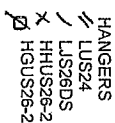


ALPHA-BARFIE

CONFIRM TRUSS LAYOUT
P.L.95914

CONVENTIONAL
FRAMING BY
OTHERS



Job Track:	45147
Layout ID:	292613
Plan Log:	95914

Builder / Location: **GOLD PARK HOMES / VAUGHAN**

ENGINEERED FROM
A- 18023630 TO
A- 18023651

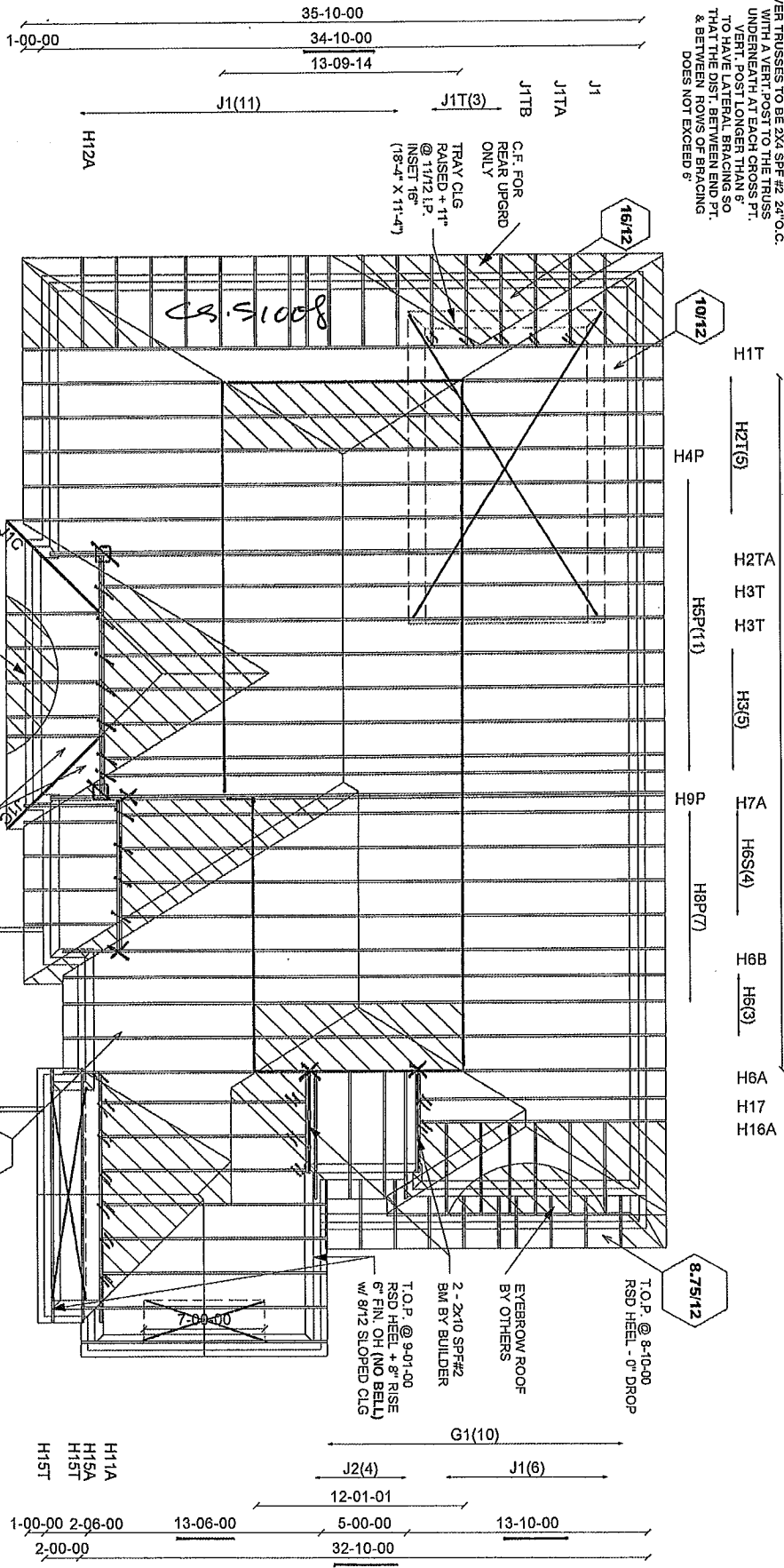
BROOKV ALLEY

Model / Elevation:
4204 REV1

SID OF OF 1 2ND FLOOR (5300) OF
1A REAR WEG.

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 RETRACED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

ALL CONV. FRAMING TO CONFORM WITH PART 3 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET OVER TRUSSES DO NOT EXCEED O.C. UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6' TO HAVE LATERAL BRACING SO & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



15' B/C EXT.
BELL CURVE BY OTHERS
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - EM
ASPHALT SHINGLES
2" x 6" BRG/BRICK
PIGGYBACK TRS
PURLINS BY OTHERS
CONFORM TRUSS LAYOUT
P.L.95914

A-18023633 - A-18023658

CONVENTIONAL
FRAMING BY
OTHERS



Job Track: 45147
Layout ID: 292614
Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/18/2018 Designer: AMANDA

Model / Elevation:
4204 REV1 / A OPT TRAY
OR REAR WG.
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

ALPA-BARRIE

ALPA-BR-RE

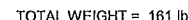


02 REAR VPG.

/A OPT TRAY 5 BED

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...

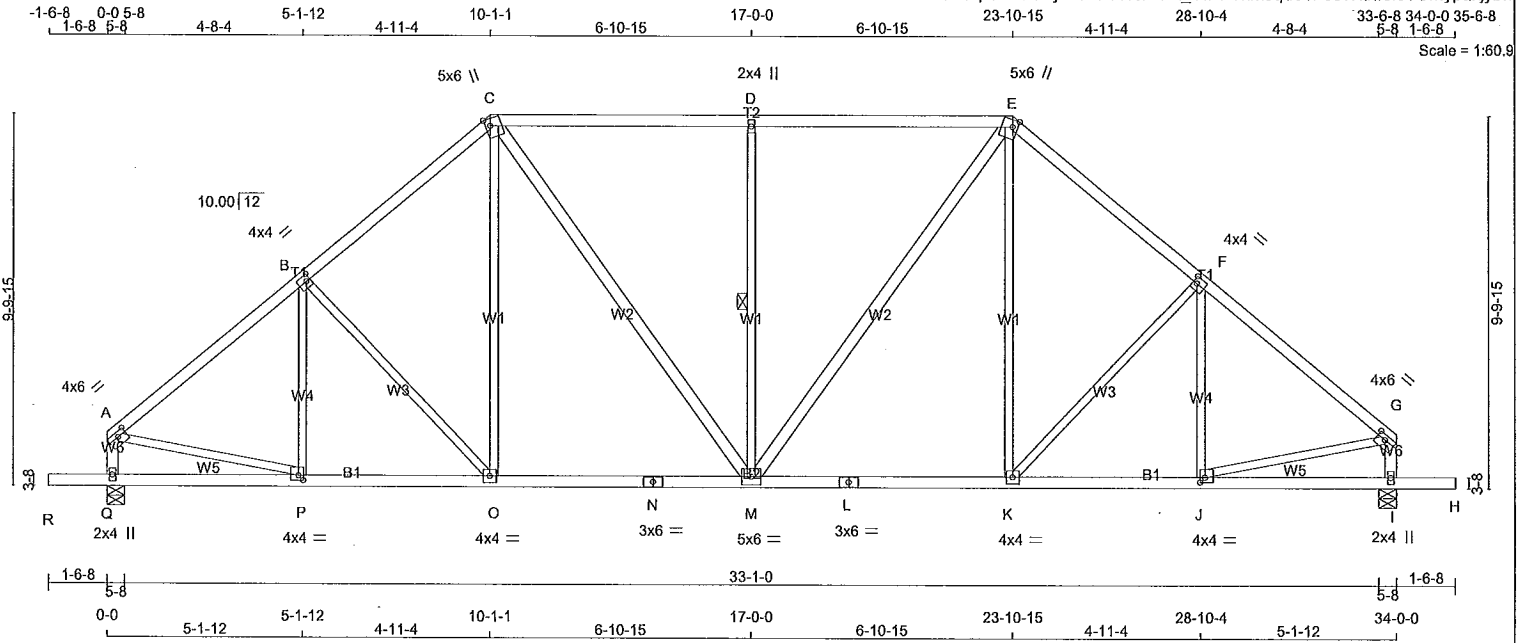
Scale = 1:60.0



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H2	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 09:39:46 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-rTf3kzBz_YfPFTkmJqd31F0s?Zlnf6io?CMypuzjybb



TOTAL WEIGHT = 5 X 167 = 835 lb

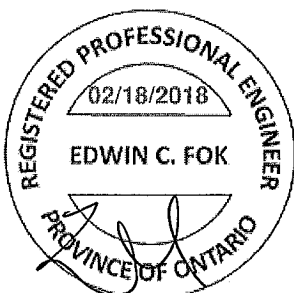
LUMBER				LUMBER		DESCR.	
N. L. G. A. RULES				CHORDS		SIZE	
A - C	2x4	DRY	No.2	SPF			
C - E	2x4	DRY	No.2	SPF			
E - G	2x4	DRY	No.2	SPF			
Q - A	2x4	DRY	No.2	SPF			
I - G	2x4	DRY	No.2	SPF			
R - N	2x4	DRY	No.2	SPF			
N - L	2x4	DRY	No.2	SPF			
L - H	2x4	DRY	No.2	SPF			
ALL WEBS	2x3	DRY	No.2	SPF			
EXCEPT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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	2.75
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMVW-t	MT20	4.0	4.0	2.00	1.25
G	TMVW-t	MT20	4.0	6.0	1.50	2.75
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-t	MT20	4.0	4.0	1.50	1.50
K	BMVW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	4.0	4.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
Q	1841	0	1841	0	0	5-8	2-12		
I	1841	0	1841	0	0	5-8	2-12		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
Q	1317	778 / 0	0 / 0	0 / 0	0 / 0	538 / 0	0 / 0		
I	1317	778 / 0	0 / 0	0 / 0	0 / 0	538 / 0	0 / 0		

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.66 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-M.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.
FR-TO		FROM TO	CSI (LC)	FR-TO			
A-B	-1835 / 0	-78.0 -78.0	0.32 (1)	P-B	-206 / 0	0.10 (1)	
B-C	-1702 / 0	-78.0 -78.0	0.30 (1)	B-O	-220 / 0	0.24 (1)	
C-D	-1595 / 0	-85.5 -85.5	0.58 (1)	O-C	0 / 272	0.06 (1)	
D-E	-1595 / 0	-85.5 -85.5	0.58 (1)	C-M	0 / 530	0.09 (1)	
E-F	-1702 / 0	-78.0 -78.0	0.30 (1)	M-D	-725 / 0	0.47 (1)	
F-G	-1835 / 0	-78.0 -78.0	0.32 (1)	M-E	0 / 530	0.09 (1)	
Q-A	-1650 / 0	0.0 0.0	0.17 (1)	K-E	0 / 272	0.06 (1)	
I-G	-1650 / 0	0.0 0.0	0.17 (1)	K-F	-220 / 0	0.24 (1)	
				J-F	-206 / 0	0.10 (1)	
R-Q	0 / 0	-96.5 -96.5	0.16 (1)	A-P	0 / 1464	0.33 (1)	
Q-P	0 / 0	-18.5 -18.5	0.10 (4)	J-G	0 / 1464	0.33 (1)	
P-O	0 / 1432	-18.5 -18.5	0.30 (1)				
O-N	0 / 1284	-18.5 -18.5	0.32 (4)				
N-M	0 / 1284	-18.5 -18.5	0.32 (4)				
M-L	0 / 1284	-18.5 -18.5	0.32 (4)				
L-K	0 / 1284	-18.5 -18.5	0.32 (4)				
K-J	0 / 1432	-18.5 -18.5	0.30 (1)				
J-I	0 / 0	-18.5 -18.5	0.10 (4)				
I-H	0 / 0	-96.5 -96.5	0.16 (1)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.13")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL)= L/999 (0.14")

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=0.58/1.00 (C-D:1), BC=0.32/1.00 (M-O:4), WB=0.47/1.00 (D-M:1), SS=0.29/1.00 (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= 0.88 (P) (INPUT = 0.90)
JSI METAL= 0.54 (J) (INPUT = 1.00)

A-18023631

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H2A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 09:58:58 2018 Page 2
ID:MF8ilriaTok7DlbpT4B71Xys4PG-75GaVu7ahVoxTVoAoml-IDIAkm6yy8a1VWMvQQwF6zjyJB

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	1.75	3.25
B	TMWW-t	MT20	5.0	6.0	2.75	1.75
C	TMWW-t	MT20	4.0	6.0	2.00	1.75
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMWW-t	MT20	4.0	6.0	2.00	1.75
H	TMWW-t	MT20	5.0	6.0	2.75	1.75
I	TMVW-t	MT20	5.0	8.0	1.75	3.25
J	BMV1-t	MT20	6.0	9.0	Edge	0.50
K	BMWW-t	MT20	6.0	12.0	Edge	2.00
L	BMWW-t	MT20	4.0	9.0	4.50	1.75
M	BMWW-t	MT20	4.0	6.0		
N	BS-t	MT20	4.0	6.0		
O	BMWWW-t	MT20	5.0	6.0		
P	BS-t	MT20	4.0	6.0		
Q	BMWW-t	MT20	4.0	6.0		
R	BMWW-t	MT20	4.0	9.0	4.50	1.75
S	BMWW-t	MT20	6.0	12.0	Edge	2.00
T	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) 6001.3 lbs FACTORED DOWN AT 30-11-14 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
K	30-11-14	-6001	-6001	---	FRONT	VERT	TOTAL

CSI: TC=0.46/1.00 (D-E:1), BC=0.71/1.00 (K-L:1), WB=0.88/1.00 (G-M:1), SSI=0.44/1.00 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

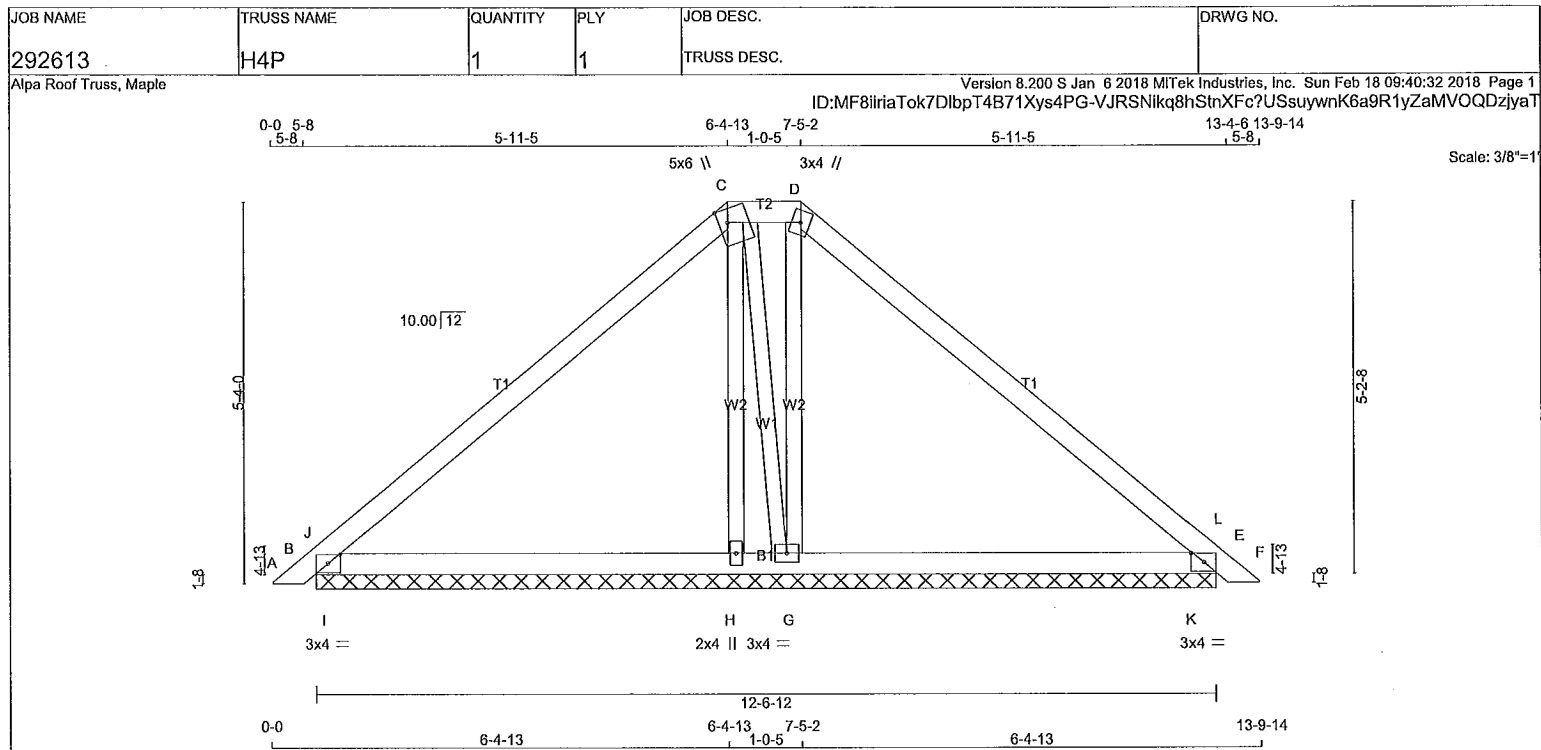
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (S) (INPUT = 0.90)
JSI METAL= 0.85 (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-18023632(2)



TOTAL WEIGHT = 46 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - 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
B	TMB1-I	MT20	3.0	4.0	1.50 2.00
C	TTWW+m	MT20	5.0	6.0	2.25 1.50
D	TTWW+m	MT20	3.0	4.0	
E	TMB1-I	MT20	3.0	4.0	1.50 2.00
G	BMW1-I	MT20	3.0	4.0	
H	BMW1+u	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
B	453	0	0	453	0	0	12-6-12	9-0	
E	448	0	0	448	0	0	12-6-12	9-0	
H	158	0	0	158	0	0	12-6-12	9-0	
G	233	0	0	233	0	0	12-6-12	9-0	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
B	321	210 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0	
E	317	207 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0	
H	116	53 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0	
G	167	101 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 12	-78.0	-78.0 0.02 (1)	10.00	H-C	-41 / 0	0.02 (1)
B-J	-61 / 137	-78.0	-78.0 0.21 (1)	6.25	C-G	-36 / 0	0.01 (1)
J-C	-257 / 0	-78.0	-78.0 0.33 (1)	6.25	G-D	-81 / 0	0.03 (1)
C-D	-178 / 0	-78.0	-78.0 0.01 (1)	6.25	I-J	-758 / 0	0.00 (1)
D-L	-250 / 0	-78.0	-78.0 0.33 (1)	6.25	K-L	-759 / 0	0.00 (1)
L-E	-60 / 145	-78.0	-78.0 0.21 (1)	6.25			
E-F	0 / 12	-78.0	-78.0 0.02 (1)	10.00			
B-I	0 / 185	-18.5	-18.5 0.28 (1)	10.00			
I-H	0 / 185	-18.5	-18.5 0.28 (1)	10.00			
H-G	0 / 184	-18.5	-18.5 0.22 (1)	10.00			
G-K	0 / 179	-18.5	-18.5 0.28 (1)	10.00			
K-E	0 / 179	-18.5	-18.5 0.28 (1)	10.00			

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.33/1.00 (C-J:1), BC=0.28/1.00 (B-I:1), WB=0.03/1.00 (D-G:1), SSI=0.59/1.00 (E-K: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.

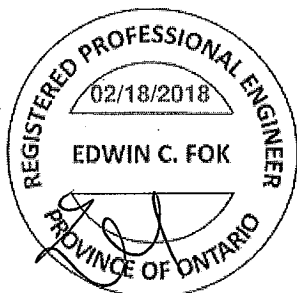
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

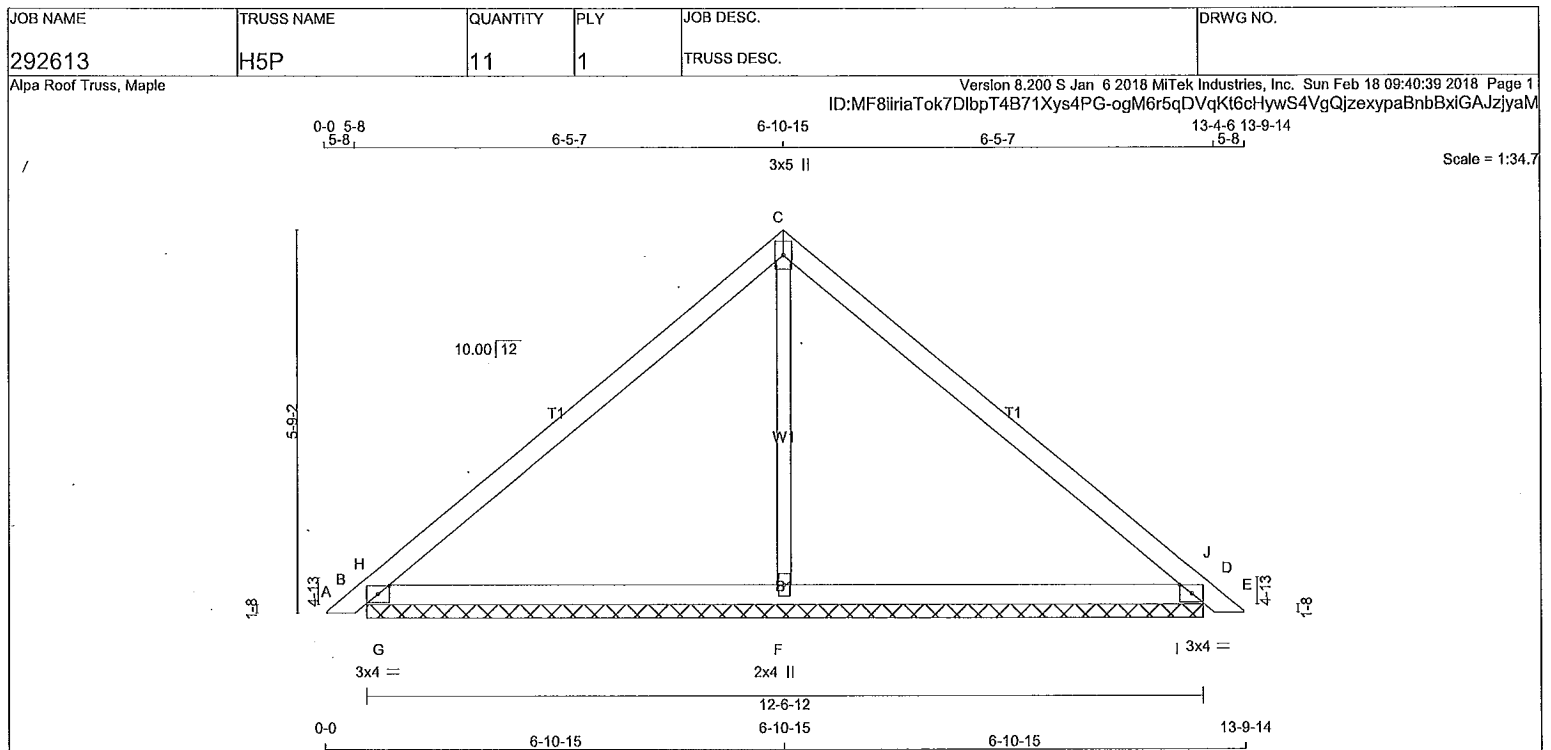
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.39 (B) (INPUT = 0.90)
JSI METAL= 0.11 (B) (INPUT = 1.00)

A-18023634





TOTAL WEIGHT = 11 X 39 = 427 lb

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	SPF	SPF
A - C	2x4	DRY	No.2				
C - E	2x4	DRY	No.2				
B - D	2x4	DRY	No.2				
ALL WEBS	2x3	DRY	No.2				
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	2.00
C	TTW+p	MT20	3.0	5.0		
D	TMB1-I	MT20	3.0	4.0	1.50	2.00
F	BMW1+w	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	491	0	491	0	0	12-6-12	1-5-11		
D	491	0	491	0	0	12-6-12	1-5-11		
F	312	0	312	0	0	12-6-12	1-5-11		

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	346	231 / 0	0 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0	0 / 0
D	346	231 / 0	0 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0	0 / 0
F	228	109 / 0	0 / 0	0 / 0	0 / 0	0 / 0	119 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 12	-78.0 -78.0	0.02 (1)	10.00	F-C	-57 / 9	0.03 (1)
B-H	-40 / 219	-78.0 -78.0	0.28 (1)	6.25	G-H	-942 / 0	0.00 (1)
H-C	-296 / 0	-78.0 -78.0	0.39 (1)	6.25	I-J	-941 / 0	0.00 (1)
C-J	-296 / 0	-78.0 -78.0	0.39 (1)	6.25			
J-D	-40 / 219	-78.0 -78.0	0.28 (1)	6.25			
D-E	0 / 12	-78.0 -78.0	0.02 (1)	10.00			
B-G	0 / 213	-18.5 -18.5	0.34 (1)	10.00			
G-F	0 / 213	-18.5 -18.5	0.34 (1)	10.00			
F-I	0 / 213	-18.5 -18.5	0.34 (1)	10.00			
I-D	0 / 213	-18.5 -18.5	0.34 (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

CSI: TC=0.39/1.00 (C-H:1), BC=0.34/1.00 (B-G:1), WB=0.03/1.00 (C-F:1), SSI=0.73/1.00 (B-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.

