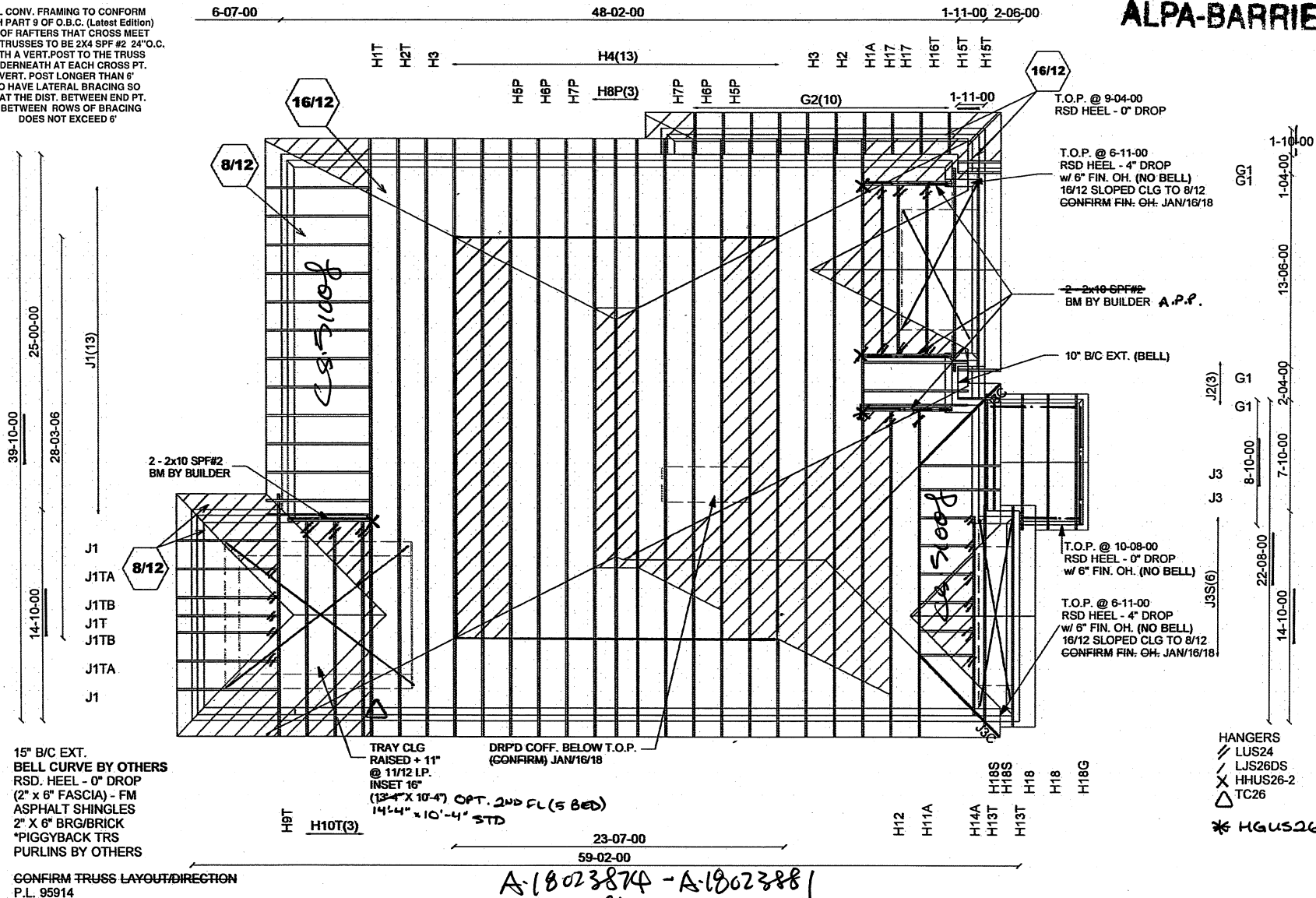


ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF 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'



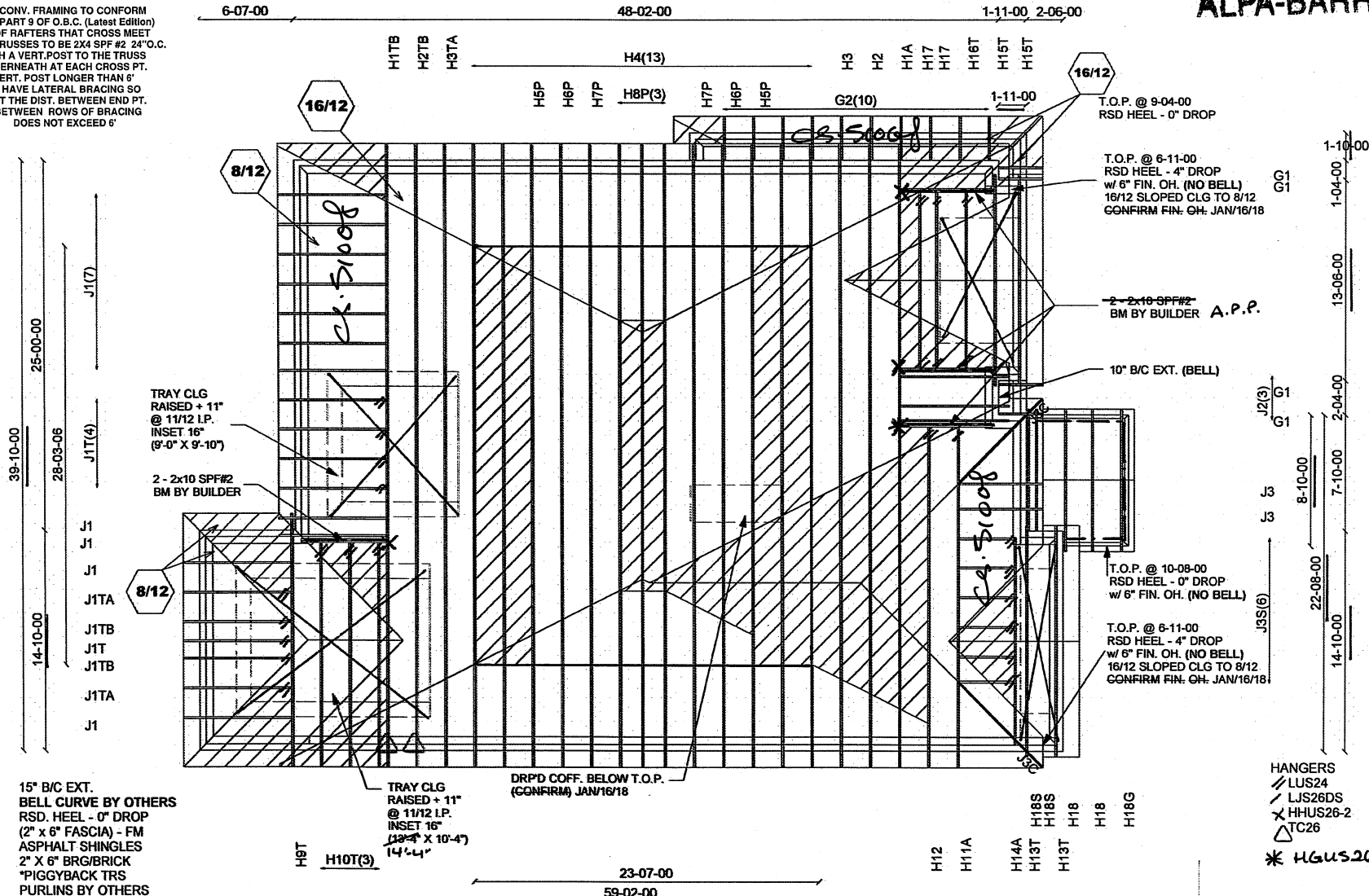
P.L. 99352, 100885, 101745, 105728

OAK GROVE

	Job Track: 45147 Layout ID: 292634 Plan Log: 95914	Builder / Location: GOLD PARK HOMES / VAUGHAN Project: PINE VALLEY Date: 1/19/2018 Designer: AMANDA	Model / Elevation: 5003 REV1	STD W/ / A OPT TRAY MST STD OR OPT LOGGIA (FAT) STD OR OPT 2ND FL 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.
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ALPHA-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

CONFIRM TRUSS LAYOUT/DIRECTION
P.L. 95914

A-18023874 - A-18023881
A-18023884 - A-18023893
A-18023896 - A-18023900
A-18023903 - A-18023905
OAK GROVE

HANGERS
/ LUS24
/ LJS26DS
X HHUS26-2
△ TC26
* H6US26-3

CONVENTIONAL FRAMING BY OTHERS

P.L. 99352, 100885, 101745, 105328



Job Track: 45147
Layout ID: 292636
Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 1/19/2018 Designer: AMANDA

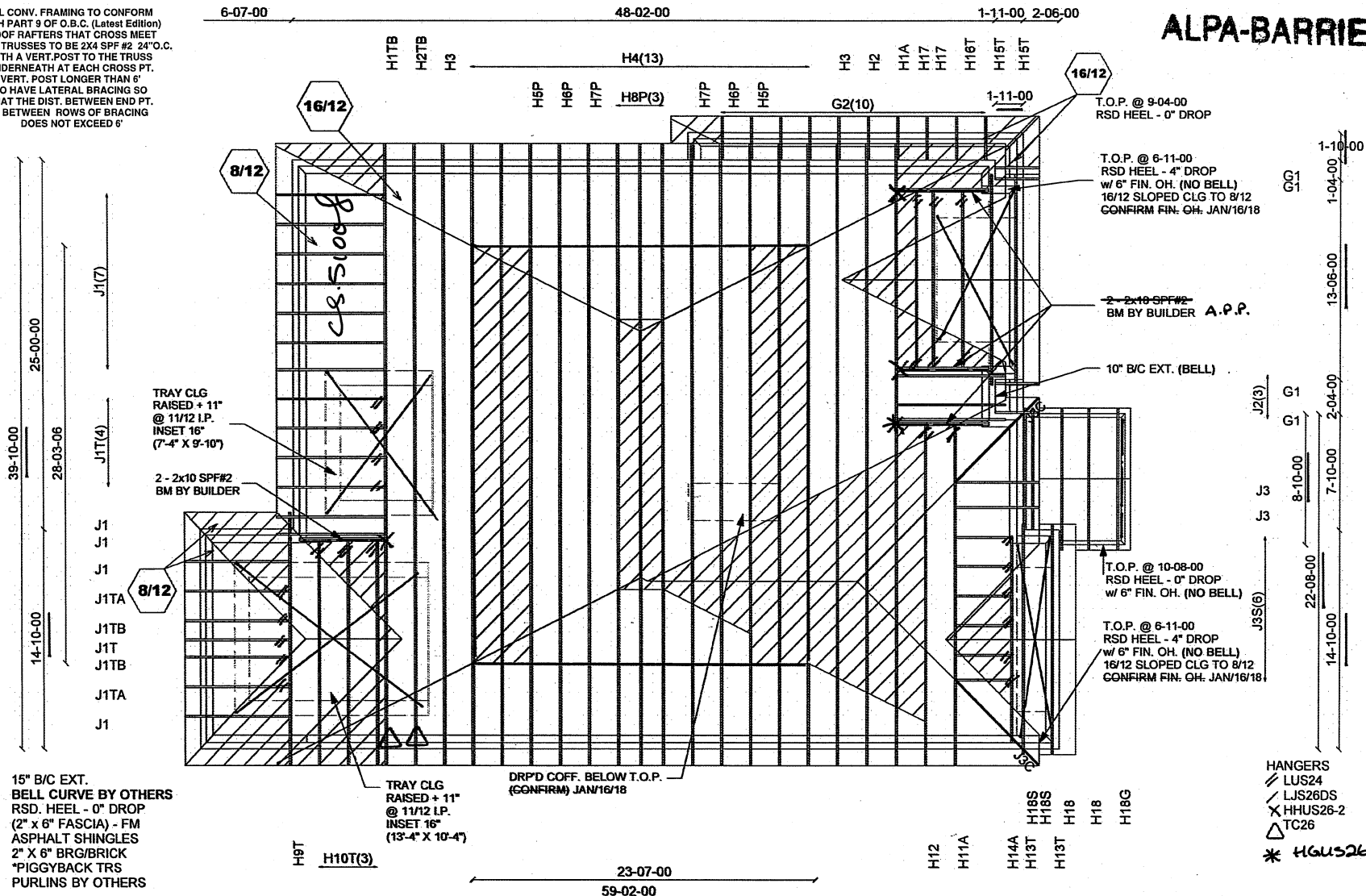
Model / Elevation:
5003 REV1

STD OR OPT LOGGIA (FLAT)
/ A OPT TRAYS w/SITTING CLG

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

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. (Latest Edition)
ROOF 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'



HANGERS
LUS24
LJS26DS
HHUS26-2
TC26
* H4US26-3

CONVENTIONAL
FRAMING BY
OTHERS

CONFIRM TRUSS LAYOUT/DIRECTION
P.L. 95914

A-18023874 - A-18023881
A-18023884 - A-18023893
A-18023896 - A-18023900
A-18023904 - A-18023905

BAK GROVE

P.L. 99352, 100885, 101745, 105328



Job Track: 45147
Layout ID: 292637
Plan Log: 95914

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 1/19/2018 Designer: AMANDA

Model / Elevation:

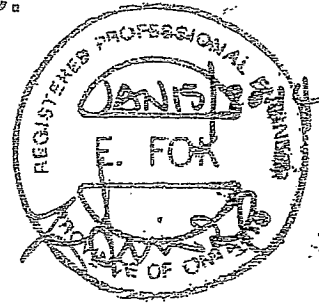
5003 REV1

OPT. 2ND FL (500) OR OPT LOGGIA (641)
/ A OPT TRAYS 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	MI16	5.0	15.0		
T	BMWWW-I	MT20	8.0	9.0	4.25	4.50
U	BMWWW-I	MT20	8.0	9.0	4.25	4.50
V	BS-I	MI16	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

- 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.

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
MI16	438	276	2341 1245
			1656 1656

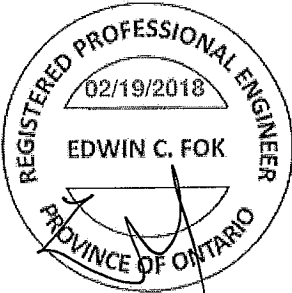
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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

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-18023873(2)

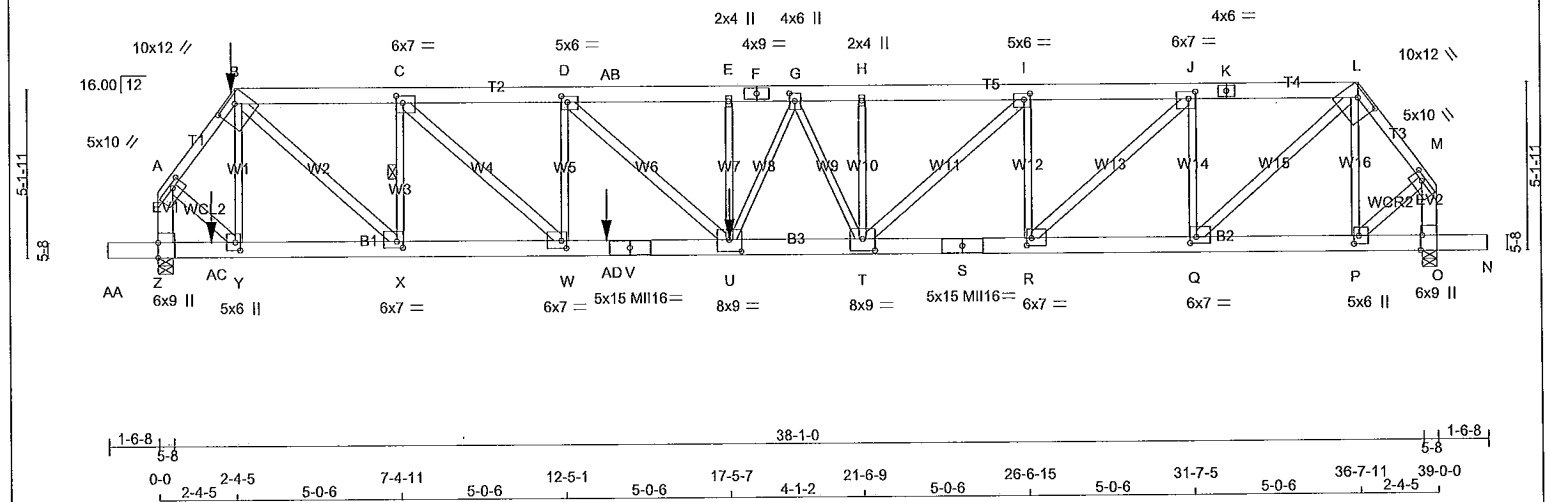
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H1A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0fBKG3yNySB-WmRyr2EMNPama2UPu5ExKSTxhOXqzcVQ_5b0zAzjdM

-1-6-8 0-0 2-4-5 5-0-6 7-4-11 5-0-6 12-5-1 5-0-6 17-5-7 19-6-0 21-6-9 5-0-6 26-6-15 5-0-6 31-7-5 5-0-6 36-7-11 39-0-0 40-6-8
1-6-8 2-4-5 5-0-6 7-4-11 5-0-6 12-5-1 5-0-6 17-5-7 2-0-9 2-0-9 5-0-6 26-6-15 5-0-6 31-7-5 5-0-6 36-7-11 2-4-5 1-6-8
Scale = 1:70.4



TOTAL WEIGHT = 237 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	10.0	1.50	3.75
B	TTWW-h	MT20	10.0	12.0	2.50	7.00
C	TMVW-t	MT20	6.0	7.0	2.50	2.50
D	TMVW-t	MT20	5.0	6.0	2.25	2.25
E	TMVW-h	MT20	2.0	4.0		
F	TS-t	MT20	4.0	9.0		
G	TMVW-h	MT20	4.0	6.0	2.75	2.00
H	TMVW-h	MT20	2.0	4.0		
I	TMVW-t	MT20	5.0	6.0	2.25	2.25
J	TMVW-t	MT20	6.0	7.0	2.50	2.50
K	TS-t	MT20	4.0	6.0		
L	TTWW-h	MT20	10.0	12.0	2.50	7.00
M	TMVW-t	MT20	5.0	10.0	1.50	3.75
O	BMV1-t	MT20	6.0	9.0	Edge	0.50
P	BMVW-h	MT20	5.0	6.0	3.00	1.75

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
Z	5099	0	5099	0
O	3498	0	3498	0

UNFACTORED REACTIONS

	1ST LCASE	MAX / MIN	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Z	3589	2454 / 0	0 / 0	0 / 0	0 / 0	1135 / 0	0 / 0
O	2471	1641 / 0	0 / 0	0 / 0	0 / 0	830 / 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 = 2.80 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF 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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH FR-TO	WEBS	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO
FR-TO							
A-B	-3924 / 0	-78.0	-78.0	0.31 (1)	3.31	Y-B	-571 / 0
B-C	-5882 / 0	-78.0	-78.0	0.21 (1)	4.02	B-X	0 / 4838
C-D	-9075 / 0	-78.0	-78.0	0.35 (1)	3.23	X-C	-3369 / 0
D-AB	-10644 / 0	-78.0	-78.0	0.57 (1)	2.80	C-W	0 / 4361
AB-E	-10644 / 0	-163.2	-163.2	0.57 (1)	2.80	W-D	-2010 / 0
E-F	-10644 / 0	-78.0	-78.0	0.34 (1)	3.00	D-U	0 / 2144
F-G	-10644 / 0	-78.0	-78.0	0.34 (1)	3.00	U-E	-470 / 0
G-H	-9337 / 0	-78.0	-78.0	0.27 (1)	3.24	U-G	0 / 1576
H-I	-9337 / 0	-78.0	-78.0	0.37 (1)	3.17	G-T	-1686 / 0
I-J	-7310 / 0	-78.0	-78.0	0.25 (1)	3.64	T-H	-305 / 0
J-K	-4755 / 0	-78.0	-78.0	0.16 (1)	4.43	T-I	0 / 2770
K-L	-4755 / 0	-78.0	-78.0	0.16 (1)	4.43	R-I	-2273 / 0
L-M	-2799 / 0	-78.0	-78.0	0.20 (1)	3.97	R-J	0 / 3490
Z-A	-4686 / 0	0.0	0.0	0.38 (1)	4.93	Q-J	-2808 / 0
O-M	-3370 / 0	0.0	0.0	0.27 (1)	5.74	Q-L	0 / 4229
						P-L	-902 / 0
AA-Z	0 / 0	-96.5	-96.5	0.05 (1)	10.00	A-Y	0 / 2764
Z-AC	0 / 0	-38.3	-38.3	0.15 (1)	10.00	P-M	0 / 1972
AC-Y	0 / 0	-38.3	-38.3	0.15 (1)	10.00		
Y-X	0 / 2338	-18.5	-18.5	0.22 (1)	10.00		
X-W	0 / 5882	-18.5	-18.5	0.44 (1)	10.00		
W-AD	0 / 9075	-18.5	-18.5	0.77 (1)	10.00		
AD-V	0 / 9075	-39.8	-39.8	0.77 (1)	10.00		
V-U	0 / 9075	-39.8	-39.8	0.77 (1)	10.00		
U-T	0 / 10013	-18.5	-18.5	0.57 (1)	10.00		
T-S	0 / 7310	-18.5	-18.5	0.43 (1)	10.00		
S-R	0 / 7310	-18.5	-18.5	0.43 (1)	10.00		
R-Q	0 / 4755	-18.5	-18.5	0.28 (1)	10.00		
Q-P	0 / 1657	-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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
END SETBACK = 6-3-4
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 2-4-5 OF SPAN MEASURED FROM THE LEFT.

