

ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS SHEET OVER TRUSSES TO BE 2X10 SP#42, AS O.C. WITH 1/2" MIN. OVERLAP. TRUSSES UNDERNENTLY AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

46-06-00

ALPA-BARRIE

3-04-00
7-01-00

8/12

H1 H2 H3 H4 H5 H6

H10(9)
H11P
H12P(3)

H9 H8 H7

16/12

3.5/12

T.O.P. @ 9-03-00
RSD HEEL - 0" DROP
PITCH AS PER COMMENTS

31-10-00
20-03-06

J1(11)

ca. 5100g

ca. 5100g

ca. 5100g

FLAT ROOF

2 - 2x10 SP#42
BM BY BUILDER
VAULT CLG
@ 8/12

J1S(4)
G1(10)

J1 J1 J1 J1 J1

13-00-00

5-03-00

8-04-00

5-03-00

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

7-02-00

14-09-00

51-10-00

H13S(3)
H13
H13T
H13T

HANGERS
LUS24
X HHUS26-2

A-18023083-A-18023086
A-18023088-A-18023092
A-18023106-A-18023111

CONVENTIONAL
FRAMING BY
OTHERS

SUMNERDALE

Model / Elevator

4001 REV1

/ B

STO 02 OCT LAUNDRY

Builder / Location
GOLD PARK HOMES / VAUGHAN

Project
PINE VALLEY

Date: 1/16/2018 Designer: AMANDA

Job Track: 45147

Layout ID: 292572

Plan Log: 95914



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

ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF RAFTERS THAT CROSS MEET WITH A VENT POST TO THE TRUSS JOINTS SHALL BE SET BACK 1" TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

46-06-00

ALPHA-BARRIE

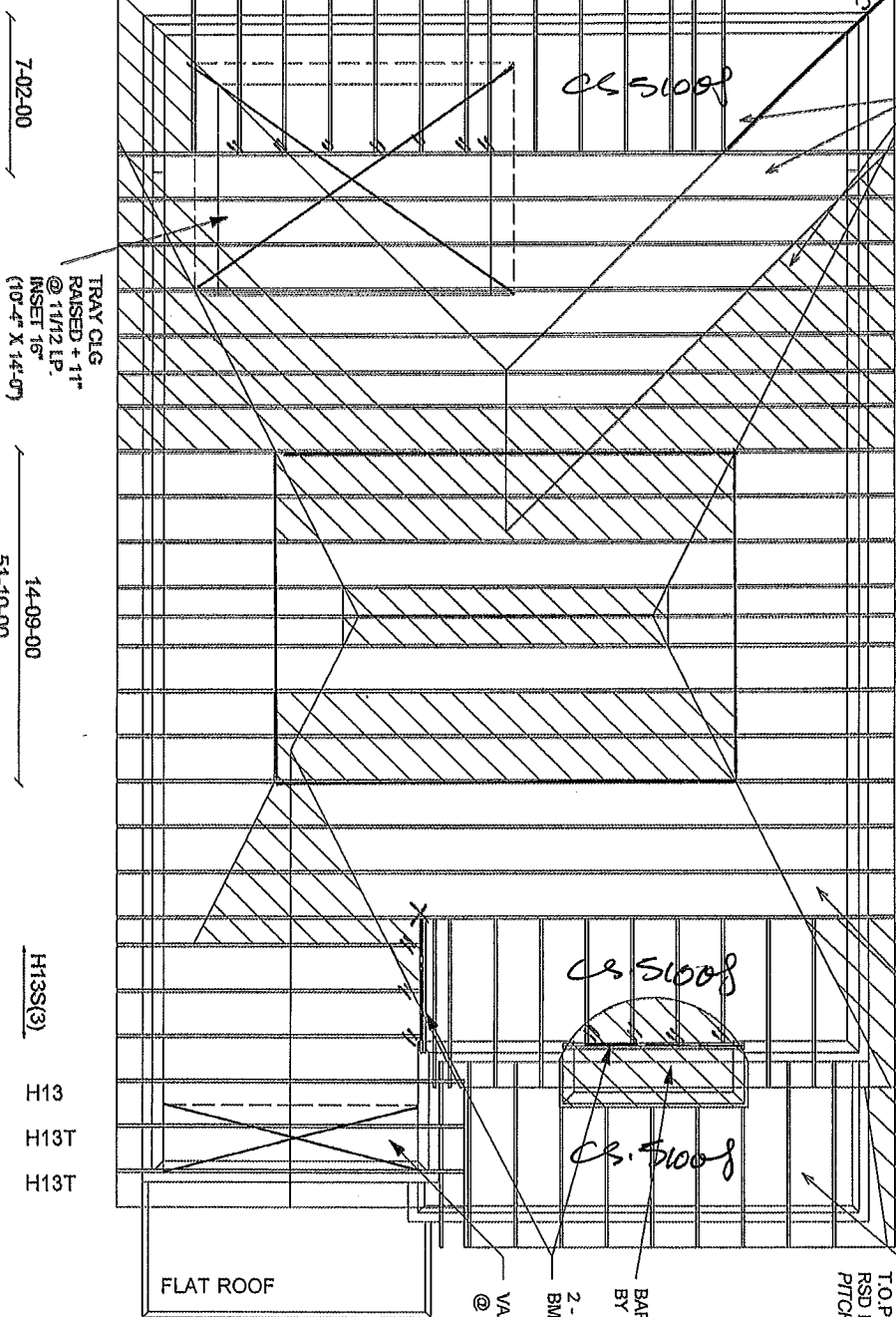
3-04-00
7-01-00
2-00-00

8/12 H1T H2T H3T H4T H5 H6 H6 H10(9) H11P H12P(3) H11P H9 H8 H7 16/12 3.5/12

T.O.P. @ 9-03-00
RSD HEEL - 0" DROP
PITCH AS PER COMMENTS

31-10-00
20-03-06
J1T(5) J1(6)
J1TB J1TA J1

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



HANGERS
LUS24
XFHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS



Job Track 45147
Layout ID: 292573
Plan Log: 95914

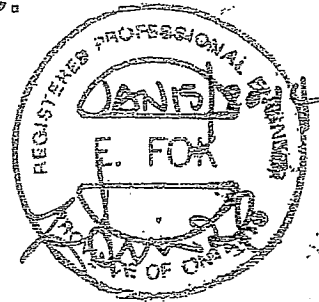
Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 1/16/2018 Designer: AMANDA

Model / Elevator: 4001 REV1 / B OPT TRAY
Model / Elevator: 4001 REV1 / B OPT TRAY
Model / Elevator: 4001 REV1 / B OPT TRAY

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

Stracon Engineering Inc.

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



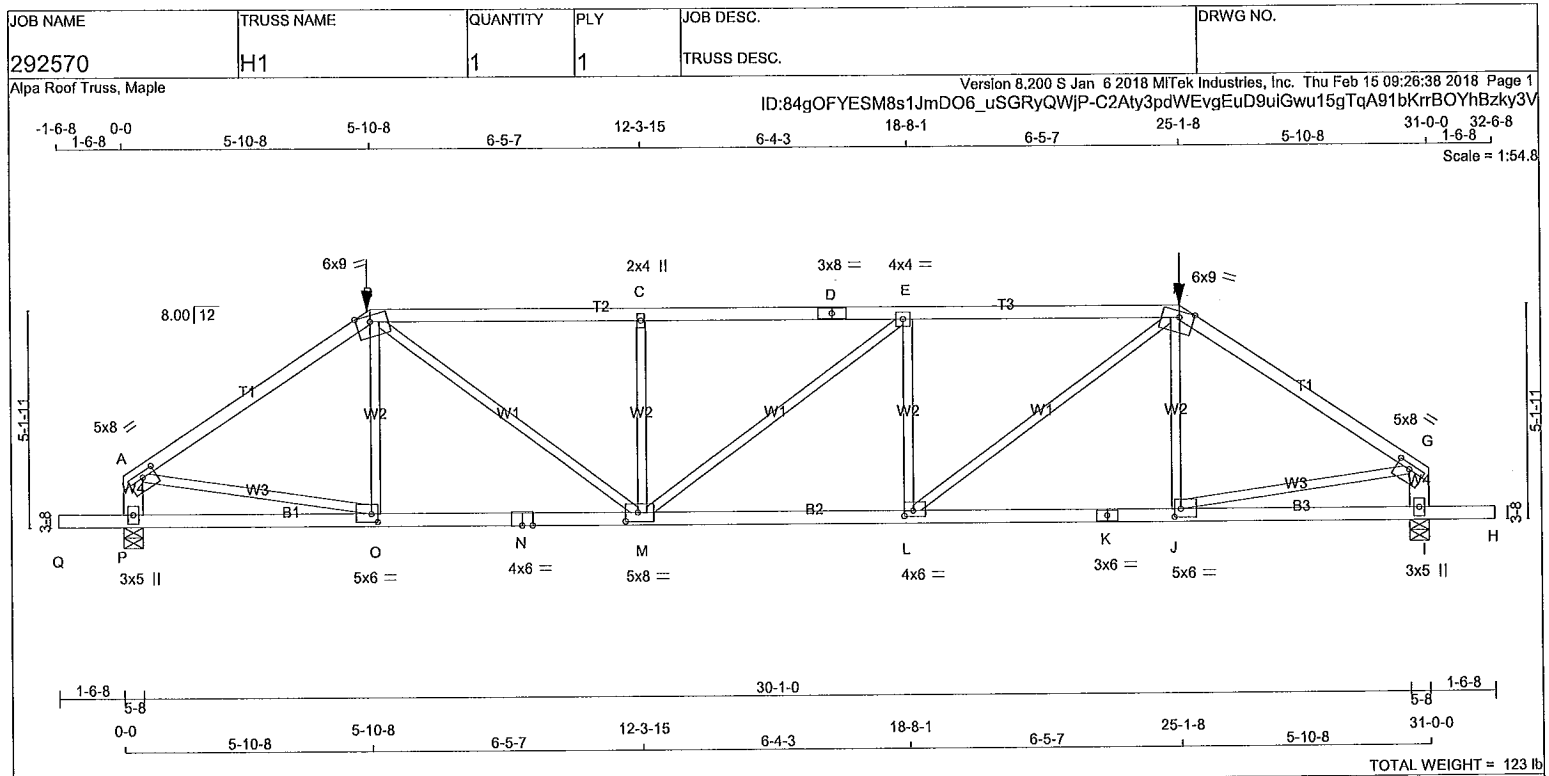
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	1.50	3.75
B	TTWW-m	MT20	6.0	9.0	1.75	4.00
C	TMW-w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMW-w	MT20	4.0	4.0		
F	TTWW-m	MT20	6.0	9.0	1.75	4.00
G	TMVW-t	MT20	5.0	8.0	1.50	3.75
I	BMV1+p	MT20	3.0	5.0		
J	BMW-w	MT20	5.0	6.0	2.25	1.75
K	BS-t	MT20	3.0	6.0		
L	BMW-w	MT20	4.0	6.0	1.50	2.50
M	BMWW-w	MT20	5.0	8.0	2.50	3.50
N	BS-t	MT20	4.0	6.0		
O	BMW-w	MT20	5.0	6.0	2.25	1.75
P	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD IN-SX
	VERT	HORZ	DOWN	HORZ		
P	2983	0	2983	0	5-8	3-15
I	2983	0	2983	0	5-8	3-15

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.98 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO				FR-TO			
A-B	-3695 / 0	-78.0	-78.0	0.74 (1)	3.56	O-B	-211 / 102	0.09 (1)	
B-C	-4787 / 0	-153.5	-153.5	0.97 (1)	2.99	B-M	0 / 2150	0.53 (1)	
C-D	-4787 / 0	-153.5	-153.5	0.96 (1)	2.98	M-C	-1064 / 0	0.43 (1)	
D-E	-4787 / 0	-153.5	-153.5	0.96 (1)	2.98	M-E	-1 / 0	0.00 (1)	
E-F	-4787 / 0	-153.5	-153.5	0.97 (1)	2.98	L-E	-1064 / 0	0.43 (1)	
F-G	-3695 / 0	-78.0	-78.0	0.74 (1)	3.56	L-F	0 / 2151	0.53 (1)	
P-A	-2747 / 0	0.0	0.0	0.20 (1)	6.26	J-F	-212 / 103	0.09 (1)	
I-G	-2747 / 0	0.0	0.0	0.20 (1)	6.26	A-O	0 / 3105	0.77 (1)	
						J-G	0 / 3105	0.77 (1)	
Q-P	0 / 0	-96.5	-96.5	0.17 (1)	10.00				
P-O	0 / 0	-36.4	-36.4	0.36 (4)	10.00				
O-N	0 / 3066	-36.4	-36.4	0.74 (1)	10.00				
N-M	0 / 3066	-36.4	-36.4	0.74 (1)	10.00				
M-L	0 / 4788	-36.4	-36.4	0.99 (1)	10.00				
L-K	0 / 3066	-36.4	-36.4	0.74 (1)	10.00				
K-J	0 / 3066	-36.4	-36.4	0.74 (1)	10.00				
J-I	0 / 0	-36.4	-36.4	0.36 (4)	10.00				
I-H	0 / 0	-96.5	-96.5	0.17 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	5-10-8	-334	-334	---	FRONT	VERT	TOTAL
F	25-1-8	-334	-334	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 5-10-8
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/872 (0.43")

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

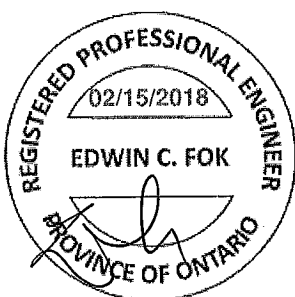
AUTOSOLVE HEELS OFF

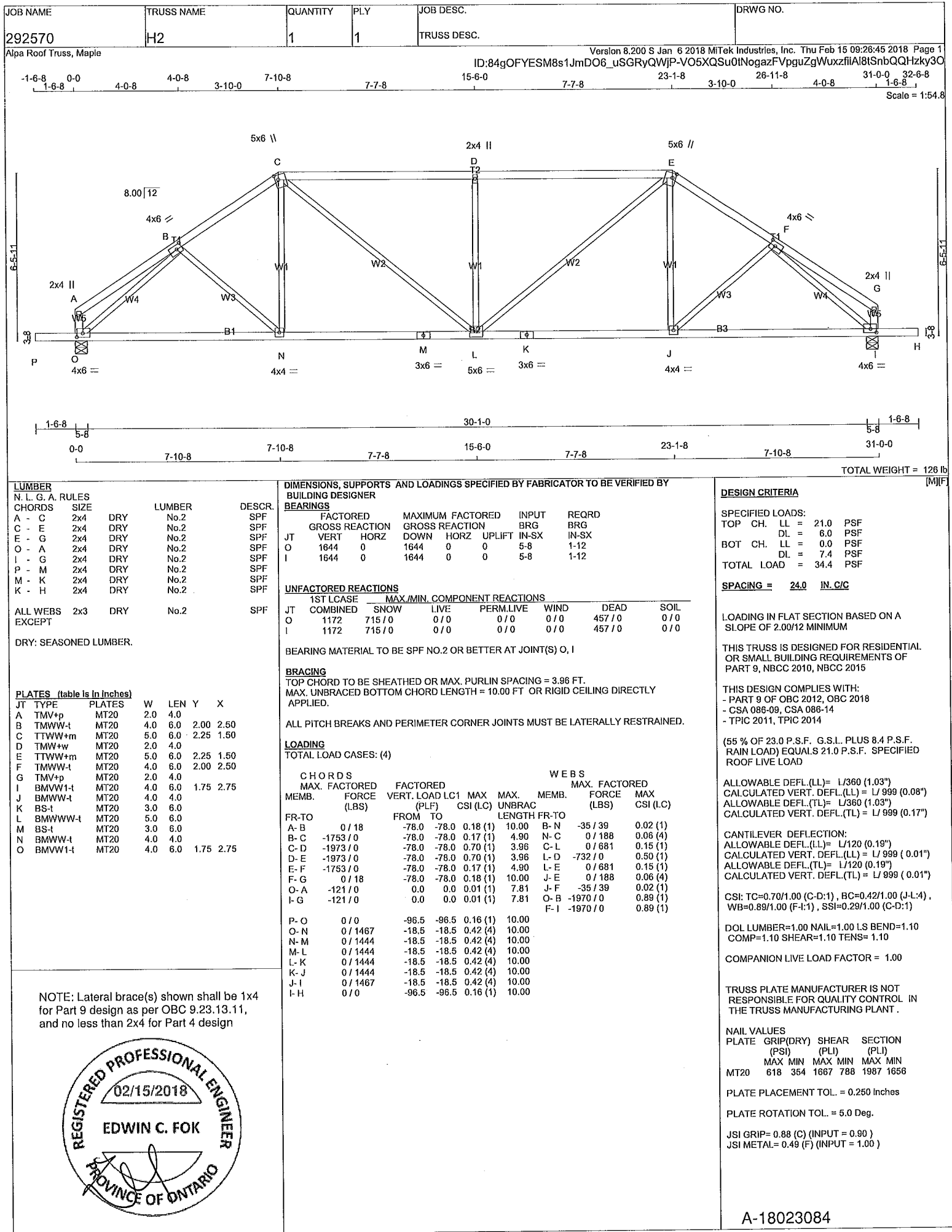
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