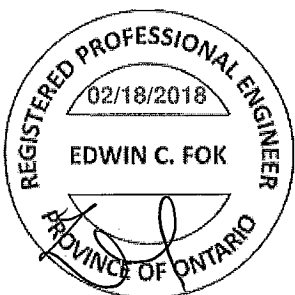
NAIL VALUES		GRIP(DRY) SHEAR		SECTION	
PLATE	(PSI)	(PLI)	(PLI)	MAX	MIN
MT20	618	354	1667	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

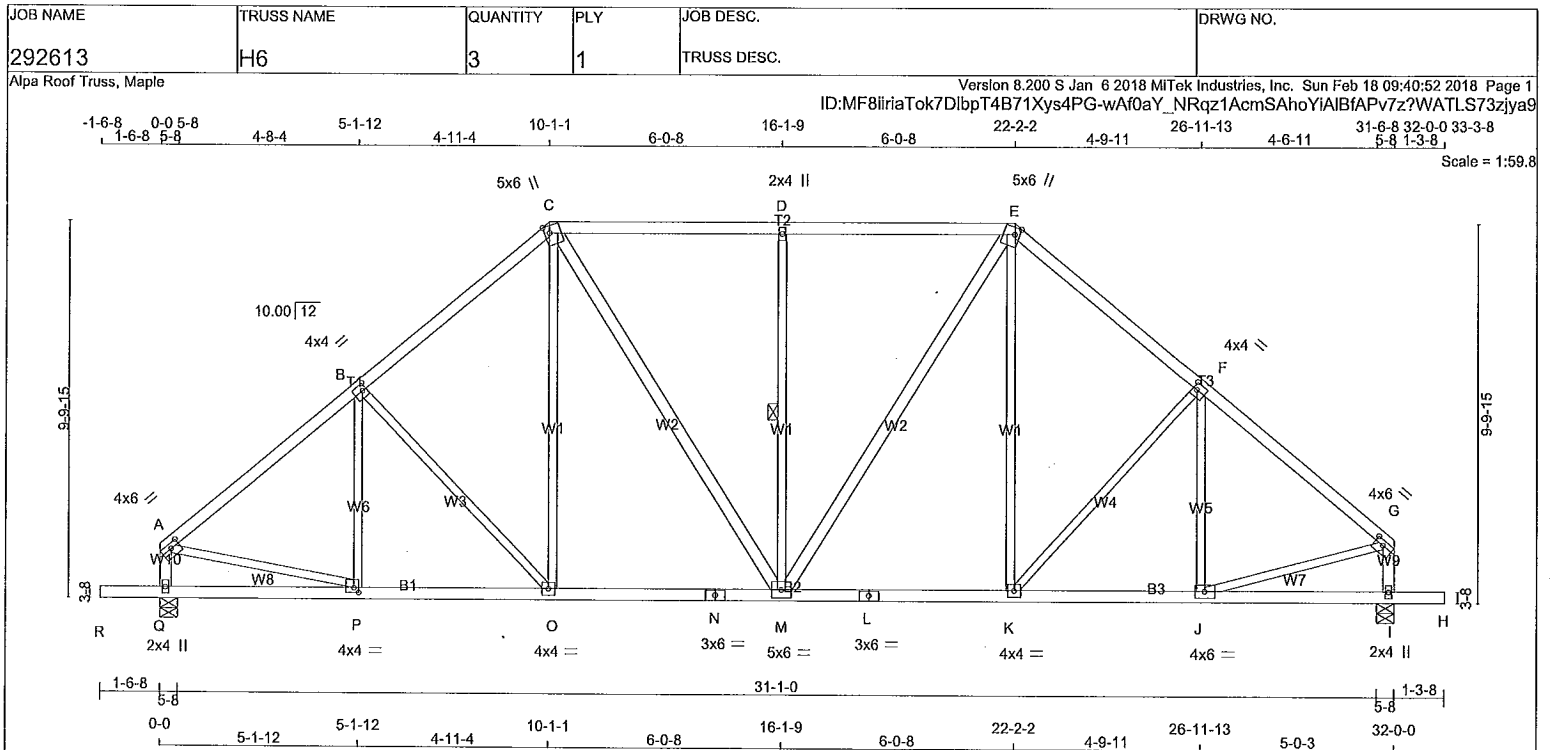
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.43 (B) (INPUT = 0.90)
JSI METAL= 0.12 (D) (INPUT = 1.00)

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



A-18023635



TOTAL WEIGHT = 3 X 161 = 484 lb [M/F]

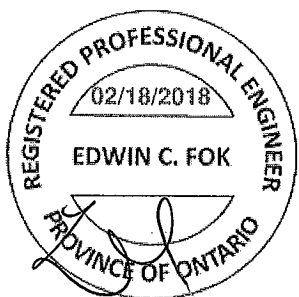
LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
Q - A	2x4	DRY	No.2
I - G	2x4	DRY	No.2
R - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
L - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
C - M	2x4	DRY	No.2
M - E	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWW-I	MT20	4.0	6.0	1.50	2.75
B	TMWW-I	MT20	4.0	4.0	2.00	1.25
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMWW+m	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMWW-I	MT20	4.0	4.0	2.00	1.25
G	TMWW-I	MT20	4.0	6.0	1.50	2.75
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-I	MT20	4.0	6.0		
K	BMWW-I	MT20	4.0	4.0		
L	BS-I	MT20	3.0	6.0		
M	BMWW-I	MT20	5.0	6.0		
N	BS-I	MT20	3.0	6.0		
O	BMWW-I	MT20	4.0	4.0		
P	BMWW-I	MT20	4.0	4.0	1.50	1.50
Q	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
Q	1737	0	1737	0	5-8
I	1714	0	1714	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1242	736 / 0	0 / 0	0 / 0	0 / 0	506 / 0	0 / 0
I	1226	726 / 0	0 / 0	0 / 0	0 / 0	500 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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 D-M.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	
FR-TO		FROM TO		FR-TO			
A-B	-1707 / 0	-78.0 -78.0	0.31 (1)	4.80	P-B	-182 / 0	0.09 (1)
B-C	-1558 / 0	-78.0 -78.0	0.29 (1)	4.99	B-O	-239 / 0	0.25 (1)
C-D	-1402 / 0	-85.5 -85.5	0.43 (1)	2.00	O-C	0 / 276	0.06 (1)
D-E	-1402 / 0	-85.5 -85.5	0.43 (1)	2.00	C-M	0 / 426	0.07 (1)
E-F	-1536 / 0	-78.0 -78.0	0.28 (1)	5.04	M-D	-632 / 0	0.41 (1)
F-G	-1636 / 0	-78.0 -78.0	0.29 (1)	4.91	M-E	0 / 457	0.07 (1)
Q-A	-1548 / 0	0.0 0.0	0.16 (1)	6.62	K-E	0 / 240	0.05 (1)
I-G	-1550 / 0	0.0 0.0	0.16 (1)	6.61	K-F	-187 / 0	0.20 (1)
					J-F	-236 / 0	0.12 (1)
R-Q	0 / 0	-96.5 -96.5	0.16 (1)	10.00	A-P	0 / 1363	0.31 (1)
Q-P	0 / 0	-18.5 -18.5	0.10 (4)	10.00	J-G	0 / 1322	0.30 (1)
P-O	0 / 1334	-18.5 -18.5	0.27 (1)	10.00			
O-N	0 / 1173	-18.5 -18.5	0.26 (1)	10.00			
N-M	0 / 1173	-18.5 -18.5	0.26 (1)	10.00			
M-L	0 / 1157	-18.5 -18.5	0.26 (1)	10.00			
L-K	0 / 1157	-18.5 -18.5	0.26 (1)	10.00			
K-J	0 / 1279	-18.5 -18.5	0.26 (1)	10.00			
J-I	0 / 0	-18.5 -18.5	0.10 (4)	10.00			
I-H	0 / 0	-96.5 -96.5	0.11 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND 6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.07")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

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

CSI: TC=0.43/1.00 (C-D:1), BC=0.27/1.00 (O-P:1), WB=0.41/1.00 (D-M:1), SSI=0.25/1.00 (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) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

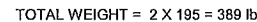
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
JSI METAL= 0.50 (P) (INPUT = 1.00)

A-18023636

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 09:52:50 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xvs4PG-ul1SG2aIlRR9JvfSEThwpaUsYcNKLhOCHAHSKRzlvOx



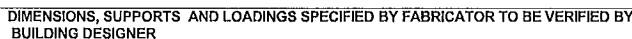
DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT
SEPARATELY THEN FASTENED TOGETHER AS
FOLLOWS:

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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



BEARINGS

UNFACTORED REACTIONS

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.36 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 E-P

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)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	-2834 / 0	-78.0	-78.0	0.07 (1)	5.40	T-B	-1055 / 0	0.07 (1)	
B-C	-3544 / 0	-78.0	-78.0	0.16 (1)	4.86	B-S	0 / 645	0.08 (1)	
C-D	-3673 / 0	-78.0	-78.0	0.16 (1)	4.79	S-C	-535 / 0	0.17 (1)	
D-W	-3491 / 0	-78.0	-78.0	0.55 (1)	4.36	C-R	0 / 122	0.02 (1)	
W-E	-3491 / 0	-154.5	-154.5	0.55 (1)	4.36	R-D	0 / 931	0.12 (1)	
E-X	-3491 / 0	-154.5	-154.5	0.55 (1)	4.36	D-P	0 / 1264	0.11 (1)	
X-F	-3491 / 0	-78.0	-78.0	0.55 (1)	4.36	P-E	-1027 / 0	0.50 (1)	
F-G	-3632 / 0	-78.0	-78.0	0.15 (1)	4.82	F-F	0 / 1324	0.12 (1)	
G-H	-3664 / 0	-78.0	-78.0	0.15 (1)	4.80	N-F	0 / 836	0.10 (1)	
H-I	-3556 / 0	-78.0	-78.0	0.08 (1)	4.93	N-G	-103 / 0	0.05 (1)	
U-A	-2970 / 0	0.0	0.0	0.11 (1)	7.81	M-G	-236 / 0	0.08 (1)	
K-I	-4012 / 0	0.0	0.0	0.15 (1)	7.10	M-H	0 / 100	0.01 (1)	
						L-H	-362 / 0	0.03 (4)	
V-U	0 / 0	-96.5	-96.5	0.04 (1)	10.00	A-T	0 / 2451	0.22 (1)	
U-T	0 / 0	-18.5	-18.5	0.04 (1)	10.00	L-I	0 / 3213	0.28 (1)	
T-S	0 / 2192	-18.5	-18.5	0.21 (1)	10.00				
S-R	0 / 2730	-18.5	-18.5	0.43 (1)	10.00				
R-Y	0 / 2809	-18.5	-18.5	0.63 (1)	10.00				
Y-Q	0 / 2809	-37.3	-37.3	0.63 (1)	10.00				
Q-P	0 / 2809	-37.3	-37.3	0.63 (1)	10.00				
P-O	0 / 2777	-37.3	-37.3	0.50 (1)	10.00				
O-Z	0 / 2777	-37.3	-37.3	0.50 (1)	10.00				
Z-N	0 / 2777	-18.5	-18.5	0.50 (1)	10.00				
N-M	0 / 2824	-18.5	-18.5	0.33 (1)	10.00				
M-L	0 / 2744	-18.5	-18.5	0.26 (1)	10.00				
L-AA	0 / 0	-18.5	-18.5	0.41 (1)	10.00				
AA-K	0 / 0	-18.5	-18.5	0.41 (1)	10.00				
K-J	0 / 0	-96.5	-96.5	0.03 (1)	10.00				

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

*** NON STANDARD GIRDER ***
ADD'T'L USER-DEFINED LOADS APPLIED TO
ALL LOAD CASES.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.07")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= $L/120$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL)= $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CSI: TC=0.55/1.00 (E-F:1), BC=0.63/1.00 (P-R:1),
WB=0.50/1.00 (E-P:1), SS=0.43/1.00 (K-L: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.

A-18023637 CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H6A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITok Industries, Inc. Sun Feb 18 09:52:50 2018 Page 2
ID:MF8ilriaTok7DlbpT4B71Xys4PG-ul1SG2qLRR9JyfSEThwpaUsYcNKLhOCHAHSKRZjyOx

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVV+p	MT20	5.0	6.0	2.00	2.25
B	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	5.0	6.0	2.00	2.00
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.00	2.00
G	TMWW-t	MT20	4.0	4.0	2.00	1.25
H	TMWW-t	MT20	4.0	6.0	2.00	2.75
I	TMVV+p	MT20	5.0	6.0	2.00	2.25
K	BMV1+p	MT20	3.0	4.0		
L	BMWW-t	MT20	4.0	6.0	2.00	2.75
M, N, R, S						
M	BMWW-t	MT20	4.0	4.0		
O	BS-t	MT20	4.0	6.0		
P	BMWW-t	MT20	5.0	6.0		
Q	BS-t	MT20	4.0	6.0		
T	BMWW-t	MT20	4.0	6.0		
U	BMV1+p	MT20	2.0	4.0		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
Y	12-8-8	-1283	-1283	---	FRONT	VERT	TOTAL
Z	20-0-6	-861	-861	---	FRONT	VERT	TOTAL
AA	31-1-12	-2433	-2433	---	FRONT	VERT	TOTAL

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

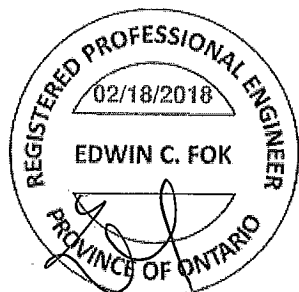
JSI GRIP= 0.86 (L) (INPUT = 0.90)

JSI METAL= 0.47 (Q) (INPUT = 1.00)

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1282.6 lbs FACTORED DOWN AT 12-8-8, AND 860.8 lbs FACTORED DOWN AT 20-0-6, AND 2432.8 lbs FACTORED DOWN AT 31-1-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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



A-18023637(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H6B	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 09:50:24 2018 Page 2
ID:MF8ilriaTok7DlbpT4B71Xys4PG-ACDgd7vAka1toWV0hp3hunRz4ldA8egllSvCvzjyRD

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	2.00	2.25
B	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TTWW+m	MT20	4.0	6.0	Edge	1.00
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	6.0	2.25	1.50
G	TMWW-t	MT20	4.0	4.0	2.00	1.25
H	TMWW-t	MT20	4.0	6.0	2.00	2.75
I	TMVW+p	MT20	5.0	6.0	2.00	2.25
K	BMV1+p	MT20	3.0	4.0		
L	BMWW-t	MT20	5.0	8.0	4.25	2.50
M, N, R, S, T						
M	BMWW-t	MT20	4.0	4.0		
O	BS-t	MT20	4.0	6.0		
P	BMWWW-t	MT20	5.0	6.0		
Q	BS-t	MT20	4.0	6.0		
U	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) 3672.2 lbs FACTORED DOWN AT 29-11-14 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NAIL VALUES

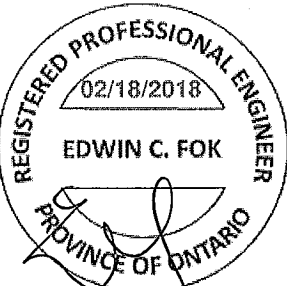
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

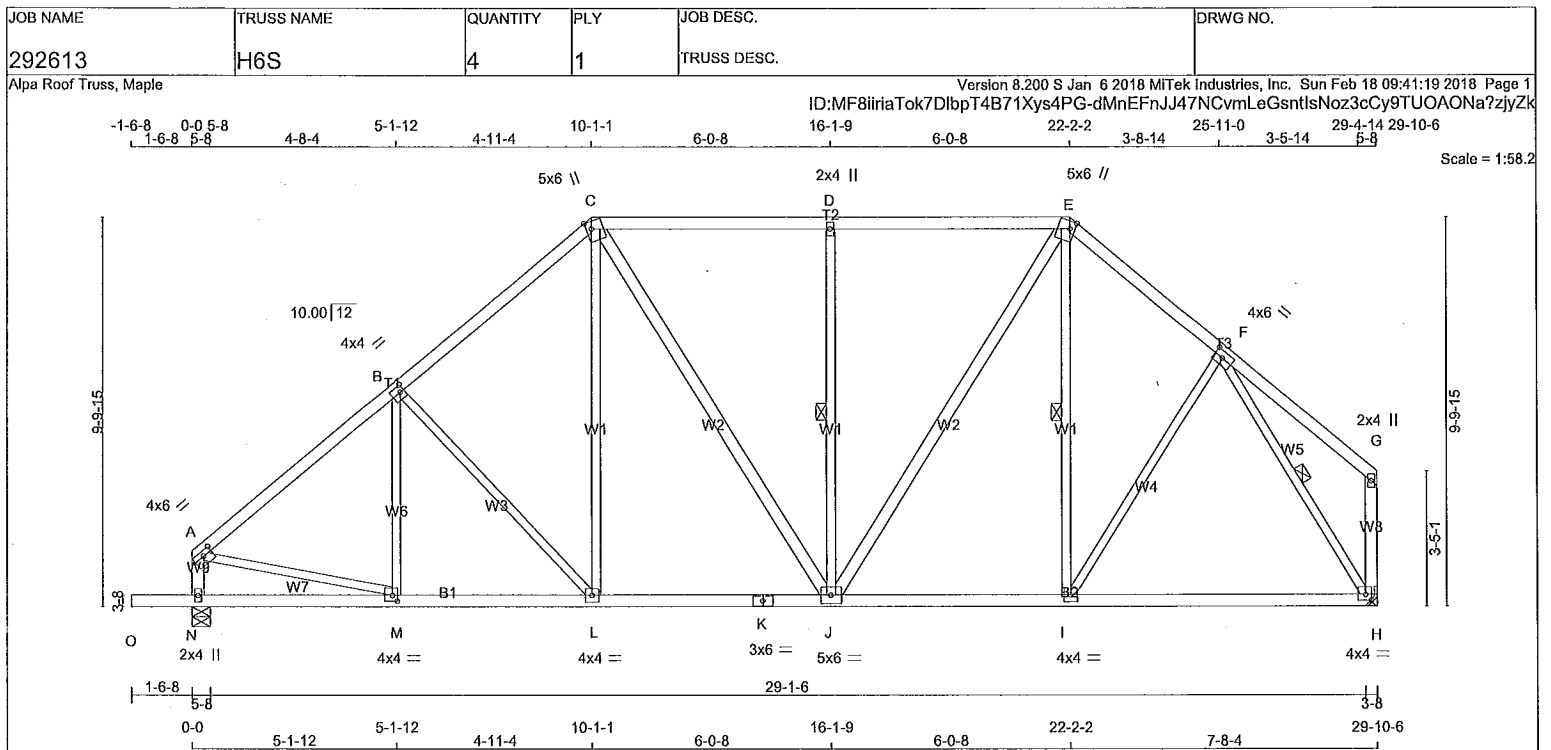
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (K) (INPUT = 0.90)
JSI METAL= 0.60 (L) (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-180236386



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	2.75
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TTWW+m	MT20	5.0	6.0	2.25	1.50
D	TMVW-t	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMVW-t	MT20	4.0	6.0	2.00	2.75
G	TMVW-t	MT20	2.0	4.0		
H	BMVW-t	MT20	4.0	4.0	1.75	1.75
I	BMVW-t	MT20	4.0	4.0		
J	BMVW-t	MT20	5.0	6.0		
K	BS-t	MT20	3.0	6.0		
L	BMVW-t	MT20	4.0	4.0		
M	BMVW-t	MT20	4.0	4.0	1.75	1.50
N	BMVW-t	MT20	2.0	4.0		

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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
N	1631	0	1631	0	5-8	2-7	
H	1489	0	1489	0			

HANGER BY OTHERS
MIN. SEAT SIZE: 1-10

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1166	692 / 0	0 / 0	0 / 0	0 / 0	475 / 0	0 / 0
H	1066	627 / 0	0 / 0	0 / 0	0 / 0	439 / 0	0 / 0

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

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.96 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-J, E-I, F-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				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	-1574 / 0	-78.0 -78.0 0.30 (1)	4.96	M-B	-161 / 7	0.08 (1)	
B-C	-1411 / 0	-78.0 -78.0 0.29 (1)	5.19	B-L	-254 / 0	0.27 (1)	
C-D	-1220 / 0	-85.5 -85.5 0.42 (1)	2.00	L-C	0 / 291	0.07 (1)	
D-E	-1220 / 0	-85.5 -85.5 0.42 (1)	2.00	C-J	0 / 297	0.05 (1)	
E-F	-1218 / 0	-78.0 -78.0 0.16 (1)	5.65	J-D	-633 / 0	0.41 (1)	
F-G	0 / 22	-78.0 -78.0 0.18 (1)	10.00	J-E	0 / 569	0.09 (1)	
N-A	-1441 / 0	0.0 0.0 0.15 (1)	6.81	I-E	-26 / 53	0.02 (4)	
H-G	-117 / 0	0.0 0.0 0.02 (1)	7.81	I-F	0 / 208	0.05 (4)	
				A-M	0 / 1259	0.28 (1)	
				F-H	-1541 / 0	0.55 (1)	
O-N	0 / 0	-96.5 -96.5 0.16 (1)	10.00				
N-M	0 / 0	-18.5 -18.5 0.10 (4)	10.00				
M-L	0 / 1232	-18.5 -18.5 0.26 (1)	10.00				
L-K	0 / 1061	-18.5 -18.5 0.24 (1)	10.00				
K-J	0 / 1061	-18.5 -18.5 0.24 (1)	10.00				
J-I	0 / 915	-18.5 -18.5 0.34 (4)	10.00				
I-H	0 / 806	-18.5 -18.5 0.32 (4)	10.00				