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.44")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/602 (0.78")

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")

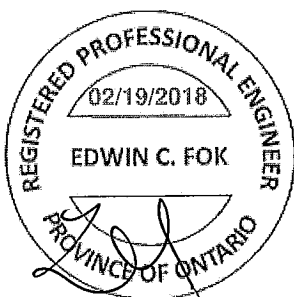
CSI: TC=0.57/1.00 (D-E:1), BC=0.77/1.00 (U-W:1)
WB=0.99/1.00 (J-Q:1), SSI=0.55/1.00 (U-W:1)

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

A-18023874 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H1A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 09:48:38 2018 Page 2
ID:Rbextx08A5M1Jnp0fBKG3yNySB-WmRyr2EMNPama2UPu5ExKSTxhOXqzcVQ 5b0zAzjdM

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) 146.3 lbs FACTORED DOWN AT 2-4-5 ON TOP CHORD, AND 2087.3 lbs FACTORED DOWN AT 17-5-8, AND 928.5 lbs FACTORED DOWN AT 1-7-6, AND 928.5 lbs FACTORED DOWN AT 13-8-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-146	-146	---	FRONT	VERT	TOTAL
U	17-5-8	-2087	-2087	---	FRONT	VERT	TOTAL
AC	1-7-6	-928	-928	---	FRONT	VERT	TOTAL
AD	13-8-8	-928	-928	---	FRONT	VERT	TOTAL

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

NAIL VALUES

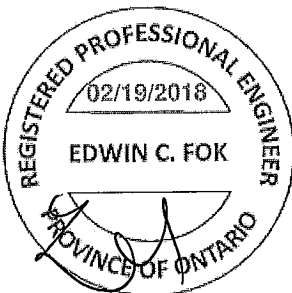
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
MII16	438	276	2341

PLATE PLACEMENT TOL. = 0.250 inches

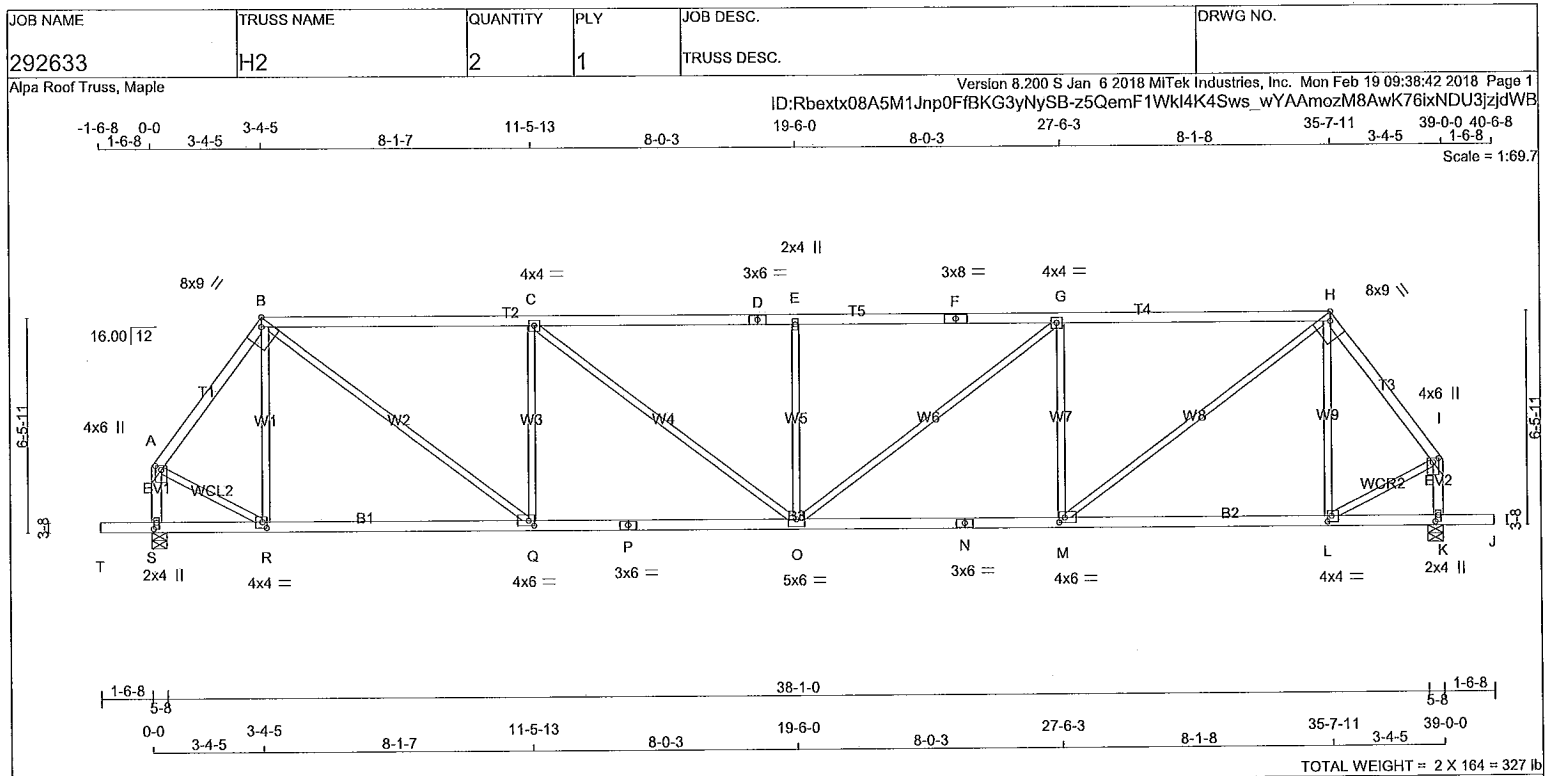
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.90 (P) (INPUT = 0.90)
JSI METAL = 1.00 (V) (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-18023874(6)



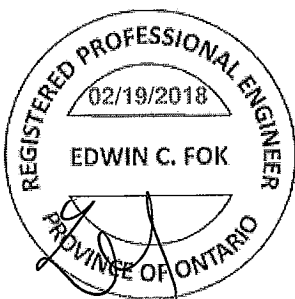
LUMBER				DESCR.	
N. L. G. A. RULES	SIZE	LUMBER			
CHORDS					
A - B	2x4	DRY	No.2	SPF	
B - D	2x4	DRY	1650F 1.5E	SPF	
D - F	2x4	DRY	1650F 1.5E	SPF	
F - H	2x4	DRY	1650F 1.5E	SPF	
H - I	2x4	DRY	No.2	SPF	
S - A	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
T - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - 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+fw	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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
S	2030	0	2030	0	0	5-8	3-0	3-0	3-0
K	2030	0	2030	0	0	5-8	3-0	3-0	3-0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	FORCE (LBS)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH (FT)
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	O-G	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.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.30")
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), SSI=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 1655

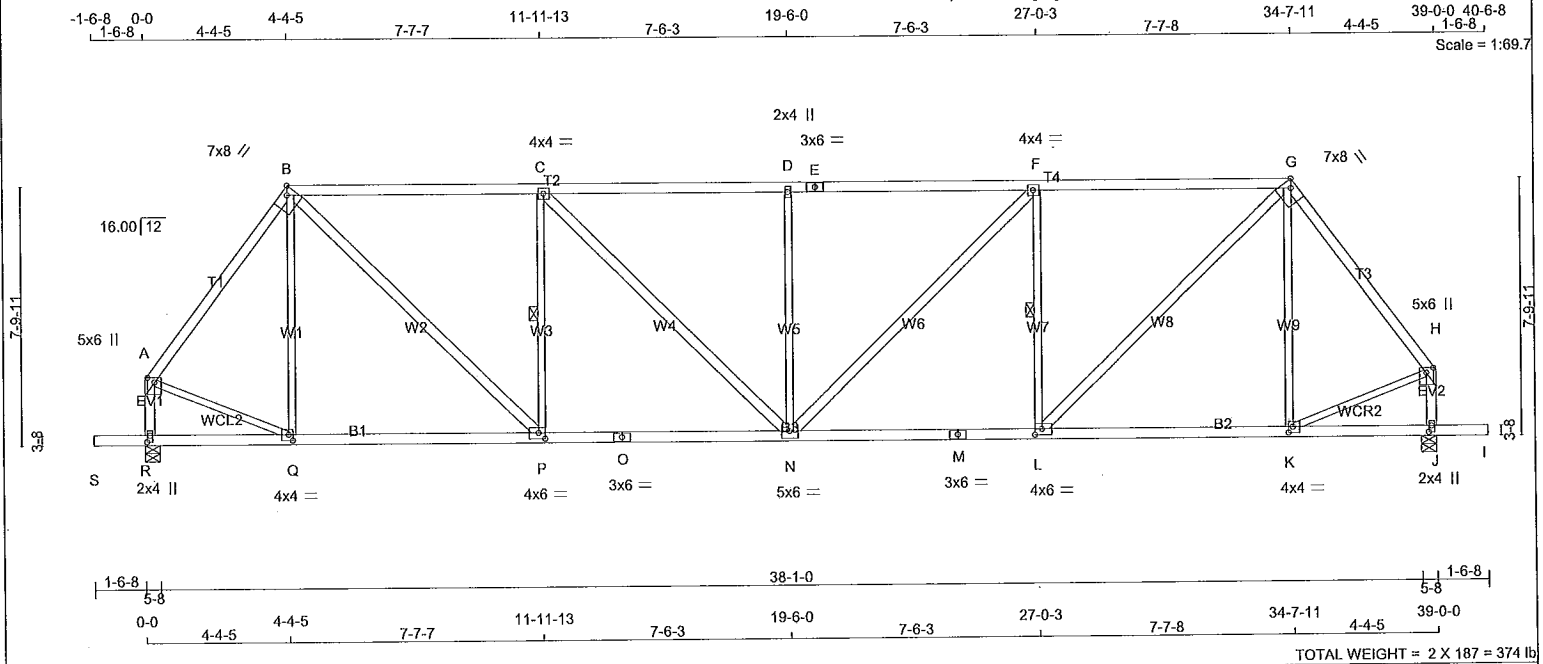
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023875

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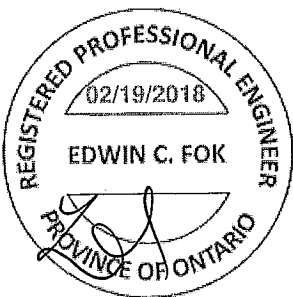
LUMBER			N. L. G. A. RULES	
CHORDS	SIZE		LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - E	2x4	DRY	1650F 1.5E	SPF
E - G	2x4	DRY	1650F 1.5E	SPF
G - H	2x4	DRY	No.2	SPF
R - A	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
S - O	2x4	DRY	No.2	SPF
O - M	2x4	DRY	No.2	SPF
M - I	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	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	TMVW-t	MT20	4.0	4.0		
D	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-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	BMVW-t	MT20	4.0	4.0	2.00	1.50
L	BMVW-t	MT20	4.0	6.0	2.00	2.50
M	BS-t	MT20	3.0	6.0		
N	BMVWWW-t	MT20	5.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	6.0	2.00	2.50
Q	BMVW-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			MAXIMUM FACTORED			INPUT	REQD
GROSS REACTION			GROSS REACTION			BRG	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)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	-1657 / 0	-78.0	-78.0	0.37 (1)	4.82	Q-B	-232 / 0	0.26 (1)
B-C	-2152 / 0	-78.0	-78.0	0.72 (1)	4.36	B-P	0 / 1633	0.26 (1)
C-D	-2490 / 0	-78.0	-78.0	0.76 (1)	4.09	P-C	-999 / 0	0.38 (1)
D-E	-2490 / 0	-78.0	-78.0	0.76 (1)	4.09	C-N	0 / 478	0.08 (1)
E-F	-2490 / 0	-78.0	-78.0	0.76 (1)	4.09	N-D	-541 / 0	0.62 (1)
F-G	-2152 / 0	-78.0	-78.0	0.72 (1)	4.36	N-F	0 / 478	0.08 (1)
G-H	-1657 / 0	-78.0	-78.0	0.37 (1)	4.82	L-F	-999 / 0	0.38 (1)
R-A	-1855 / 0	0.0	0.0	0.21 (1)	6.15	L-G	0 / 1633	0.26 (1)
J-H	-1855 / 0	0.0	0.0	0.21 (1)	6.15	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)	10.00			
R-Q	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
Q-P	0 / 986	-18.5	-18.5	0.31 (4)	10.00			
P-O	0 / 2152	-18.5	-18.5	0.46 (1)	10.00			
O-N	0 / 2152	-18.5	-18.5	0.46 (1)	10.00			
N-M	0 / 2152	-18.5	-18.5	0.46 (1)	10.00			
M-L	0 / 2152	-18.5	-18.5	0.46 (1)	10.00			
L-K	0 / 986	-18.5	-18.5	0.31 (4)	10.00			
K-J	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
J-I	0 / 0	-96.5	-96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

07/15/16 10:00 10:00

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

PLATE PLACEMENT TOL. = 0.250 inches

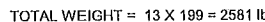
PLATE ROTATION TOL. = 5.0 Deg.

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

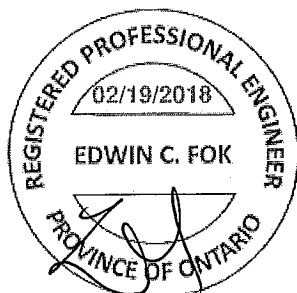
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 09:38:57 2018 Page 1

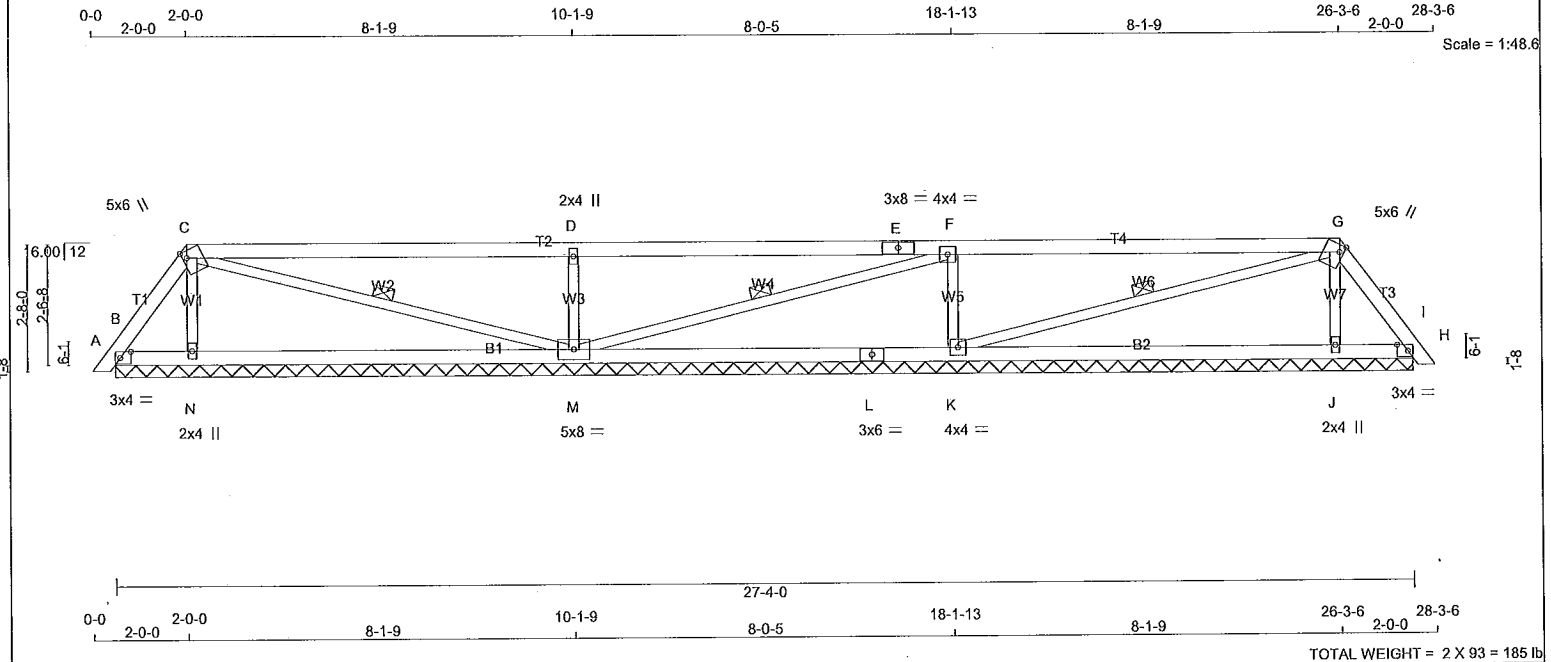
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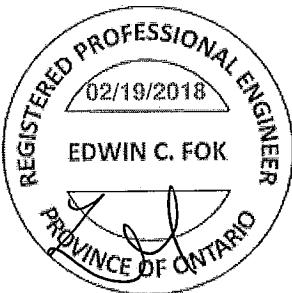




LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
B - L	2x4	DRY	No.2	SPF
L - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

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-I	MT20	3.0	8.0	
F	TMWV-I	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	BMV1+w	MT20	2.0	4.0	
K	BMWV-I	MT20	4.0	4.0	
L	BS-I	MT20	3.0	6.0	
M	BMWVW-I	MT20	5.0	8.0	
N	BMV1+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



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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
JT	119	0	119	0	-6	27-4-0	(11-4-8) ₂ -15
B	374	0	374	0	0	27-4-0	(11-4-8) ₂ -15
N	860	0	860	0	0	27-4-0	(11-4-8) ₂ -15
M	842	0	842	0	0	27-4-0	(11-4-8) ₂ -15
K	365	0	365	0	0	27-4-0	(11-4-8) ₂ -15
J	132	0	132	0	-4	27-4-0	(11-4-8) ₂ -15

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT H FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	79	83 / 0	0 / 0	0 / 0	0 / 0	0 / -4	0 / 0
B	273	127 / 0	0 / 0	0 / 0	0 / 0	146 / 0	0 / 0
M	612	382 / 0	0 / 0	0 / 0	0 / 0	230 / 0	0 / 0
K	599	372 / 0	0 / 0	0 / 0	0 / 0	227 / 0	0 / 0
J	268	123 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0
H	87	90 / 0	0 / 0	0 / 0	0 / 0	0 / -3	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)	FACTORED LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 10	-78.0	-78.0 0.01 (1)	10.00	N-C	-237 / 0	0.04 (1)
B-C	-82 / 0	-78.0	-78.0 0.03 (1)	6.25	C-M	-38 / 0	0.02 (1)
C-D	0 / 1	-78.0	-78.0 0.69 (1)	10.00	M-D	-692 / 0	0.11 (1)
D-E	0 / 0	-78.0	-78.0 0.69 (1)	10.00	M-F	-26 / 0	0.01 (1)
E-F	0 / 0	-78.0	-78.0 0.69 (1)	10.00	K-F	-685 / 0	0.11 (1)
F-G	-23 / 0	-78.0	-78.0 0.69 (1)	6.25	K-G	-22 / 0	0.01 (1)
G-H	-98 / 0	-78.0	-78.0 0.03 (1)	6.25	J-G	-228 / 0	0.04 (1)
H-I	0 / 10	-78.0	-78.0 0.01 (1)	10.00			
B-N	0 / 47	-18.5	-18.5 0.20 (4)	10.00			
N-M	0 / 36	-18.5	-18.5 0.24 (4)	10.00			
M-L	0 / 24	-18.5	-18.5 0.24 (4)	10.00			
L-K	0 / 24	-18.5	-18.5 0.24 (4)	10.00			
K-J	0 / 45	-18.5	-18.5 0.24 (4)	10.00			
J-H	0 / 56	-18.5	-18.5 0.20 (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=0.69/1.00 (F-G:1), BC=0.24/1.00 (J-K:4),
WB=0.11/1.00 (D-M:1), SSI=0.30/1.00 (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.

