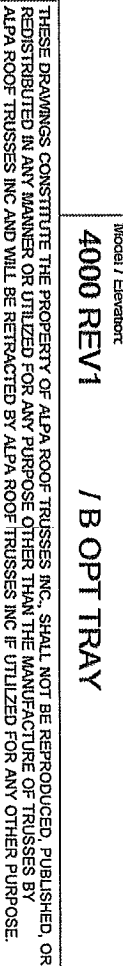


ALL CONV. FRAMING TO CONFORM WITH PART 9 OF O.B.C. (Latest Edition) ROOF PATTERNS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF #2 24" WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. VERT. POST LONGER THAN 6" TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'



HANGERS
// LUS24
X HHUS26-2
/ US2608

Job Track	45147	Builder / Location	GOLD PARK HOMES / VAUGHAN		Model / Elevation	4000 REV1	/ B
Layout ID:	292568	Project: PINE VALLEY					
Plan Log	95914	Date:	1/16/2018	Designer:	AMANDA	THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALFA 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 ALFA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALFA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.	



23'-05-00

34'-11-00

7'-03-00

3'-11-00

T.O.P. @ 7-00-00
w/ 12:12 SLOPE

8/12

H2A

H3

H4(8)

H3

H2

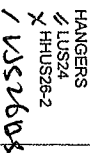
H1A

H2S(3)

H23

H22

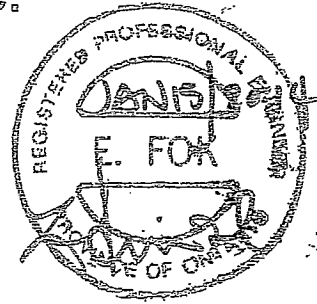
H21



ALPHA-B-APRILE

Stracon Engineering Inc.

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



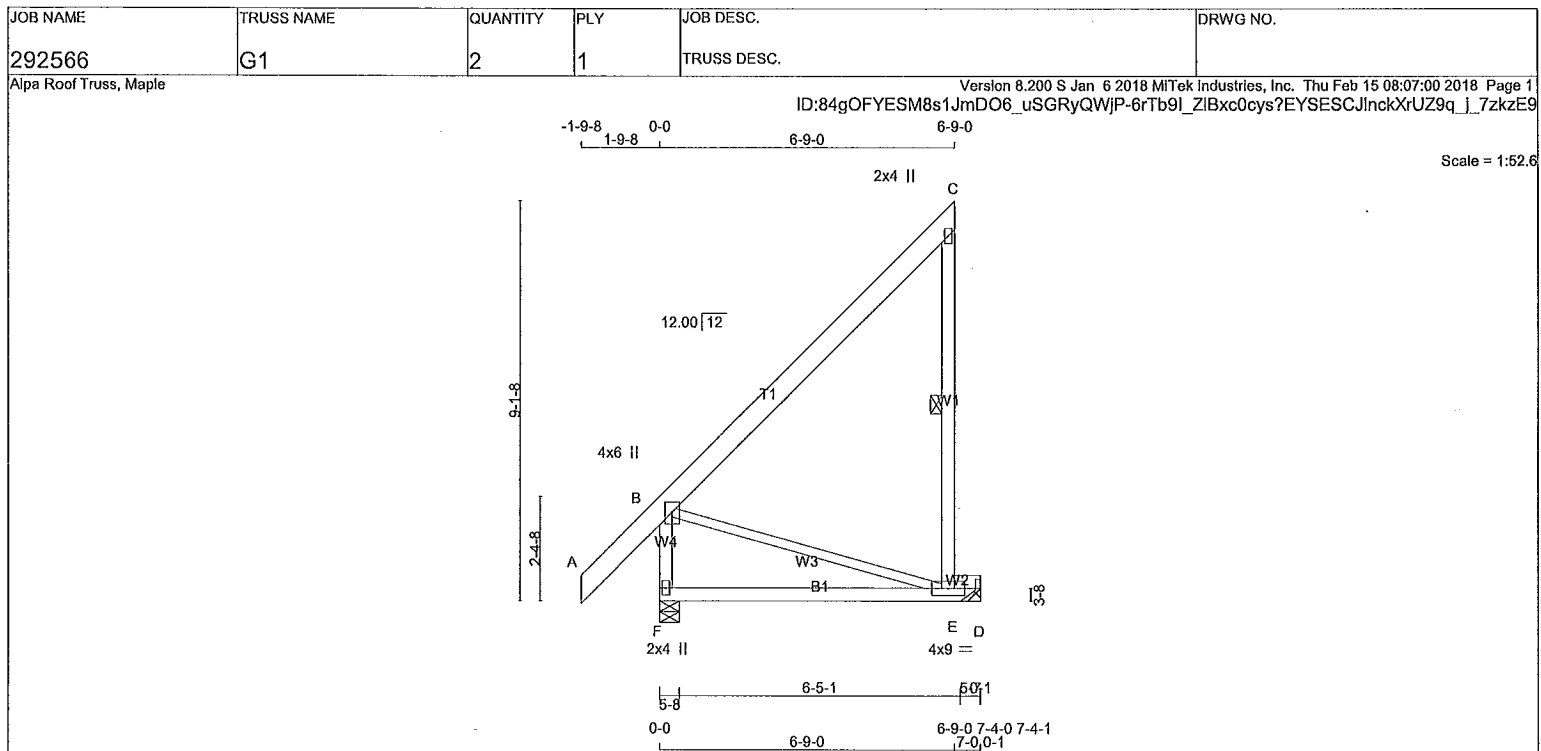
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



TOTAL WEIGHT = 2 X 48 = 96 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x6	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
F - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	2.75 2.00
C	TMV+p	MT20	2.0	4.0	
E	BMVWV-l	MT20	4.0	9.0	
F	BMV1+p	MT20	2.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
F	504	0	504	0	5-8	1-8
D	310	0	310	0	0	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	357	235 / 0	0 / 0	0 / 0	0 / 0	122 / 0	0 / 0
D	222	130 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 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 C-E.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	
	FR-TO	TO	FROM	TO	FR-TO		FR-TO	TO
A-B	0 / 54	-78.0	-78.0	0.11 (1)	10.00	B-E	0 / 0	0.00 (1)
B-C	0 / 0	-78.0	-78.0	0.30 (1)	10.00			
E-C	-263 / 0	0.0	0.0	0.09 (1)	6.25			
F-B	-415 / 0	0.0	0.0	0.05 (1)	7.81			
F-E	0 / 0	-18.5	-18.5	0.33 (4)	10.00			
E-D	0 / 0	-18.5	-18.5	0.10 (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

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) = $L/360$ (0.24")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
ALLOWABLE DEFL.(TL) = $L/360$ (0.24")
CALCULATED VERT. DEFL.(TL) = $L/374$ (0.24")

CSI: TC=0.30/1.00 (B-C:1), BC=0.33/1.00 (E-F:4), WB=0.00/1.00 (B-E:1), SSI=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.

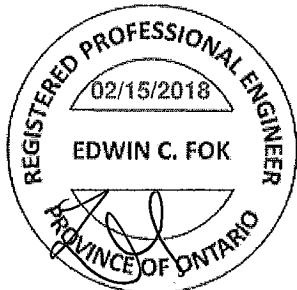
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (E) (INPUT = 0.90)
JSI METAL= 0.20 (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



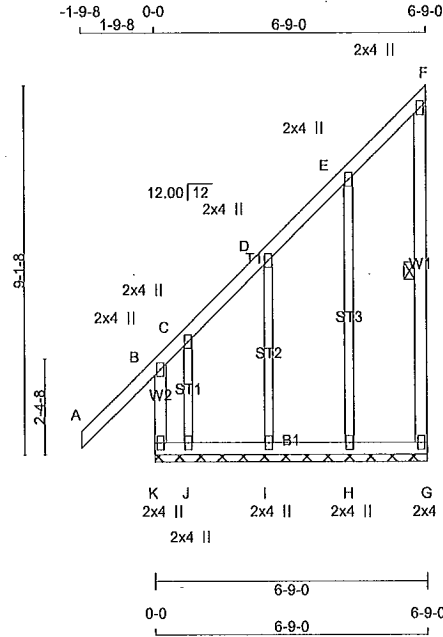
A-18023042

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	G1G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-x?qsPL3JK1hmkXP0LufUjSMnCkixXeRXmR1Cnzke3



Scale = 1:57.0

TOTAL WEIGHT = 45 lb

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C, D, E				
C	TMW+w	MT20	2.0	4.0
F	TMV+p	MT20	2.0	4.0
G	BMV1+p	MT20	2.0	4.0
H, I, J				
H	BMV1+w	MT20	2.0	4.0
K	BMV1+p	MT20	2.0	4.0

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

PROVIDE ANCHORAGE AT BEARING JOINT J FOR 150 LBS. FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
K-B	-336 / 0	0.0	0.0 0.04 (1)	7.81	H-E	-165 / 0	0.15 (1)
A-B	0 / 52	-78.0	-78.0 0.20 (1)	10.00	I-D	-161 / 0	0.06 (1)
B-C	-116 / 0	-78.0	-78.0 0.17 (1)	6.25	J-C	0 / 65	0.01 (1)
C-D	-4 / 0	-78.0	-78.0 0.04 (1)	10.00			
D-E	-5 / 0	-78.0	-78.0 0.04 (1)	10.00			
E-F	-9 / 0	-78.0	-78.0 0.04 (1)	10.00			
G-F	-67 / 0	0.0	0.0 0.01 (1)	6.25			
K-J	0 / 5	-18.5	-18.5 0.04 (1)	10.00			
J-I	0 / 7	-18.5	-18.5 0.02 (4)	10.00			
I-H	0 / 3	-18.5	-18.5 0.02 (4)	10.00			
H-G	0 / 0	-18.5	-18.5 0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.20/1.00 (A-B:1), BC=0.04/1.00 (J-K:1), WB=0.15/1.00 (E-H:1), SSI=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

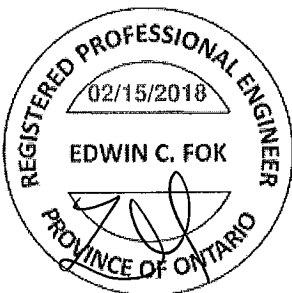
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.18 (B) (INPUT = 1.00)

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



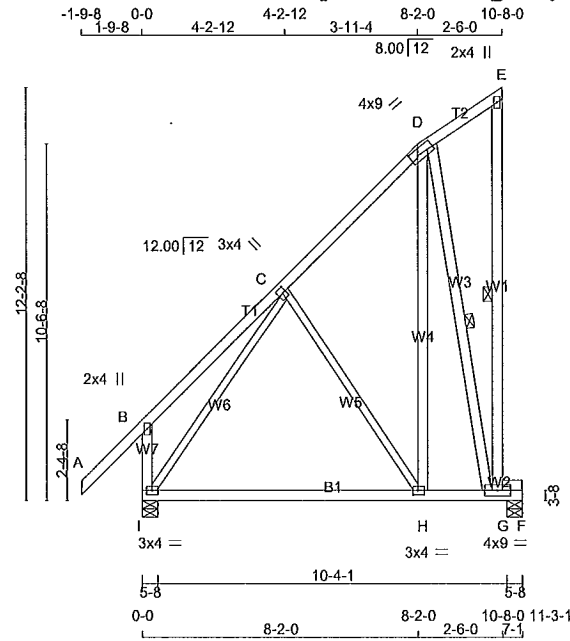
A-18023043

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	G2	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-iXJu549LSuidhm0ZpAokpPojURNdp3sdN0NSTJzkzDx



TOTAL WEIGHT = 2 X 84 = 168 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C	TMVW+H	MT20	3.0	4.0 2.00 1.25
D	TTWW-m	MT20	4.0	9.0 2.00 2.75
E	TMV+p	MT20	2.0	4.0
G	BMVWV-I	MT20	4.0	9.0
H	BMVWV-I	MT20	3.0	4.0 1.50 1.75
I	BMVWV-I	MT20	3.0	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	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
F	498	0	498	0	5-8 (5-7)
I	689	0	689	0	5-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	358	212 / 0	0 / 0	0 / 0	0 / 0	144 / 0	0 / 0
I	489	315 / 0	0 / 0	0 / 0	0 / 0	173 / 0	0 / 0

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

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 E-G, D-G.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO					FR-TO				
A-B	0 / 52	-78.0	-78.0	0.20 (1)	H-D	0 / 465	0.07 (1)	0.07 (1)	0.07 (1)
B-C	0 / 27	-78.0	-78.0	0.22 (1)	D-G	-570 / 0	0.35 (1)	0.35 (1)	0.35 (1)
C-D	-210 / 0	-78.0	-78.0	0.22 (1)	I-C	-435 / 0	0.45 (1)	0.45 (1)	0.45 (1)
D-E	0 / 0	-78.0	-78.0	0.08 (1)	C-H	-198 / 0	0.22 (1)	0.22 (1)	0.22 (1)
G-E	-97 / 0	0.0	0.0	0.08 (1)					
I-B	-269 / 0	0.0	0.0	0.03 (1)					
I-H	0 / 242	-18.5	-18.5	0.33 (4)					
H-G	0 / 136	-18.5	-18.5	0.42 (1)					
G-F	0 / 0	-18.5	-18.5	0.16 (1)					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")

CSI: TC=0.22/1.00 (B-C-1), BC=0.42/1.00 (G-H-1), WB=0.45/1.00 (C-I-1), SSI=0.19/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

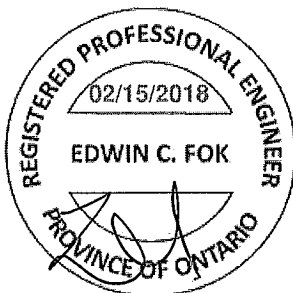
NAIL VALUES				
PLATE	GRIP(DRY)	SHEAR	SECTION	
	(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	MAX MIN	
MT20	618	354	1667	788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

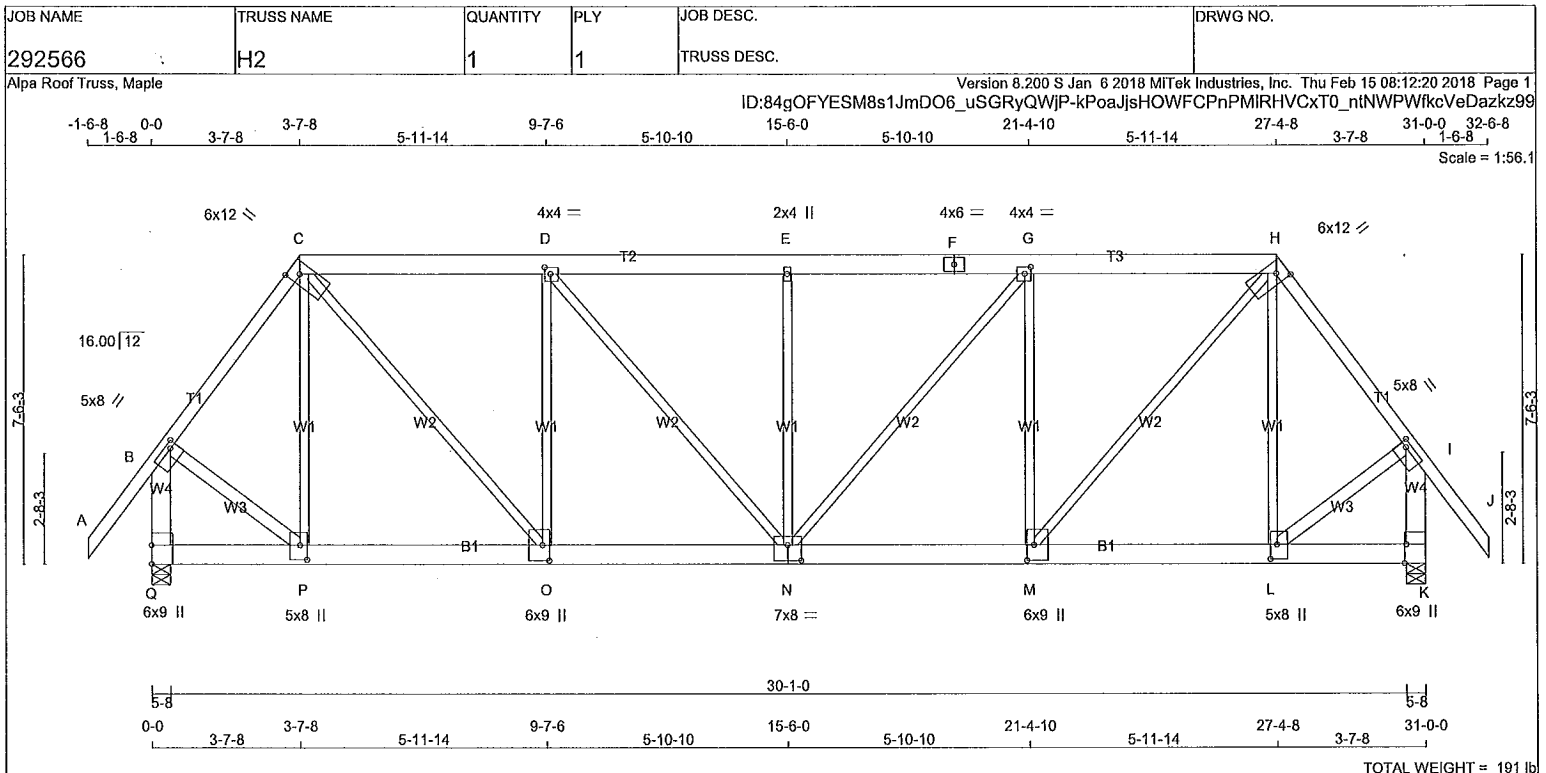
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.32 (G) (INPUT = 1.00)

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



A-18023044



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-t	MT20	5.0	8.0 1.50 2.00
C	TTWW+h	MT20	6.0	12.0 3.25 2.75
D	TMVW-t	MT20	4.0	4.0 2.00 1.75
E	TMVW-w	MT20	2.0	4.0
F	TS-t	MT20	4.0	6.0
G	TMVW-t	MT20	4.0	4.0 2.00 1.75
H	TTWW+h	MT20	6.0	12.0 3.25 2.75
I	TMVW-t	MT20	5.0	8.0 1.50 2.00
K	BMV1+t	MT20	6.0	9.0 Edge 0.50
L	BMVW+t	MT20	5.0	8.0 4.25 2.00
M	BMVW+t	MT20	6.0	9.0 4.50 2.00
N	BSVWV-t	MT20	7.0	8.0 4.50 4.00
O	BMVW+t	MT20	6.0	9.0 4.50 2.00
P	BMVW+t	MT20	5.0	8.0 4.25 2.00
Q	BMV1+t	MT20	6.0	9.0 5.50