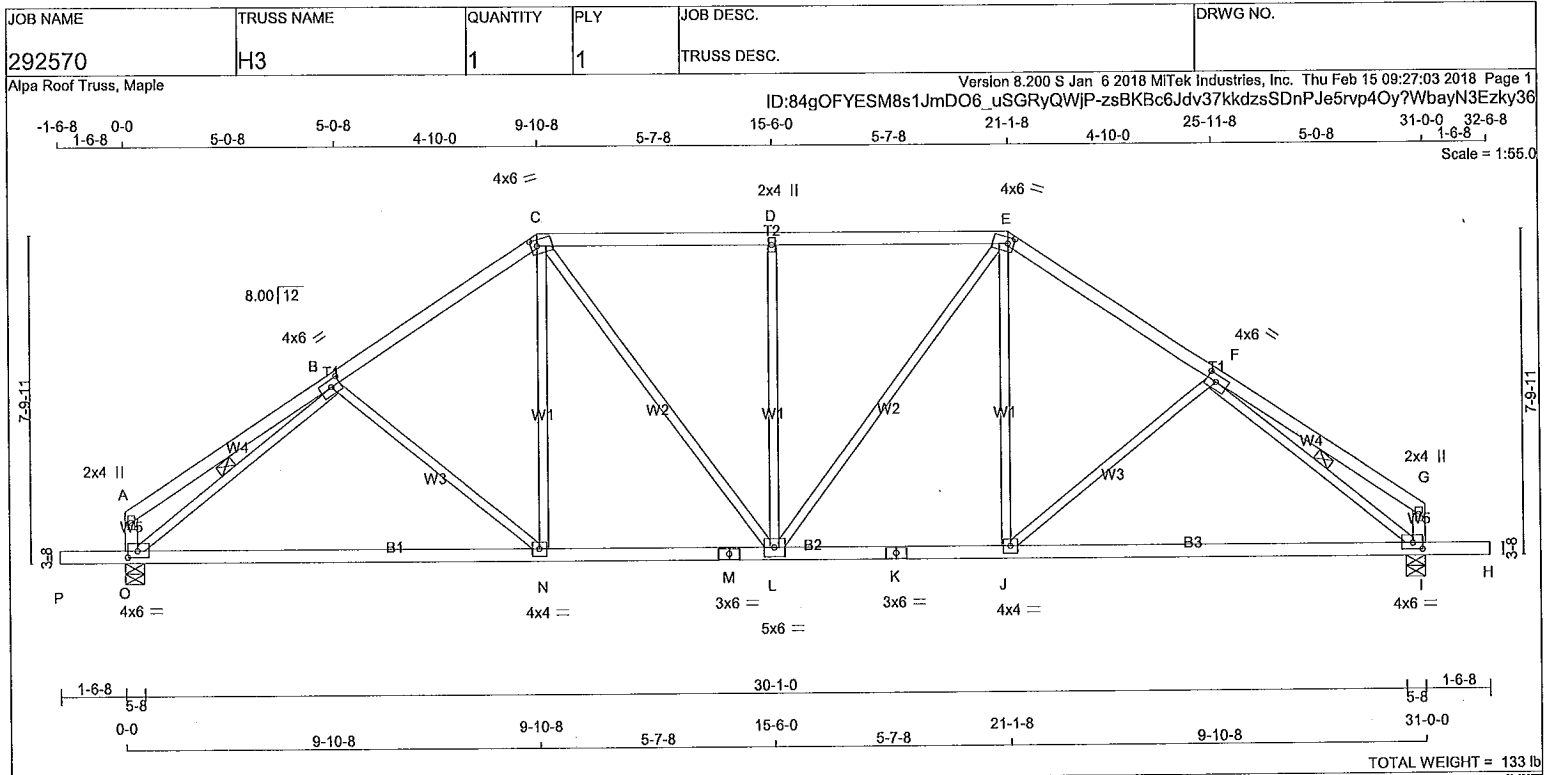
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

A-18023083

CONTINUED ON PAGE 2







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

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-t	MT20	4.0	6.0	2.00	2.75
C	TTWW-m	MT20	4.0	6.0	1.75	1.75
D	TMW-w	MT20	2.0	4.0		
E	TTWW-m	MT20	4.0	6.0	1.75	1.75
F	TMWW-t	MT20	4.0	6.0	2.00	2.75
G	TMV+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	6.0	1.75	2.75
J	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWWW-t	MT20	5.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	4.0	4.0		
O	BMVW-t	MT20	4.0	6.0	1.75	2.75

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	UPLIFT	IN-SX	IN-SX
O	1644	0	1644	0	0	5-8	1-12		
I	1644	0	1644	0	0	5-8	1-12		

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)=	L/360 (1.03")
CALCULATED VERT. DEFL.(LL)=	L/999 (0.07")
ALLOWABLE DEFL.(TL)=	L/360 (1.03")
CALCULATED VERT. DEFL.(TL)=	L/999 (0.31")

CANTILEVER DEFLECTION:

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

CSI: TC=0.35/1.00 (C-D:1), BC=0.54/1.00 (J-L:4), WB=0.61/1.00 (D-L:1), SSI=0.21/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

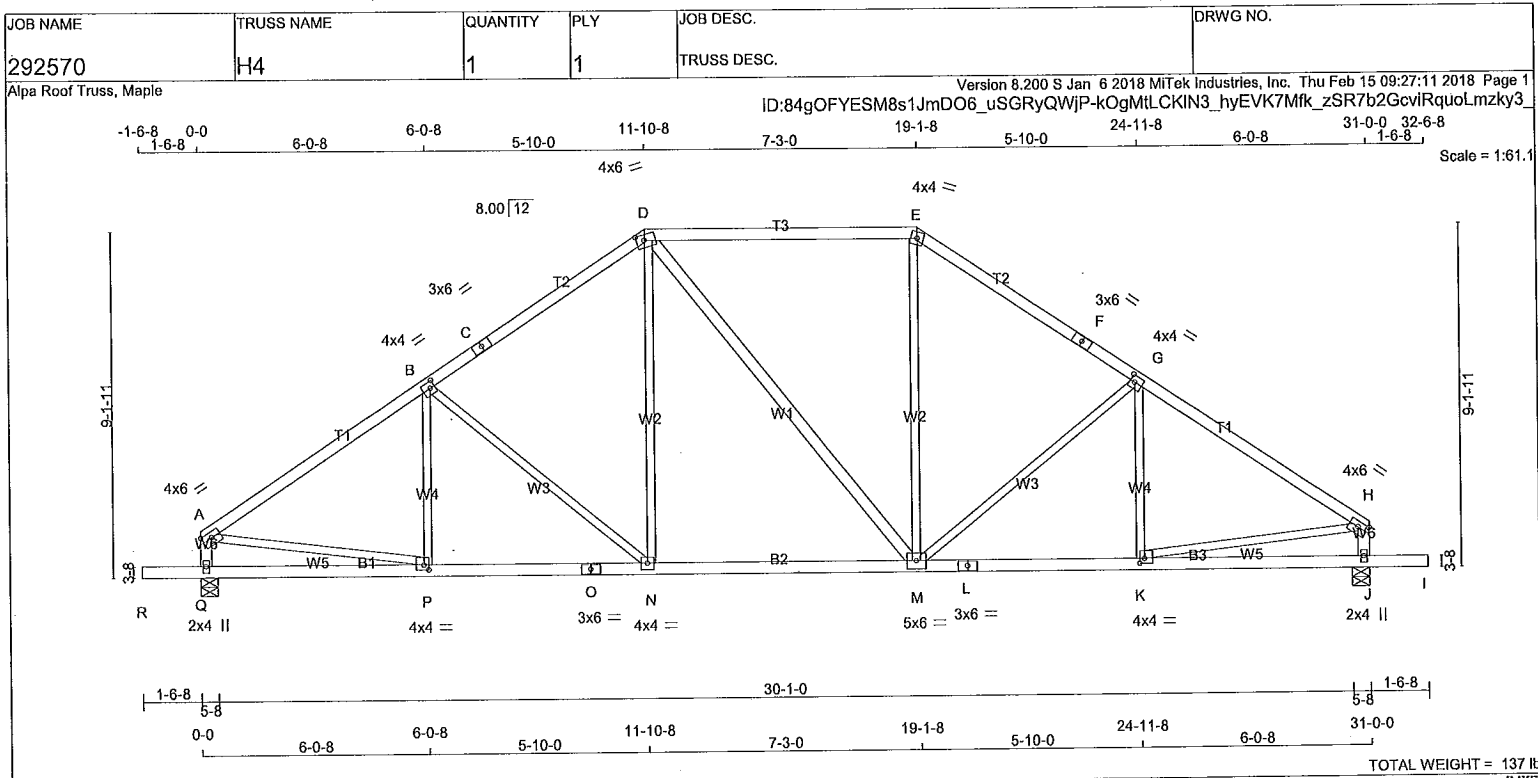
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.47 (F) (INPUT = 1.00)

A-18023085





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	-1836 / 0	-78.0	-78.0 0.44 (1)	P-B	-115 / 45	0.05 (1)	0.05 (1)
B-C	-1528 / 0	-78.0	-78.0 0.40 (1)	B-N	-402 / 0	0.49 (1)	0.49 (1)
C-D	-1528 / 0	-78.0	-78.0 0.40 (1)	N-D	0 / 379	0.09 (1)	0.09 (1)
D-E	-1249 / 0	-78.0	-78.0 0.36 (1)	D-M	0 / 0	0.00 (1)	0.00 (1)
E-F	-1528 / 0	-78.0	-78.0 0.40 (1)	M-E	0 / 379	0.09 (1)	0.09 (1)
F-G	-1528 / 0	-78.0	-78.0 0.40 (1)	M-G	-401 / 0	0.49 (1)	0.49 (1)
G-H	-1835 / 0	-78.0	-78.0 0.44 (1)	K-G	-116 / 44	0.05 (1)	0.05 (1)
Q-A	-1448 / 0	0.0	0.0 0.15 (1)	A-P	0 / 1570	0.35 (1)	0.35 (1)
J-H	-1448 / 0	0.0	0.0 0.15 (1)	K-H	0 / 1570	0.35 (1)	0.35 (1)
R-Q	0 / 0	-96.5	-96.5 0.16 (1)				
Q-P	0 / 0	-18.5	-18.5 0.14 (4)				
P-O	0 / 1553	-18.5	-18.5 0.34 (1)				
O-N	0 / 1553	-18.5	-18.5 0.34 (1)				
N-M	0 / 1248	-18.5	-18.5 0.29 (1)				
M-L	0 / 1553	-18.5	-18.5 0.34 (1)				
L-K	0 / 1553	-18.5	-18.5 0.34 (1)				
K-J	0 / 0	-18.5	-18.5 0.14 (4)				
J-I	0 / 0	-96.5	-96.5 0.16 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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	

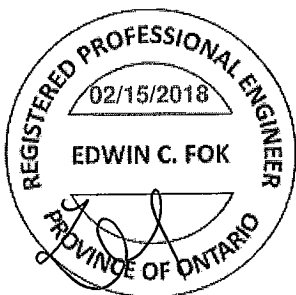
PLATE PLACEMENT TOL. = 0.250 inches

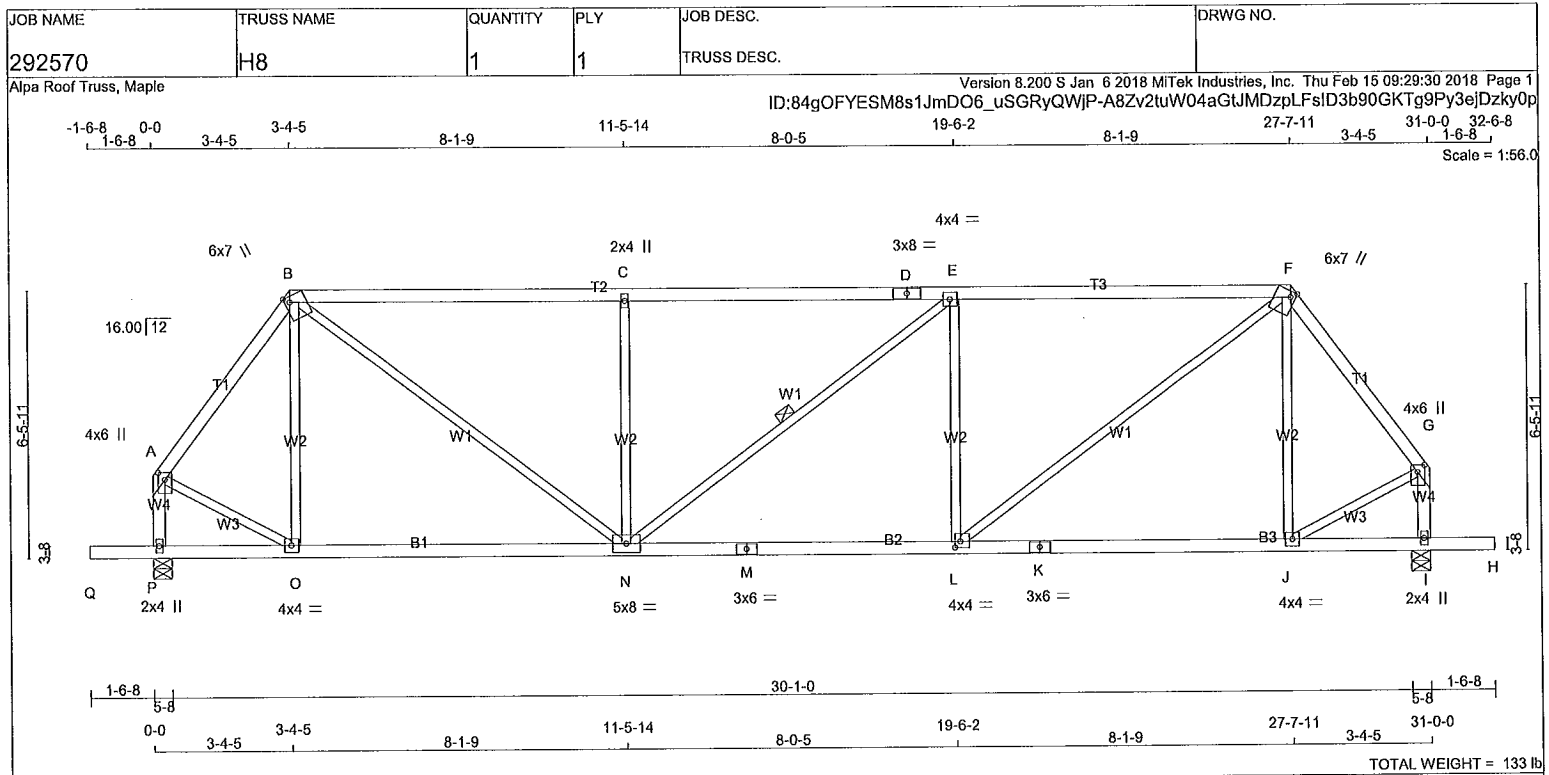
PLATE ROTATION TOL. = 5.0 Deg.

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

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CONTINUED ON PAGE 2





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW+p	MT20	4.0	6.0 2.00 2.00
B	TTWW+m	MT20	6.0	7.0 Edge 1.50
C	TMW+w	MT20	2.0	4.0
D	TS-t	MT20	3.0	8.0
E	TMWW-t	MT20	4.0	4.0
F	TTWW+m	MT20	6.0	7.0 Edge 1.50
G	TMVW+p	MT20	4.0	6.0 2.00 2.00
I	BMV1+p	MT20	2.0	4.0
J	BMWW-t	MT20	4.0	4.0
K	BS-t	MT20	3.0	6.0
L	BMWW-t	MT20	4.0	4.0 1.75 1.50
M	BS-t	MT20	3.0	6.0
N	BMWWW-t	MT20	5.0	8.0
O	BMWW-t	MT20	4.0	4.0
P	BMV1+p	MT20	2.0	4.0

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

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
P	1644	0	0	5-8
I	1644	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX / MIN	COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE
P	1172	715 / 0	0 / 0	0 / 0
I	1172	715 / 0	0 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

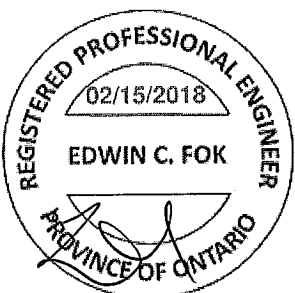
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

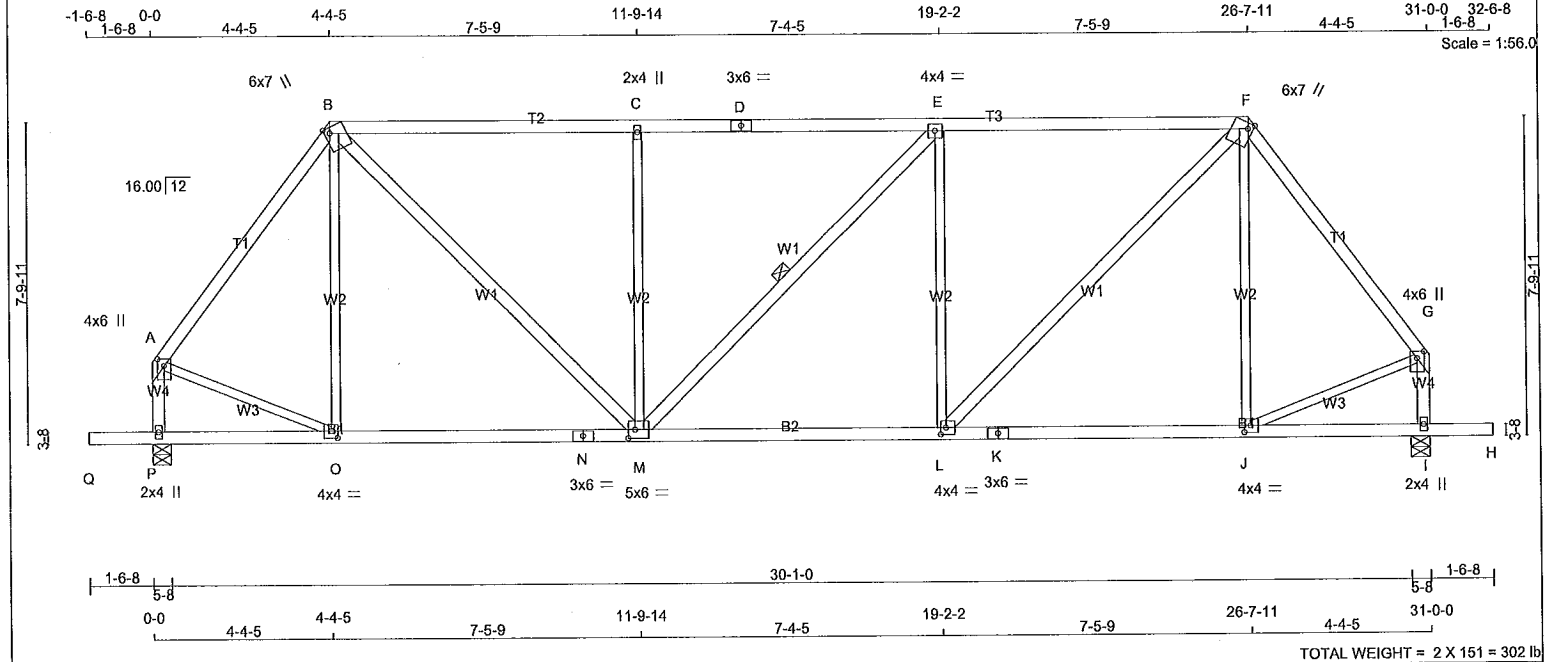
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292570	H9	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:29:53 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-7ZSbtAxb8U77sdeq9Gel9g2IRukDpWYh18M1Nzky0S