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.00")
CALCULATED VERT. DEFL.(LL)= L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (1.00")
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=0.42/1.00 (C-D:1), BC=0.34/1.00 (I-J:4), WB=0.55/1.00 (F-H:1), SSI=0.25/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

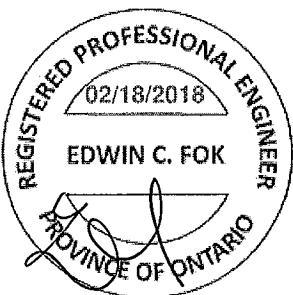
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

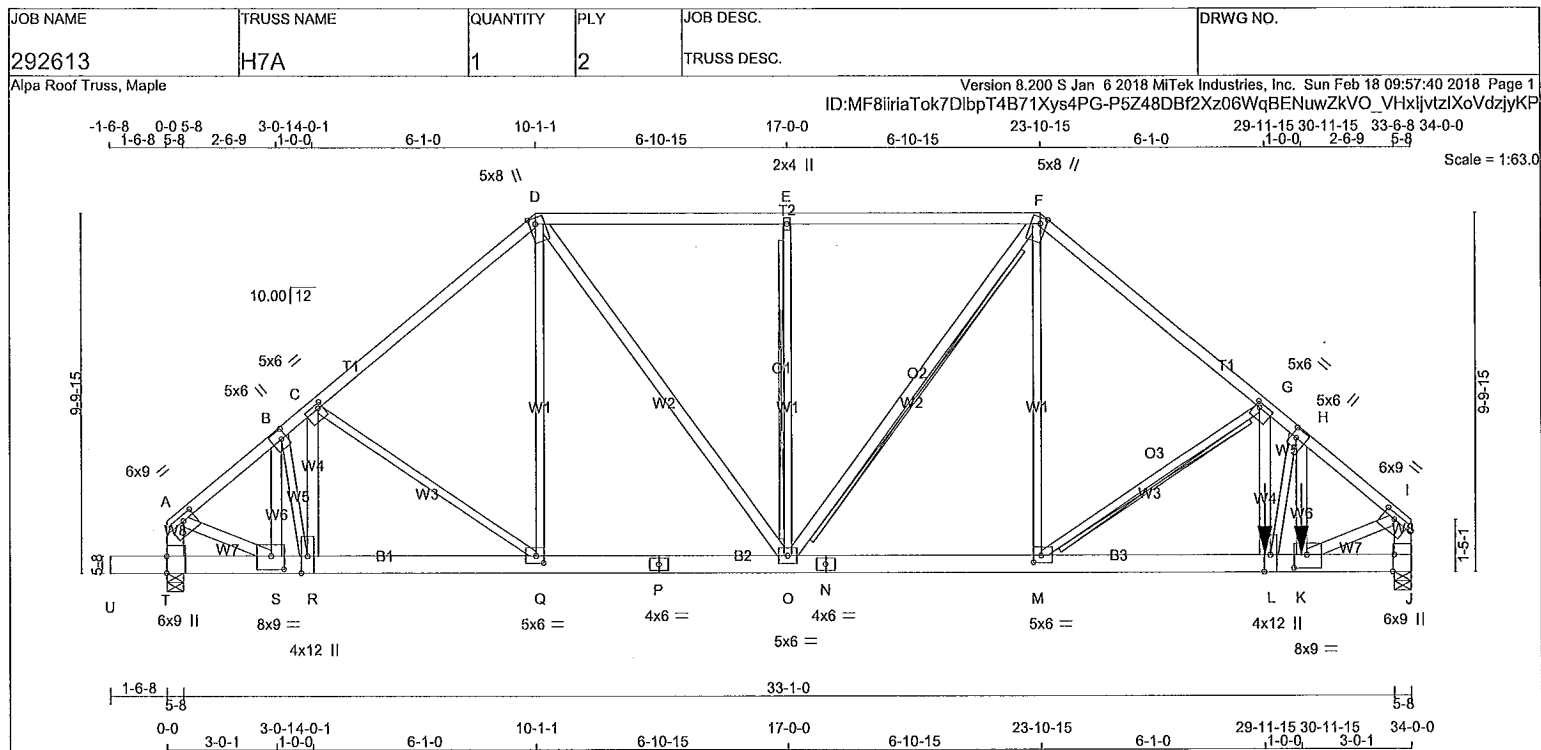
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.46 (M) (INPUT = 1.00)

A-18023639





LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2 SPF
D - F	2x4	DRY	No.2 SPF
F - I	2x4	DRY	No.2 SPF
T - A	2x6	DRY	No.2 SPF
J - I	2x6	DRY	No.2 SPF
U - P	2x6	DRY	No.2 SPF
P - N	2x6	DRY	No.2 SPF
N - J	2x6	DRY	No.2 SPF

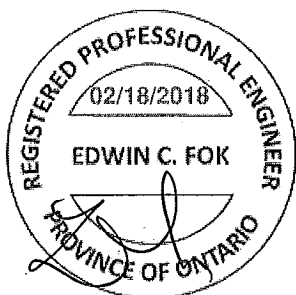
ALL WEBS	SIZE	LUMBER	DESCR.
EXCEPT	2x4	DRY	No.2 SPF
B - R	2x3	DRY	No.2 SPF
C - Q	2x3	DRY	No.2 SPF
Q - D	2x3	DRY	No.2 SPF
M - F	2x3	DRY	No.2 SPF
M - G	2x3	DRY	No.2 SPF
L - H	2x3	DRY	No.2 SPF
O - E	2x3	DRY	No.2 SPF

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD (PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - D	12	TOP
D - F	12	TOP
F - I	12	TOP
T - A	12	TOP
J - I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
U - P	12	TOP
P - N	12	TOP
N - J	12	SIDE(183.1)
WEBS : (0.122"x3") SPIRAL NAILS		
L - H	2	SIDE(740.4)
2x3	6	
G - L	5	SIDE(425.1)
H - K	2	SIDE(664.6)
2x4	6	

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
T	2788	0	2788	0	5-8	1-8	5-8
J	10570	0	10570	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
T	1975	1277 / 0	0 / 0	0 / 0	0 / 0	698 / 0
J	7380	5377 / 0	0 / 0	0 / 0	0 / 0	2004 / 0

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

BRACING

FOR SECTION D-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.42 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.

2x6 DRY SPF No.2 T-BRACE AT G-M, F-O
2x4 DRY SPF No.2 T-BRACE AT E-O

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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-2782 / 0	-78.0 -78.0	0.09 (1)	5.42	S-B	-638 / 0	0.05 (1)
B-C	-2822 / 0	-78.0 -78.0	0.24 (1)	5.16	B-R	0 / 634	0.08 (1)
C-D	-3043 / 0	-78.0 -78.0	0.35 (1)	5.00	R-C	-615 / 0	0.07 (1)
D-E	-3312 / 0	-85.5 -85.5	0.50 (1)	2.00	C-Q	-12 / 0	0.01 (4)
E-F	-3312 / 0	-85.5 -85.5	0.50 (1)	2.00	Q-D	0 / 151	0.03 (4)
F-G	-4812 / 0	-78.0 -78.0	0.54 (1)	4.05	M-F	0 / 3177	0.39 (1)
G-H	-10422 / 0	-78.0 -78.0	0.58 (1)	2.47	M-G	-5265 / 0	0.96 (1)
H-I	-11168 / 0	-78.0 -78.0	0.64 (1)	2.42	L-G	0 / 5990	0.53 (1)
T-A	-2612 / 0	0.0 0.0	0.09 (1)	7.81	L-H	-1252 / 0	0.16 (1)
J-I	-10160 / 0	0.0 0.0	0.37 (1)	4.73	K-H	0 / 1903	0.17 (1)
U-T	0 / 0	-96.5 -96.5	0.04 (1)	10.00	A-S	0 / 2262	0.20 (1)
T-S	0 / 0	-18.5 -18.5	0.01 (4)	10.00	K-I	0 / 9008	0.80 (1)
S-R	0 / 2183	-18.5 -18.5	0.16 (1)	10.00	O-F	-655 / 0	0.14 (1)
R-Q	0 / 2315	-18.5 -18.5	0.18 (1)	10.00	D-O	0 / 1693	0.15 (1)
Q-P	0 / 2312	-18.5 -18.5	0.18 (1)	10.00	O-E	-713 / 0	0.34 (1)
P-O	0 / 2312	-18.5 -18.5	0.18 (1)	10.00			
O-N	0 / 3699	-18.5 -18.5	0.26 (1)	10.00			
N-M	0 / 3699	-18.5 -18.5	0.26 (1)	10.00			
M-L	0 / 7974	-18.5 -18.5	0.57 (1)	10.00			
L-K	0 / 8544	-18.5 -18.5	0.90 (1)	10.00			
K-J	0 / 0	-63.7 -63.7	0.35 (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 PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

GIRDER TYPE: CStdGirder

START DISTANCE = 30-11-14
START SPAN CARRIED = 3-10-8
END DISTANCE = 34-0-0
END SPAN CARRIED = 3-10-8
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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

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=0.84/1.00 (H-I:1), BC=0.90/1.00 (K-L:1), WB=0.96/1.00 (G-M:1), SSI=0.35/1.00 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

A-18023640

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H7A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 09:57:40 2018 Page 2
ID:MF8ilriaTok7DlbpT4B71Xys4PG-P5Z48DBf2Xz06WqBENuwZkVO VHXljvtzIXoVdzjyKP

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	6.0	9.0	1.75	4.00
B	TMVW-t	MT20	5.0	6.0	3.00	1.75
C	TMVW-t	MT20	5.0	6.0	1.50	1.50
D	TTWW+m	MT20	5.0	8.0	2.00	2.00
E	TMVW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	8.0	2.00	2.00
G	TMVW-t	MT20	5.0	6.0	1.50	1.50
H	TMVW-t	MT20	5.0	6.0	3.00	1.75
I	TMVW-t	MT20	6.0	9.0	1.75	4.00
J	BMV1-t	MT20	6.0	9.0	Edge	0.50
K	BMVW-t	MT20	8.0	9.0	4.25	4.25
L	BMVW-t	MT20	4.0	12.0	Edge	
M	BMVW-t	MT20	5.0	6.0	2.25	2.50
N	BS-t	MT20	4.0	6.0		
O	BMVWW-t	MT20	5.0	6.0		
P	BS-t	MT20	4.0	6.0		
Q	BMVW-t	MT20	5.0	6.0	2.25	2.50
R	BMVW-t	MT20	4.0	12.0	Edge	
S	BMVW-t	MT20	8.0	9.0	4.25	4.25
T	BMV1-t	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) 6001.3 lbs FACTORED DOWN AT 30-11-14, AND 3688.0 lbs FACTORED DOWN AT 29-11-14 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
K	30-11-14	-6001	-6001	---	FRONT	VERT	TOTAL
L	29-11-14	-3688	-3688	---	FRONT	VERT	TOTAL

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.

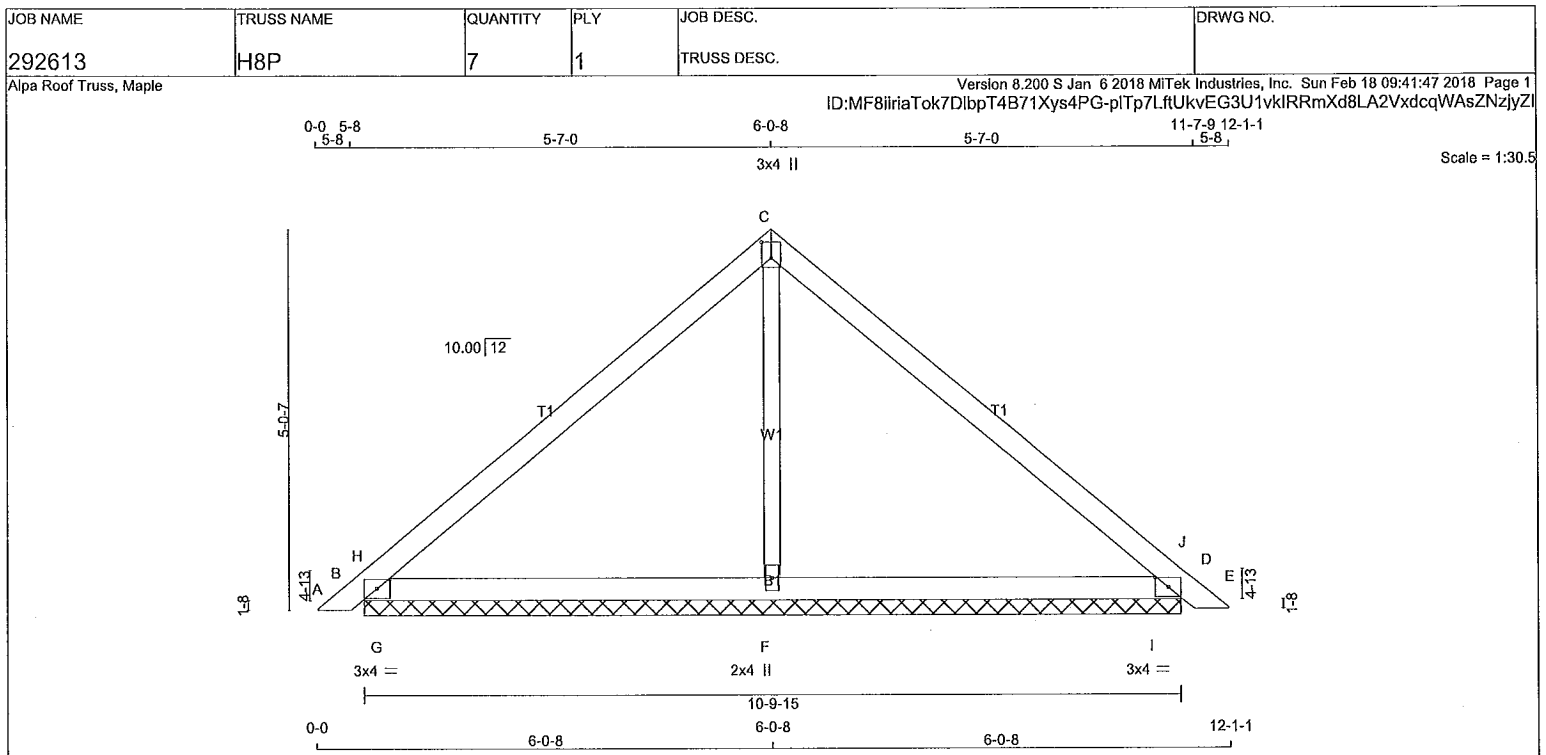
JSI GRIP= 0.90 (A) (INPUT = 0.90)

JSI METAL= 0.94 (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-18023640(2)



TOTAL WEIGHT = 7 X 34 = 236 lb (M)

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
B - D	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 2.00
C	TTW+p	MT20	3.0	4.0	2.50 1.50
D	TMB1-I	MT20	3.0	4.0	1.50 2.00
F	BMW1+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
B	415	0	415	0	0	10-9-15	1-2-7		
D	415	0	415	0	0	10-9-15	1-2-7		
F	295	0	295	0	0	10-9-15	1-2-7		

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	293	196 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
D	293	196 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
F	215	106 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D, 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 LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 12	-78.0	-78.0 0.02 (1)	10.00	F-C	-75 / 0	0.03 (1)
B-H	-36 / 132	-78.0	-78.0 0.19 (1)	6.25	G-H	-707 / 0	0.00 (1)
H-C	-234 / 0	-78.0	-78.0 0.28 (1)	6.25	I-J	-707 / 0	0.00 (1)
C-J	-234 / 0	-78.0	-78.0 0.28 (1)	6.25			
J-D	-36 / 132	-78.0	-78.0 0.19 (1)	6.25			
D-E	0 / 12	-78.0	-78.0 0.02 (1)	10.00			
B-G	0 / 168	-18.5	-18.5 0.26 (1)	10.00			
G-F	0 / 168	-18.5	-18.5 0.26 (1)	10.00			
F-I	0 / 168	-18.5	-18.5 0.26 (1)	10.00			
I-D	0 / 168	-18.5	-18.5 0.26 (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

CSI: TC=0.28/1.00 (C-H:1), BC=0.26/1.00 (F-G:1), WB=0.03/1.00 (C-F:1), SSI=0.54/1.00 (B-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

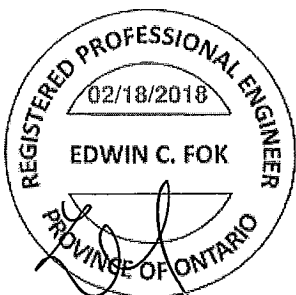
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

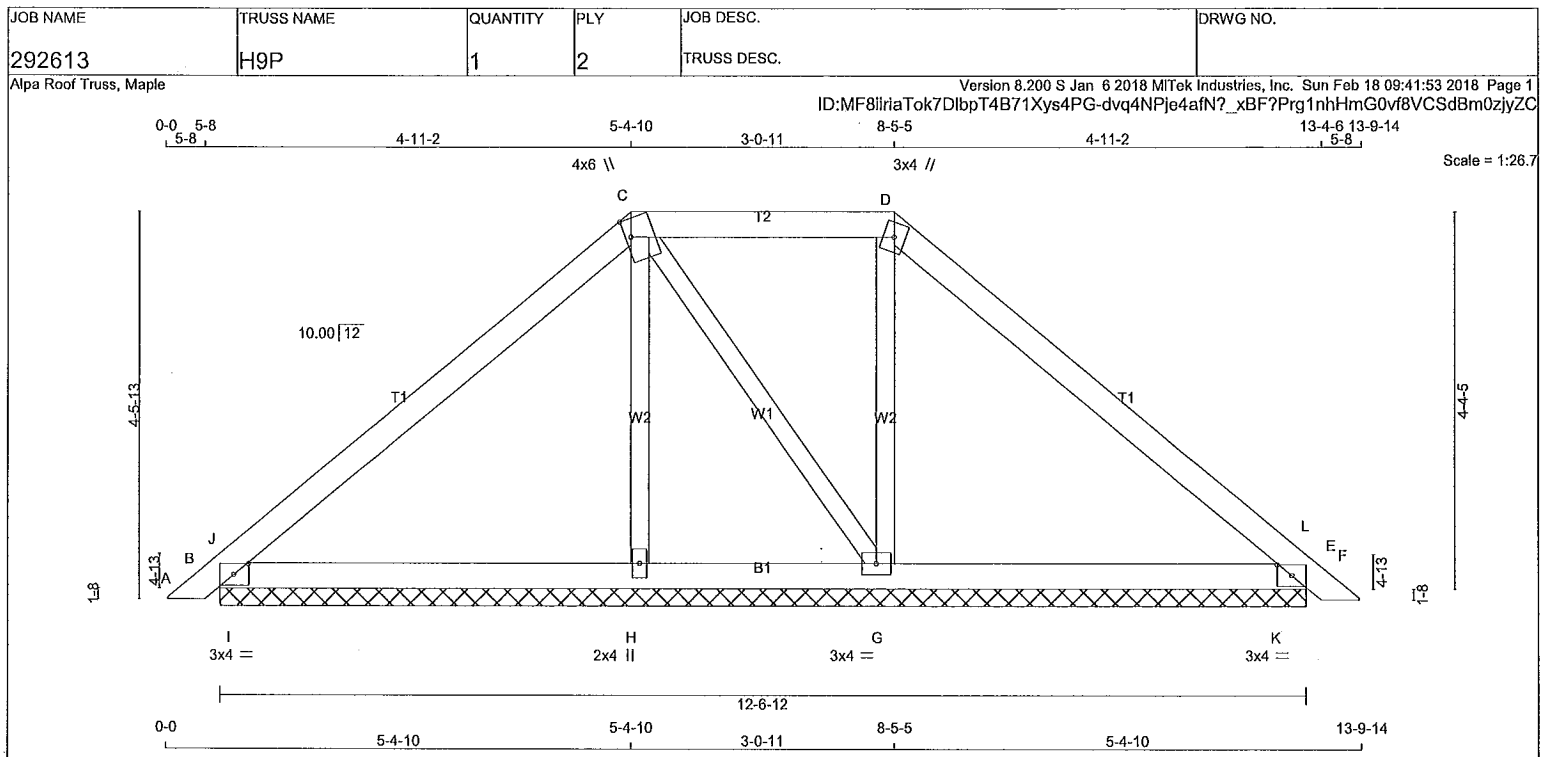
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.36 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

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



A-18023641



TOTAL WEIGHT = 2 X 44 = 87 lb

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

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	TOP
C - D	12	TOP
D - F	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
B - E	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB-I	MT20	3.0	4.0	1.50 2.00
C	TTWW+m	MT20	4.0	6.0	2.50 0.75
D	TTWW+m	MT20	3.0	4.0	
E	TMB-I	MT20	3.0	4.0	1.50 2.00
G	BMWW1-I	MT20	3.0	4.0	
H	BMWW1+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	IN-SX		IN-SX	
B	389	0	389	0	0	12-6-12	6-5		
E	368	0	368	0	0	12-6-12	6-5		
H	222	0	222	0	0	12-6-12	6-5		
G	314	0	314	0	0	12-6-12	6-5		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	275	182 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
E	260	171 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0
H	161	83 / 0	0 / 0	0 / 0	0 / 0	78 / 0	0 / 0
G	224	135 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				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	0 / 12	-78.0 -78.0	0.01 (1)	10.00	H-C	-113 / 0	0.02 (1)
B-J	-64 / 8	-78.0 -78.0	0.05 (1)	6.25	C-G	-44 / 0	0.01 (1)
J-C	-212 / 0	-78.0 -78.0	0.11 (1)	6.25	G-D	-169 / 0	0.02 (1)
C-D	-125 / 0	-78.0 -78.0	0.06 (1)	6.25	I-J	-483 / 0	0.00 (1)
D-L	-180 / 0	-78.0 -78.0	0.11 (1)	6.25	K-L	-487 / 0	0.00 (1)
L-E	-58 / 43	-78.0 -78.0	0.06 (1)	6.25			
E-F	0 / 12	-78.0 -78.0	0.01 (1)	10.00			
B-I	0 / 154	-18.5 -18.5	0.09 (1)	10.00			
I-H	0 / 154	-18.5 -18.5	0.09 (1)	10.00			
H-G	0 / 151	-18.5 -18.5	0.06 (1)	10.00			
G-K	0 / 130	-18.5 -18.5	0.09 (1)	10.00			
K-E	0 / 130	-18.5 -18.5	0.09 (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

CSI: TC=0.11/1.00 (C-J:1), BC=0.09/1.00 (H-I:1), WB=0.02/1.00 (D-G:1), SSI=0.19/1.00 (E-K: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.