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
JT	1625	0	1625	0	0	5-8	1-12	
Q	1625	0	1625	0	0	5-8	1-12	

UNFACTORED REACTIONS

	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
JT	1156	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
Q	1156	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.63 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)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 52	-78.0	-78.0 0.17 (1)	10.00	P-C	-302 / 0	0.28 (1)
B-C	-1156 / 0	-78.0	-78.0 0.23 (1)	5.63	C-O	0 / 1176	0.29 (1)
C-D	-1450 / 0	-78.0	-78.0 0.22 (1)	6.15	O-D	-784 / 0	0.72 (1)
D-E	-1666 / 0	-78.0	-78.0 0.23 (1)	5.83	D-N	0 / 337	0.08 (1)
E-F	-1666 / 0	-78.0	-78.0 0.23 (1)	5.83	N-E	-423 / 0	0.39 (1)
F-G	-1666 / 0	-78.0	-78.0 0.23 (1)	5.83	N-G	0 / 337	0.08 (1)
G-H	-1450 / 0	-78.0	-78.0 0.22 (1)	6.15	M-G	-784 / 0	0.72 (1)
H-I	-1156 / 0	-78.0	-78.0 0.23 (1)	5.63	M-H	0 / 1176	0.29 (1)
I-J	0 / 52	-78.0	-78.0 0.17 (1)	10.00	L-H	-302 / 0	0.28 (1)
Q-B	-1607 / 0	0.0	0.0 0.16 (1)	7.72	B-P	0 / 805	0.14 (1)
K-I	-1607 / 0	0.0	0.0 0.16 (1)	7.72	L-I	0 / 805	0.14 (1)
Q-P	0 / 0	-18.5	-18.5 0.04 (4)	10.00			
P-O	0 / 688	-18.5	-18.5 0.09 (1)	10.00			
O-N	0 / 1450	-18.5	-18.5 0.15 (1)	10.00			
N-M	0 / 1450	-18.5	-18.5 0.15 (1)	10.00			
M-L	0 / 688	-18.5	-18.5 0.09 (1)	10.00			
L-K	0 / 0	-18.5	-18.5 0.04 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

CSI: TC=0.23/1.00 (B-C:1), BC=0.15/1.00 (N-O:1)
WB=0.72/1.00 (D-O:1), SSI=0.18/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

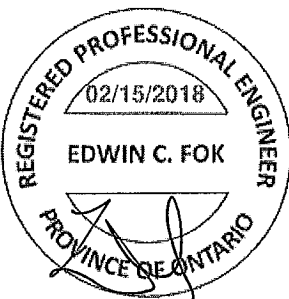
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (D) (INPUT = 0.90)
JSI METAL= 0.26 (B) (INPUT = 1.00)

A-18023046



Alpa Roof Truss, Maple

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The diagram shows a roof truss with various dimensions. The top dimensions are: 1-6-8, 0-0, 3-7-8, 9-7-6, 15-6-0, 5-10-10, 21-4-10, 5-11-14, 27-4-8, 31-0-0, 32-6-8, 3-7-8, 1-6-8. The bottom dimensions are: 1-6-8, 3-7-8, 5-11-14, 5-10-10, 5-11-14, 1-6-8. The scale is 1:56.1.

Scale = 1:56.1



DRY: SEASONED LUMBER.

CHORDS	#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS			
A- C	1	12	TOP
H- J	1	12	TOP
C- F	2	12	TOP
F- H	2	12	TOP
Q- B	2	12	TOP
K- I	2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
Q- N	2	9	SIDE(265.9)
N- K	2	9	SIDE(265.9)
WEBS : (0.122"x3") SPIRAL NAILS			
2x3	1	6	
2x4	1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

02/15/2018

EDWIN C. FOK

REGISTERED PROFESSIONAL ENGINEER

PROVINCE OF ONTARIO

BEARINGS

UNFACTORED REACTIONS	
1ST CASE	MAX./MIN. COMPONENT REACTIONS

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

BEARING SIZE FACTOR = 1.15 AT JNT(S) Q, K (BASED ON SUPPORT DEPTH = 1-8)

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY

APPLIED.

ALL FITTING BREAKS AND PERMITTED CORNER JOINTS MUST BE LATERALLY RESTRAINED

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

TOTAL LOAD CASES: (4)

CHIEF WELD

Q-P	0/0	-550.2	-550.2	0.32 (1)	10.00
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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 = 0-0
START SPAN CARRIED = 24-0-9
END DISTANCE = 31-0-0
END SPAN CARRIED = 24-0-9
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'T'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/ 947 (0.39")

CSI: TC=0.46/1.00 (I-K:1), BC=0.87/1.00 (M-N:1),
WB=0.92/1.00 (H-M:1), SSI=0.64/1.00 (M-N:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES	GRIP (DRY)		SHEAR		SECTION	
	(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 (G) (INPUT = 0.90)
JSI METAL= 0.83 (P) (INPUT = 1.00)

A-18023047 CONTINUED ON PAGE 2

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H2A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

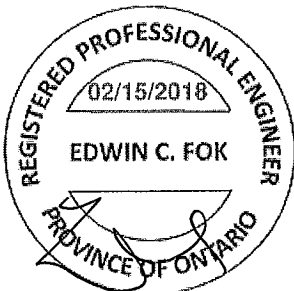
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:11:48 2018 Page 2
ID:84gOFYESM8s1JmDO6 uSGRyQWjP-gFtTbmTCwgDIZtDijl?vB8UXInf0IOyNely5Qzkz9f

PLATES (table is in inches)

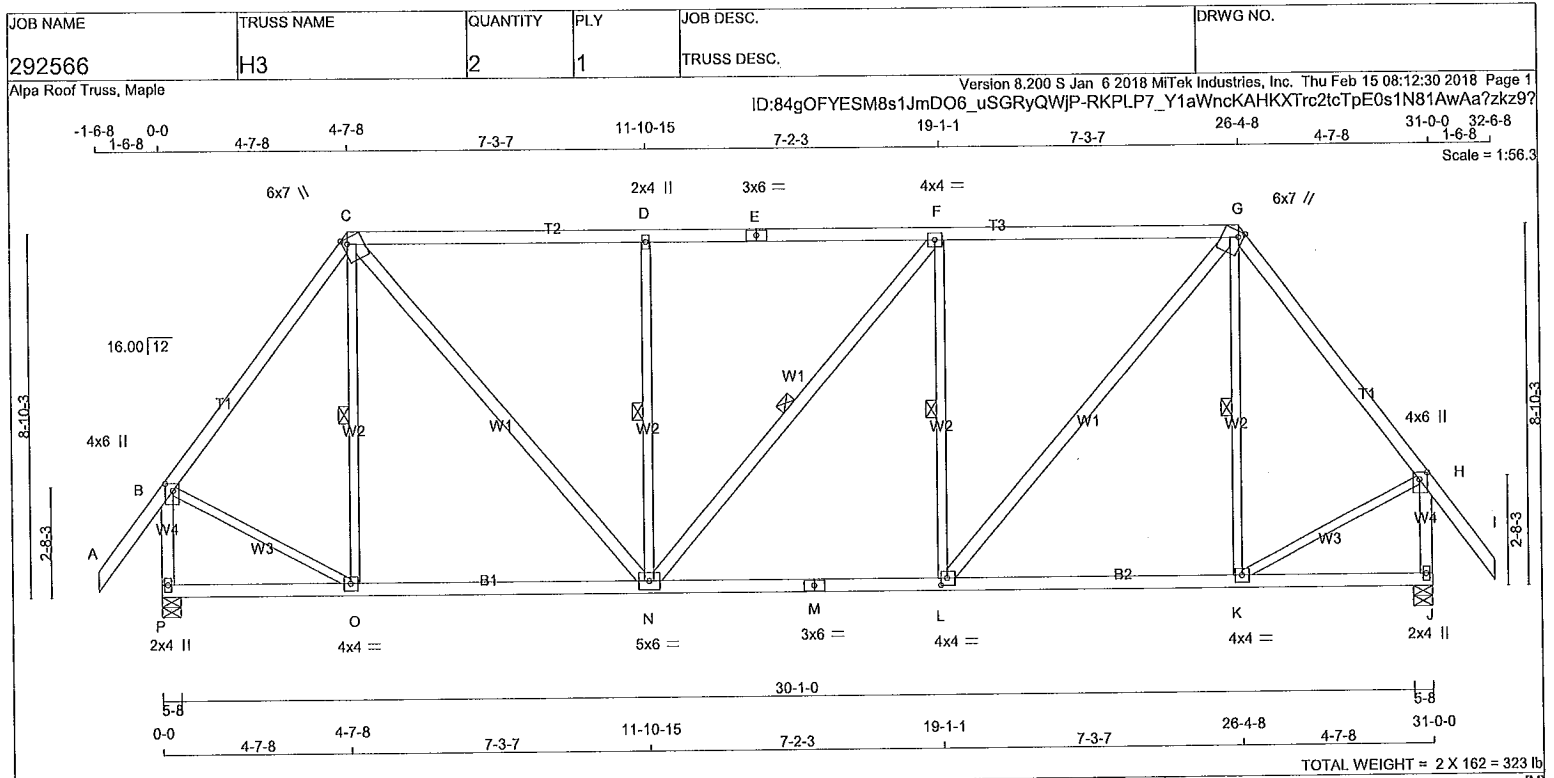
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.50	2.00
C	TTWW+h	MT20	6.0	12.0	3.25	2.75
D	TMWW-t	MT20	4.0	4.0	2.00	1.75
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	4.0	6.0		
G	TMWW-t	MT20	4.0	4.0	2.00	1.75
H	TTWW+h	MT20	6.0	12.0	3.25	2.75
I	TMVW-t	MT20	5.0	8.0	1.50	2.00
K	BMV1+t	MT20	6.0	9.0	Edge	0.50
L	BMWW+t	MT20	5.0	8.0	4.25	2.00
M	BMWW+t	MT20	6.0	9.0	4.50	2.00
N	BSWWW-l	MT20	7.0	8.0	4.50	4.00
O	BMWW+t	MT20	6.0	9.0	4.50	2.00
P	BMWW+t	MT20	5.0	8.0	4.25	2.00
Q	BMV1+t	MT20	6.0	9.0	5.50	

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

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



A-18023047(2)



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.25
C	TTVW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTVW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	2.00	2.25
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0		
L	BMVW-t	MT20	4.0	4.0	2.00	1.75
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	5.0	6.0		
O	BMVW-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	HORZ	UPLIFT
P	1625	0	1625	0	5-8
J	1625	0	1625	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT COMBINED							
P	1156	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
J	1156	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.67 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 C-O, D-N, F-N, F-L, G-K.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 52	O-C	-217 / 2
B-C	-1178 / 0	C-N	0 / 979
C-D	-1337 / 0	N-D	-609 / 0
D-E	-1337 / 0	N-F	-2 / 0
E-F	-1337 / 0	L-F	-610 / 0
F-G	-1338 / 0	L-G	0 / 981
G-H	-1177 / 0	K-G	-218 / 2
H-I	0 / 52	B-O	0 / 781
P-B	-1595 / 0	K-H	0 / 781
J-H	-1595 / 0		
P-O	0 / 0		
O-N	0 / 700		
N-M	0 / 1338		
M-L	0 / 1338		
L-K	0 / 700		
K-J	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0 PSF
	DL = 8.0 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 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.68/1.00 (F-G:1), BC=0.32/1.00 (L-N:1), WB=0.31/1.00 (F-L:1), SSI=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (N) (INPUT = 0.90)
JSI METAL = 0.48 (M) (INPUT = 1.00)

A-18023048

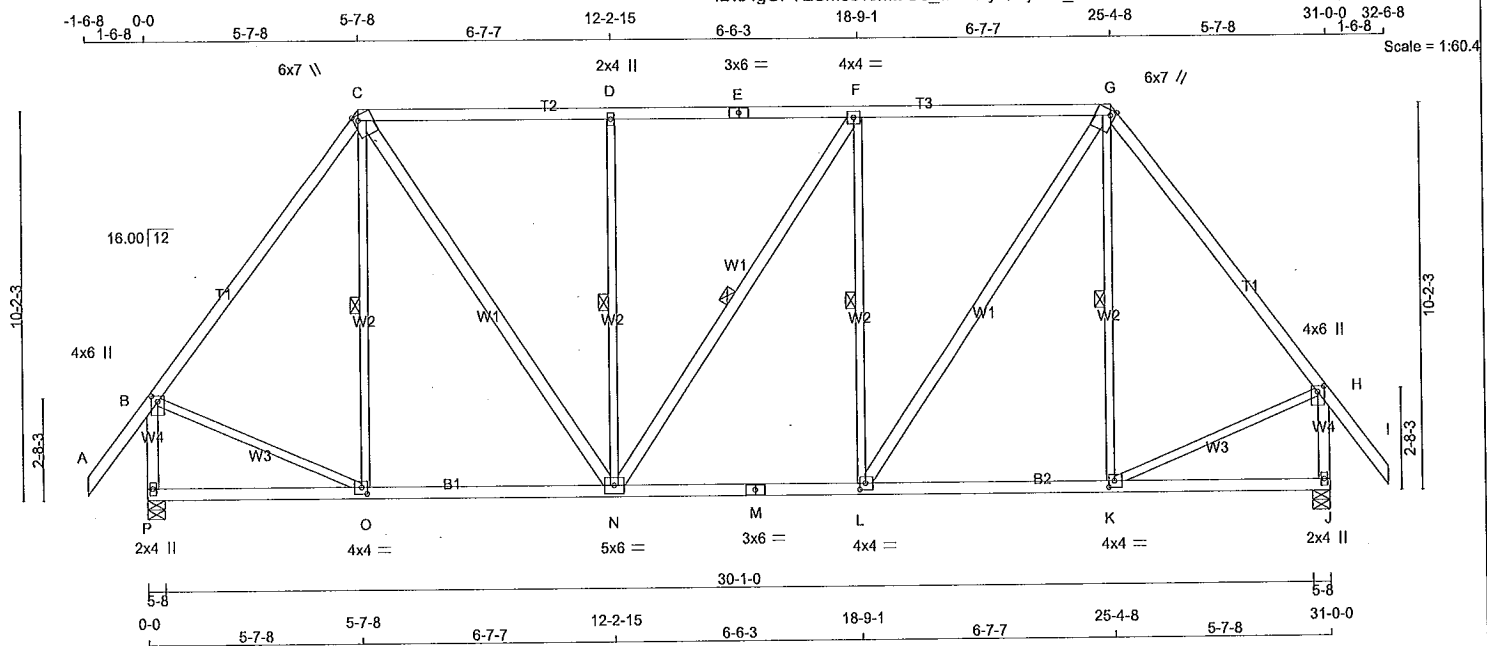


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H4	8	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWJP-O_3XOdCTZQv5OF7xx1llu2Av9Tk2pb8xPd1hkOzkz8l



TOTAL WEIGHT = 8 X 171 = 1370 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW+p	MT20	4.0	6.0	1.75	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMWW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMWW+p	MT20	4.0	6.0	1.75	2.00
J	BMV1+p	MT20	2.0	4.0		
K, L, O						
K	BMWW-t	MT20	4.0	4.0	2.00	1.75
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT
JT	1699	0	1699	0
P	1699	0	1699	0
J	1699	0	1699	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	1215	720 / 0	0 / 0	0 / 0	0 / 0	495 / 0	0 / 0
P	1215	720 / 0	0 / 0	0 / 0	0 / 0	495 / 0	0 / 0
J	1215	720 / 0	0 / 0	0 / 0	0 / 0	495 / 0	0 / 0

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

BRACING

FOR SECTION C-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 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-O, D-N, F-N, F-L, G-K.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO						FR-TO		
A-B	0 / 52	-78.0	-78.0	0.15 (1)	10.00	O-C	-173 / 10	0.12 (1)
B-C	-1258 / 0	-78.0	-78.0	0.40 (1)	5.33	C-N	0 / 874	0.14 (1)
C-D	-1237 / 0	-85.5	-85.5	0.46 (1)	2.00	N-D	-606 / 0	0.43 (1)
D-E	-1237 / 0	-85.5	-85.5	0.42 (1)	2.00	N-F	-2 / 0	0.00 (1)
E-F	-1237 / 0	-85.5	-85.5	0.42 (1)	2.00	L-F	-806 / 0	0.43 (1)
F-G	-1237 / 0	-85.5	-85.5	0.46 (1)	2.00	L-G	0 / 876	0.14 (1)
G-H	-1238 / 0	-85.5	-85.5	0.46 (1)	5.34	K-G	-175 / 10	0.12 (1)
H-I	-1257 / 0	-78.0	-78.0	0.40 (1)	5.34	B-O	0 / 810	0.18 (1)
I-J	0 / 52	-78.0	-78.0	0.15 (1)	10.00	O-H	0 / 809	0.18 (1)
P-B	-1658 / 0	0.0	0.0	0.24 (1)	6.44			
J-H	-1658 / 0	0.0	0.0	0.24 (1)	6.44			
P-O	0 / 0	-18.5	-18.5	0.16 (4)	10.00			
O-N	0 / 750	-18.5	-18.5	0.24 (4)	10.00			
N-M	0 / 1239	-18.5	-18.5	0.28 (1)	10.00			
M-L	0 / 1239	-18.5	-18.5	0.28 (1)	10.00			
L-K	0 / 750	-18.5	-18.5	0.24 (4)	10.00			
K-J	0 / 0	-18.5	-18.5	0.16 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

(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 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.46/1.00 (F-G:1), BC=0.28/1.00 (L-N:1), WB=0.43/1.00 (F-L:1), SSI=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (P) (INPUT = 0.80)
JSI METAL= 0.51 (B) (INPUT = 1.00)

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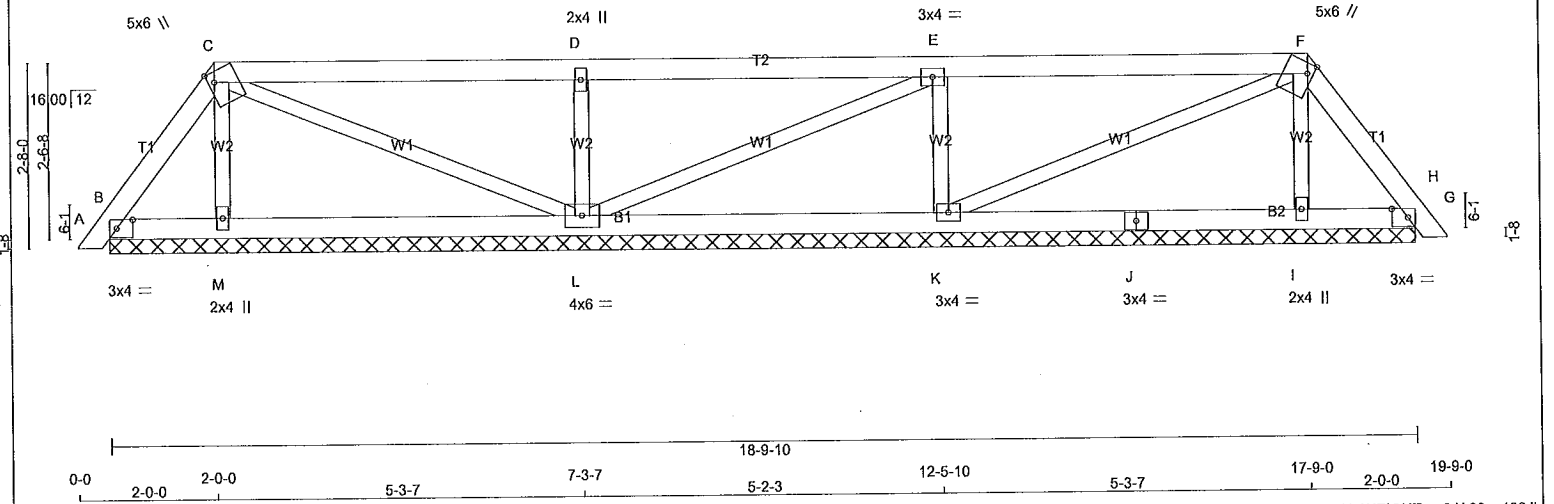


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H5P	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmD06_uSGRYQWJP-D8QofgHE8GfE6Ab5IHPi7JP_FuqHDOGpnZU?x2zkz8c

0-0 2-0-0 2-0-0 5-3-7 7-3-7 5-2-3 12-5-10 5-3-7 17-9-0 2-0-0 19-9-0
Scale = 1:33.2



TOTAL WEIGHT = 2 X 66 = 133 lb

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
A - C	2x4	DRY	No.2	SPF	
C - 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.					