TOTAL WEIGHT = 2 X 151 = 302 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
P	1644	0	5-8	2-7
I	1644	0	5-8	2-7

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)
FR-TO						FR-TO			
A-B	-1277/0	-78.0	-78.0	0.33 (1)	5.35	O-B	-151/28	0.17 (1)	
B-C	-1521/0	-78.0	-78.0	0.74 (1)	4.36	B-M	0/1077	0.17 (1)	
C-D	-1521/0	-78.0	-78.0	0.74 (1)	4.35	M-C	-824/0	0.71 (1)	
D-E	-1521/0	-78.0	-78.0	0.74 (1)	4.35	M-E	-1/0	0.00 (1)	
E-F	-1522/0	-78.0	-78.0	0.75 (1)	4.35	L-E	-624/0	0.71 (1)	
F-G	-1277/0	-78.0	-78.0	0.33 (1)	5.35	L-F	0/1078	0.17 (1)	
P-A	-1469/0	0.0	0.0	0.17 (1)	6.75	J-F	-152/28	0.17 (1)	
I-G	-1469/0	0.0	0.0	0.17 (1)	6.75	A-O	0/810	0.18 (1)	
						J-G	0/810	0.18 (1)	

Q-P	0/0	-96.5	-96.5	0.16 (1)	10.00
P-O	0/0	-18.5	-18.5	0.16 (4)	10.00
O-N	0/760	-18.5	-18.5	0.27 (4)	10.00
N-M	0/760	-18.5	-18.5	0.27 (4)	10.00
M-L	0/1522	-18.5	-18.5	0.36 (1)	10.00
L-K	0/760	-18.5	-18.5	0.27 (4)	10.00
K-J	0/760	-18.5	-18.5	0.27 (4)	10.00
J-I	0/0	-18.5	-18.5	0.16 (4)	10.00
I-H	0/0	-96.5	-96.5	0.16 (1)	10.00

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED DEFL.(TL) = L/999 (0.13")

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=0.75/1.00 (E-F:1), BC=0.36/1.00 (L-M:1), WB=0.71/1.00 (E-L:1), SS=0.27/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

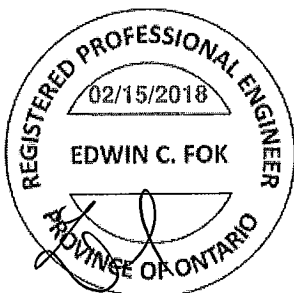
PLATE PLACEMENT TOL. = 0.250 inches

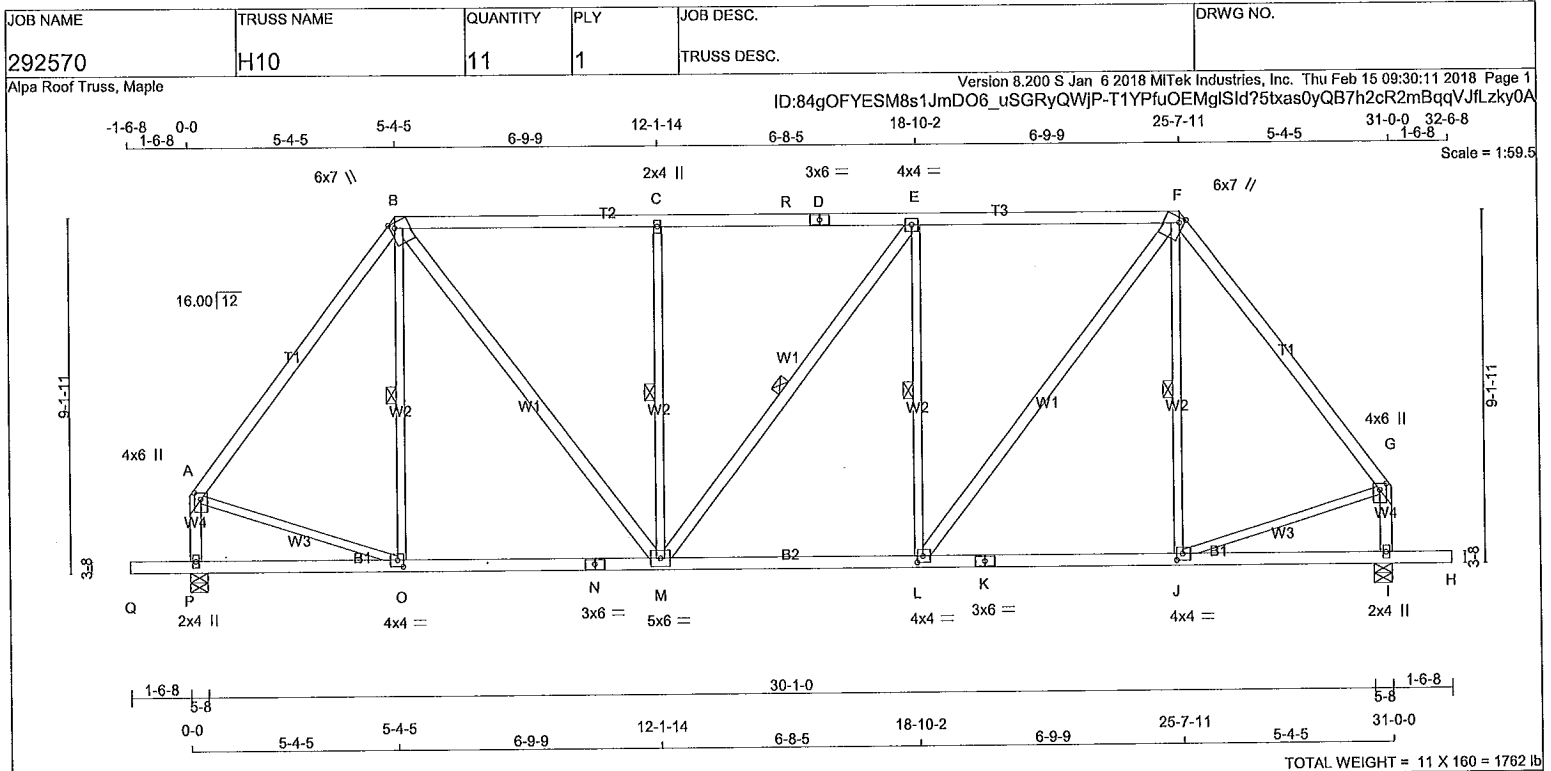
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (A) (INPUT = 0.90)
JSI METAL= 0.44 (A) (INPUT = 1.00)

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CONTINUED ON PAGE 2





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

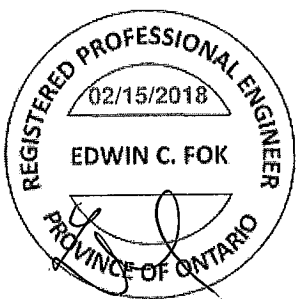
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
P	1720	0	0	1720	0	0	5-8	2-9	2-9
I	1720	0	0	1720	0	0	5-8	2-9	2-9

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

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

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 23.0 P.S.F. G.S.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 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

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

CSI: TC=0.49/1.00 (E-F:1), BC=0.31/1.00 (L-M:1), WB=0.34/1.00 (E-L:1), SS=0.27/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

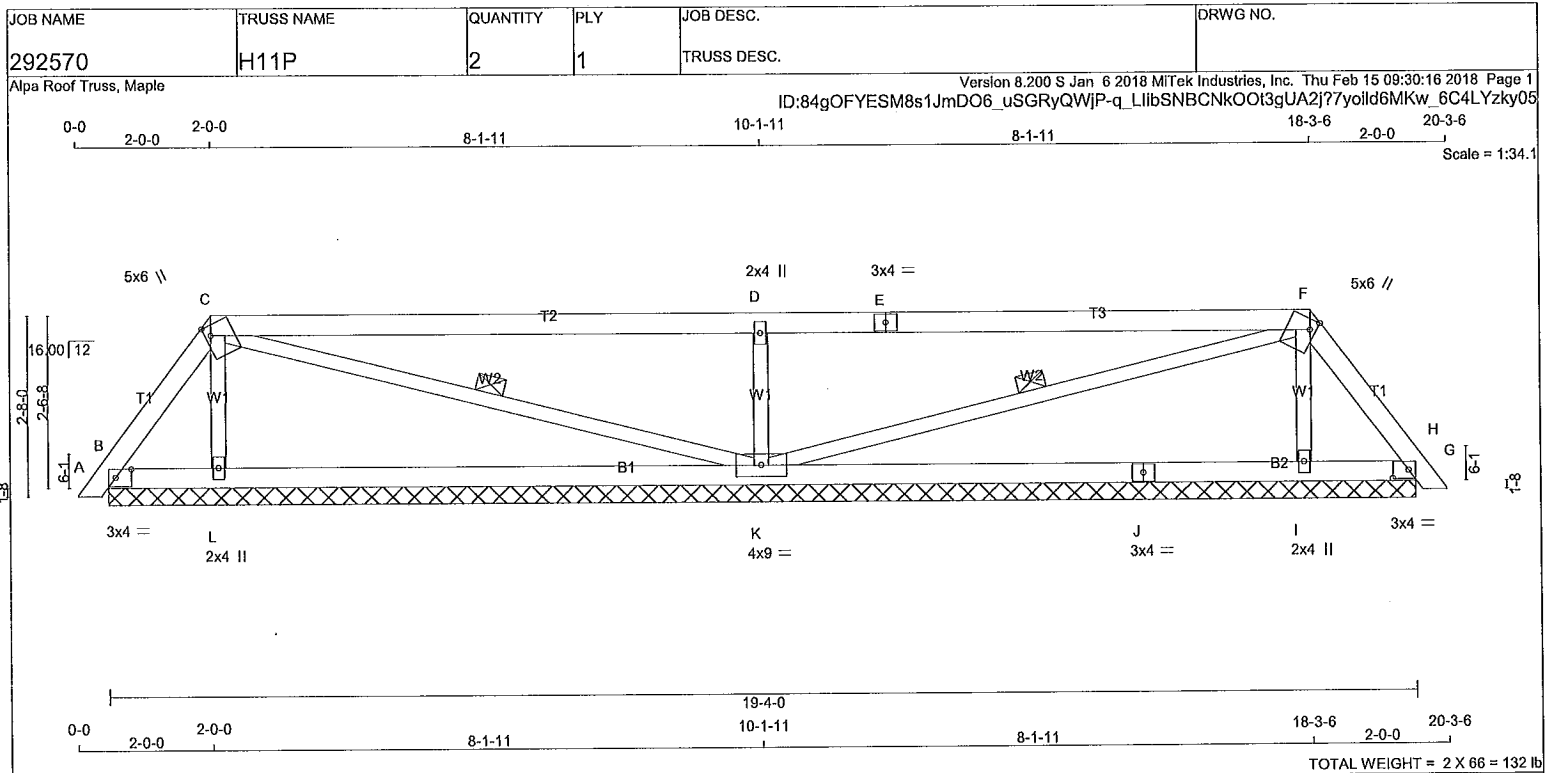
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023090

CONTINUED ON PAGE 2



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

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMB1-I	MT20	3.0	4.0	1.50 2.75
C TTWW+m	MT20	5.0	6.0	1.75 1.00
D TMW+w	MT20	2.0	4.0	
E TS-t	MT20	3.0	4.0	
F TTWW+m	MT20	5.0	6.0	1.75 1.00
G TMB1-I	MT20	3.0	4.0	1.50 2.75
I BMW1+w	MT20	2.0	4.0	
J BS-t	MT20	3.0	4.0	
K BMWWW1-t	MT20	4.0	9.0	
L BMW1+w	MT20	2.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
B	139	0	139	0	19-4-0 (4-0-0)-11-14	
L	344	0	344	0	19-4-0 (4-0-0)-11-14	
K	953	0	953	0	19-4-0 (4-0-0)-11-14	
I	344	0	344	0	19-4-0 (4-0-0)-11-14	
G	139	0	139	0	19-4-0 (4-0-0)-11-14	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
B	93	93/0	0/0	0/0	0/0	0/-0	0/0
L	253	113/0	0/0	0/0	0/0	140/0	0/0
K	677	429/0	0/0	0/0	0/0	248/0	0/0
I	253	113/0	0/0	0/0	0/0	140/0	0/0
G	93	93/0	0/0	0/0	0/0	0/-0	0/0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0/10	-78.0 -78.0	0.01 (1)	10.00	L-C	-210/0	0.03 (1)
B-C	-104/0	-78.0 -78.0	0.03 (1)	6.25	C-K	-8/0	0.00 (1)
C-D	-41/0	-78.0 -78.0	0.88 (1)	6.25	K-D	-793/0	0.13 (1)
D-E	-43/0	-78.0 -78.0	0.88 (1)	6.25	K-F	-8/0	0.00 (1)
E-F	-43/0	-78.0 -78.0	0.88 (1)	6.25	I-F	-210/0	0.03 (1)
F-G	-104/0	-78.0 -78.0	0.03 (1)	6.25			
G-H	0/10	-78.0 -78.0	0.01 (1)	10.00			
B-L	0/60	-18.5 -18.5	0.19 (4)	10.00			
L-K	0/50	-18.5 -18.5	0.26 (4)	10.00			
K-J	0/50	-18.5 -18.5	0.26 (4)	10.00			
J-I	0/50	-18.5 -18.5	0.26 (4)	10.00			
I-G	0/60	-18.5 -18.5	0.19 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

(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

CSI: TC=0.88/1.00 (D-F:1), BC=0.26/1.00 (K-L:4), WB=0.13/1.00 (D-K:1), SSI=0.31/1.00 (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.

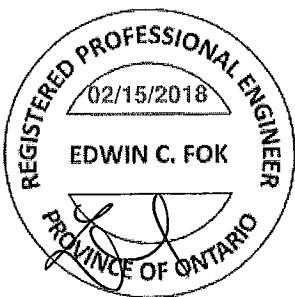
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

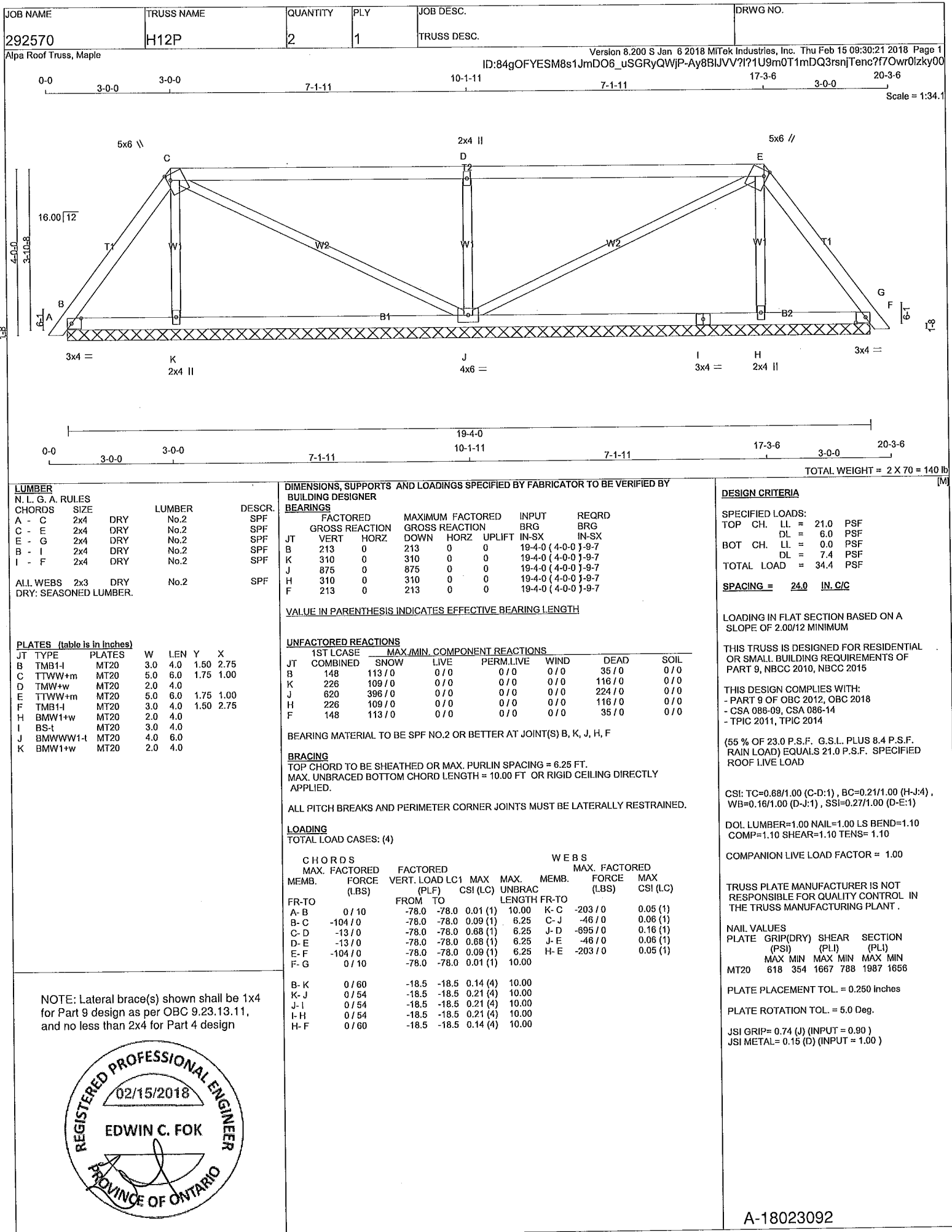
PLATE ROTATION TOL. = 5.0 Deg.