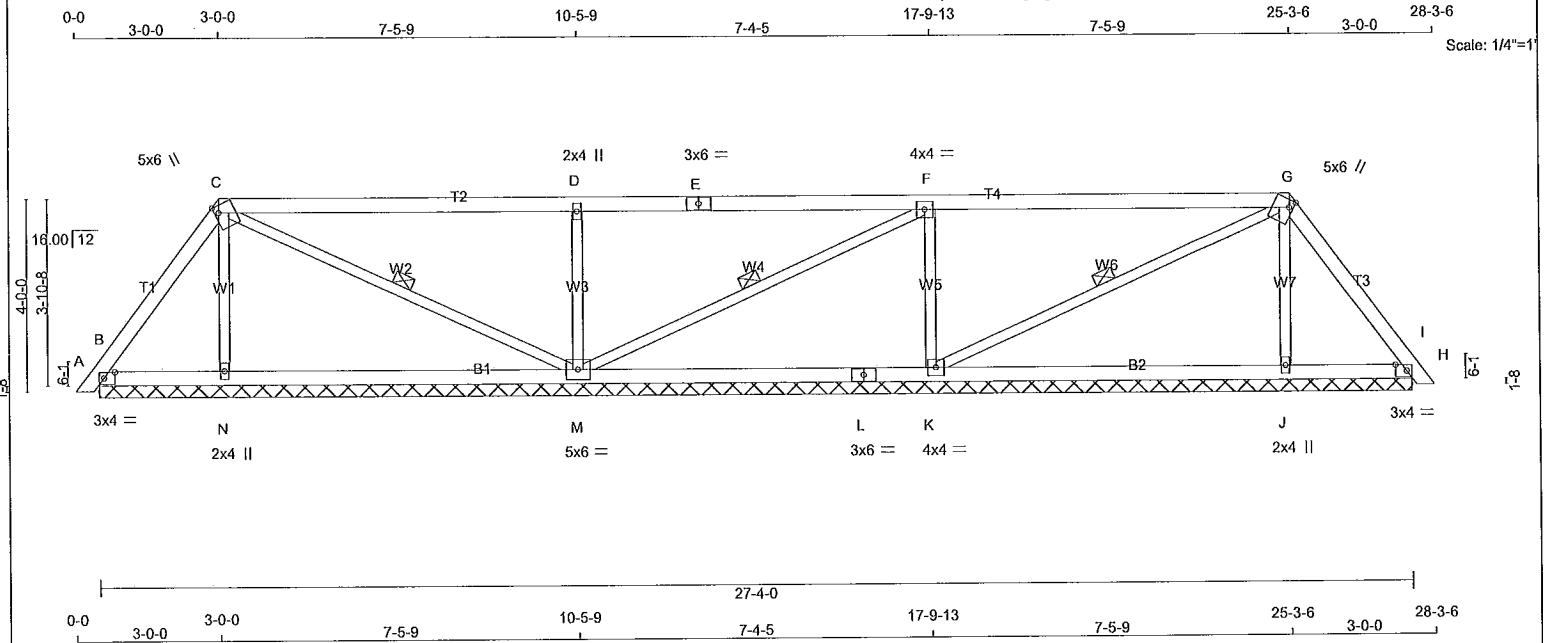
JSI GRIP= 0.79 (K) (INPUT = 0.90)
JSI METAL= 0.54 (E) (INPUT = 1.00)

A-18023878

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H6P	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
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-I	MT20	3.0	6.0	
F	TMWW-I	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-I	MT20	4.0	4.0	
L	BS-I	MT20	3.0	6.0	
M	BMWW1-I	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

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	
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		

UNFACTORED 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (L/C)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (L/C)	
FR-TO		FROM	TO	FR-TO			
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	-635 / 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.

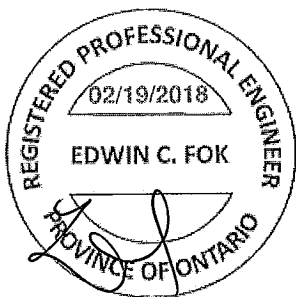
NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667 788 1987 1656

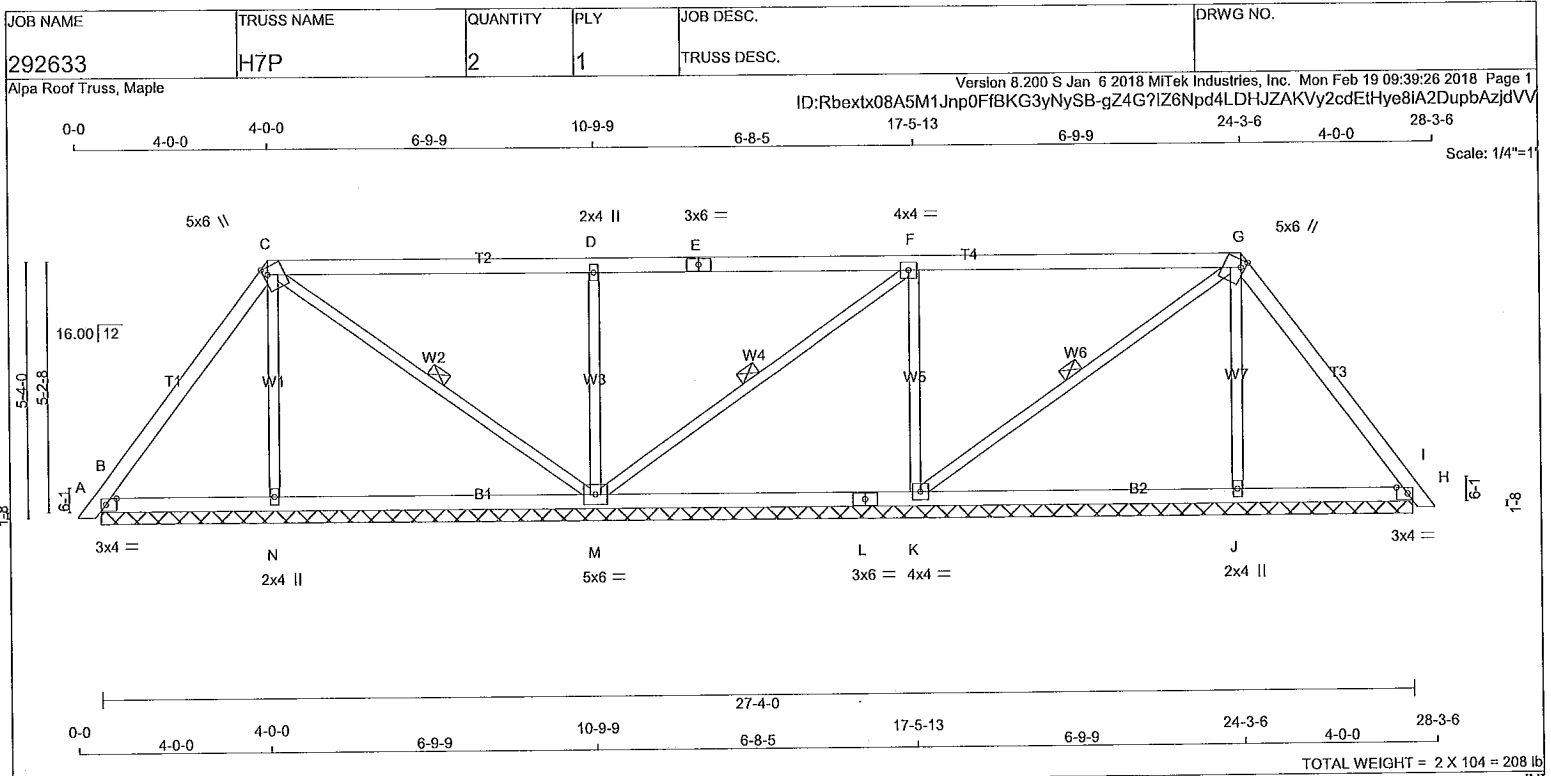
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (M) (INPUT = 0.80)
JSI METAL= 0.14 (E) (INPUT = 1.00)

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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	BMWWW1-t	MT20	5.0	6.0		
N	BMW1+W	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	258	0	258	0	27-4.0 (11-4-8)11-3	11-3
N	321	0	321	0	27-4.0 (11-4-8)11-3	11-3
M	831	0	831	0	27-4.0 (11-4-8)11-3	11-3
K	665	0	665	0	27-4.0 (11-4-8)11-3	11-3
J	315	0	315	0	27-4.0 (11-4-8)11-3	11-3
H	303	0	303	0	27-4.0 (11-4-8)11-3	11-3

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

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

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	MAX. MEMB. UNBRAC LENGTH	FR-TO	WEBS MAX. FACTORED FORCE (LBS)	
							MAX	CS1 (LC)
A-B	0 / 10	-78.0	-78.0	0.01 (1)	10.00	N-C	-213 / 0	0.09 (1)
B-C	-92 / 0	-78.0	-78.0	0.17 (1)	6.25	C-M	-107 / 0	0.05 (1)
C-D	0 / 38	-78.0	-78.0	0.49 (1)	10.00	M-D	-578 / 0	0.23 (1)
D-E	0 / 38	-78.0	-78.0	0.49 (1)	10.00	M-F	-107 / 0	0.05 (1)
E-F	0 / 38	-78.0	-78.0	0.49 (1)	10.00	K-F	-514 / 0	0.21 (1)
F-G	-48 / 0	-78.0	-78.0	0.48 (1)	6.25	K-G	-41 / 0	0.02 (1)
G-H	-147 / 0	-78.0	-78.0	0.17 (1)	6.25	J-G	-207 / 0	0.08 (1)
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			

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=0.49/1.00 (D-F:1), BC=0.17/1.00 (J-K:4), WB=0.23/1.00 (D-M:1), SSI=0.25/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

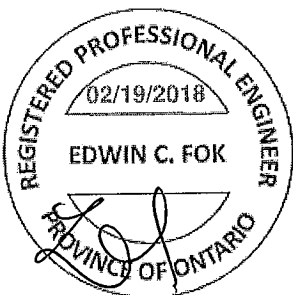
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.15 (H) (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

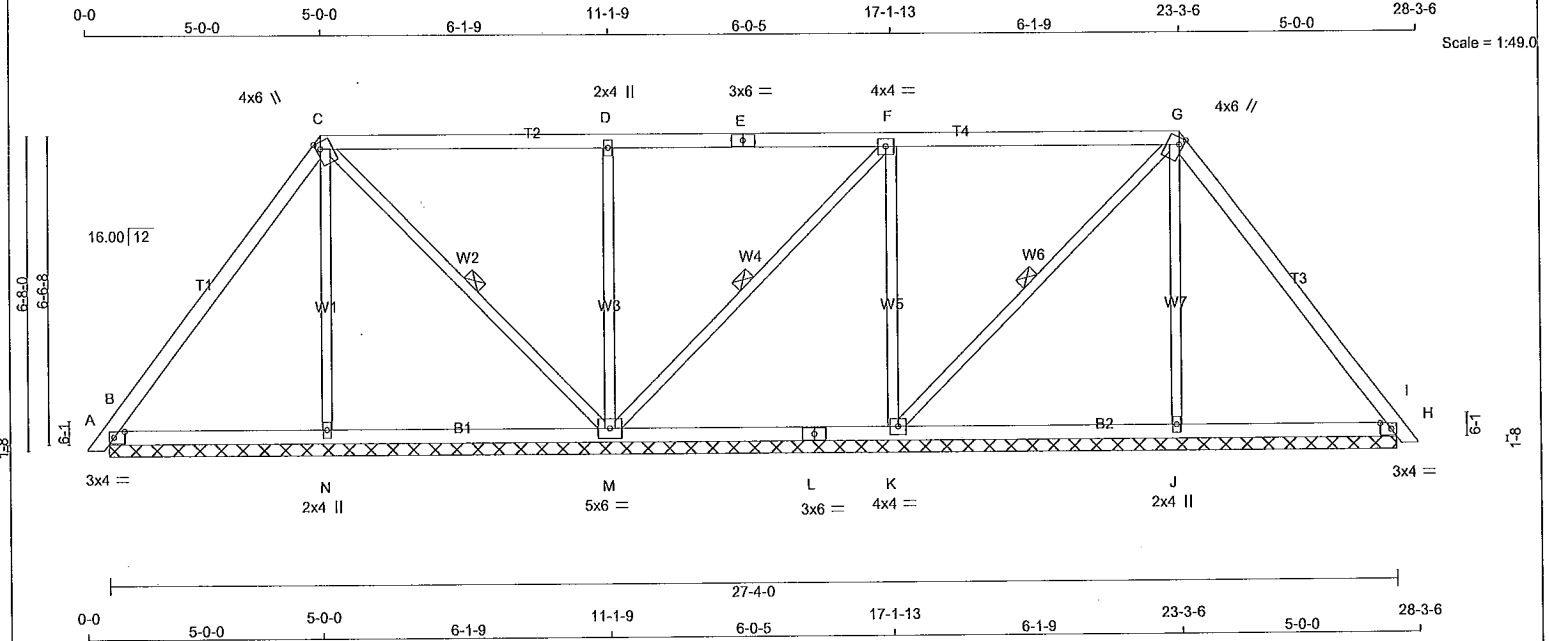


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H8P	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 3 X 111 = 332 lb

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	No.2	SPF	
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	4.0	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	4.0	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	BMW1-I	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMW1-I	MT20	5.0	6.0		
N	BMW1+w	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	306	0	306	0	27-4-0 (12-4-0)11-10	
N	308	0	308	0	27-4-0 (12-4-0)11-10	
M	834	0	834	0	27-4-0 (12-4-0)11-10	
K	572	0	572	0	27-4-0 (12-4-0)11-10	
J	307	0	307	0	27-4-0 (12-4-0)11-10	
H	365	0	365	0	27-4-0 (12-4-0)11-10	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

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

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		
A-B	0 / 10	-78.0 -78.0 0.01 (1)	10.00	N-C -199 / 0
B-C	-87 / 0	-78.0 -78.0 0.27 (1)	6.25	C-M -139 / 0
C-D	0 / 50	-78.0 -78.0 0.40 (1)	10.00	M-D -521 / 0
D-E	0 / 49	-78.0 -78.0 0.40 (1)	10.00	M-F -142 / 0
E-F	0 / 49	-78.0 -78.0 0.40 (1)	10.00	K-F -418 / 0
F-G	-49 / 0	-78.0 -78.0 0.39 (1)	6.25	K-G -59 / 0
G-H	-160 / 0	-78.0 -78.0 0.28 (1)	6.25	J-G -198 / 0
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	

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.

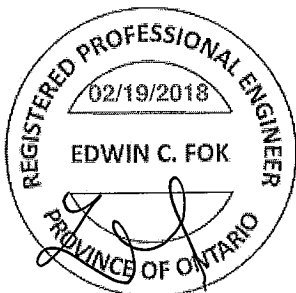
NAIL VALUES	PLATE	GRIP(DRY)	SHEAR	SECTION
		(PSI)	(PLI)	(PLI)
		MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	788 1987 1656

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)

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

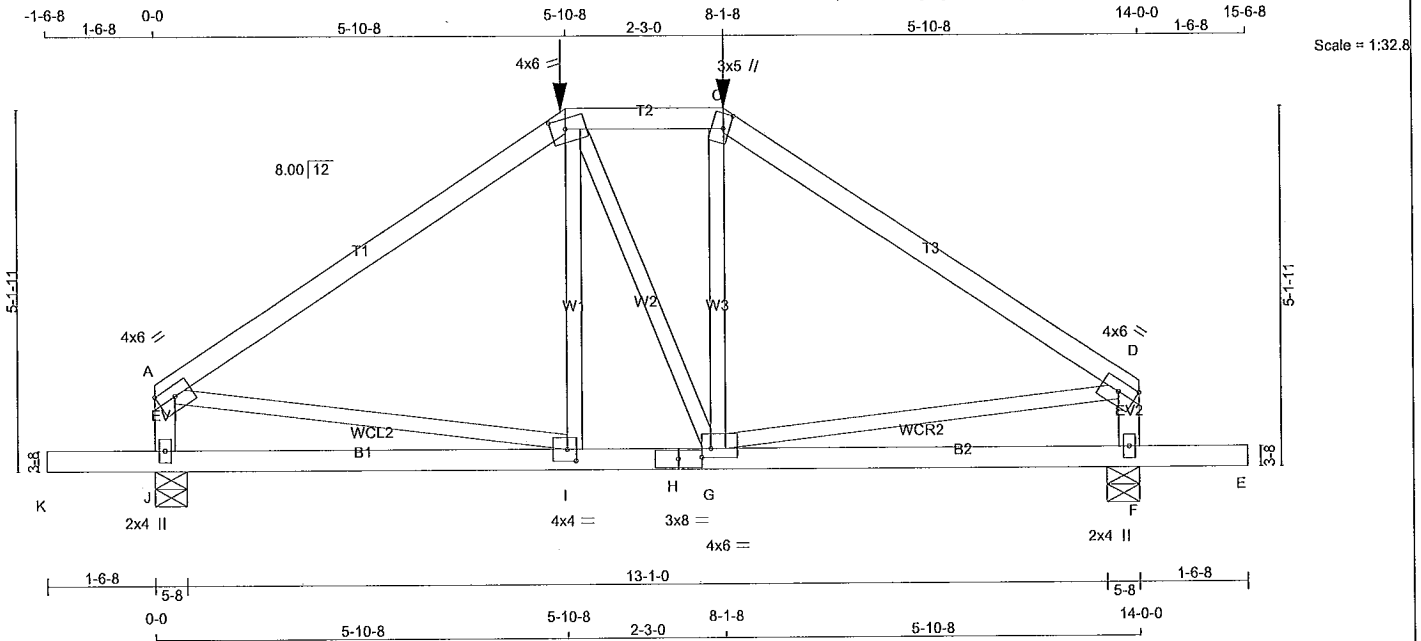


A-18023881

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292633	H9	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Mon Feb 19 09:40:08 2018 Page 1
ID:Rbextx08A5M1Jnp0FfBKG3yNySB-Rec9pf3SUjw7OgVOO_5LfvMmboYAU7RMil313kzjdUr



TOTAL WEIGHT = 61 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
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-t		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-t		MT20	4.0	6.0	1.75	Edge
F	BMV1+p		MT20	2.0	4.0		
G	BMVWW-t		MT20	4.0	6.0	1.50	1.50
H	BS-t		MT20	3.0	8.0		
I	BMVW-t		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
1) 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.

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	DOWN	UP	IN-SX
J	1368	0	1368	0
F	1368	0	1368	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	JT	COMBINED
J	978	J	978
F	978	F	978

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	MAX. FACTORED	FACTORED	MAX. FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	-1318 / 0	-78.0 -78.0	0.62 (1)	I-B	-5 / 117
B-C	-1097 / 0	-153.5 -153.5	0.16 (1)	B-G	0 / 4
C-D	-1320 / 0	-78.0 -78.0	0.62 (1)	G-C	-2 / 121
J-A	-1128 / 0	0.0 0.0	0.13 (1)	A-I	0 / 1108
F-D	-1127 / 0	0.0 0.0	0.13 (1)	G-D	0 / 1109
K-J	0 / 0	-96.5 -96.5	0.17 (1)		
J-I	0 / 0	-36.4 -36.4	0.29 (4)		
I-H	0 / 1096	-36.4 -36.4	0.40 (4)		
H-G	0 / 1096	-36.4 -36.4	0.40 (4)		
G-F	0 / 0	-36.4 -36.4	0.30 (4)		
F-E	0 / 0	-96.5 -96.5	0.17 (1)		

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

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
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), BC=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

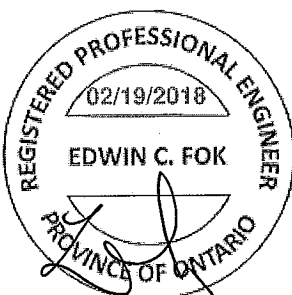
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

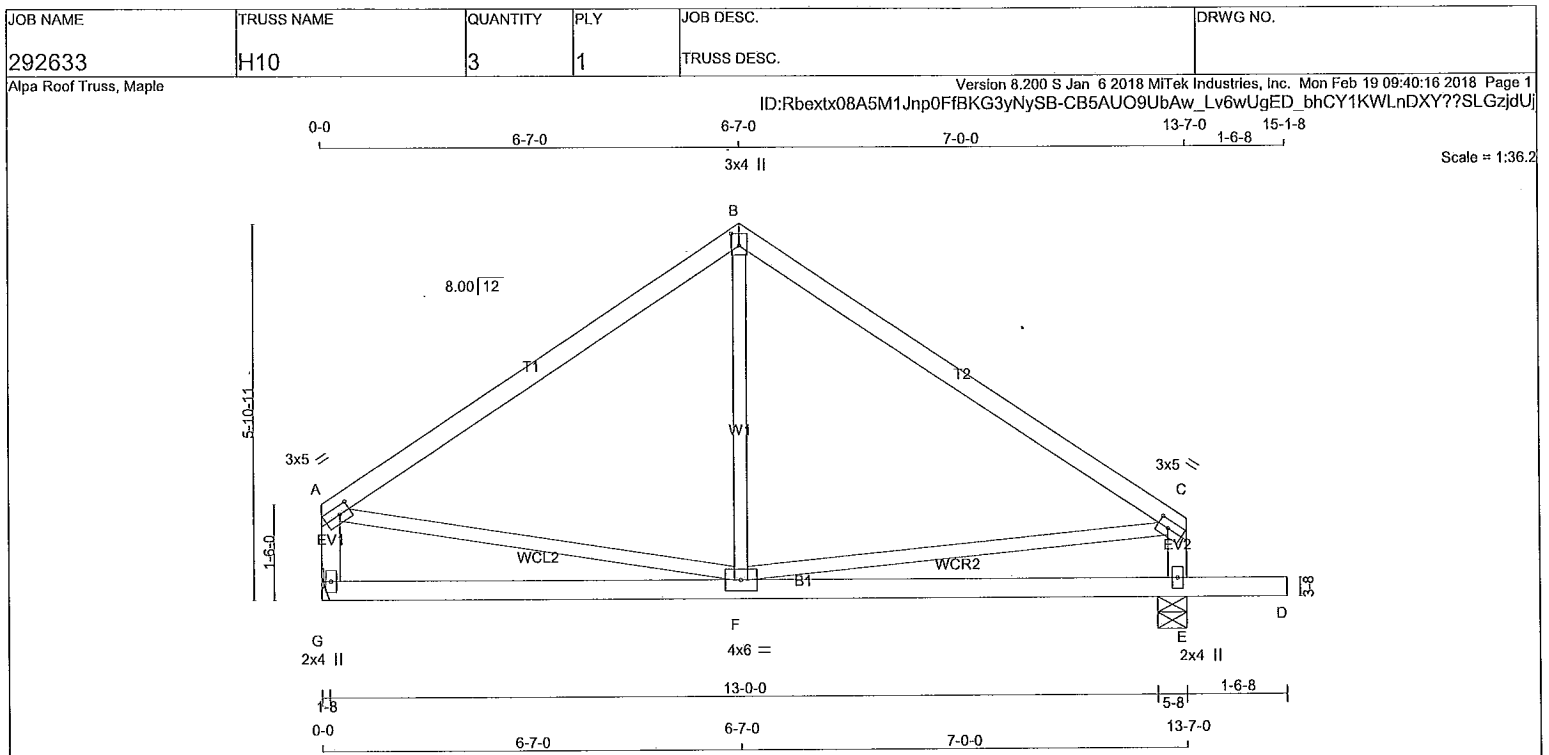
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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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 EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
G	655	0	655	0	0	HANGER BY OTHERS
E	804	0	804	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	467	285 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
E	573	350 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-502 / 0	-78.0	-78.0 0.37 (1)	6.25	F-B	0 / 121	0.04 (4)
B-C	-502 / 0	-78.0	-78.0 0.32 (1)	6.25	A-F	0 / 424	0.10 (1)
G-A	-610 / 0	0.0	0.0 0.06 (1)	7.81	F-C	0 / 421	0.09 (1)
E-C	-605 / 0	0.0	0.0 0.06 (1)	7.81			
G-F	0 / 0	-18.5	-18.5 0.25 (4)	10.00			
F-E	0 / 0	-18.5	-18.5 0.25 (4)	10.00			
E-D	0 / 0	-96.5	-96.5 0.16 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.45")
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=0.37/1.00 (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.