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
B	135	0	135	0	0	18-9-10 (4-0-0)3-14			
M	237	0	237	0	0	18-9-10 (4-0-0)3-14			
L	577	0	577	0	0	18-9-10 (4-0-0)3-14			
K	539	0	539	0	0	18-9-10 (4-0-0)3-14			
I	230	0	230	0	0	18-9-10 (4-0-0)3-14			
G	151	0	151	0	0	18-9-10 (4-0-0)3-14			

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	93	75 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0	0 / 0
M	173	84 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0	0 / 0
L	410	258 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 0	0 / 0
K	383	237 / 0	0 / 0	0 / 0	0 / 0	146 / 0	0 / 0	0 / 0
I	168	80 / 0	0 / 0	0 / 0	0 / 0	88 / 0	0 / 0	0 / 0
G	104	84 / 0	0 / 0	0 / 0	0 / 0	20 / 0	0 / 0	0 / 0

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM	TO		FR-TO			FR-TO	
A-B	0 / 10	-78.0	-78.0 0.01 (1)	10.00	M-C	-157 / 0	0.03 (1)		
B-C	-64 / 0	-78.0	-78.0 0.03 (1)	6.25	C-L	-42 / 0	0.02 (1)		
C-D	0 / 10	-78.0	-78.0 0.29 (1)	10.00	L-D	-449 / 0	0.07 (1)		
D-E	0 / 9	-78.0	-78.0 0.29 (1)	10.00	L-E	-37 / 0	0.02 (1)		
E-F	-24 / 0	-78.0	-78.0 0.29 (1)	6.25	K-E	-434 / 0	0.07 (1)		
F-G	-84 / 0	-78.0	-78.0 0.03 (1)	6.25	K-F	-18 / 0	0.01 (1)		
G-H	0 / 10	-78.0	-78.0 0.01 (1)	10.00	I-F	-149 / 0	0.02 (1)		
B-M	0 / 36	-18.5	-18.5 0.08 (4)	10.00					
M-L	0 / 29	-18.5	-18.5 0.10 (4)	10.00					
L-K	0 / 24	-18.5	-18.5 0.10 (4)	10.00					
K-J	0 / 41	-18.5	-18.5 0.10 (4)	10.00					
J-I	0 / 41	-18.5	-18.5 0.10 (4)	10.00					
I-G	0 / 48	-18.5	-18.5 0.08 (4)	10.00					

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.29/1.00 (D-E:1), BC=0.10/1.00 (H-K:4), WB=0.07/1.00 (D-L:1), SSI=0.19/1.00 (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.

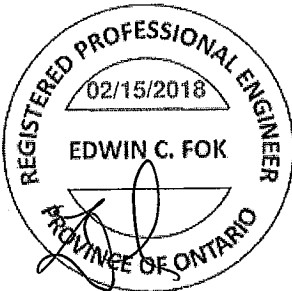
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

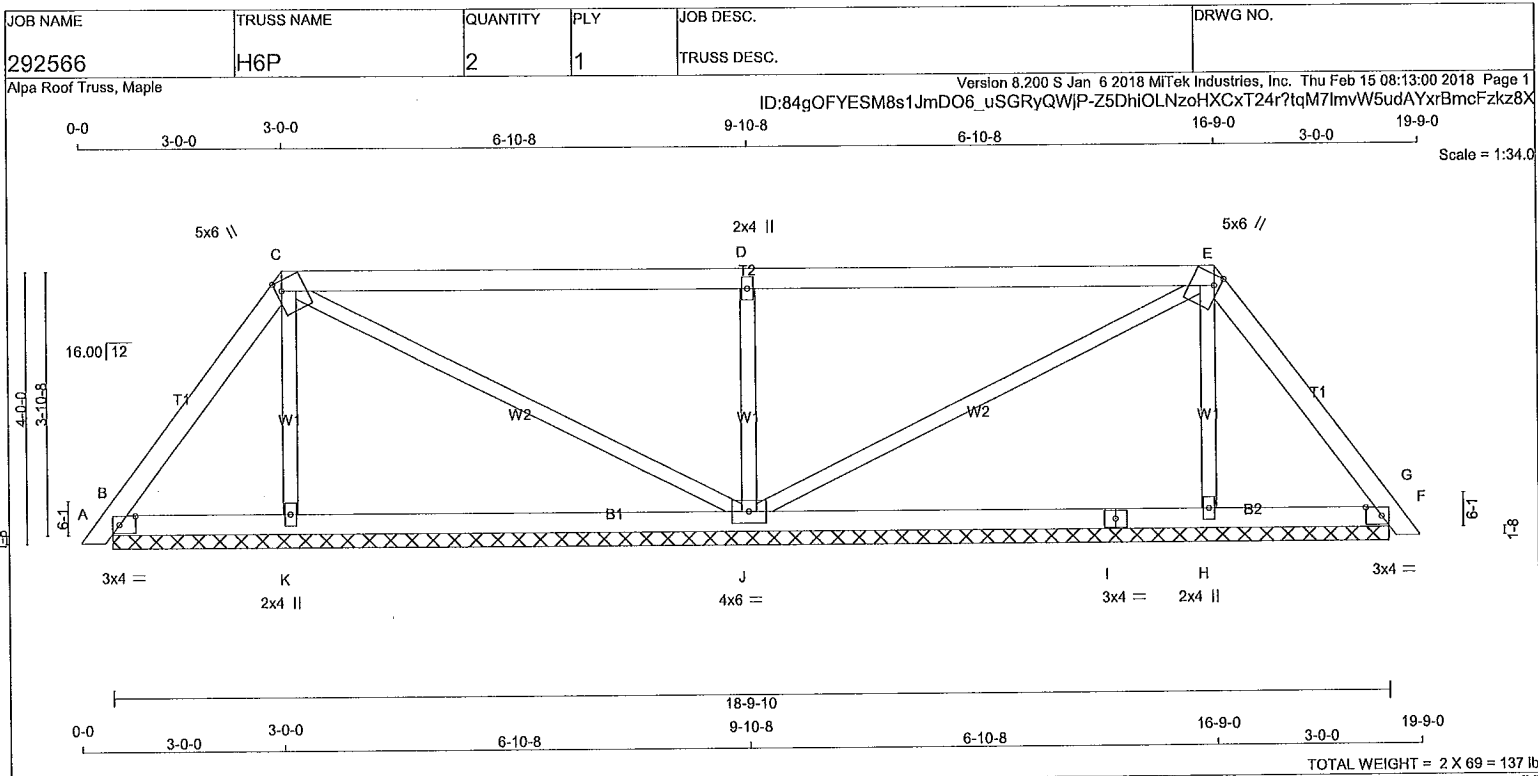
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (L) (INPUT = 0.90)
JSI METAL= 0.12 (J) (INPUT = 1.00)

A-18023050





LUMBER
N. L. G. A. RULES

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

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	TTWW+m	MT20	5.0	6.0	1.75	1.00
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H	BMW1+w	MT20	2.0	4.0		
I	BS-I	MT20	3.0	4.0		
J	BMW1+w	MT20	4.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	213	0	213	0	18-9-10 (4-0-0) 38-0	
K	299	0	299	0	18-9-10 (4-0-0) 38-0	
J	845	0	845	0	18-9-10 (4-0-0) 38-0	
H	299	0	299	0	18-9-10 (4-0-0) 38-0	
F	213	0	213	0	18-9-10 (4-0-0) 38-0	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	COMBINED	MAX/MIN COMPONENT REACTIONS				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	148	112 / 0	0 / 0	0 / 0	0 / 0	36 / 0
K	218	106 / 0	0 / 0	0 / 0	0 / 0	112 / 0
J	600	383 / 0	0 / 0	0 / 0	0 / 0	216 / 0
H	218	106 / 0	0 / 0	0 / 0	0 / 0	112 / 0
F	148	112 / 0	0 / 0	0 / 0	0 / 0	36 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO		
A-B	0 / 10	-78.0 -78.0	0.01 (1)	10.00	K-C	-196 / 0
B-C	-102 / 0	-78.0 -78.0	0.09 (1)	6.25	C-J	-46 / 0
C-D	-12 / 0	-78.0 -78.0	0.63 (1)	6.25	J-D	-670 / 0
D-E	-12 / 0	-78.0 -78.0	0.63 (1)	6.25	J-E	-46 / 0
E-F	-102 / 0	-78.0 -78.0	0.09 (1)	6.25	H-E	-196 / 0
F-G	0 / 10	-78.0 -78.0	0.01 (1)	10.00		
B-K	0 / 59	-18.5 -18.5	0.13 (4)	10.00		
K-J	0 / 53	-18.5 -18.5	0.19 (4)	10.00		
J-I	0 / 53	-18.5 -18.5	0.19 (4)	10.00		
I-H	0 / 53	-18.5 -18.5	0.19 (4)	10.00		
H-F	0 / 59	-18.5 -18.5	0.13 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.63/1.00 (D-E:1), BC=0.19/1.00 (J-K:4), WB=0.16/1.00 (D-J:1), SSI=0.26/1.00 (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.

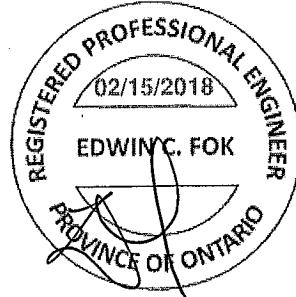
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (J) (INPUT = 0.90)
JSI METAL= 0.14 (D) (INPUT = 1.00)

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

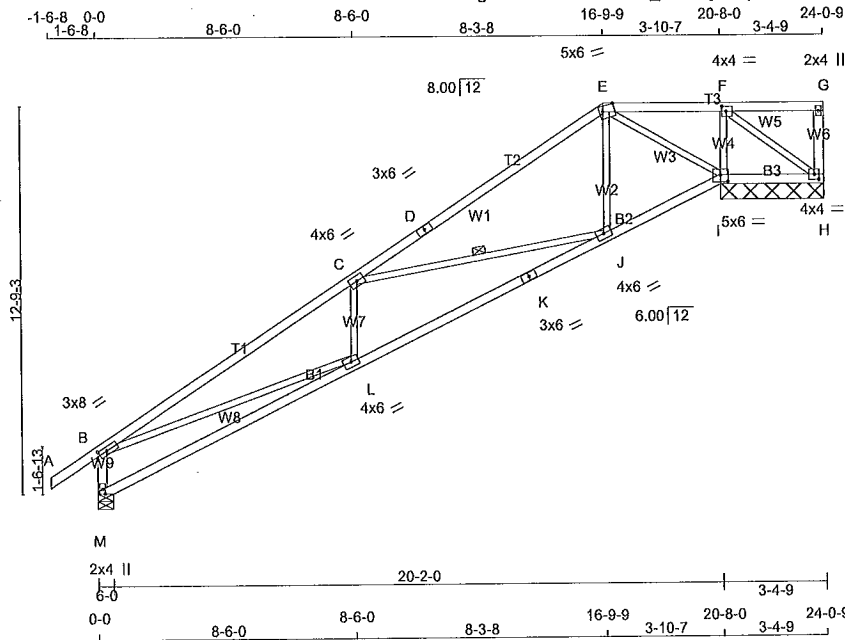


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H7T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:84gOFYEM8s1JmDO6_uSGRYQWJP-wKY0KvcAnZ3PrJ9HNSO2?71SLmyP2Run_GWwO_zkz8B



TOTAL WEIGHT = 95 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	2100F 1.8E	SPF		
D - E	2x4 DRY	2100F 1.8E	SPF		
E - G	2x4 DRY	No.2	SPF		
H - G	2x4 DRY	No.2	SPF		
M - B	2x4 DRY	No.2	SPF		
M - K	2x4 DRY	No.2	SPF		
K - I	2x4 DRY	No.2	SPF		
I - H	2x4 DRY	No.2	SPF		

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	8.0	1.50	3.25
C	TMVW-I	MT20	4.0	6.0		
D	TS-I	MT20	3.0	6.0		
E	TTWW-m	MT20	5.0	6.0	Edge	4.75
F	TMVW-I	MT20	4.0	4.0	2.00	1.75
G	TMV+p	MT20	2.0	4.0		
H	BMVW1-I	MT20	4.0	4.0	2.00	1.75
I	BBVW1-I	MT20	5.0	6.0	2.75	3.00
J	BMVW-I	MT20	4.0	6.0		
K	BS-I	MT20	3.0	6.0		
L	BMVW-I	MT20	4.0	6.0		
M	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	UPLIFT	IN-SX
JT	-506	0	0	-506
H	1938	0	1938	0
I	1014	0	1014	0
M	1014	0	1014	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT H FOR 506 LBS FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES, SHALL BE PROVIDED BY BUILDG. DESIGNER

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	-360	0/-223	0/0	0/0	0/0	0/-137	0/0
I	1381	847/0	0/0	0/0	0/0	534/0	0/0
M	720	454/0	0/0	0/0	0/0	267/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MEMB. UNBRACED LENGTH (FT)	WEBS MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO		FROM	TO				
A-B	0/35	-78.0	-78.0	0.09 (1)	10.00	L-C	-112/89
B-C	-1968/0	-78.0	-78.0	0.87 (1)	4.74	C-J	-1378/0
C-D	-413/0	-78.0	-78.0	0.82 (1)	6.25	J-E	0/591
D-E	-413/0	-78.0	-78.0	0.82 (1)	6.25	E-I	-1421/0
E-F	0/890	-78.0	-78.0	0.36 (1)	10.00	I-F	-994/0
F-G	0/0	-78.0	-78.0	0.22 (1)	10.00	F-H	0/1049
H-G	-79/0	0.0	0.0	0.01 (1)	7.81	B-L	0/1760
M-B	-948/0	0.0	0.0	0.10 (1)	7.81		
M-L	0/8	-18.5	-18.5	0.32 (4)	10.00		
L-K	0/1864	-18.5	-18.5	0.50 (4)	10.00		
K-J	0/1864	-18.5	-18.5	0.50 (4)	10.00		
J-I	0/350	-18.5	-18.5	0.20 (4)	10.00		
I-H	-847/0	-18.5	-18.5	0.07 (4)	6.25		

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.69")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.69")
CALCULATED VERT. DEFL.(TL) = L/932 (0.27")

CSI: TC=0.87/1.00 (B-C:1), BC=0.50/1.00 (J-L:4), WB=0.71/1.00 (C-J:1), SSI=0.26/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

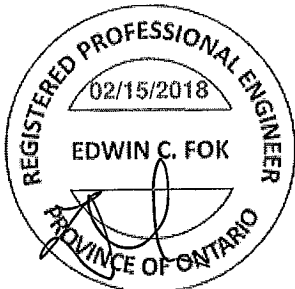
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.65 (K) (INPUT = 1.00)

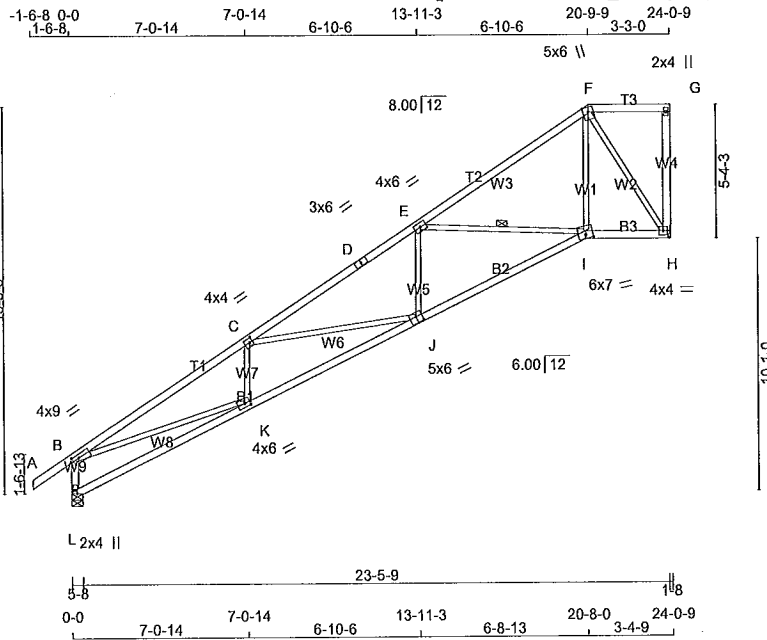
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H8T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:92.1

TOTAL WEIGHT = 102 lb

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

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-t	MT20	4.0	9.0 1.75 3.00
C	TMVW-t	MT20	4.0	4.0 2.00 1.50
D	TS-t	MT20	3.0	6.0
E	TMVW-t	MT20	4.0	6.0
F	TTVW+m	MT20	5.0	6.0 Edge
G	TMV+p	MT20	2.0	4.0
H	BMVW-t	MT20	4.0	4.0
I	BBVW-m	MT20	6.0	7.0 1.75 3.50
J	BSVW-t	MT20	5.0	6.0 3.00 3.00
K	BMVW-t	MT20	4.0	6.0 1.75 2.50
L	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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
H	1160	0	1160	0	0				
L	1286	0	1286	0	0				