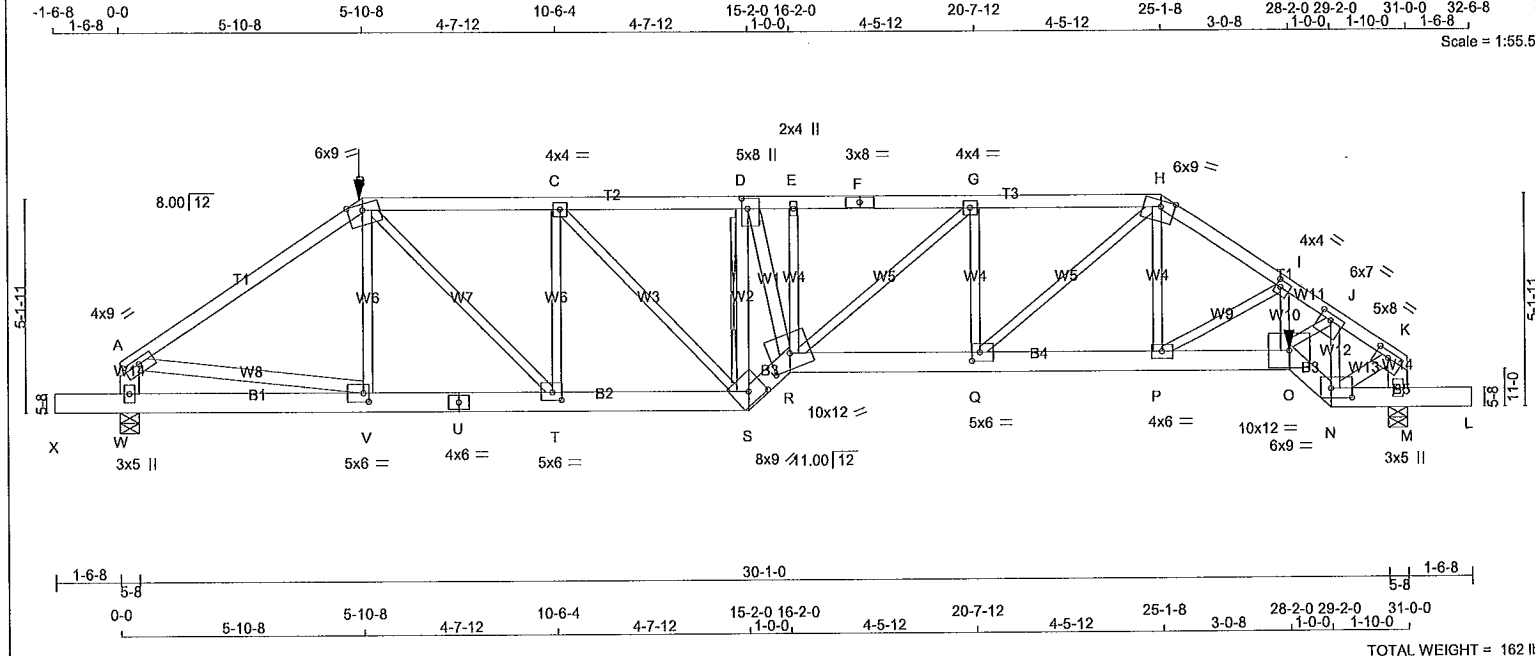
JSI GRIP= 0.64 (C) (INPUT = 0.90)
JSI METAL= 0.26 (E) (INPUT = 1.00)

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



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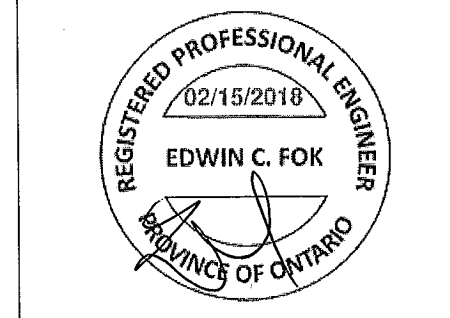




LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - B	2x4	DRY	1650F 1.5E	SPF
B - F	2x4	DRY	1650F 1.5E	SPF
F - H	2x4	DRY	1650F 1.5E	SPF
H - K	2x4	DRY	1650F 1.5E	SPF
W - A	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
X - U	2x6	DRY	No.2	SPF
U - S	2x6	DRY	No.2	SPF
S - R	2x6	DRY	No.2	SPF
R - O	2x6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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	4.0	9.0 1.50 4.50
B	TTWW-m	MT20	6.0	9.0 Edge 4.25
C	TMVW-t	MT20	4.0	4.0
D	TMVW-t	MT20	5.0	8.0 3.00 1.75
E	TMVW-t	MT20	2.0	4.0
F	TS-t	MT20	3.0	8.0
G	TMVW-t	MT20	4.0	4.0
H	TTWW-m	MT20	6.0	9.0 1.75 4.00
I	TMVW-t	MT20	4.0	4.0 2.00 1.25
J	TMVW-t	MT20	6.0	7.0 1.75 3.25
K	TMVW-t	MT20	5.0	8.0 1.75 3.75
M	BMV1+p	MT20	3.0	5.0
N	BBWW-t	MT20	6.0	9.0 2.75 6.00
O	BBWW-t	MT20	10.0	12.0
P	BMVW-t	MT20	4.0	6.0
Q	BMVW-t	MT20	5.0	6.0 2.50 2.25
R	BBWW-m	MT20	10.0	12.0 4.50 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		FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT	IN-SX
W	2988	0	2988	0	5-8
M	3253	0	3253	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2132	1291 / 0	0 / 0	0 / 0	0 / 0	842 / 0	0 / 0
M	2312	1454 / 0	0 / 0	0 / 0	0 / 0	859 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 2.95 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-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

CHORDS		MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	-3765 / 0	-78.0	-78.0 0.75 (1)	V-B	-201 / 84
B-C	-4515 / 0	-153.5	-153.5 0.65 (1)	B-T	0 / 2000
C-D	-5026 / 0	-153.5	-153.5 0.68 (1)	T-C	-1324 / 0
D-E	-6168 / 0	-153.5	-153.5 0.40 (1)	C-S	0 / 728
E-F	-6170 / 0	-78.0	-78.0 0.50 (1)	S-D	-4848 / 0
F-G	-6170 / 0	-78.0	-78.0 0.50 (1)	D-R	0 / 4485
G-H	-5540 / 0	-78.0	-78.0 0.45 (1)	R-E	-70 / 0
H-I	-4660 / 0	-78.0	-78.0 0.24 (1)	R-G	0 / 827
I-J	-5850 / 0	-78.0	-78.0 0.26 (1)	Q-G	-944 / 0
J-K	-3233 / 0	-78.0	-78.0 0.16 (1)	Q-H	0 / 2167
W-A	-2745 / 0	0.0	0.0 0.19 (1)	P-H	0 / 917
M-K	-3025 / 0	0.0	0.0 0.21 (1)	P-I	-952 / 0
				O-I	0 / 833
X-W	0 / 0	-96.5	-96.5 0.08 (1)	O-J	0 / 3049
W-V	0 / 0	-36.4	-36.4 0.15 (4)	N-J	-3452 / 0
V-U	0 / 3116	-36.4	-36.4 0.47 (1)	A-V	0 / 3150
U-T	0 / 3116	-36.4	-36.4 0.47 (1)	N-K	0 / 2900
T-S	0 / 4515	-36.4	-36.4 0.66 (1)		
S-R	0 / 6615	-36.4	-36.4 0.86 (1)		
R-Q	0 / 5540	-112.0	-112.0 0.88 (1)		
Q-P	0 / 3894	-112.0	-112.0 0.82 (1)		
P-O	0 / 4680	-112.0	-112.0 0.73 (1)		
O-N	0 / 3369	-18.5	-18.5 0.44 (1)		
N-M	-1 / 0	-18.5	-18.5 0.08 (1)		
M-L	0 / 0	-96.5	-96.5 0.08 (1)		

FACTORED CONCENTRATED LOADS (LBS)		LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
JT								
B	5-10-8	-334	-334	---	---	FRONT	VERT	TOTAL
O	28-2-0	-423	-423	---	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:
TOP CH. LL = 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 = 16-2-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 28-2-12
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 5-10-8
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 16-2-0 OF SPAN MEASURED FROM THE LEFT.

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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.30")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/637 (0.58")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/332 (0.06")
A-18023099 CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gQFYESM8s1JmDO6 uSGRyQWJP-BFd8vTEWkmcZomKyURScY5cnIHQop25zZrDwvzkxYg

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S	BBWW-h	MT20	8.0	9.0	3.25	4.50
T	BMWW-t	MT20	5.0	6.0	2.25	2.75
U	BS-t	MT20	4.0	6.0		
V	BMWW-t	MT20	5.0	6.0	2.50	1.50
W	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 334.0 lbs FACTORED DOWN AT 5-10-8 ON TOP CHORD, AND 423.2 lbs FACTORED DOWN AT 28-2-0 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

ALLOWABLE DEFL.(TL)= $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/172$ (0.11")

CSI: TC=0.75/1.00 (A-B:1), BC=0.88/1.00 (Q-R:1),
WB=0.79/1.00 (D-S:1), SSI=0.37/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

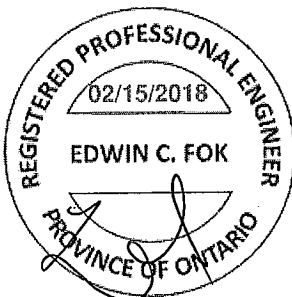
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

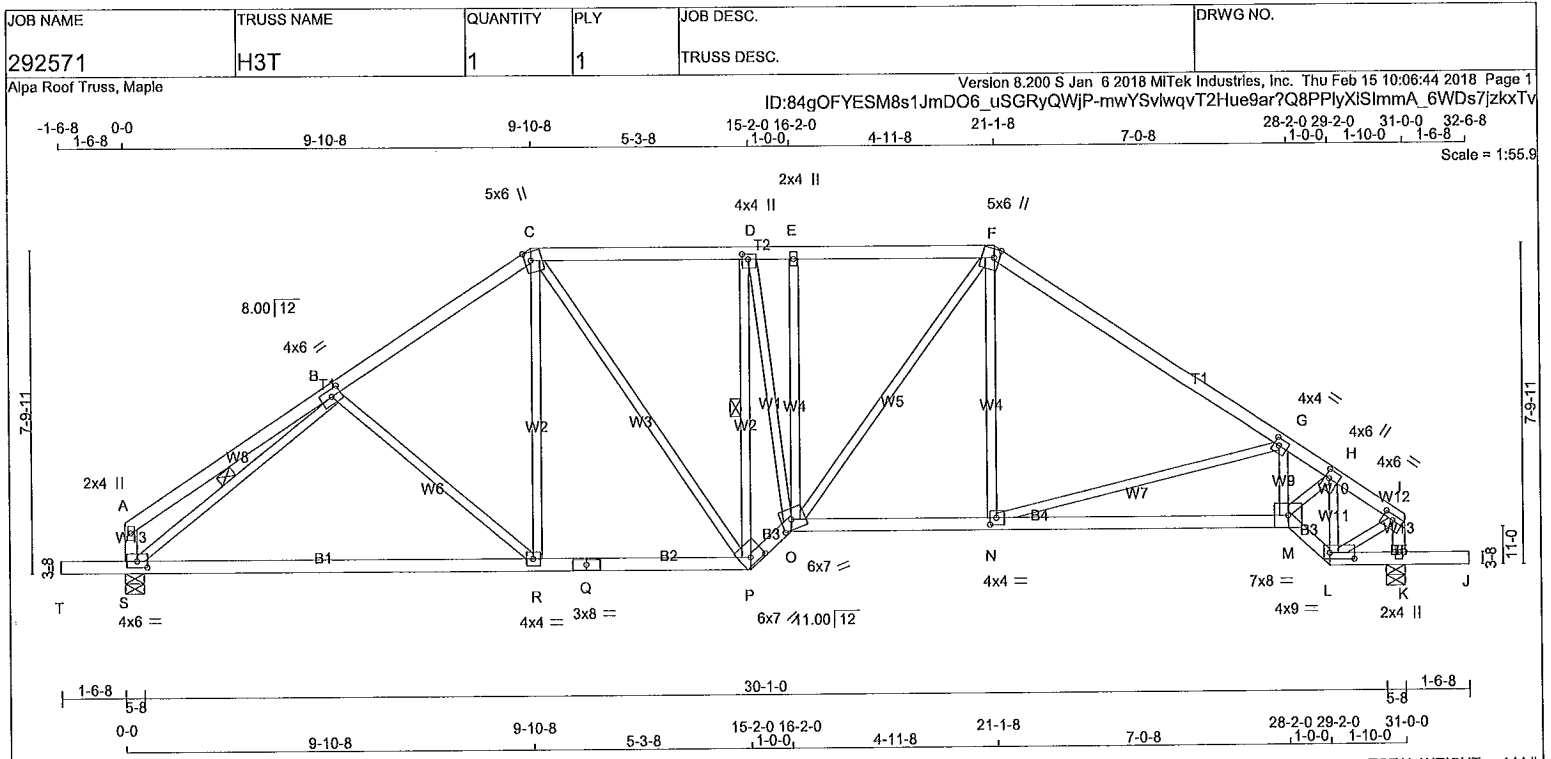
JSI GRIP= 0.90 (Q) (INPUT = 0.90)

JSI METAL= 0.93 (H) (INPUT = 1.00)

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



A-18023099(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2 SPF
C - F	2x4	DRY	No.2 SPF
F - I	2x4	DRY	No.2 SPF
S - A	2x4	DRY	No.2 SPF
K - I	2x4	DRY	No.2 SPF
T - Q	2x4	DRY	No.2 SPF
Q - P	2x4	DRY	No.2 SPF
P - O	2x4	DRY	No.2 SPF
O - M	2x4	DRY	No.2 SPF
M - L	2x4	DRY	No.2 SPF
L - J	2x4	DRY	No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMVW-t	MT20	4.0	6.0	2.00	2.75
C	TTVW+m	MT20	5.0	6.0	Edge	1.75
D	TMVW-t	MT20	4.0	4.0	1.50	1.75
E	TMVW-w	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	6.0	2.50	1.50
G	TMVW-t	MT20	4.0	4.0	2.00	1.50
H	TMVW-t	MT20	4.0	6.0	2.50	1.25
I	TMVW-t	MT20	4.0	6.0	1.50	3.00
K	BMV1+p	MT20	2.0	4.0		
L	BBVW-t	MT20	4.0	9.0	1.75	7.25
M	BBVW-t	MT20	7.0	8.0		
N	BBVW-t	MT20	4.0	4.0	2.00	1.75
O	BBVWV-m	MT20	6.0	7.0	3.00	3.00
P	BBVW-h	MT20	6.0	7.0	2.00	4.00
Q	BS-t	MT20	3.0	8.0		
R	BMVW-t	MT20	4.0	4.0		
S	BMVW-t	MT20	4.0	6.0	1.75	3.00

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP/LIFT		
S	1640	0	1640	0	5-8	1-12
K	1648	0	1648	0	5-8	2-7

