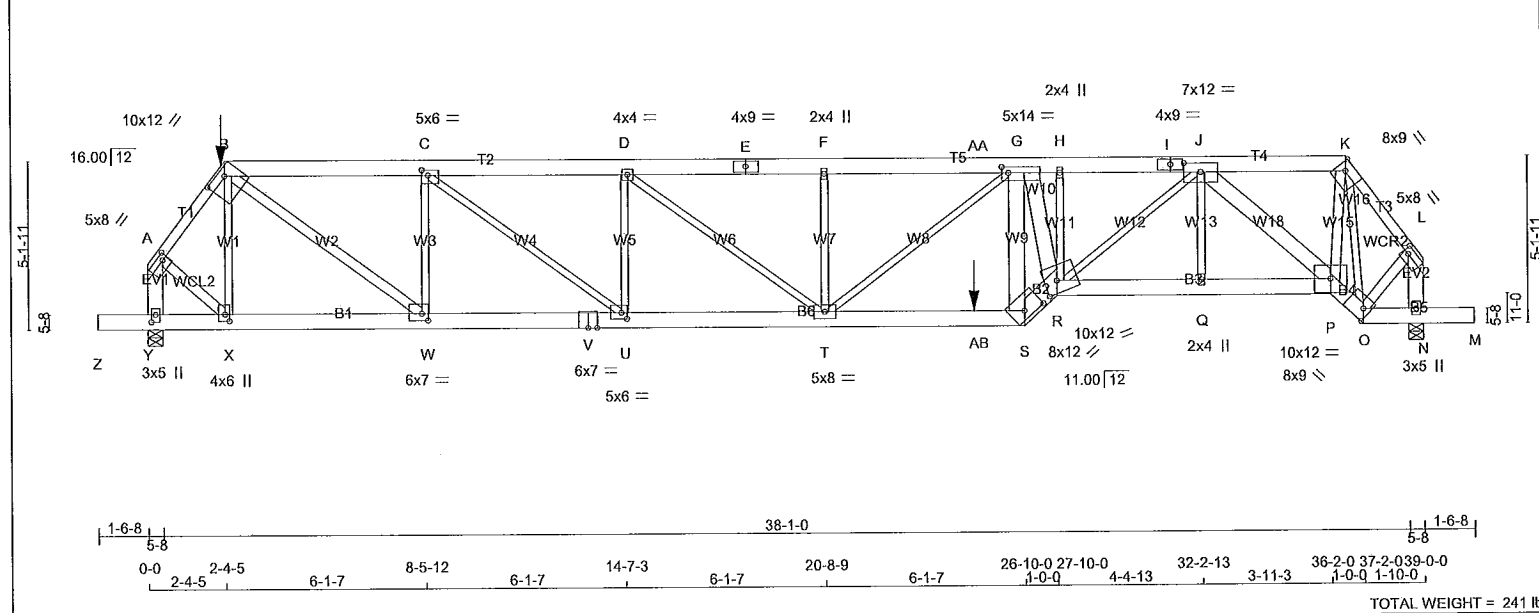
A-18023893

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1JnpOFFBKG3yNySB-hJVN0qto6NyRacFjaRQwhv_e_CThny1b46ZOJHJzd2h

Scale = 1:70.6



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				
A - B	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	
B - E	2x6	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	
E - I	2x6	DRY	No.2	SPF	JT VERT	JT HORZ	UPLIFT	IN-SX	IN-SX
I - K	2x6	DRY	No.2	SPF	Y	3925	0	3925	0
K - L	2x4	DRY	No.2	SPF	N	3443	0	3443	0
Y - A	2x6	DRY	No.2	SPF					
N - L	2x6	DRY	No.2	SPF					
Z - V	2x6	DRY	2100F 1.8E	SPF					
V - S	2x6	DRY	2100F 1.8E	SPF					
S - R	2x8	DRY	1950F 1.7E	SPF					
R - P	2x6	DRY	No.2	SPF					
P - O	2x6	DRY	1650F 1.5E	SPF					
O - M	2x6	DRY	No.2	SPF					
ALL WEBS EXCEPT									
B - W	2x4	DRY	No.2	SPF					
S - G	2x6	DRY	No.2	SPF					
G - R	2x6	DRY	No.2	SPF					
P - K	2x4	DRY	No.2	SPF					
A - X	2x4	DRY	No.2	SPF					
O - L	2x4	DRY	No.2	SPF					
J - P	2x6	DRY	No.2	SPF					

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.00	2.00
B	TTWW-h	MT20	10.0	12.0	2.50	7.00
C	TMVW-t	MT20	5.0	6.0	2.00	2.25
D	TMVW-t	MT20	4.0	4.0		
E	TS-t	MT20	4.0	9.0		
F	TMVW-w	MT20	2.0	4.0		
G	TMVWW-t	MT20	5.0	14.0	2.25	2.50
H	TMVW-w	MT20	2.0	4.0		
I	TS-t	MT20	4.0	9.0		
J	TMVWW-t	MT20	7.0	12.0	3.25	6.00
K	TTWW-h	MT20	8.0	9.0	3.25	3.00
L	TMVW-t	MT20	5.0	8.0	2.25	2.00
N	BMV1+p	MT20	3.0	5.0		

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

BUILDING DESIGNER										DESIGN CRITERIA									
BEARINGS										*** SPECIAL LOADS ANALYSIS ***									
FACTORED					MAXIMUM FACTORED					INPUT					REQRD				
GROSS REACTION					GROSS REACTION					BRG					BRG				
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX			JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
Y	3925	0	3925	0	0	5-8	4-10			Y	3925	0	3925	0	0	5-8	4-10		
N	3443	0	3443	0	0	5-8	5-7			N	3443	0	3443	0	0	5-8	5-7		
ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD										SPECIFIED LOADS:									
UNFACTORED REACTIONS										TOP CH. LL = 21.0 PSF									
1ST LCASE										DL = 6.0 PSF									
MAX/MIN. COMPONENT REACTIONS										BOT CH. LL = 0.0 PSF									
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
Y	2793	1735 / 0	0 / 0	0 / 0	0 / 0	1058 / 0	0 / 0			Y	2793	1735 / 0	0 / 0	0 / 0	0 / 0	1058 / 0	0 / 0		
N	2443	1557 / 0	0 / 0	0 / 0	0 / 0	886 / 0	0 / 0			N	2443	1557 / 0	0 / 0	0 / 0	0 / 0	886 / 0	0 / 0		
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Y, N										TOTAL LOAD = 34.4 PSF									
BEARING SIZE FACTOR = 1.15 AT JNT(S) Y (BASED ON SUPPORT DEPTH = 1-8)										SPACING = 24.0 IN. C/C									
BRACING										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.35 FT.										GIRDER TYPE: CPrimeHlp									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										SIDE SETBACK = 2-4-5									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										END SETBACK = 5-10-8									
LOADING										END WALL WIDTH = 0-0									
TOTAL LOAD CASES: (4)										CORNER FRAMING TYPE: CONVENTIONAL									
CHORDS										END JACK TYPE: CONVENTIONAL									
MAX. FACTORED										APPLIED TO FRONT SIDE									
MEMB. FORCE (LBS)										- ADD'L LOADS BASED ON 55 % OF GSL.									
VERT. LOAD LC1 MAX										LOADS APPLIED TO FIRST 25-3-8 OF SPAN MEASURED FROM THE LEFT.									
CSF (PLF)										*** NON STANDARD GIRDER ***									
UNBRAC										ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.									
LENGTH FR-TO										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010, NBCC 2015									
FR-TO										THIS DESIGN COMPLIES WITH:									
FROM TO										- PART 9 OF OBC 2012, OBC 2018									
A-B -3160 / 0										- CSA 086-09, CSA 086-14									
B-C -5614 / 0										- TPIC 2011, TPIC 2014									
C-D -7675 / 0										DESIGN ASSUMPTIONS									
D-E -8362 / 0										- OVERHANG NOT TO BE ALTERED OR CUT OFF.									
E-F -8362 / 0										(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									
F-AA -8362 / 0										ALLOWABLE DEFL.(LL)= L/360 (1.30")									
AA-G -8362 / 0										CALCULATED VERT. DEFL.(LL)= L/ 999 (0.45")									
G-H -8263 / 0										ALLOWABLE DEFL.(TL)= L/360 (1.30")									
H-I -8250 / 0										CALCULATED VERT. DEFL.(TL)= L/ 552 (0.85")									
I-J -8250 / 0										CANTILEVER DEFLECTION:									
J-K -2362 / 0										ALLOWABLE DEFL.(LL)= L/120 (0.19")									
K-L -2431 / 0										CALCULATED VERT. DEFL.(LL)= L/ 389 (0.05")									
Y-A -3793 / 0										ALLOWABLE DEFL.(TL)= L/120 (0.19")									
N-L -3215 / 0										CALCULATED VERT. DEFL.(TL)= L/ 206 (0.09")									
Z-Y 0 / 0										CSI: TC=0.93/1.00 (C-D:1), BC=0.85/1.00 (S-T:1), WB=0.95/1.00 (K-O:1), SSI=0.51/1.00 (S-T:1)									
Y-X 0 / 0										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00									
X-W 0 / 1873																			
W-V 0 / 5614																			
V-U 0 / 5614																			
U-T 0 / 7675																			
T-AB 0 / 7300																			
AB-S 0 / 7300																			
S-R 0 / 9523																			
R-Q 0 / 5363																			
Q-P 0 / 5363																			
P-O 0 / 2414																			
O-N -1 / 0																			
N-M 0 / 0																			
FACTORED CONCENTRATED LOADS (LBS)																			
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE			JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL			B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL		
AB	25-3-8	-989	-989	---	FRONT	VERT	TOTAL			AB	25-3-8	-989	-989	---	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

- ADD'L LOADS BASED ON 55 % OF GSL.

LOADS APPLIED TO FIRST 25-3-8 OF SPAN MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***

ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010, 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 (1.30")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.45")

ALLOWABLE DEFL.(TL)= L/360 (1.30")

CALCULATED VERT. DEFL.(TL)= L/ 552 (0.85")

CANTILEVER DEFLECTION:

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

CALCULATED VERT. DEFL.(LL)= L/ 389 (0.05")

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

CALCULATED VERT. DEFL.(TL)= L/ 206 (0.09")

CSI: TC=0.93/1.00 (C-D:1), BC=0.85/1.00 (S-T:1), WB=0.95/1.00 (K-O:1), SSI=0.51/1.00 (S-T:1)

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

A-18023894

CONTINUED ON PAGE

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	H1T	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Mon Feb 19 10:10:11 2018 Page 2 ID:Rbextx08A5M1Jnp0FfBKg3yNySB-9W3mD9uQth4ICmqv88x9E6Xpkcp0QPHIJmJyskzjd2g					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
O	BBWW-h	MT20	8.0	9.0	4.00	2.50
P	BBWW-l	MT20	10.0	12.0		
Q	BMW+w	MT20	2.0	4.0		
R	BBWWW-m	MT20	10.0	12.0	4.50	4.50
S	BBW-h	MT20	8.0	12.0	2.75	7.00
T	BMWWW-l	MT20	5.0	8.0		
U	BMWW-l	MT20	5.0	6.0	2.25	2.00
V	BS-l	MT20	6.0	7.0		
W	BMWW-l	MT20	6.0	7.0	2.50	2.25
X	BMWW+l	MT20	4.0	6.0	2.50	1.50
Y	BMV1+p	MT20	3.0	5.0	2.75	1.50

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 134.1 lbs FACTORED DOWN AT 2-4-5 ON TOP CHORD, AND 988.9 lbs FACTORED DOWN AT 25-3-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

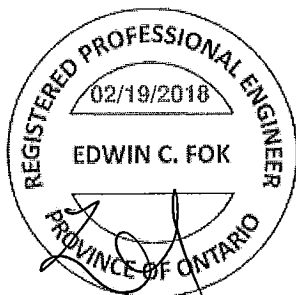
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

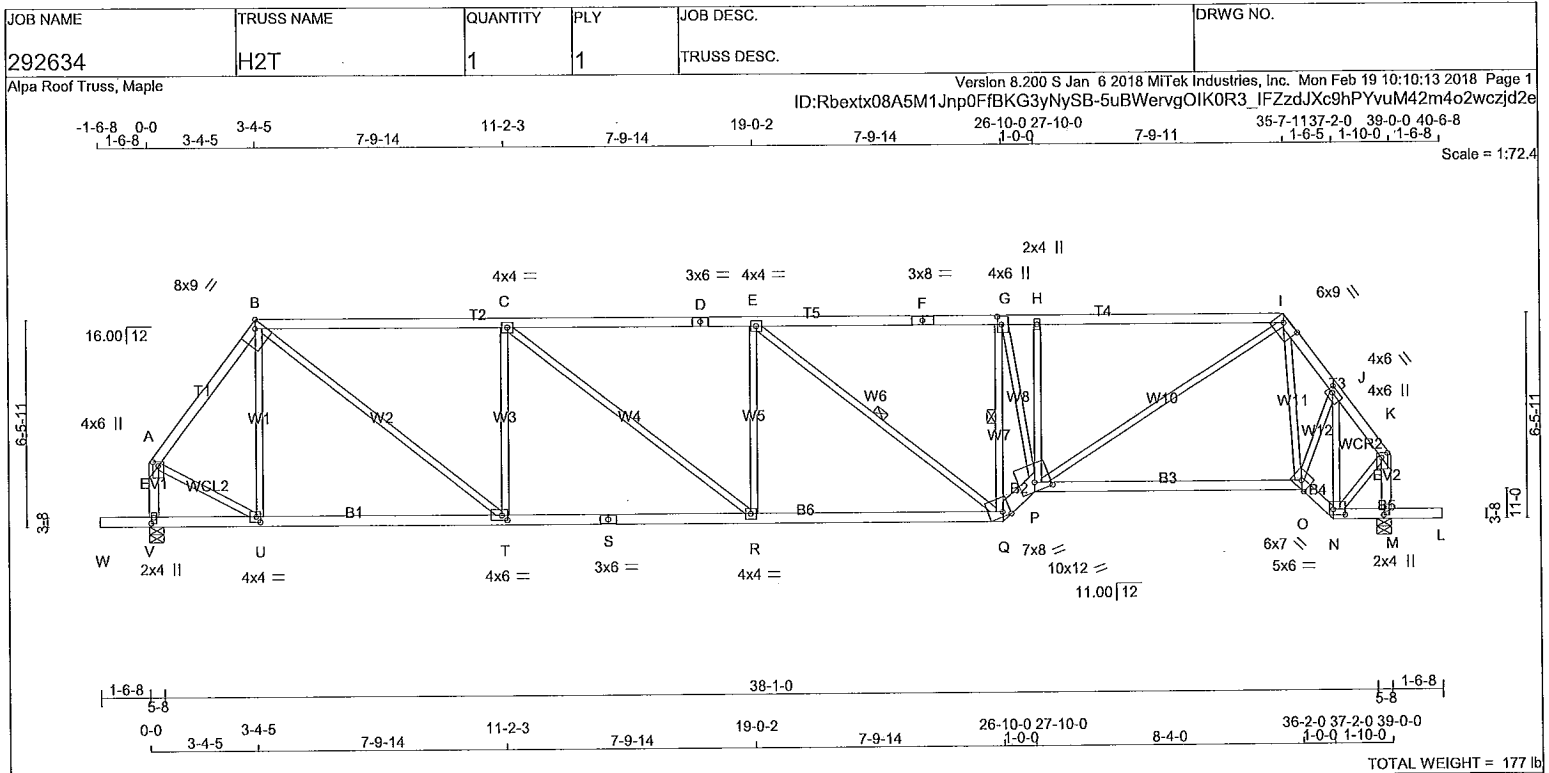
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (X) (INPUT = 0.90)
JSI METAL= 0.99 (S) (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-1802389(4)(2)



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	1650F 1.5E	SPF
D - F	2x4	DRY	1650F 1.5E	SPF
F - I	2x4	DRY	1650F 1.5E	SPF
I - K	2x4	DRY	No.2	SPF
V - A	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
W - S	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - P	2x6	DRY	No.2	SPF
P - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - L	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	1.50 2.00
B	TTVW-h	MT20	8.0	9.0	Edge 2.75
C	TMVW-t	MT20	4.0	4.0	
D	TS-t	MT20	3.0	6.0	
E	TMVW-t	MT20	4.0	4.0	
F	TS-t	MT20	3.0	8.0	
G	TMVW+t	MT20	4.0	6.0	3.00 1.50
H	TMVW-w	MT20	2.0	4.0	
I	TTVW-h	MT20	6.0	9.0	1.75 6.00
J	TMVW-t	MT20	4.0	6.0	1.75 2.00
K	TMVW+p	MT20	4.0	6.0	1.75 2.25
M	BMV1+p	MT20	2.0	4.0	2.25 1.00
N	BBVW-l	MT20	5.0	6.0	2.00 4.50
O	BBVW-h	MT20	6.0	7.0	Edge
P	BBVWV-m	MT20	10.0	12.0	3.25 6.00
Q	BBVW-m	MT20	7.0	8.0	Edge 2.75
R	BMVW-t	MT20	4.0	4.0	
S	BS-t	MT20	3.0	6.0	
T	BMVW-t	MT20	4.0	6.0	1.75 2.00
U	BMVW-t	MT20	4.0	4.0	2.00 1.50

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
	FACTORED			MAXIMUM FACTORED		INPUT		REQD	
	GROSS REACTION			GROSS REACTION		BRG		BRG	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
V	2027	0		2027	0	0	5-8	3-0	
M	2033	0		2033	0	0	5-8	3-0	

UNFACTORED REACTIONS									
	1ST LCASE			MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
V	1445	882 / 0	0 / 0	0 / 0	0 / 0	563 / 0	0 / 0		
M	1449	885 / 0	0 / 0	0 / 0	0 / 0	565 / 0	0 / 0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 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-Q, Q-G.