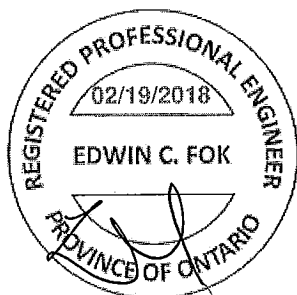
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

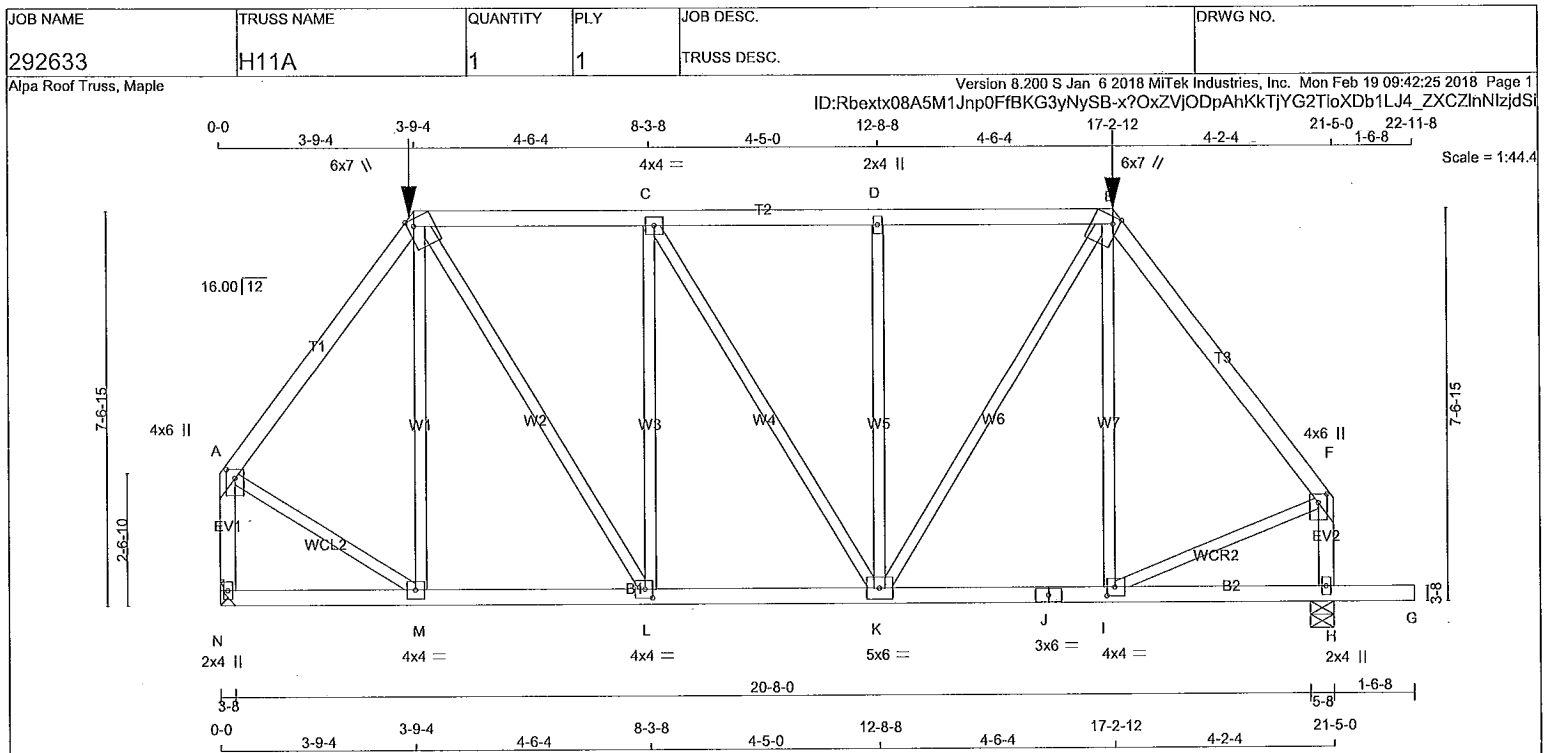
PLATE ROTATION TOL. = 5.0 Deg.

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

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 - BMWW-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
1) 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 9.23.13.11, and no less than 2x4 for Part 4 design

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT	N	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1121	681 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	440 / 0	0 / 0
H	1222	742 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	480 / 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 = 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		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX (LC)	MAX (LC)	MAX (LC)
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	-1217 / 0	-78.0	-78.0	0.26 (1)	5.49	M-B	-271 / 0	0.29 (1)	
B-C	-1181 / 0	-120.6	-120.6	0.39 (1)	5.32	B-L	0 / 867	0.21 (1)	
C-D	-1199 / 0	-120.6	-120.6	0.39 (1)	5.29	L-C	-609 / 0	0.65 (1)	
D-E	-1198 / 0	-120.6	-120.6	0.38 (1)	5.31	C-K	0 / 34	0.01 (1)	
E-F	-1318 / 0	-78.0	-78.0	0.34 (1)	5.25	K-D	-575 / 0	0.61 (1)	
N-A	-1529 / 0	0.0	0.0	0.22 (1)	6.61	K-E	0 / 782	0.19 (1)	
H-F	-1516 / 0	0.0	0.0	0.19 (1)	6.64	I-E	-150 / 44	0.16 (1)	
N-M	0 / 0	-28.6	-28.6	0.13 (4)	10.00	A-M	0 / 831	0.21 (1)	
M-L	0 / 722	-28.6	-28.6	0.20 (1)	10.00	I-F	0 / 840	0.21 (1)	
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 = 3-8-4
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
- ADD'TL 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")

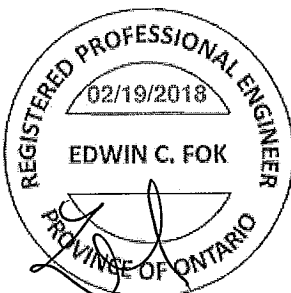
CSI: TC=0.39/1.00 (B-C:1), BC=0.27/1.00 (K-L:1), WB=0.65/1.00 (C-L:1), SSI=0.28/1.00 (B-C:1)

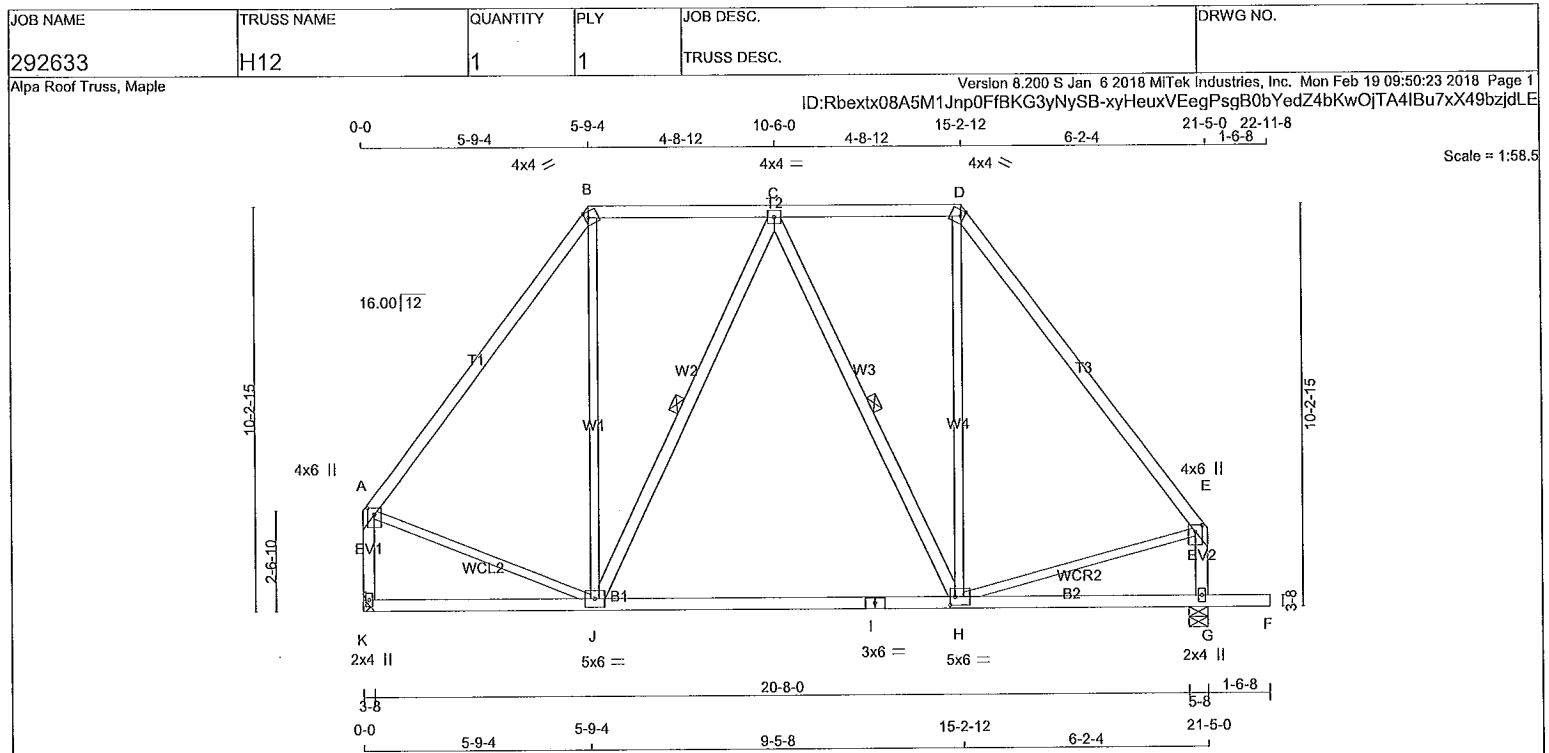
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

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	DRY	No.2	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	2x3	DRY	No.2	SPF
EXCEPT				
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	TMVW-t	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	HORZ	DOWN	HORZ	UPLIFT
K	1033	0	1033	0	0
G	1182	0	1182	0	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	737	450 / 0	0 / 0	0 / 0	0 / 0	287 / 0	0 / 0
G	843	514 / 0	0 / 0	0 / 0	0 / 0	328 / 0	0 / 0

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		MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT.	(PLF)	CSi (LC)	UNBRAC	LENGTH	FR-TO	MEMB.	FORCE (LBS)
FR-TO		FROM	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				

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), SS=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

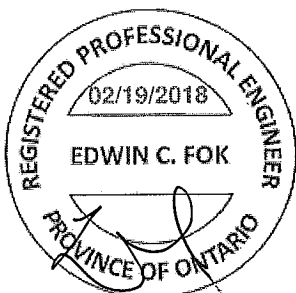
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (J) (INPUT = 0.80)
JSI METAL= 0.31 (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

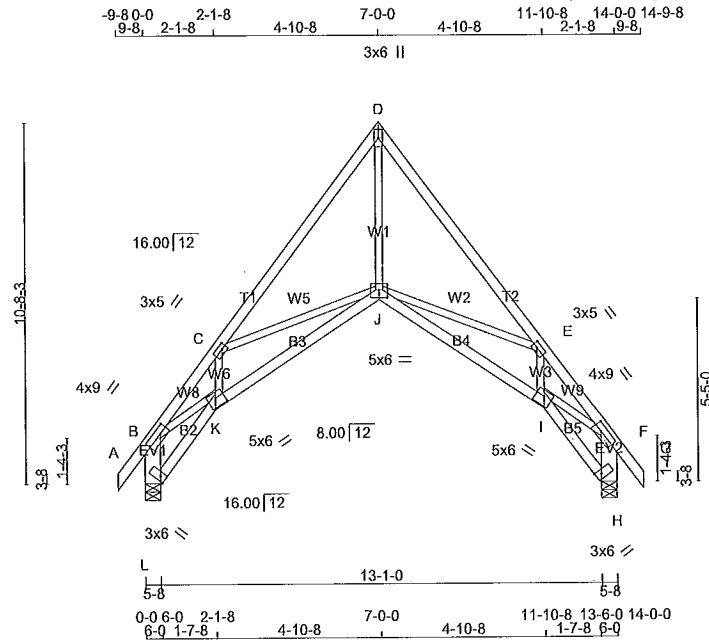


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Alpa Roof Truss, Maple

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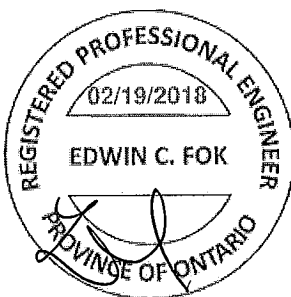


TOTAL WEIGHT = 2 X 74 = 149 lb
[M][F]

DRY: SEASONED LUMBER.

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

UNFACTORED REACTIONS

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 28	-78.0	-78.0	0.05 (1)	10.00	J-D	0 / 987	0.22 (1)
B-C	-1380 / 0	-78.0	-78.0	0.17 (1)	5.37	J-E	-388 / 0	0.18 (1)
C-D	-836 / 0	-78.0	-78.0	0.24 (1)	6.25	I-E	0 / 555	0.02 (4)
D-E	-836 / 0	-78.0	-78.0	0.24 (1)	6.25	C-J	-388 / 0	0.18 (1)
E-F	-1381 / 0	-78.0	-78.0	0.17 (1)	5.37	K-C	0 / 555	0.02 (4)
F-G	0 / 28	-78.0	-78.0	0.05 (1)	10.00	B-K	0 / 1000	0.23 (1)
L-B	-726 / 0	0.0	0.0	0.05 (1)	7.81	I-F	0 / 1000	0.23 (1)
H-F	-726 / 0	0.0	0.0	0.05 (1)	7.81			
L-K	0 / 0	-18.5	-18.5	0.02 (4)	10.00			
K-J	0 / 1028	-18.5	-18.5	0.24 (1)	10.00			
J-I	0 / 1028	-18.5	-18.5	0.24 (1)	10.00			
I-H	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

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

- CSA 688-65, CSA 688
- 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)
	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.

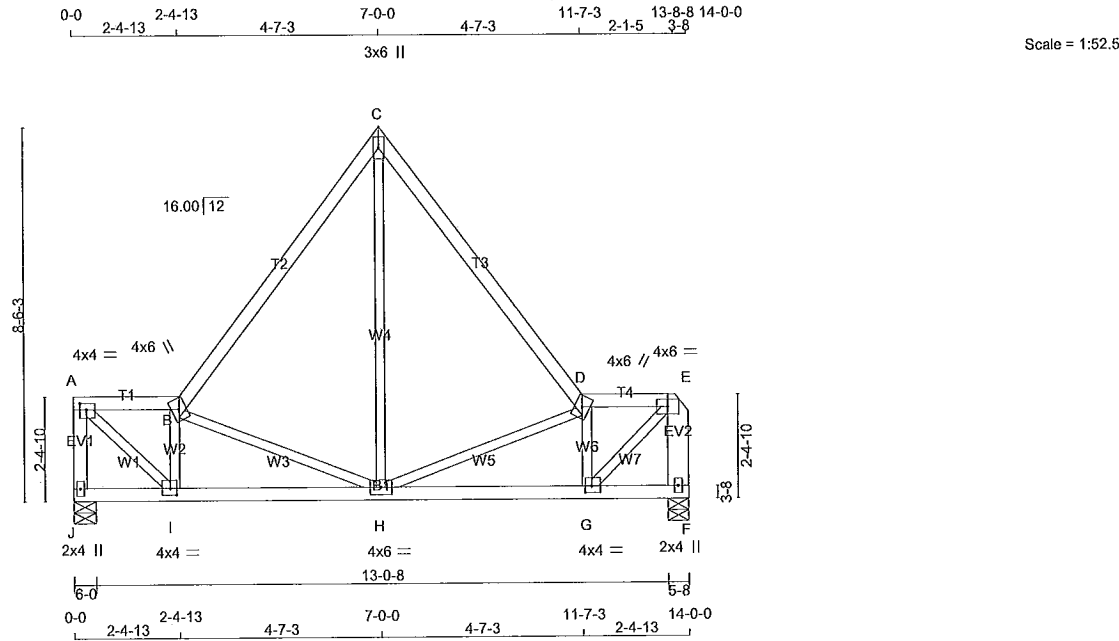
JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.25 (B) (INPUT = 1.00)

A-18023886

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

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-XwfMOYugL.CJTuyuYsfgr76DpC2PqH2SFGYDIlzjdKl



TOTAL WEIGHT = 66 lb (M)

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
F - E	2x6	DRY	No.2	SPF
J - 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-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 - TVMW-I	MT20	4.0	6.0				
F - BMV1+p	MT20	2.0	4.0				
G - BMVW-I	MT20	4.0	4.0	1.75	1.75		
H - BMVWW-I	MT20	4.0	6.0				
I - BMVW-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	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
J	921	0	921	0	0	6-0	1-8		
F	921	0	921	0	0	5-8	1-8		

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	1ST LCASE 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)

CHORDS		FACTORED		MEMB.		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT.	LOAD (PLF)	LC1	MAX.	MEMB.	FORCE (LBS)	MAX.	CSI (LC)
FR-TO		FROM	TO		LENGTH	FR-TO			
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)	
J-I	0/0	-53.7	-53.7	0.08 (4)	10.00	G-E	0/1194	0.30 (1)	
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				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CSldGirder
START DISTANCE = 0-0
START SPAN CARRIED = 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.
- ADDT'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	SECTION
		(PSI)	(PLI)	(PLI)
		MAX	MIN	MAX
	MT20	618	354	1667
		788	1987	1656

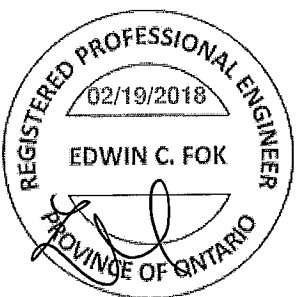
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023887

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.
292633	H15T	2	1	TRUSS DESC.	

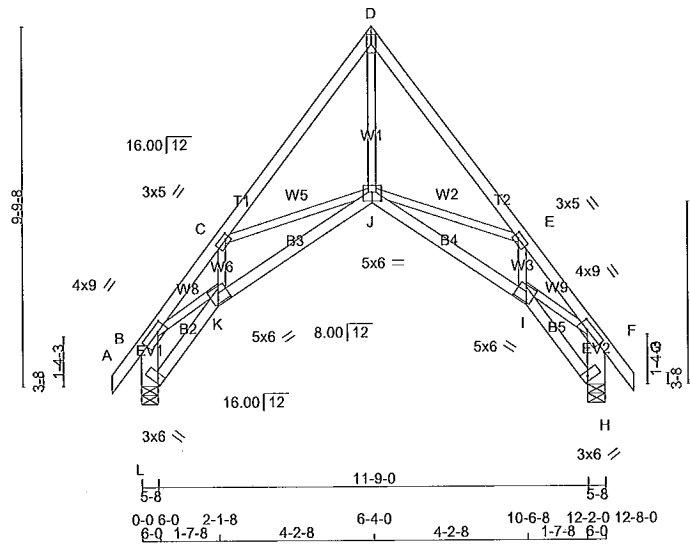
Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-tuSFRFxpAkxI_jmVfCG?YBp7EDngVZkBPXF_QVzjdKg

9-8 0-0 2-1-8 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 6-4-0 4-2-8 10-6-8 12-8-0 13-5-8
3x6 ||

Scale = 1:62.9



TOTAL WEIGHT = 2 X 68 = 137 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
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	BBWW-I	MT20	5.0	6.0	3.00	3.00
J	BBWW-I	MT20	5.0	6.0	2.75	3.00
K	BBWW-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
L	682	0	682	0	5-8	1-8
H	682	0	682	0	5-8	1-8

UNFACTORED REACTIONS

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

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	FR-TO	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)			MEMB. MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
A-B	0/28	-78.0	-78.0	0.05 (1)	10.00	J-D	0/900	0.20 (1)
B-C	-1208/0	-78.0	-78.0	0.12 (1)	5.71	J-E	-316/0	0.10 (1)
C-D	-752/0	-78.0	-78.0	0.18 (1)	6.25	I-E	0/51	0.02 (4)
D-E	-752/0	-78.0	-78.0	0.18 (1)	6.25	C-J	-316/0	0.10 (1)
E-F	-1208/0	-78.0	-78.0	0.12 (1)	5.71	K-C	0/51	0.02 (4)
F-G	0/28	-78.0	-78.0	0.05 (1)	10.00	B-K	0/869	0.20 (1)
L-B	-662/0	0.0	0.0	0.05 (1)	7.81	I-F	0/869	0.20 (1)
H-F	-662/0	0.0	0.0	0.05 (1)	7.81			
L-K	0/0	-18.5	-18.5	0.02 (4)	10.00			
K-J	0/893	-18.5	-18.5	0.20 (1)	10.00			
J-I	0/893	-18.5	-18.5	0.20 (1)	10.00			
I-H	0/0	-18.5	-18.5	0.02 (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

(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.