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	827	505 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0
L	914	573 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-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. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 35	-78.0 -78.0	0.15 (1)	10.00	K-C	-330 / 0	0.06 (1)
B-C	-2796 / 0	-78.0 -78.0	0.78 (1)	3.53	C-J	-460 / 0	0.44 (1)
C-D	-2260 / 0	-78.0 -78.0	0.56 (1)	4.09	J-E	0 / 294	0.07 (4)
D-E	-2260 / 0	-78.0 -78.0	0.56 (1)	4.09	E-I	-1209 / 0	0.39 (1)
E-F	-841 / 0	-78.0 -78.0	0.46 (1)	6.01	I-F	0 / 1113	0.25 (1)
F-G	0 / 0	-78.0 -78.0	0.14 (1)	10.00	F-H	-1194 / 0	0.72 (1)
H-G	-127 / 0	0.0 0.0	0.06 (1)	7.81	B-K	0 / 2448	0.55 (1)
L-B	-1230 / 0	0.0 0.0	0.13 (1)	7.23			
L-K	0 / 7	-18.5 -18.5	0.23 (4)	10.00			
K-J	0 / 2609	-18.5 -18.5	0.52 (1)	10.00			
J-I	0 / 2102	-18.5 -18.5	0.48 (1)	10.00			
I-H	0 / 646	-18.5 -18.5	0.14 (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

(56% 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 (0.80")
CALCULATED VERT. DEFL.(LL)= L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL)= L/863 (0.33")

CSI: TC=0.78/1.00 (B-C:1), BC=0.52/1.00 (J-K:1), WB=0.72/1.00 (F-H:1), SSI=0.21/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(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 (K) (INPUT = 0.90)
JSI METAL= 0.64 (K) (INPUT = 1.00)

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

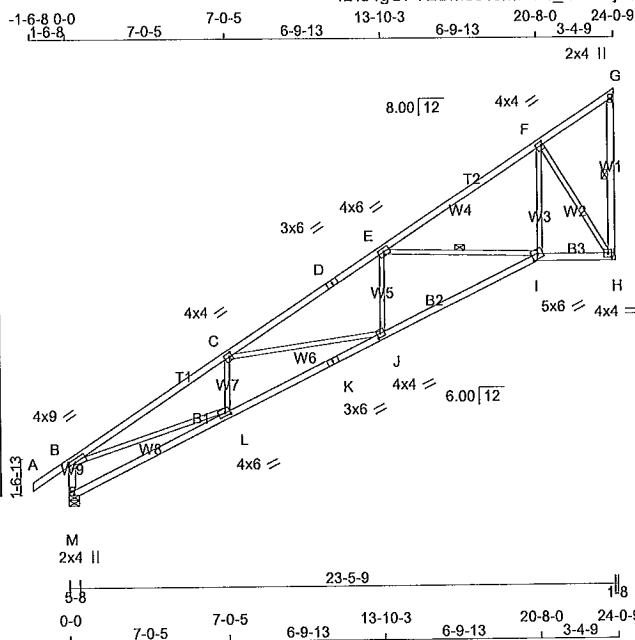


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H9T	8	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:100.8

TOTAL WEIGHT = 8 X 105 = 839 lb

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	1.75	3.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TMVW-t	MT20	4.0	6.0		
F	TMVW-t	MT20	4.0	4.0	1.75	1.00
G	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	4.0	4.0	2.00	1.75
I	BBVW-h	MT20	5.0	6.0	2.50	3.25
J	BMVW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMVW-t	MT20	4.0	6.0	1.75	2.50
M	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 GROSS REACTION	FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	IN-SX	IN-SX
JT	1286	0	5-8	1-11
M	1286	0	5-8	1-11
H	1160	0	5-8	1-11

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	914	573 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0
H	827	505 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.56 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF G-H, E-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	MAX. FACTORED	FACTORED	FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM TO			FR-TO	
M-B	-1228 / 0	0.0	0.0 0.13 (1)	7.23	B-L	0 / 2442
A-B	0 / 35	-78.0	-78.0 0.15 (1)	10.00	L-C	-349 / 0
B-C	-2789 / 0	-78.0	-78.0 0.77 (1)	3.56	C-J	-439 / 0
C-D	-2283 / 0	-78.0	-78.0 0.56 (1)	4.07	J-E	0 / 312
D-E	-2283 / 0	-78.0	-78.0 0.56 (1)	4.07	E-I	-1171 / 0
E-F	-878 / 0	-78.0	-78.0 0.36 (1)	6.10	I-F	0 / 1097
F-G	-42 / 0	-78.0	-78.0 0.26 (1)	6.25	F-H	-1287 / 0
H-G	-53 / 0	0.0	0.0 0.01 (1)	6.25		

M-L	0 / 5	-18.5	-18.5 0.19 (4)	10.00
L-K	0 / 2609	-18.5	-18.5 0.52 (1)	10.00
K-J	0 / 2609	-18.5	-18.5 0.52 (1)	10.00
J-I	0 / 2113	-18.5	-18.5 0.44 (1)	10.00
I-H	0 / 704	-18.5	-18.5 0.15 (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

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 957 (0.30")

CSI: TC=0.77/1.00 (B-C:1), BC=0.52/1.00 (J-L:1), WB=0.77/1.00 (F-H:1), SSI=0.21/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

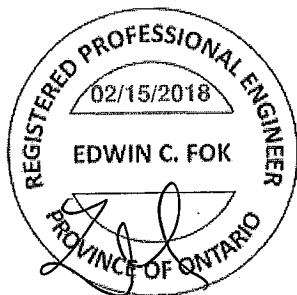
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.80 (K) (INPUT = 1.00)

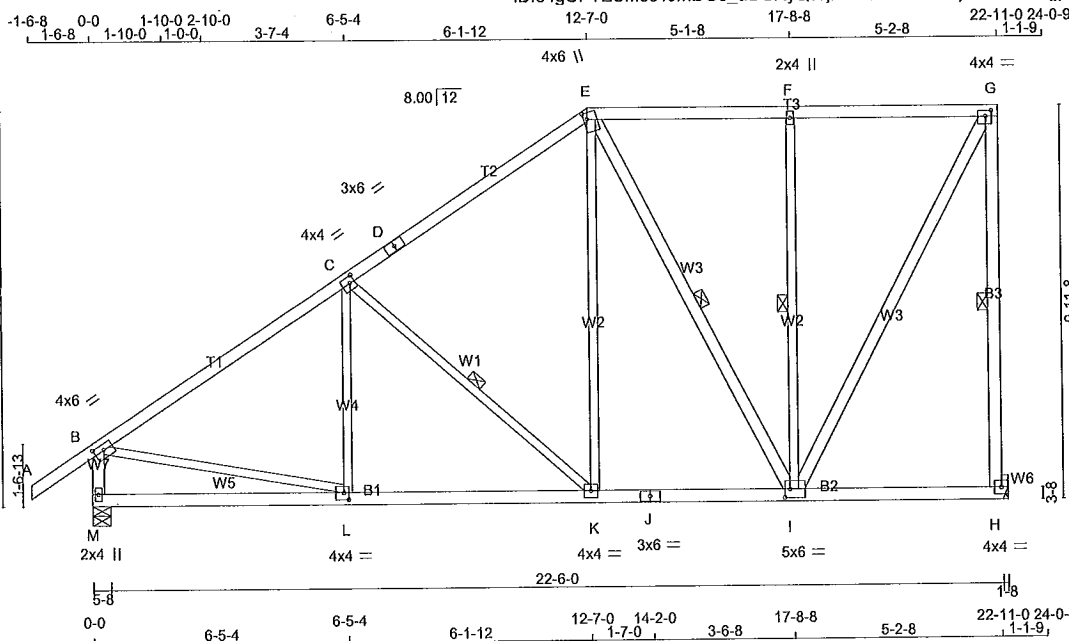
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H10	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:58.2

TOTAL WEIGHT = 6 X 125 = 750 lb
[M][F]

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

ALL WEBS	EXCEPT	SIZE	LUMBER	DESCR.
E - I	2x4 DRY	No.2	SPF	
I - G	2x4 DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-t	MT20	4.0	6.0	1.75	3.00
C	TMWV-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTWV+m	MT20	4.0	6.0	2.00	1.00
F	TMWV-w	MT20	2.0	4.0		
G	TMWV-t	MT20	4.0	4.0	1.75	1.75
H	BMWV1-t	MT20	4.0	4.0		
I	BMWVW-t	MT20	5.0	6.0	2.50	1.50
J	BS-t	MT20	3.0	6.0		
K	BMWV-t	MT20	4.0	4.0		
L	BMWV-t	MT20	4.0	4.0	2.00	1.50
M	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
	VERT	HORZ	DOWN	UPLIFT
JT	1242	0	1242	0
M	1158	0	1158	0
H				

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	884	546 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
M	831	478 / 0	0 / 0	0 / 0	0 / 0	353 / 0	0 / 0
H							

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

BRACING

FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.99 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, E-I, 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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
M-B	-1194 / 0	0.0 0.0 0.13 (1)	7.32	K-E	0 / 413	0.09 (1)	
A-B	0 / 35	-78.0 -78.0 0.15 (1)	10.00	B-L	0 / 1036	0.23 (1)	
B-C	-1190 / 0	-78.0 -78.0 0.45 (1)	5.30	L-C	-63 / 73	0.03 (1)	
C-D	-832 / 0	-78.0 -78.0 0.41 (1)	6.10	C-K	-472 / 0	0.22 (1)	
D-E	-832 / 0	-78.0 -78.0 0.41 (1)	6.10	E-I	-357 / 0	0.23 (1)	
E-F	-500 / 0	-85.5 -85.5 0.28 (1)	2.00	I-F	-538 / 0	0.36 (1)	
F-G	-500 / 0	-85.5 -85.5 0.28 (1)	2.00	I-G	0 / 1078	0.17 (1)	
M-L	0 / 0	-18.5 -18.5 0.18 (4)	10.00				
L-K	0 / 1017	-18.5 -18.5 0.29 (4)	10.00				
K-J	0 / 668	-18.5 -18.5 0.18 (4)	10.00				
J-I	0 / 668	-18.5 -18.5 0.18 (4)	10.00				
I-H	0 / 0	-18.5 -18.5 0.11 (4)	10.00				
H-G	-1119 / 0	0.0 0.0 0.54 (1)	5.99				

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.45/1.00 (B-C:1), BC=0.54/1.00 (G-H:1)
WB=0.36/1.00 (F-I:1), SSI=0.21/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

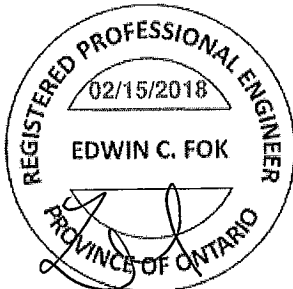
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL = 0.38 (L) (INPUT = 1.00)

A-18023055

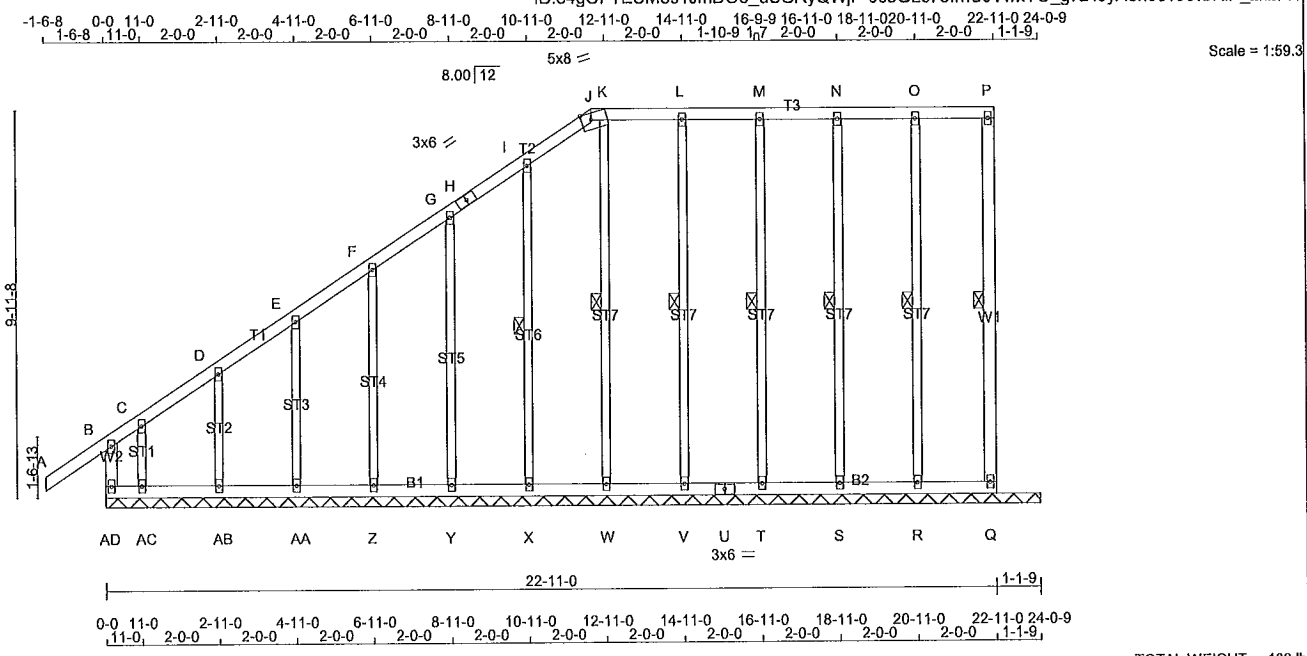


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H10G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:14:05 2018 Page 1

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. AD- B 2x4 DRY No.2 SPF A - H 2x4 DRY No.2 SPF H - J 2x4 DRY No.2 SPF J - P 2x4 DRY No.2 SPF AD- U 2x4 DRY No.2 SPF U - Q 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT Q - P 2x4 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2-0-0 OC.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. <u>PROVIDE ANCHORAGE AT BEARING JOINT AC FOR 320 LBS. FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).</u> 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 O-R, N-S, M-T, L-V, K-W, I-X, P-Q. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4)					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 CSI: TC=0.25/1.00 (C-D:1) , BC=0.02/1.00 (Q-R:4) , WB=0.16/1.00 (G-Y:1) , SSI=0.24/1.00 (B-C:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 788 1987 1656 PLATE PLACEMENT TOL. = 0.250 Inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.40 (E) (INPUT = 0.90) JSI METAL= 0.25 (B) (INPUT = 1.00)																																																																																																																																																																																																																																																																																																																															
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMV+p MT20 2.0 4.0 C, D, E, F, G, I, L, M, N, O, P C TMW+w MT20 2.0 4.0 H TS-t MT20 3.0 6.0 J J TTW-m MT20 5.0 8.0 Edge 3.00 K Q, R, S, T, V, W, X, Y, Z, AA, AB, AC Q BMW1+w MT20 2.0 4.0 U BS-t MT20 3.0 6.0 AD BMV1+p MT20 2.0 4.0 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					<table><tr><th colspan="2">CHORDS</th><th colspan="2">FACTORED</th><th colspan="2">MAX. FACTORED</th><th colspan="2">WEBS</th><th colspan="2">MAX. FACTORED</th></tr><tr><th>MEMB.</th><th>FORCE (LBS)</th><th>VERT. LOAD (PLF)</th><th>LC1</th><th>MAX</th><th>UNBRACED LENGTH</th><th>MEMB.</th><th>FORCE (LBS)</th><th>MAX</th><th>UNBRACED LENGTH</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>AD- B</td><td>-498 / 0</td><td>0.0</td><td>0.0</td><td>0.05 (1)</td><td>7.81</td><td>R- O</td><td>-162 / 0</td><td>0.11 (1)</td><td></td></tr><tr><td>A- B</td><td>0 / 35</td><td>-78.0</td><td>-78.0</td><td>0.15 (1)</td><td>10.00</td><td>S- N</td><td>-157 / 0</td><td>0.11 (1)</td><td></td></tr><tr><td>B- C</td><td>-188 / 0</td><td>-78.0</td><td>-78.0</td><td>0.25 (1)</td><td>6.25</td><td>T- M</td><td>-155 / 0</td><td>0.10 (1)</td><td></td></tr><tr><td>C- D</td><td>0 / 55</td><td>-78.0</td><td>-78.0</td><td>0.25 (1)</td><td>10.00</td><td>V- L</td><td>-158 / 0</td><td>0.11 (1)</td><td></td></tr><tr><td>D- E</td><td>-28 / 0</td><td>-78.0</td><td>-78.0</td><td>0.12 (1)</td><td>6.25</td><td>W- K</td><td>-160 / 0</td><td>0.11 (1)</td><td></td></tr><tr><td>E- F</td><td>-3 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td>X- I</td><td>-150 / 0</td><td>0.08 (1)</td><td></td></tr><tr><td>F- G</td><td>-4 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td>Y- G</td><td>-160 / 0</td><td>0.16 (1)</td><td></td></tr><tr><td>G- H</td><td>-5 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td>Z- F</td><td>-161 / 0</td><td>0.10 (1)</td><td></td></tr><tr><td>H- I</td><td>-5 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td>AA- E</td><td>-115 / 0</td><td>0.04 (1)</td><td></td></tr><tr><td>I- J</td><td>-6 / 0</td><td>-78.0</td><td>-78.0</td><td>0.03 (1)</td><td>10.00</td><td>AB- D</td><td>-317 / 0</td><td>0.07 (1)</td><td></td></tr><tr><td>J- K</td><td>0 / 3</td><td>-78.0</td><td>-78.0</td><td>0.03 (1)</td><td>10.00</td><td>AC- C</td><td>0 / 351</td><td>0.08 (1)</td><td></td></tr><tr><td>K- L</td><td>0 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td>Q- P</td><td>-59 / 0</td><td>0.03 (1)</td><td></td></tr><tr><td>L- M</td><td>0 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>M- N</td><td>0 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>N- O</td><td>0 / 0</td><td>-78.0</td><td>-78.0</td><td>0.04 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>O- P</td><td>0 / 0</td><td>-78.0</td><td>-78.0</td><td>0.03 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>AD-AC</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>AC-AB</td><td>0 / 16</td><td>-18.5</td><td>-18.5</td><td>0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>AB-AA</td><td>0 / 8</td><td>-18.5</td><td>-18.5</td><td>0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>AA-Z</td><td>0 / 5</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>Z-Y</td><td>0 / 3</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>Y-X</td><td>0 / 1</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>X-W</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>W-V</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>V-U</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>U-T</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>T-S</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>S-R</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>R-Q</td><td>0 / 0</td><td>-18.5</td><td>-18.5</td><td>0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr></table>					CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED		MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX	UNBRACED LENGTH	FR-TO		FROM TO				FR-TO				AD- B	-498 / 0	0.0	0.0	0.05 (1)	7.81	R- O	-162 / 0	0.11 (1)		A- B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	S- N	-157 / 0	0.11 (1)		B- C	-188 / 0	-78.0	-78.0	0.25 (1)	6.25	T- M	-155 / 0	0.10 (1)		C- D	0 / 55	-78.0	-78.0	0.25 (1)	10.00	V- L	-158 / 0	0.11 (1)		D- E	-28 / 0	-78.0	-78.0	0.12 (1)	6.25	W- K	-160 / 0	0.11 (1)		E- F	-3 / 0	-78.0	-78.0	0.04 (1)	10.00	X- I	-150 / 0	0.08 (1)		F- G	-4 / 0	-78.0	-78.0	0.04 (1)	10.00	Y- G	-160 / 0	0.16 (1)		G- H	-5 / 0	-78.0	-78.0	0.04 (1)	10.00	Z- F	-161 / 0	0.10 (1)		H- I	-5 / 0	-78.0	-78.0	0.04 (1)	10.00	AA- E	-115 / 0	0.04 (1)		I- J	-6 / 0	-78.0	-78.0	0.03 (1)	10.00	AB- D	-317 / 0	0.07 (1)		J- K	0 / 3	-78.0	-78.0	0.03 (1)	10.00	AC- C	0 / 351	0.08 (1)		K- L	0 / 0	-78.0	-78.0	0.04 (1)	10.00	Q- P	-59 / 0	0.03 (1)		L- M	0 / 0	-78.0	-78.0	0.04 (1)	10.00					M- N	0 / 0	-78.0	-78.0	0.04 (1)	10.00					N- O	0 / 0	-78.0	-78.0	0.04 (1)	10.00					O- P	0 / 0	-78.0	-78.0	0.03 (1)	10.00					AD-AC	0 / 0	-18.5	-18.5	0.01 (4)	10.00					AC-AB	0 / 16	-18.5	-18.5	0.02 (4)	10.00					AB-AA	0 / 8	-18.5	-18.5	0.02 (4)	10.00					AA-Z	0 / 5	-18.5	-18.5	0.01 (4)	10.00					Z-Y	0 / 3	-18.5	-18.5	0.01 (4)	10.00					Y-X	0 / 1	-18.5	-18.5	0.01 (4)	10.00					X-W	0 / 0	-18.5	-18.5	0.01 (4)	10.00					W-V	0 / 0	-18.5	-18.5	0.01 (4)	10.00					V-U	0 / 0	-18.5	-18.5	0.01 (4)	10.00					U-T	0 / 0	-18.5	-18.5	0.01 (4)	10.00					T-S	0 / 0	-18.5	-18.5	0.01 (4)	10.00					S-R	0 / 0	-18.5	-18.5	0.02 (4)	10.00					R-Q	0 / 0	-18.5	-18.5	0.02 (4)	10.00				
CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED																																																																																																																																																																																																																																																																																																																																	
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FR-TO		FROM TO				FR-TO																																																																																																																																																																																																																																																																																																																																			
AD- B	-498 / 0	0.0	0.0	0.05 (1)	7.81	R- O	-162 / 0	0.11 (1)																																																																																																																																																																																																																																																																																																																																	
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F- G	-4 / 0	-78.0	-78.0	0.04 (1)	10.00	Y- G	-160 / 0	0.16 (1)																																																																																																																																																																																																																																																																																																																																	
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H- I	-5 / 0	-78.0	-78.0	0.04 (1)	10.00	AA- E	-115 / 0	0.04 (1)																																																																																																																																																																																																																																																																																																																																	
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J- K	0 / 3	-78.0	-78.0	0.03 (1)	10.00	AC- C	0 / 351	0.08 (1)																																																																																																																																																																																																																																																																																																																																	
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W-V	0 / 0	-18.5	-18.5	0.01 (4)	10.00																																																																																																																																																																																																																																																																																																																																				
V-U	0 / 0	-18.5	-18.5	0.01 (4)	10.00																																																																																																																																																																																																																																																																																																																																				
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T-S	0 / 0	-18.5	-18.5	0.01 (4)	10.00																																																																																																																																																																																																																																																																																																																																				
S-R	0 / 0	-18.5	-18.5	0.02 (4)	10.00																																																																																																																																																																																																																																																																																																																																				
R-Q	0 / 0	-18.5	-18.5	0.02 (4)	10.00																																																																																																																																																																																																																																																																																																																																				
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design																																																																																																																																																																																																																																																																																																																																									