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L)		MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (L)	
FR-TO			FROM TO		FR-TO				
A-B		-1610 / 0	-78.0 -78.0 0.21 (1)	5.02	U-B		-319 / 0	0.22 (1)	
B-C		-2513 / 0	-78.0 -78.0 0.81 (1)	4.03	B-T		0 / 1982	0.45 (1)	
C-D		-3034 / 0	-78.0 -78.0 0.90 (1)	3.70	T-C		-1082 / 0	0.74 (1)	
D-E		-3034 / 0	-78.0 -78.0 0.90 (1)	3.70	C-R		0 / 663	0.15 (1)	
E-F		-2625 / 0	-78.0 -78.0 0.67 (1)	4.22	R-E		-282 / 5	0.19 (1)	
F-G		-2625 / 0	-78.0 -78.0 0.67 (1)	4.22	E-Q		-519 / 0	0.36 (1)	
G-H		-2955 / 0	-78.0 -78.0 0.52 (1)	3.91	Q-G		-2012 / 0	0.55 (1)	
H-I		-2964 / 0	-78.0 -78.0 0.77 (1)	3.91	G-P		0 / 1741	0.39 (1)	
I-J		-1823 / 0	-78.0 -78.0 0.07 (1)	4.92	P-H		-425 / 0	0.20 (1)	
J-K		-1319 / 0	-78.0 -78.0 0.05 (1)	5.59	P-I		0 / 2248	0.51 (1)	
V-A		-1869 / 0	0.0 0.0 0.22 (1)	6.13	I-O		-93 / 22	0.04 (1)	
M-K		-1805 / 0	0.0 0.0 0.21 (1)	6.23	O-J		0 / 921	0.21 (1)	
					N-J		-1412 / 0	0.38 (1)	
W-V		0 / 0	-96.5 -96.5 0.16 (1)	10.00	A-U		0 / 1057	0.24 (1)	
V-U		0 / 0	-18.5 -18.5 0.17 (4)	10.00	N-K		0 / 1047	0.24 (1)	
U-T		0 / 954	-18.5 -18.5 0.30 (4)	10.00					
T-S		0 / 2514	-18.5 -18.5 0.55 (1)	10.00					
S-R		0 / 2514	-18.5 -18.5 0.55 (1)	10.00					
R-Q		0 / 3034	-18.5 -18.5 0.63 (1)	10.00					
Q-P		0 / 3597	-18.5 -18.5 0.43 (1)	10.00					
P-O		0 / 1086	-18.5 -18.5 0.48 (4)	10.00					
O-N		0 / 1024	-18.5 -18.5 0.17 (1)	10.00					
N-M		0 / 0	-18.5 -18.5 0.16 (1)	10.00					
M-L		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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.46")

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=0.90/1.00 (C-E:1), BC=0.63/1.00 (Q-R:1), WB=0.74/1.00 (C-T:1), SSI=0.29/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

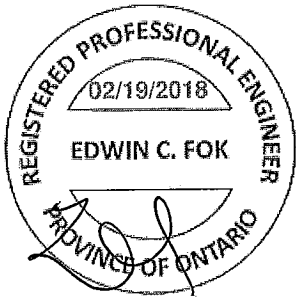
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)		
	MAX	MIN	MAX	MIN	MAX
MT20	618	354	1667	788	1987 1656

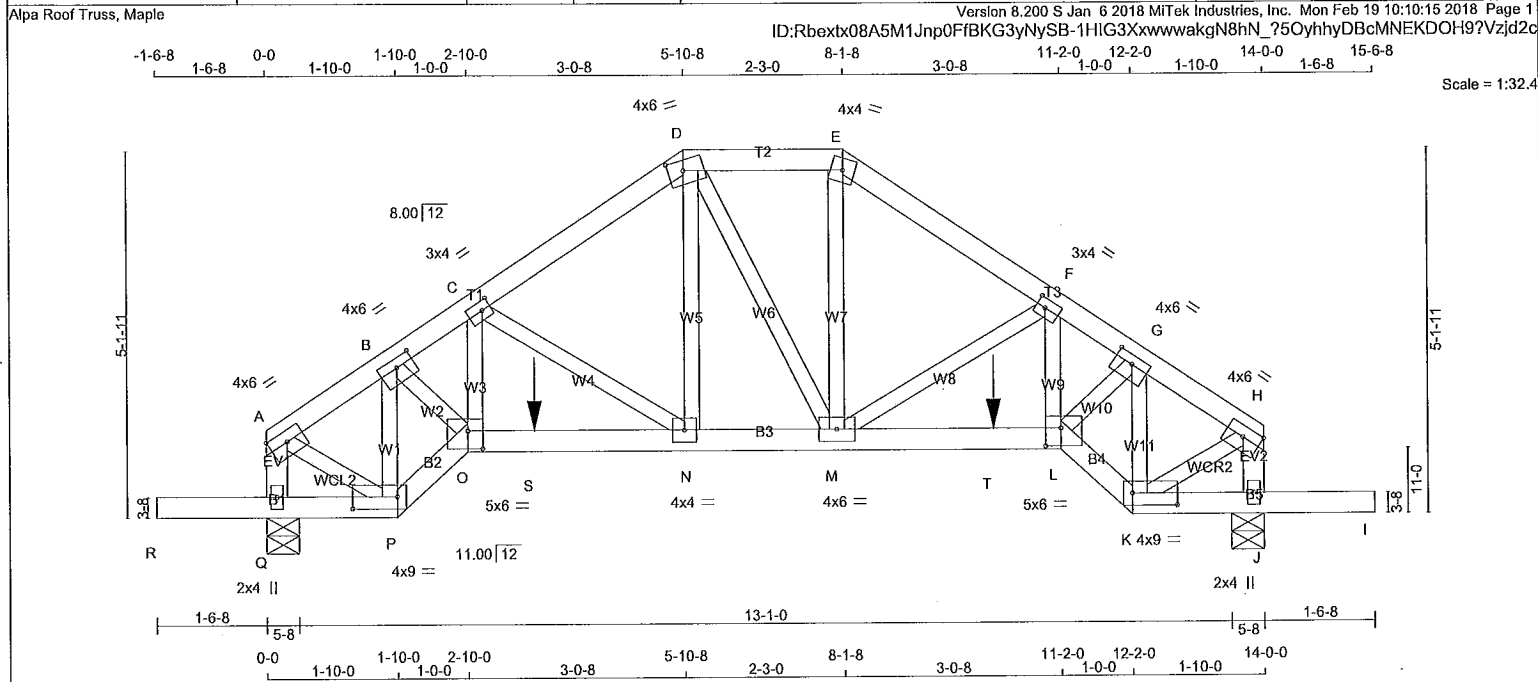
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (A) (INPUT = 0.90)
JSI METAL= 0.83 (S) (INPUT = 1.00)

A-18023895 CONTINUED ON PAGE 2





LUMBER

N. L. G. A. RULES

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

SPF

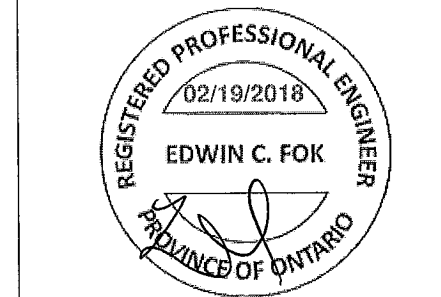
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	4.0	6.0	1.75	Edge
B	TMVW-I	MT20	4.0	6.0	1.50	3.00
C	TMVW-I	MT20	3.0	4.0	1.50	1.50
D	TTVW-m	MT20	4.0	6.0	1.75	2.50
E	TTVW-m	MT20	4.0	4.0		
F	TMVW-I	MT20	3.0	4.0	1.50	1.50
G	TMVW-I	MT20	4.0	6.0	1.50	3.00
H	TMVW-I	MT20	4.0	6.0	1.75	Edge
J	BMV1+p	MT20	2.0	4.0		
K	BBVW-I	MT20	4.0	9.0	2.00	7.50
L	BBVW-I	MT20	5.0	6.0	3.00	2.50
M	BBVWVW-I	MT20	4.0	6.0		
N	BMVW-I	MT20	4.0	4.0		
O	BBVW-I	MT20	5.0	6.0	3.00	2.50
P	BBVW-I	MT20	4.0	9.0	2.00	7.50
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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
Q	1549	0	1549	0
J	1549	0	1549	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED						
Q	1097	713 / 0	0 / 0	0 / 0	0 / 0	384 / 0	0 / 0
J	1097	713 / 0	0 / 0	0 / 0	0 / 0	384 / 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 = 4.46 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MEMB.	FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	-1307 / 0	-78.0	-78.0 0.09 (1)	5.54	P-B	-1475 / 0	0.25 (1)
B-C	-2239 / 0	-78.0	-78.0 0.11 (1)	4.46	B-O	0 / 1250	0.31 (1)
C-D	-1678 / 0	-78.0	-78.0 0.15 (1)	4.96	O-C	0 / 408	0.10 (1)
D-E	-1413 / 0	-78.0	-78.0 0.10 (1)	5.36	C-N	-563 / 0	0.14 (1)
E-F	-1684 / 0	-78.0	-78.0 0.15 (1)	4.96	N-D	0 / 731	0.18 (1)
F-G	-2239 / 0	-78.0	-78.0 0.11 (1)	4.46	D-M	0 / 11	0.00 (1)
G-H	-1307 / 0	-78.0	-78.0 0.09 (1)	5.54	M-E	0 / 744	0.18 (1)
Q-A	-1321 / 0	0.0	0.0 0.15 (1)	7.00	M-F	-558 / 0	0.14 (1)
J-H	-1321 / 0	0.0	0.0 0.15 (1)	7.00	L-F	0 / 402	0.10 (1)
					L-G	0 / 1250	0.31 (1)
R-Q	0 / 0	-96.5	-96.5 0.17 (1)	10.00	K-G	-1475 / 0	0.25 (1)
Q-P	0 / 0	-18.5	-18.5 0.17 (1)	10.00	A-P	0 / 1197	0.30 (1)
P-O	0 / 1362	-18.5	-18.5 0.24 (1)	10.00	K-H	0 / 1197	0.30 (1)
O-S	0 / 1863	-18.5	-18.5 0.81 (1)	10.00			
S-N	0 / 1863	-112.0	-112.0 0.81 (1)	10.00			
N-M	0 / 1408	-112.0	-112.0 0.51 (1)	10.00			
M-T	0 / 1863	-112.0	-112.0 0.80 (1)	10.00			
T-L	0 / 1863	-18.5	-18.5 0.80 (1)	10.00			
L-K	0 / 1363	-18.5	-18.5 0.24 (1)	10.00			
K-J	0 / 0	-18.5	-18.5 0.17 (1)	10.00			
J-I	0 / 0	-96.5	-96.5 0.17 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
S	3-9-4	-423	-423	FRONT	VERT	TOTAL
T	10-2-12	-423	-423	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	PSF
DL	21.0	PSF
DL	6.0	PSF
BOT CH.	LL	PSF
DL	0.0	PSF
DL	7.4	PSF
TOTAL LOAD	34.4	PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 3-9-4
START SPAN CARRIED = 5-10-8
END DISTANCE = 10-2-12
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'TL LOADS BASED ON 55 % OF GSL.

*** NON STANDARD GIRDER ***
ADD'TL 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 (0.47")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL)= L/999 (0.12")

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

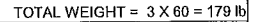
CSI: TC=0.15/1.00 (E-F:1), BC=0.81/1.00 (N-O:1), WB=0.31/1.00 (B-O:1), SSI=0.30/1.00 (N-O:1)

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

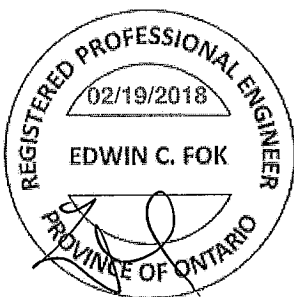
COMPANION LIVE LOAD FACTOR = 1.00

Alpa Roof Truss, Maple

Scale = 1:36.2



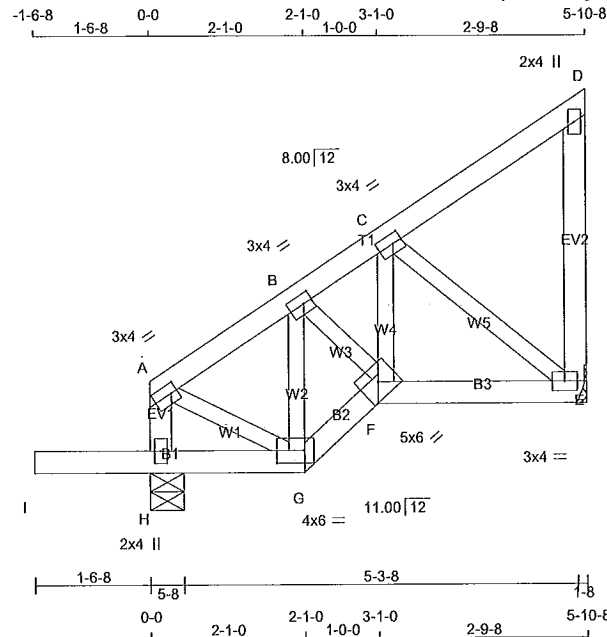
A-18023897



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	J1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FbKG3yNySB-w2Ynvv_R_84A9_SScq41ZosNCqklFGw80FN8Gzjd2Y



Scale = 1:31.0

TOTAL WEIGHT = 30 lb

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	DOWN	BRG	BRG
H	452	0	5-8	1-8
E	264	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	125 / 0	0 / 0
H	322	197 / 0	0 / 0
E	188	115 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
H-A	-229 / 0	0.0 0.0 0.02 (1)	A-G	0 / 158
A-B	-171 / 0	-78.0 -78.0 0.04 (1)	G-B	-212 / 0
B-C	-223 / 0	-78.0 -78.0 0.06 (1)	B-F	0 / 96
C-D	-10 / 0	-78.0 -78.0 0.07 (1)	F-C	0 / 88
E-D	-87 / 0	0.0 0.0 0.02 (1)	C-E	-247 / 0
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 / 184	-18.5 -18.5 0.03 (1)		
F-E	0 / 194	-18.5 -18.5 0.06 (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/542 (0.03")

CSI: TC=0.07/1.00 (C-D:1), BC=0.16/1.00 (G-H:1), WB=0.05/1.00 (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)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

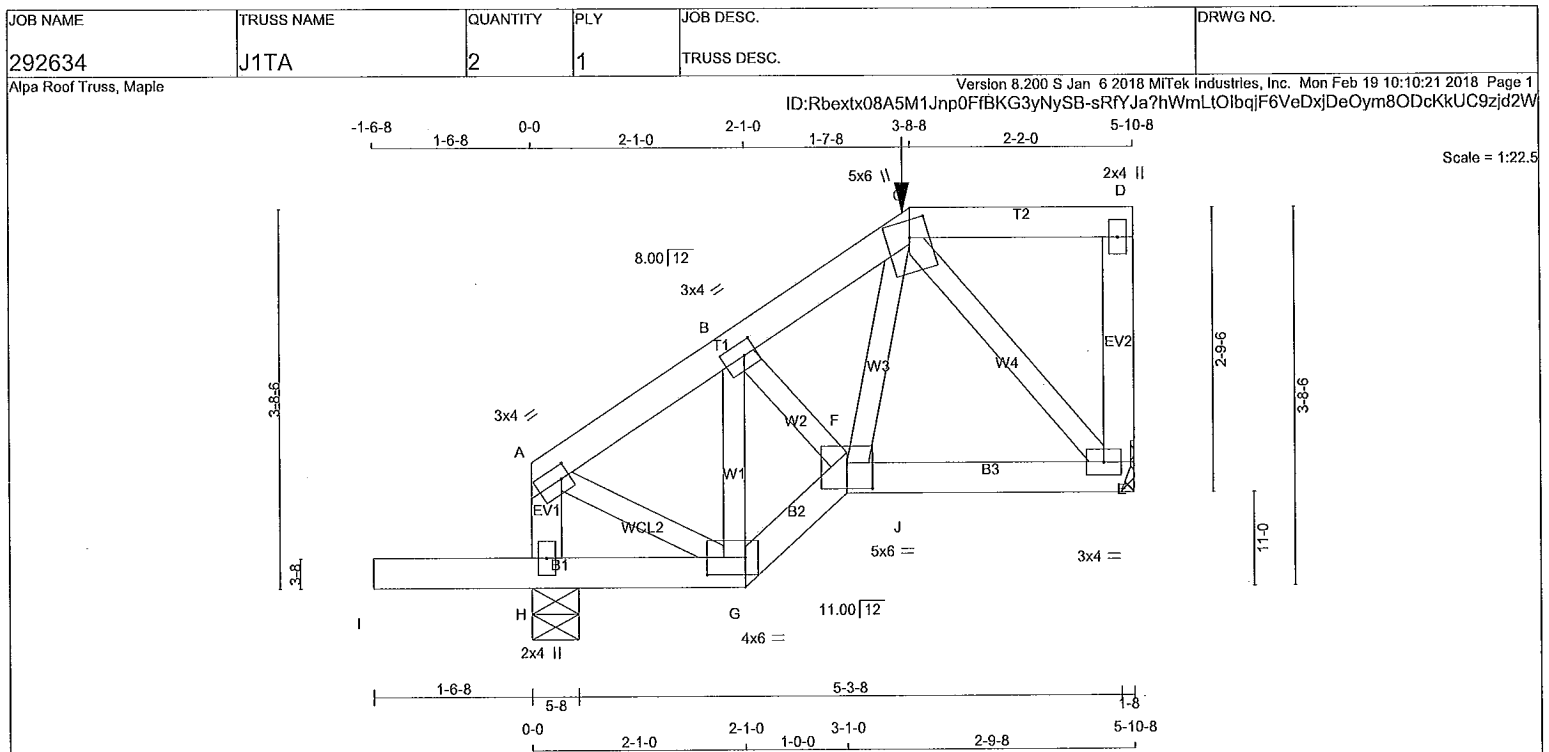
PLATE ROTATION TOL. = 5.0 Deg.