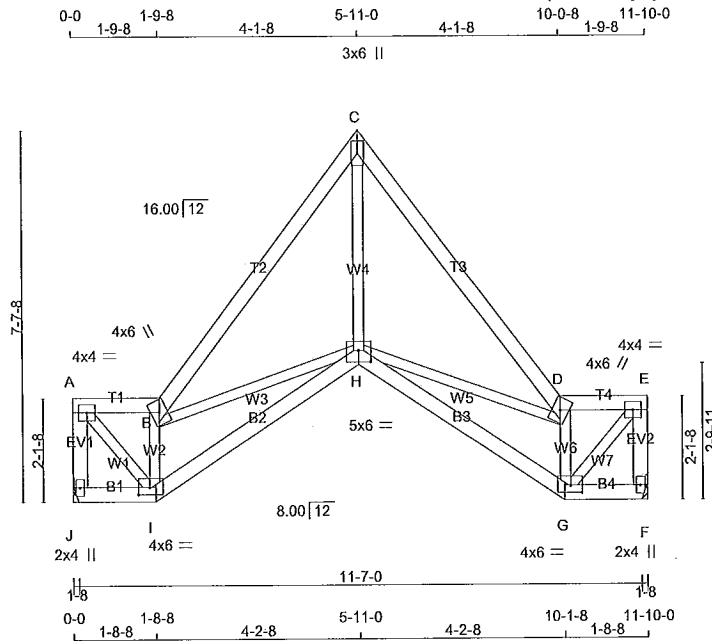
JSI GRIP= 0.67 (J) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)

A-18023888

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

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-ErF8Uz?x_GZ25UfTSlSBFEW_xEWZArwYpziIzjdKb



Scale = 1:47.4

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	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT
J	571	0	571	0
F	571	0	571	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
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	MAX. FACTORED	FACTORED	MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX.	FACTORED
				(LBS)	(PLF)		CSI (LC)	UNBRAC			
FR-TO		FROM	TO					LENGTH	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)			
						G-E	0 / 683	0.15 (1)			
J-I	0 / 0	-18.5	-18.5	0.02 (4)	10.00						
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) = 1/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = 1/999 (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.

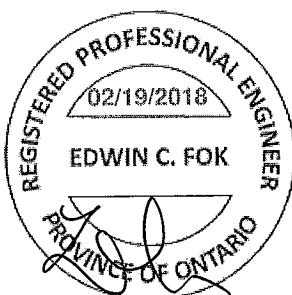
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

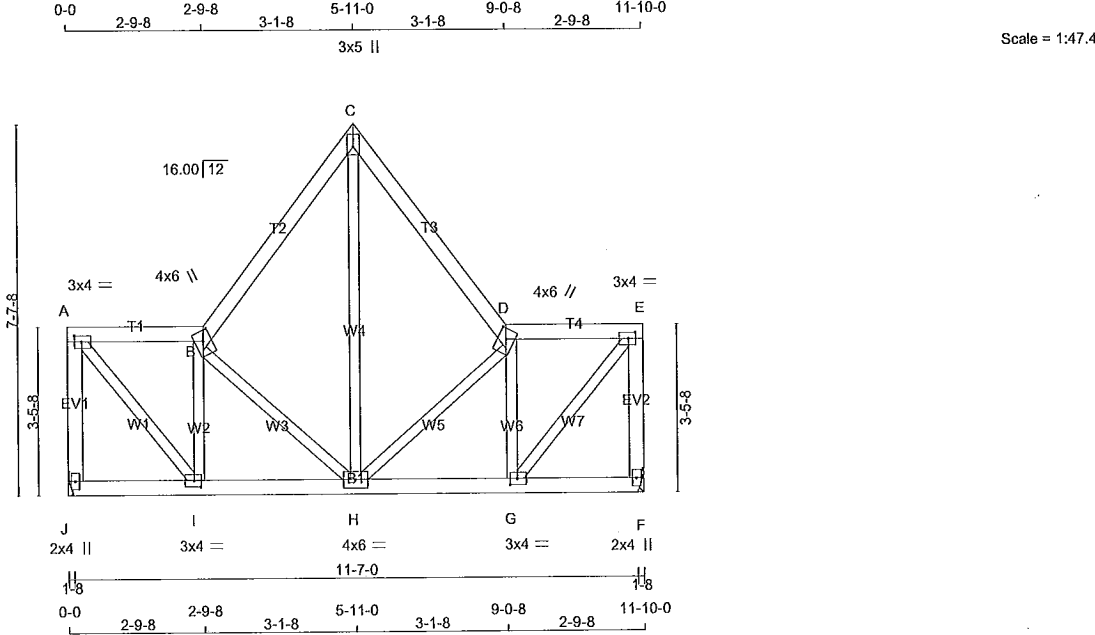
PLATE ROTATION TOL. = 5.0 Deg.

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



A-18023889



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR FOR BUILDING DESIGNER BEARINGS					DESIGN CRITERIA				
J - A	2x4	DRY	No.2	SPF	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG		SPECIFIED LOADS:		
A - B	2x4	DRY	No.2	SPF	JT VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	TOP CH. LL = 21.0	PSF	
B - C	2x4	DRY	No.2	SPF	J 571	0	571	0	0	HANGER BY OTHERS		DL = 6.0	PSF	
C - D	2x4	DRY	No.2	SPF								BOT CH. LL = 0.0	PSF	
D - E	2x4	DRY	No.2	SPF								DL = 7.4	PSF	
F - E	2x4	DRY	No.2	SPF								TOTAL LOAD = 34.4	PSF	
J - F	2x4	DRY	No.2	SPF										
ALL WEBS 2x3 DRY No.2 SPF					UNFACTORED REACTIONS					SPACING = 24.0 IN. C/C				
DRY: SEASONED LUMBER.					1ST LCASE MAX./MIN. COMPONENT REACTIONS					LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM				
					JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015		
					J 407	248 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0	THIS DESIGN COMPLIES WITH:		
					F 407	248 / 0	0 / 0	0 / 0	0 / 0	159 / 0	0 / 0	- 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) , SSI=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 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)		
												A-18023890		

PLATES (table is in inches)						
JT TYPE	PLATES	W	LEN	Y	X	
A	TMVW-t	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-t	MT20	3.0	4.0	1.50	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-t	MT20	3.0	4.0	1.50	1.75
H	BMWWW-t	MT20	4.0	6.0		
I	BMWW-t	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.						

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. UNBRAC LENGTH	LC1 MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO			FR-TO			FR-TO	
J-A	-548 / 0	0.0	0.0	0.10 (1)	7.81	A-I	0 / 585	0.13 (1)	
A-B	-378 / 0	-78.0	-78.0	0.08 (1)	6.25	I-B	-391 / 0	0.08 (1)	
B-C	-389 / 0	-78.0	-78.0	0.10 (1)	6.25	B-H	-221 / 0	0.07 (1)	
C-D	-389 / 0	-78.0	-78.0	0.10 (1)	6.25	H-C	0 / 375	0.08 (1)	
D-E	-378 / 0	-78.0	-78.0	0.08 (1)	6.25	H-D	-221 / 0	0.07 (1)	
F-E	-548 / 0	0.0	0.0	0.10 (1)	7.81	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)	10.00				
I-H	0 / 391	-18.5	-18.5	0.08 (1)	10.00				
H-G	0 / 391	-18.5	-18.5	0.08 (1)	10.00				
G-F	0 / 0	-18.5	-18.5	0.03 (4)	10.00				

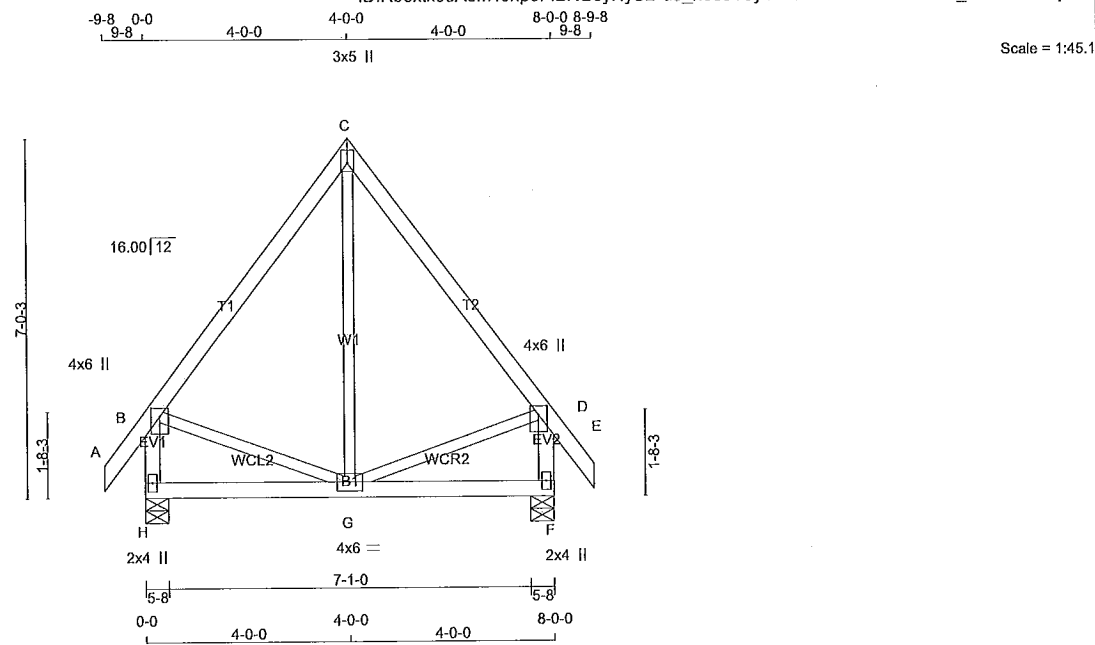
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

02/19/2018

EDWIN C. FOK

REGISTERED PROFESSIONAL ENGINEER

PROVINCE OF ONTARIO



TOTAL WEIGHT = 2 X 42 = 85 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+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		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	IN-SX
H	457	0	457	0	0	5-8	1-8		
F	457	0	457	0	0	5-8	1-8		

UNFACTORED REACTIONS							
JT	COMBINED	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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 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 .

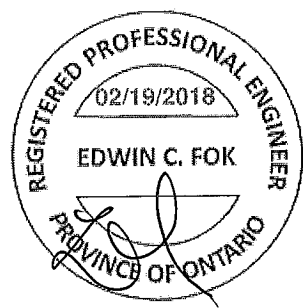
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)		
	MAX MIN	MAX MIN	MAX MIN		
MT20	618 354	1667 788	1987 1656		

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (D) (INPUT = 0.90)
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



Alpa Roof Truss, Maple

Scale = 1:45.7



A-18023892

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

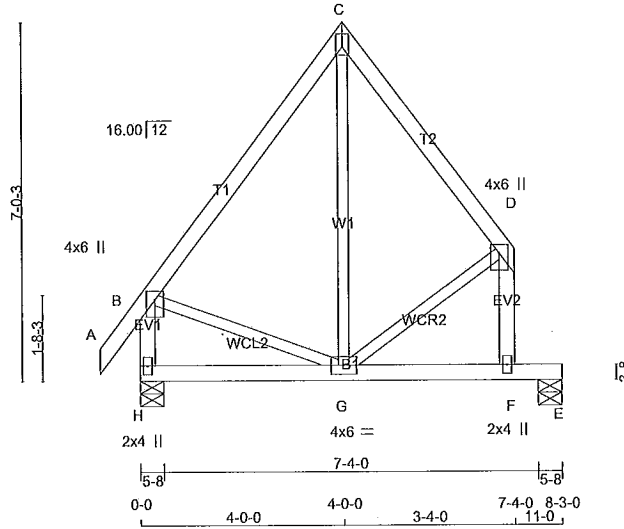
Alpa Roof Truss, Maple

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-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

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES	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	BMV+p	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

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
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				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. UNBRAC. LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	CSI (LC)	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. 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 (0.27")
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.

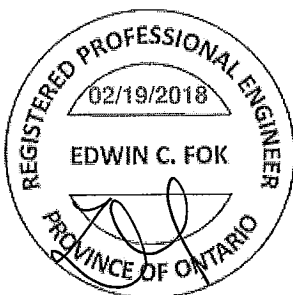
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

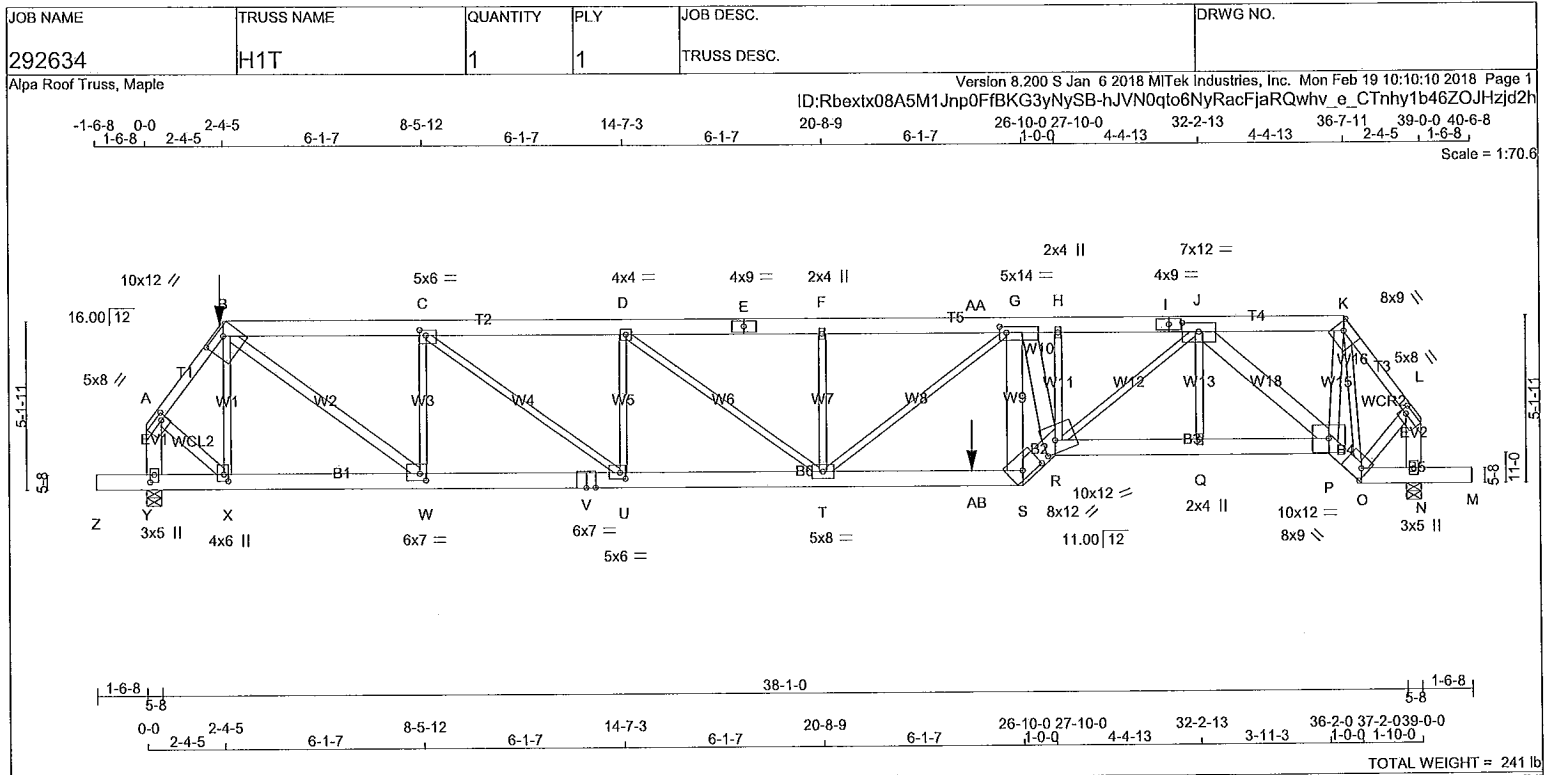
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL = 0.13 (B) (INPUT = 1.00)

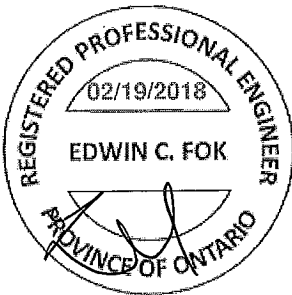
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023893



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. LUMBER DESCR. A - B 2x4 DRY No.2 SPF B - E 2x6 DRY No.2 SPF E - I 2x6 DRY No.2 SPF I - K 2x6 DRY No.2 SPF K - L 2x4 DRY No.2 SPF 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.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQ'D JT VERT HORZ DOWN HORZ UPLIFT IN-SX BRG IN-SX BRG Y 3925 0 3925 0 0 5-8 4-10 N 3443 0 3443 0 0 5-8 5-7 <u>ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD.</u> UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL Y 2793 1735 / 0 0 / 0 0 / 0 1058 / 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 BEARING SIZE FACTOR = 1.15 AT JNT(S) Y (BASED ON SUPPORT DEPTH = 1-8) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.35 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 MEMB. FORCE (LBS) VERT. LOAD LC1 MAX. UNBRAC (PLF) CSI (LC) LENGTH FR-TO FR-TO FROM TO A-B -3160 / 0 -78.0 -78.0 0.23 (1) 3.74 X-B -942 / 0 0.33 (1) B-C -5614 / 0 -153.5 -153.5 0.69 (1) 3.06 B-W 0 / 4708 0.83 (1) C-D -7675 / 0 -153.5 -153.5 0.93 (1) 2.35 W-C -2625 / 0 0.93 (1) D-E -8362 / 0 -153.5 -153.5 0.89 (1) 2.36 C-U 0 / 2596 0.64 (1) E-F -8362 / 0 -153.5 -153.5 0.89 (1) 2.36 U-D -1448 / 0 0.51 (1) F-AA -8362 / 0 -153.5 -153.5 0.88 (1) 2.35 D-T 0 / 865 0.21 (1) AA-G -8362 / 0 -78.0 -78.0 0.88 (1) 2.35 T-F -890 / 0 0.31 (1) G-H -8263 / 0 -78.0 -78.0 0.77 (1) 2.38 T-G 0 / 1361 0.34 (1) H-I -8250 / 0 -78.0 -78.0 0.77 (1) 2.44 S-G -5552 / 0 0.89 (1) I-J -8250 / 0 -78.0 -78.0 0.77 (1) 2.44 G-R 0 / 3920 0.51 (1) J-K -2362 / 0 -78.0 -78.0 0.20 (1) 5.14 R-H 0 / 463 0.11 (1) K-L -2431 / 0 -78.0 -78.0 0.17 (1) 4.25 R-J 0 / 3761 0.93 (1) Y-A -3793 / 0 0.0 0.0 0.31 (1) 5.45 Q-J -79 / 45 0.02 (1) N-L -3215 / 0 0.0 0.0 0.26 (1) 5.86 P-K 0 / 4608 0.81 (1) Z-Y 0 / 0 -96.5 -96.5 0.05 (1) 10.00 K-O -2863 / 0 0.95 (1) Y-X 0 / 0 -36.4 -36.4 0.07 (4) 10.00 A-X 0 / 2226 0.39 (1) X-W 0 / 1873 -36.4 -36.4 0.16 (1) 10.00 O-L 0 / 1873 0.33 (1) W-V 0 / 5614 -36.4 -36.4 0.37 (1) 10.00 J-P -4134 / 0 0.93 (1) V-U 0 / 5614 -36.4 -36.4 0.37 (1) 10.00 U-T 0 / 7675 -36.4 -36.4 0.53 (1) 10.00 T-AB 0 / 7300 -36.4 -36.4 0.85 (1) 10.00 AB-S 0 / 7300 -18.5 -18.5 0.85 (1) 10.00 S-R 0 / 9523 -18.5 -18.5 0.44 (1) 10.00 R-Q 0 / 5363 -18.5 -18.5 0.72 (1) 10.00 Q-P 0 / 5363 -18.5 -18.5 0.72 (1) 10.00 P-O 0 / 2414 -18.5 -18.5 0.20 (1) 10.00 O-N -1 / 0 -18.5 -18.5 0.08 (1) 10.00 N-M 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 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 - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 25-3-8 OF SPAN MEASURED FROM THE LEFT. *** NON STANDARD GIRDER *** ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, OBC 2018 - CSA 086-09, CSA 086-14 - TPIC 2011, TPIC 2014 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), SS=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 CONTINUE ON PAGE 2			
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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+t	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