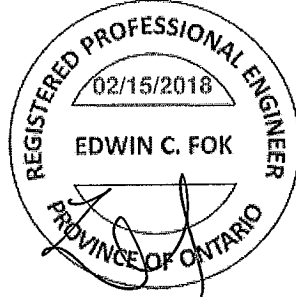
02/15/2018

EDWIN C. FOK

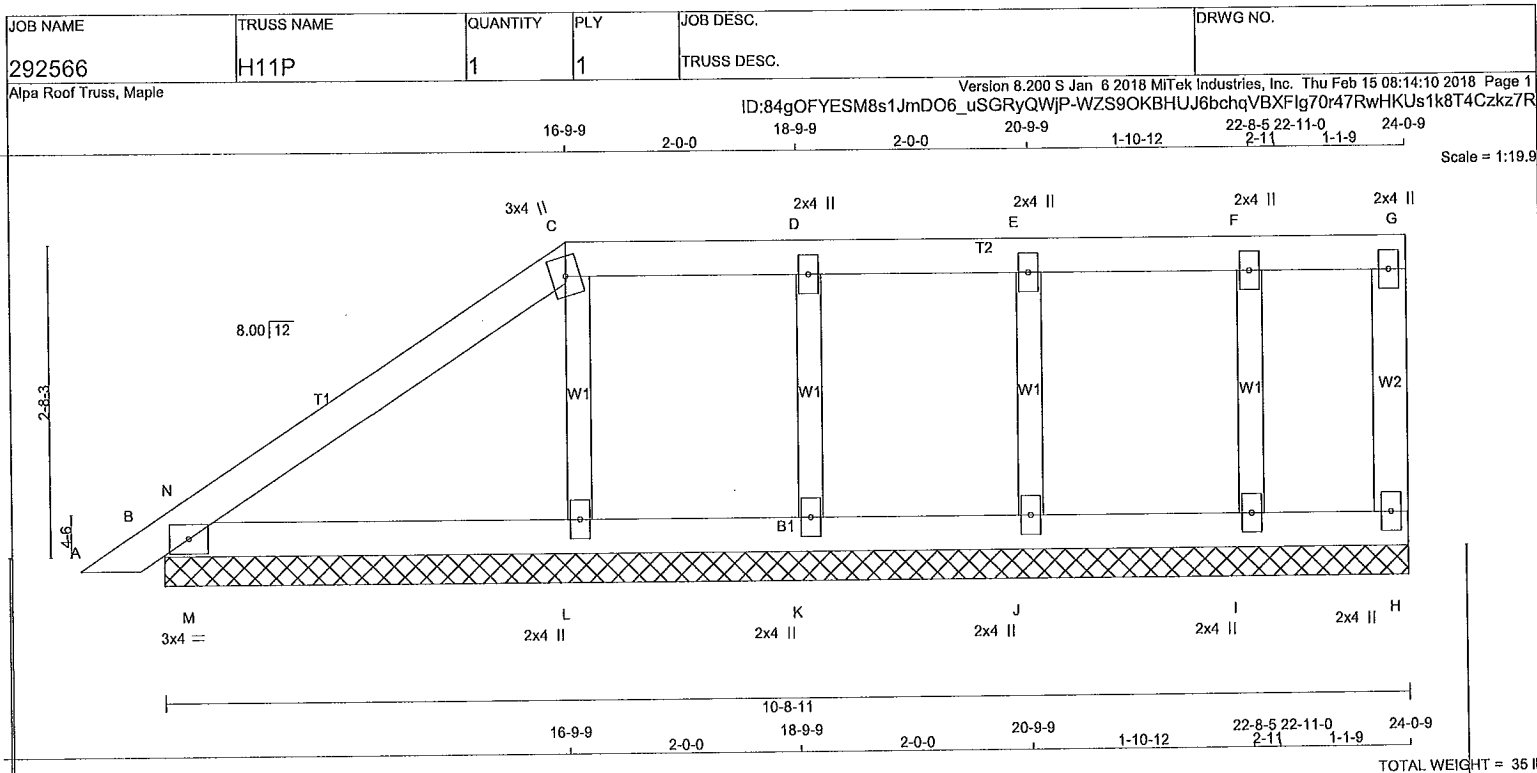
REGISTERED PROFESSIONAL ENGINEER

PROVINCE OF ONTARIO

A-18023056



A-18023056



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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TTW+m	MT20	3.0	4.0	
D, E, F					
D	TMW+w	MT20	2.0	4.0	
G	TMV+p	MT20	2.0	4.0	
H	BMV1+p	MT20	2.0	4.0	
I, J, K, L					
I	BMW1+w	MT20	2.0	4.0	

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM	TO	FR-TO			
A-B	0 / 13	-78.0	-78.0 0.02 (1)	10.00	L-C	-176 / 0	0.03 (1)
B-N	-9 / 43	-78.0	-78.0 0.04 (1)	10.00	K-D	-178 / 0	0.03 (1)
N-C	-14 / 0	-78.0	-78.0 0.12 (1)	6.25	J-E	-143 / 0	0.02 (1)
C-D	0 / 0	-78.0	-78.0 0.05 (1)	10.00	I-F	-140 / 0	0.02 (1)
D-E	0 / 0	-78.0	-78.0 0.05 (1)	10.00	M-N	-228 / 0	0.00 (1)
E-F	0 / 0	-78.0	-78.0 0.03 (1)	10.00			
F-G	0 / 0	-78.0	-78.0 0.03 (1)	10.00			
H-G	-38 / 0	0.0	0.0 0.01 (1)	7.81			
B-M	0 / 8	-18.5	-18.5 0.10 (1)	10.00			
M-L	0 / 8	-18.5	-18.5 0.10 (1)	10.00			
L-K	0 / 0	-18.5	-18.5 0.06 (1)	10.00			
K-J	0 / 0	-18.5	-18.5 0.02 (4)	10.00			
J-I	0 / 0	-18.5	-18.5 0.02 (4)	10.00			
I-H	0 / 0	-18.5	-18.5 0.01 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 8.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.12/1.00 (C-N:1), BC=0.10/1.00 (B-M:1), WB=0.03/1.00 (D-K:1), SSI=0.18/1.00 (B-M: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.

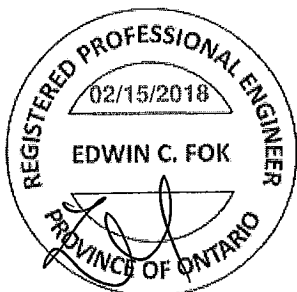
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
JSI METAL= 0.06 (C) (INPUT = 1.00)

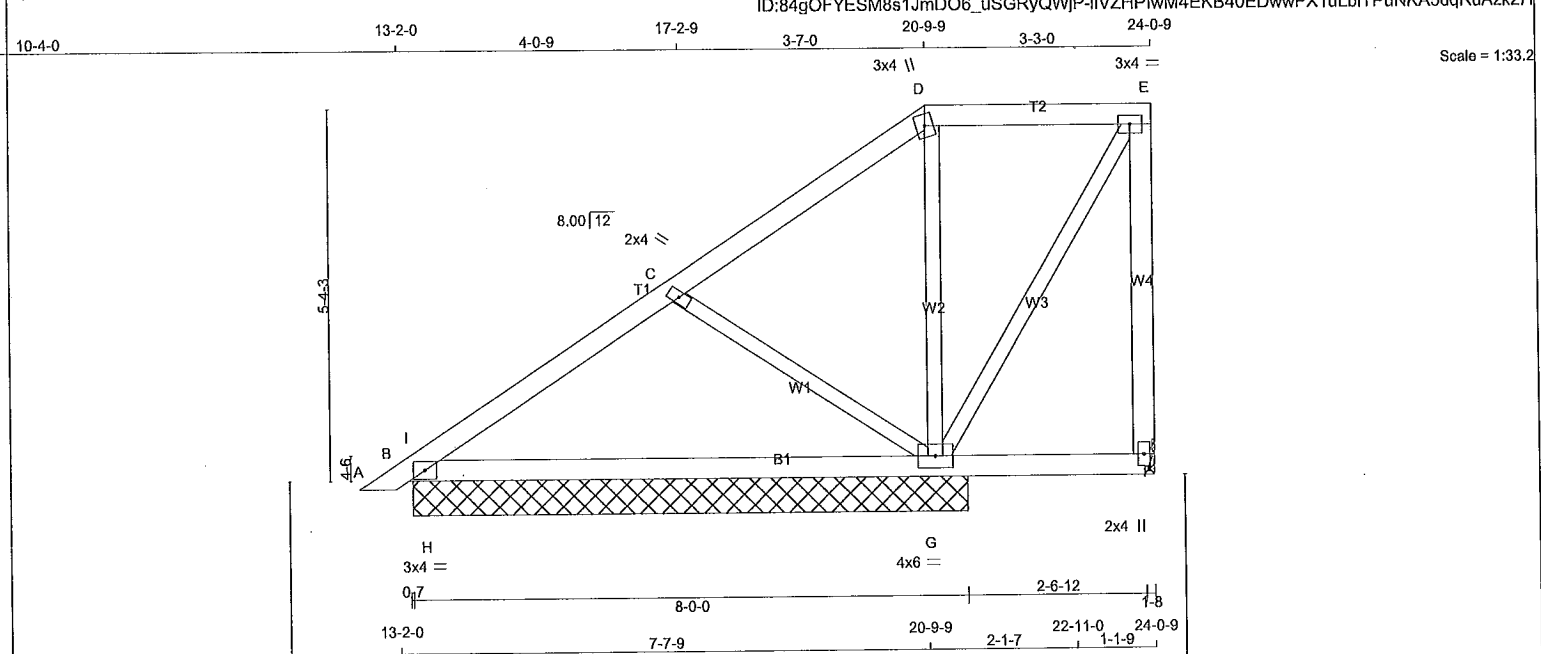
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023057

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H12P	1	1	TRUSS DESC.	

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TOTAL WEIGHT = 44 lb

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
F	56	56	0	0
B	377	377	0	0
G	653	653	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	LIVE	PERM.LIVE	
F	40	26 / 0	0 / 0	14 / 0
B	268	170 / 0	0 / 0	98 / 0
G	466	282 / 0	0 / 0	184 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		LENGTH FR-TO		
A-B	0 / 13	-78.0	-78.0 0.02 (1)	10.00	G-D	-258 / 0
B-I	-406 / 0	-78.0	-78.0 0.14 (4)	6.25	G-E	-84 / 0
I-C	-253 / 0	-78.0	-78.0 0.19 (1)	6.25	C-G	-333 / 0
C-D	0 / 26	-78.0	-78.0 0.19 (1)	10.00	H-I	0 / 223
D-E	0 / 45	-78.0	-78.0 0.15 (1)	10.00		
F-E	-55 / 0	0.0	0.0 0.03 (1)	7.81		
B-H	0 / 235	-18.5	-18.5 0.12 (4)	10.00		
H-G	0 / 235	-18.5	-18.5 0.20 (4)	10.00		
G-F	0 / 0	-18.5	-18.5 0.18 (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

ALLOWABLE DEFL.(LL)= L/360 (0.25")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL)= L/999 (0.07")

CSI: TC=0.19/1.00 (C-D:1), BC=0.20/1.00 (G-H:4)
WB=0.12/1.00 (C-G:1), SSI=0.20/1.00 (B-I:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

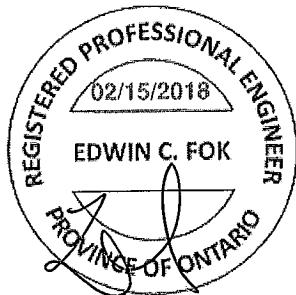
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (G) (INPUT = 0.90)
JSI METAL= 0.12 (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

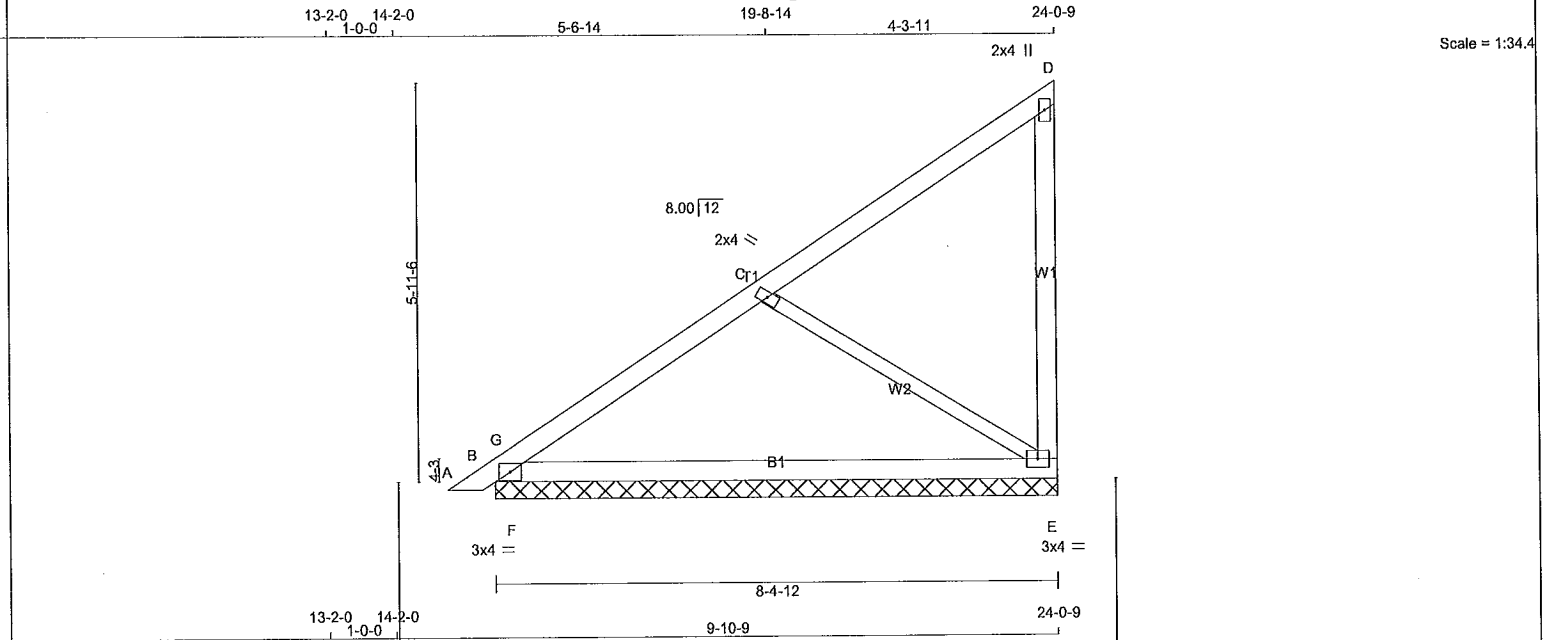


A-18023058

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H13P	5	1	TRUSS DESC.	