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

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



A-18023898



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - 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-t	MT20	3.0	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TTVW+m	MT20	5.0	6.0	2.00	2.25
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BBVW1	MT20	5.0	6.0	3.00	3.00
G	BBVW1	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT					BRG	BRG
E	413	0	413	0	IN-SX	IN-SX
					HANGER BY OTHERS	
H	527	0	527	0	5-8	1-8

UNFACTORED REACTIONS

	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS				WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE					
JT	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)

MEMB.	CHORDS		FACTORED		MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX			FORCE	MAX	
	(LBS)	(PLF)	(LBS)	(LC)			(LBS)	(LC)	
FR-TO			FROM	TO		FR-TO			
A-B	-249 / 0	-78.0	-78.0	0.04 (1)	6.25	G-B	-287 / 0	0.05 (1)	
B-C	-329 / 0	-78.0	-78.0	0.04 (1)	6.25	B-F	0 / 102	0.03 (1)	
C-D	0 / 0	-111.3	-111.3	0.10 (1)	10.00	F-C	0 / 162	0.04 (1)	
E-D	-121 / 0	0.0	0.0	0.02 (1)	7.81	C-E	-343 / 0	0.07 (1)	
H-A	-296 / 0	0.0	0.0	0.03 (1)	7.81	A-G	0 / 231	0.06 (1)	
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 / 270	-26.4	-26.4	0.05 (1)	10.00				
F-J	0 / 226	-26.4	-26.4	0.09 (4)	10.00				
J-E	0 / 226	-26.4	-26.4	0.09 (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/C

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

GIRDER TYPE: CPrimeHip

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

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

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/571 (0.03")

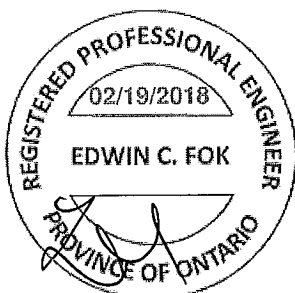
CSI: TC=0.10/1.00 (C-D:1) , BC=0.17/1.00 (G-H:1) , WB=0.07/1.00 (C-E:1) , SSI=0.13/1.00 (H-I:1)

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 .

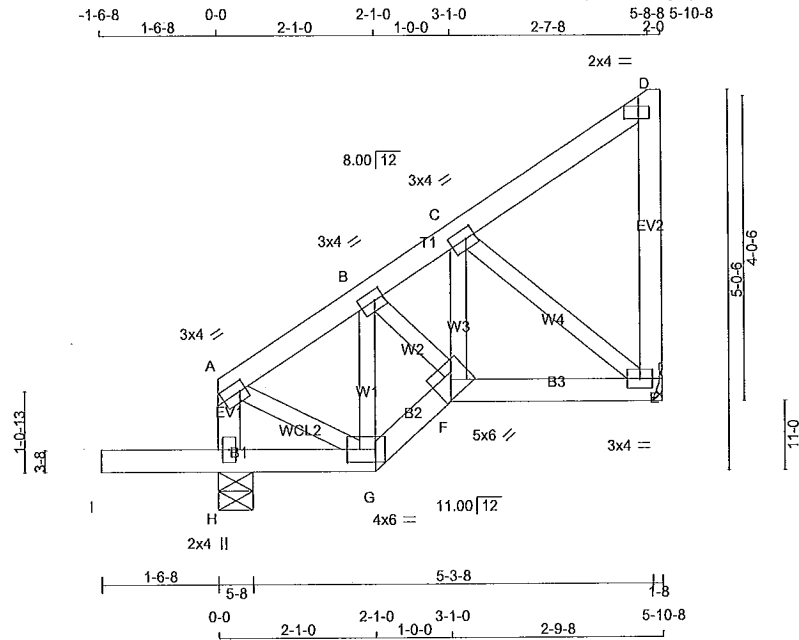
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	J1TB	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 10:23 2018 Page 1
ID:Rbextx08A5M1Jnp0FfBKG3yNySB-opnlkG1x2NbbedDrg9zje13BR4gE2FW3dDaH1zjd2U



Scale = 1:30.5

TOTAL WEIGHT = 2 X 30 = 61 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-1	MT20	3.0	4.0	1.50	1.00
B	TMVW-1	MT20	3.0	4.0	1.50	1.50
C	TMVW-1	MT20	3.0	4.0	1.50	1.50
D	TVM-p	MT20	2.0	4.0	0.50	2.25
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		

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
E	264	0	264	0	0	5-8	1-8		
H	452	0	452	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0

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

BRACING

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

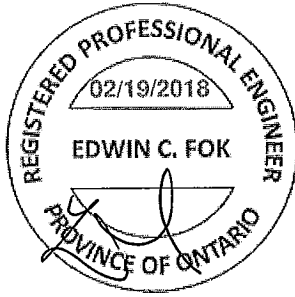
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	CS1 (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	-171 / 0	-78.0	-78.0 0.04 (1)	6.25	G-B	-212 / 0	0.03 (1)
B-C	-223 / 0	-78.0	-78.0 0.06 (1)	6.25	B-F	0 / 96	0.02 (1)
C-D	-10 / 0	-78.0	-78.0 0.07 (1)	10.00	F-C	0 / 88	0.02 (4)
E-D	-87 / 0	0.0	0.0 0.03 (1)	7.81	C-E	-247 / 0	0.05 (1)
H-A	-229 / 0	0.0	0.0 0.02 (1)	7.81	A-G	0 / 158	0.04 (1)
I-H	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
H-G	0 / 0	-18.5	-18.5 0.16 (1)	10.00			
G-F	0 / 184	-18.5	-18.5 0.03 (1)	10.00			
F-E	0 / 194	-18.5	-18.5 0.06 (4)	10.00			

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



DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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/542 (0.03")

CSI: TC=0.07/1.00 (C-D:1), BC=0.16/1.00 (G-H:1), WB=0.05/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

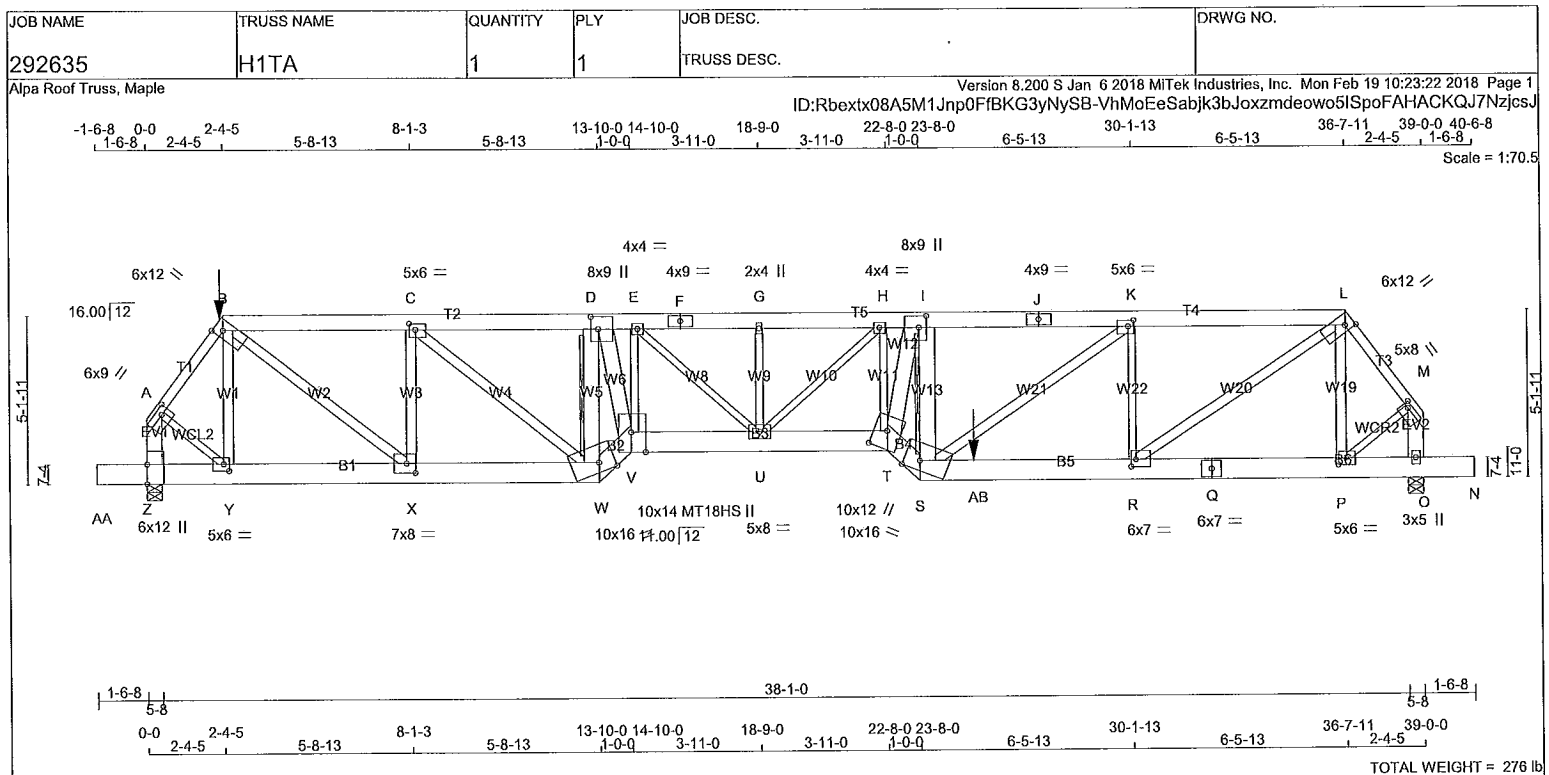
NAIL VALUES	PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023900



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2 SPF
B - F	2x6	DRY	1650F 1.5E SPF
F - J	2x6	DRY	1650F 1.5E SPF
J - L	2x6	DRY	1650F 1.5E SPF
L - M	2x4	DRY	No.2 SPF
Z - A	2x6	DRY	No.2 SPF
O - M	2x6	DRY	No.2 SPF
AA - W	2x8	DRY	No.2 SPF
W - V	2x8	DRY	1950F 1.7E SPF
V - T	2x8	DRY	1950F 1.7E SPF
T - S	2x8	DRY	1950F 1.7E SPF
S - Q	2x8	DRY	1950F 1.7E SPF
Q - N	2x8	DRY	1950F 1.7E SPF

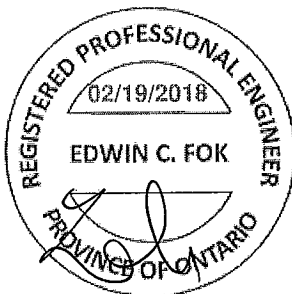
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
Y - B	2x4	DRY	No.2	SPF
B - X	2x4	DRY	No.2	SPF
X - C	2x4	DRY	No.2	SPF
C - W	2x4	DRY	No.2	SPF
W - D	2x6	DRY	No.2	SPF
D - V	2x6	DRY	1650F 1.5E	SPF
T - I	2x6	DRY	1650F 1.5E	SPF
S - I	2x6	DRY	No.2	SPF
P - L	2x4	DRY	No.2	SPF
R - L	2x4	DRY	No.2	SPF
S - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	6.0	9.0	2.25	3.00
B	TTWW+H	MT20	6.0	12.0	3.25	2.50
C	TMVW-t	MT20	5.0	6.0	2.25	2.25
D	TMVW+H	MT20	8.0	9.0	4.50	2.75
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	4.0	9.0		
G	TMW+H	MT20	2.0	4.0		
H	TMVW-t	MT20	4.0	4.0		
I	TMVW+H	MT20	8.0	9.0	4.25	2.75

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



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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT		DOWN	HORZ	UPLIFT
Z		3933	0	3933	0
O		3443	0	3443	0

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
Z		2798	1739	0	0	0	1060
O		2443	1558	0	0	0	886

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-W, I-S

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		MAX.		WEBS		MAX. FACTORED	
		MEMB.	FORCE	VERT.	LOAD	LC1	MAX	MEMB.	FORCE	MAX	LC1
			(LBS)	(PLF)	CS	(LC)	UNBRAC		(LBS)	MAX	CS
FR-TO		FROM		TO		LENGTH		FR-TO		TO	
A-B	-3241 / 0	-78.0	-78.0	0.24	(1)	3.69	Y-B	-862 / 0	0.21	(1)	
B-C	-5492 / 0	-153.5	-153.5	0.37	(1)	3.96	B-X	0 / 4587	0.81	(1)	
C-D	-7713 / 0	-153.5	-153.5	0.47	(1)	3.33	X-C	-2769 / 0	0.66	(1)	
D-E	-9825 / 0	-153.5	-153.5	0.41	(1)	3.03	C-W	0 / 2836	0.50	(1)	
E-F	-10378 / 0	-78.0	-78.0	0.47	(1)	2.91	W-D	-8278 / 0	0.87	(1)	
F-G	-10378 / 0	-78.0	-78.0	0.47	(1)	2.91	D-V	0 / 7900	0.64	(1)	
G-H	-10378 / 0	-78.0	-78.0	0.47	(1)	2.91	V-E	-363 / 0	0.09	(1)	
H-I	-10382 / 0	-78.0	-78.0	0.44	(1)	2.92	E-U	0 / 755	0.19	(1)	
I-J	-8241 / 0	-78.0	-78.0	0.41	(1)	3.33	U-G	-483 / 0	0.11	(1)	
J-K	-8241 / 0	-78.0	-78.0	0.41	(1)	3.33	U-H	0 / 88	0.03	(4)	
K-L	-5639 / 0	-78.0	-78.0	0.28	(1)	4.02	T-H	0 / 129	0.03	(1)	
L-M	-2799 / 0	-78.0	-78.0	0.20	(1)	3.97	T-I	0 / 7951	0.65	(1)	
Z-A	-3811 / 0	0.0	0.0	0.30	(1)	5.43	S-I	-8032 / 0	0.85	(1)	
O-M	-3304 / 0	0.0	0.0	0.26	(1)	5.79	P-L	-893 / 0	0.21	(1)	
AA-Z	0 / 0	-96.5	-96.5	0.06	(1)	10.00	A-Y	0 / 2244	0.56	(1)	
Z-Y	0 / 0	-36.4	-36.4	0.09	(1)	10.00	P-M	0 / 1938	0.48	(1)	
Y-X	0 / 1915	-36.4	-36.4	0.29	(1)	10.00	R-L	0 / 4893	0.87	(1)	
X-W	0 / 5493	-36.4	-36.4	0.68	(1)	10.00	S-K	0 / 3179	0.56	(1)	
W-V	0 / 9899	-36.4	-36.4	0.45	(1)	10.00	R-K	-2410 / 0	0.80	(1)	
V-U	0 / 9838	-112.0	-112.0	0.54	(1)	10.00					
U-T	0 / 10380	-112.0	-112.0	0.56	(1)	10.00					
T-S	0 / 10632	-112.0	-112.0	0.49	(1)	10.00					
S-AB	0 / 5642	-112.0	-112.0	0.58	(1)	10.00					
AB-R	0 / 5642	-18.5	-18.5	0.58	(1)	10.00					
R-Q	0 / 1649	-18.5	-18.5	0.15	(1)	10.00					
Q-P	0 / 1649	-18.5	-18.5	0.15	(1)	10.00					

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
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
- ADD'TL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 14-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 14-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 25-3-8
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'TL LOADS BASED ON 55 % OF GSL.