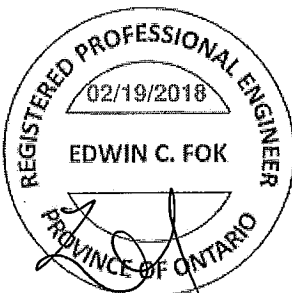
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

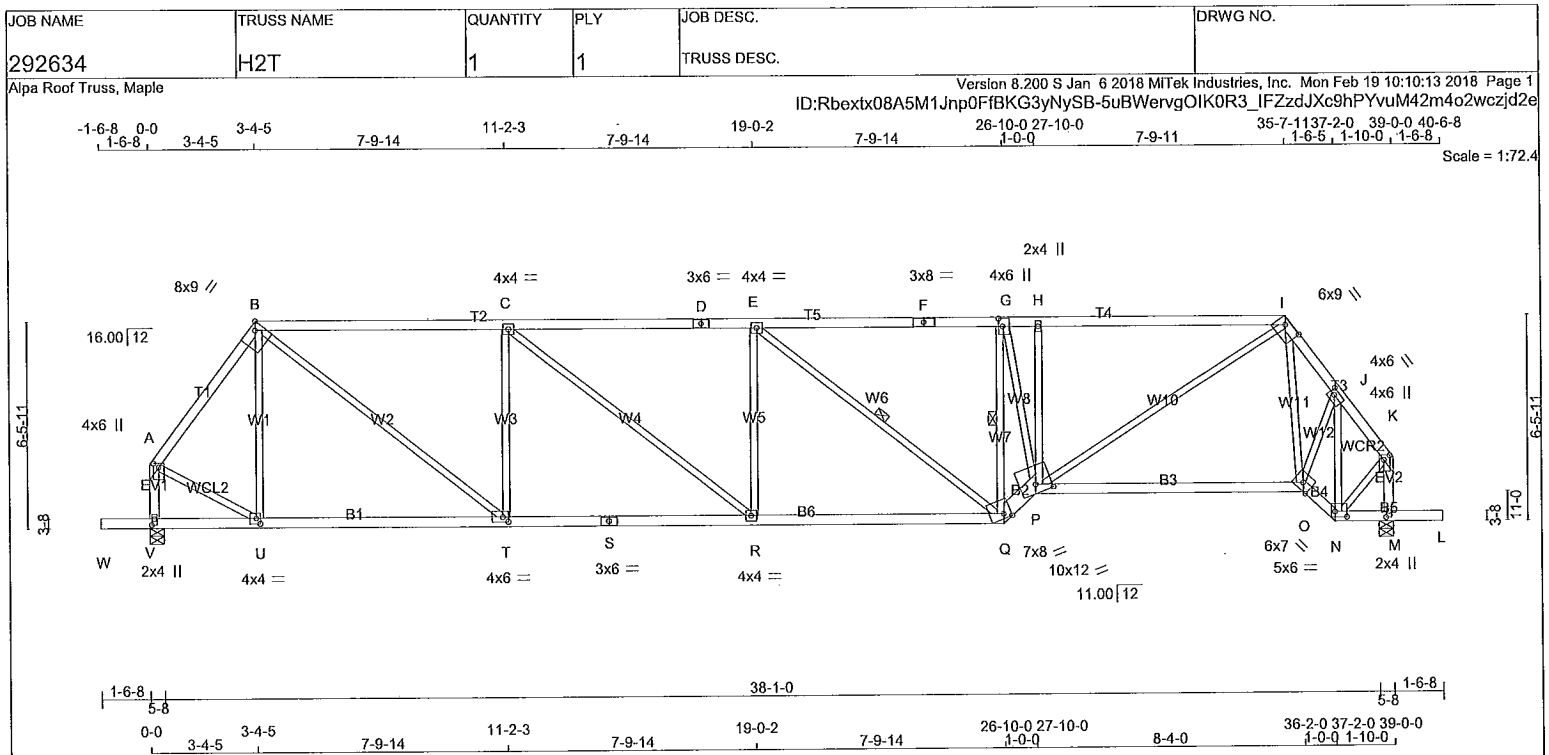
JSI GRIP= 0.90 (X) (INPUT = 0.90)

JSI METAL= 0.99 (S) (INPUT = 1.00)

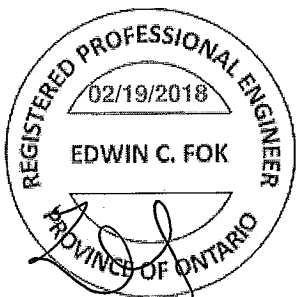
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

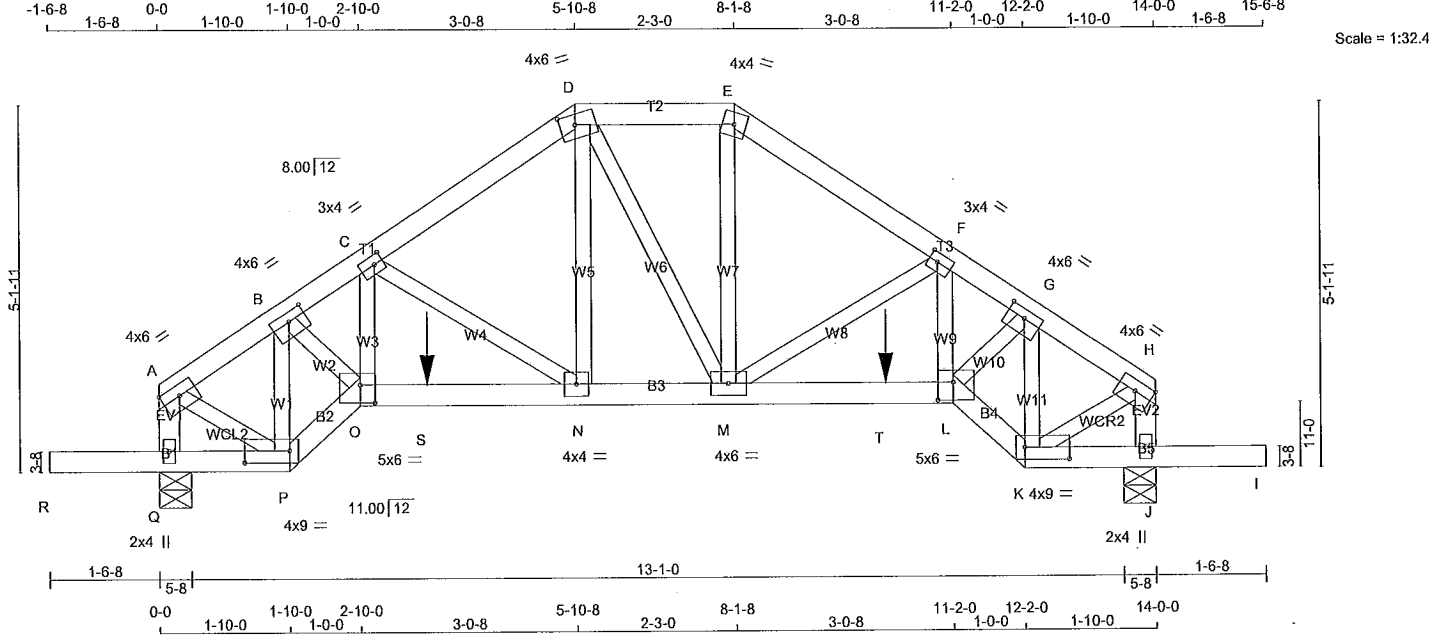


A-18023894(2)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA
A - B 2x4 DRY No.2 SPF					BEARINGS										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 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= 0.83 (S) (INPUT = 1.00)
B - D 2x4 DRY 1650F 1.5E SPF					UNFACTORED REACTIONS										
D - F 2x4 DRY 1650F 1.5E SPF					1ST LCASE										
F - I 2x4 DRY 1650F 1.5E SPF					MAX./MIN. COMPONENT REACTIONS										
I - K 2x4 DRY No.2 SPF					JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										
V - A 2x4 DRY No.2 SPF					V 1445 882 / 0 0 / 0 0 / 0 0 / 0 563 / 0 0 / 0										
M - K 2x4 DRY No.2 SPF					M 1449 885 / 0 0 / 0 0 / 0 0 / 0 565 / 0 0 / 0										
W - S 2x4 DRY No.2 SPF					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M										
S - Q 2x4 DRY No.2 SPF					BRACING										
Q - P 2x6 DRY No.2 SPF					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 FT.										
P - O 2x4 DRY No.2 SPF					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										
O - N 2x4 DRY No.2 SPF					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										
N - L 2x4 DRY No.2 SPF					1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-Q, G-Q.										
ALL WEBS 2x3 DRY No.2 SPF					END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW										
EXCEPT					LOADING										
DRY: SEASONED LUMBER.					TOTAL LOAD CASES: (4)										
					CHORDS										
					MEMB. MAX. FACTORED FORCE (LBS)										
					FACTORED VERT. LOAD LC1 MAX (PLF)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
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					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEMB. MAX. FACTORED FORCE (LBS)										
					MAX. UNBRACED LENGTH FR-TO										
					MEM										





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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-I	MT20	4.0	6.0	1.75 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	TTW-m	MT20	4.0	6.0	1.75 2.50
E	TTW-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	BBWW-I	MT20	4.0	9.0	2.00 7.50
L	BBWW-I	MT20	5.0	6.0	3.00 2.50
M	BMWWW-I	MT20	4.0	6.0	
N	BMWW-I	MT20	4.0	4.0	
O	BBWW-I	MT20	5.0	6.0	3.00 2.50
P	BBWW-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 IN-SX	REQRD BRG IN-SX
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
Q	1549	0	1549	0	5-8
J	1549	0	1549	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
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		MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED UNBRAC LENGTH	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO			FROM 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-	MAX+	FACE DIR.
S	3-9-4	-423	-423	---	FRONT VERT
T	10-2-12	-423	-423	---	FRONT VERT

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: CSldGirder
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.
- 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

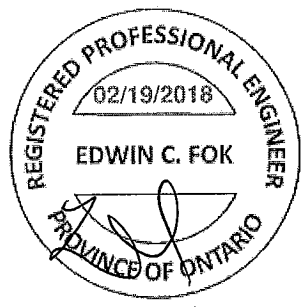
ALLOWABLE DEFL.(LL)=	L/360 (0.47")
CALCULATED VERT. DEFL.(LL)=	L/999 (0.06")
ALLOWABLE DEFL.(TL)=	L/360 (0.47")
CALCULATED VERT. DEFL.(TL)=	L/999 (0.12")

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)

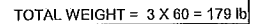
DOL LUMBER=1.00 NAIL=1.00 L.S BEND=1.00
COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00



Alpa Roof Truss, Maple

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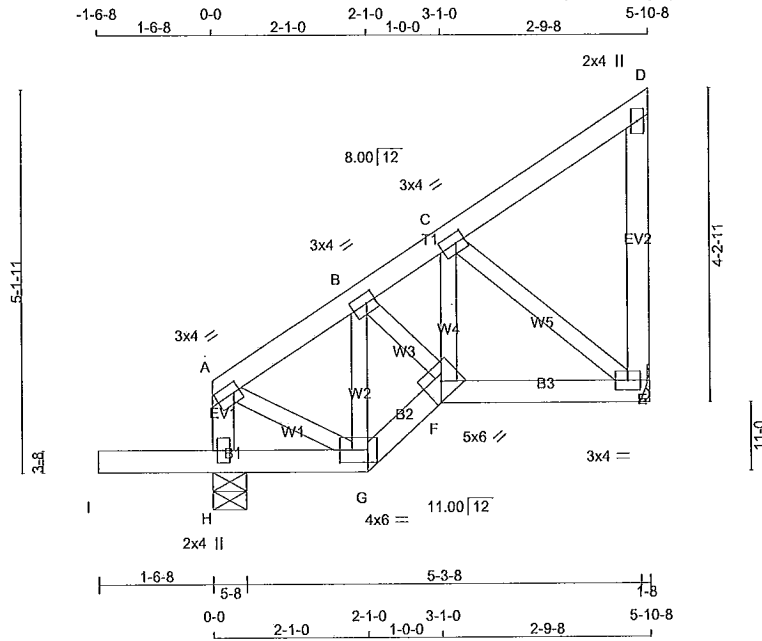
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	J1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:31.0

TOTAL WEIGHT = 30 lb

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

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

PLATES (table is in inches)

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

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

BEARINGS

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

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. FACTORED UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRAC LENGTH
FR-TO						FR-TO			
H-A	-229 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 158	0.04 (1)	
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	0.02 (1)	7.81	C-E	-247 / 0	0.05 (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				

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)	(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= 0.52 (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



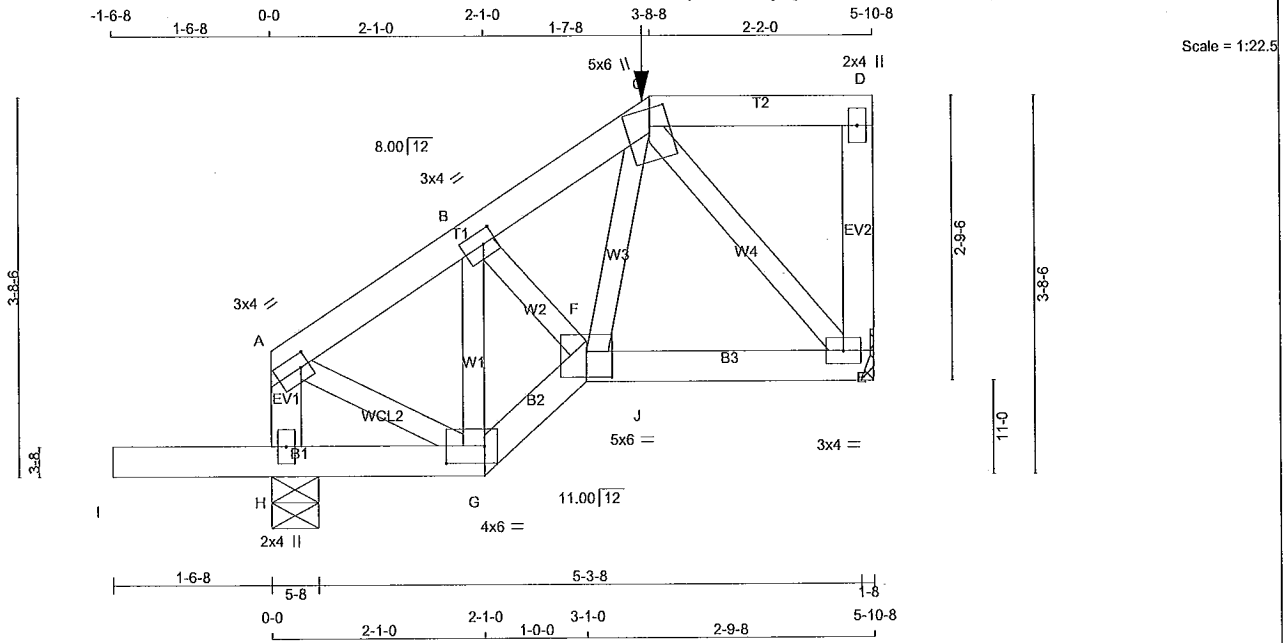
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292634	J1TA	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:22.5

TOTAL WEIGHT = 2 X 29 = 57 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
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	TTWW+m	MT20	5.0	6.0	2.00	2.25
D	TMV+p	MT20	2.0	4.0		
E	BMVW-t	MT20	3.0	4.0		
F	BBVW-t	MT20	5.0	6.0	3.00	3.00
G	BBVW-t	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES
1) 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.

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD IN-SX
	VERT	HORZ	DOWN	HORZ		
E	413	0	413	0		
H	527	0	527	0		

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
E	294	183 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
H	377	225 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. UNBRAC	MAX. FACTORED		MAX. UNBRAC	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	CSI (LC)		MEMB.	FORCE (LBS)		MAX. CSI (LC)
FR-TO		FROM	TO			LENGTH	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				

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")

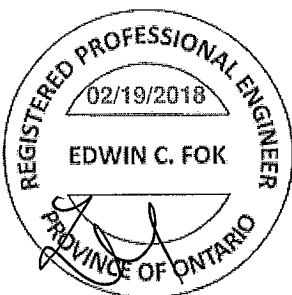
CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/571 (0.03")

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

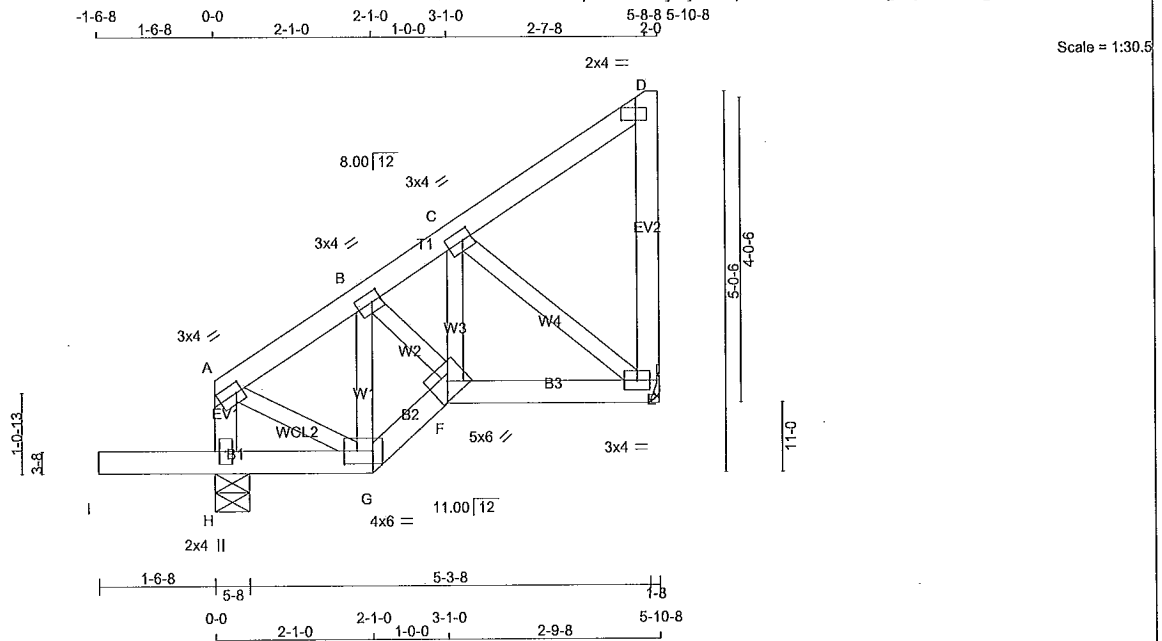
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.