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-aSsqYSNhyw?Tv?7TOZB1pnl8M2AVV1413UZHm6qzkz7C



TOTAL WEIGHT = 5 X 32 = 160 lb

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

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0			
C	TMW+w	MT20	2.0	4.0			
D	TMV+p	MT20	2.0	4.0			
E	BMVW1-t	MT20	3.0	4.0			

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	GROSS REACTION	BRG	BRG	
JT VERT HORZ	JT VERT HORZ	DOWN HORZ	UPLIFT IN-SX	IN-SX
E 405 0	405 0	0 0	8-4-12	6-8
B 454 0	454 0	0 0	8-4-12	6-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E 289	176 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
B 323	203 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. FACTORED CSI (LC)	UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO							FR-TO			
A-B	0 / 13	-78.0	-78.0	0.02 (1)	10.00		C-E	-400 / 0	0.17 (1)	
B-G	-620 / 0	-78.0	-78.0	0.25 (4)	6.25		F-G	0 / 391	0.00 (1)	
G-C	-365 / 0	-78.0	-78.0	0.26 (1)	6.25					
C-D	-24 / 0	-78.0	-78.0	0.25 (1)	6.25					
E-D	-128 / 0	0.0	0.0	0.08 (1)	7.81					
B-F	0 / 340	-18.5	-18.5	0.23 (4)	10.00					
F-E	0 / 340	-18.5	-18.5	0.29 (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

CSI: TC=0.26/1.00 (C-G:1), BC=0.29/1.00 (E-F:4), WB=0.17/1.00 (C-E:1), SSI=0.36/1.00 (B-F:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

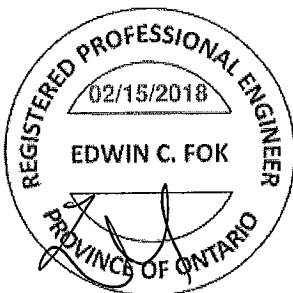
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (E) (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-18023059

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H14T	1	2	TRUSS DESC.	

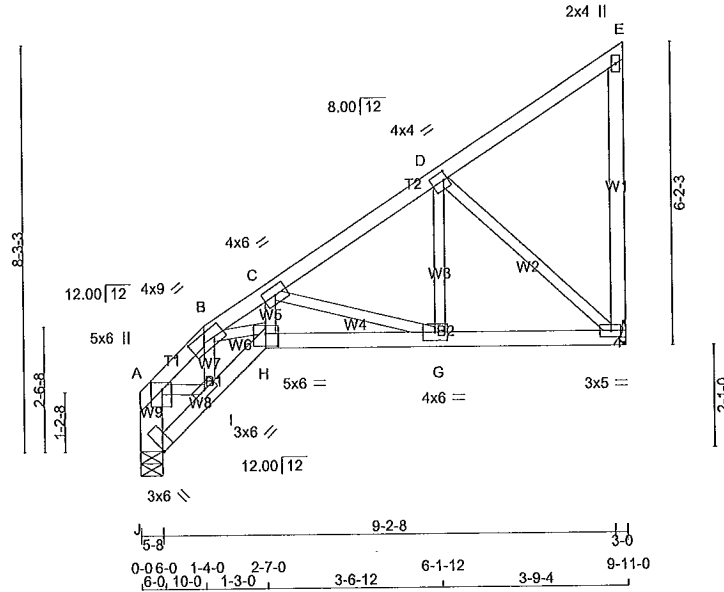
Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRYQWJP-ODTgHuCz_WGSJT4RUhNSRabT0cOHTKoE8RNBczkz0z

0-0 1-4-0 2-7-0 6-1-12 3-9-4 9-11-0
1-4-0 1-3-0 3-6-12 6-1-12 3-9-4 9-11-0

Scale = 1:46.9



TOTAL WEIGHT = 2 X 47 = 94 lb

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

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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
J - A 2	12	TOP
A - B 1	12	TOP
B - E 1	12	TOP
E - F 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J - H 1	12	SIDE(95.4)
H - F 1	8	SIDE(133.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	MTVW+p	MT20	5.0	6.0	1.75	2.75
B	TTWW-m	MT20	4.0	9.0	2.00	3.50

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP
JT	1799	0	1799	0
F	1799	0	1799	0

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
J	1282	783 / 0	0 / 0	0 / 0	0 / 0	500 / 0
F	1282	783 / 0	0 / 0	0 / 0	0 / 0	500 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
MEMB.									
FR-TO									
J - A	-1611 / 0	0.0	0.0	0.06 (1)	7.81	H - C	0 / 1997	0.25 (1)	
A - B	-2429 / 0	-78.0	-78.0	0.03 (1)	5.77	C - G	-2014 / 0	0.25 (1)	
B - C	-4346 / 0	-78.0	-78.0	0.12 (1)	4.49	G - D	0 / 1842	0.23 (1)	
C - D	-1685 / 0	-78.0	-78.0	0.12 (1)	6.25	D - F	-1915 / 0	0.39 (1)	
D - E	-20 / 0	-78.0	-78.0	0.10 (1)	6.25	I - B	-1007 / 0	0.08 (1)	
F - E	-110 / 0	0.0	0.0	0.04 (1)	7.81	A - I	0 / 1716	0.21 (1)	
J - I	0 / 12	-284.8	-284.8	0.05 (1)	10.00	B - H	0 / 1951	0.24 (1)	
I - H	0 / 2247	-284.8	-284.8	0.22 (1)	10.00				
H - G	0 / 3361	-284.8	-284.8	0.63 (1)	10.00				
G - F	0 / 1432	-284.8	-284.8	0.46 (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

GIRDER TYPE: CSIdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 13-0-8
END DISTANCE = 9-11-0
END SPAN CARRIED = 13-0-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.33")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.12/1.00 (B-C:1), BC=0.63/1.00 (G-H:1)
WB=0.39/1.00 (D-F:1), SSI=0.28/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

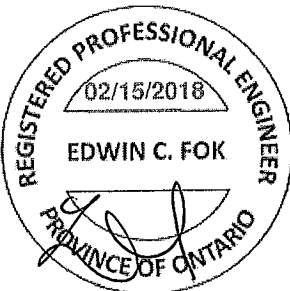
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.80)
JSI METAL= 0.51 (B) (INPUT = 1.00)

A-18023060 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H14T	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

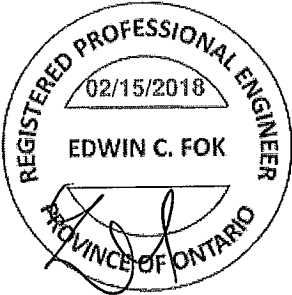
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:21:04 2018 Page 2
ID:84gOFYESM8s1JmDO6 uSGRyQWjP-ODTgHuCz WGsGJT4RUhNSRAbT0cOHTKoE8RNbCzkz0z

PLATES (table is in inches)

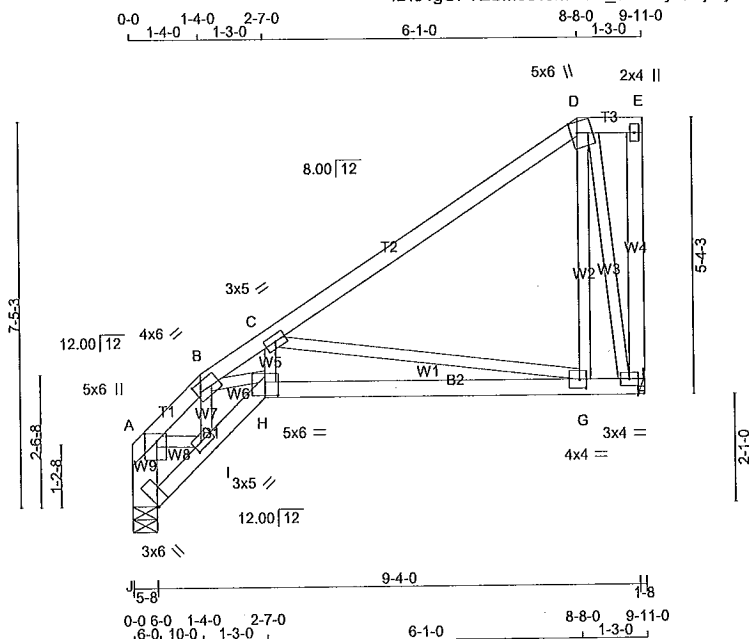
JT	TYPE	PLATES	W	LEN	Y	X
C	TMWW-t	MT20	4.0	6.0		
D	TMWW-t	MT20	4.0	4.0	2.00	1.00
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	5.0	1.50	2.25
G	BMWW-t	MT20	4.0	6.0		
H	BBWW-t	MT20	5.0	6.0	3.00	3.00
I	BMWW-t	MT20	3.0	6.0		
J	BVM1-t	MT20	3.0	6.0	Edge	0.25

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

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



A-18023060(27



TOTAL WEIGHT = 50 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 - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
J - A	2x6	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)		W	LEN	Y	X
JT	TYPE	PLATES			
A	TWVW+p	MT20	5.0	6.0	1.75 2.75
B	TWVW-m	MT20	4.0	6.0	2.00 1.00
C	TWVW-l	MT20	3.0	5.0	
D	TWVW+m	MT20	5.0	6.0	2.50 1.50
E	TWV+p	MT20	2.0	4.0	
F	BMVW1-l	MT20	3.0	4.0	
G	BMVW-t	MT20	4.0	4.0	2.00 1.50
H	BBVW-l	MT20	5.0	6.0	3.00 3.00
I	BMVW-t	MT20	3.0	5.0	1.50 2.00
J	BVM1-H	MT20	3.0	6.0	Edge 0.25

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		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	478	0	478	0	0	HANGER BY OTHERS	
						MIN. SEAT SIZE: 1-8	
J	478	0	478	0	0	5-8	1-8

UNFACTORED REACTIONS

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	341	208 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0
J	341	208 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A - B	-640 / 0	-78.0	-78.0 0.02 (1)	6.25	H - C	0 / 420	0.09 (1)
B - C	-1354 / 0	-78.0	-78.0 0.27 (1)	5.27	C - G	-1064 / 0	0.74 (1)
C - D	-156 / 0	-78.0	-78.0 0.33 (1)	6.25	G - D	0 / 307	0.07 (4)
D - E	0 / 0	-78.0	-78.0 0.02 (1)	10.00	D - F	-469 / 0	0.21 (1)
F - E	-49 / 0	0.0	0.0 0.02 (1)	7.81	I - B	-347 / 0	0.05 (1)
J - A	-463 / 0	0.0	0.0 0.03 (1)	7.81	A - I	0 / 452	0.10 (1)
					B - H	0 / 785	0.18 (1)
J - I	-1 / 0	-18.5	-18.5 0.01 (4)	10.00			
I - H	0 / 588	-18.5	-18.5 0.10 (1)	10.00			
H - G	0 / 1160	-18.5	-18.5 0.27 (1)	10.00			
G - F	0 / 117	-18.5	-18.5 0.17 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(I.L.)= L/360 (0.33")
CALCULATED VERT. DEFL.(I.L.) = L/ 999 (0.03")
ALLOWABLE DEFL.(T.L.)= L/360 (0.33")
CALCULATED VERT. DEFL.(T.L.) = L/ 999 (0.08")

CSI: TC=0.33/1.00 (C-D:1), BC=0.27/1.00 (G-H:1)
 WB=0.74/1.00 (C-G:1), SSI=0.18/1.00 (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

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.

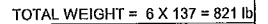
JSI GRIP= 0.83 (B) (INPUT = 0.90)
JSI METAL= 0.39 (G) (INPUT = 1.00)

A-18023069

Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRyQWjP-hO207w1NCV1s8sO5NyEGDAkWhn6oUBdX1ukEXqzkyp_



Q-P	0/0	-18.5	-18.5	0.02 (4)	10.00
P-O	0/900	-18.5	-18.5	0.15 (1)	10.00
O-N	0/1272	-18.5	-18.5	0.28 (1)	10.00
N-M	0/1062	-18.5	-18.5	0.24 (4)	10.00
M-L	0/852	-18.5	-18.5	0.14 (1)	10.00
L-K	0/413	-18.5	-18.5	0.44 (4)	10.00
K-J	-140/0	0.0	0.0	0.07 (1)	6.25

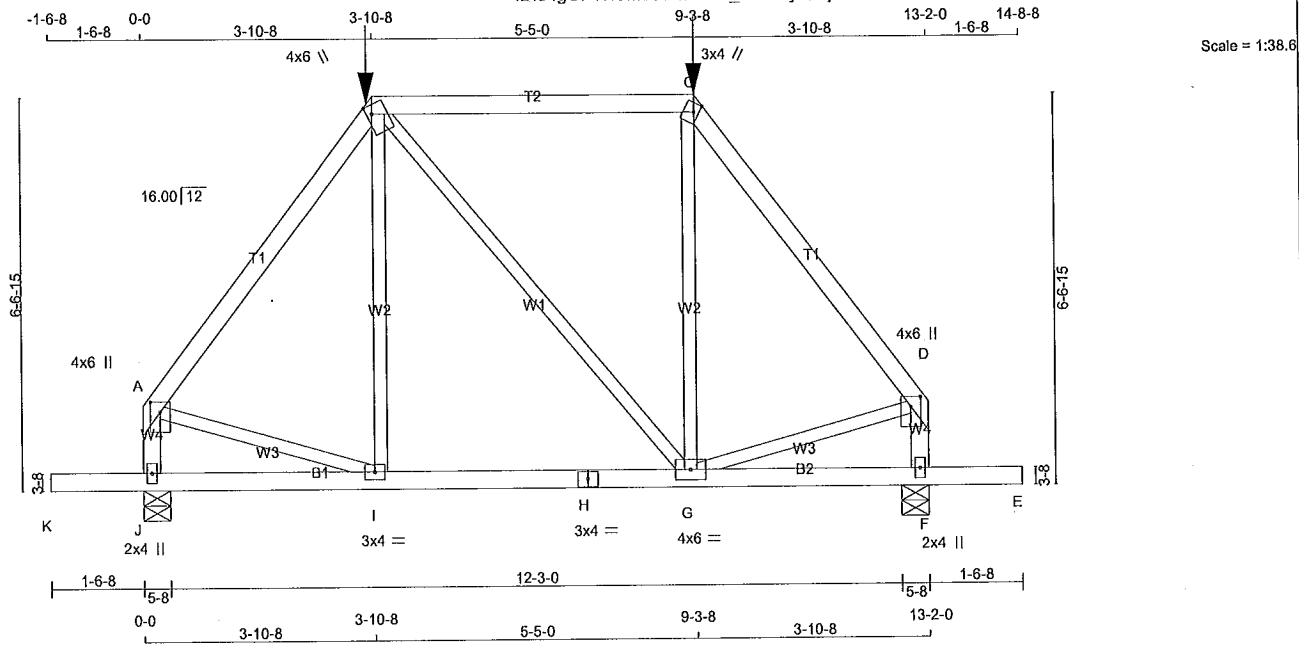
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H21	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 09:08:53 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWJP-u9KGQwWbK0knzDIT0XfADSUIGWtS?6u4y?whpPzkyK8



TOTAL WEIGHT = 65 lb

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTVW+m	MT20	4.0	6.0	1.75	1.00
C	TTW+m	MT20	3.0	4.0	1.75	1.00
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMWWW-t	MT20	4.0	6.0		
H	BS-t	MT20	3.0	4.0		
I	BMWW-t	MT20	3.0	4.0		
J	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 119.6 lbs FACTORED DOWN AT 9-3-8, AND 119.6 lbs FACTORED DOWN AT 3-10-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
J	1059	0	1059	0	0	5-8	1-9		
F	1059	0	1059	0	0	5-8	1-9		

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
J	756	459 / 0	0 / 0	0 / 0	0 / 0	297 / 0	0 / 0		
F	756	459 / 0	0 / 0	0 / 0	0 / 0	297 / 0	0 / 0		

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

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

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

LOADING		TOTAL LOAD CASES: (4)							
CHORDS		MAX. FACTORED		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	LOC.	LC1	MAX.	MEMB.	FORCE (LBS)	LOC.	MAX.	MEMB.
FR-TO		FROM	TO						
A-B	-752 / 0	-78.0	-78.0	0.25 (1)	6.25	I-B	0 / 110	0.04 (4)	
B-C	-449 / 0	-114.5	-114.5	0.65 (1)	6.25	B-G	0 / 0	0.00 (1)	
C-D	-753 / 0	-78.0	-78.0	0.25 (1)	6.25	G-C	0 / 111	0.04 (4)	
J-A	-870 / 0	0.0	0.0	0.10 (1)	7.81	A-I	0 / 463	0.11 (1)	
F-D	-870 / 0	0.0	0.0	0.10 (1)	7.81	G-D	0 / 463	0.11 (1)	
K-J	0 / 0	-96.5	-96.5	0.17 (1)	10.00				
J-I	0 / 0	-27.2	-27.2	0.15 (4)	10.00				
I-H	0 / 449	-27.2	-27.2	0.20 (4)	10.00				
H-G	0 / 449	-27.2	-27.2	0.20 (4)	10.00				
G-F	0 / 0	-27.2	-27.2	0.15 (4)	10.00				
F-E	0 / 0	-96.5	-96.5	0.17 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE		
B	3-10-8	-120	-120	---	FRONT	VERT	TOTAL		
C	9-3-8	-120	-120	---	FRONT	VERT	TOTAL		

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

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.44")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.44")
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=0.65/1.00 (B-C:1), BC=0.20/1.00 (G-I:4), WB=0.11/1.00 (D-G:1), SS=0.27/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

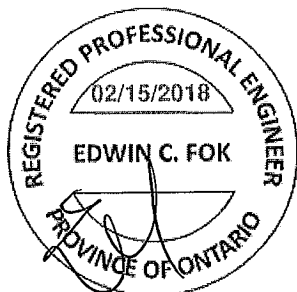
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