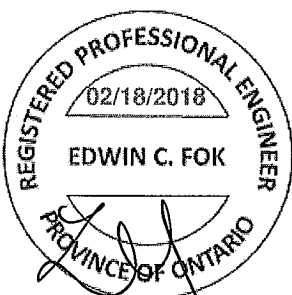
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

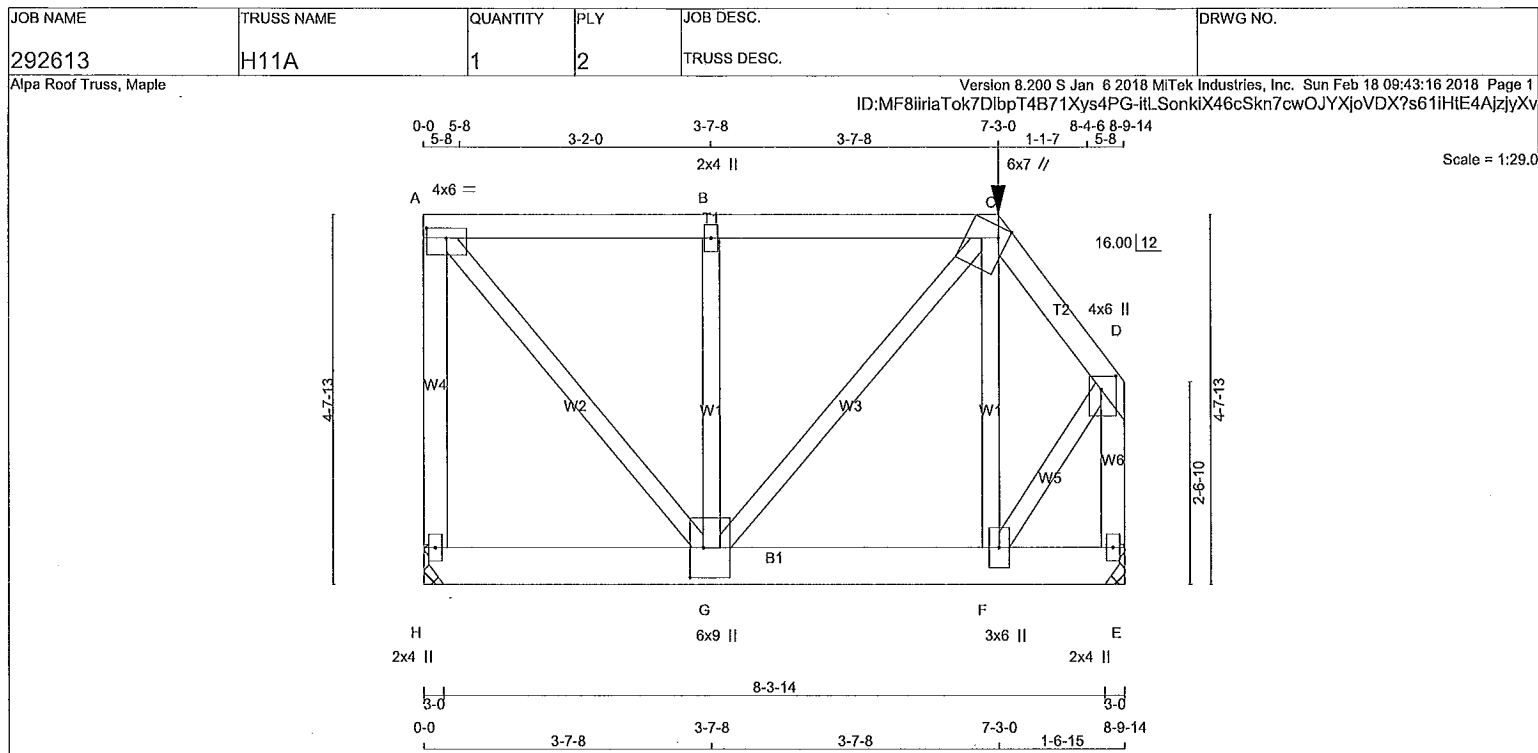
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.16 (B) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)

A-18023642





TOTAL WEIGHT = 2 X 51 = 102 lb

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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #/ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
H-A 1	12	TOP
A-C 1	12	SIDE(47.7)
C-D 1	12	SIDE(58.9)
E-D 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H-E 2	8	SIDE(340.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
H	3593	0	3593	0	0	HANGER BY OTHERS
E	3577	0	3577	0	0	MIN. SEAT SIZE: 2-5 HANGER BY OTHERS

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX /MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
H	2562	1564 / 0	0 / 0	0 / 0	0 / 0	0 / 0	998 / 0	0 / 0
E	2551	1555 / 0	0 / 0	0 / 0	0 / 0	0 / 0	995 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.07 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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
H-A	-2548 / 0	0.0	0.0 0.42 (1)	7.10	A-G	0 / 3118	0.39 (1)
A-B	-2016 / 0	-114.5	-114.5 0.12 (1)	6.07	G-B	-464 / 0	0.07 (1)
B-C	-2016 / 0	-114.5	-114.5 0.12 (1)	6.07	G-C	0 / 1203	0.15 (1)
C-D	-2067 / 0	-78.0	-78.0 0.03 (1)	6.13	F-C	0 / 447	0.06 (1)
E-D	-3240 / 0	0.0	0.0 0.23 (1)	6.45	F-D	0 / 1944	0.24 (1)
H-G	0 / 0	-699.2	-699.2 0.30 (1)	10.00			
G-F	0 / 1233	-699.2	-699.2 0.38 (1)	10.00			
F-E	0 / 0	-699.2	-699.2 0.15 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	7-3-0	-49	-49	---	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 = 0-0
RIGHT SETBACK = 1-6-15
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CSldGirder
START DISTANCE = 0-0
START SPAN CARRIED = 29-10-6
END DISTANCE = 8-9-14
END SPAN CARRIED = 29-10-6
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 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 (0.29")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL)= L/999 (0.04")

CSI: TC=0.42/1.00 (A-H:1), BC=0.38/1.00 (F-G:1), WB=0.39/1.00 (A-G:1), SS=0.49/1.00 (G-H:1)

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

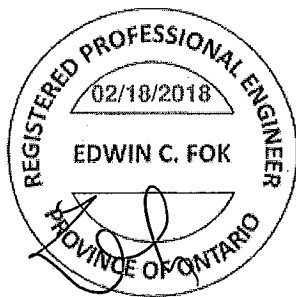
COMPANION LIVE LOAD FACTOR = 1.00

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 1687 788 1987 1656

A-18023643 CONTINUED ON PAGE 2

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H11A	1	2	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 09:43:17 2018 Page 2 ID:MF8iiriaTok7DlbpT4B71Xys4PG-A3vq07kKINET3uMKAevY4kFzFdtEbZHsWXzdl9zJyXu					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	3.00
B	TMW+w	MT20	2.0	4.0		
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+p	MT20	4.0	6.0	2.00	2.25
E	BMV1+p	MT20	2.0	4.0		
F	BMWW+t	MT20	3.0	6.0		
G	BMWWW+t	MT20	6.0	9.0	4.50	2.00
H	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

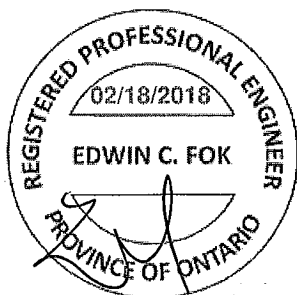
- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 48.7 lbs FACTORED DOWN AT 7-3-0
ON TOP CHORD. DESIGN FOR UNSPECIFIED
CONNECTION(S) IS DELEGATED TO THE
BUILDING DESIGNER.

PLATE PLACEMENT TOL. = 0.250 inches

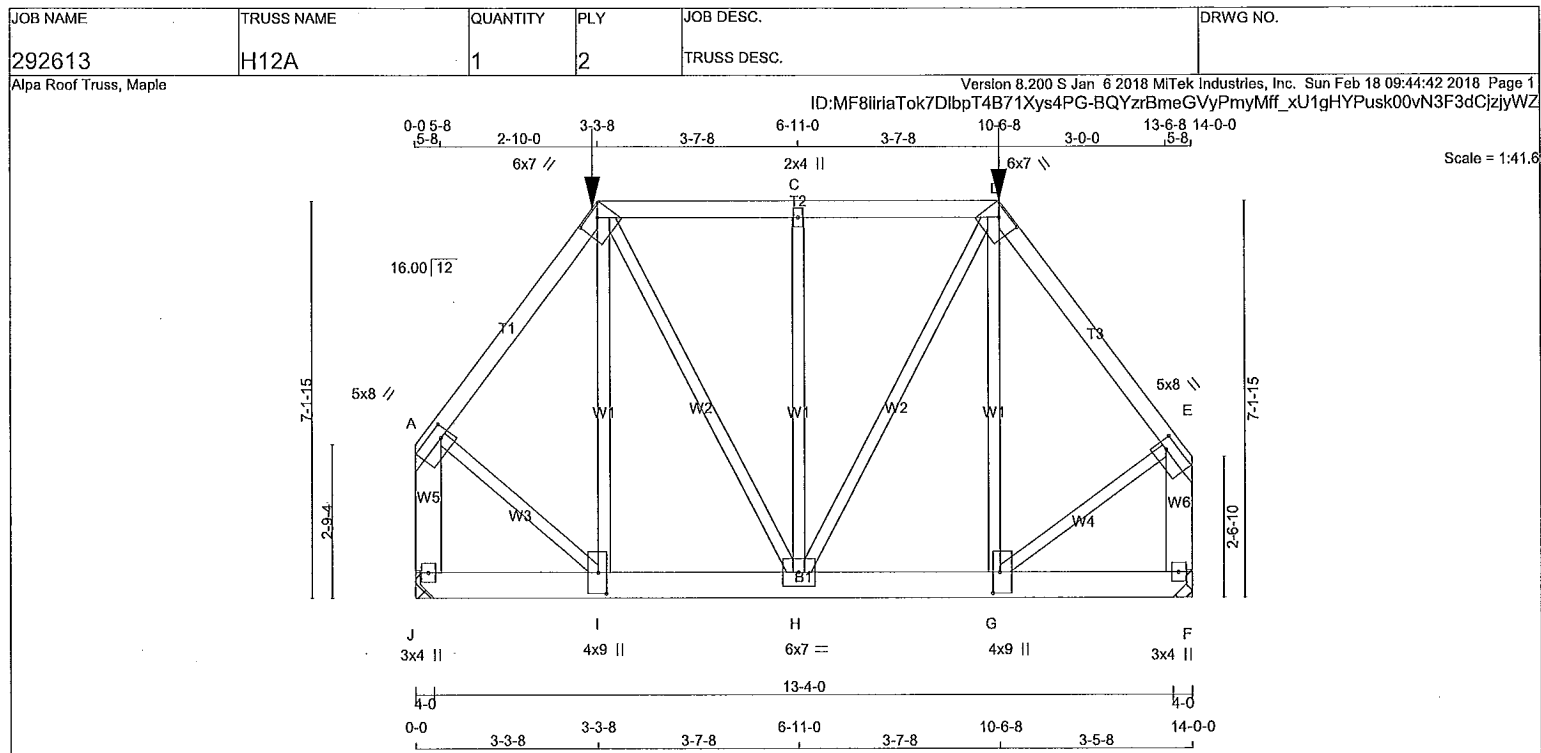
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.37 (F) (INPUT = 1.00)

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



A-18022643(2)



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

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A-B	1	12
B-D	1	12
D-E	1	12
J-A	2	12
F-E	2	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J-F	2	6
WEBS : (0.122"x3") SPIRAL NAILS		
I-B	1	6
2x3	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	5847	0	5847	0	0	BRG	BRG
F	5844	0	5844	0	0	HANGER BY OTHERS	HANGER BY OTHERS

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	4169	2543 / 0	0 / 0	0 / 0	0 / 0	1627 / 0	0 / 0
F	4167	2541 / 0	0 / 0	0 / 0	0 / 0	1626 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.61 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	-3916 / 0	-78.0 -78.0	0.16 (1)	I-B	0 / 1204	0.15 (1)	
B-C	-3158 / 0	-114.5 -114.5	0.14 (1)	B-H	0 / 1703	0.21 (1)	
C-D	-3158 / 0	-114.5 -114.5	0.14 (1)	H-C	-408 / 0	0.17 (1)	
D-E	-4046 / 0	-78.0 -78.0	0.18 (1)	H-D	0 / 1530	0.19 (1)	
J-A	-4853 / 0	0.0 0.0	0.25 (1)	G-D	0 / 1449	0.18 (1)	
F-E	-4790 / 0	0.0 0.0	0.23 (1)	A-I	0 / 2818	0.35 (1)	
				G-E	0 / 2791	0.35 (1)	
J-I	0 / 0	-723.3 -723.3	0.29 (1)				
I-H	0 / 2351	-723.3 -723.3	0.45 (1)				
H-G	0 / 2433	-723.3 -723.3	0.47 (1)				
G-F	0 / 0	-723.3 -723.3	0.31 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	3-3-8	-102	-102	---	FRONT	VERT	TOTAL
D	10-6-8	-107	-107	---	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 = 3-3-8
RIGHT SETBACK = 3-5-8
END SETBACK = 3-10-8
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.

GIRDER TYPE: CSldGirder
START DISTANCE = 0-0
START SPAN CARRIED = 30-10-6
END DISTANCE = 14-0-0
END SPAN CARRIED = 30-10-6
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.25/1.00 (A-J:1), BC=0.47/1.00 (G-H:1), WB=0.35/1.00 (A-I:1), SSI=0.50/1.00 (F-G:1)

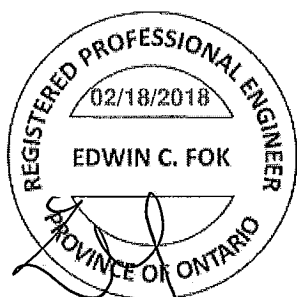
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

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.
292613	H12A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 09:44:43 2018 Page 2
ID:MF8ilriaTok7DlbpT4B71Xys4PG-fc6L3XnG1p4GO6xsCiSjZtpi9ICzIT8WlvpAkAzjyWY

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.25	2.00
B	TTWW-h	MT20	6.0	7.0	1.75	4.00
C	TMW+w	MT20	2.0	4.0		
D	TTWW-h	MT20	6.0	7.0	1.75	4.00
E	TMVW-t	MT20	5.0	8.0	2.25	2.00
F	BMV1+p	MT20	3.0	4.0		
G	BMWW+t	MT20	4.0	9.0	4.50	1.50
H	BMWWW-t	MT20	6.0	7.0		
I	BMWW+t	MT20	4.0	9.0	4.50	1.75
J	BMV1+p	MT20	3.0	4.0		

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 106.7 lbs FACTORED DOWN AT 10-6-8, AND 101.6 lbs FACTORED DOWN AT 3-3-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (I) (INPUT = 0.90)
JSI METAL= 0.55 (G) (INPUT = 1.00)

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

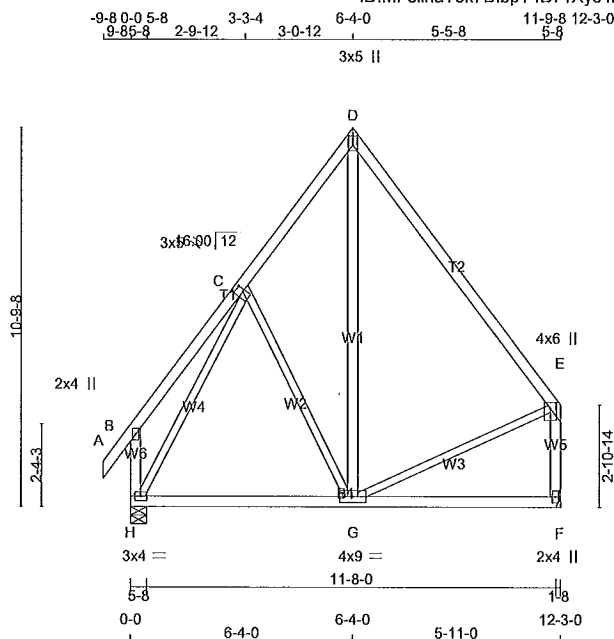


A-1802364407

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H13S	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 09:44:59 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-Bh4OQ?zJGj5_JZ9w83kTDFUQSkjZVhbtzOh1IEzjyWl



Scale = 1:65.7

TOTAL WEIGHT = 3 X 72 = 215 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW+H	MT20	3.0	5.0	2.25	0.75
D	TTW+p	MT20	3.0	5.0	2.00	Edge
E	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW+H	MT20	4.0	9.0		
H	BMVW1+H	MT20	3.0	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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	JT	DOWN	IN-SX		IN-SX	
F	591	591	0	5-8		1-8	
H	662	662	0	5-8		1-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX /MIN.	COMPONENT REACTIONS				
F	421	257 / 0	0 / 0	0 / 0	0 / 0	164 / 0	0 / 0
H	470	295 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 28	-78.0	-78.0 0.05 (1)	10.00	C-G	-105 / 0	0.10 (1)
B-C	0 / 24	-78.0	-78.0 0.13 (1)	10.00	G-D	0 / 156	0.03 (4)
C-D	-325 / 0	-78.0	-78.0 0.10 (1)	6.25	H-C	-509 / 0	0.45 (1)
D-E	-303 / 0	-78.0	-78.0 0.30 (1)	6.25	G-E	0 / 197	0.04 (1)
H-B	-162 / 0	0.0	0.0 0.02 (1)	7.81			
F-E	-550 / 0	0.0	0.0 0.09 (1)	7.81			
H-G	0 / 231	-18.5	-18.5 0.22 (4)	10.00			
G-F	0 / 0	-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

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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.30/1.00 (D-E:1), BC=0.22/1.00 (G-H:4), WB=0.45/1.00 (C-H:1), SSI=0.11/1.00 (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.

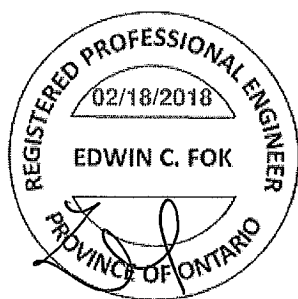
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

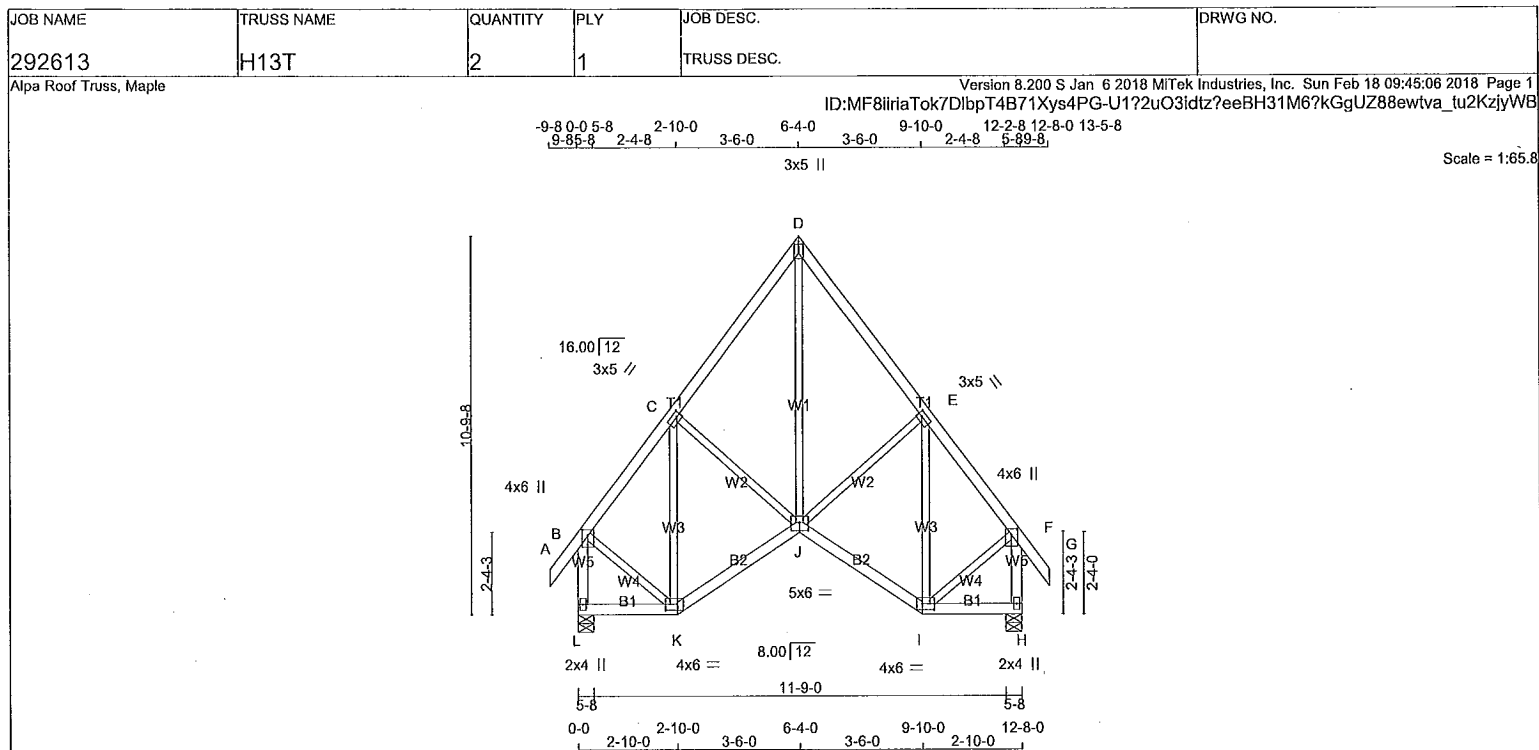
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (C) (INPUT = 0.90)
JSI METAL = 0.32 (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-18023645



TOTAL WEIGHT = 2 X 76 = 152 lb

LUMBER				DESCR.			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	SPF	FACTORED	MAXIMUM FACTORED	INPUT
A - D	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG
D - B	2x4	DRY	No.2	SPF	VERT	DOWN	IN-SX
L - G	2x4	DRY	No.2	SPF	HORZ	HORZ	IN-SX
H - F	2x4	DRY	No.2	SPF	UPLIFT	UPLIFT	IN-SX
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+p	MT20	4.0	6.0	2.00	2.00
C	TMVW-l	MT20	3.0	5.0	1.50	1.50
D	TTW+p	MT20	3.0	5.0	2.00	Edge
E	TMVW-l	MT20	3.0	5.0	1.50	1.50
F	TMVW+p	MT20	4.0	6.0	2.00	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BBWW-l	MT20	4.0	6.0	2.00	4.00
J	BBWW-p	MT20	5.0	6.0	2.75	3.00
K	BBWW-l	MT20	4.0	6.0	2.00	4.00
L	BMV1+p	MT20	2.0	4.0		

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

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

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

UNFACTORED REACTIONS

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	0 / 28	-78.0	-78.0	0.05 (1)	10.00	J-D	0 / 415	0.09 (1)	
B-C	-396 / 0	-78.0	-78.0	0.10 (1)	6.25	J-E	-12 / 0	0.00 (1)	
C-D	-423 / 0	-78.0	-78.0	0.12 (1)	6.25	I-E	-283 / 0	0.15 (1)	
D-E	-423 / 0	-78.0	-78.0	0.12 (1)	6.25	C-J	-12 / 0	0.00 (1)	
E-F	-396 / 0	-78.0	-78.0	0.10 (1)	6.25	K-C	-283 / 0	0.15 (1)	
F-G	0 / 28	-78.0	-78.0	0.05 (1)	10.00	B-K	0 / 309	0.07 (1)	
L-B	-656 / 0	0.0	0.0	0.08 (1)	7.81	I-F	0 / 309	0.07 (1)	
H-F	-656 / 0	0.0	0.0	0.08 (1)	7.81				
L-K	0 / 0	-18.5	-18.5	0.04 (4)	10.00				
K-J	0 / 300	-18.5	-18.5	0.09 (4)	10.00				
J-I	0 / 300	-18.5	-18.5	0.09 (4)	10.00				
I-H	0 / 0	-18.5	-18.5	0.04 (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 (0.42")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.12/1.00 (C-D:1), BC=0.09/1.00 (I-J:4), WB=0.15/1.00 (E-I:1), SI=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.