UNFACTORED REACTIONS

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

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-P, B-S.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRACED LENGTH	FR-TO	MEMB.	WEBS		MAX. UNBRACED LENGTH	FR-TO
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	MAX. CSI (LC)				MAX. FORCE (LBS)	MAX. CSI (LC)		
A-B	0 / 24	-78.0	-78.0	0.30 (1)	10.00	B-R	-181 / 0	0.14 (1)			
B-C	-1656 / 0	-78.0	-78.0	0.27 (1)	4.90	R-C	0 / 299	0.07 (4)			
C-D	-1568 / 0	-78.0	-78.0	0.29 (1)	4.97	C-P	0 / 362	0.08 (1)			
D-E	-1769 / 0	-78.0	-78.0	0.28 (1)	4.73	P-D	-1719 / 0	0.66 (1)			
E-F	-1771 / 0	-78.0	-78.0	0.27 (1)	4.75	D-O	0 / 1315	0.30 (1)			
F-G	-1865 / 0	-78.0	-78.0	0.57 (1)	4.34	O-E	-120 / 0	0.10 (1)			
G-H	-2434 / 0	-78.0	-78.0	0.45 (1)	3.92	O-F	0 / 399	0.09 (1)			
H-I	-1393 / 0	-78.0	-78.0	0.14 (1)	5.38	N-F	0 / 314	0.07 (4)			
S-A	-153 / 0	0.0	0.0	0.02 (1)	7.81	N-G	-709 / 0	0.75 (1)			
K-I	-1419 / 0	0.0	0.0	0.14 (1)	6.84	M-G	-119 / 42	0.02 (1)			
						M-H	0 / 1629	0.37 (1)			
T-S	0 / 0	-96.5	-96.5	0.16 (1)	10.00	L-H	-1548 / 0	0.24 (1)			
S-R	0 / 1492	-18.5	-18.5	0.53 (4)	10.00	L-I	0 / 1257	0.28 (1)			
R-Q	0 / 1359	-18.5	-18.5	0.53 (4)	10.00	S-B	-1955 / 0	0.58 (1)			
Q-P	0 / 1359	-18.5	-18.5	0.53 (4)	10.00						
P-O	0 / 2155	-18.5	-18.5	0.35 (1)	10.00						
O-N	0 / 1530	-18.5	-18.5	0.37 (1)	10.00						
N-M	0 / 2209	-18.5	-18.5	0.47 (1)	10.00						
M-L	0 / 1431	-18.5	-18.5	0.23 (1)	10.00						
L-K	0 / 0	-18.5	-18.5	0.12 (1)	10.00						
K-J	0 / 0	-96.5	-96.5	0.16 (1)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/694 (0.03")

CSI: TC=0.57/1.00 (F-G:1), BC=0.53/1.00 (P-R:4), WB=0.75/1.00 (G-N:1), SS=0.28/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

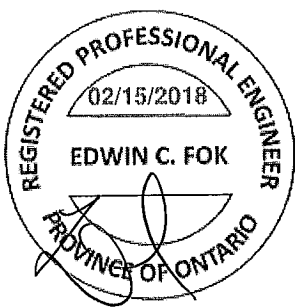
PLATE PLACEMENT TOL. = 0.250 Inches

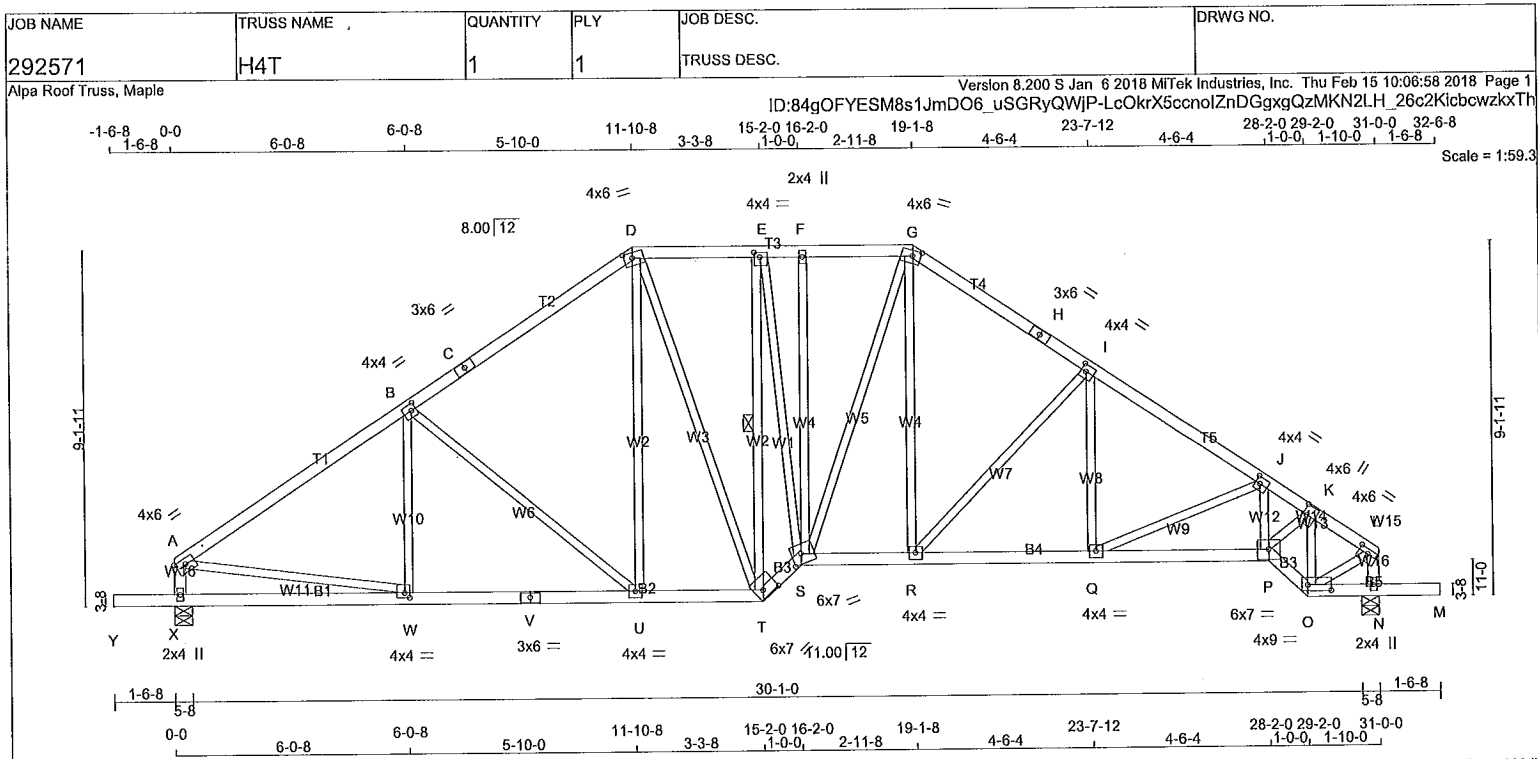
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (S) (INPUT = 0.90)
JSI METAL= 0.64 (Q) (INPUT = 1.00)

A-18023101

CONTINUED ON PAGE 2





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 - G	2x4	DRY	No.2 SPF
G - H	2x4	DRY	No.2 SPF
H - L	2x4	DRY	No.2 SPF
X - A	2x4	DRY	No.2 SPF
N - L	2x4	DRY	No.2 SPF
Y - V	2x4	DRY	No.2 SPF
V - T	2x4	DRY	No.2 SPF
T - S	2x4	DRY	No.2 SPF
S - P	2x4	DRY	No.2 SPF
P - O	2x4	DRY	No.2 SPF
O - M	2x4	DRY	No.2 SPF

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
X	1640	0	1640	0	0	5-8	2-7	2-7	2-7
N	1648	0	1648	0	0	5-8	2-7	2-7	2-7

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
X	1169	714 / 0	0 / 0	0 / 0	0 / 0	456 / 0	0 / 0		
N	1175	717 / 0	0 / 0	0 / 0	0 / 0	458 / 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 = 4.34 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.

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

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	-1832 / 0	-78.0 -78.0	0.44 (1)	W-B	-108 / 53	0.04 (1)	
B-C	-1518 / 0	-78.0 -78.0	0.40 (1)	B-U	-408 / 0	0.49 (1)	
C-D	-1518 / 0	-78.0 -78.0	0.40 (1)	U-D	0 / 343	0.08 (1)	
D-E	-1316 / 0	-78.0 -78.0	0.12 (1)	D-T	0 / 219	0.05 (1)	
E-F	-1453 / 0	-78.0 -78.0	0.13 (1)	T-E	-1388 / 0	0.76 (1)	
F-G	-1453 / 0	-78.0 -78.0	0.13 (1)	E-S	0 / 1073	0.24 (1)	
G-H	-1672 / 0	-78.0 -78.0	0.23 (1)	S-F	-8 / 19	0.01 (1)	
H-I	-1672 / 0	-78.0 -78.0	0.23 (1)	S-G	0 / 215	0.05 (1)	
I-J	-2075 / 0	-78.0 -78.0	0.24 (1)	R-G	0 / 451	0.10 (1)	
J-K	-2422 / 0	-78.0 -78.0	0.12 (1)	R-I	-534 / 0	0.45 (1)	
K-L	-1410 / 0	-78.0 -78.0	0.08 (1)	Q-I	0 / 215	0.05 (4)	
X-A	-1445 / 0	0.0 0.0	0.15 (1)	Q-J	-335 / 0	0.13 (1)	
N-L	-1419 / 0	0.0 0.0	0.14 (1)	P-J	0 / 75	0.02 (4)	
Y-X	0 / 0	-96.5 -96.5	0.16 (1)	P-K	0 / 1372	0.31 (1)	
X-W	0 / 0	-18.5 -18.5	0.16 (4)	O-K	-1588 / 0	0.25 (1)	
W-V	0 / 1550	-18.5 -18.5	0.33 (1)	A-W	0 / 1567	0.35 (1)	
V-U	0 / 1550	-18.5 -18.5	0.33 (1)	O-L	0 / 1291	0.29 (1)	
U-T	0 / 1240	-18.5 -18.5	0.25 (1)				
T-S	0 / 1805	-18.5 -18.5	0.29 (1)				
S-R	0 / 1378	-18.5 -18.5	0.25 (1)				
R-Q	0 / 1739	-18.5 -18.5	0.32 (1)				
Q-P	0 / 2045	-18.5 -18.5	0.38 (1)				
P-O	0 / 1469	-18.5 -18.5	0.24 (1)				
O-N	0 / 0	-18.5 -18.5	0.12 (1)				
N-M	0 / 0	-96.5 -96.5	0.16 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL)= L/957 (0.02")

CSI: TC=0.44/1.00 (A-B:1), BC=0.38/1.00 (P-Q:1)
WB=0.76/1.00 (E-T:1), SSI=0.19/1.00 (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

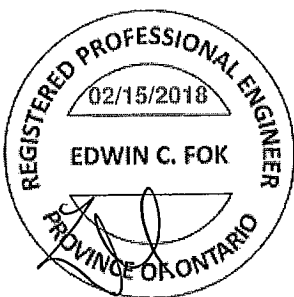
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.89 (W) (INPUT = 0.90)
JSI METAL= 0.58 (W) (INPUT = 1.00)

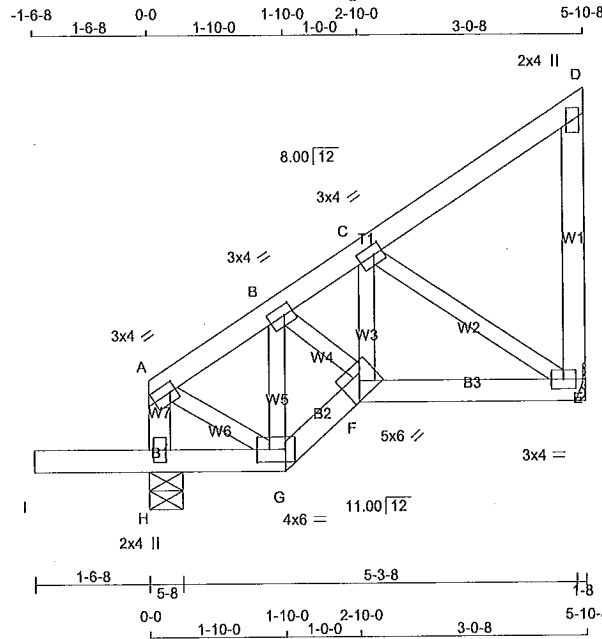


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292571	J1T	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-XkZu9IEV09BkOUZNPn7whHKtn4_6FHfsvngVnzKxTW



TOTAL WEIGHT = 5 X 30 = 150 lb

LUMBER

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BBWW-h	MT20	5.0	6.0		
G	BBWW-1	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

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

HANGER BY OTHERS
 MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	1ST LCASE		MAX. FACTORED UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
			FROM	TO				
FR-TO								
H-A	-223 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 154	0.03 (1)
A-B	-165 / 0	-78.0	-78.0	0.04 (1)	6.25	G-B	-220 / 0	0.03 (1)
B-C	-239 / 0	-78.0	-78.0	0.08 (1)	6.25	B-F	0 / 130	0.03 (1)
C-D	-11 / 0	-78.0	-78.0	0.08 (1)	6.25	F-C	0 / 63	0.02 (4)
E-D	-95 / 0	0.0	0.0	0.03 (1)	7.81	C-E	-259 / 0	0.06 (1)
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00			
H-G	0 / 0	-18.5	-18.5	0.16 (1)	10.00			
G-F	0 / 173	-18.5	-18.5	0.03 (1)	10.00			
F-E	0 / 216	-18.5	-18.5	0.07 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
 ALLOWABLE DEFL.(TL)= L/360 (0.20")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

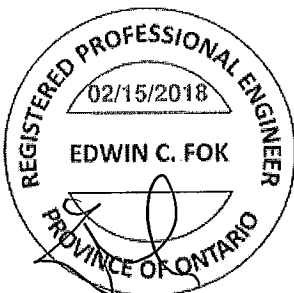
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

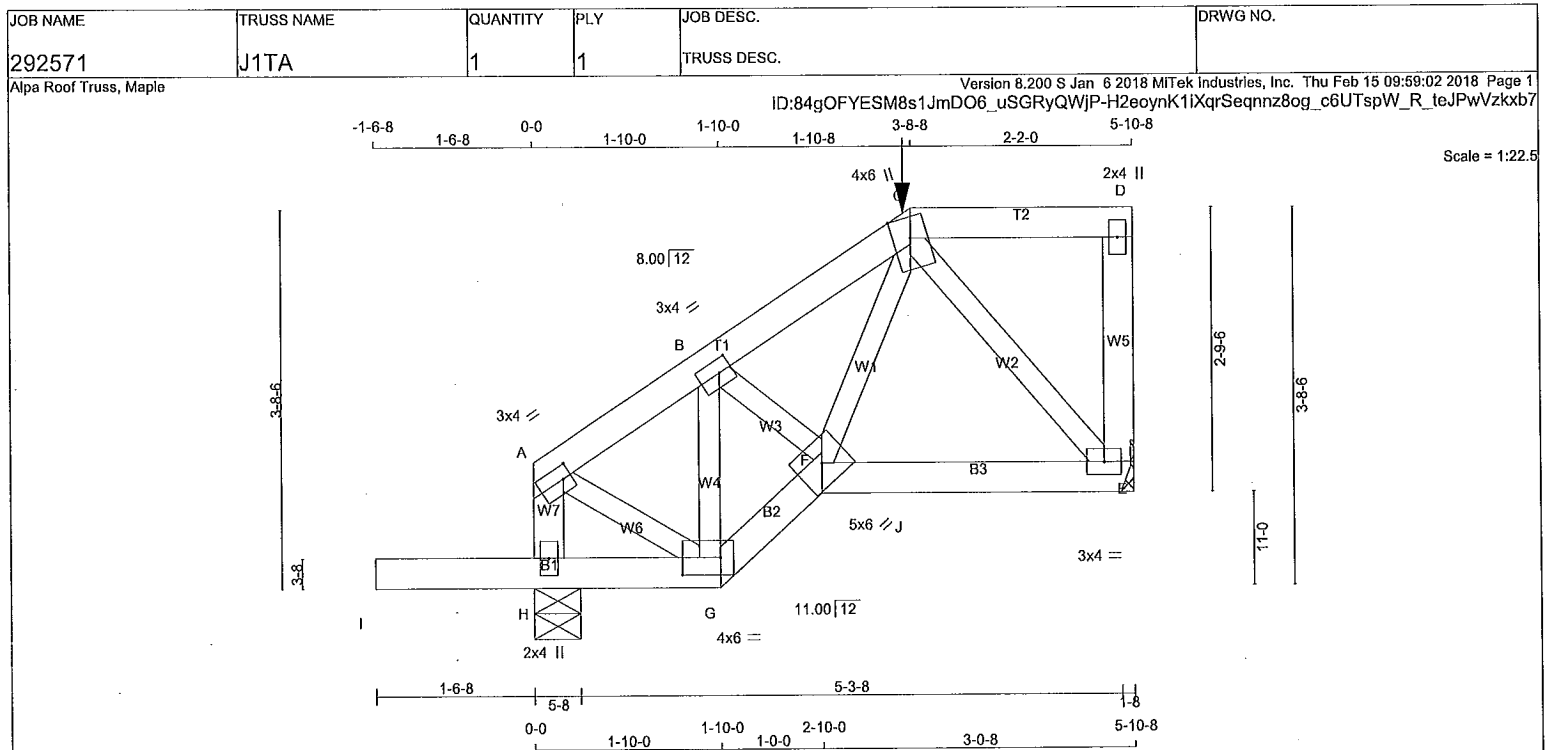
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
 JSI METAL= 0.08 (E) (INPUT = 1.00)

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



A-18023103



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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - TMVW-1	MT20	3.0	4.0	1.50	1.00
B - TMVW-1	MT20	3.0	4.0	1.50	1.50
C - TTWW+m	MT20	4.0	6.0	Edge	
D - TMV+p	MT20	2.0	4.0		
E - BMVW1-1	MT20	3.0	4.0		
F - BBWW-h	MT20	5.0	6.0		
G - BBWW-1	MT20	4.0	6.0	2.00	4.50
H - BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 106.4 lbs FACTORED DOWN AT 3-8-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A-B	-243 / 0	A-B	-302 / 0
B-C	-339 / 0	B-F	0 / 118
C-D	0 / 0	F-C	0 / 157
E-D	-121 / 0	C-E	-338 / 0
H-A	-292 / 0	A-G	0 / 231
I-H	0 / 0		
H-G	0 / 0		
G-F	0 / 261		
F-J	0 / 223		
J-E	0 / 223		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-8-8	-106	-106	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip