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 10:10:23 2018 Page 1
ID:Rbextx08A5M1Jnp0FfBKg3yNySB-opnlkG1x2Nbbecldrg9zje13BR4gE2FW3dDaH1zjd2U



TOTAL WEIGHT = 2 X 30 = 61 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TVM-p	MT20	2.0	4.0	0.50	2.25
E	BMVW-t	MT20	3.0	4.0		
F	BBVW-h	MT20	5.0	6.0		
G	BBVW-l	MT20	4.0	6.0	2.00	4.50
H	BMV-t+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
	VERT	DOWN	IN-SX	IN-SX
JT	264	0	0	0
E	264	0	0	0
H	452	0	0	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
JT	188	115 / 0	0 / 0	0 / 0	73 / 0	0 / 0
E	322	197 / 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				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	-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			

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), RC=0.16/1.00 (G-H:1), WB=0.05/1.00 (C-E:1), SSF=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

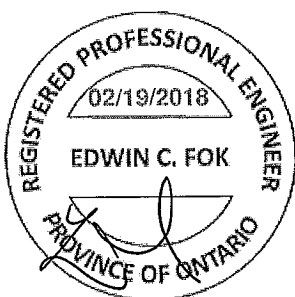
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

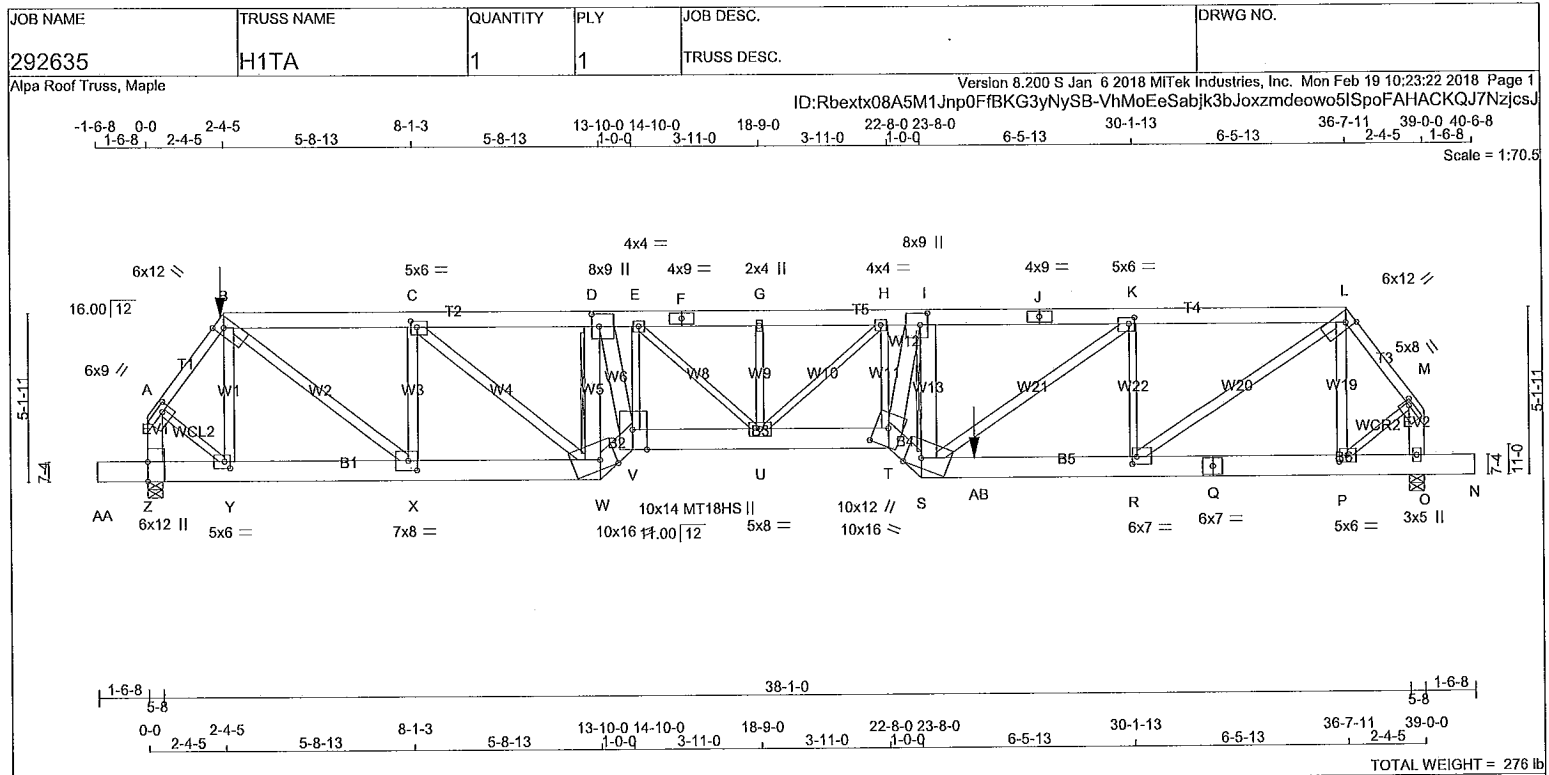
PLATE ROTATION TOL. = 5.0 Deg.

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-18023900



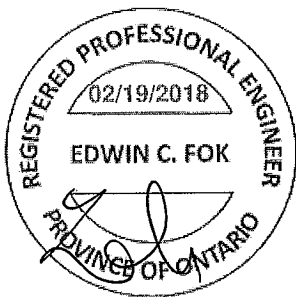
LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	No.2	SPF
B - F	2x6	DRY	1650F 1.5E	SPF
F - J	2x6	DRY	1650F 1.5E	SPF
J - L	2x6	DRY	1650F 1.5E	SPF
L - M	2x4	DRY	No.2	SPF
Z - A	2x6	DRY	No.2	SPF
O - M	2x6	DRY	No.2	SPF
AA - W	2x8	DRY	No.2	SPF
W - V	2x8	DRY	1950F 1.7E	SPF
V - T	2x8	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				
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+u	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
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					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Z	2798	1739 / 0	0 / 0	0 / 0	0 / 0	1060 / 0	0 / 0
O	2443	1558 / 0	0 / 0	0 / 0	0 / 0	886 / 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 (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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)	
FR-TO		FROM TO		FR-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	0.84 (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: CPrimeHlp
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 14-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGlrder
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

(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/468 (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")

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	TMVV-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	BMWWWW-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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MEMB.	FORCE (LBS)	FACTORED MAX	LC1 MAX
FR-TO		FROM TO		FR-TO		FROM 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), SSI=0.52/1.00 (R-S: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.

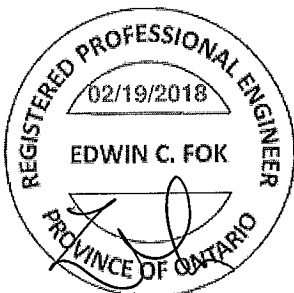
NAIL VALUES			
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1667 788
MT18HS	511	354	2455 1382 3004 2010

PLATE PLACEMENT TOL. = 0.250 inches

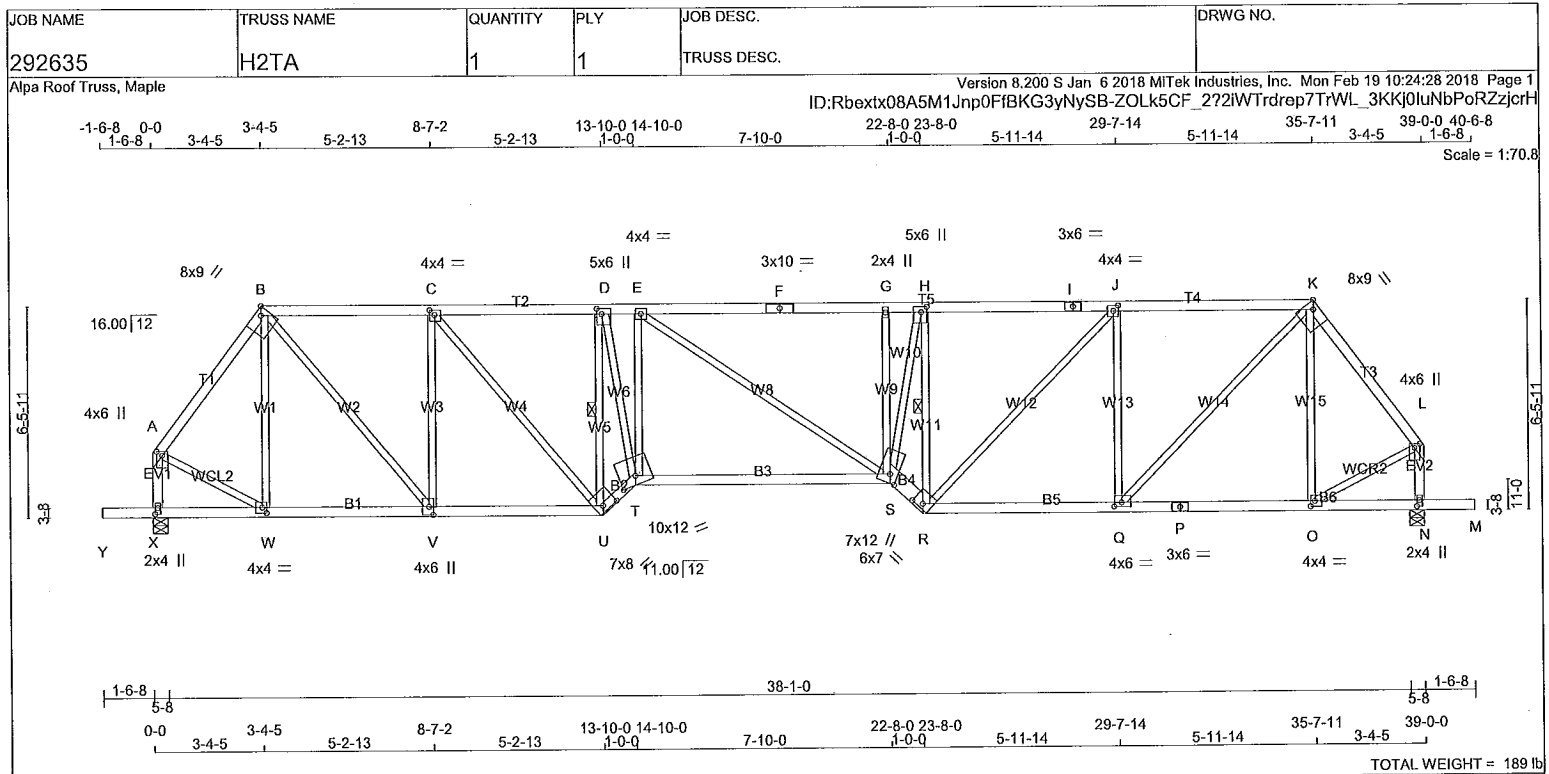
PLATE ROTATION TOL. = 5.0 Deg.

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



A-18023901



LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
A - B	2x4	DRY	No.2	SPF	
B - F	2x4	DRY	1650F 1.5E	SPF	
F - I	2x4	DRY	1650F 1.5E	SPF	
I - K	2x4	DRY	1650F 1.5E	SPF	
K - L	2x4	DRY	No.2	SPF	
X - A	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
Y - U	2x4	DRY	No.2	SPF	
U - T	2x4	DRY	No.2	SPF	
T - S	2x4	DRY	No.2	SPF	
S - R	2x6	DRY	No.2	SPF	
R - P	2x4	DRY	No.2	SPF	
P - M	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	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		MAXIMUM FACTORED		INPUT		REQRD		
	GROSS REACTION		GROSS REACTION		BRG	BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
X	2030	0	2030	0	0	5-8	3-0		
N	2030	0	2030	0	0	5-8	3-0		

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS									
	1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
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				
	MAX. FACTORED	FACTORED				MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-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	S-H	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=0.64/1.00 (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.

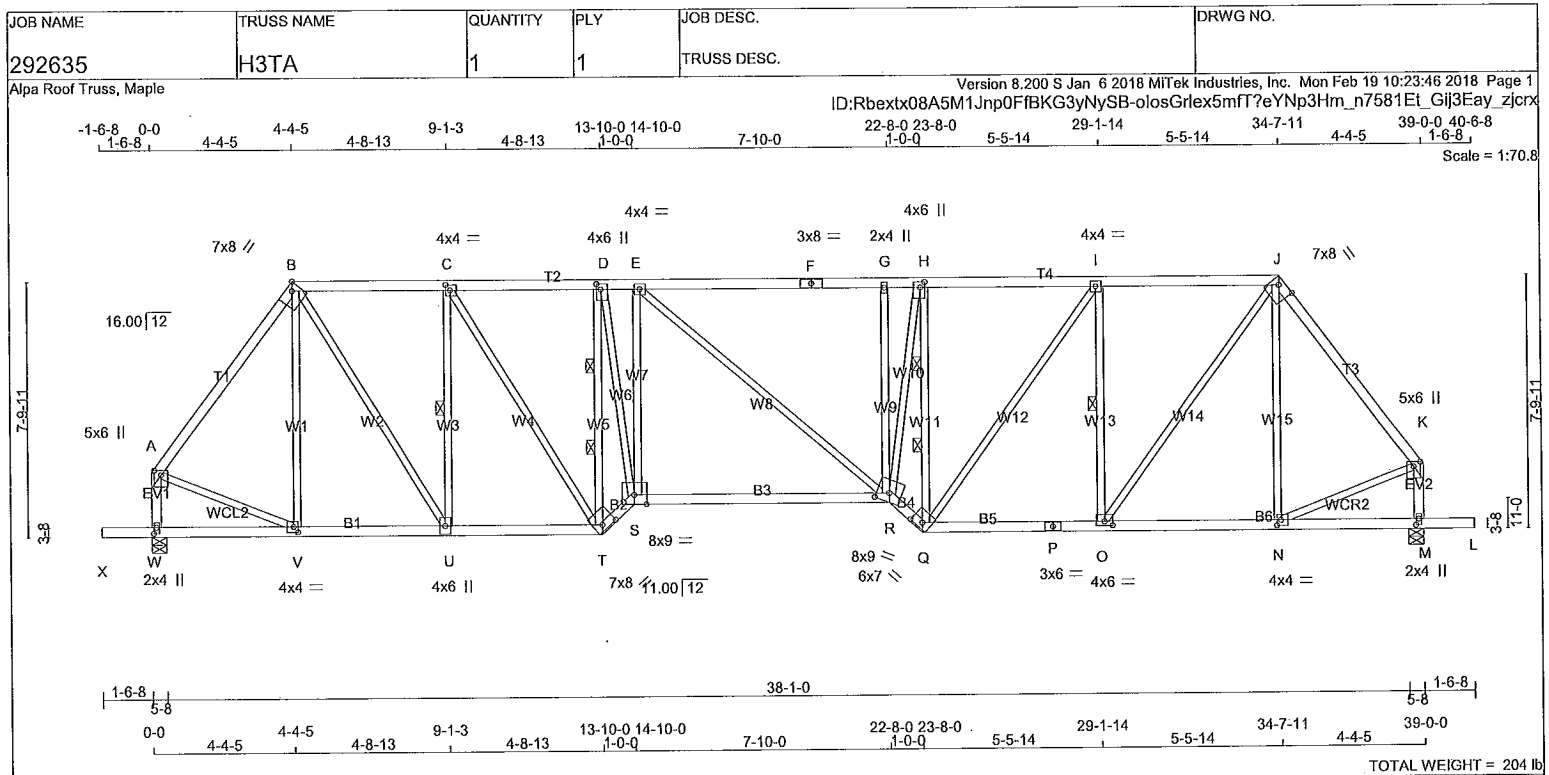
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)		
	MAX	MIN	MAX	MIN	MAX
MT20	618	354	1667	788	1987

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)

A-18023902 CONTINUED ON PAGE 2



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF			
B - F	2x4	DRY	No.2	SPF			
F - J	2x4	DRY	No.2	SPF			
J - K	2x4	DRY	No.2	SPF			
W - A	2x4	DRY	No.2	SPF			
M - K	2x4	DRY	No.2	SPF			
X - T	2x4	DRY	No.2	SPF			
T - S	2x4	DRY	No.2	SPF			
S - R	2x4	DRY	No.2	SPF			
R - Q	2x4	DRY	No.2	SPF			
Q - P	2x4	DRY	No.2	SPF			
P - 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	5.0	6.0	1.75	2.50
B	TTWW-h	MT20	7.0	8.0	Edge	2.75
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TMVW-t	MT20	4.0	4.0	2.00	1.50
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	8.0		
G	TMVW-w	MT20	2.0	4.0		
H	TMVW-t	MT20	4.0	6.0	2.00	1.50
I	TMVW-t	MT20	4.0	4.0		
J	TTWW-h	MT20	7.0	8.0	2.00	5.25
K	TMVW+p	MT20	5.0	6.0	1.75	2.50
M	BMV1+p	MT20	2.0	4.0	2.25	1.00
N	BMVW-t	MT20	4.0	4.0	2.00	1.50
O	BMVW-t	MT20	4.0	6.0	1.50	3.00
P	BS-t	MT20	3.0	6.0		
Q	BBWW-h	MT20	6.0	7.0	2.00	4.00
R	BBWWW-m	MT20	8.0	9.0	3.25	4.50
S	BBWW-t	MT20	8.0	9.0	Edge	
T	BBWW-h	MT20	7.0	8.0	2.00	5.00
U	BMVW-t	MT20	4.0	6.0		
V	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		REQRD	
	GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
W	2030	0	2030	0	5-8		3-0	
M	2030	0	2030	0	5-8		3-0	

UNFACTORED REACTIONS

	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
JT	1447	883 / 0	0 / 0	0 / 0	0 / 0	564 / 0	0 / 0
M	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) W, M

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.60 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-U, I-O.
2 LATERAL BRACE(S) AT 1/3 LENGTH OF D-T, H-Q.

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. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-1651 / 0	-78.0	-78.0 0.37 (1)	4.83	V-B	-260 / 0	0.30 (1)
B-C	-1775 / 0	-78.0	-78.0 0.33 (1)	4.68	B-U	0 / 1482	0.33 (1)
C-D	-2258 / 0	-78.0	-78.0 0.37 (1)	4.21	U-C	-1168 / 0	0.45 (1)
D-E	-2671 / 0	-78.0	-78.0 0.48 (1)	3.68	C-T	0 / 902	0.20 (1)
E-F	-2766 / 0	-78.0	-78.0 0.80 (1)	3.60	T-D	-2807 / 0	1.00 (1)
F-G	-2766 / 0	-78.0	-78.0 0.80 (1)	3.60	D-S	0 / 2765	0.62 (1)
G-H	-2758 / 0	-78.0	-78.0 0.49 (1)	3.61	S-E	-558 / 0	0.45 (1)
H-I	-2357 / 0	-78.0	-78.0 0.49 (1)	3.99	E-R	0 / 113	0.03 (1)
I-J	-1882 / 0	-78.0	-78.0 0.45 (1)	4.42	R-G	-479 / 0	0.39 (1)
J-K	-1652 / 0	-78.0	-78.0 0.37 (1)	4.82	R-H	0 / 2650	0.60 (1)
W-A	-1849 / 0	0.0	0.0 0.21 (1)	6.16	Q-H	-2714 / 0	0.96 (1)
M-K	-1850 / 0	0.0	0.0 0.21 (1)	6.16	Q-I	0 / 804	0.18 (1)
					O-I	-1125 / 0	0.43 (1)
					O-J	0 / 1519	0.34 (1)
X-W	0 / 0	-96.5	-96.5 0.16 (1)	10.00	N-J	-253 / 0	0.29 (1)
W-V	0 / 0	-18.5	-18.5 0.09 (4)	10.00	A-V	0 / 1047	0.24 (1)
V-U	0 / 982	-18.5	-18.5 0.21 (1)	10.00	N-K	0 / 1048	0.24 (1)
U-T	0 / 1776	-18.5	-18.5 0.33 (1)	10.00			
T-S	0 / 3107	-18.5	-18.5 0.50 (1)	10.00			
S-R	0 / 2680	-18.5	-18.5 0.62 (1)	10.00			
R-Q	0 / 3146	-18.5	-18.5 0.51 (1)	10.00			
Q-P	0 / 1882	-18.5	-18.5 0.36 (1)	10.00			
P-O	0 / 1882	-18.5	-18.5 0.36 (1)	10.00			
O-N	0 / 982	-18.5	-18.5 0.22 (4)	10.00			
N-M	0 / 0	-18.5	-18.5 0.10 (4)	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

(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 (0.25")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/721 (0.65")

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=0.80/1.00 (E-G:1), BC=0.62/1.00 (R-S:1), WB=1.00/1.00 (D-T:1), SSI=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= 0.61 (D) (INPUT = 1.00)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292636	H1TB	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
C	TMWW-t	MT20	5.0	6.0	2.25	2.25
D	TMWW-t	MT20	7.0	12.0	2.25	5.25
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	4.0	9.0		
G	TMW+w	MT20	2.0	4.0		
H	TMWW-t	MT20	4.0	4.0		
I	TMWWW+t	MT20	10.0	12.0	3.75	3.00
J	TMWWW+t	MT20	5.0	8.0	3.00	1.75
K	TMW+w	MT20	2.0	4.0		
L	TS-t	MT20	4.0	9.0		
M	TMWWW-t	MT20	6.0	12.0	2.50	5.50
N	TTWW-h	MT20	8.0	9.0	3.25	3.00
O	TMVW-t	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-t	MT20	10.0	12.0	6.00	6.00
T	BMW+w	MT20	2.0	4.0		
U	BBWWW-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	BMWWW-t	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-t	MT20	6.0	9.0	2.75	3.75
AC	BMWW-t	MT20	5.0	6.0	2.50	2.75
AD	BMV1+t	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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED 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.

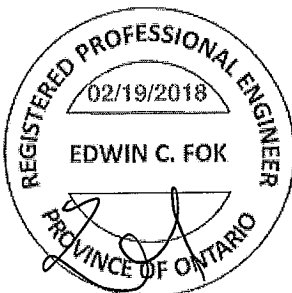
NAIL VALUES		GRIP(DRY) SHEAR		SECTION	
PLATE	(PSI)	(PLI)	(PLI)	MAX	MIN
MT20	618	354	1667	788	1987
MT18HS	511	354	2455	1382	3004

PLATE PLACEMENT TOL. = 0.250 inches

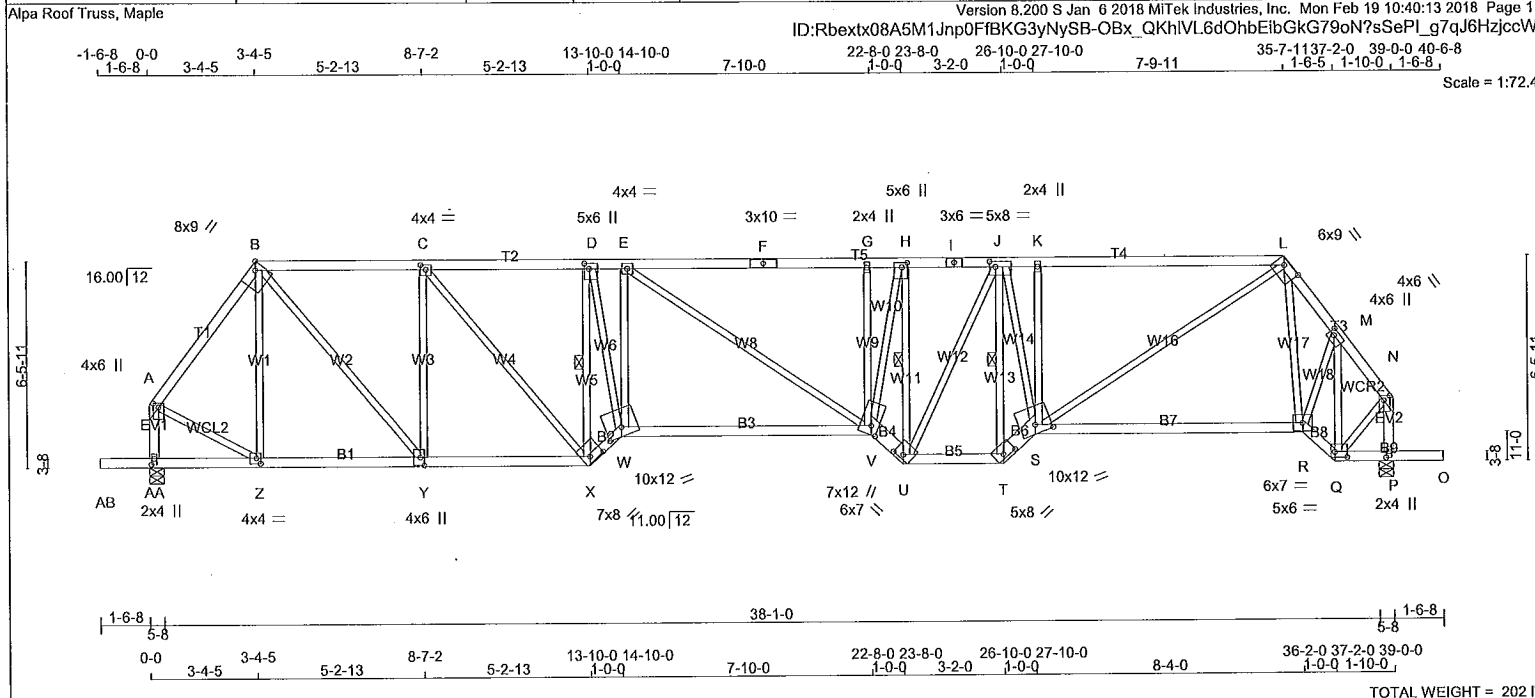
PLATE ROTATION TOL. = 5.0 Deg.