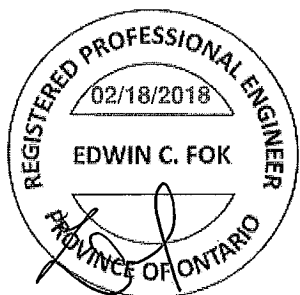
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (D) (INPUT = 0.90)
JSI METAL= 0.17 (F) (INPUT = 1.00)

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



A-18023646

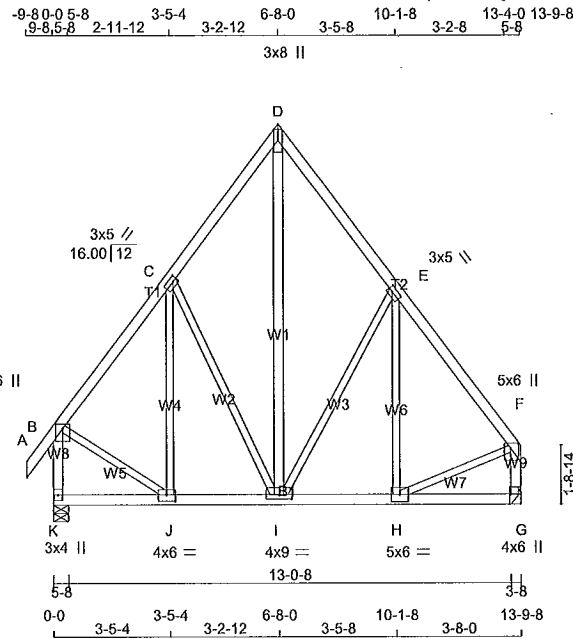
A-18023647

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H15A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 09:46:12 2018 Page 1

ID:MF8iiriaTok7DlbpT4B71Xys4PG-Yk_?kzs549ldZnEywuYage?vCAX45eEcmFsOMWzjyV9



Scale = 1:68.0

TOTAL WEIGHT = 87 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	5.0	6.0	1.50	2.50
C	TMVW-l	MT20	3.0	5.0	1.50	1.50
D	TTW+p	MT20	3.0	8.0	3.75	Edge
E	TMVW-l	MT20	3.0	5.0	1.50	1.50
F	TMVW+p	MT20	5.0	6.0	1.75	2.75
G	BMV1+l	MT20	4.0	6.0	Edge	0.50
H	BMVW-l	MT20	5.0	6.0		
I	BMVW-l	MT20	4.0	9.0	1.50	4.50
J	BMVW-l	MT20	4.0	6.0	2.25	3.00
K	BMV1+p	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
K	2441	0	2441	0
G	2370	0	2370	0

HANGER BY OTHERS
MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
K	1739	1069 / 0	0 / 0	0 / 0	0 / 0	669 / 0	0 / 0
G	1690	1031 / 0	0 / 0	0 / 0	0 / 0	658 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	0 / 28	J-C	0 / 430
B-C	-1634 / 0	C-I	-499 / 0
C-D	-1308 / 0	I-D	0 / 1853
D-E	-1309 / 0	E-H	-664 / 0
E-F	-1800 / 0	H-E	0 / 675
F-G	-2069 / 0	G-J	0 / 1143
G-F	-1976 / 0	J-F	0 / 1165
K-J	0 / 0		
J-I	0 / 993		
I-H	0 / 1094		
H-G	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: Cstd Girder

START DISTANCE = 0-0

START SPAN CARRIED = 12-3-0

END DISTANCE = 13-9-8

END SPAN CARRIED = 12-3-0

END WALL WIDTH = 0-0

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.28/1.00 (B-K:1), BC=0.70/1.00 (H-I:1), WB=0.67/1.00 (E-I:1), SSI=0.50/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

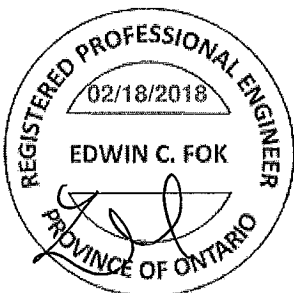
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (E) (INPUT = 0.90)

JSI METAL= 0.55 (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

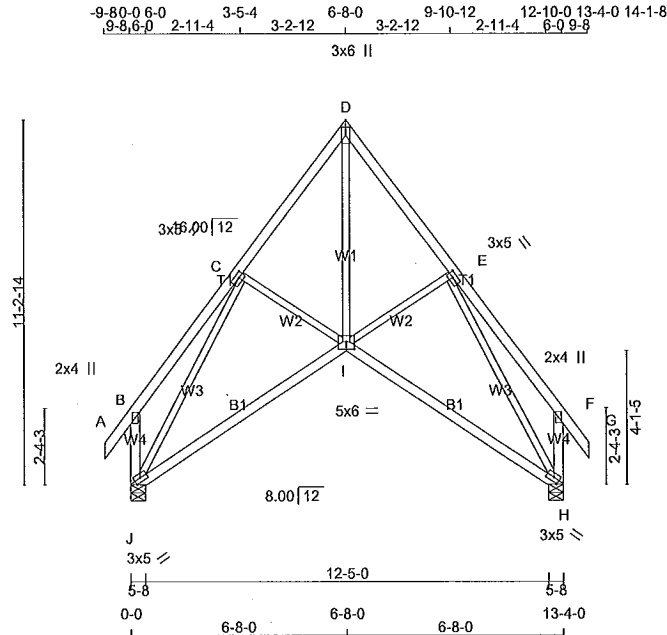


A-18023648

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292613	H15T	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITok Industries, Inc. Sun Feb 18 09:46:22 2018 Page 1
ID:MF8ilriaTok7DibpT4B71Xys4PG-FbmrN_NJDYDmK?TW_jx4IQe3C15R7Y53pHwjxzyV?



Scale = 1:71.0

TOTAL WEIGHT = 2 X 75 = 150 lb
[M][F]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
J - B	2x4	DRY	No.2	SPF
H - F	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	TMV+p	MT20	2.0	4.0	
C	TMWW-l	MT20	3.0	5.0	1.50 2.00
D	TTW+p	MT20	3.0	6.0	
E	TMWW-l	MT20	3.0	5.0	1.50 2.00
F	TMV+p	MT20	2.0	4.0	
H	BMVW1-l	MT20	3.0	5.0	1.50 2.25
I	BBWW-p	MT20	5.0	6.0	2.75 3.00
J	BMVW1-l	MT20	3.0	5.0	1.50 2.25

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG
J	714	0	714	0	0	5-8	1-8	1-8	
H	714	0	714	0	0	5-8	1-8	1-8	

UNFACTORED REACTIONS						
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
J	508	318 / 0	0 / 0	0 / 0	0 / 0	190 / 0
H	508	318 / 0	0 / 0	0 / 0	0 / 0	190 / 0

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

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	LENGTH	FR-TO			
A-B	0 / 28	-78.0 -78.0	0.05 (1)	I-D	0 / 646	0.15 (1)	
B-C	0 / 23	-78.0 -78.0	0.13 (1)	I-E	-43 / 8	0.01 (1)	
C-D	-555 / 0	-78.0 -78.0	0.10 (1)	C-I	-43 / 8	0.01 (1)	
D-E	-555 / 0	-78.0 -78.0	0.10 (1)	J-C	-802 / 0	0.80 (1)	
E-F	0 / 23	-78.0 -78.0	0.13 (1)	E-H	-802 / 0	0.80 (1)	
F-G	0 / 28	-78.0 -78.0	0.05 (1)				
J-B	-171 / 0	0.0 0.0	0.02 (1)				
H-F	-171 / 0	0.0 0.0	0.02 (1)				
J-I	0 / 428	-18.5 -18.5	0.28 (4)				
I-H	0 / 428	-18.5 -18.5	0.28 (4)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.44")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.44")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.13/1.00 (E-F:1), BC=0.28/1.00 (H-I:4), WB=0.80/1.00 (C-J:1), SSI=0.07/1.00 (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.

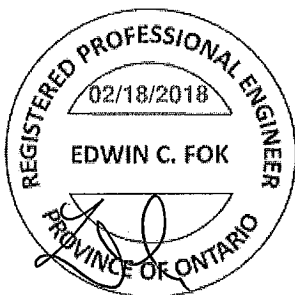
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

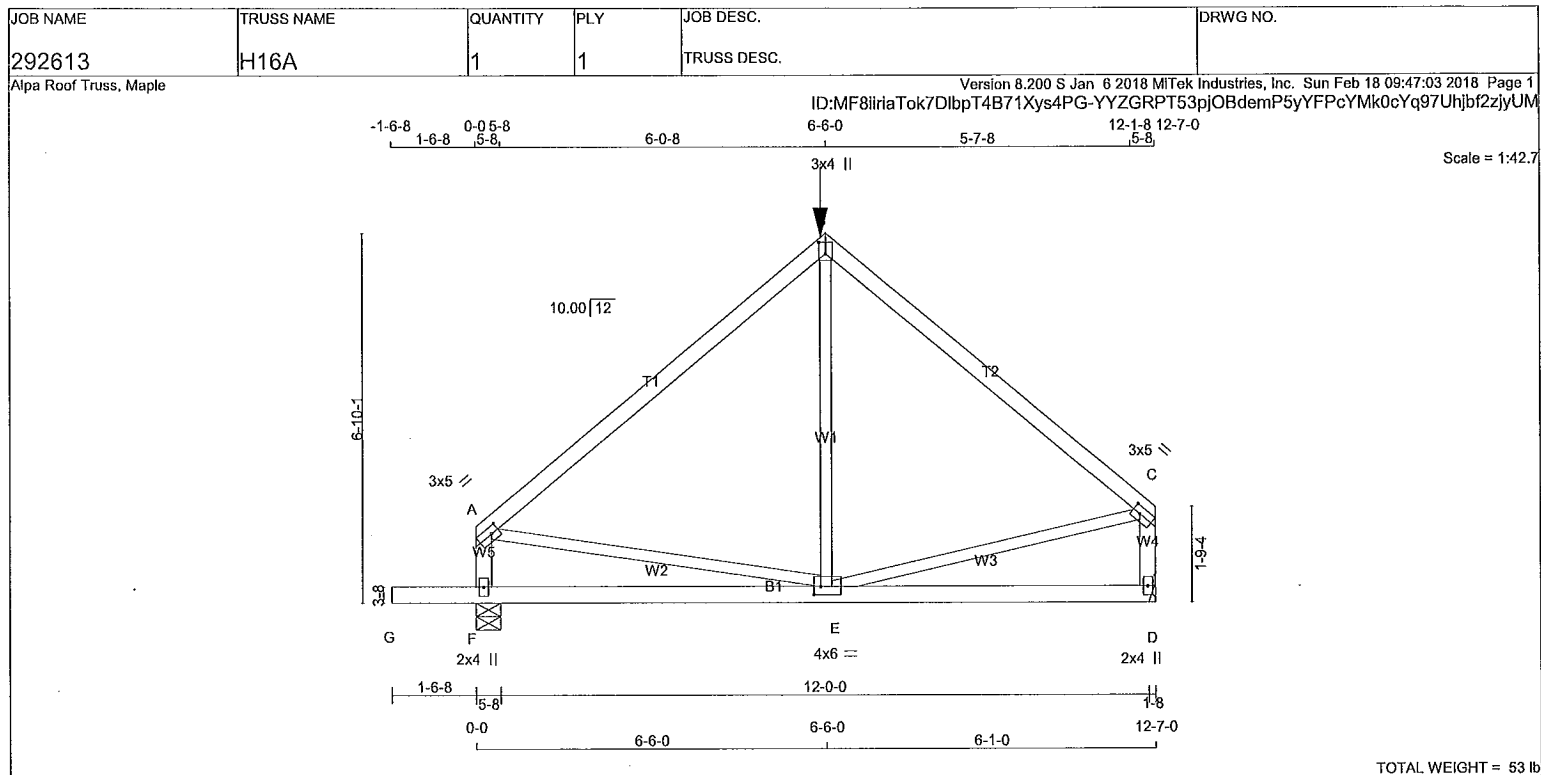
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (C) (INPUT = 0.90)
JSI METAL= 0.24 (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-18023649



LUMBER				DESCR.	
CHORDS	SIZE	LUMBER			
A - B	2x4	DRY	2100F 1.8E	SPF	
B - C	2x4	DRY	No.2	SPF	
F - A	2x4	DRY	No.2	SPF	
D - C	2x4	DRY	No.2	SPF	
G - D	2x4	DRY	No.2	SPF	
ALL WEBS	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	5.0	1.50	1.75
B	TTW+p	MT20	3.0	4.0	2.50	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	1.75
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	4.0	6.0	1.75	1.50
F	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 388.4 lbs FACTORED DOWN AT 6-6-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
D	862	0	862	0	0	0
F	998	0	998	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	615	372 / 0	0 / 0	0 / 0	0 / 0	243 / 0	0 / 0
F	712	430 / 0	0 / 0	0 / 0	0 / 0	282 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.10 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 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-685 / 0	-78.0	-78.0 0.44 (1)	6.25	E-B	-1 / 155	0.06 (4)
B-C	-685 / 0	-78.0	-78.0 0.60 (1)	6.10	A-E	0 / 533	0.13 (1)
F-A	-777 / 0	0.0	0.0 0.09 (1)	7.81	E-C	0 / 542	0.13 (1)
D-C	-805 / 0	0.0	0.0 0.10 (1)	7.81			
G-F	0 / 0	-96.5	-96.5 0.17 (1)	10.00			
F-E	0 / 0	-27.2	-27.2 0.34 (4)	10.00			
E-D	0 / 0	-27.2	-27.2 0.34 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	6-6-0	-388	-388	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 6-6-0
RIGHT SETBACK = 6-1-0
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

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=0.60/1.00 (B-C:1), BC=0.34/1.00 (E-F:4), WB=0.13/1.00 (C-E:1), SSI=0.17/1.00 (A-B: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

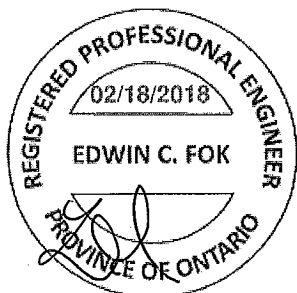
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



292613

H17

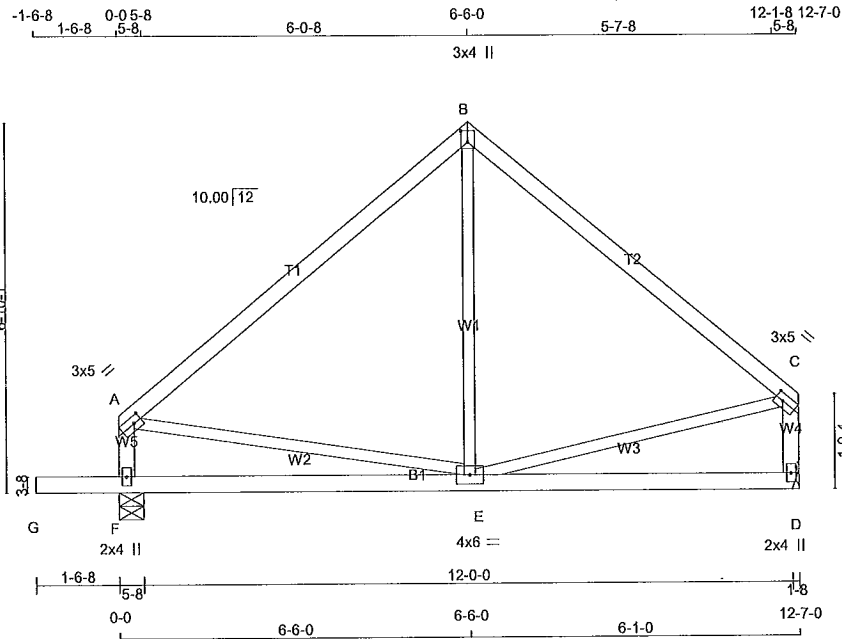
1

1

TRUSS DESC.

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 09:47:58 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-R7O3_C8b6jebH4LK79SRz?O?4upXxjID8kY?4MzjyTV



Scale = 1:42.7

TOTAL WEIGHT = 53 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	2100F 1.8E	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
G - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

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	IN-SX	IN-SX
D	607	0	607	0	0	HANGER BY OTHERS
F	756	0	756	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	0/0	0/0	0/0
D	433	264 / 0	0 / 0	0 / 0	0 / 0	169 / 0	0 / 0
F	539	329 / 0	0 / 0	0 / 0	0 / 0	210 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO				FR-TO			
A-B	-399 / 0	-78.0	-78.0	0.28 (1)	6.25	E-B	0 / 110	0.04 (4)	
B-C	-399 / 0	-78.0	-78.0	0.37 (1)	6.25	A-E	0 / 310	0.07 (1)	
F-A	-558 / 0	0.0	0.0	0.06 (1)	7.81	E-C	0 / 316	0.07 (1)	
D-C	-568 / 0	0.0	0.0	0.06 (1)	7.81				
G-F	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
F-E	0 / 0	-18.5	-18.5	0.21 (4)	10.00				
E-D	0 / 0	-18.5	-18.5	0.21 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

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 (B-C:1), BC=0.21/1.00 (D-E:4), WB=0.07/1.00 (C-E:1), SSI=0.15/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

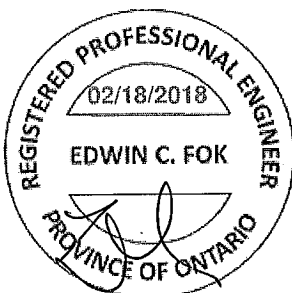
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

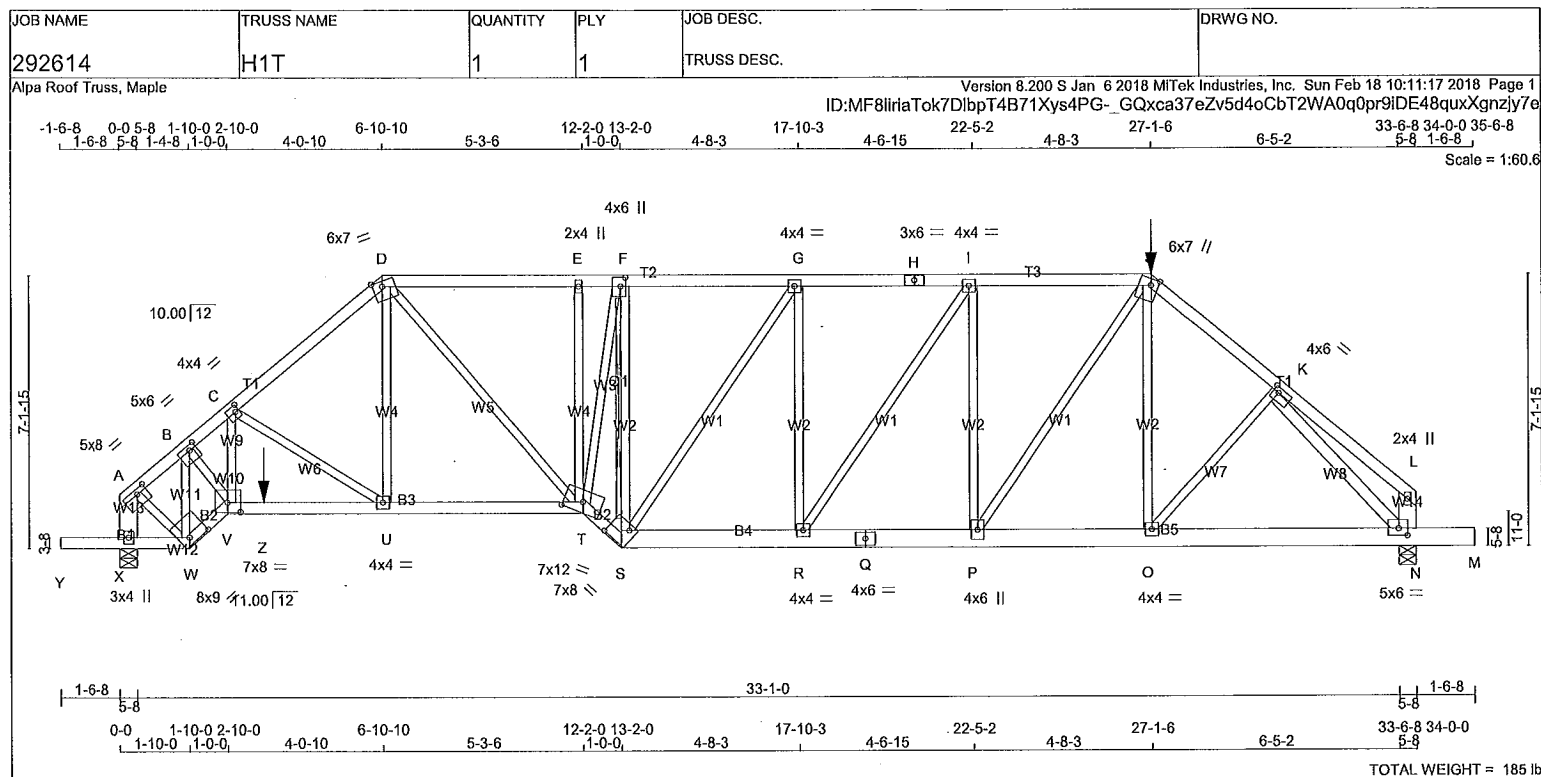
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (E) (INPUT = 0.80)
JSI METAL= 0.17 (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-18023651



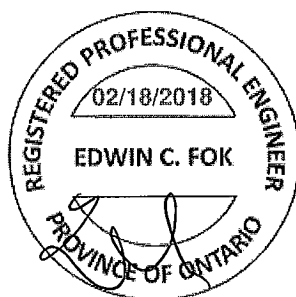
TOTAL WEIGHT = 185 lb

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE
A - D	2x4	DRY	No.2	SPF	
D - H	2x4	DRY	No.2	SPF	
H - J	2x4	DRY	No.2	SPF	
J - L	2x4	DRY	No.2	SPF	
X - A	2x6	DRY	No.2	SPF	
N - L	2x6	DRY	No.2	SPF	
Y - W	2x4	DRY	No.2	SPF	
W - V	2x4	DRY	No.2	SPF	
V - T	2x4	DRY	No.2	SPF	
T - S	2x4	DRY	No.2	SPF	
S - Q	2x6	DRY	No.2	SPF	
Q - M	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
K - N	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
A	MT20	5.0	8.0	1.50	3.25
B	MT20	5.0	6.0	1.50	2.25
C	MT20	4.0	4.0	2.00	1.25
D	MT20	6.0	7.0	Edge	3.00
E	MT20	2.0	4.0		
F	MT20	4.0	6.0	2.75	1.50
G	MT20	4.0	4.0		
H	MT20	3.0	4.0		
I	MT20	4.0	4.0		
J	MT20	6.0	7.0	2.00	2.25
K	MT20	4.0	6.0	1.50	1.75
L	MT20	2.0	4.0		
N	MT20	5.0	6.0	2.25	2.75
O, R, U					
O	MT20	4.0	4.0		
P	MT20	4.0	6.0		
Q	MT20	4.0	6.0		
S	MT20	7.0	8.0	5.25	5.75
T	MT20	7.0	12.0	3.25	6.00
V	MT20	7.0	8.0	3.00	4.00