LEFT SETBACK = 3-8-8

RIGHT SETBACK = 0-0

END SETBACK = 3-8-8

END WALL WIDTH = 0-0

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")

CALCULATED VERT. DEFL.(LL) = L/999 (0.00")

ALLOWABLE DEFL.(TL) = L/360 (0.20")

CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CANTILEVER DEFLECTION:

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

CALCULATED VERT. DEFL.(LL) = L/999 (0.02")

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

CALCULATED VERT. DEFL.(TL) = L/617 (0.03")

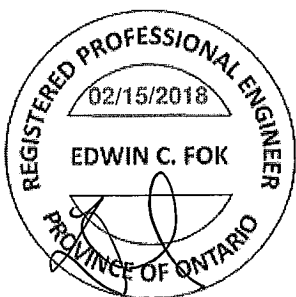
CSI: TC=0.10/1.00 (C-D:1), BC=0.17/1.00 (G-H:1), WB=0.07/1.00 (C-E:1), SSI=0.13/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

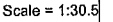
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-q4UYdhJvMJ4ljYbjjj?ei94W6bTdFQ0hTVzYFtzkxTP



TOTAL WEIGHT = 30 lb

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

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-l	MT20	3.0	4.0	1.50	1.00
B	TMVW-l	MT20	3.0	4.0	1.50	1.50
C	TMVW-l	MT20	3.0	4.0	1.50	1.50
D	TMV-p	MT20	2.0	4.0	0.50	2.25
E	BMVW-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	BMVl+p	MT20	2.0	4.0		

BEARINGS

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

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	188	115/0	0/0	0/0	0/0	73/0	0/0
H	322	197/0	0/0	0/0	0/0	125/0	0/0

BRACING

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

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A - B	-165 / 0	-78.0	-78.0 0.04 (1)	6.25	G - B	-220 / 0	0.03 (1)
B - C	-239 / 0	-78.0	-78.0 0.08 (1)	6.25	B - F	0 / 130	0.03 (1)
C - D	-11 / 0	-78.0	-78.0 0.08 (1)	6.25	F - C	0 / 63	0.02 (4)
E - D	-95 / 0	0.0	0.0 0.03 (1)	7.81	C - E	-259 / 0	0.06 (1)
H - A	-223 / 0	0.0	0.0 0.02 (1)	7.81	A - G	0 / 154	0.03 (1)
I - H	0 / 0	-96.5	-96.5 0.16 (1)	10.00			
H - G	0 / 0	-18.5	-18.5 0.16 (1)	10.00			
G - F	0 / 173	-18.5	-18.5 0.03 (1)	10.00			
F - E	0 / 216	-18.5	-18.5 0.07 (4)	10.00			

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

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

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

ALLOWABLE DEFL.(LL)= 1/360 (0.20")
CALCULATED VERT. DEFL.(LL) = 1/ 999 (0.00")
ALLOWABLE DEFL.(TL)= 1/360 (0.20")
CALCULATED VERT. DEFL.(TL) = 1/ 999 (0.01")

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

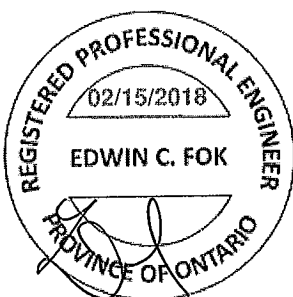
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (D) (INPUT = 1.00)

A-18023105

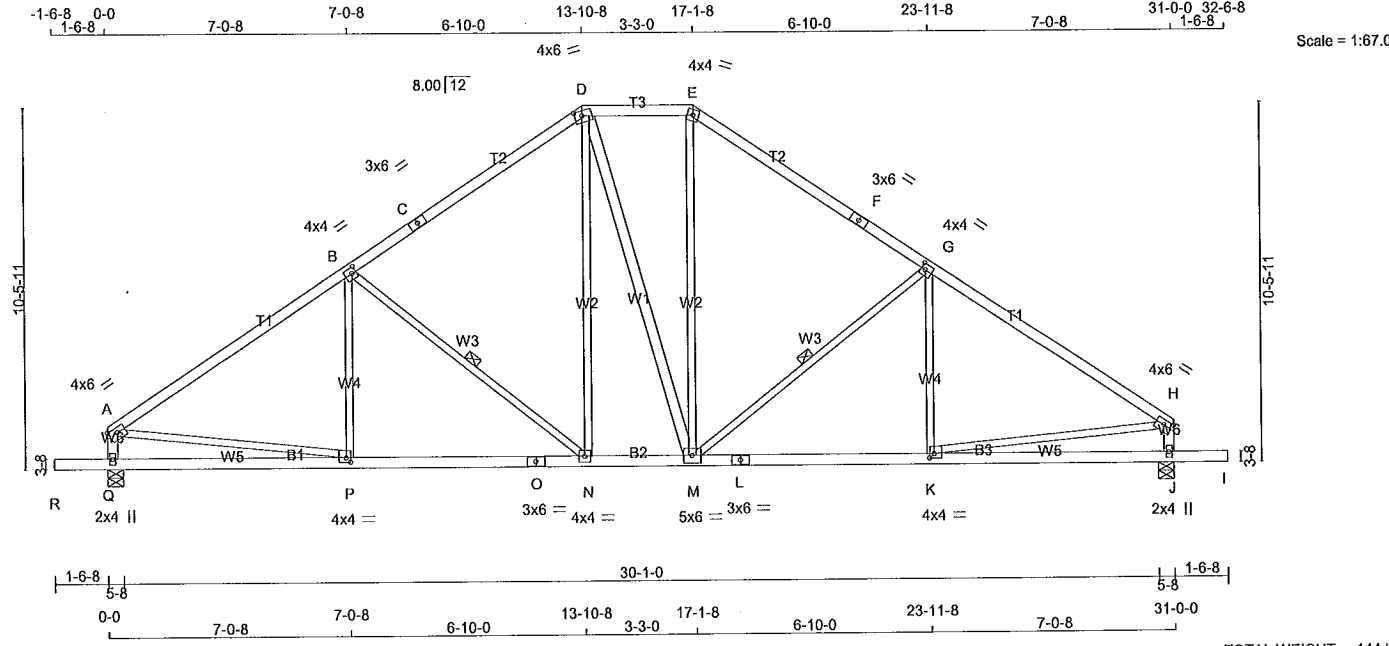
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292572	H5	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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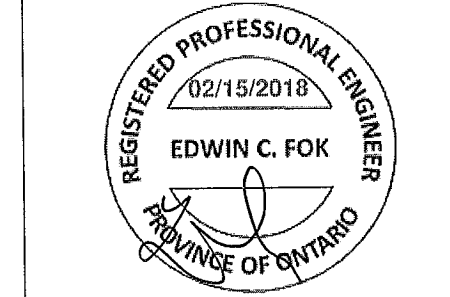
LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - F	2x4	DRY	No.2	SPF	
F - H	2x4	DRY	No.2	SPF	
Q - A	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - L	2x4	DRY	No.2	SPF	
L - I	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT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

DRY: SEASONED LUMBER.

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

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

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



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

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

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-N, G-M.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	-1829/0	-78.0	-78.0	0.62 (1)
B-C	-1393/0	-78.0	-78.0	0.56 (1)
C-D	-1393/0	-78.0	-78.0	0.56 (1)
D-E	-1132/0	-78.0	-78.0	0.12 (1)
E-F	-1394/0	-78.0	-78.0	0.56 (1)
F-G	-1394/0	-78.0	-78.0	0.56 (1)
G-H	-1828/0	-78.0	-78.0	0.62 (1)
Q-A	-1443/0	0.0	0.0	0.15 (1)
J-H	-1442/0	0.0	0.0	0.15 (1)
R-Q	0/0	-96.5	-96.5	0.16 (1)
Q-P	0/0	-18.5	-18.5	0.23 (4)
P-O	0/1552	-18.5	-18.5	0.38 (4)
O-N	0/1552	-18.5	-18.5	0.38 (4)
N-M	0/1131	-18.5	-18.5	0.25 (1)
M-L	0/1551	-18.5	-18.5	0.37 (4)
L-K	0/1551	-18.5	-18.5	0.37 (4)
K-J	0/0	-18.5	-18.5	0.23 (4)
J-I	0/0	-96.5	-96.5	0.16 (1)
P-B	-50/92	0.03 (4)		
B-N	-546/0	0.30 (1)		
N-D	0/424	0.10 (1)		
D-M	0/4	0.00 (1)		
M-E	0/428	0.10 (1)		
E-G	-544/0	0.30 (1)		
G-K	-52/91	0.03 (4)		
A-P	0/1564	0.35 (1)		
K-H	0/1564	0.35 (1)		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

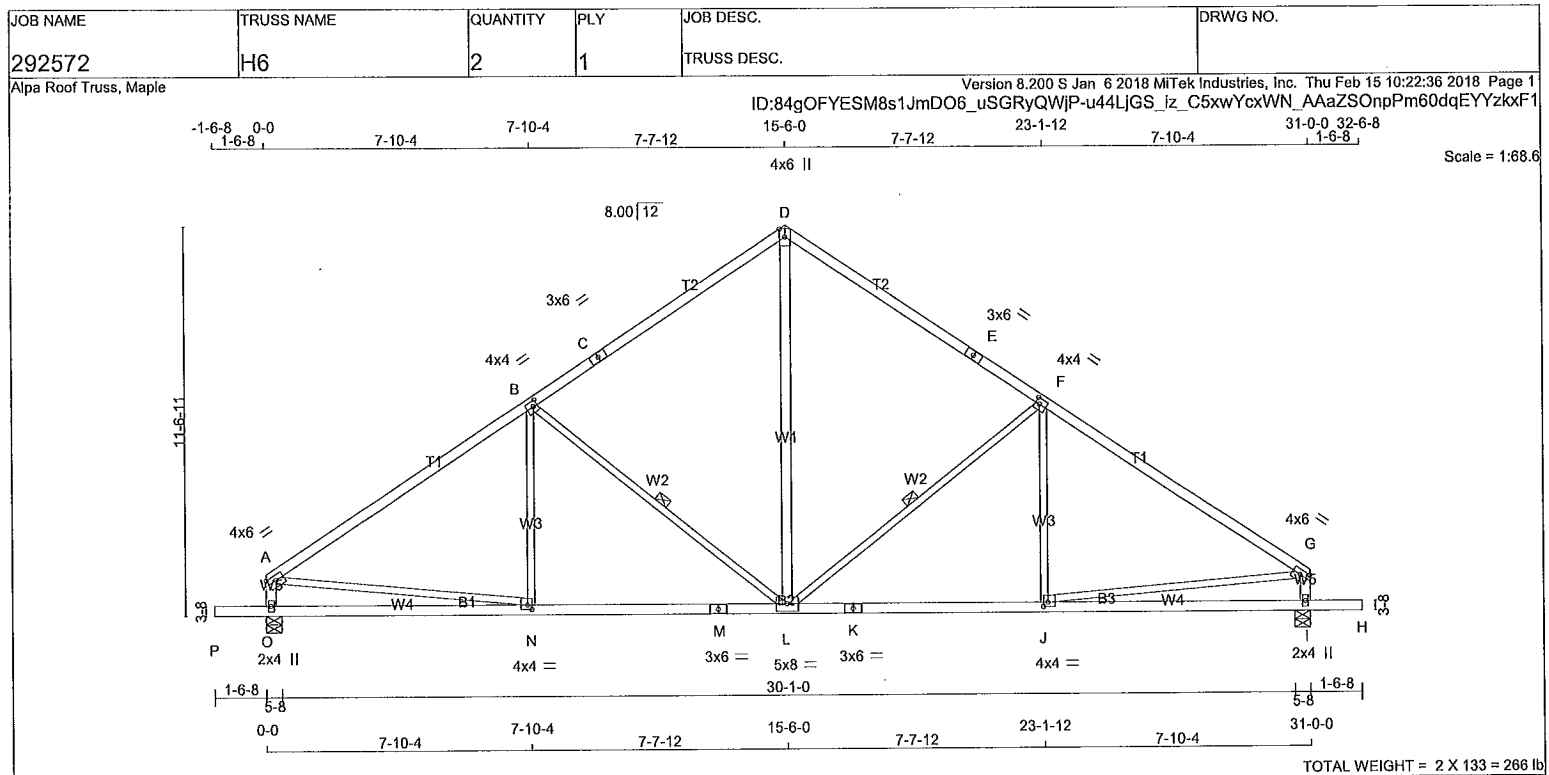
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

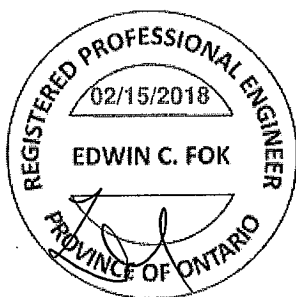


LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
O - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT	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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	4.0	6.0 1.75 Edge
B	TMVW-t	MT20	4.0	4.0 2.00 1.50
C	TS-t	MT20	3.0	6.0
D	TTW+p	MT20	4.0	6.0 Edge
E	TS-t	MT20	3.0	6.0
F	TMVW-t	MT20	4.0	4.0 2.00 1.50
G	TMVW-t	MT20	4.0	6.0 1.75 Edge
I	BMV1+p	MT20	2.0	4.0
J	BMVW-t	MT20	4.0	4.0 1.50 1.50
K	BS-t	MT20	3.0	6.0
L	BMVW-t	MT20	5.0	8.0
M	BS-t	MT20	3.0	6.0
N	BMVW-t	MT20	4.0	4.0 1.50 1.50
O	BMV1+p	MT20	2.0	4.0

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
O	1644	0	1644	0	0	5-8	2-7	
I	1644	0	1644	0	0	5-8	2-7	

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (LC)
FR-TO				FR-TO			
A-B	-1809/0	-78.0	-78.0 0.81 (1)	L-D	0/938	0.15 (1)	
B-C	-1290/0	-78.0	-78.0 0.70 (1)	L-F	-642/0	0.44 (1)	
C-D	-1290/0	-78.0	-78.0 0.70 (1)	J-F	-17/114	0.04 (4)	
D-E	-1290/0	-78.0	-78.0 0.70 (1)	B-L	-642/0	0.44 (1)	
E-F	-1290/0	-78.0	-78.0 0.70 (1)	N-B	-17/114	0.04 (4)	
F-G	-1809/0	-78.0	-78.0 0.81 (1)	A-N	0/1549	0.35 (1)	
O-A	-1436/0	0.0	0.0 0.15 (1)	J-G	0/1549	0.35 (1)	
I-G	-1436/0	0.0	0.0 0.15 (1)				
P-O	0/0	-96.5	-96.5 0.16 (1)				
O-N	0/0	-18.5	-18.5 0.27 (4)				
N-M	0/1539	-18.5	-18.5 0.42 (4)				
M-L	0/1539	-18.5	-18.5 0.42 (4)				
L-K	0/1539	-18.5	-18.5 0.42 (4)				
K-J	0/1539	-18.5	-18.5 0.42 (4)				
J-I	0/0	-18.5	-18.5 0.27 (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

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/380 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/380 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

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

CSI: TC=0.81/1.00 (A-B:1), BC=0.42/1.00 (J-L:4), WB=0.44/1.00 (B-L:1), SS=0.25/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

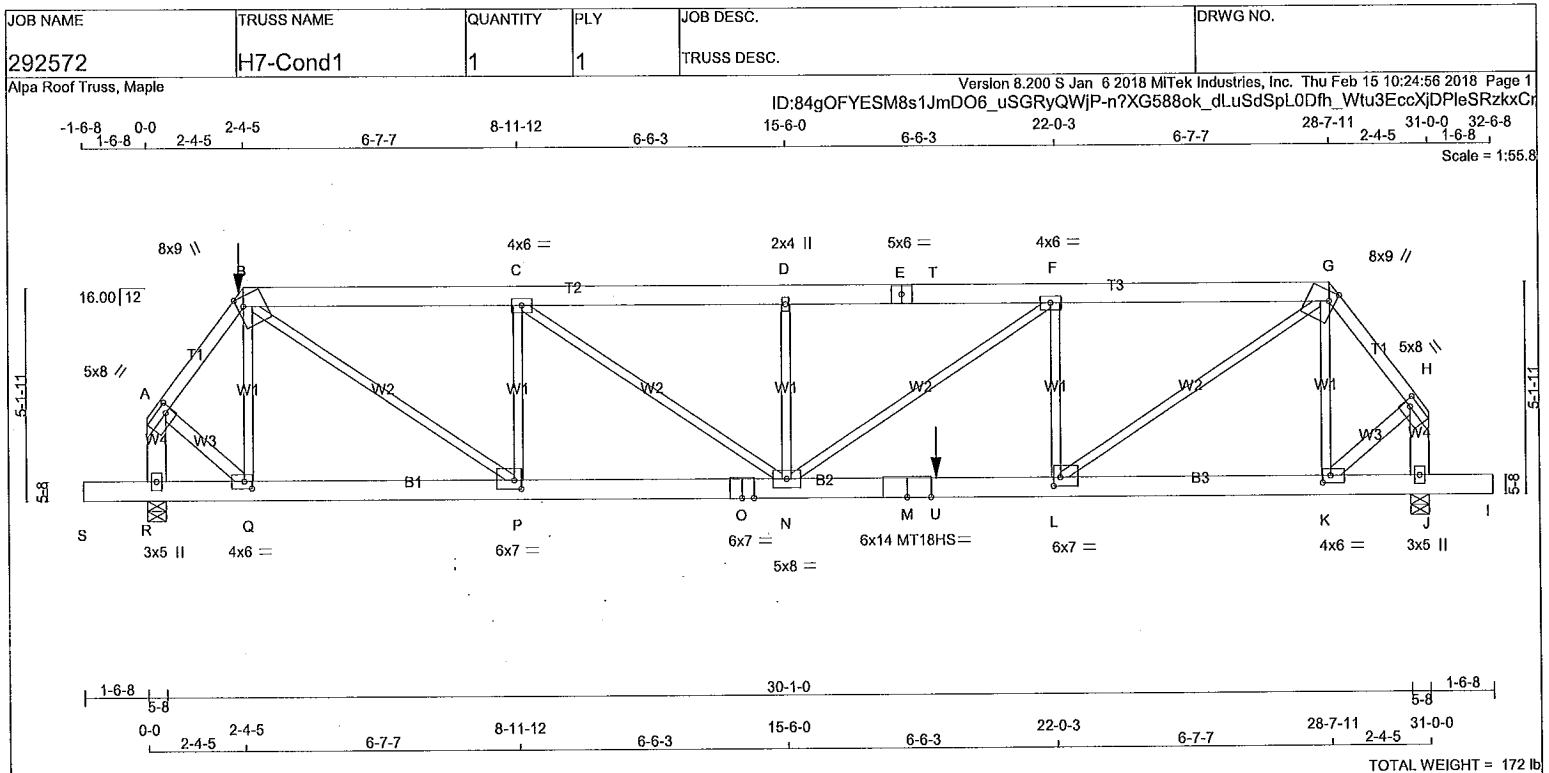
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023107