*** NON STANDARD GIRDER ***
ADD'TL 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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/ 891 (0.53")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/ 469 (1.00")
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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CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292635	H1TA	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
J	TS-t	MT20	4.0	9.0		
K	TMWW-t	MT20	5.0	6.0	2.25	2.00
L	TTWW+h	MT20	6.0	12.0	3.25	2.25
M	TMVW-t	MT20	5.0	8.0	1.50	2.00
O	BMV1+p	MT20	3.0	5.0		
P	BMWW-t	MT20	5.0	6.0	2.50	2.75
Q	BS-t	MT20	6.0	7.0		
R	BMWW-t	MT20	6.0	7.0	2.75	1.75
S	BBWW-m	MT20	10.0	16.0	Edge	5.75
T	BBWW+m	MT20	10.0	12.0	6.50	4.75
U	BMWWW-t	MT20	5.0	8.0		
V	BBWW+p	MT18HS	10.0	14.0	Edge	5.25
W	BBWW-m	MT20	10.0	16.0	Edge	5.75
X	BMWW-t	MT20	7.0	8.0	3.50	3.25
Y	BMWW-t	MT20	5.0	6.0	2.50	2.00
Z	BMV1+t	MT20	6.0	12.0	Edge	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 134.1 lbs FACTORED DOWN AT 2-4-5 ON TOP CHORD, AND 988.9 lbs FACTORED DOWN AT 25-3-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRAC (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
P-O	0/0	-18.5	-18.5	0.03 (4)	10.00		
O-N	0/0	-96.5	-96.5	0.03 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
AB	25-3-8	-989	-989	---	FRONT	VERT	TOTAL

CSI: TC=0.47/1.00 (G-H:1), BC=0.68/1.00 (W-X:1), WB=0.87/1.00 (D-W:1), SS=0.52/1.00 (R-S:1)

DOI 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) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
MT18HS	511	354	2455

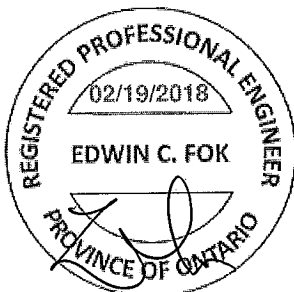
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

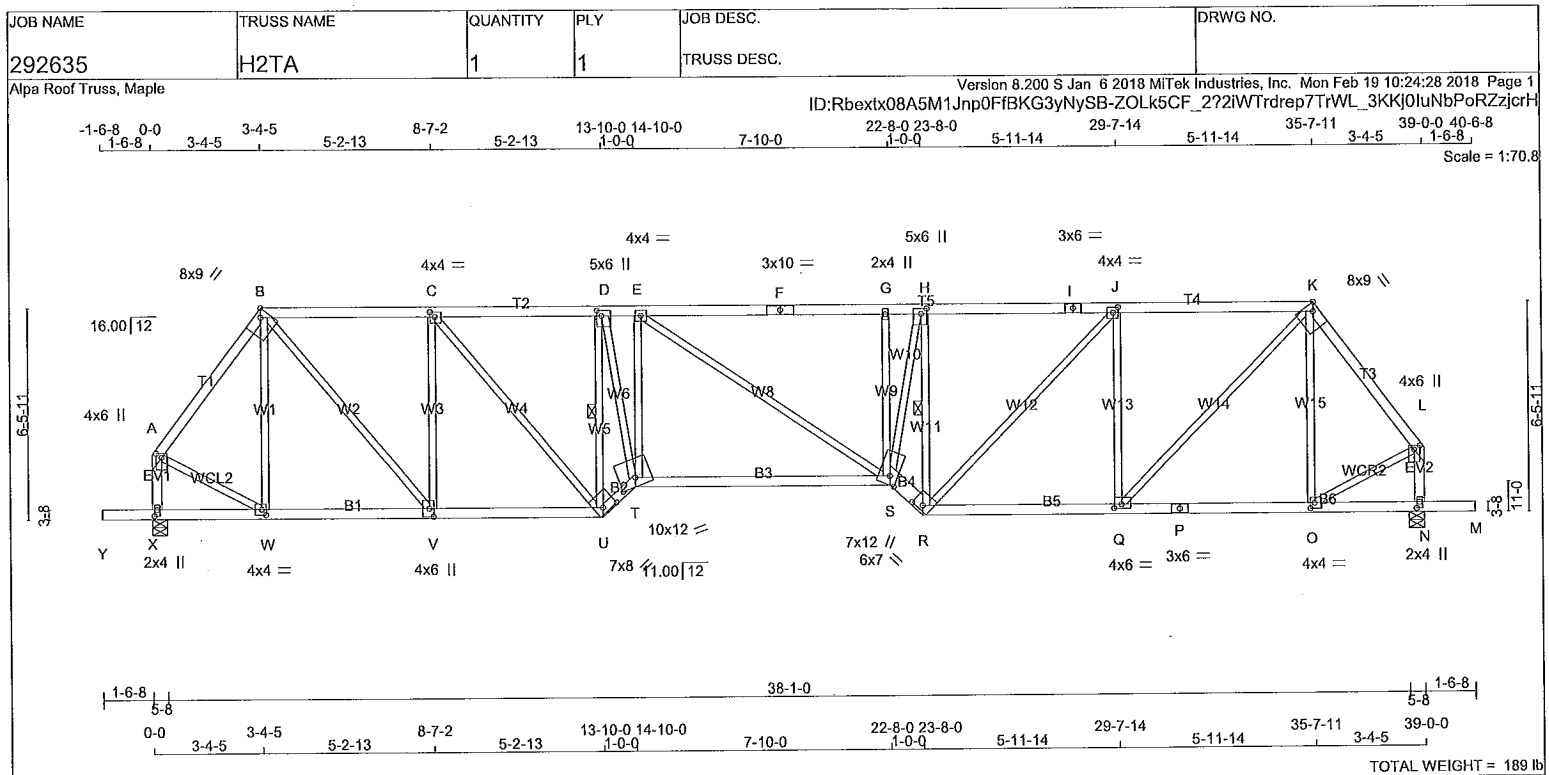
JSI GRIP= 0.90 (K) (INPUT = 0.90)

JSI METAL= 1.00 (T) (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



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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
B - F	2x4	DRY	1650F 1.5E
F - I	2x4	DRY	1650F 1.5E
I - K	2x4	DRY	1650F 1.5E
K - L	2x4	DRY	No.2
X - A	2x4	DRY	No.2
N - L	2x4	DRY	No.2
Y - U	2x4	DRY	No.2
U - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - R	2x6	DRY	No.2
R - P	2x4	DRY	No.2
P - M	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	1.50	2.00
B	TTWW-h	MT20	8.0	9.0	Edge	2.75
C	TMVW-t	MT20	4.0	4.0	1.75	1.75
D	TMVW+t	MT20	5.0	6.0	2.00	1.75
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	10.0		
G	TMVW+w	MT20	2.0	4.0		
H	TMVW+t	MT20	5.0	6.0	2.00	2.00
I	TS-t	MT20	3.0	6.0		
J	TMVW-t	MT20	4.0	4.0	2.00	1.75
K	TTWW-h	MT20	8.0	9.0	Edge	2.75
L	TMVW+p	MT20	4.0	6.0	1.50	2.00
N	BMV1+p	MT20	2.0	4.0	2.25	1.00
O	BMVW-t	MT20	4.0	4.0	2.00	1.50
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	4.0	6.0	1.50	2.75
R	BBWW-h	MT20	6.0	7.0	1.75	3.75
S	BBWWW+m	MT20	7.0	12.0	3.25	2.75
T	BBWW-m	MT20	10.0	12.0	3.25	6.00
U	BBWW-h	MT20	7.0	8.0	2.00	5.00

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP
JT	2030	0	2030	0
X	2030	0	2030	0
N	2030	0	2030	0

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0
X	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0
N	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.87 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-U, H-R.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MEMB.
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-1602 / 0	-78.0	-78.0 0.21 (1)	5.04	W-B	-354 / 0	0.24 (1)
B-C	-2083 / 0	-78.0	-78.0 0.32 (1)	4.93	B-V	0 / 1748	0.39 (1)
C-D	-2749 / 0	-78.0	-78.0 0.35 (1)	4.40	V-C	-1234 / 0	0.84 (1)
D-E	-3350 / 0	-78.0	-78.0 0.38 (1)	3.96	C-U	0 / 1026	0.23 (1)
E-F	-3506 / 0	-78.0	-78.0 0.64 (1)	3.87	U-D	-3282 / 0	0.89 (1)
F-G	-3506 / 0	-78.0	-78.0 0.64 (1)	3.87	D-T	0 / 3232	0.73 (1)
G-H	-3497 / 0	-78.0	-78.0 0.39 (1)	3.87	T-E	-567 / 0	0.26 (1)
H-I	-2897 / 0	-78.0	-78.0 0.47 (1)	4.19	E-S	0 / 174	0.04 (1)
I-J	-2897 / 0	-78.0	-78.0 0.47 (1)	4.19	S-G	-459 / 0	0.21 (1)
J-K	-2220 / 0	-78.0	-78.0 0.43 (1)	4.68	H-S	0 / 3142	0.71 (1)
K-L	-1604 / 0	-78.0	-78.0 0.21 (1)	5.03	R-H	-3210 / 0	0.87 (1)
X-A	-1860 / 0	0.0	0.0 0.21 (1)	6.15	R-J	0 / 966	0.22 (1)
N-L	-1862 / 0	0.0	0.0 0.21 (1)	6.15	Q-J	-1210 / 0	0.82 (1)
Y-X	0 / 0	-96.5	-96.5 0.16 (1)	10.00	Q-K	0 / 1820	0.41 (1)
X-W	0 / 0	-18.5	-18.5 0.08 (4)	10.00	O-K	-347 / 0	0.24 (1)
W-V	0 / 948	-18.5	-18.5 0.21 (1)	10.00	A-W	0 / 1052	0.24 (1)
V-U	0 / 2084	-18.5	-18.5 0.40 (1)	10.00	O-L	0 / 1053	0.24 (1)
U-T	0 / 3788	-18.5	-18.5 0.61 (1)	10.00			
T-S	0 / 3361	-18.5	-18.5 0.73 (1)	10.00			
S-R	0 / 3856	-18.5	-18.5 0.46 (1)	10.00			
R-Q	0 / 2221	-18.5	-18.5 0.44 (1)	10.00			
Q-P	0 / 950	-18.5	-18.5 0.25 (4)	10.00			
P-O	0 / 950	-18.5	-18.5 0.25 (4)	10.00			
O-N	0 / 0	-18.5	-18.5 0.09 (4)	10.00			
N-M	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 (1.30")
CALCULATED VERT. DEFL.(LL)= L/999 (0.30")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL)= L/625 (0.75")

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=0.84/1.00 (E-G:1), BC=0.73/1.00 (S-T:1), WB=0.89/1.00 (D-U:1), SS=0.23/1.00 (E-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

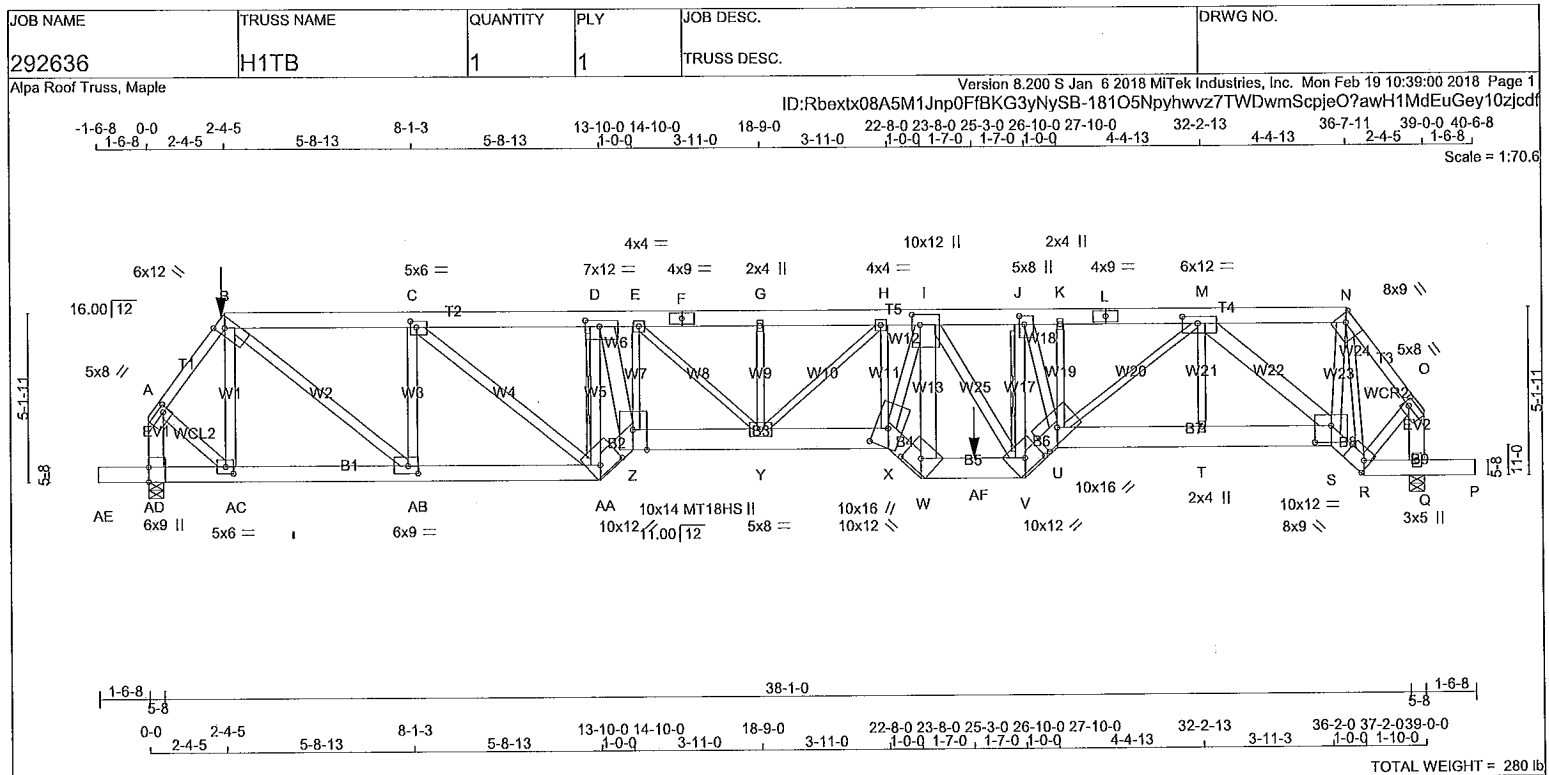
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.68 (R) (INPUT = 1.00)



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - F	2x6	DRY	1650F 1.5E	SPF
F - L	2x6	DRY	1650F 1.5E	SPF
L - N	2x6	DRY	1650F 1.5E	SPF
N - O	2x4	DRY	No.2	SPF
AD - A	2x6	DRY	No.2	SPF
Q - O	2x6	DRY	No.2	SPF
AE - AA	2x6	DRY	No.2	SPF
AA - Z	2x8	DRY	1950F 1.7E	SPF
Z - X	2x8	DRY	1950F 1.7E	SPF
X - W	2x8	DRY	1950F 1.7E	SPF
W - V	2x8	DRY	1950F 1.7E	SPF
V - U	2x8	DRY	1950F 1.7E	SPF
U - S	2x8	DRY	1950F 1.7E	SPF
S - R	2x6	DRY	No.2	SPF
R - P	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
AC - B	2x4	DRY	1650F 1.5E	SPF
B - AB	2x4	DRY	No.2	SPF
AB - C	2x4	DRY	1650F 1.5E	SPF
C - AA	2x4	DRY	No.2	SPF
AA - D	2x4	DRY	1650F 1.5E	SPF
D - Z	2x6	DRY	1650F 1.5E	SPF
X - I	2x4	DRY	2100F 1.8E	SPF
W - I	2x6	DRY	No.2	SPF
V - J	2x4	DRY	No.2	SPF
J - U	2x4	DRY	2100F 1.8E	SPF
M - S	2x6	DRY	No.2	SPF
S - N	2x4	DRY	No.2	SPF
A - AC	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
I - V	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.00	2.00
B	TTWW-h	MT20	6.0	12.0	3.25	2.50

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
AD	3930	0	3930	0	0	5-8	5-8	
Q	3446	0	3446	0	0	5-8	5-7	

ALLOW FOR 0.4" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
AD	2796	1738 / 0	0 / 0	0 / 0	0 / 0	1059 / 0	0 / 0
Q	2445	1559 / 0	0 / 0	0 / 0	0 / 0	886 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.87 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-AA, J-V