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		REQD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
X	2646	0	2646	0	0	5-8	2-14		
N	2517	0	2517	0	0	5-8	2-11		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
X	1882	1174 / 0	0 / 0	0 / 0	0 / 0	708 / 0	0 / 0		
N	1795	1092 / 0	0 / 0	0 / 0	0 / 0	703 / 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 = 3.34 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 F-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		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO		FROM	TO		FR-TO		
A-B	-2159 / 0	-78.0	-78.0 0.15 (1)	4.47	W-B	-2405 / 0	0.45 (1)
B-C	-3381 / 0	-78.0	-78.0 0.27 (1)	3.54	B-V	0 / 1940	0.48 (1)
C-D	-3087 / 0	-78.0	-78.0 0.36 (1)	3.67	V-C	0 / 89	0.02 (1)
D-E	-3297 / 0	-78.0	-78.0 0.57 (1)	3.34	C-U	-352 / 0	0.14 (1)
E-F	-3293 / 0	-114.5	-114.5 0.40 (1)	3.43	U-D	0 / 608	0.15 (1)
F-G	-2971 / 0	-114.5	-114.5 0.48 (1)	3.57	D-T	0 / 1399	0.35 (1)
G-H	-3125 / 0	-114.5	-114.5 0.58 (1)	3.34	T-E	-244 / 0	0.15 (1)
H-I	-3125 / 0	-114.5	-114.5 0.58 (1)	3.34	E-F	0 / 1951	0.48 (1)
I-J	-2833 / 0	-114.5	-114.5 0.55 (1)	3.54	S-F	-2280 / 0	0.81 (1)
J-K	-2706 / 0	-78.0	-78.0 0.26 (1)	3.97	G-S	-271 / 0	0.38 (1)
K-L	0 / 17	-78.0	-78.0 0.14 (1)	10.00	R-G	-296 / 0	0.25 (1)
X-A	-2418 / 0	0.0	0.0 0.18 (1)	6.59	R-I	0 / 520	0.13 (1)
N-L	-111 / 0	0.0	0.0 0.01 (1)	7.81	I-P	-1011 / 0	0.86 (1)
Y-X	0 / 0	-96.5	-96.5 0.17 (1)	10.00	P-J	0 / 1360	0.34 (1)
X-W	0 / 0	-18.5	-18.5 0.17 (1)	10.00	O-J	0 / 139	0.05 (4)
W-V	0 / 2095	-18.5	-18.5 0.37 (1)	10.00	O-K	0 / 169	0.04 (1)
V-Z	0 / 2650	-18.5	-18.5 0.80 (1)	10.00	A-W	0 / 1900	0.47 (1)
Z-U	0 / 2650	-63.7	-63.7 0.80 (1)	10.00	K-N	-2921 / 0	0.90 (1)
U-T	0 / 2365	-63.7	-63.7 0.75 (1)	10.00			
T-S	0 / 3901	-27.2	-27.2 0.69 (1)	10.00			
S-R	0 / 3125	-27.2	-27.2 0.46 (1)	10.00			
R-Q	0 / 2834	-27.2	-27.2 0.41 (1)	10.00			
Q-P	0 / 2834	-27.2	-27.2 0.41 (1)	10.00			
P-O	0 / 2060	-27.2	-27.2 0.34 (1)	10.00			
O-N	0 / 1947	-27.2	-27.2 0.34 (1)	10.00			
N-M	0 / 0	-96.5	-96.5 0.08 (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: CStdGirder
START DISTANCE = 3-9-4
START SPAN CARRIED = 3-10-8
END DISTANCE = 12-2-0
END SPAN CARRIED = 3-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 6-10-10
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 21-10-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

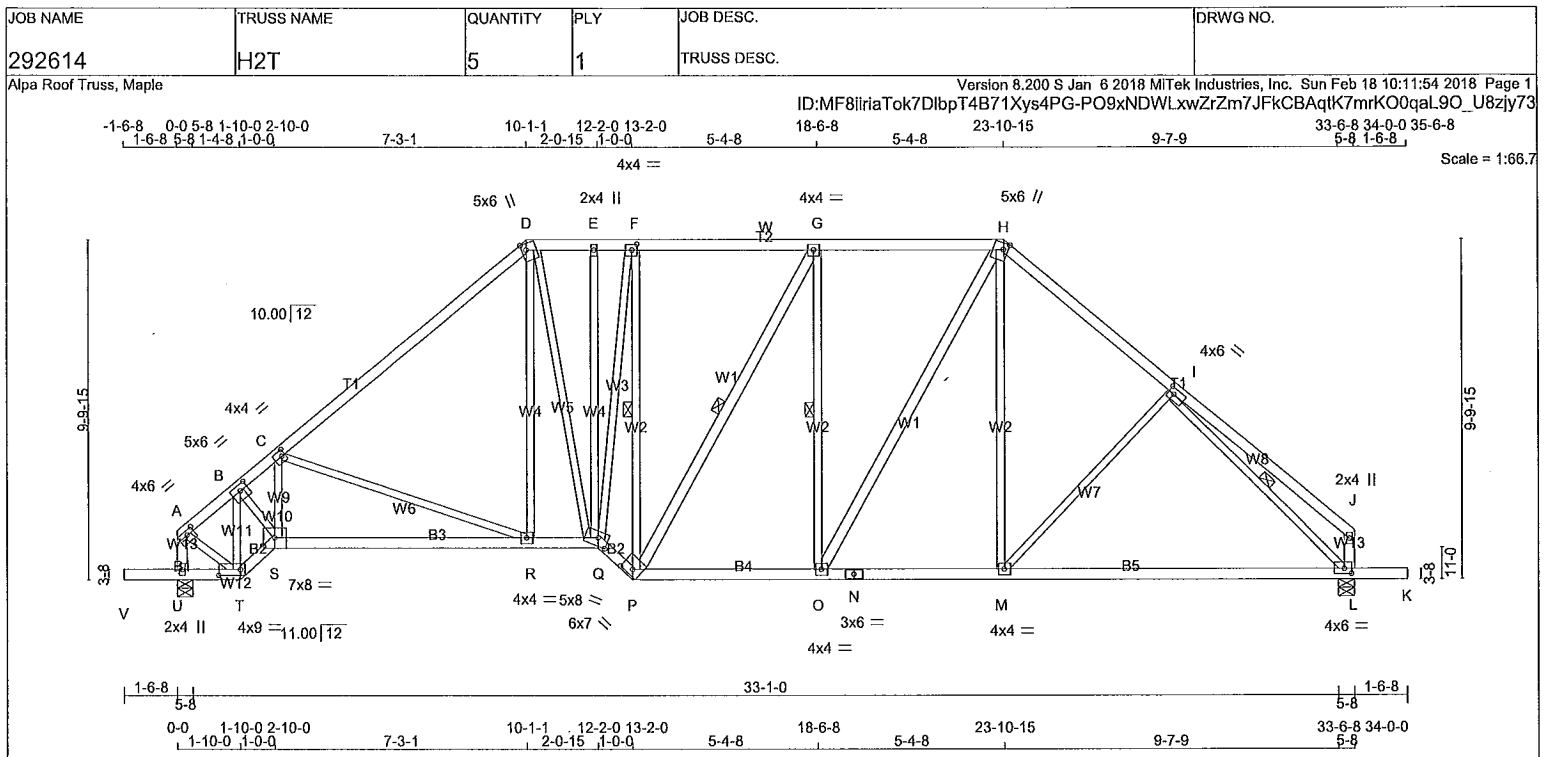
DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

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

A-18023652 CONTINUED ON PAGE 2



TOTAL WEIGHT = 5 X 190 = 951 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
U - A	2x4	DRY	No.2
L - J	2x4	DRY	No.2
V - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2

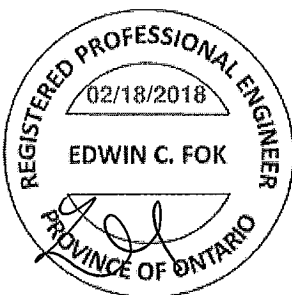
ALL WEBS EXCEPT			
MEMB.	SIZE	LUMBER	DESCR.
P - G	2x4	DRY	No.2
O - H	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	2.75
B	TMVW-t	MT20	5.0	6.0	2.00	2.75
C	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTVW+m	MT20	5.0	6.0	2.25	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0	2.00	1.75
G	TMVW-t	MT20	4.0	4.0		
H	TTVW+m	MT20	5.0	6.0	2.25	1.50
I	TMVW-t	MT20	4.0	6.0	2.00	2.00
J	TMV+p	MT20	2.0	4.0		
L	BMVW1-t	MT20	4.0	6.0	1.75	2.50
M, O, R						
M	BMVW-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
P	BBVW-h	MT20	6.0	7.0	2.00	4.00
Q	BBVW-m	MT20	5.0	8.0	2.75	3.50
S	BBVW-t	MT20	7.0	8.0		
T	BBVW-t	MT20	4.0	9.0	2.00	7.50
U	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
U	1844	0	0	1844	0	5-8	2-12		
L	1837	0	0	1837	0	5-8	1-15		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	1319	780 / 0	0 / 0	0 / 0	0 / 0	539 / 0	0 / 0
L	1314	777 / 0	0 / 0	0 / 0	0 / 0	537 / 0	0 / 0

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

BRACING

FOR SECTION D-H, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FORCE (LBS)	MAX. CSI (LC)	
FR-TO.		FROM TO		FR-TO			
A-B	-1413 / 0	-78.0 -78.0	0.14 (1)	5.35	T-B	-1563 / 0	0.27 (1)
B-C	-2159 / 0	-78.0 -78.0	0.48 (1)	4.09	B-S	0 / 1517	0.34 (1)
C-D	-1879 / 0	-78.0 -78.0	0.66 (1)	4.25	S-C	-262 / 0	0.05 (1)
D-E	-1548 / 0	-85.5 -85.5	0.13 (1)	2.00	C-R	-488 / 0	0.60 (1)
E-F	-1548 / 0	-85.5 -85.5	0.17 (1)	2.00	R-D	0 / 290	0.07 (4)
F-W	-1469 / 0	-85.5 -85.5	0.31 (1)	2.00	D-Q	0 / 553	0.12 (1)
W-G	-1469 / 0	-85.5 -85.5	0.31 (1)	2.00	Q-E	0 / 84	0.02 (1)
G-H	-1547 / 0	-85.5 -85.5	0.31 (1)	2.00	Q-F	0 / 717	0.16 (1)
H-I	-1712 / 0	-78.0 -78.0	0.30 (1)	4.81	P-F	-1136 / 0	0.74 (1)
I-J	0 / 29	-78.0 -78.0	0.32 (1)	10.00	P-G	-158 / 0	0.10 (1)
U-A	-1816 / 0	0.0 0.0	0.17 (1)	6.51	O-G	-383 / 0	0.25 (1)
L-J	-155 / 0	0.0 0.0	0.02 (1)	7.81	O-H	0 / 517	0.08 (1)
V-U	0 / 0	-96.5 -96.5	0.16 (1)	10.00	M-H	0 / 296	0.07 (4)
U-T	0 / 0	-18.5 -18.5	0.12 (1)	10.00	M-I	-150 / 8	0.16 (1)
T-S	0 / 1350	-18.5 -18.5	0.22 (1)	10.00	A-T	0 / 1225	0.28 (1)
S-R	0 / 1873	-18.5 -18.5	0.43 (1)	10.00	I-L	-2015 / 0	0.73 (1)
R-Q	0 / 1416	-18.5 -18.5	0.38 (4)	10.00			
Q-P	0 / 1976	-18.5 -18.5	0.32 (1)	10.00			
P-O	0 / 1547	-18.5 -18.5	0.33 (1)	10.00			
O-N	0 / 1293	-18.5 -18.5	0.54 (4)	10.00			
N-M	0 / 1293	-18.5 -18.5	0.54 (4)	10.00			
M-L	0 / 1393	-18.5 -18.5	0.54 (4)	10.00			
L-K	0 / 0	-96.5 -96.5	0.16 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

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

CSI: TC=0.66/1.00 (C-D:1), BC=0.54/1.00 (M-O:4), WB=0.74/1.00 (F-P:1), SSI=0.28/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-18023653 CONTINUE ON PAGE 2

A-18023654 CONTINUED ON PAGE 2

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	2.00	2.25
B	TMWW-l	MT20	4.0	4.0	1.75	1.25
C	TMWW-l	MT20	4.0	4.0	2.00	1.25
D	TMWW-l	MT20	4.0	4.0	2.00	1.25
E	TTWW+m	MT20	5.0	6.0	2.25	1.50
F	TMW+w	MT20	2.0	4.0		
G	TMWWW-l	MT20	5.0	6.0		
H	TMWW-l	MT20	4.0	4.0		
I	TTW-m	MT20	4.0	4.0	1.75	2.00
J	TMWW-l	MT20	4.0	6.0	2.00	2.50
K	TMWW-l	MT20	4.0	6.0	1.75	1.50
L	TMVW-l	MT20	5.0	8.0	1.75	3.25
M	BMV1+t	MT20	6.0	9.0	Edge	0.50
N	BMWW+t	MT20	8.0	9.0	4.50	3.75
O	BMWW+t	MT20	4.0	6.0	3.00	1.75
P	BMWWW-l	MT20	5.0	6.0		
Q	BS-l	MT20	4.0	6.0		
R, U, V						
R	BMWW-l	MT20	4.0	4.0		
S	BBW-h	MT20	7.0	8.0		
T	BBWWWW-m	MT20	5.0	8.0	2.75	3.50
W	BBWW-l	MT20	6.0	7.0		
X	BBWW-l	MT20	4.0	6.0	2.00	4.50
Y	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) 6001.3 lbs FACTORED DOWN AT 30-11-14 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 (LC)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED UNBRAC (LC)	FR-TO	LENGTH FR-TO
O-N	0 / 5941	-18.5	-18.5	0.54 (1)	10.00		
N-M	0 / 0	-63.7	-63.7	0.16 (1)	10.00		

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
N	30-11-14	-8001	-8001	---	FRONT	VERT	TOTAL

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
N	30-11-14	-8001	-8001	---	FRONT	VERT	TOTAL

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 (PL)	SECTION (PL)
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

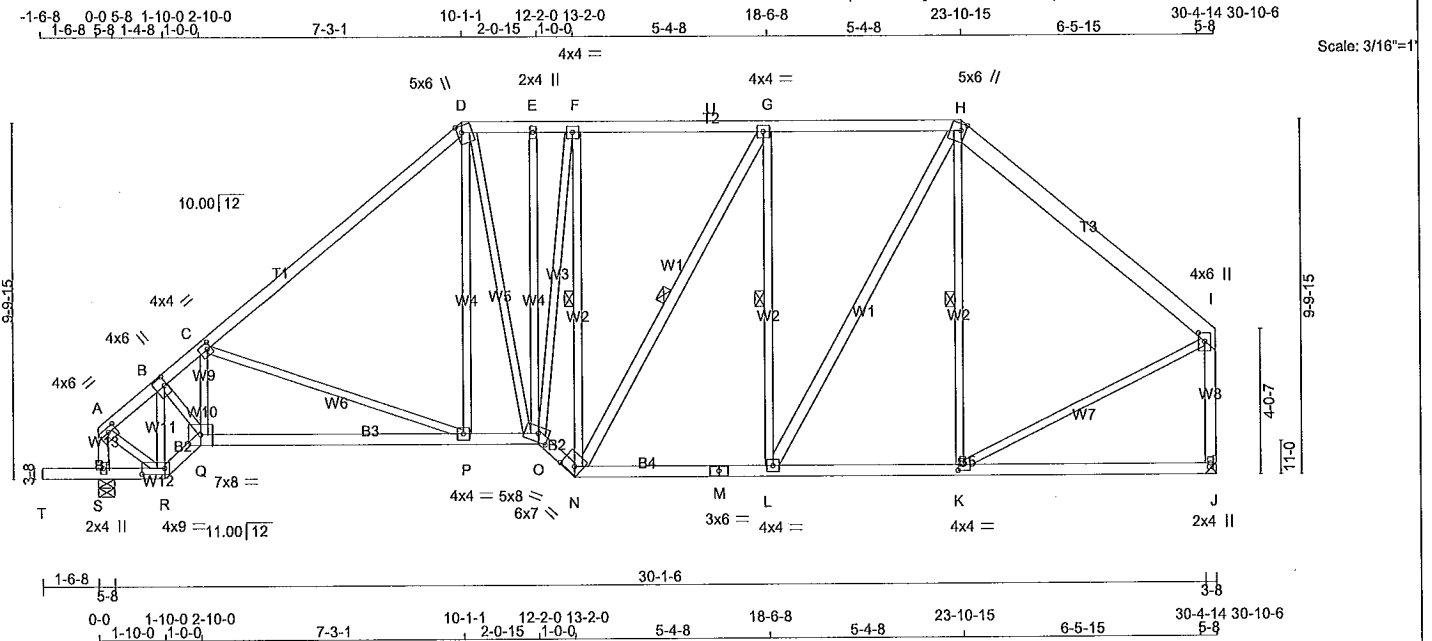
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.90)
JSI METAL= 0.73 (L) (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-18023654(2)



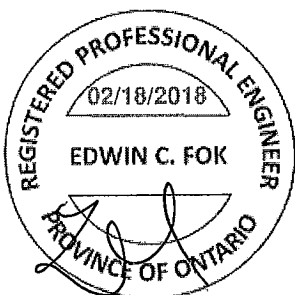
TOTAL WEIGHT = 2 X 184 = 368 lb

LUMBER		N. L. G. A. RULES			
CHORDS	SIZE		LUMBER		DESCR
A - D	2x4	DRY	No.2		SPF
D - H	2x4	DRY	No.2		SPF
H - I	2x6	DRY	No.2		SPF
S - A	2x4	DRY	No.2		SPF
J - I	2x4	DRY	No.2		SPF
T - R	2x4	DRY	No.2		SPF
R - Q	2x4	DRY	No.2		SPF
Q - O	2x4	DRY	No.2		SPF
O - N	2x4	DRY	No.2		SPF
N - M	2x4	DRY	No.2		SPF
M - J	2x4	DRY	No.2		SPF
ALL WEBS EXCEPT	2x3	DRY	No.2		SPF
N - G	2x4	DRY	No.2		SPF
L - H	2x4	DRY	No.2		SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMMWV-l	MT20	4.0	6.0	1.50 2.75
B	TMMWV+l	MT20	4.0	6.0	3.00 1.00
C	TMMWV-l	MT20	4.0	4.0	2.00 1.25
D	TTWVV+m	MT20	5.0	6.0	2.25 1.50
E	TMMW+w	MT20	2.0	4.0	
F	TMMWV-l	MT20	4.0	4.0	
G	TMMWV-l	MT20	4.0	4.0	
H	TTWVV+m	MT20	5.0	6.0	2.25 1.50
I	TTWVV+p	MT20	4.0	6.0	2.75 2.00
J	BMV1+p	MT20	2.0	4.0	
K	BMWVW-l	MT20	4.0	4.0	2.00 1.75
L	BMWVW-l	MT20	4.0	4.0	
M	BS-1	MT20	3.0	6.0	
N	BBWVW-h	MT20	6.0	7.0	2.25 4.50
O	BBWVW-m	MT20	5.0	8.0	2.75 3.50
P	BMWVW-l	MT20	4.0	4.0	
Q	BBWVW-l	MT20	7.0	8.0	
R	BBWVW-l	MT20	4.0	9.0	2.00 7.50
S	BMV1+p	MT20	2.0	4.0	

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



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

BEARINGS						
	FACTORED		MAXIMUM FACTORED		INPUT	REQRD
	GROSS REACTION		GROSS REACTION		BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
JT	1688	0	1688	0	0	5-8
S						2-8
J	1542	0	1542	0	0	
						HANGER BY OTHERS
						MIN. SEAT SIZE: 1-11

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1207	714 / 0	0 / 0	0 / 0	0 / 0	493 / 0	0 / 0
J	1104	646 / 0	0 / 0	0 / 0	0 / 0	458 / 0	0 / 0

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

BRACING

BRACING
FOR SECTION D-H, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)		CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	-1270 / 0	-78.0	-78.0	0.13 (1)	5.58	R-B	-1405 / 0	0.24 (1)	
B-C	-1931 / 0	-78.0	-78.0	0.47 (1)	4.30	B-Q	0 / 1389	0.31 (1)	
C-D	-1640 / 0	-78.0	-78.0	0.62 (1)	4.52	Q-C	-251 / 0	0.04 (1)	
D-E	-1327 / 0	-85.5	-85.5	0.11 (1)	2.00	C-P	-496 / 0	0.81 (1)	
E-F	-1328 / 0	-85.5	-85.5	0.17 (1)	2.00	P-D	0 / 295	0.07 (4)	
F-U	-1253 / 0	-85.5	-85.5	0.30 (1)	2.00	D-O	0 / 398	0.09 (1)	
U-G	-1253 / 0	-85.5	-85.5	0.30 (1)	2.00	O-E	0 / 69	0.02 (1)	
G-H	-1244 / 0	-85.5	-85.5	0.30 (1)	2.00	O-F	0 / 683	0.15 (1)	
H-I	-1178 / 0	-78.0	-78.0	0.25 (1)	6.25	N-F	-1093 / 0	0.71 (1)	
S-A	-1460 / 0	0.0	0.0	0.15 (1)	6.77	N-G	0 / 16	0.00 (1)	
J-I	-1489 / 0	0.0	0.0	0.36 (1)	6.71	L-G	-524 / 0	0.34 (1)	
						L-H	0 / 706	0.11 (1)	
T-S	0 / 0	-96.5	-96.5	0.16 (1)	10.00	K-H	-323 / 0	0.21 (1)	
S-R	0 / 0	-18.5	-18.5	0.12 (1)	10.00	A-R	0 / 1098	0.25 (1)	
R-Q	0 / 1210	-18.5	-18.5	0.20 (1)	10.00	K-I	0 / 1010	0.23 (1)	
Q-P	0 / 1696	-18.5	-18.5	0.40 (1)	10.00				
P-O	0 / 1233	-18.5	-18.5	0.36 (4)	10.00				
O-N	0 / 1683	-18.5	-18.5	0.27 (1)	10.00				
N-M	0 / 1245	-18.5	-18.5	0.26 (1)	10.00				
M-L	0 / 1245	-18.5	-18.5	0.26 (1)	10.00				
L-K	0 / 896	-18.5	-18.5	0.29 (4)	10.00				
K-J	0 / 0	-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
PIGGYBACK TRUSS WITH SLOPES OF 6.00/12
AND -6.00/12 AND RESPECTIVE WALL
HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL
DEAD LOAD OF 3.0 P.S.F.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

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) = $L/999$ (0.01")

CSI: TC=0.62/1.00 (C-D:1), BC=0.40/1.00 (P-Q:1)
 , WB=0.71/1.00 (F-N:1), SSI=0.28/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