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.25 2.00
B	TTWW+m	MT20	8.0	9.0	2.75 1.75
C	TMVW-t	MT20	4.0	6.0	
D	TMVW+m	MT20	2.0	4.0	
E	TS-t	MT20	5.0	6.0	
F	TMVW-t	MT20	4.0	6.0	
G	TTWW+m	MT20	8.0	9.0	2.75 1.75
H	TMVW-t	MT20	5.0	8.0	2.25 2.00
J	BMV1+p	MT20	3.0	5.0	
K	BMVW-t	MT20	4.0	6.0	2.00 2.25
L	BMVW-t	MT20	6.0	7.0	2.50 2.00
M	BS-t	MT18HS	6.0	14.0	
N	BMVWV-t	MT20	5.0	8.0	
O	BS-t	MT20	6.0	7.0	
P	BMVW-t	MT20	6.0	7.0	2.50 2.00
Q	BMVW-t	MT20	4.0	6.0	2.00 2.25
R	BMV1+p	MT20	3.0	5.0	

HANGERS NOTES

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
R	3189	0	3189	0	5-8	4-10		
J	2772	0	2772	0	5-8	3-5		

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
R	2268	1415 / 0	0 / 0	0 / 0	853 / 0	0 / 0	
J	1966	1259 / 0	0 / 0	0 / 0	707 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH	WEBS MAX. FACTORED FORCE (LBS)	
	FR-TO	TO	FR-TO	TO		FR-TO	TO
A-B	-2567 / 0	-78.0	-78.0	0.18 (1)	4.15	Q-B	-647 / 0
B-C	-4425 / 0	-153.5	-153.5	0.67 (1)	3.40	B-P	0 / 3559
C-D	-5538 / 0	-153.5	-153.5	0.77 (1)	2.94	P-C	-1941 / 0
D-E	-5538 / 0	-153.5	-153.5	0.54 (1)	3.28	C-N	0 / 1370
E-T	-5538 / 0	-153.5	-153.5	0.54 (1)	3.28	N-D	-917 / 0
T-F	-5538 / 0	-78.0	-78.0	0.54 (1)	3.28	N-F	0 / 1424
F-G	-4381 / 0	-78.0	-78.0	0.42 (1)	3.78	L-F	-1460 / 0
G-H	-2133 / 0	-78.0	-78.0	0.15 (1)	4.50	L-G	0 / 3820
R-A	-3087 / 0	0.0	0.0	0.25 (1)	5.97	K-G	-800 / 0
J-H	-2589 / 0	0.0	0.0	0.21 (1)	6.41	A-Q	0 / 1801
S-R	0 / 0	-96.5	-96.5	0.06 (1)	10.00	K-H	0 / 1502
R-Q	0 / 0	-36.4	-36.4	0.11 (1)	10.00		
Q-P	0 / 1518	-36.4	-36.4	0.24 (1)	10.00		
P-O	0 / 4425	-36.4	-36.4	0.59 (1)	10.00		
O-N	0 / 4425	-36.4	-36.4	0.59 (1)	10.00		
N-M	0 / 4381	-36.4	-36.4	0.45 (1)	10.00		
M-U	0 / 4381	-36.4	-36.4	0.45 (1)	10.00		
U-L	0 / 4381	-18.5	-18.5	0.55 (1)	10.00		
L-K	0 / 1260	-18.5	-18.5	0.36 (1)	10.00		
K-J	0 / 0	-18.5	-18.5	0.03 (4)	10.00		
J-I	0 / 0	-96.5	-96.5	0.06 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134		FRONT	VERT	TOTAL
U	19-1-8	-930	-930		FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 19-1-8 OF SPAN MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.28")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/738 (0.50")

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=0.77/1.00 (C-D:1), BC=0.95/1.00 (L-N:1), WB=0.95/1.00 (G-L:1), SSI=0.40/1.00 (B-C:1)

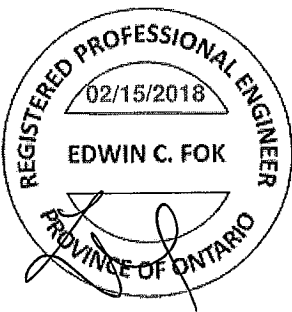
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

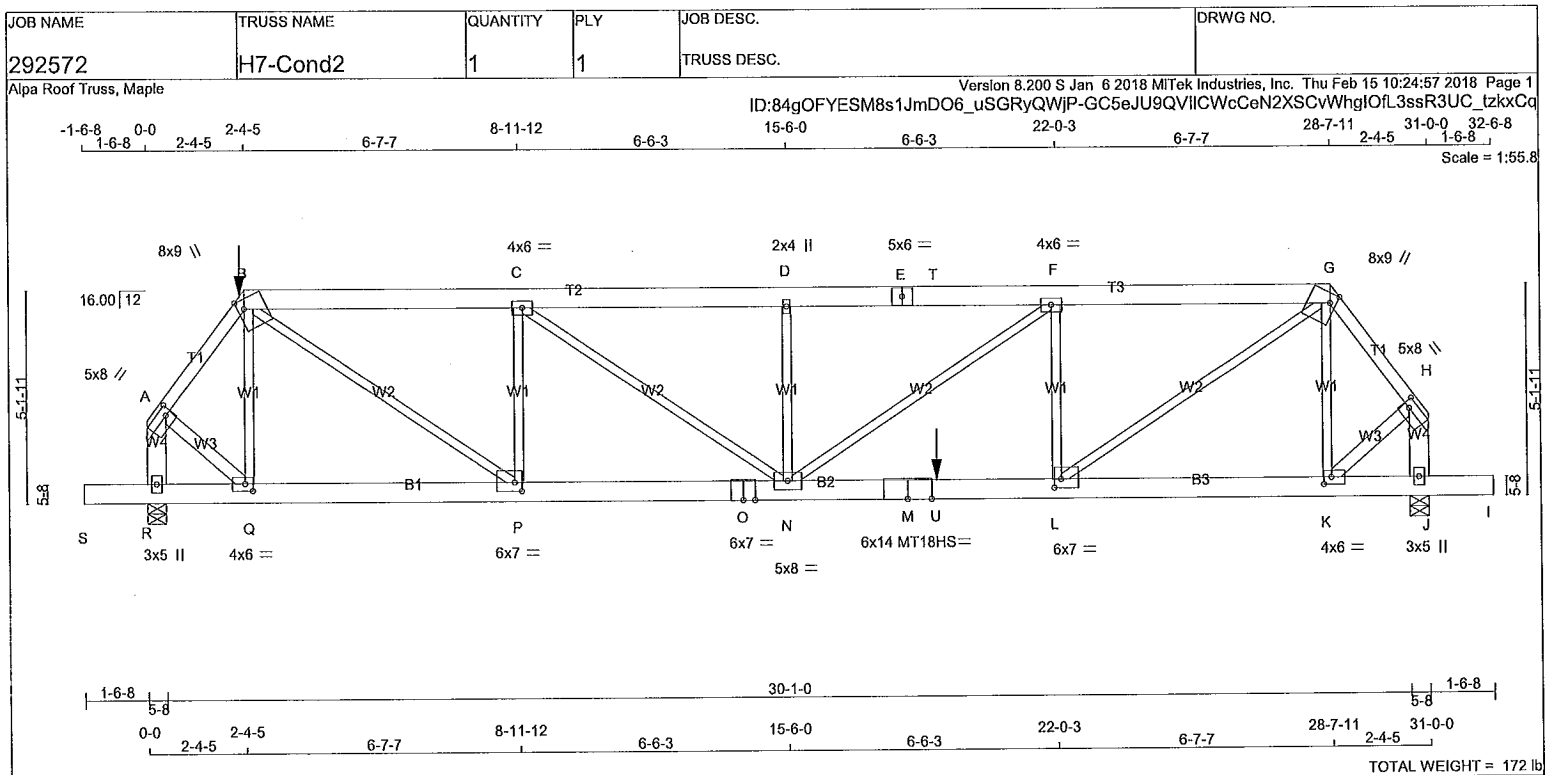
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

A-18023108

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

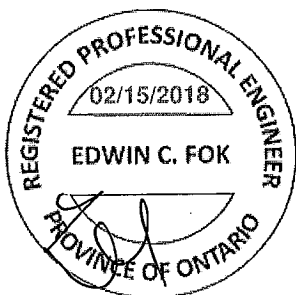
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	5.0	8.0	2.25	2.00
B	TTWW+m	MT20	8.0	9.0	2.75	1.75
C	TMVW-I	MT20	4.0	6.0		
D	TMVW+m	MT20	2.0	4.0		
E	TS-I	MT20	5.0	6.0		
F	TMVW-I	MT20	4.0	6.0		
G	TTWW+m	MT20	8.0	9.0	2.75	1.75
H	TMVW-I	MT20	5.0	8.0	2.25	2.00
J	BMV1+p	MT20	3.0	5.0		
K	BMVW-I	MT20	4.0	6.0	2.00	2.25
L	BMVW-I	MT20	6.0	7.0	2.50	2.00
M	BS-I	MT18HS	6.0	14.0		
N	BMVWW-I	MT20	5.0	8.0		
O	BS-I	MT20	6.0	7.0		
P	BMVW-I	MT20	6.0	7.0	2.50	2.00
Q	BMVW-I	MT20	4.0	6.0	2.00	2.25
R	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
R	3182	0	3182	0	0	5-8	4-9	
J	2761	0	2761	0	0	5-8	3-4	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ	DOWN	HORZ
R	2263	1412 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	852 / 0	0 / 0	705 / 0	0 / 0	0 / 0
J	1958	1253 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	705 / 0	0 / 0	705 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.95 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (LC1)		MAX. FACTORED VERT. LOAD (LC)		MAX. FACTORED VERT. LOAD (UNBRACED LENGTH)		WEBS MAX. FACTORED FORCE (LBS)		MAX. FACTORED VERT. LOAD (LC)	
	FR-TO	TO-TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FR-TO	TO-TO	FROM	TO
A-B	-2551 / 0	-78.0	-78.0	0.18 (1)	4.15	Q-B	-646 / 0	0.23 (1)						
B-C	-4413 / 0	-153.5	-153.5	0.67 (1)	3.41	B-P	0 / 3548	0.88 (1)						
C-D	-5514 / 0	-153.5	-153.5	0.76 (1)	2.95	P-C	-1933 / 0	0.68 (1)						
D-E	-5514 / 0	-153.5	-153.5	0.54 (1)	3.29	C-N	0 / 1356	0.34 (1)						
E-T	-5514 / 0	-153.5	-153.5	0.54 (1)	3.29	N-D	-916 / 0	0.32 (1)						
T-F	-5514 / 0	-78.0	-78.0	0.54 (1)	3.29	F-F	0 / 1424	0.35 (1)						
F-G	-4358 / 0	-78.0	-78.0	0.42 (1)	3.80	L-F	-1460 / 0	0.52 (1)						
G-H	-2124 / 0	-78.0	-78.0	0.15 (1)	4.52	L-G	0 / 3798	0.94 (1)						
R-A	-3080 / 0	0.0	0.0	0.25 (1)	5.97	K-G	-794 / 0	0.28 (1)						
J-H	-2579 / 0	0.0	0.0	0.21 (1)	6.42	A-Q	0 / 1797	0.32 (1)						
S-R	0 / 0	-96.5	-96.5	0.06 (1)	10.00	K-H	0 / 1496	0.26 (1)						
R-Q	0 / 0	-36.4	-36.4	0.11 (1)	10.00									
Q-P	0 / 1514	-36.4	-36.4	0.24 (1)	10.00									
P-O	0 / 4413	-36.4	-36.4	0.59 (1)	10.00									
O-N	0 / 4413	-36.4	-36.4	0.59 (1)	10.00									
N-M	0 / 4358	-36.4	-36.4	0.94 (1)	10.00									
M-U	0 / 4358	-36.4	-36.4	0.94 (1)	10.00									
U-L	0 / 4358	-18.5	-18.5	0.94 (1)	10.00									
L-K	0 / 1255	-18.5	-18.5	0.35 (1)	10.00									
K-J	0 / 0	-18.5	-18.5	0.03 (4)	10.00									
J-I	0 / 0	-96.5	-96.5	0.06 (1)	10.00									

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-4-5	-134	-134	---	FRONT	VERT	TOTAL
U	19-1-7	-913	-913	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 2-4-5
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 19-1-7 OF SPAN
MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.27")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/744 (0.50")

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=0.76/1.00 (C-D:1), BC=0.94/1.00 (L-N:1),
WB=0.94/1.00 (G-L:1), SSI=0.40/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

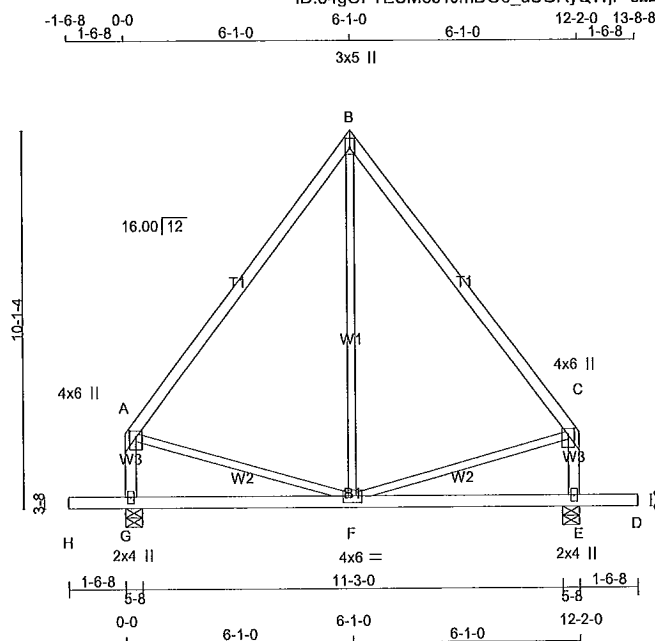
AUTOSOLVE HEELS OFF

CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292572	H13	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-sz2eWX8sBU4ZMCTOAG0gXBwq3LZOZM9xlqMXi7zkxBY



Scale = 1:61.7

TOTAL WEIGHT = 62 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT	736	0	736	0	5-8	1-8
G	736	0	736	0	5-8	1-8
E	736	0	736	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	524	320 / 0	0 / 0	0 / 0	0 / 0	204 / 0
G	524	320 / 0	0 / 0	0 / 0	0 / 0	204 / 0
E	524	320 / 0	0 / 0	0 / 0	0 / 0	204 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX. CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	-320 / 0	-78.0	-78.0	0.25 (1)	6.25	F-B	0 / 114	0.04 (4)	
B-C	-320 / 0	-78.0	-78.0	0.25 (1)	6.25	A-F	0 / 199	0.04 (1)	
G-A	-544 / 0	0.0	0.0	0.06 (1)	7.81	F-C	0 / 199	0.04 (1)	
E-C	-544 / 0	0.0	0.0	0.06 (1)	7.81				
H-G	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
G-F	0 / 0	-18.5	-18.5	0.20 (4)	10.00				
F-E	0 / 0	-18.5	-18.5	0.20 (4)	10.00				
E-D	0 / 0	-96.5	-96.5	0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

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

CSI: TC=0.25/1.00 (B-C:1), BC=0.20/1.00 (F-G:1), WB=0.04/1.00 (A-F:1), SSI=0.12/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

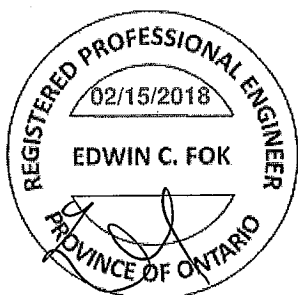
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