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	-3170 / 0	-78.0 -78.0 0.23 (1)	3.73	AC-B	-944 / 0
B-C	-5429 / 0	-153.5 -153.5 0.38 (1)	3.96	B-AB	0 / 4591
C-D	-7627 / 0	-153.5 -153.5 0.48 (1)	3.33	AB-C	-2788 / 0
D-E	-9807 / 0	-153.5 -153.5 0.42 (1)	3.02	C-AA	0 / 2815
E-F	-10371 / 0	-78.0 -78.0 0.48 (1)	2.90	AA-D	-8572 / 0
F-G	-10371 / 0	-78.0 -78.0 0.51 (1)	2.90	D-Z	0 / 8163
G-H	-10371 / 0	-78.0 -78.0 0.51 (1)	2.87	Z-E	-346 / 0
H-I	-10347 / 0	-78.0 -78.0 0.48 (1)	2.87	E-Y	0 / 772
I-J	-7199 / 0	-78.0 -78.0 0.30 (1)	3.59	Y-G	-526 / 0
J-K	-8334 / 0	-78.0 -78.0 0.39 (1)	3.26	Y-H	0 / 106
K-L	-8328 / 0	-78.0 -78.0 0.42 (1)	3.26	X-H	0 / 375
L-M	-8328 / 0	-78.0 -78.0 0.42 (1)	3.26	X-I	0 / 7725
M-N	-2389 / 0	-78.0 -78.0 0.14 (1)	4.77	W-I	-6547 / 0
N-O	-2433 / 0	-78.0 -78.0 0.17 (1)	5.25	V-J	-4330 / 0
AD-A	-3784 / 0	0.0 0.0 0.31 (1)	5.46	J-U	0 / 4241
Q-O	-3218 / 0	0.0 0.0 0.26 (1)	5.86	U-K	0 / 188
				U-M	0 / 3683
AE-AD	0 / 0	-96.5 -96.5 0.08 (1)	10.00	T-M	0 / 79
AD-AC	0 / 0	-36.4 -36.4 0.10 (4)	10.00	M-S	-4252 / 0
AC-AB	0 / 1870	-36.4 -36.4 0.33 (1)	10.00	S-N	0 / 4695
AB-AA	0 / 5429	-36.4 -36.4 0.80 (1)	10.00	N-R	-2938 / 0
AA-Z	0 / 10160	-36.4 -36.4 0.47 (1)	10.00	A-AC	0 / 2222
Z-Y	0 / 9818	-112.0 -112.0 0.53 (1)	10.00	R-O	0 / 1874
Y-X	0 / 10338	-112.0 -112.0 0.56 (1)	10.00	I-V	-1854 / 0
X-W	0 / 10682	-112.0 -112.0 0.49 (1)	10.00		
W-AF	0 / 8203	-112.0 -112.0 0.59 (1)	10.00		
AF-V	0 / 8203	-18.5 -18.5 0.59 (1)	10.00		

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
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 14-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGirder
START DISTANCE = 14-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 25-3-8
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/824 (0.57")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/434 (1.08")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/299 (0.06")

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CONTINUED ON PAGE 2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
C	TMWW-I	MT20	5.0	6.0	2.25	2.25
D	TMWW-I	MT20	7.0	12.0	2.25	5.25
E	TMWW-I	MT20	4.0	4.0		
F	TS-I	MT20	4.0	9.0		
G	TMW+W	MT20	2.0	4.0		
H	TMWW-I	MT20	4.0	4.0		
I	TMWWWW+I	MT20	10.0	12.0	3.75	3.00
J	TMWW+I	MT20	5.0	8.0	3.00	1.75
K	TMW+W	MT20	2.0	4.0		
L	TS-I	MT20	4.0	9.0		
M	TMWWWW-I	MT20	6.0	12.0	2.50	5.50
N	TTWW-h	MT20	8.0	9.0	3.25	3.00
O	TMVW-I	MT20	5.0	8.0	2.25	2.00
Q	BMV1+P	MT20	3.0	5.0		
R	BBWW-h	MT20	8.0	9.0	4.00	2.25
S	BBWW-I	MT20	10.0	12.0	6.00	6.00
T	BMW+W	MT20	2.0	4.0		
U	BBWWWW-h	MT20	10.0	16.0	4.50	8.00
V	BBWW-h	MT20	10.0	12.0	4.25	6.00
W	BBW-h	MT20	10.0	12.0	4.25	6.00
X	BBWW+M	MT20	10.0	16.0	6.75	4.75
Y	BMWWWW-I	MT20	5.0	8.0		
Z	BBWW+P	MT18HS	10.0	14.0	Edge	5.25
AA	BBWW-h	MT20	10.0	12.0	3.50	7.75
AB	BMWW-I	MT20	6.0	9.0	2.75	3.75
AC	BMWW-I	MT20	5.0	6.0	2.50	2.75
AD	BMV1+I	MT20	6.0	9.0	Edge	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 134.1 lbs FACTORED DOWN AT 2-4-5 ON TOP CHORD, AND 988.9 lbs FACTORED DOWN AT 25-3-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
V-U	0 / 9577	-18.5	-18.5 0.44 (1)	10.00			
U-T	0 / 5489	-18.5	-18.5 0.26 (1)	10.00			
T-S	0 / 5489	-18.5	-18.5 0.26 (1)	10.00			
S-R	0 / 2472	-18.5	-18.5 0.32 (1)	10.00			
R-Q	-1 / 0	-18.5	-18.5 0.08 (1)	10.00			
Q-P	0 / 0	-96.5	-96.5 0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
AF	25-3-8	-989	-989	---	FRONT	VERT	TOTAL

ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/158 (0.12")

CSI: TC=0.51/1.00 (G-H:1), BC=0.80/1.00 (AA-AB:1), WB=0.99/1.00 (I-W:1), SSI=0.37/1.00 (V-W:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

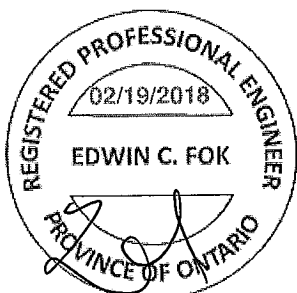
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656
MT18HS 511 354 2455 1382 3004 2010

PLATE PLACEMENT TOL. = 0.250 Inches

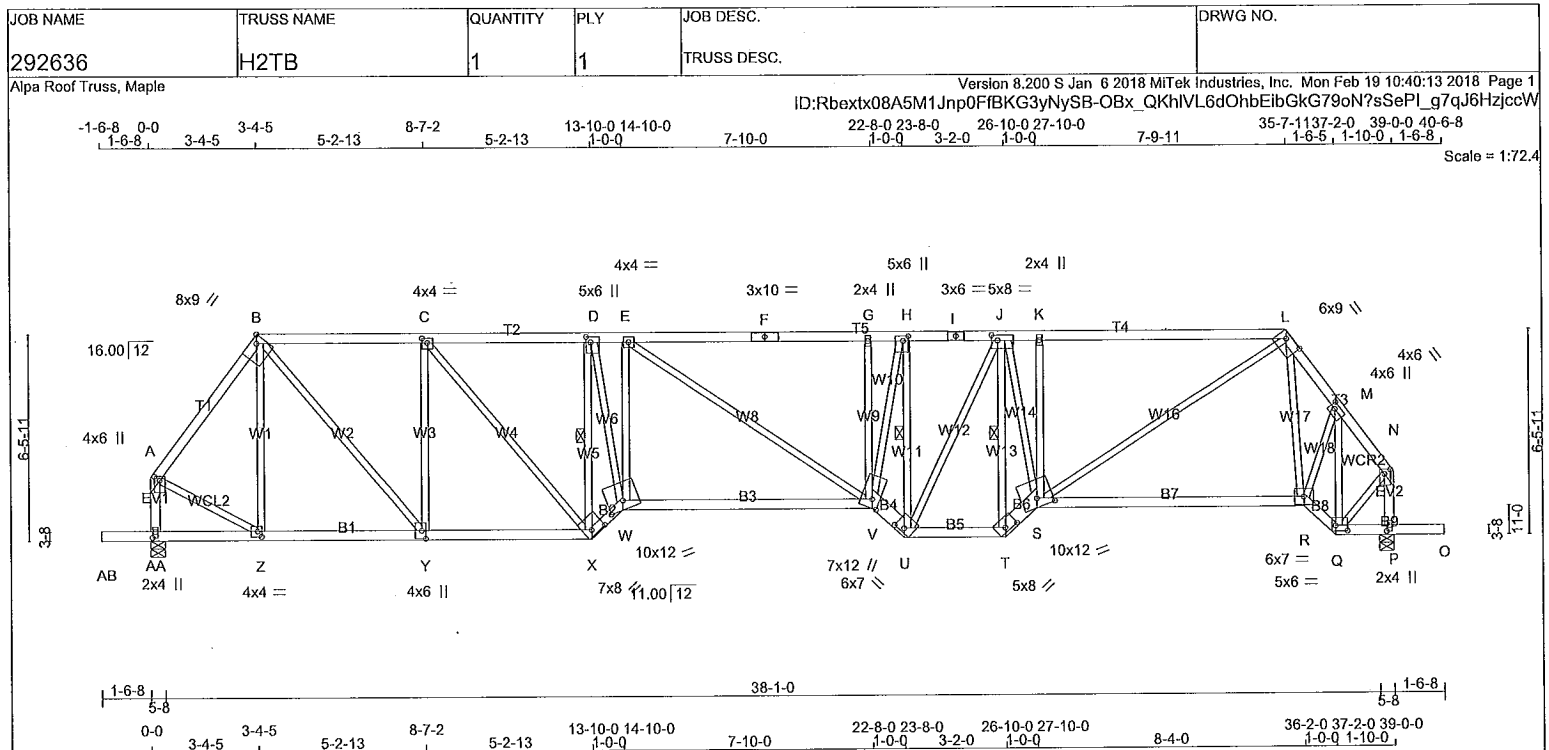
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (AA) (INPUT = 0.90)
JSI METAL= 0.99 (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-18023904(2)



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA		
N. L. G. A. RULES					BUILDING DESIGNER							
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED		MAXIMUM FACTORED		INPUT	REQRD	SPECIFIED LOADS:	
A - B	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG	BRG	TOP CH. LL = 21.0 PSF	
B - F	2x4	DRY	1650F 1.5E	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	
F - I	2x4	DRY	1650F 1.5E	SPF	AA	2027	0	2027	0	5-8	3-0	
I - L	2x4	DRY	1650F 1.5E	SPF	P	2033	0	2033	0	5-8	3-0	
L - N	2x4	DRY	No.2	SPF	ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD							
AA- A	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS							
P - N	2x4	DRY	No.2	SPF	1ST LCASE MAX/MIN. COMPONENT REACTIONS							
AB- X	2x4	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	
X - W	2x4	DRY	No.2	SPF	AA	1445	882 / 0	0 / 0	0 / 0	0 / 0	563 / 0	
W - V	2x4	DRY	No.2	SPF	P	1449	885 / 0	0 / 0	0 / 0	0 / 0	565 / 0	
V - U	2x6	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) AA, P							
U - T	2x4	DRY	No.2	SPF	BRACING							
T - S	2x6	DRY	No.2	SPF	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.86 FT.							
S - R	2x4	DRY	No.2	SPF	MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.							
R - Q	2x4	DRY	No.2	SPF	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.							
Q - O	2x4	DRY	No.2	SPF	1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-X, H-U, J-T.							
ALL WEBS 2x3 DRY No.2 SPF EXCEPT					END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW							
DRY: SEASONED LUMBER.					LOADING							
					TOTAL LOAD CASES: (4)							
					CHORDS				WEBS			
					MAX. FACTORED		FACTORED		MAX. 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	FR-TO	FR-TO	FR-TO
					A - B	-1599 / 0	-78.0	-78.0 0.21 (1)	5.04	Z - B	-353 / 0	0.24 (1)
					B - C	-2079 / 0	-78.0	-78.0 0.32 (1)	4.94	B - Y	0 / 1745	0.39 (1)
					C - D	-2742 / 0	-78.0	-78.0 0.35 (1)	4.41	Y - C	-1231 / 0	0.84 (1)
					D - E	-3341 / 0	-78.0	-78.0 0.37 (1)	3.97	C - X	0 / 1022	0.23 (1)
					E - F	-3495 / 0	-78.0	-78.0 0.65 (1)	3.86	X - D	-3273 / 0	0.89 (1)
					F - G	-3495 / 0	-78.0	-78.0 0.65 (1)	3.86	D - W	0 / 3220	0.72 (1)
					G - H	-3483 / 0	-78.0	-78.0 0.40 (1)	3.87	W - E	-561 / 0	0.26 (1)
					H - I	-2860 / 0	-78.0	-78.0 0.18 (1)	4.51	E - V	0 / 171	0.04 (1)
					I - J	-2860 / 0	-78.0	-78.0 0.18 (1)	4.51	V - G	-587 / 0	0.27 (1)
					J - K	-2952 / 0	-78.0	-78.0 0.53 (1)	3.91	V - H	0 / 3242	0.73 (1)
					K - L	-2965 / 0	-78.0	-78.0 0.78 (1)	3.89	U - H	-3056 / 0	0.83 (1)
					L - M	-1823 / 0	-78.0	-78.0 0.07 (1)	4.92	U - J	0 / 582	0.13 (1)
					M - N	-1319 / 0	-78.0	-78.0 0.05 (1)	5.59	T - J	-2308 / 0	0.63 (1)
					AA- A	-1857 / 0	0.0	0.0 0.21 (1)	6.15	J - S	0 / 1886	0.42 (1)
					P - N	-1805 / 0	0.0	0.0 0.21 (1)	6.23	S - K	-641 / 0	0.30 (1)
										S - L	0 / 2249	0.51 (1)
					AB-AA	0 / 0	-96.5	-96.5 0.16 (1)	10.00	L - R	-93 / 22	0.04 (1)
					AA- Z	0 / 0	-18.5	-18.5 0.08 (4)	10.00	R - M	0 / 921	0.21 (1)
					Z - Y	0 / 947	-18.5	-18.5 0.21 (1)	10.00	Q - M	-1412 / 0	0.38 (1)
					Y - X	0 / 2080	-18.5	-18.5 0.40 (1)	10.00	A - Z	0 / 1050	0.24 (1)
					X - W	0 / 3779	-18.5	-18.5 0.61 (1)	10.00	Q - N	0 / 1047	0.24 (1)
					W - V	0 / 3353	-18.5	-18.5 0.73 (1)	10.00			
					V - U	0 / 3809	-18.5	-18.5 0.45 (1)	10.00			
					U - T	0 / 2598	-18.5	-18.5 0.45 (1)	10.00			
					T - S	0 / 3472	-18.5	-18.5 0.41 (1)	10.00			
					S - R	0 / 1086	-18.5	-18.5 0.48 (4)	10.00			
					R - Q	0 / 1024	-18.5	-18.5 0.17 (1)	10.00			
					Q - P	0 / 0	-18.5	-18.5 0.16 (1)	10.00			
					P - O	0 / 0	-96.5	-96.5 0.16 (1)	10.00			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	1.50	2.00
B	TTWW-h	MT20	8.0	9.0	Edge	2.75
C	TMVW-t	MT20	4.0	4.0	1.75	2.00
D	TMVW+t	MT20	5.0	6.0	2.00	1.75
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	10.0		
G	TMW+w	MT20	2.0	4.0		
H	TMVW+t	MT20	5.0	6.0	1.75	2.00
I	TS-t	MT20	3.0	6.0		
J	TMVWW-t	MT20	5.0	8.0	2.00	2.25
K	TMW+w	MT20	2.0	4.0		
L	TTWW-h	MT20	6.0	9.0	1.75	6.00
M	TMVW-t	MT20	4.0	6.0	1.75	2.00
N	TMVW+p	MT20	4.0	6.0	1.75	2.25
P	BMV1+p	MT20	2.0	4.0	2.25	1.00
Q	BBWW-I	MT20	5.0	6.0	2.00	4.50
R	BBWW-I	MT20	6.0	7.0		

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

REGISTERED PROFESSIONAL ENGINEER

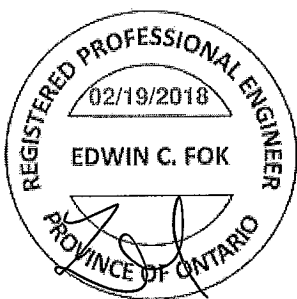
02/19/2018

EDWIN C. FOK

PROVINCE OF ONTARIO

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 (1.30")			
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.33")			
ALLOWABLE DEFL.(TL)= L/360 (1.30")			
CALCULATED VERT. DEFL.(TL)= L/ 585 (0.80")			
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/ 531 (0.03")			
CSI: TC=0.78/1.00 (K-L:1), BC=0.73/1.00 (V-W:1), WB=0.89/1.00 (D-X:1), SSI=0.28/1.00 (K-L: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= 0.90 (J) (INPUT = 0.90)			
JSI METAL= 0.68 (U) (INPUT = 1.00)			
A-18023905 CONTINUED 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



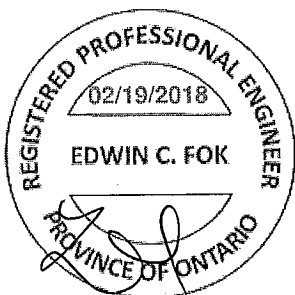
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292636	H2TB	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 10:40:13 2018 Page 2					
ID:Rbextx08A5M1Jnp0FIBKG3yNySB-OBx QKhVl.6dOhbElbGkG79oN?sSePI_g7qJ6HzjccW					

PLATES (table is in inches)