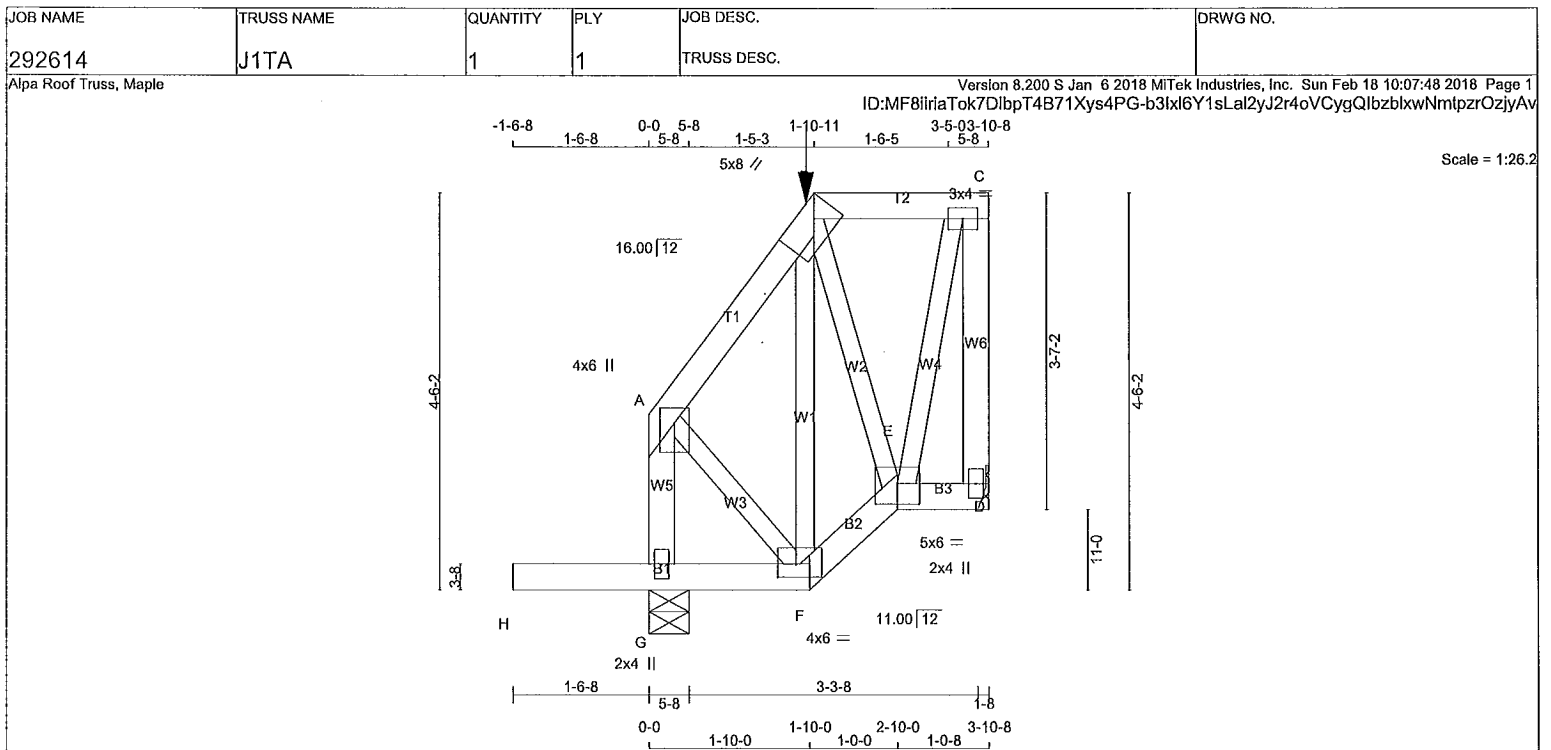
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-18023655

CONTINUED ON PAGE 2

A-18023656



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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW-h	MT20	5.0	8.0	Edge	2.75
C	TMVW-1	MT20	3.0	4.0		
D	BMV1+p	MT20	2.0	4.0		
E	BBVW-1	MT20	5.0	6.0	2.75	3.00
F	BBVW-1	MT20	4.0	6.0	1.75	2.50
G	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 64.3 lbs FACTORED DOWN AT 1-10-11 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG DOWN	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
D	248	0	248	0	0	HANGER BY OTHERS
G	425	0	425	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	177	109 / -13	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
G	304	183 / 0	0 / 0	0 / 0	0 / 0	121 / 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.

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-88 / 0	-78.0	-78.0 0.05 (1)	6.25	F-B	-120 / 0	0.03 (1)
B-C	-40 / 0	-111.3	-111.3 0.08 (1)	6.25	B-E	-51 / 8	0.01 (1)
D-C	-235 / 0	0.0	0.0 0.05 (1)	7.81	E-C	0 / 131	0.03 (1)
G-A	-190 / 0	0.0	0.0 0.02 (1)	7.81	A-F	0 / 69	0.02 (1)
H-G	0 / 0	-96.5	-96.5 0.17 (1)	10.00			
G-F	0 / 0	-26.4	-26.4 0.17 (1)	10.00			
F-E	0 / 73	-26.4	-26.4 0.02 (1)	10.00			
E-D	0 / 0	-26.4	-26.4 0.01 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	1-10-11	-54	-54	—	FRONT	VERT	TOTAL

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 1-10-11
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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

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/555 (0.03")

CSI: TC=0.08/1.00 (B-C:1), BC=0.17/1.00 (F-G:1), WB=0.03/1.00 (B-F:1), SSI=0.13/1.00 (G-H:1)

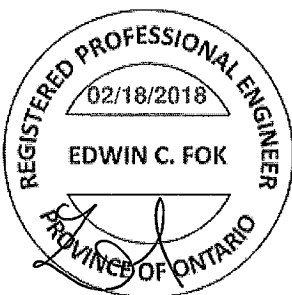
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

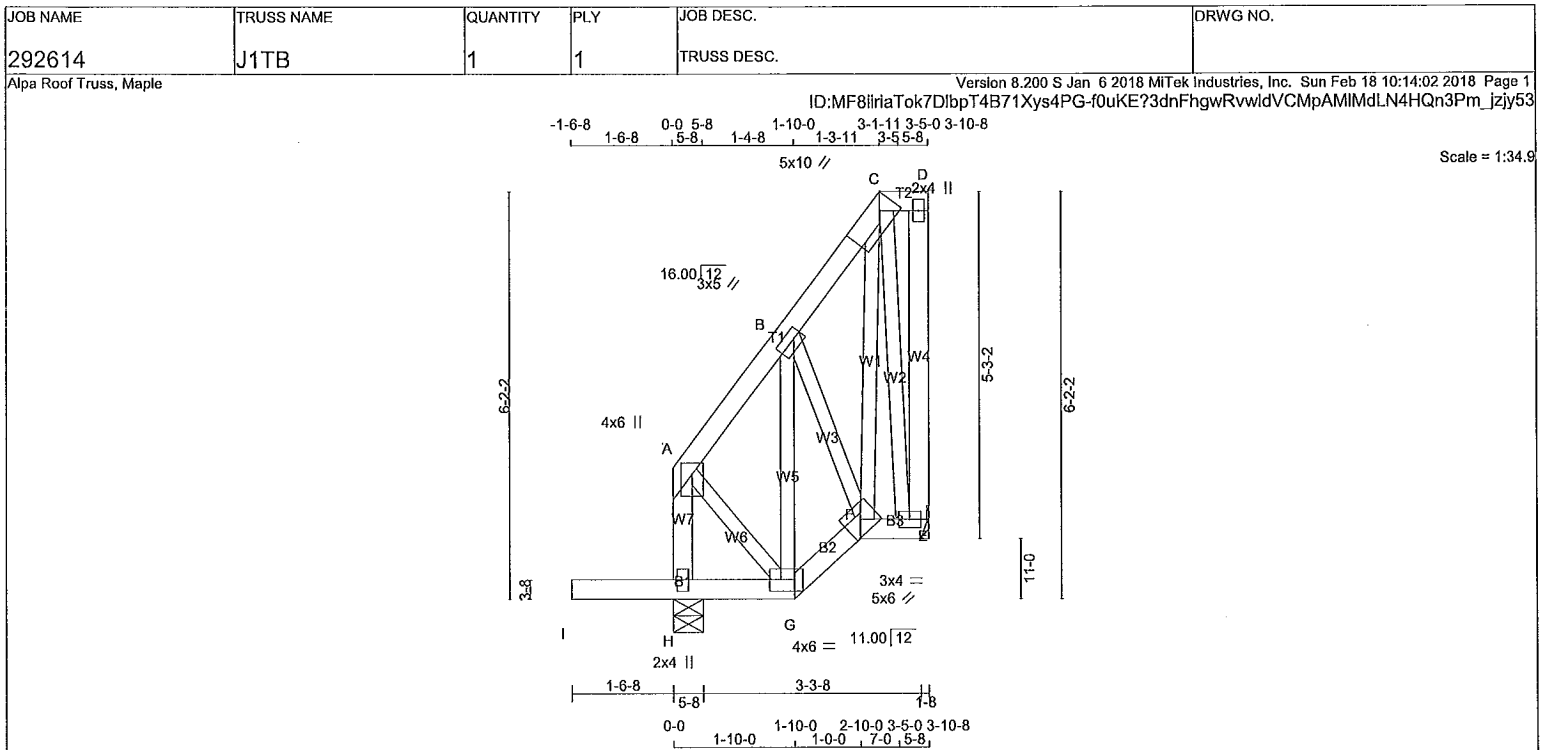
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

A-18023657

CONTINUED ON PAGE 2



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



TOTAL WEIGHT = 36 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
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+p	MT20	4.0	6.0	2.00	2.00
B - TMWW-l	MT20	3.0	5.0	1.50	1.50
C - TTWW-h	MT20	5.0	10.0	Edge	2.75
D - TMV+p	MT20	2.0	4.0		
E - BMVW1-l	MT20	3.0	4.0		
F - BBWW-h	MT20	5.0	6.0		
G - BBWW-l	MT20	4.0	6.0	2.00	4.50
H - BMV1+p	MT20	2.0	4.0		

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

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	IN-SX	IN-SX	IN-SX	IN-SX
E	157	0		157	0	0		HANGER BY OTHERS	
H	365	0		365	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	112	68 / -13	0 / 0	0 / 0	0 / 0	44 / 0	0 / 0
H	260	159 / 0	0 / 0	0 / 0	0 / 0	101 / 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: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-52 / 6	-78.0 -78.0	0.03 (1)	6.25	G-B	-100 / 0	0.03 (1)
B-C	-51 / 0	-78.0 -78.0	0.03 (1)	6.25	B-F	-33 / 13	0.01 (1)
C-D	0 / 0	-78.0 -78.0	0.01 (1)	10.00	F-C	-2 / 82	0.02 (1)
E-D	-29 / 0	0.0 0.0	0.01 (1)	7.81	C-E	-121 / 0	0.05 (1)
H-A	-137 / 0	0.0 0.0	0.02 (1)	7.81	A-G	-4 / 49	0.01 (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	-5 / 47	-18.5 -18.5	0.01 (1)	10.00			
F-E	0 / 18	-18.5 -18.5	0.01 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

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/544 (0.03")

CSI: TC=0.03/1.00 (A-B: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)	(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656	

PLATE PLACEMENT TOL. = 0.250 inches

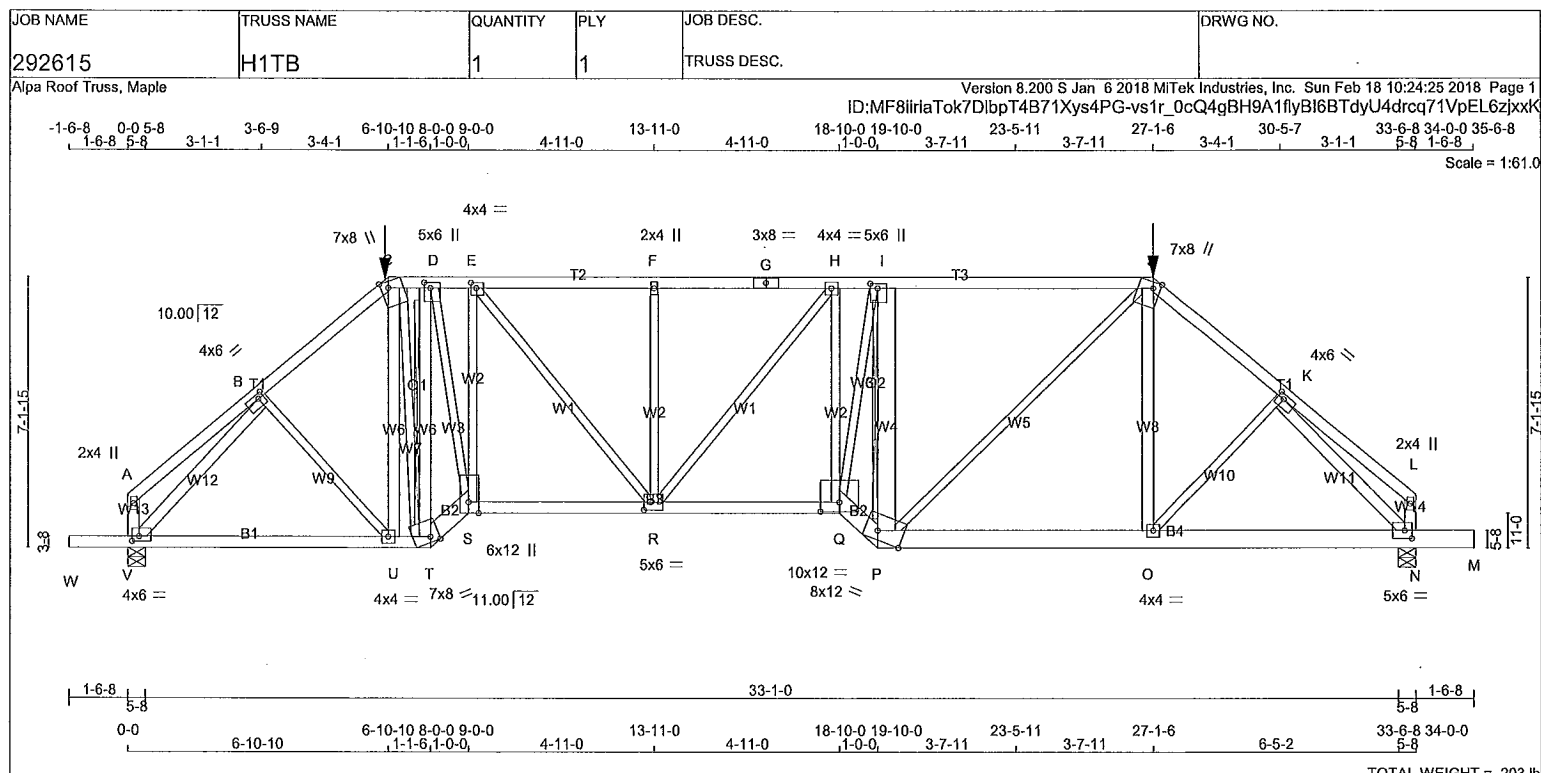
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (E) (INPUT = 0.90)
JSI METAL= 0.04 (G) (INPUT = 1.00)

A-18023658

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





TOTAL WEIGHT = 203 lb

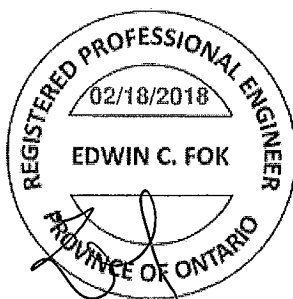
LUMBER		N. L. G. A. RULES		CHORDS		SIZE		LUMBER		DESCR.	
A - C	2x4	DRY	No.2	SPF							
C - G	2x4	DRY	2100F 1.8E	SPF							
G - J	2x4	DRY	2100F 1.8E	SPF							
J - L	2x4	DRY	No.2	SPF							
V - A	2x4	DRY	No.2	SPF							
N - L	2x4	DRY	No.2	SPF							
W - T	2x4	DRY	No.2	SPF							
T - S	2x6	DRY	No.2	SPF							
S - Q	2x4	DRY	No.2	SPF							
Q - P	2x6	DRY	No.2	SPF							
P - M	2x6	DRY	No.2	SPF							
ALL WEBS	2x3	DRY	No.2	SPF							
EXCEPT											
U - C	2x4	DRY	No.2	SPF							
T - D	2x4	DRY	No.2	SPF							
P - I	2x6	DRY	No.2	SPF							
O - J	2x4	DRY	No.2	SPF							
V - B	2x4	DRY	No.2	SPF							
K - N	2x4	DRY	No.2	SPF							

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+P	MT20	2.0	4.0		
B	TMVW+I	MT20	4.0	6.0	1.50	1.75
C	TTVW+M	MT20	7.0	8.0	Edge	2.25
D	TMVW+I	MT20	5.0	6.0	1.75	2.00
E	TMVW+I	MT20	4.0	4.0	1.75	1.75
F	TMVW+M	MT20	2.0	4.0		
G	TS+I	MT20	3.0	8.0		
H	TMVW+I	MT20	4.0	4.0		
I	TMVW+M	MT20	5.0	6.0	1.50	2.25
J	TTVW+M	MT20	7.0	8.0	Edge	2.25
K	TMVW+I	MT20	4.0	6.0	1.50	2.00
L	TMV+P	MT20	2.0	4.0		
N	BMVW+I	MT20	5.0	6.0	2.50	2.25
O	BMVW+I	MT20	4.0	4.0		
P	BBVW+M	MT20	8.0	12.0	Edge	8.00
Q	BBVW+I	MT20	10.0	12.0	3.00	6.00

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



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

BEARINGS

JT	FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
	GROSS REACTION		GROSS REACTION		BRG		BRG	
V	2523	0	2523	0	5-8		2-11	
N	2521	0	2521	0	5-8		2-11	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
V	1789	1094 / 0	0 / 0	0 / 0	0 / 0	705 / 0	0 / 0
N	1798	1093 / 0	0 / 0	0 / 0	0 / 0	705 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.53 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-T, I-P

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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 17	-78.0 -78.0	0.14 (1)	10.00	B-U	0 / 210	0.05 (1)
B-C	-2692 / 0	-78.0 -78.0	0.26 (1)	3.98	U-C	-26 / 161	0.04 (4)
C-D	-2264 / 0	-114.5 -114.5	0.04 (1)	5.41	C-T	0 / 1329	0.33 (1)
D-E	-2813 / 0	-114.5 -114.5	0.10 (1)	4.91	T-D	-3394 / 0	0.99 (1)
E-F	-3502 / 0	-78.0 -78.0	0.32 (1)	4.27	D-S	0 / 3290	0.81 (1)
F-G	-3502 / 0	-78.0 -78.0	0.32 (1)	4.27	S-E	-956 / 0	0.61 (1)
G-H	-3502 / 0	-78.0 -78.0	0.32 (1)	4.27	E-R	0 / 1069	0.26 (1)
H-I	-3556 / 0	-114.5 -114.5	0.66 (1)	3.53	R-F	-495 / 0	0.31 (1)
I-J	-3152 / 0	-114.5 -114.5	0.83 (1)	3.76	R-H	-76 / 0	0.09 (1)
J-K	-2719 / 0	-78.0 -78.0	0.27 (1)	3.96	Q-H	0 / 346	0.09 (1)
K-L	0 / 17	-78.0 -78.0	0.14 (1)	10.00	Q-I	0 / 2555	0.63 (1)
V-A	-107 / 0	0.0 0.0	0.01 (1)	7.81	P-I	-3552 / 0	0.74 (1)
N-L	-106 / 0	0.0 0.0	0.01 (1)	7.81	O-J	0 / 182	0.05 (4)
					Q-K	0 / 182	0.05 (1)
W-V	0 / 0	-96.5 -96.5	0.17 (1)	10.00	V-B	-2907 / 0	0.94 (1)
U-U	0 / 1906	-27.2 -27.2	0.58 (1)	10.00	K-N	-2930 / 0	0.90 (1)
U-T	0 / 2041	-27.2 -27.2	0.61 (1)	10.00	P-J	0 / 1472	0.36 (1)
T-S	0 / 3127	-27.2 -27.2	0.41 (1)	10.00			
S-R	0 / 2830	-63.7 -63.7	0.76 (1)	10.00			
R-Q	0 / 3549	-63.7 -63.7	0.89 (1)	10.00			
Q-P	0 / 4029	-27.2 -27.2	0.53 (1)	10.00			
P-O	0 / 2071	-27.2 -27.2	0.38 (1)	10.00			
O-N	0 / 1945	-27.2 -27.2	0.36 (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
C	6-10-10	-213	-213	---	FRONT	VERT	TOTAL
J	27-1-6	-213	-213	---	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 = 6-10-10
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-0-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGlrder
START DISTANCE = 9-0-0
START SPAN CARRIED = 3-10-8
END DISTANCE = 18-10-0
END SPAN CARRIED = 3-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-10-10
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 15-2-0 OF SPAN MEASURED FROM THE RIGHT.