A-18023073 CONTINUED ON PAGE 2



Alpa Roof Truss, Maple

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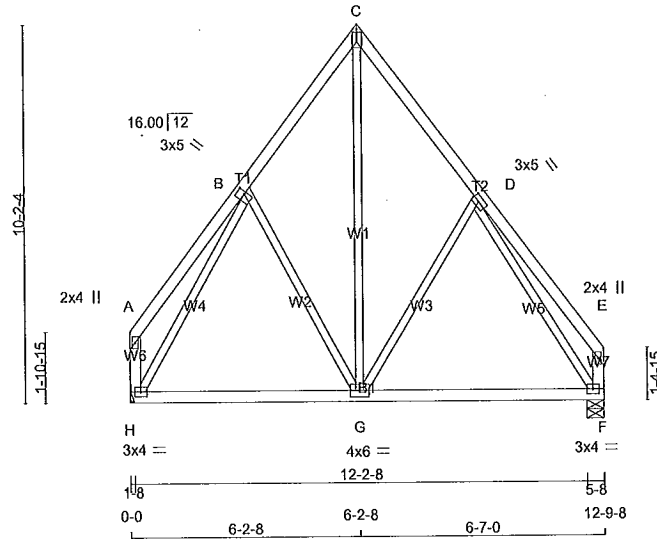
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H23	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:10:02 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWJP-NR_LvUI4CQ_Iq4kYWOMW?rAKQngDJE7rkvzkyJ3

0-0 3-2-8 3-2-8 3-0-0 6-2-8 3-2-4 9-4-12 3-4-12 12-9-8
3x5 II
Scale = 1:62.2



TOTAL WEIGHT = 2 X 70 = 140 lb

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

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	3.0	5.0	2.25	0.75
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMWW-t	MT20	3.0	5.0	1.50	2.25
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BMVWW-t	MT20	4.0	6.0		
H	BMVW1-t	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	UP/LIFT	IN-SX
H	726	0	726	0
F	726	0	726	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	518	316 / 0	0 / 0	0 / 0	0 / 0	202 / 0	0 / 0
F	518	316 / 0	0 / 0	0 / 0	0 / 0	202 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MAX. UNBRAC LENGTH	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A - B	0 / 26	-91.8 -91.8	0.15 (1)	10.00	B - G	-127 / 0	0.10 (1)
B - C	-437 / 0	-91.8 -91.8	0.16 (1)	6.25	G - C	0 / 426	0.11 (1)
C - D	-439 / 0	-91.8 -91.8	0.18 (1)	6.25	G - D	-170 / 0	0.13 (1)
D - E	0 / 28	-91.8 -91.8	0.18 (1)	10.00	H - B	-648 / 0	0.48 (1)
H - A	-107 / 0	0.0 0.0	0.01 (1)	7.81	D - F	-652 / 0	0.46 (1)
F - E	-113 / 0	0.0 0.0	0.01 (1)	7.81			
H - G	0 / 310	-21.8 -21.8	0.31 (4)	10.00			
G - F	0 / 338	-21.8 -21.8	0.31 (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

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 0-0

END SETBACK = 2-8-8

END WALL WIDTH = 0-0

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

(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 (0.43")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.43")
CALCULATED VERT. DEFL.(TL)= L/999 (0.06")

CSI: TC=0.18/1.00 (C-D:1), BC=0.31/1.00 (F-G:4), WB=0.48/1.00 (B-H:1), SSI=0.13/1.00 (F-G:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

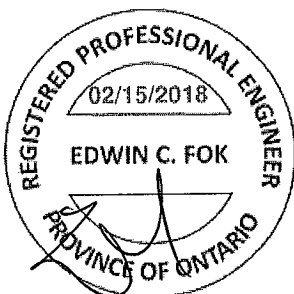
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (D) (INPUT = 0.90)

JSI METAL= 0.41 (B) (INPUT = 1.00)

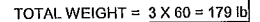
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023075

TRUSS DESC.

Scale = 1:62.2

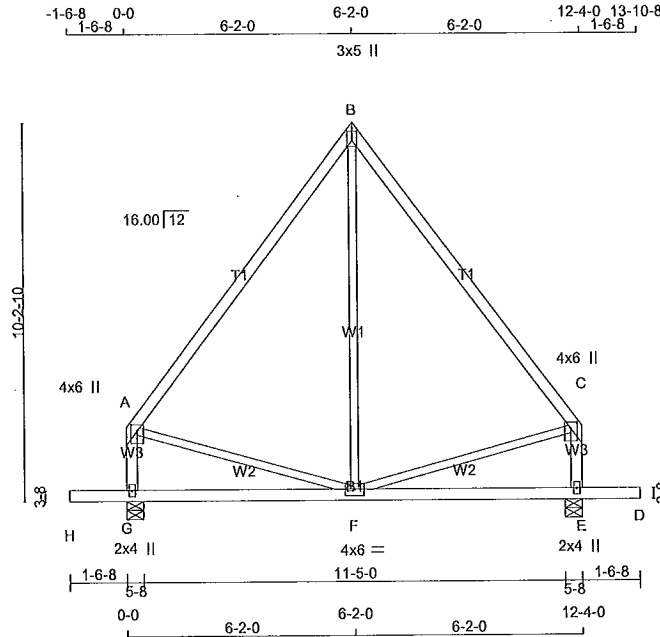


A-18023076

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H24	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:62.3

TOTAL WEIGHT = 2 X 63 = 126 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 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	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	BMVWWV-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		MAXIMUM FACTORED		INPUT		REQRD	
	GROSS REACTION	GROSS REACTION	DOWN	HORZ	BRG	BRG	IN-SX	IN-SX
JT	744	0	744	0	0	5-8	1-8	
G	744	0	744	0	0	5-8	1-8	
E	744	0	744	0	0	5-8	1-8	

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	530	324 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0
G	530	324 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0
E	530	324 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX	CS1 (LC)	
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO				
A-B	-325 / 0	-78.0	-78.0	0.25 (1)	6.25	F-B	0 / 116	0.04 (4)	
B-C	-325 / 0	-78.0	-78.0	0.25 (1)	6.25	A- F	0 / 202	0.05 (1)	
G-A	-552 / 0	0.0	0.0	0.06 (1)	7.81	F- C	0 / 202	0.05 (1)	
E-C	-552 / 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 (A-B:1), BC=0.20/1.00 (E-F:4), WB=0.05/1.00 (C-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.

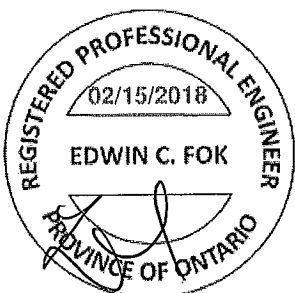
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

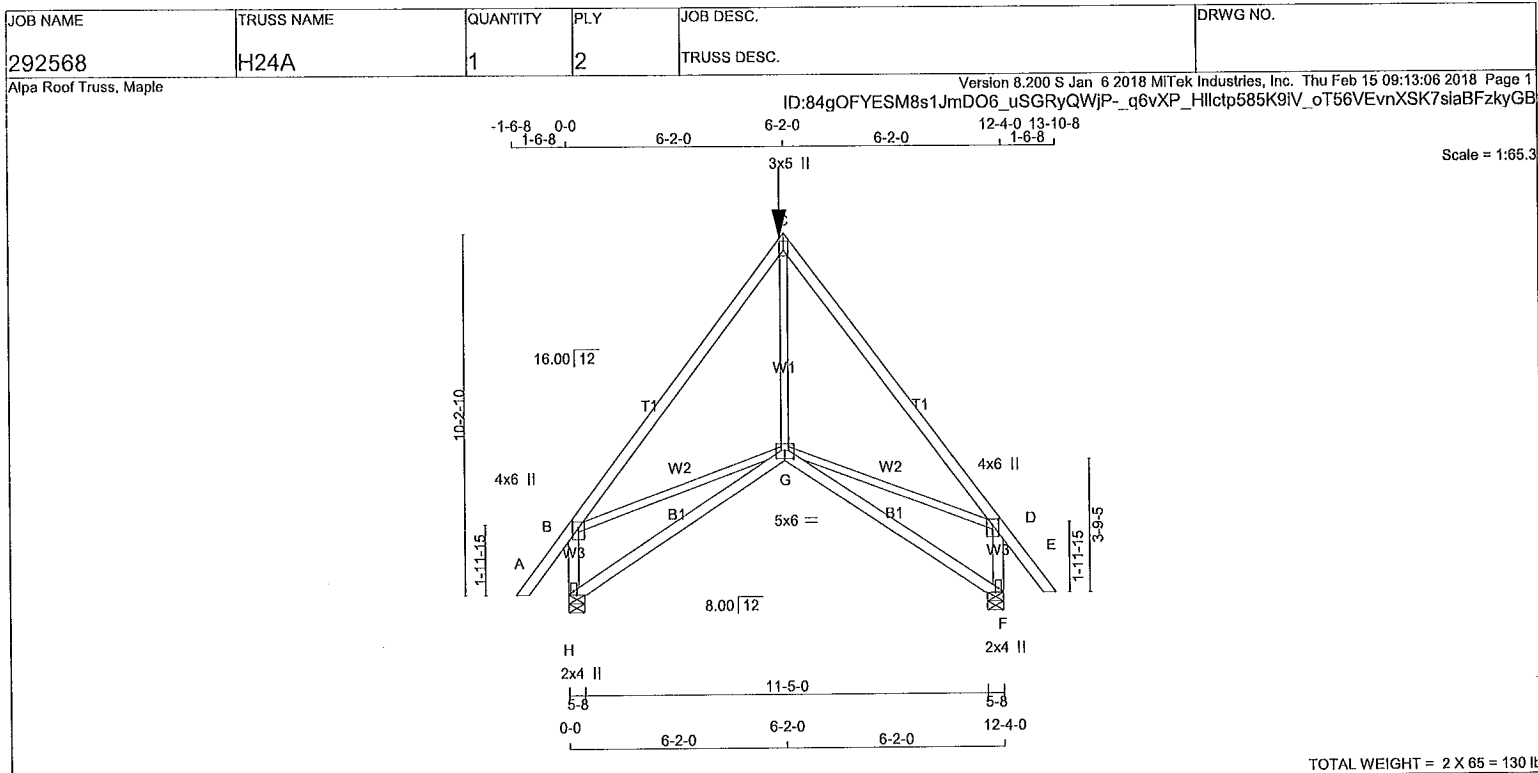
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (F) (INPUT = 0.90)
JSI METAL= 0.16 (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-18023077



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.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	SIDE(65.9)
C - E	12	SIDE(65.9)
H - B	12	TOP
F - D	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
H - G	12	SIDE(9.9)
G - F	12	SIDE(9.9)
WEBS : (0.122"x3") SPIRAL NAILS		
G - C	6	SIDE(141.2)
2x3	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
H	1357	0	1357	0	5-8
F	1357	0	1357	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	976	544 / 0	0 / 0	0 / 0	0 / 0	432 / 0	0 / 0
F	976	544 / 0	0 / 0	0 / 0	0 / 0	432 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	FACTORED FORCE (LBS)	MEMB.	FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 43	G-C	0 / 893
B-C	-1513 / 0	B-G	0 / 964
C-D	-1513 / 0	G-D	0 / 964
D-E	0 / 43		
H-B	-1234 / 0		
F-D	-1234 / 0		
H-G	0 / 0		
G-F	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	6-2-0	-1046	-1046	-	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

*** NON STANDARD GIRDER ***

ADDT'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 (0.41")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.22/1.00 (B-C:1), BC=0.24/1.00 (F-G:4), WB=0.12/1.00 (B-G:1), SSI=0.08/1.00 (F-G:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES		PLATE GRIP(DRY)		SHEAR		SECTION	
(PSI)	(PLI)	(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= 0.83 (G) (INPUT = 0.80)
JSI METAL= 0.30 (F) (INPUT = 1.00)



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

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H24A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

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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	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 1046.3 lbs FACTORED DOWN AT 6-2-0
ON TOP CHORD. DESIGN FOR UNSPECIFIED
CONNECTION(S) IS DELEGATED TO THE
BUILDING DESIGNER.

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



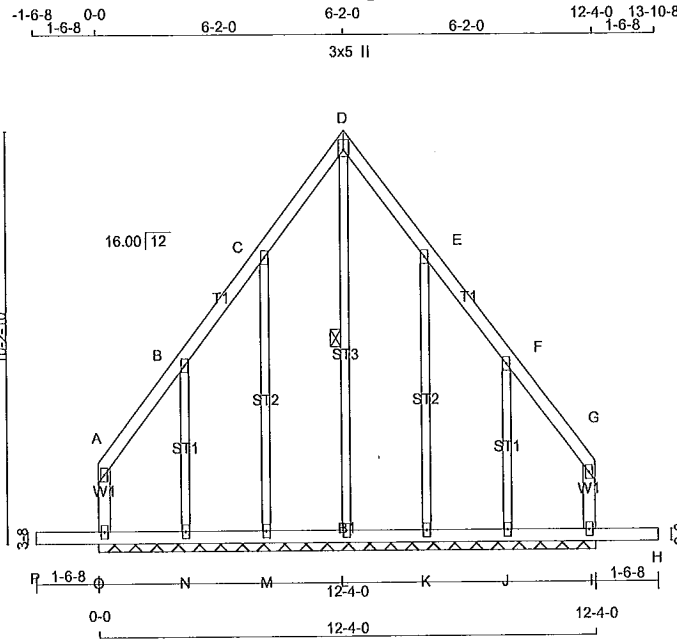
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H24G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:57.2

TOTAL WEIGHT = 71 lb

LUMBER

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

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

GABLE STUDS SPACED AT 2'-0" OC.

PLATES (table is in inches)

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

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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 D-L.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
O-A	-118 / 0	0.0 0.0	0.04 (1)	L-D	-111 / 0	0.08 (1)	
A-B	-47 / 0	-78.0 -78.0	0.04 (1)	M-C	-154 / 0	0.16 (1)	
B-C	-41 / 0	-78.0 -78.0	0.04 (1)	N-B	-153 / 0	0.05 (1)	
C-D	-35 / 0	-78.0 -78.0	0.04 (1)	K-E	-154 / 0	0.16 (1)	
D-E	-35 / 0	-78.0 -78.0	0.04 (1)	J-F	-153 / 0	0.05 (1)	
E-F	-41 / 0	-78.0 -78.0	0.04 (1)				
F-G	-47 / 0	-78.0 -78.0	0.04 (1)				
I-G	-118 / 0	0.0 0.0	0.04 (1)				
P-O	0 / 0	-96.5 -96.5	0.16 (1)				
O-N	0 / 29	-18.5 -18.5	0.02 (4)				
N-M	0 / 25	-18.5 -18.5	0.02 (4)				
M-L	0 / 22	-18.5 -18.5	0.02 (4)				
L-K	0 / 22	-18.5 -18.5	0.02 (4)				
K-J	0 / 25	-18.5 -18.5	0.02 (4)				
J-I	0 / 29	-18.5 -18.5	0.02 (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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(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

CSI: TC=0.04/1.00 (C-D:1), BC=0.16/1.00 (H-I:1), WB=0.16/1.00 (E-K:1), SSI=0.12/1.00 (O-P:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

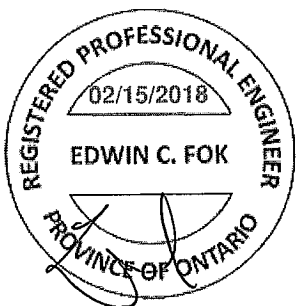
NAIL VALUES	PLATE	GRIP(DRY)	SHEAR	SECTION
		(PSI)	(PLI)	(PLI)
		MAX	MIN	MAX
	MT20	618	354	1667
		788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (C) (INPUT = 0.90)
JSI METAL = 0.07 (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-18023079

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H24T	3	1	TRUSS DESC.	

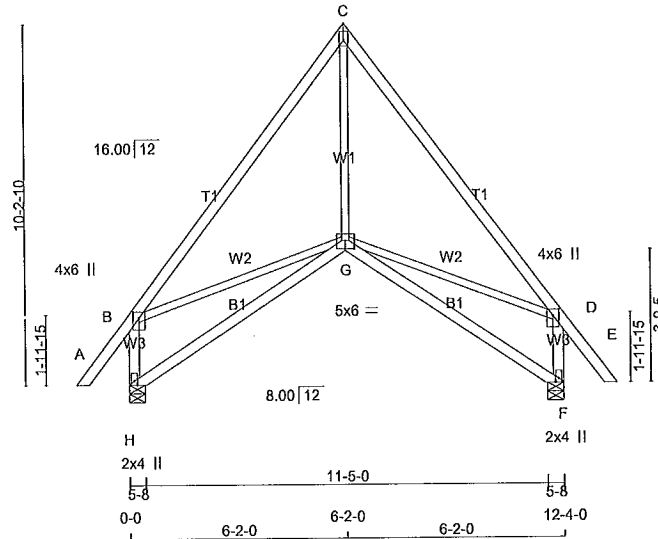
Alpa Roof Truss, Maple

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ID:84gOFYESM8s1JmDO6_uSGRYQWjP-OhJTjFDq1u72DagxVM2Bo0IVT39Ta6GkzYef5zkyFt

-1-6-8 0-0 6-2-0 6-2-0 12-4-0 13-10-8
1-6-8 6-2-0 6-2-0 1-6-8
3x5 II

Scale = 1:65.3



TOTAL WEIGHT = 3 X 65 = 195 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	BBWW+p	MT20	5.0	6.0	2.75	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
JT	702	0	0	0
H	702	0	0	0
F	702	0	0	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	499	317 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
H	499	317 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	UNBRAC LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO			FROM	TO						
A-B	0 / 43	-78.0	-78.0	0.07 (1)	10.00	G-C	0 / 332	0.07 (1)		
B-C	-508 / 0	-78.0	-78.0	0.26 (1)	6.25	B-G	0 / 323	0.07 (1)		
C-D	-508 / 0	-78.0	-78.0	0.26 (1)	6.25	G-D	0 / 323	0.07 (1)		
D-E	0 / 43	-78.0	-78.0	0.07 (1)	10.00					
H-B	-645 / 0	0.0	0.0	0.08 (1)	7.81					
F-D	-645 / 0	0.0	0.0	0.08 (1)	7.81					
H-G	0 / 0	-18.5	-18.5	0.21 (4)	10.00					
G-F	0 / 0	-18.5	-18.5	0.21 (4)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.26/1.00 (B-C:1), BC=0.21/1.00 (G-H:4), WB=0.07/1.00 (C-G:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

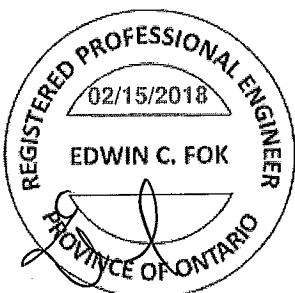
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (H) (INPUT = 0.90)
JSI METAL= 0.32 (F) (INPUT = 1.00)