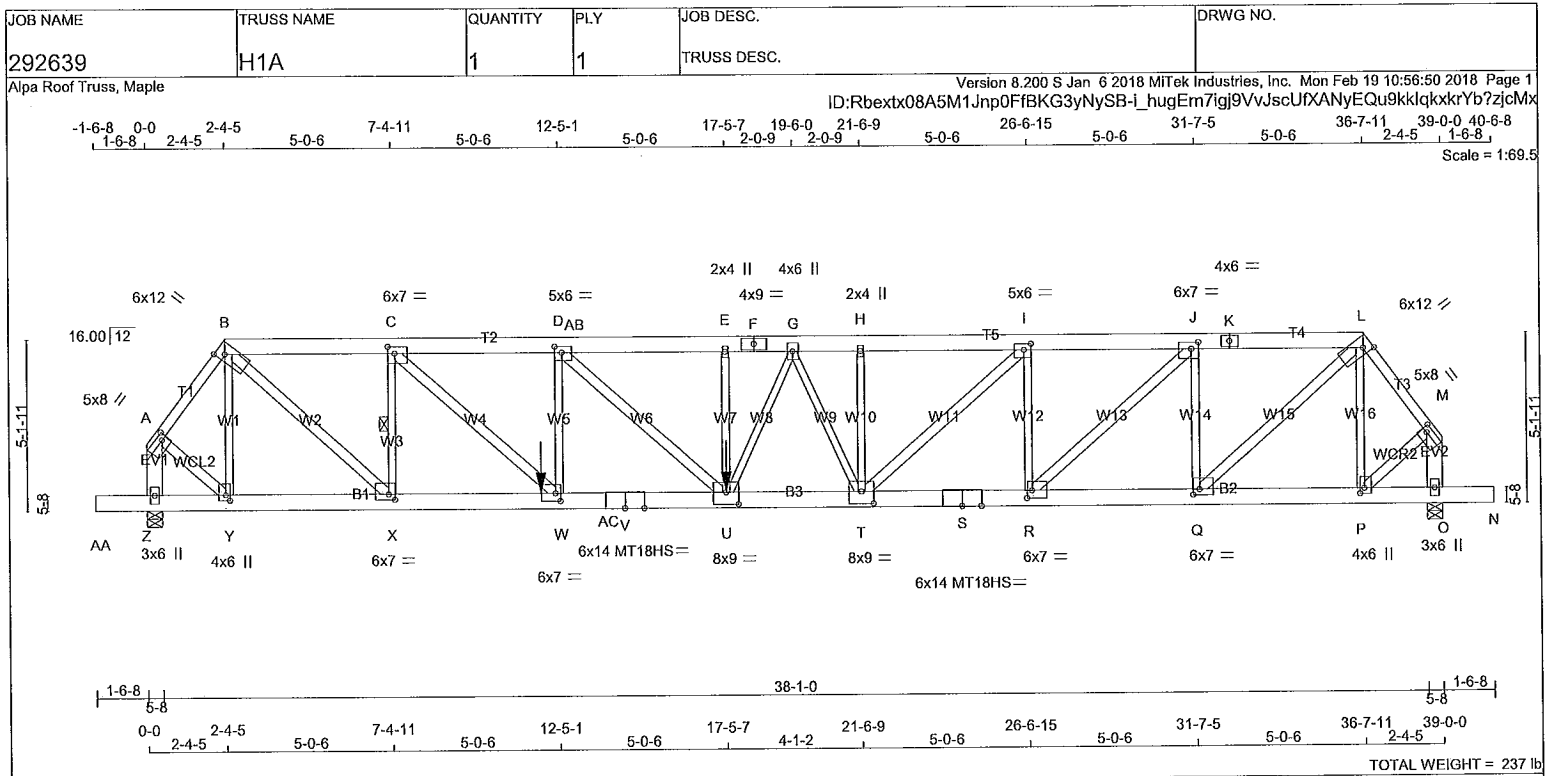
JT	TYPE	PLATES	W	LEN	Y	X
S	BBWW-m	MT20	10.0	12.0	3.25	6.00
T	BBW-h	MT20	5.0	8.0	1.50	4.50
U	BBWW-h	MT20	6.0	7.0	1.50	3.50
V	BBWW-m	MT20	7.0	12.0	3.25	2.75
W	BBWW-m	MT20	10.0	12.0	3.25	6.00
X	BBWW-h	MT20	7.0	8.0	2.00	5.00
Y	BMWW-t	MT20	4.0	6.0	3.00	1.50
Z	BMWW-t	MT20	4.0	4.0	2.00	1.50
AA	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

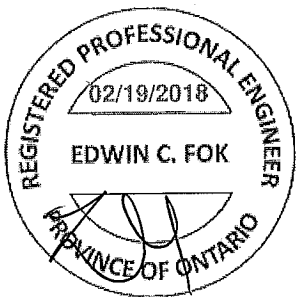
NOTE: Lateral brace(s) shown shall be 1x4
for Part 9 design as per OBC 9.23.13.11,
and no less than 2x4 for Part 4 design



A-18023905(2)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - B 2x4 DRY No.2 SPF B - F 2x6 DRY 1650F 1.5E SPF F - K 2x6 DRY 1650F 1.5E SPF K - L 2x6 DRY 1650F 1.5E SPF L - M 2x4 DRY No.2 SPF Z - A 2x6 DRY No.2 SPF O - M 2x6 DRY No.2 SPF AA - V 2x6 DRY 2100F 1.8E SPF V - S 2x6 DRY 2100F 1.8E SPF S - N 2x6 DRY 2100F 1.8E SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT B - X 2x4 DRY No.2 SPF C - W 2x4 DRY No.2 SPF D - U 2x4 DRY No.2 SPF T - I 2x4 DRY No.2 SPF R - J 2x4 DRY No.2 SPF Q - Y 2x4 DRY No.2 SPF A - Y 2x4 DRY No.2 SPF P - M 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED INPUT REQD GROSS REACTION DOWN BRG BRG JT VERT HORZ 4134 0 5-8 5-3 Z 3444 0 3444 0 5-8 3-7 O UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL Z 2915 1959 / 0 0 / 0 0 / 0 956 / 0 0 / 0 O 2433 1609 / 0 0 / 0 0 / 0 825 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Z, O BEARING SIZE FACTOR = 1.15 AT JNT(S) Z, O (BASED ON SUPPORT DEPTH = 1-8) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.86 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-X. 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. UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED VERT. LOAD (PLF) FR-TO A-B -3341 / 0 -78.0 -78.0 0.25 (1) 3.63 Y-B -1118 / 0 0.39 (1) B-C -5763 / 0 -78.0 -78.0 0.21 (1) 4.05 B-X 0 / 5169 0.91 (1) C-AB -8950 / 0 -78.0 -78.0 0.35 (1) 3.25 X-C -3362 / 0 0.68 (1) AB-D -8950 / 0 -154.5 -154.5 0.35 (1) 3.25 C-W 0 / 4354 0.77 (1) D-E -10342 / 0 -154.5 -154.5 0.54 (1) 2.86 W-D -1961 / 0 0.69 (1) E-F -10342 / 0 -78.0 -78.0 0.32 (1) 3.05 D-U 0 / 1901 0.34 (1) F-G -10342 / 0 -78.0 -78.0 0.32 (1) 3.05 U-E -471 / 0 0.17 (1) G-H -9146 / 0 -78.0 -78.0 0.26 (1) 3.28 U-G 0 / 1441 0.36 (1) H-I -9146 / 0 -78.0 -78.0 0.36 (1) 3.21 G-T -1544 / 0 0.65 (1) I-J -7163 / 0 -78.0 -78.0 0.24 (1) 3.67 T-H -302 / 0 0.11 (1) J-K -4670 / 0 -78.0 -78.0 0.16 (1) 4.46 T-I 0 / 2709 0.48 (1) K-L -4670 / 0 -78.0 -78.0 0.16 (1) 4.46 R-I -2233 / 0 0.79 (1) L-M -2752 / 0 -78.0 -78.0 0.20 (1) 4.00 R-J 0 / 3406 0.60 (1) Z-A -4004 / 0 0.0 0.0 0.32 (1) 5.31 Q-J -2750 / 0 0.97 (1) O-M -3314 / 0 0.0 0.0 0.27 (1) 5.78 Q-L 0 / 4151 0.73 (1) P-L -886 / 0 0.31 (1) AA-Z 0 / 0 -96.5 -96.5 0.05 (1) 10.00 A-Y 0 / 2353 0.42 (1) Z-Y 0 / 0 -18.5 -18.5 0.04 (1) 10.00 P-M 0 / 1938 0.34 (1) Y-X 0 / 1977 -18.5 -18.5 0.14 (1) 10.00 X-AC 0 / 5763 -18.5 -18.5 0.42 (1) 10.00 AC-W 0 / 5763 -37.3 -37.3 0.42 (1) 10.00 W-V 0 / 8950 -37.3 -37.3 0.56 (1) 10.00 V-U 0 / 8950 -37.3 -37.3 0.56 (1) 10.00 U-T 0 / 9765 -18.5 -18.5 0.60 (1) 10.00 T-S 0 / 7163 -18.5 -18.5 0.42 (1) 10.00 S-R 0 / 7163 -18.5 -18.5 0.42 (1) 10.00 R-Q 0 / 4670 -18.5 -18.5 0.28 (1) 10.00 Q-P 0 / 1629 -18.5 -18.5 0.13 (1) 10.00 P-O 0 / 0 -18.5 -18.5 0.04 (1) 10.00 O-N 0 / 0 -96.5 -96.5 0.05 (1) 10.00			DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TOP CH. LL = 21.0 PSF DL = 6.0 PSF BOT CH. LL = 0.0 PSF DL = 7.4 PSF TOTAL LOAD = 34.4 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM *** NON STANDARD GIRDER *** ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, OBC 2018 - CSA 086-09, CSA 086-14 - TPIC 2011, TPIC 2014 (55% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.30") CALCULATED VERT. DEFL.(LL)= L/999 (0.42") ALLOWABLE DEFL.(TL)= L/360 (1.30") CALCULATED VERT. DEFL.(TL)= L/619 (0.76") CANTILEVER DEFLECTION: ALLOWABLE DEFL.(LL)= L/120 (0.19") CALCULATED VERT. DEFL.(LL)= L/999 (0.00") ALLOWABLE DEFL.(TL)= L/120 (0.19") CALCULATED VERT. DEFL.(TL)= L/999 (0.00") CSI: TC=0.54/1.00 (D-E:1), BC=0.60/1.00 (T-U:1), WB=0.97/1.00 (J-Q:1), SSI=0.56/1.00 (W-X:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 COMPANION LIVE LOAD FACTOR = 1.00 AUTOSOLVE HEELS OFF TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 788 1987 1656 MT18HS 511 354 2455 1382 3004 2010 A-18023906		
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292639	H1A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 10:56:50 2018 Page 2.
ID:Rbextx08A5M1Jnp0FfBKG3yNySB-I hugEm7Igj9VvJscUfXANyEQu9kkIqkxkrYb?zjcMx

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Q	BMWW-I	MT20	6.0	7.0	2.00	2.25
R	BMWW-I	MT20	6.0	7.0	2.75	1.75
S	BS-I	MT18HS	6.0	14.0		
T	BMWWWW-I	MT20	8.0	9.0	4.25	4.50
U	BMWWWW-I	MT20	8.0	9.0	4.25	4.50
V	BS-I	MT18HS	6.0	14.0		
W	BMWW-I	MT20	6.0	7.0	2.75	1.75
X	BMWW-I	MT20	6.0	7.0	2.00	2.25
Y	BMWW+I	MT20	4.0	6.0	2.00	1.50
Z	BMV1+p	MT20	3.0	6.0		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
U	17-5-8	-2132	-2132	---	FRONT	VERT	TOTAL
AC	11-10-8	-855	-855	---	FRONT	VERT	TOTAL

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)

JSI METAL= 0.88 (V) (INPUT = 1.00)

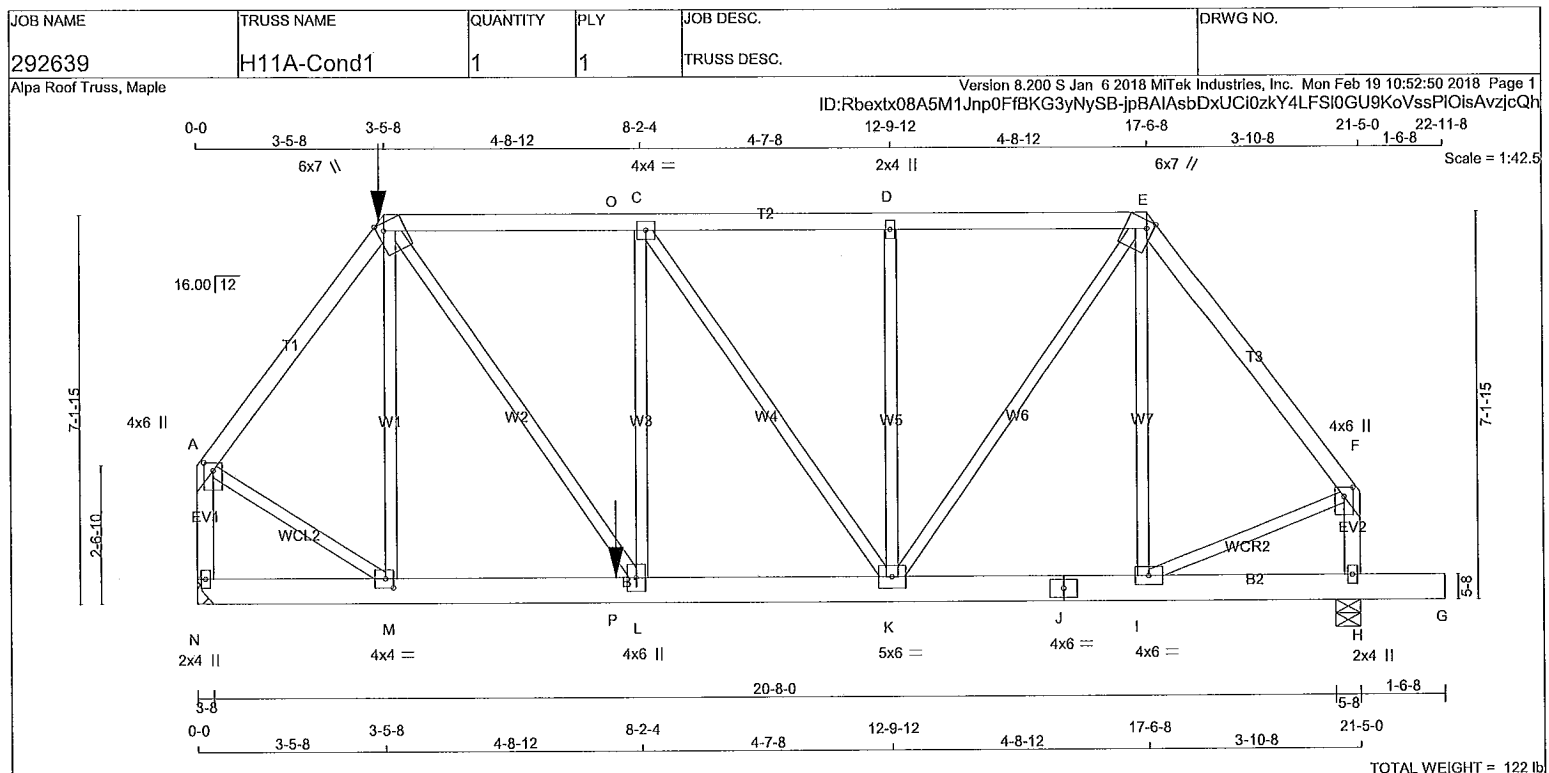
HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 2131.9 lbs FACTORED DOWN AT 17-5-8, AND 855.1 lbs FACTORED DOWN AT 11-10-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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



A-18023906(2)



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
N - A	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
N - J	2x6	DRY	No.2	SPF
J - G	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW+p	MT20	4.0	6.0 1.75 2.00
B	TTWW+m	MT20	6.0	7.0 Edge 1.50
C	TMWW-l	MT20	4.0	4.0
D	TMW+w	MT20	2.0	4.0
E	TTWW+m	MT20	6.0	7.0 Edge 1.50
F	TMVW+p	MT20	4.0	6.0 2.00 2.00
H	BMV1+p	MT20	2.0	4.0
I	BMWW-l	MT20	4.0	6.0
J	BS-l	MT20	4.0	6.0
K	BMWWW-l	MT20	5.0	6.0
L	BMWWH-l	MT20	4.0	6.0
M	BMWW-l	MT20	4.0	4.0 2.00 1.75
N	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) 106.7 lbs FACTORED DOWN AT 3-5-8 ON TOP CHORD, AND 652.1 lbs FACTORED DOWN AT 7-8-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

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		
N	1710	0	1710	0	0	0
H	1486	0	1486	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. LIVE		PERM. LIVE		WIND	DEAD	SOIL
	SNOW	WIND	PERM. LIVE	WIND	DEAD	SOIL			
N	1212	779 / 0	0 / 0	0 / 0	0 / 0	432 / 0	0 / 0	0 / 0	0 / 0
H	1055	669 / 0	0 / 0	0 / 0	0 / 0	386 / 0	0 / 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 = 4.98 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				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LOCL CSI (L/C)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (L/C)	
FR-TO		FROM	TO		FR-TO			
A-B	-1355 / 0	-78.0	-78.0	0.23 (1)	5.32	M-B	-260 / 0	0.22 (1)
B-O	-1412 / 0	-114.5	-114.5	0.38 (1)	4.98	B-L	0 / 1059	0.26 (1)
O-C	-1412 / 0	-78.0	-78.0	0.38 (1)	4.98	L-C	-150 / 0	0.13 (1)
C-D	-1188 / 0	-78.0	-78.0	0.36 (1)	5.36	C-K	-398 / 0	0.56 (1)
D-E	-1188 / 0	-78.0	-78.0	0.26 (1)	5.52	K-D	-370 / 0	0.32 (1)
E-F	-1128 / 0	-78.0	-78.0	0.27 (1)	5.65	K-E	0 / 901	0.22 (1)
N-A	-1693 / 0	0.0	0.0	0.24 (1)	6.34	I-E	-148 / 11	0.13 (1)
H-F	-1314 / 0	0.0	0.0	0.16 (1)	7.02	A-M	0 / 935	0.23 (1)
						I-F	0 / 720	0.18 (1)
N-M	0 / 0	-27.2	-27.2	0.08 (1)	10.00			
M-P	0 / 803	-27.2	-27.2	0.24 (1)	10.00			
P-L	0 / 803	-18.5	-18.5	0.24 (1)	10.00			
L-K	0 / 1412	-18.5	-18.5	0.27 (1)	10.00			
K-J	0 / 670	-18.5	-18.5	0.12 (1)	10.00			
J-I	0 / 670	-18.5	-18.5	0.12 (1)	10.00			
I-H	0 / 0	-18.5	-18.5	0.05 (4)	10.00			
H-G	0 / 0	-96.5	-96.5	0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	3-5-8	-107	-107	—	FRONT	VERT	TOTAL
P	7-8-8	-652	-652	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 3-5-8
RIGHT SETBACK = 3-10-8
END SETBACK = 3-10-8
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 7-8-8 OF SPAN MEASURED FROM THE LEFT.