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



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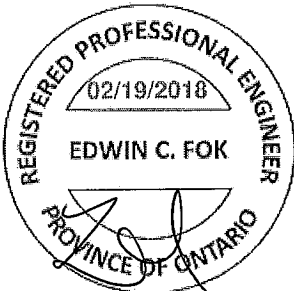


LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA					
N. L. G. A. RULES				BEARINGS										SPECIFIED LOADS:					
CHORDS	SIZE	LUMBER	DESCR.	FACTORED			MAXIMUM FACTORED			INPUT		REQRD		TOP	CH.	LL	=	21.0	PSF
A - B	2x4	DRY	No.2	GROSS REACTION			GROSS REACTION			8RG	8RG				DL	=	6.0	PSF	
B - F	2x4	DRY	1650F 1.5E	VT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX				DL	=	0.0	PSF	
F - I	2x4	DRY	1650F 1.5E	AA	2027	0	2027	0	0	5-8	3-0				DL	=	7.4	PSF	
I - L	2x4	DRY	1650F 1.5E	P	2033	0	2033	0	0	5-8	3-0				TOTAL LOAD	=	34.4	PSF	
L - N	2x4	DRY	No.2	ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD															
AA- A	2x4	DRY	No.2	UNFACTORED REACTIONS															
P - N	2x4	DRY	No.2	1ST LCASE MAX./MIN. COMPONENT REACTIONS															
AB- X	2x4	DRY	No.2	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL								
X - W	2x4	DRY	No.2	AA	1445	882 / 0	0 / 0	0 / 0	0 / 0	563 / 0	0 / 0								
W - V	2x4	DRY	No.2	P	1449	885 / 0	0 / 0	0 / 0	0 / 0	565 / 0	0 / 0								
V - U	2x6	DRY	No.2	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) AA, P															
U - T	2x4	DRY	No.2	BRACING															
T - S	2x6	DRY	No.2	TOP CHORD TO BE SHEATHED OR MAX. PURL IN SPACING = 3.86 FT.															
S - R	2x4	DRY	No.2	MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.															
R - Q	2x4	DRY	No.2	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.															
Q - O	2x4	DRY	No.2	1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-X, H-U, J-T.															
ALL WEBS 2x3 DRY No.2 SPF				END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW															
EXCEPT				LOADING															
DRY: SEASONED LUMBER.				TOTAL LOAD CASES: (4)															
				CHORDS															
				WEBS															
				MAX. FACTORED															
				MEMB. FORCE (LBS)															
				FACTORED															
				VERT. LOAD LC1 MAX CSI (LC)															
				MAX. MEMB. UNBRAC															
				MAX. FACTORED															
				FORCE (LBS)															
				MAX CSI (LC)															
				FR-TO															
				FROM TO															
				LENGTH FR-TO															
				Z-B															
				-353 / 0															
				0.24 (1)															
				B-C															
				-2079 / 0															
				0.39 (1)															
				C-D															
				-2742 / 0															
				0.84 (1)															
				D-E															
				-3341 / 0															
				0.23 (1)															
				E-F															
				-3495 / 0															
				0.89 (1)															
				F-G															
				-3495 / 0															
				0.72 (1)															
				G-H															
				-3483 / 0															
				0.26 (1)															
				H-I															
				-2860 / 0															
				0.04 (1)															
				I-J															
				-2860 / 0															
				0.27 (1)															
				J-K															
				-2952 / 0															
				0.73 (1)															
				K-L															
				-2965 / 0															
				0.83 (1)															
				L-M															
				-1823 / 0															
				0.13 (1)															
				M-N															
				-1319 / 0															
				0.63 (1)															
				AA-A															
				-1857 / 0															
				0.42 (1)															
				P-N															
				-1805 / 0															
				0.30 (1)															
				S-L															
				0 / 2249															
				0.51 (1)															
				L-R															
				-93 / 22															
				0.04 (1)															
				R-M															
				0 / 921															
				0.21 (1)															
				Q-M															
				-1412 / 0															
				0.38 (1)															
				A-Z															
				0 / 1050															
				0.24 (1)															
				Q-N															
				0 / 1047															
				0.24 (1)															
				AB-AA															
				0 / 0															
				-96.5 -96.5 0.16 (1)															
				10.00															
				AA-Z															
				0 / 0															
				-18.5 -18.5 0.08 (4)															
				10.00															
				Z-Y															
				0 / 947															
				-18.5 -18.5 0.21 (1)															
				10.00															
				Y-X															
				0 / 2080															
				-18.5 -18.5 0.40 (1)															
				10.00															
				X-W															
				0 / 3779															
				-18.5 -18.5 0.61 (1)															
				10.00															
				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	TTVW-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	TMVW-t	MT20	5.0	8.0	2.00	2.25
K	TMW+w	MT20	2.0	4.0		
L	TTVW-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-l	MT20	5.0	6.0	2.00	4.50
R	BBWW-l	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



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

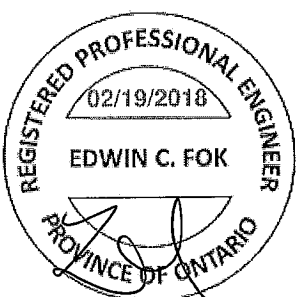
PLATE PLACEMENT TOL. = 0.250 inches

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



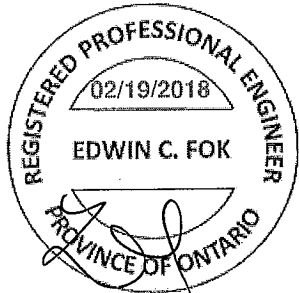
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292636	H2TB	1	1	TRUSS DESC.	

PLATES (table is in inches)

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

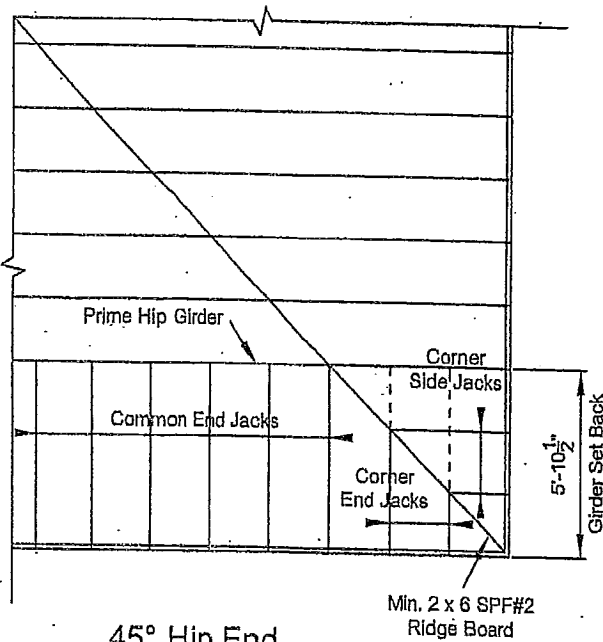
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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)

STRACON ENGINEERING INC.



45° Hip End

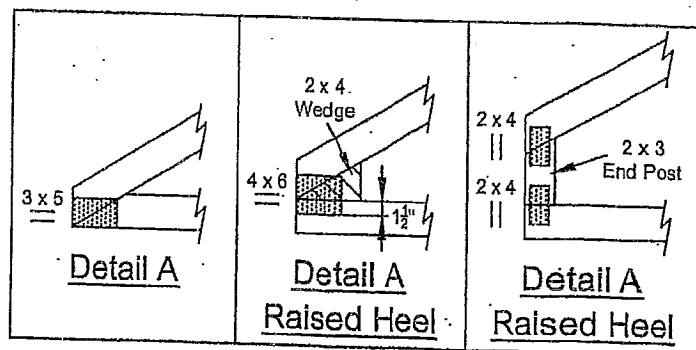
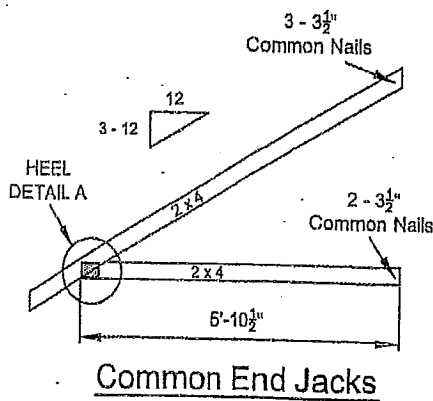
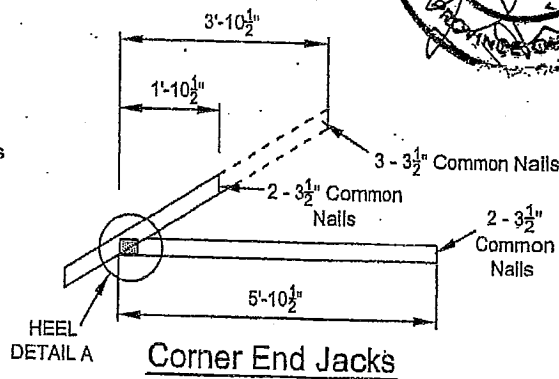
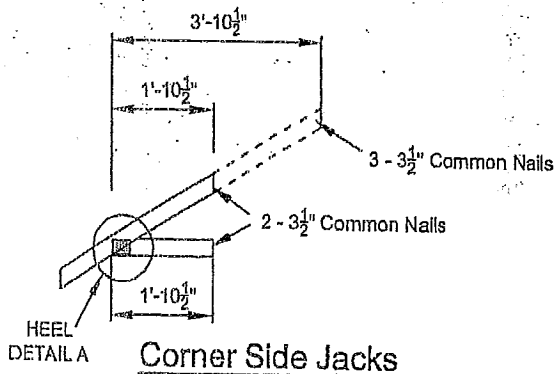
LUMBER SPECIFICATION

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

DESIGN LOAD

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

TOTAL LOAD : 50.5 P.S.F



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

CS-51008

HHUS – Double Shear Joist Hangers



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

Material: 14 gauge

Finish: G90 galvanized

Design:

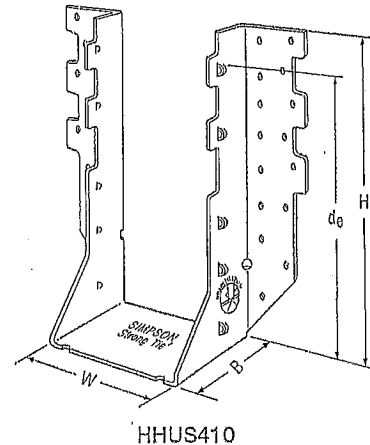
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

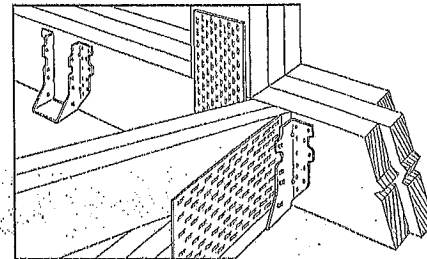
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

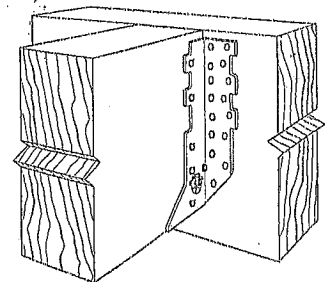
- See current catalogue for options



HHUS410



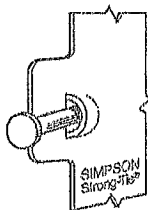
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

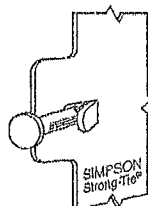
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HHUS26-2	14	3 1/8	5 1/8	3	3 1/8	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 3/8	7 1/2	3	6 3/8	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 3/8	9 3/2	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 1/8	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 1/2	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 1/8	7 29/32	(30) 16d	(10) 16d	4745	10770	4310	7650

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

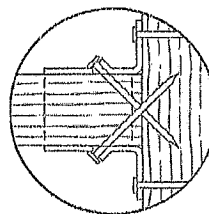


Double Double Shear Nailing prevents tabs breaking off (available on some models).

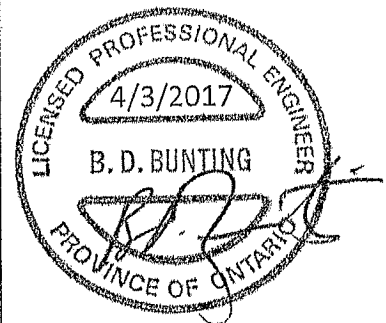
U.S. Patent 5,603,580



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 sct.simpsonstrongtie.com.

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T-SPECHHUS17 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:

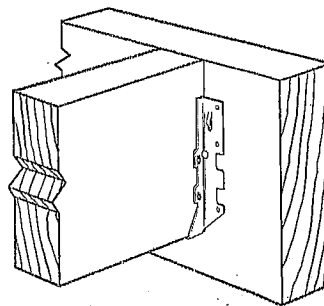
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

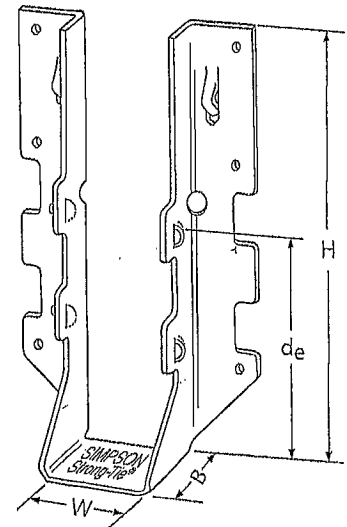
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



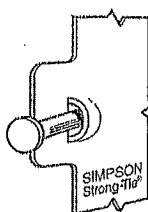
Typical LUS Installation



LUS28

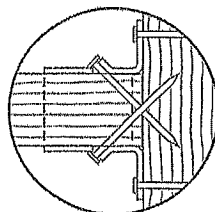
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _o ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1¾	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	690	1435
LUS26	18	1½	4¾	1¾	3¾	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 11/16	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4¾	8 11/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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

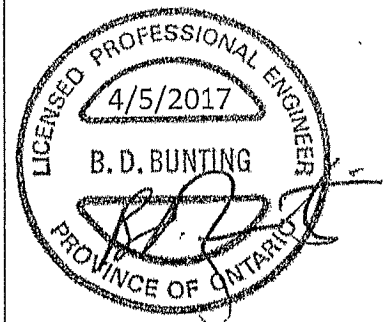


Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

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

(800) 999-5099
strongtie.com

TC – Truss Connectors



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

Material: 16 gauge

Finish: G90 galvanized

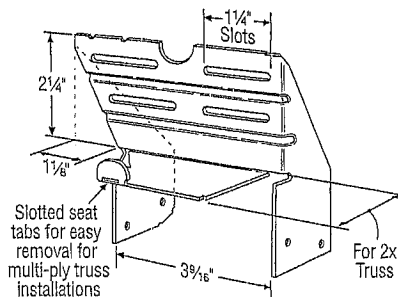
Design: Factored resistances are in accordance with CSA 086-14

Installation:

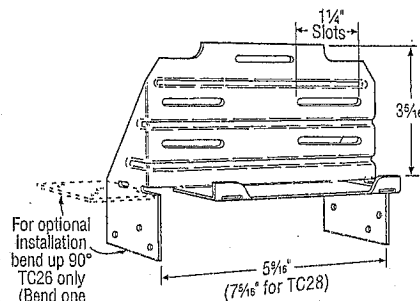
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow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

Optional TC Installation:

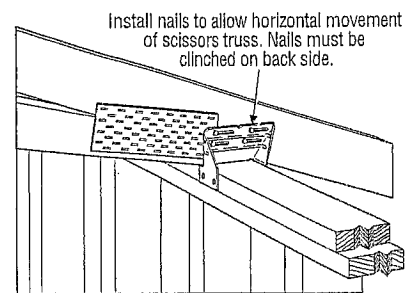
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



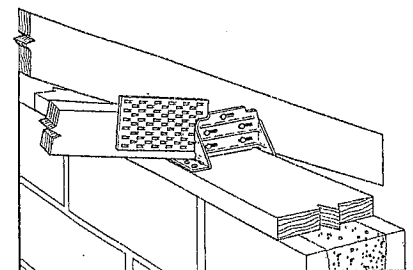
TC24
U.S. Patent 4,932,173



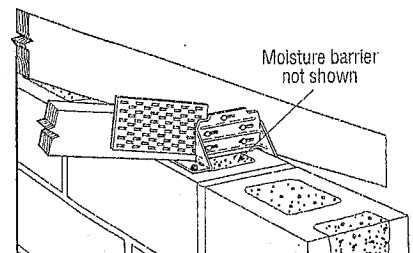
TC26
(TC28 Similar)



Typical TC24 Installation



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



Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K 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) – ⅝" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT
STATES
DESIGN

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

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T-SPECTC17 3/17 exp. 8/19

(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers

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

Material: See table

Finish: G90 galvanized

Design:

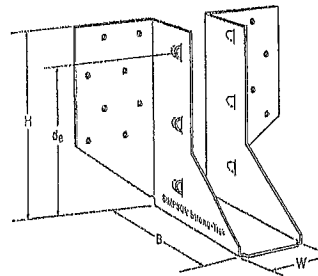
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

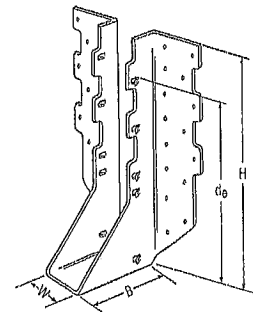
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

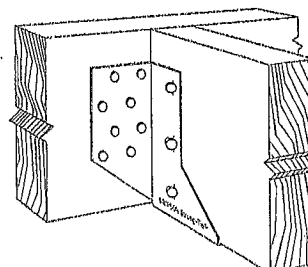
- See current catalogue for options



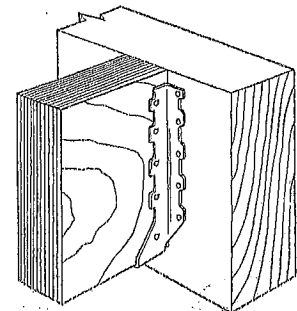
LJS26DS



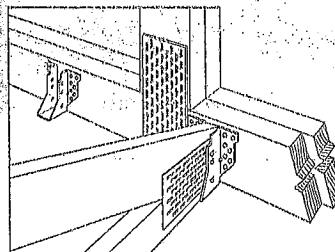
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



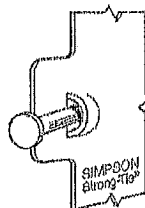
Typical HUS
Installation



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

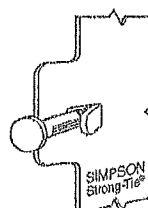
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
								lb.	lb.	lb.	lb.
LJS26DS	18	1⅞	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅞	5⅝	3	3⅞	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅞	7⅞	3	6⅞	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅞	9⅞	3	7⅞	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅞	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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

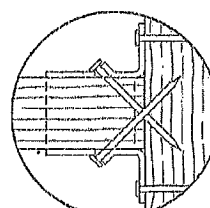


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

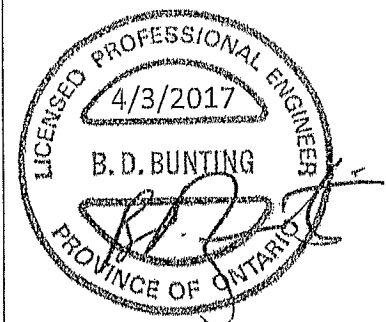
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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