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



A-18023080

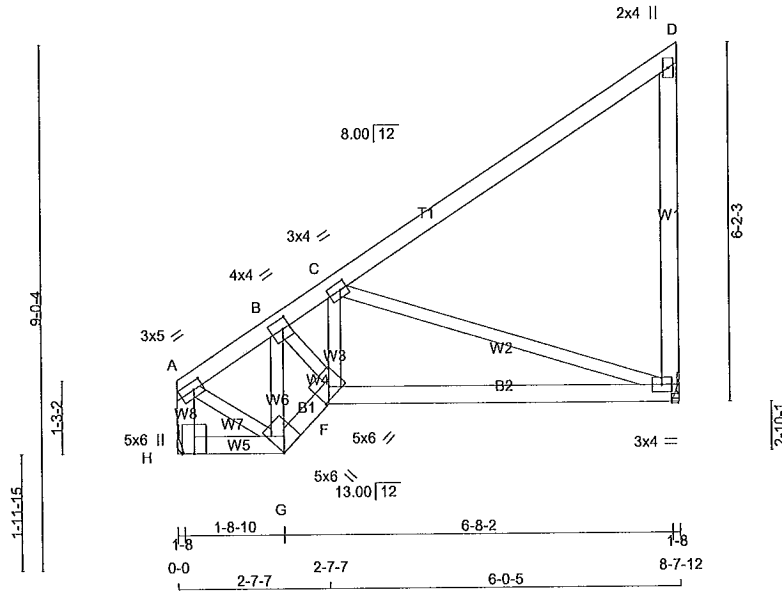
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H26	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:13:35 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-ePMtcKKUwGmoZsgXlJifvA?9C7m4asbotDci3zkyFk

0-0 1-10-2 1-10-2 2-7-7 9-6 6-0-5 8-7-12

Scale = 1:39.6



TOTAL WEIGHT = 4 X 40 = 159 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	
G - F	2x4	DRY	No.2	SPF	
F - E	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT H - G	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-1	MT20	3.0	5.0	1.50	2.00
B	TMVW-1	MT20	4.0	4.0	2.00	1.50
C	TMVW-1	MT20	3.0	4.0	1.50	1.50
D	TMV+P	MT20	2.0	4.0		
E	BMVW-1	MT20	3.0	4.0		
F	BMVW-h	MT20	5.0	6.0	2.00	3.00
G	BMVW+m	MT20	5.0	6.0	Edge	
H	VMV1-1	MT20	5.0	6.0	2.50	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
H	393	0	393	0
E	407	0	407	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	278	185 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
E	290	178 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LBS)	MAX. FACTORED VERT. LOAD LC2 (LBS)	MAX. FACTORED VERT. LOAD LC3 (LBS)	MAX. FACTORED VERT. LOAD LC4 (LBS)	MAX. FACTORED VERT. LOAD LC5 (LBS)	MAX. FACTORED VERT. LOAD LC6 (LBS)	MAX. FACTORED VERT. LOAD LC7 (LBS)	MAX. FACTORED VERT. LOAD LC8 (LBS)	MAX. FACTORED VERT. LOAD LC9 (LBS)	MAX. FACTORED VERT. LOAD LC10 (LBS)
FR-TO												
H-A	-397 / 0	0.0	0.0	0.04 (1)	7.81	F-C	-120 / 30	0.02 (1)				
A-B	-296 / 0	-78.0	-78.0	0.07 (1)	6.25	C-E	-567 / 0	0.36 (1)				
B-C	-450 / 0	-78.0	-78.0	0.39 (1)	6.25	H-G	-61 / 0	0.01 (1)				
C-D	-27 / 0	-78.0	-78.0	0.39 (1)	6.25	G-B	-376 / 0	0.06 (1)				
E-D	-183 / 0	0.0	0.0	0.13 (1)	7.81	A-G	0 / 331	0.07 (1)				
						B-F	0 / 521	0.12 (1)				
G-F	0 / 321	-18.5	-18.5	0.05 (1)	10.00							
F-E	0 / 530	-18.5	-18.5	0.24 (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

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 (0.28")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.07")

CSI: TC=0.39/1.00 (B-C:1), BC=0.24/1.00 (E-F:4), WB=0.36/1.00 (C-E:1), SSI=0.23/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

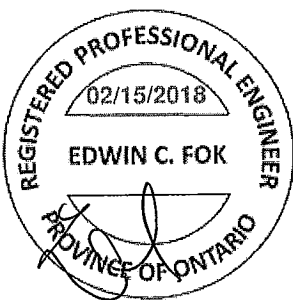
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (E) (INPUT = 0.90)
JSI METAL= 0.20 (E) (INPUT = 1.00)

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

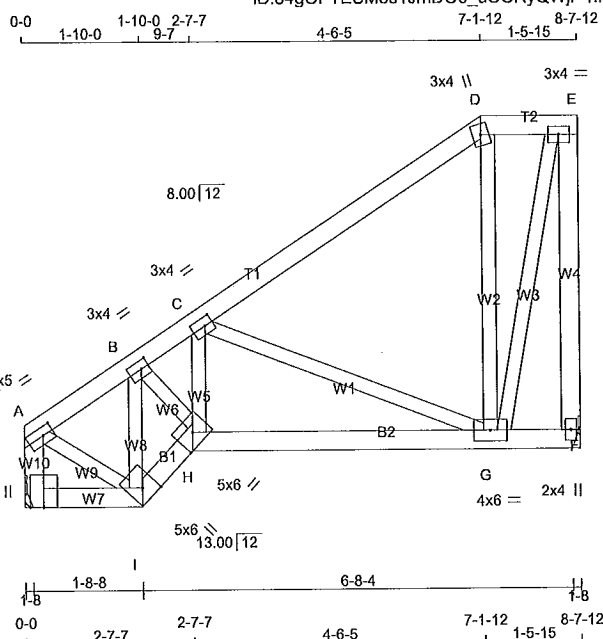


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Alpa Roof Truss, Maple

Version 8 200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 09:13:50 2018 Page 1

ID:84qOFYESM8s1JmDO6 uSGRvQWjP-hlmYmSWuOG9e5sVZvPUpm4lcFEH45PooFIMvjizkyFv



Scale = 1:35.8

TOTAL WEIGHT = 45 lb

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

DRY: SEASONED LUMBER.

BUILDING BEARINGS

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	393	0	393	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	
F	407	0	407	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	278	185 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
F	290	178 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

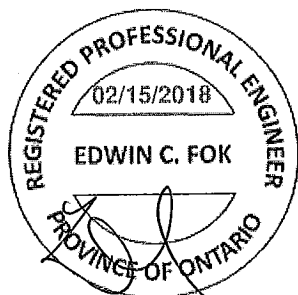
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
J-A	-397 / 0	0.0	0.0	0.04 (1)	7.81	H-C	-24 / 33	0.01 (4)	
A-B	-300 / 0	-78.0	-78.0	0.05 (1)	6.25	C-G	-385 / 0	0.15 (1)	
B-C	-459 / 0	-78.0	-78.0	0.20 (1)	6.25	G-D	-128 / 0	0.05 (1)	
C-D	-144 / 0	-78.0	-78.0	0.20 (1)	6.25	E-E	0 / 371	0.08 (1)	
D-E	-102 / 0	-78.0	-78.0	0.03 (1)	6.25	J-I	-60 / 0	0.01 (1)	
F-E	-414 / 0	0.0	0.0	0.19 (1)	7.81	I-B	-391 / 0	0.06 (1)	
						A-I	0 / 341	0.08 (1)	
I-H	0 / 332	-18.5	-18.5	0.06 (1)	10.00	B-H	0 / 392	0.09 (1)	
H-G	0 / 459	-18.5	-18.5	0.12 (1)	10.00				
G-F	0 / 0	-18.5	-18.5	0.08 (4)	10.00				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	2.00
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	TTW+m	MT20	3.0	4.0		
E	TMVW-t	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMVWWV-t	MT20	4.0	6.0		
H	BBVWV-h	MT20	5.0	6.0	Edge	
I	BMVWWV+m	MT20	5.0	6.0	Edge	
J	WVW1-t	MT20	5.0	6.0	2.50	

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



DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.20/1.00 (B-C:1) , BC=0.12/1.00 (G-H:1)
WB=0.15/1.00 (C-G:1) , SSI=0.13/1.00 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656

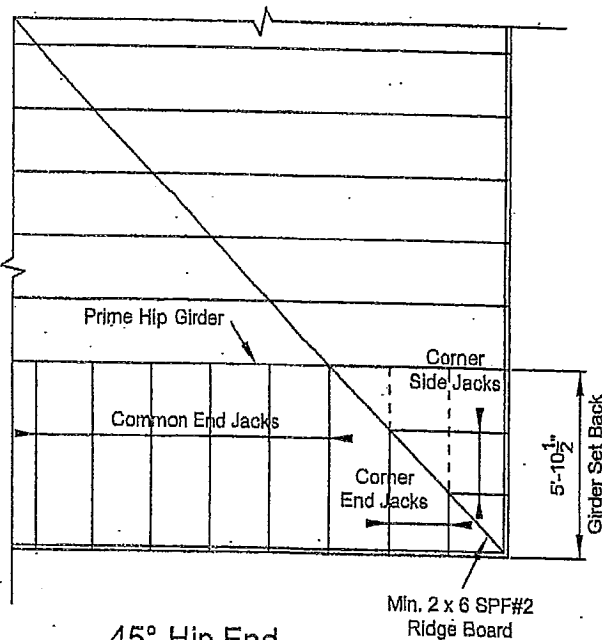
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (B) (INPUT = 0.90)
JSI METAL= 0.15 (B) (INPUT = 1.00)

A-18023082

STRACON ENGINEERING INC.



45° Hip End

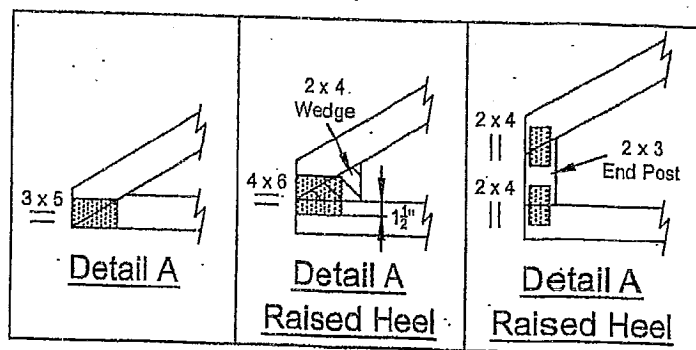
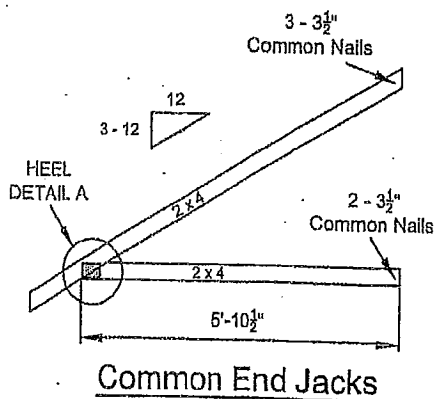
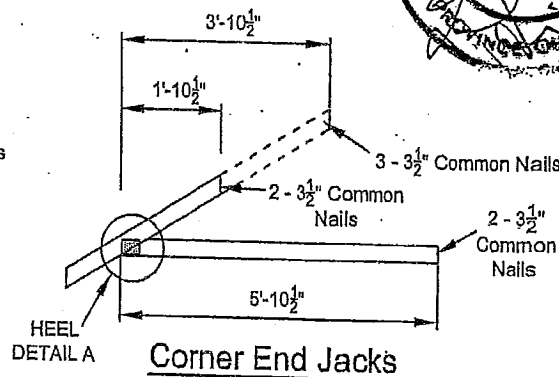
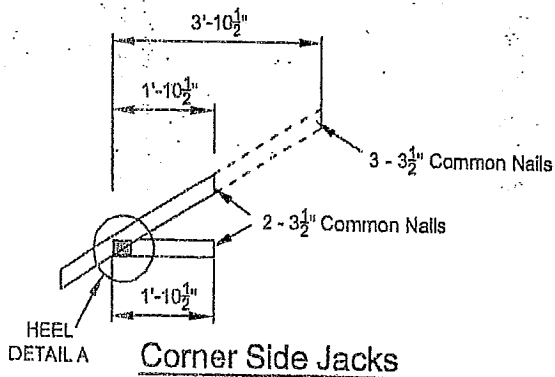
LUMBER SPECIFICATION

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

DESIGN LOAD

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

TOTAL LOAD : 50.5 P.S.F



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

CS-51008

HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

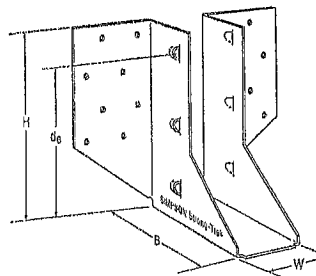
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

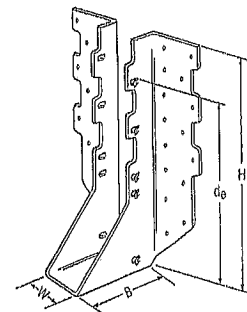
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

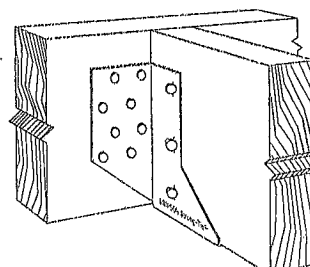
- See current catalogue for options



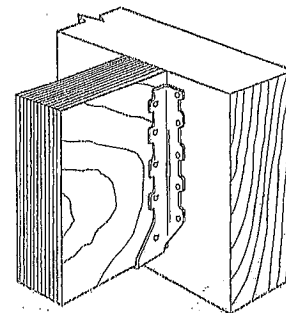
LJS26DS



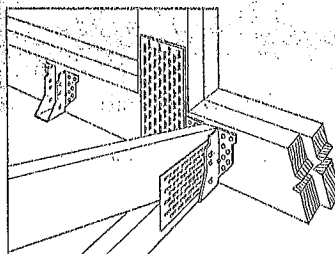
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



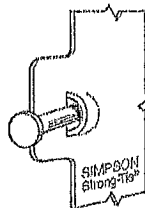
Typical HUS
Installation



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

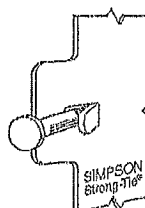
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
LJS26DS	18	1⅞	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅞	5⅝	3	3⅞⅞	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅞	7⅝	3	6⅝	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅞	9⅝	3	7⅝	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅞	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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

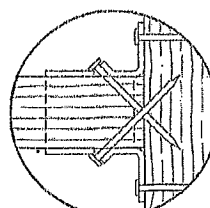


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

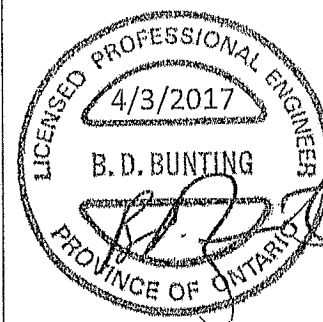
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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T-SPEC-HUS17 3/17 exp. 6/19

(800) 999-5099
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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:

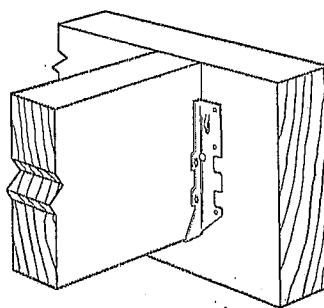
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

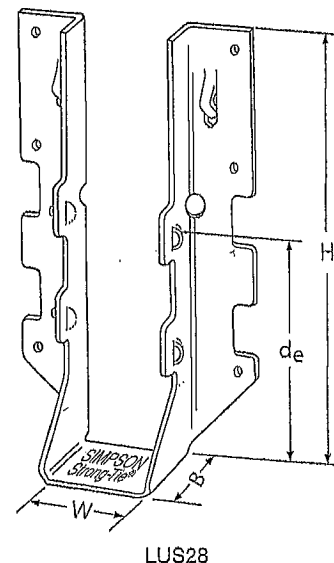
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or naller applications.

Options:

- These hangers cannot be modified



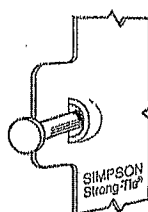
Typical LUS
Installation



LUS28

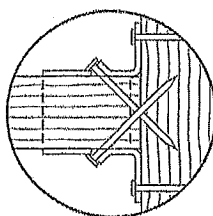
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1½	1½	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4½	1½	3½	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4½	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4½	4½	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1½	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	4½	6½	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7½	1½	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	4½	8½	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.

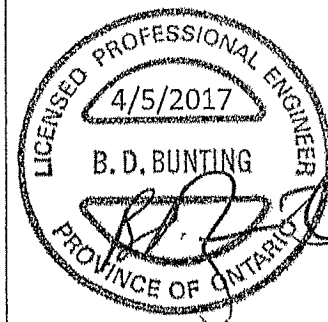


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



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HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

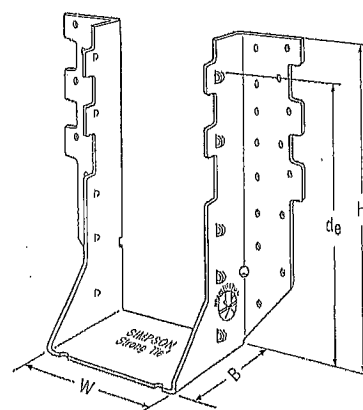
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

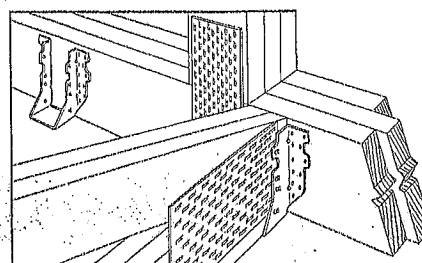
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

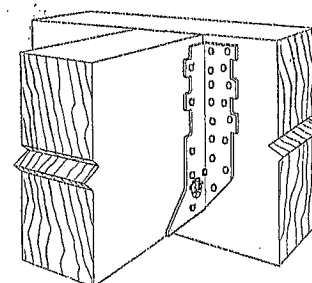
- See current catalogue for options



HHUS410



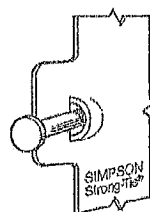
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

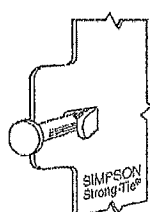
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _p =1.00)	Uplift (K _u =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 1/16	5 1/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 1/2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

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

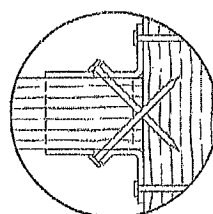


Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,603,680



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



Double Shear Nailing Top View.



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