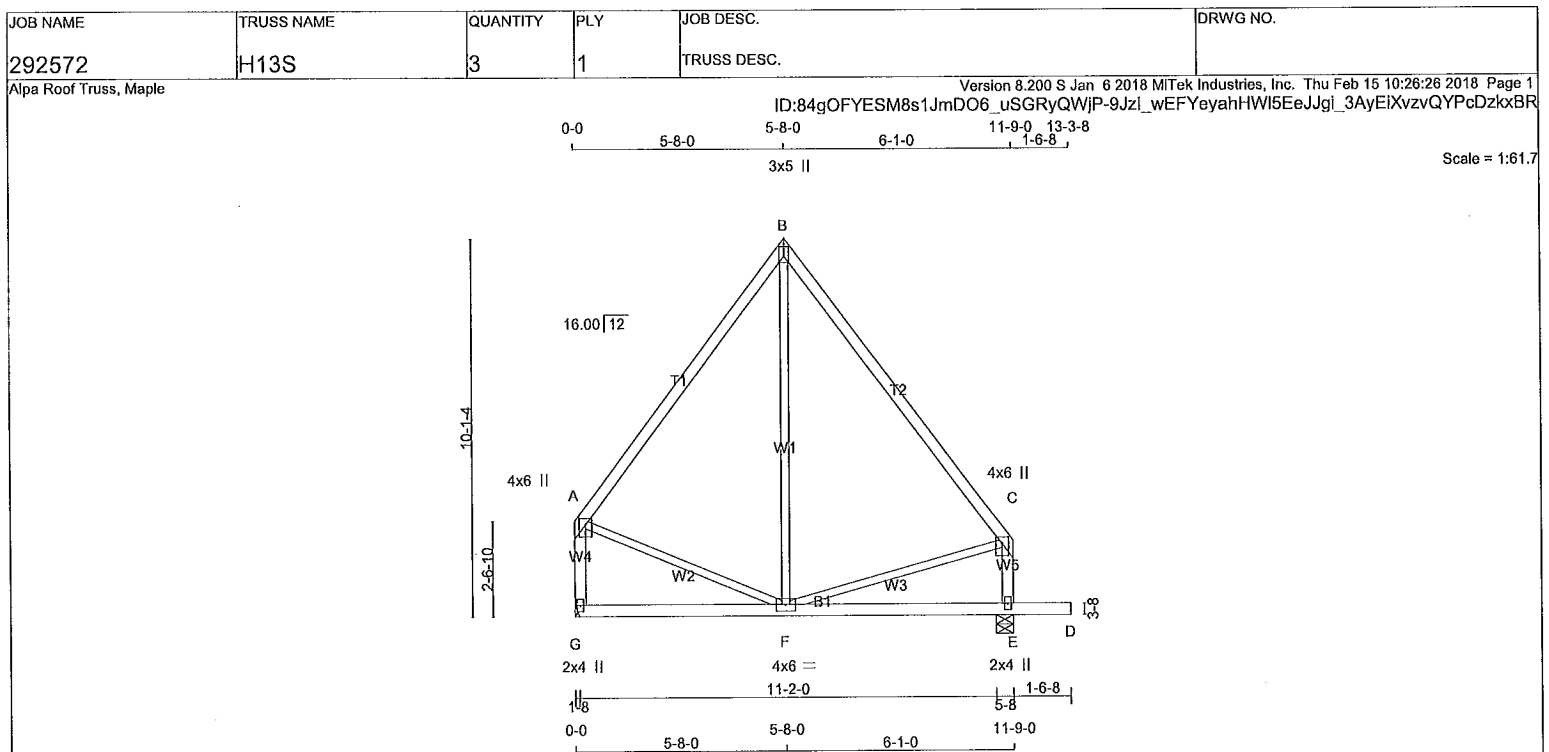
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.34 (F) (INPUT = 0.90)
JSI METAL= 0.16 (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-18023109



TOTAL WEIGHT = 3 X 60 = 179 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
G	567	0	567	0	0	0
E	715	0	715	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
G	404	247 / 0	0 / 0	0 / 0	0 / 0	157 / 0	0 / 0
E	510	311 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
	FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	LC1 MAX	UNBRAC	MEMB.	FORCE (LBS)	LC1 MAX	CS1 (LC)
A-B	-298 / 0	-78.0	-78.0	0.32 (1)	6.25	F-B	0 / 103	0.04 (4)		
B-C	-298 / 0	-78.0	-78.0	0.25 (1)	6.25	A-F	0 / 192	0.04 (1)		
G-A	-528 / 0	0.0	0.0	0.07 (1)	7.81	F-C	0 / 185	0.04 (1)		
E-C	-523 / 0	0.0	0.0	0.06 (1)	7.81					
G-F	0 / 0	-18.5	-18.5	0.18 (4)	10.00					
F-E	0 / 0	-18.5	-18.5	0.18 (4)	10.00					
E-D	0 / 0	-96.5	-96.5	0.16 (1)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.32/1.00 (A-B:1), BC=0.18/1.00 (F-G:4), WB=0.04/1.00 (A-F:1), SS=0.12/1.00 (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 1687 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (F) (INPUT = 0.90)
JSI METAL= 0.15 (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



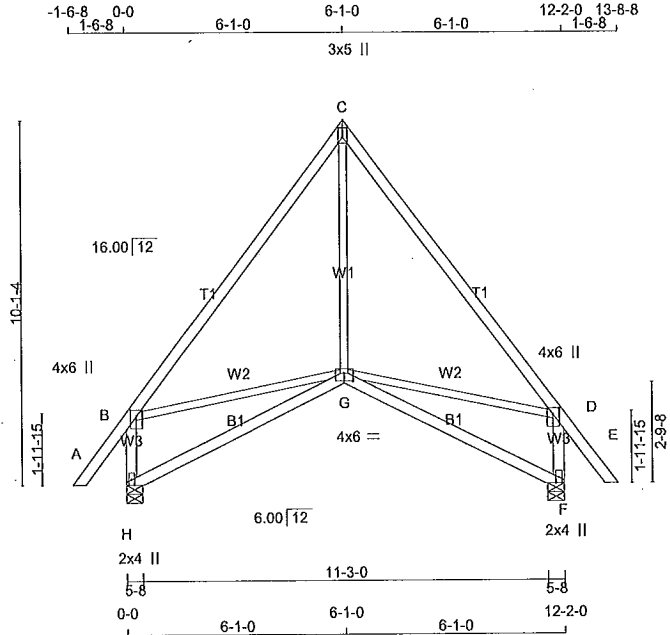
A-18023110

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292572	H13T	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale: 3/16"=1'

TOTAL WEIGHT = 2 X 63 = 127 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.00 2.00
C	TTW+p	MT20	3.0	5.0	2.00 Edge
D	TMVW+p	MT20	4.0	6.0	2.00 2.00
F	BMV1+p	MT20	2.0	4.0	Edge
G	BBWWW-p	MT20	4.0	6.0	2.50 3.00
H	BMV1+p	MT20	2.0	4.0	Edge

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
H	694	0	694	0	0	0	5-8	1-8	
F	694	0	694	0	0	0	5-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
H	493	313 / 0	0 / 0	0 / 0	0 / 0	0 / 0	180 / 0
F	493	313 / 0	0 / 0	0 / 0	0 / 0	0 / 0	180 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 43	-78.0	-78.0 0.07 (1)	10.00	G-C	0 / 215	0.06 (4)
B-C	-431 / 0	-78.0	-78.0 0.25 (1)	6.25	B-G	0 / 263	0.06 (1)
C-D	-431 / 0	-78.0	-78.0 0.25 (1)	6.25	G-D	0 / 263	0.06 (1)
D-E	0 / 43	-78.0	-78.0 0.07 (1)	10.00			
H-B	-638 / 0	0.0	0.0 0.08 (1)	7.81			
F-D	-638 / 0	0.0	0.0 0.08 (1)	7.81			
H-G	0 / 0	-18.5	-18.5 0.20 (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 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI: TC=0.25/1.00 (C-D:1), BC=0.20/1.00 (G-H:4), WB=0.06/1.00 (D-G:1), SSI=0.11/1.00 (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 .

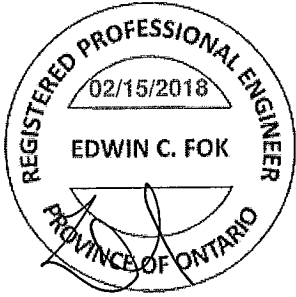
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)		
	MAX	MIN	MAX	MIN	MAX
MT20	618	354	1667	788	1987

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

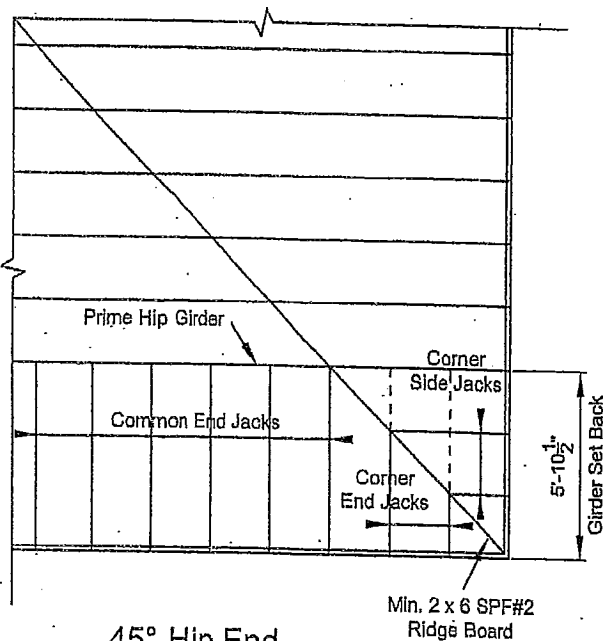
JSI GRIP= 0.47 (G) (INPUT = 0.90)
JSI METAL = 0.26 (H) (INPUT = 1.00)

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



A-18023111

STRACON ENGINEERING INC.



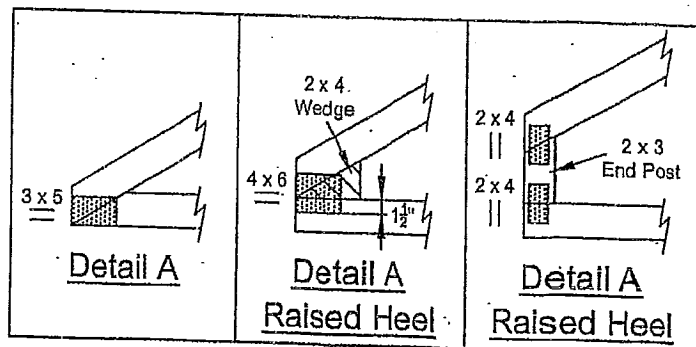
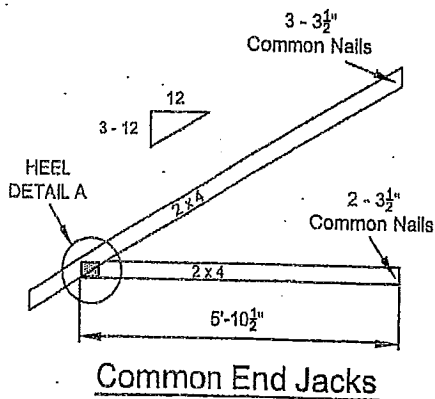
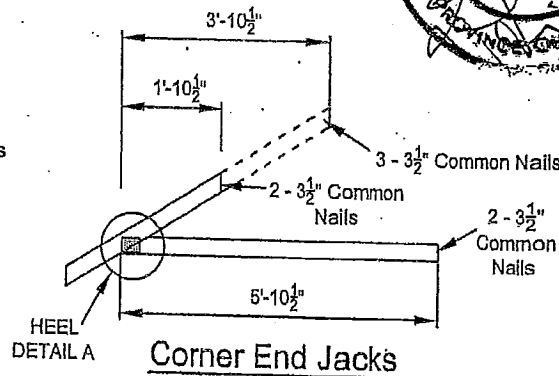
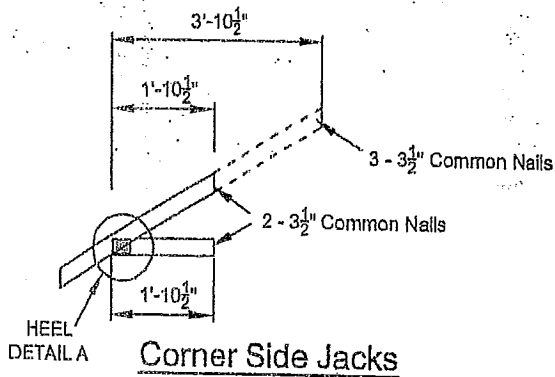
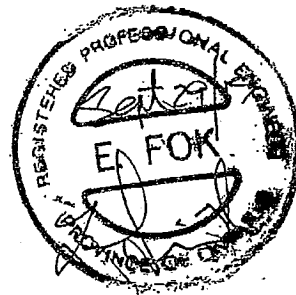
LUMBER SPECIFICATION

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

DESIGN LOAD

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

TOTAL LOAD : 50.5 P.S.F



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

CS-51008

LUS – Double Shear Joist Hangers

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

Material: 18 gauge

Finish: G90 galvanized

Design:

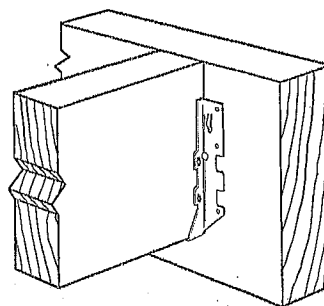
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

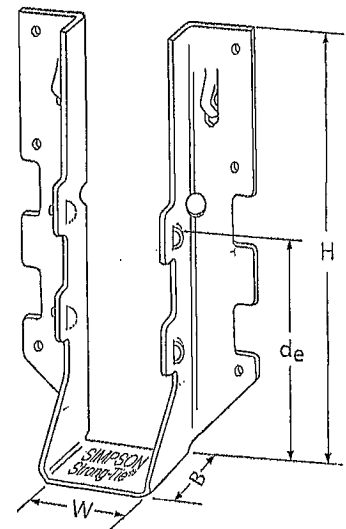
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



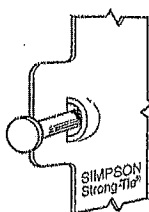
Typical LUS Installation



LUS28

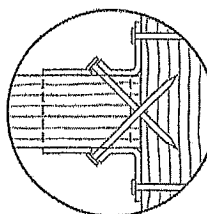
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1½	1½	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3¾	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4¾	8¾	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

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

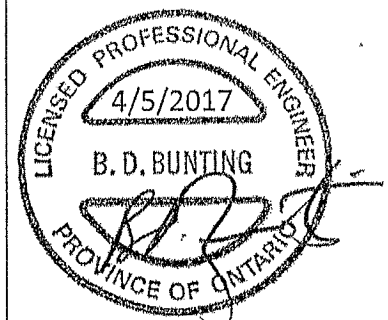


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



**LIMIT
STATES
DESIGN**

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

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

(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

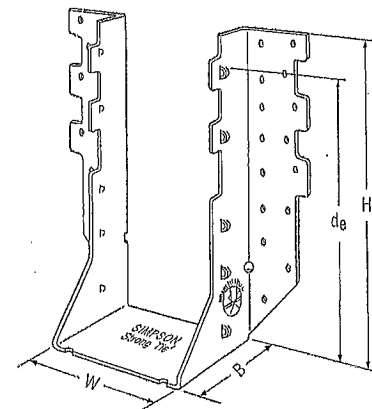
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

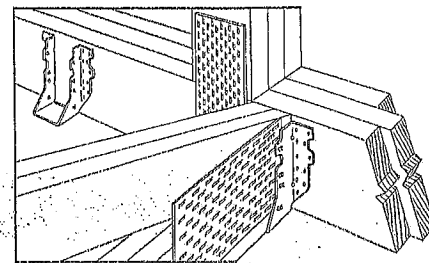
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

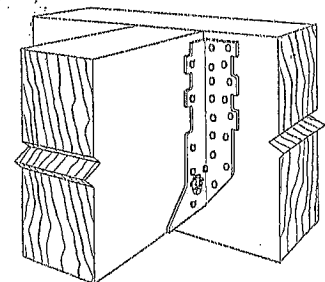
- See current catalogue for options



HHUS410



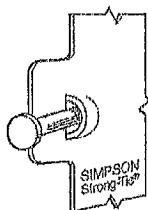
Typical HHUS Installation
(Truss Designer to provide
fastener quantity for connecting
multiple members together)



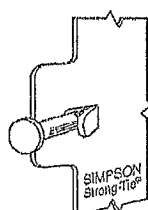
Typical HHUS
Installation

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
HHUS26-2	14	3 1/8	5 1/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 1/32	3	6 3/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 9/16	9 3/32	3	8	(30) 16d	(10) 16d	4745	9660	4310	7000
HHUS210-3	14	4 1 1/16	9	3	7 15/16	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 29/32	3	7 27/32	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS46	14	3 3/8	5 13/32	3	3 15/16	(14) 16d	(6) 16d	2540	7335	2065	5205
HHUS48	14	3 3/8	7 1/8	3	6 1/8	(22) 16d	(8) 16d	3765	8945	2267	6345
HHUS410	14	3 5/8	9	3	8	(30) 16d	(10) 16d	4745	9855	4310	7000
HHUS5.50/10	14	5 1/2	9	3	8	(30) 16d	(10) 16d	4745	10545	4310	7485
HHUS7.25/10	14	7 1/4	9	3 5/16	7 29/32	(30) 16d	(10) 16d	4745	10770	4310	7650

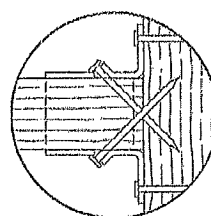
1. d₀ is the distance from the seat of the hanger to the highest joist nail.



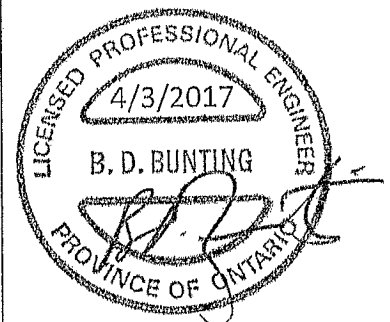
Double Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,680



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



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

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

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T-SPECHHUS17-3/17 exp. 6/19

(800) 999-5099
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