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

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

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

(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)= 1/360 (0.71")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.04")
ALLOWABLE DEFL.(TL)= 1/360 (0.71")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.07")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.00")
ALLOWABLE DEFL.(TL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.00")

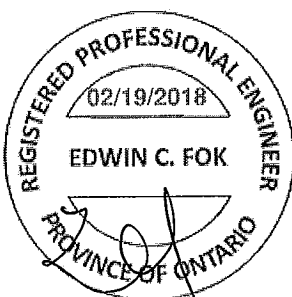
CSI: TC=0.38/1.00 (B-C:1), BC=0.27/1.00 (K-L:1), WB=0.66/1.00 (C-K:1), SSI=0.43/1.00 (L-M:1)

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

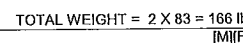
COMPANION LIVE LOAD FACTOR = 1.00

A-18023907

CONTINUED ON PAGE 2



Alpa Roof Truss, Maple



[M]

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

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 24.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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 LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 24	-78.0	-78.0 0.14 (1)	10.00	B-H	-96 / 0	0.10 (1)
B-C	-377 / 0	-78.0	-78.0 0.10 (1)	6.25	H-C	0 / 357	0.06 (1)
C-D	-379 / 0	-78.0	-78.0 0.12 (1)	6.25	H-D	-135 / 0	0.14 (1)
D-E	0 / 26	-78.0	-78.0 0.16 (1)	10.00	I-B	-575 / 0	0.58 (1)
I-A	-95 / 0	0.0	0.0 0.01 (1)	7.81	D-G	-576 / 0	0.55 (1)
G-E	-101 / 0	0.0	0.0 0.01 (1)	7.81			
I-H	0 / 257	-18.5	-18.5 0.27 (4)	10.00			
H-G	0 / 280	-18.5	-18.5 0.27 (4)	10.00			
G-F	0 / 0	-96.5	-96.5 0.16 (1)	10.00			

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

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=0.18/1.00 (D-E:1) , BC=0.27/1.00 (G-H:4)
 , WB=0.58/1.00 (B-I:1) , SSI=0.12/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

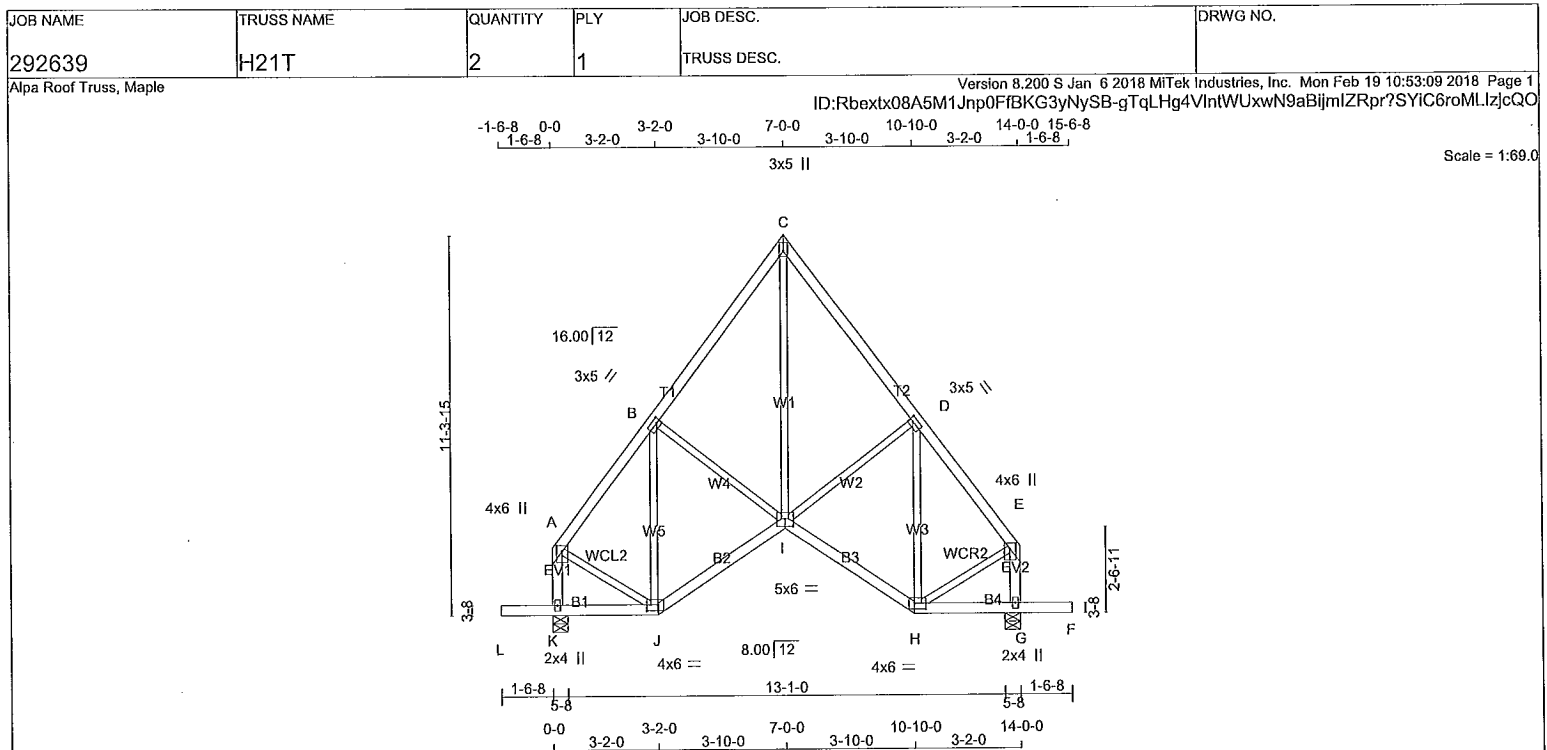
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (B) (INPUT = 0.90)
JSI METAL= 0.37 (D) (INPUT = 1.00)

A-18023909



TOTAL WEIGHT = 2 X 81 = 162 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW+p	MT20	4.0	6.0 2.00 2.00
B	TMWW-t	MT20	3.0	5.0 1.50 1.50
C	TTW+p	MT20	3.0	5.0 2.00 Edge
D	TMWW-t	MT20	3.0	5.0 1.50 1.50
E	TMVW+p	MT20	4.0	6.0 2.00 2.00
G	BMV1+p	MT20	2.0	4.0
H	BBWW-t	MT20	4.0	6.0 2.00 4.00
I	BBWWW-p	MT20	5.0	6.0 2.75 3.00
J	BBWW-t	MT20	4.0	6.0 2.00 4.00
K	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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
K	824	0	824	0	0	5-8	1-8	5-8	1-8
G	824	0	824	0	0	5-8	1-8	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
K	587	359 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0		
G	587	359 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MEMB.	FORCE (LBS)	VERT. LOAD	LC1
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-482 / 0	-78.0	-78.0 0.13 (1)	I-C	0 / 508	0.11 (1)	
B-C	-496 / 0	-78.0	-78.0 0.14 (1)	I-D	-25 / 0	0.01 (1)	
C-D	-496 / 0	-78.0	-78.0 0.14 (1)	H-D	-293 / 0	0.17 (1)	
D-E	-482 / 0	-78.0	-78.0 0.13 (1)	B-I	-25 / 0	0.01 (1)	
K-A	-646 / 0	0.0	0.0 0.07 (1)	J-B	-293 / 0	0.17 (1)	
G-E	-646 / 0	0.0	0.0 0.07 (1)	A-J	0 / 345	0.08 (1)	
				H-E	0 / 345	0.08 (1)	
L-K	0 / 0	-96.5	-96.5 0.16 (1)				
K-J	0 / 0	-18.5	-18.5 0.05 (4)				
J-I	0 / 364	-18.5	-18.5 0.11 (4)				
I-H	0 / 364	-18.5	-18.5 0.11 (4)				
H-G	0 / 0	-18.5	-18.5 0.05 (4)				
G-F	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

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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

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=0.14/1.00 (B-C:1), BC=0.16/1.00 (F-G:1), WB=0.17/1.00 (D-H:1), SS=0.12/1.00 (K-L: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

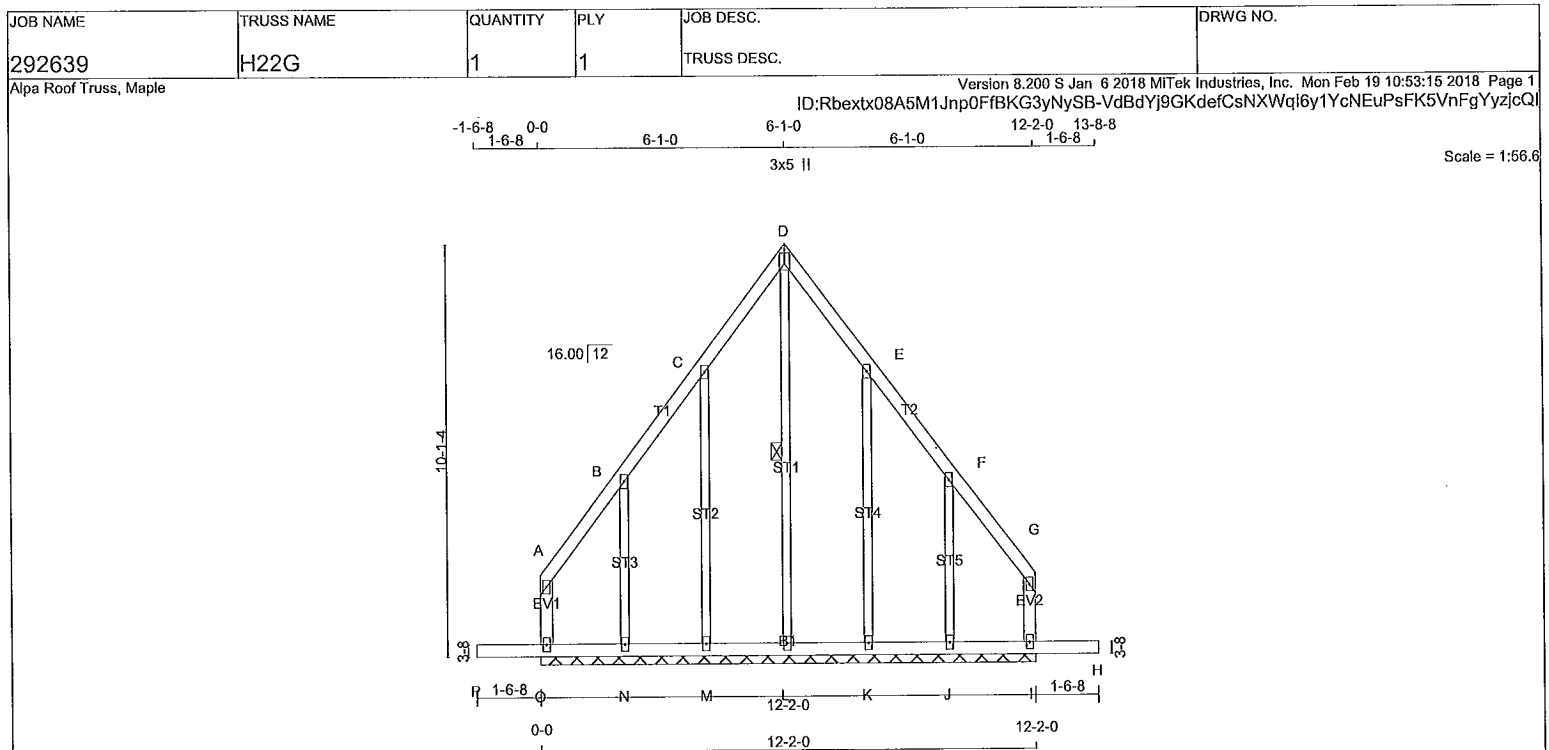
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.78 (C) (INPUT = 0.90)
JSI METAL = 0.18 (E) (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-18023910



TOTAL WEIGHT = 70 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
O - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
P - H	2x4	DRY	No.2	SPF

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMV+p	MT20	2.0	4.0
B, C, E, F				
B	TMW+w	MT20	2.0	4.0
D	TTW+p	MT20	3.0	5.0
G	TMV+p	MT20	2.0	4.0
I	BMV1+p	MT20	2.0	4.0
J, K, L, M, N				
J	BMV1+w	MT20	2.0	4.0
O	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
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-L.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
O-A	-66 / 0	0.0 0.0 0.05 (1)	7.81	L-D	-200 / 0	0.13 (1)	
A-B	0 / 14	-78.0 -78.0 0.04 (1)	10.00	M-C	-161 / 0	0.16 (1)	
B-C	0 / 22	-78.0 -78.0 0.04 (1)	10.00	N-B	-147 / 0	0.05 (1)	
C-D	0 / 23	-78.0 -78.0 0.04 (1)	10.00	K-E	-161 / 0	0.16 (1)	
D-E	0 / 23	-78.0 -78.0 0.04 (1)	10.00	J-F	-147 / 0	0.05 (1)	
E-F	0 / 22	-78.0 -78.0 0.04 (1)	10.00				
F-G	0 / 14	-78.0 -78.0 0.04 (1)	10.00				
I-G	-66 / 0	0.0 0.0 0.05 (1)	7.81				
P-O	0 / 0	-96.5 -96.5 0.16 (1)	10.00				
O-N	-8 / 0	-18.5 -18.5 0.11 (1)	10.00				
N-M	-12 / 0	-18.5 -18.5 0.02 (1)	6.25				
M-L	-15 / 0	-18.5 -18.5 0.02 (4)	6.25				
L-K	-15 / 0	-18.5 -18.5 0.02 (4)	6.25				
K-J	-12 / 0	-18.5 -18.5 0.02 (1)	6.25				
J-I	-8 / 0	-18.5 -18.5 0.11 (1)	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

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

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

CSI: TC=0.05/1.00 (G-I:1), BC=0.16/1.00 (H-I:1), WB=0.16/1.00 (E-K:1), SSI=0.12/1.00 (O-P:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

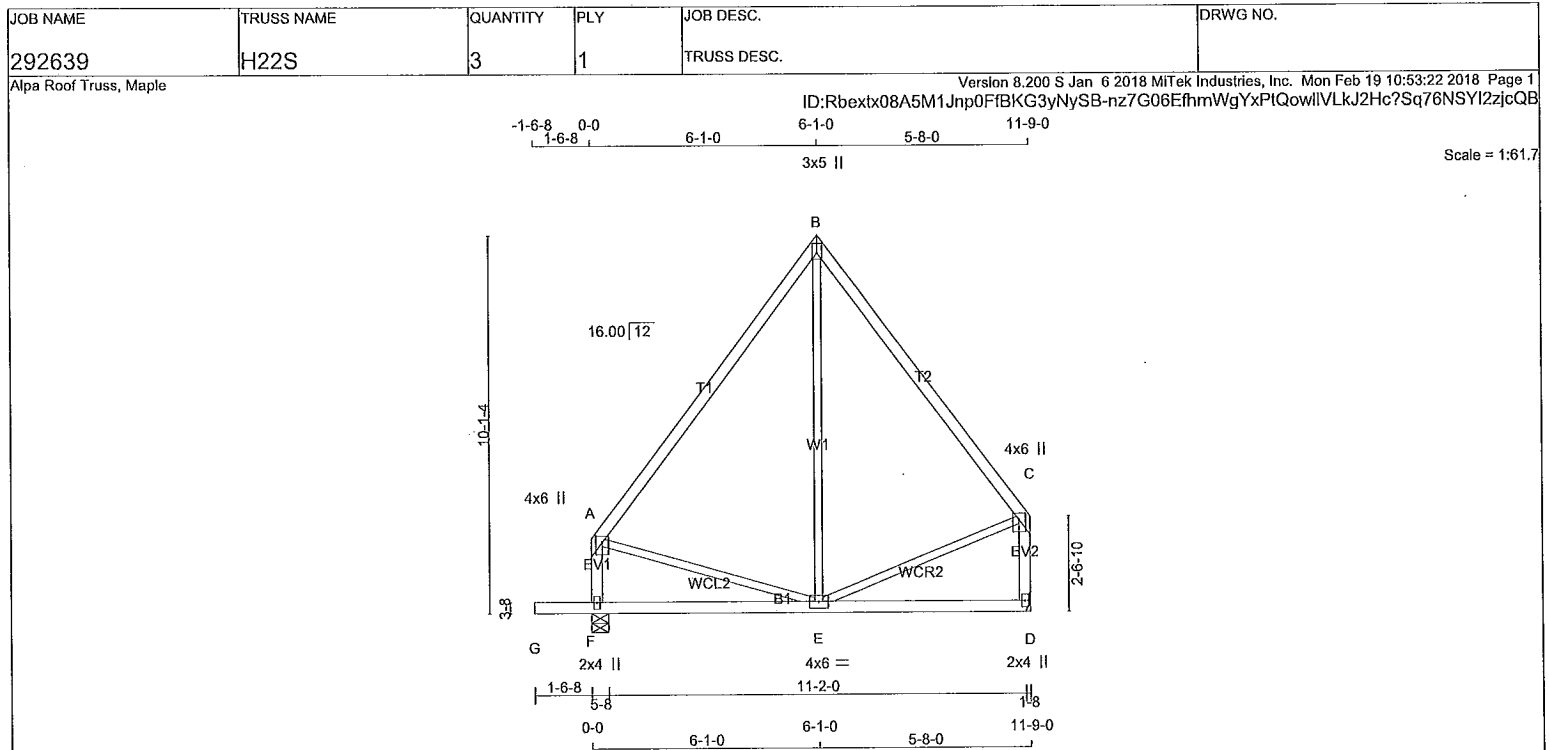
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (D) (INPUT = 0.90)
JSI METAL= 0.08 (E) (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-18023911