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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL) = L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/904 (0.45")

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")

A-18023659

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292615	H1TB	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 10:24:25 2018 Page 2

ID:MF8iiriaTok7DlbpT4B71Xys4PG-vs1r
0cQ4gBH9A1flyBI6BTdyU4drcq71VpEL6zpxxK

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
R	BMWWW-t	MT20	5.0	6.0	2.50	2.00
S	BBWW+p	MT20	6.0	12.0	Edge	3.25
T	BBWW-m	MT20	7.0	8.0	Edge	2.75
U	BMWW-t	MT20	4.0	4.0		
V	BMVW1-t	MT20	4.0	6.0	1.50	2.25

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) 212.5 lbs FACTORED DOWN AT 6-10-10, AND 212.5 lbs FACTORED DOWN AT 27-1-6 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

CSI: TC=0.83/1.00 (I-J:1) , BC=0.89/1.00 (Q-R:1) , WB=0.99/1.00 (D-T:1) , SSI=0.49/1.00 (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 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)	(PSI)	(PLI)	(PSI)	(PLI)
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.73 (K) (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

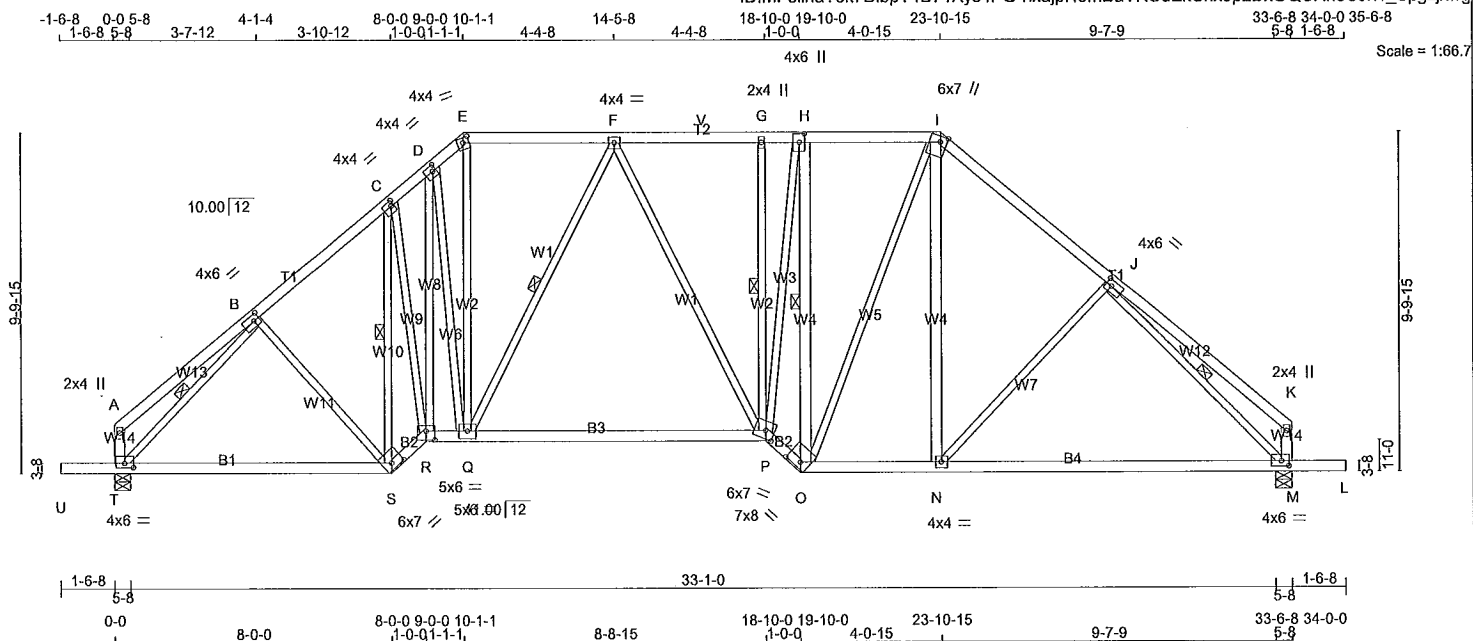
A.18023659(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292615	H2TB	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 10:25:07 2018 Page 1

ID:MF8ilriaTok7DlbpT4B71Xys4PG-hxajpN6mBaTKCdEkCnx9p2DxOQUXheCJh1_Spgzjxwg



TOTAL WEIGHT = 5 X 201 = 1007 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF	
E - I	2x4	DRY	No.2	SPF	
I - K	2x4	DRY	No.2	SPF	
T - A	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
U - S	2x4	DRY	No.2	SPF	
S - R	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	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
O - H	2x4	DRY	No.2	SPF	
N - I	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.00
C	TMWW-t	MT20	4.0	4.0	1.75	1.00
D	TMWW-t	MT20	4.0	4.0	2.00	1.25
E	TTW-m	MT20	4.0	4.0	1.75	2.00
F	TMWW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TMWW-t	MT20	4.0	6.0	3.00	1.75
I	TTWW-m	MT20	6.0	7.0	2.00	2.25
J	TMWW-t	MT20	4.0	6.0	2.00	2.00
K	TMV+p	MT20	2.0	4.0		
M	BMVVV-t	MT20	4.0	6.0	1.75	2.50
N	BMWW-t	MT20	4.0	4.0		
O	BBWW-h	MT20	7.0	8.0	2.00	5.00
P	BBWWV-m	MT20	6.0	7.0	2.75	3.00
Q	BBWWV-t	MT20	5.0	6.0		
R	BBWW-t	MT20	5.0	6.0	3.00	3.00
S	BBWW-h	MT20	6.0	7.0	2.00	4.00
T	BMVVV-t	MT20	4.0	6.0	1.50	3.00

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP
T	1841	0	0	5-8
M	1841	0	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE
T	1317	778 / 0	0 / 0	0 / 0
M	1317	778 / 0	0 / 0	0 / 0

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

BRACING

FOR SECTION E-I, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.57 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-S, F-Q, G-P, H-O, B-T, J-M.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC2)	MAX. FACTORED VERT. LOAD (LC3)	MAX. FACTORED VERT. LOAD (LC4)	MAX. FACTORED VERT. LOAD (LC5)	MAX. FACTORED VERT. LOAD (LC6)	MAX. FACTORED VERT. LOAD (LC7)	MAX. FACTORED VERT. LOAD (LC8)	MAX. FACTORED VERT. LOAD (LC9)	MAX. FACTORED VERT. LOAD (LC10)
FR-TO													
A-B	0 / 20	-78.0	-78.0	0.17 (1)	10.00	B-S	0 / 55	0.02 (4)					
B-C	-1779 / 0	-78.0	-78.0	0.18 (1)	4.87	S-C	-1179 / 0	0.48 (1)					
C-D	-2033 / 0	-78.0	-78.0	0.20 (1)	4.57	C-R	0 / 707	0.16 (1)					
D-E	-1762 / 0	-78.0	-78.0	0.19 (1)	4.85	R-D	0 / 475	0.11 (1)					
E-F	-1439 / 0	-85.5	-85.5	0.22 (1)	2.00	D-Q	-180 / 16	0.24 (1)					
F-V	-1685 / 0	-85.5	-85.5	0.23 (1)	2.00	Q-E	0 / 858	0.19 (1)					
V-G	-1685 / 0	-85.5	-85.5	0.23 (1)	2.00	Q-F	-526 / 0	0.35 (1)					
G-H	-1684 / 0	-85.5	-85.5	0.18 (1)	2.00	F-P	0 / 33	0.01 (4)					
H-I	-1514 / 0	-85.5	-85.5	0.18 (1)	2.00	P-G	-76 / 0	0.04 (1)					
I-J	-1717 / 0	-78.0	-78.0	0.30 (1)	4.80	P-H	0 / 1503	0.34 (1)					
J-K	0 / 29	-78.0	-78.0	0.32 (1)	10.00	O-H	-1857 / 0	0.86 (1)					
T-A	-123 / 0	0.0	0.0	0.01 (1)	7.81	O-I	0 / 548	0.12 (1)					
M-K	-155 / 0	0.0	0.0	0.02 (1)	7.81	N-I	0 / 293	0.05 (4)					
						N-J	-150 / 9	0.16 (1)					
U-T	0 / 0	-96.5	-96.5	0.16 (1)	10.00	T-B	-2020 / 0	0.51 (1)					
T-S	0 / 1354	-18.5	-18.5	0.48 (4)	10.00	J-M	-2020 / 0	0.74 (1)					
S-R	0 / 1862	-18.5	-18.5	0.30 (1)	10.00								
R-Q	0 / 1447	-18.5	-18.5	0.51 (4)	10.00								
Q-P	0 / 1673	-18.5	-18.5	0.53 (4)	10.00								
P-O	0 / 2016	-18.5	-18.5	0.33 (1)	10.00								
O-N	0 / 1297	-18.5	-18.5	0.56 (4)	10.00								
N-M	0 / 1396	-18.5	-18.5	0.56 (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 PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.13")
CALCULATED VERT. DEFL.(LL)= L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
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=0.32/1.00 (J-K:1), BC=0.56/1.00 (N-O:4), WB=0.86/1.00 (H-O:1), SSI=0.19/1.00 (Q-R:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (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 (B) (INPUT = 0.90)
JSI METAL= 0.50 (B) (INPUT = 1.00)

A-18023660

CONTINUED ON PAGE 2



GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	5.0	6.0	2.00	2.25
B, C, D						
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
E	TTVW+m	MT20	5.0	6.0	2.25	1.50
F	TMVW+w	MT20	2.0	4.0		
G	TMVW-t	MT20	4.0	4.0		
H	TMVW-t	MT20	4.0	4.0	1.75	1.75
I	TTVW+m	MT20	5.0	6.0	2.25	1.50
J	TMVW-t	MT20	4.0	6.0	2.00	2.50
K	TMVW-t	MT20	4.0	6.0	1.75	1.50
L	TMVW-t	MT20	5.0	8.0	1.75	3.25
M	BMV1+t	MT20	6.0	9.0	Edge	0.50
N	BMVW+t	MT20	8.0	9.0	4.50	3.75
O	BMVW-t	MT20	4.0	6.0	3.00	1.75
P	BMVW-t	MT20	4.0	6.0		
Q	BBVW-h	MT20	7.0	8.0	5.25	5.75
R	BBVW-t	MT20	6.0	7.0		
S	BMVWVW-t	MT20	5.0	6.0		
T	BMVW-t	MT20	4.0	4.0		
U	BBVW-t	MT20	5.0	6.0	3.00	3.00
V	BBVW-h	MT20	6.0	7.0	2.25	4.50
W	BMVW-t	MT20	4.0	4.0	2.00	1.50
X	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) 6001.3 lbs. FACTORED DOWN AT 30-11-14 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)	MAX
FR-TO		FROM	TO	CS1 (LC)	UNBRAC	LENGTH	FR-TO
N-M	0/0	-63.7	-63.7	0.16 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)				TYPE		
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.
N	30-11-14	-6001	-6001	—	FRONT	VERT

AUTOSOLVE HEELS OFF

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

NAIL VALUES

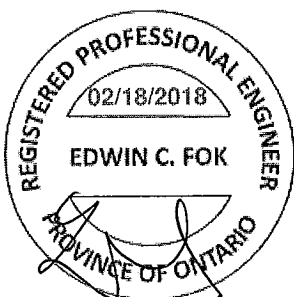
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

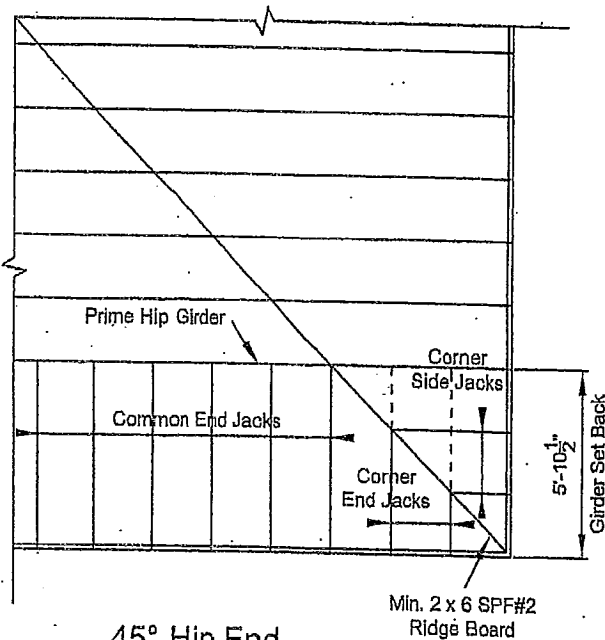
JSI GRIP= 0.88 (P) (INPUT = 0.90)
JSI METAL= 0.73 (L) (INPUT = 1.00)

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-1802366 1(2)

STRACON ENGINEERING INC.



45° Hip End

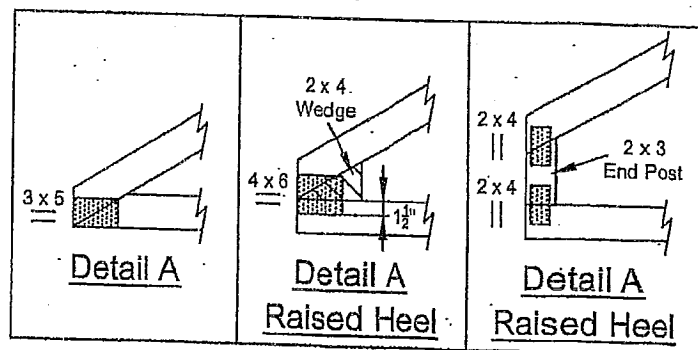
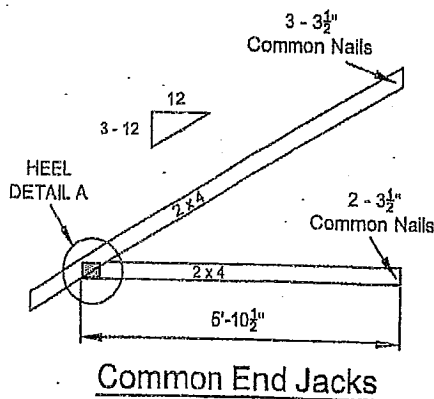
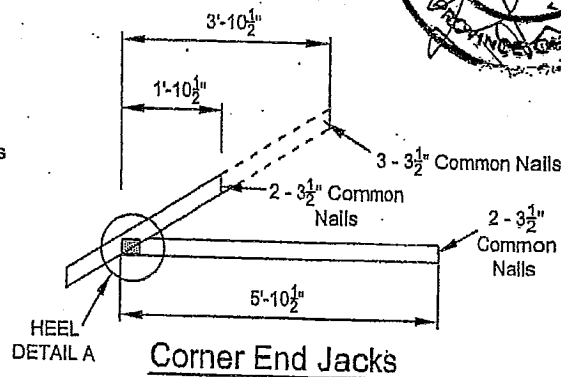
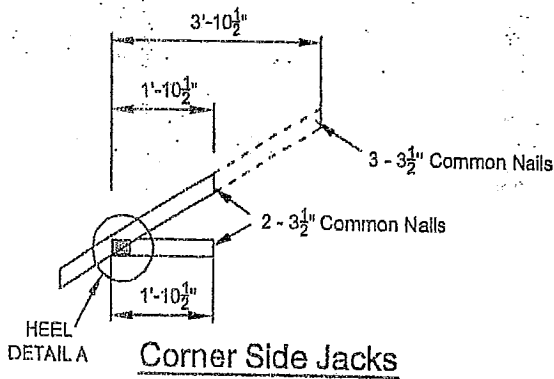
LUMBER SPECIFICATION

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

LUS – Double Shear Joist Hangers

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

Material: 18 gauge

Finish: G90 galvanized

Design:

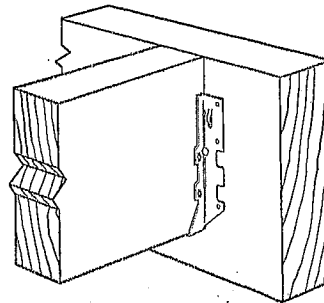
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

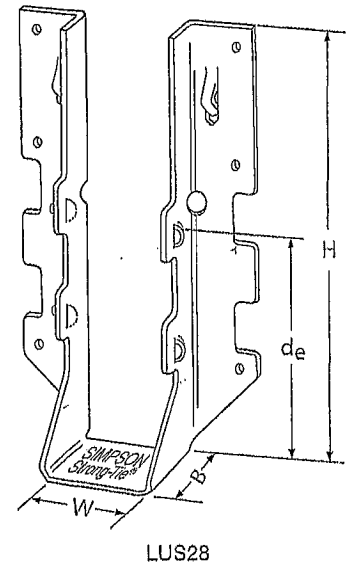
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



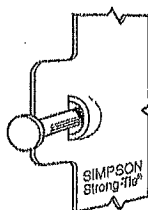
Typical LUS
Installation



LUS28

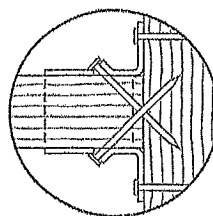
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _b =1.15)	Normal (K _b =1.00)	Uplift (K _b =1.15)	Normal (K _b =1.00)
LUS24	18	1½	3½	1½	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	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	3¾	(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	6¾	2	3¾	(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	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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

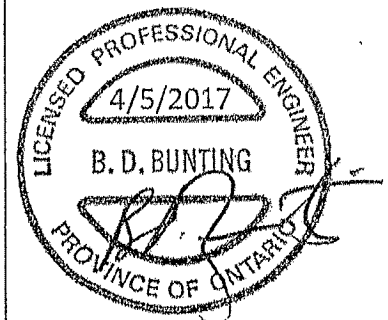


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,560



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

This technical bulletin is effective July 30, 2019, and reflects information available as of March 31, 2017.

This information is updated periodically and should not be relied upon after June 30, 2019.
Contact Simpson Strong-Tie for current information and limited warranty of the Strong-Tie Company.

© 2017 Simpson Strong-Tie Company Inc.

T-SPEC/LUS17-03/17 exp. 6/19

(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

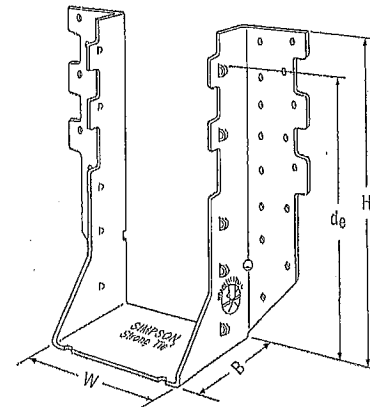
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

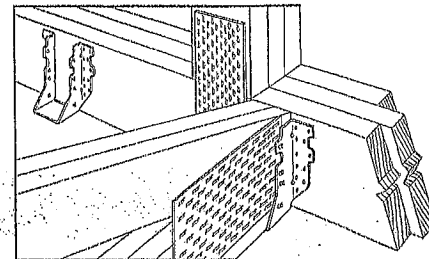
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or naler applications

Options:

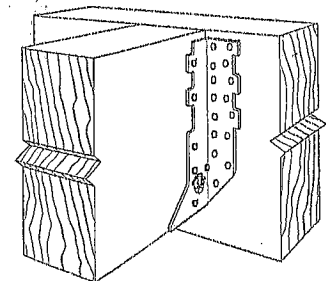
- See current catalogue for options



HHUS410



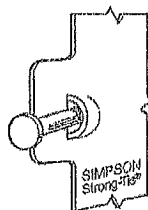
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

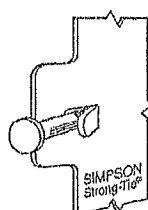
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
HHUS26-2	14	3 1/8	5 1/8	3	3 1/8	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/8	7 1/2	3	6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

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

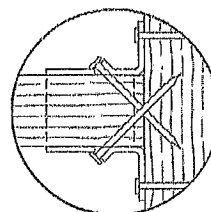


Double Shear Nailing prevents tabs breaking off (available on some models).

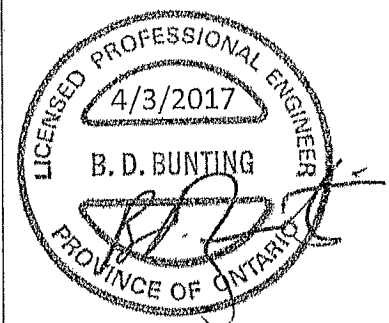
U.S. Patent 5,603,680



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



Double Shear Nailing Top View.



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

© 2017 Simpson Strong-Tie Company Inc.

T-SPECHHUS17 3/17 exp. 6/19

(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:

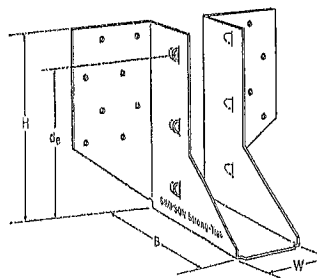
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

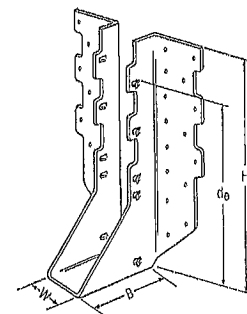
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

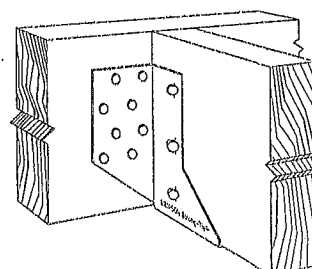
- See current catalogue for options



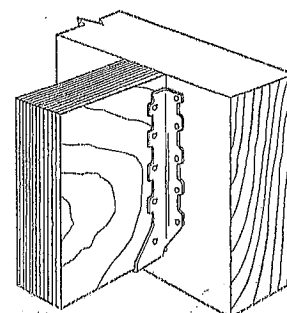
LJS26DS



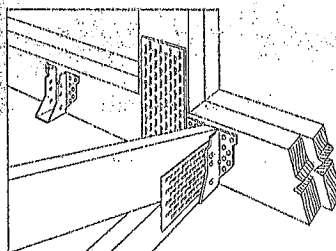
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



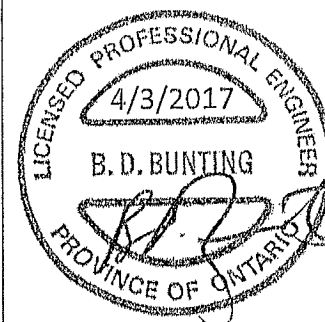
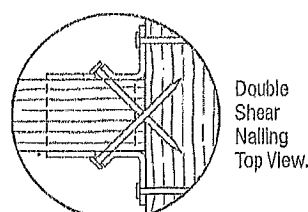
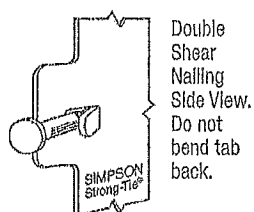
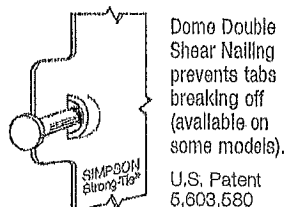
Typical HUS
Installation



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)
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	7⅝	3	6⅝	(22) 16d	(8) 16d		3605	5365	2675	4345
HUS210	16	1⅞	9⅝	3	7⅝	(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.



**LIMIT
STATES
DESIGN**

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

© 2017 Simpson Strong-Tie Company Inc.

T-SPECHUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com

HGUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie®

All HGUS 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: 12 gauge

Finish: G90 galvanized

Design:

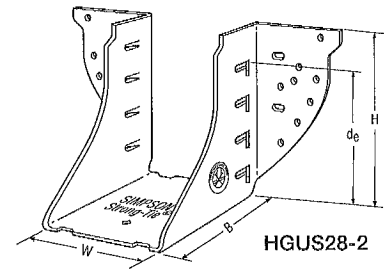
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%.
No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

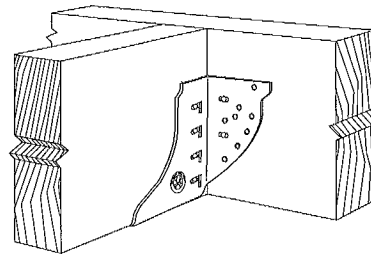
- Use all specified fasteners
- Nails: 16d = 0.162" dia x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

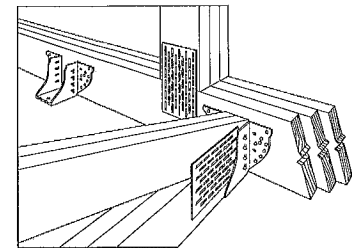
- See current catalogue for options



HGUS28-2



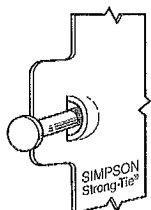
Typical HGUS
Installation



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

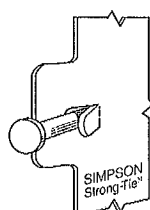
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
HGUS26	12	1½	5½	5	4⅝ ₃₂	(20) 16d	(8) 16d	2685	6625	2685	5700
HGUS26-2	12	3⅝	5⅞	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-3	12	4⅝	5½	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS26-4	12	6⅝	5⅞	4	4⅝	(20) 16d	(8) 16d	4385	8950	3100	6355
HGUS28	12	1½	7½	5	6⅝	(36) 16d	(12) 16d	3310	7675	3100	6900
HGUS28-2	12	3⅝	7⅞	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-3	12	4⅝	7¼	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS28-4	12	6⅝	7⅞	4	6⅝	(36) 16d	(12) 16d	6070	12980	4310	9215
HGUS210-2	12	3⅝	9⅝	4	8⅝	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-3	12	4⅝	9¼	4	8⅝	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS210-4	12	6⅝	9⅝	4	8⅝	(46) 16d	(16) 16d	6840	14645	4855	10400
HGUS212-4	12	6⅝	10⅝	4	10⅝	(56) 16d	(20) 16d	7640	14995	5425	10645
HGUS214-4	12	6⅝	12⅝	4	11⅝	(66) 16d	(22) 16d	10130	16400	7195	11645

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

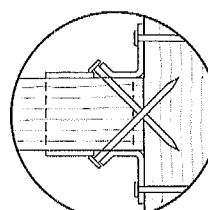


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



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

© 2017 Simpson Strong-Tie Company Inc.

T-SPECHGUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com