TOTAL WEIGHT = 3 X 60 = 179 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	2100F 1.8E	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
G - 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
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-l	MT20	4.0	6.0		
F	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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
JT				
D	567	0	567	0
F	715	0	715	0

UNFACTORED REACTIONS

	1ST LCASE	MAX / MIN	COMPONENT REACTIONS				
			LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT							
D	404	247 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0
F	510	311 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (CSI (LC))	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FR-TO)	
FR-TO				FR-TO			
A-B	-298 / 0	-78.0	-78.0 0.25 (1)	E-B	0 / 103	6.25	0.04 (4)
B-C	-298 / 0	-78.0	-78.0 0.32 (1)	A-E	0 / 185	6.25	0.04 (1)
F-A	-523 / 0	0.0	0.0 0.06 (1)	E-C	0 / 192	7.81	0.04 (1)
D-C	-528 / 0	0.0	0.0 0.07 (1)				
G-F	0 / 0	-96.5	-96.5 0.16 (1)				
F-E	0 / 0	-18.5	-18.5 0.18 (4)				
E-D	0 / 0	-18.5	-18.5 0.18 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.39")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.39")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.03")

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=0.32/1.00 (B-C:1), BC=0.18/1.00 (E-F:4), WB=0.04/1.00 (C-E:1), SSI=0.12/1.00 (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

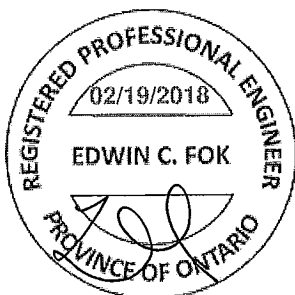
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

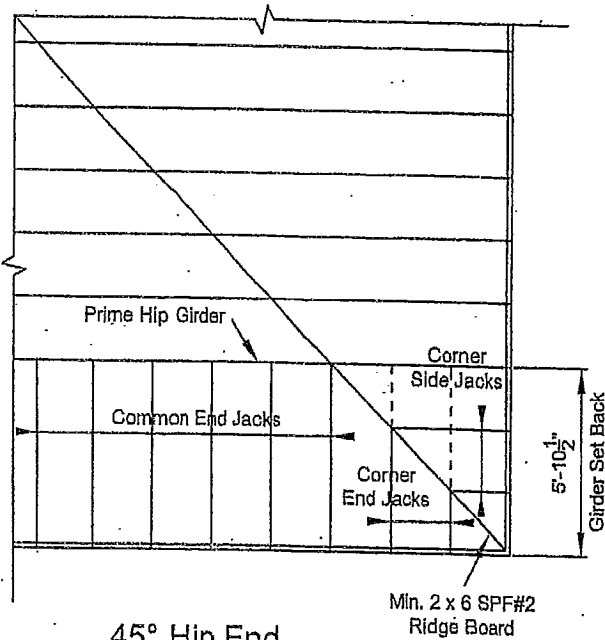
JSI GRIP= 0.32 (E) (INPUT = 0.90)
JSI METAL= 0.15 (A) (INPUT = 1.00)

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



A-18023912

STRACON ENGINEERING INC.



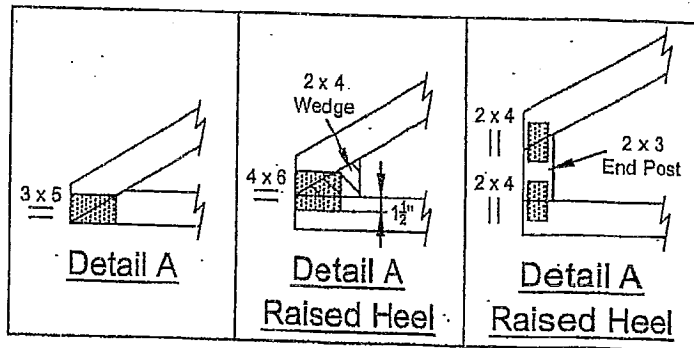
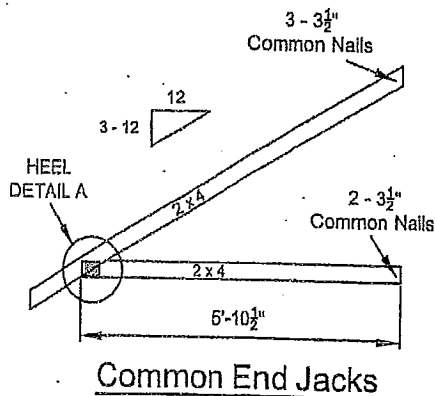
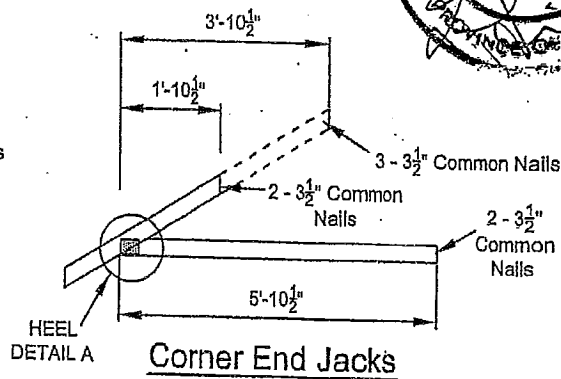
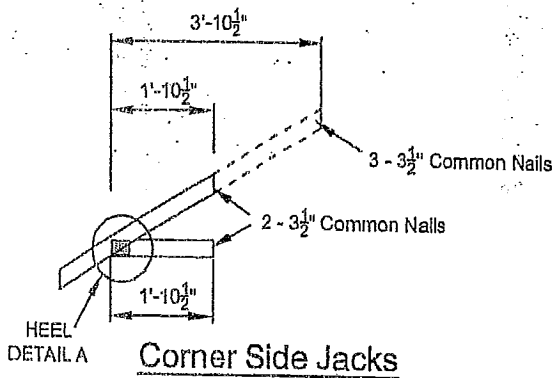
LUMBER SPECIFICATION

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

DESIGN LOAD

TOP CHORD SNOW LOAD : 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

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:

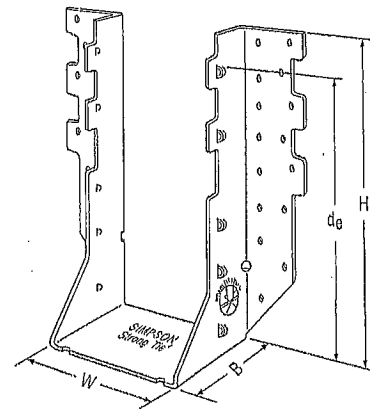
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

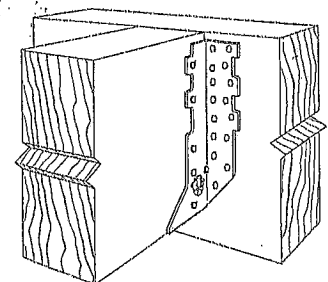
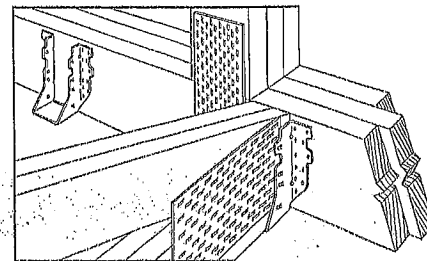
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



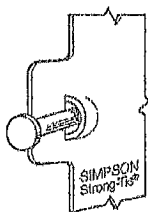
HHUS410



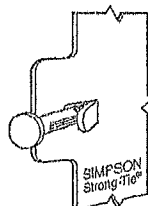
Typical HHUS Installation

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

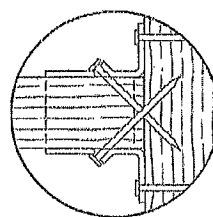
1. d_g is the distance from the seat of the hanger to the highest joist nail.



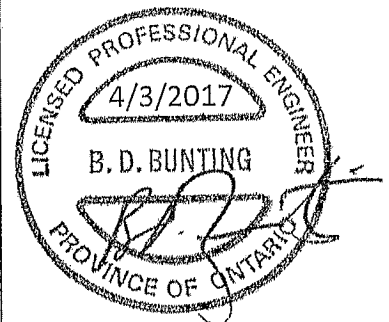
Double Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,680



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

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

(800) 999-5099
strongtie.com

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:

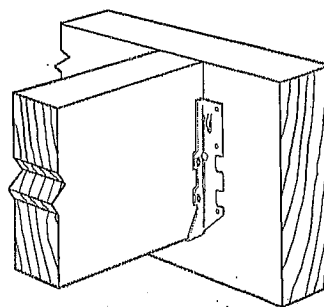
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

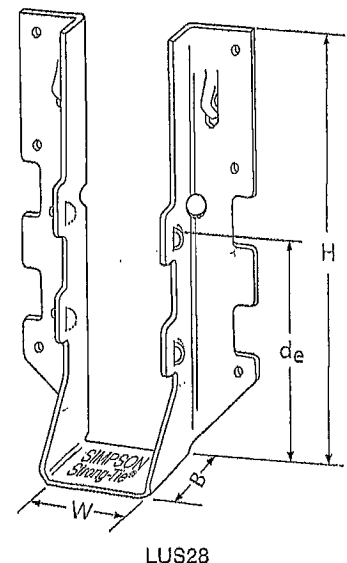
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



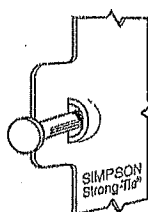
Typical LUS Installation



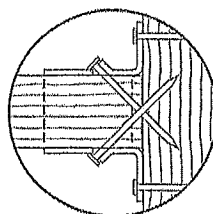
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D.Fir-L		S-P-F	
		W	H	B	d _e ¹	Face	Joist	Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LUS24	18	1½	3½	1¼	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¼	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	6¾	1¼	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	7 11/16	1¼	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	8 11/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

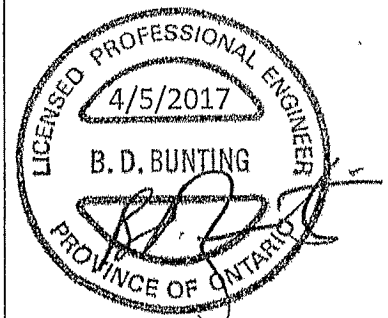
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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

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

(800) 999-5099
strongtie.com

TC – Truss Connectors



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

Material: 16 gauge

Finish: G90 galvanized

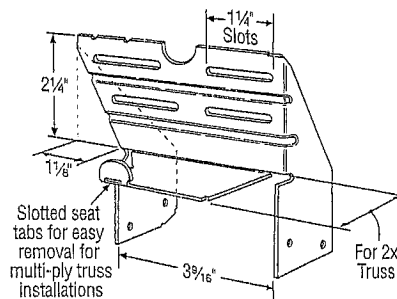
Design: Factored resistances are in accordance with CSA 086-14

Installation:

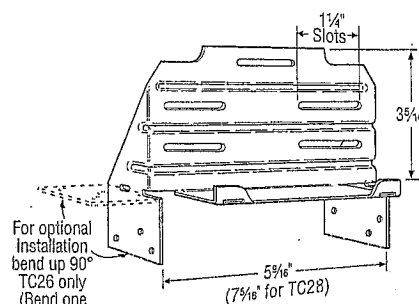
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow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

Optional TC Installation:

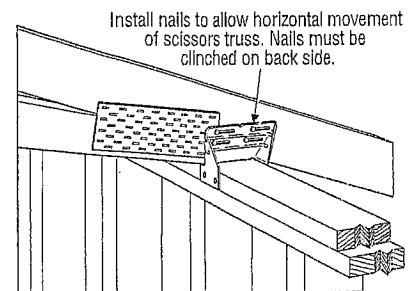
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



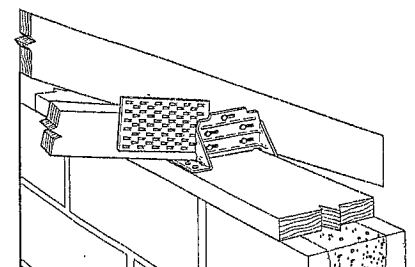
TC24
U.S. Patent 4,932,173



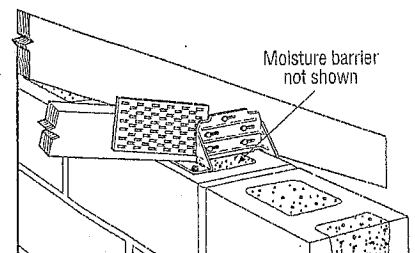
TC26
(TC28 Similar)



Typical TC24 Installation



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



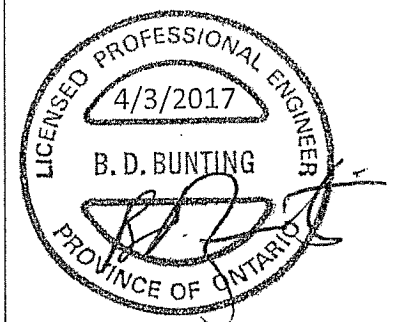
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

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



LIMIT
STATES
DESIGN

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T-SPECTC17 3/17 exp. 6/19

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HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

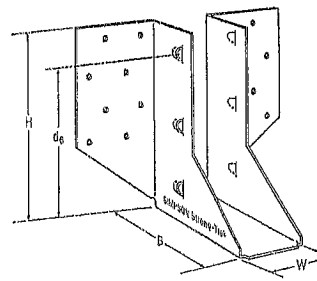
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

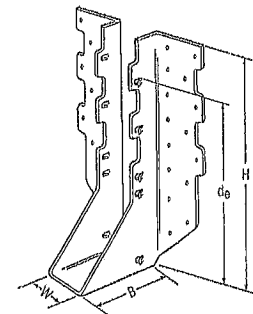
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

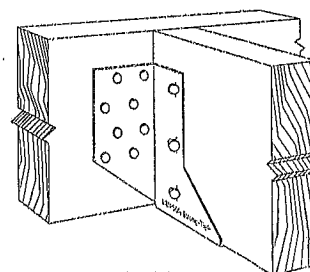
- See current catalogue for options



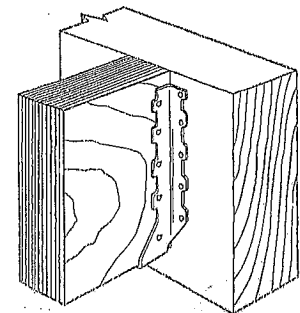
LJS26DS



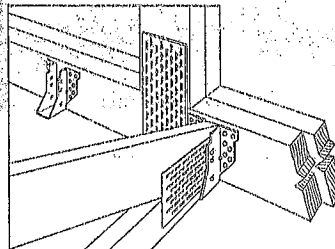
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



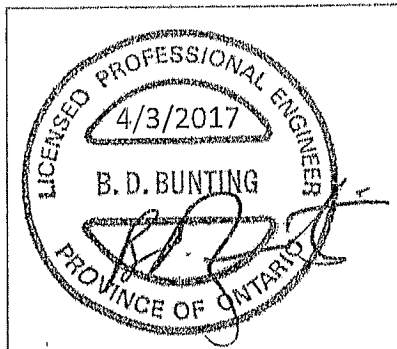
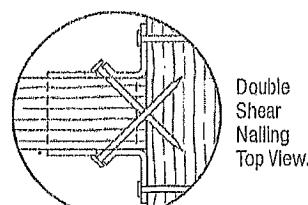
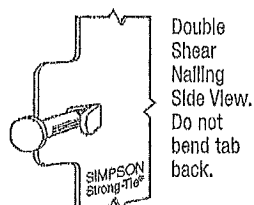
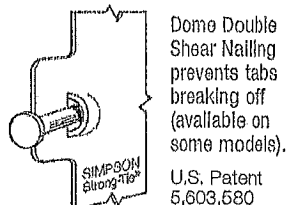
Typical HUS
Installation



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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₆ 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)
LJS26DS	18	1 11/16	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2065	4265	1460	4115
HUS26	16	1 1/4	5 3/8	3	3 11/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 1/4	7 1/2	3	6 1/2	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 1/4	9 1/2	3	7 3/32	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 1/4	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

1. d₆ is the distance from the seat of the hanger to the highest joist nail.



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