



Job Track: 45147
Layout ID: 301030
Plan Log: 99352

Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 8/13/2018 Designer: AMANDA

Model / Elevation: 4000 / A OPT GRD TRAY

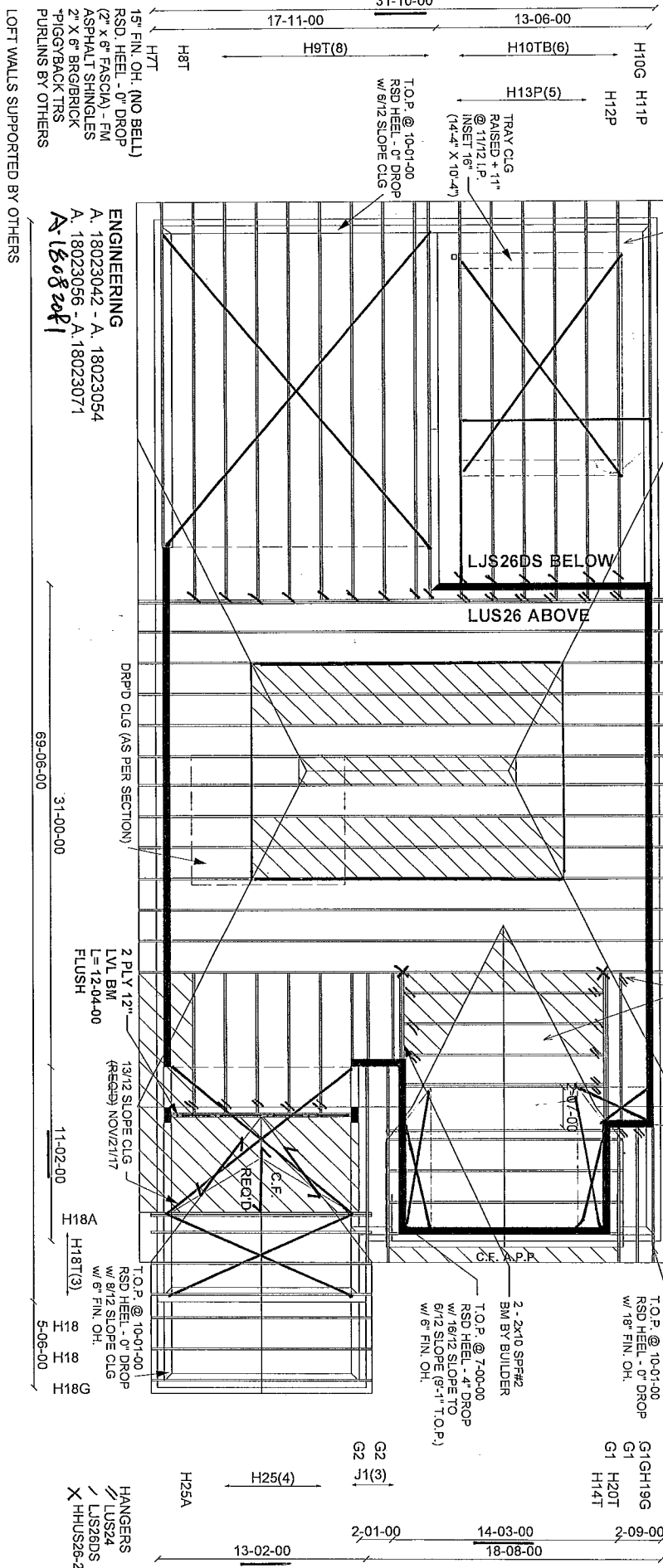
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC. AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC. IF UTILIZED FOR ANY OTHER PURPOSE.

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 O.B.C. LATEST EDITION. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE 2X4 SPF #2 @ 24" O.C WITH A VERT. POST TO THE TRUSS UNDERNEATH AT EACH CROSS POINT. VERT. POSTS LONGER THAN 6 TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINTS & BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

CONVENTIONAL FRAMING BY OTHERS

BRAR 000

Mike V. 8.2.0

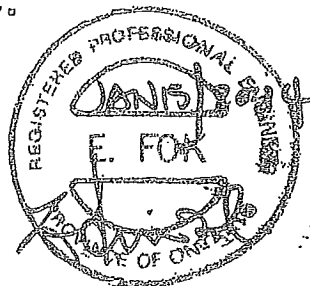


ENGINEERING
A. 18023042 - A. 18023054
A. 18023056 - A. 18023071
A. 18082081

LOFT WALLS SUPPORTED BY OTHERS

Stracon Engineering Inc.

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



RESPONSIBILITIES

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

SPECIFICATIONS

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

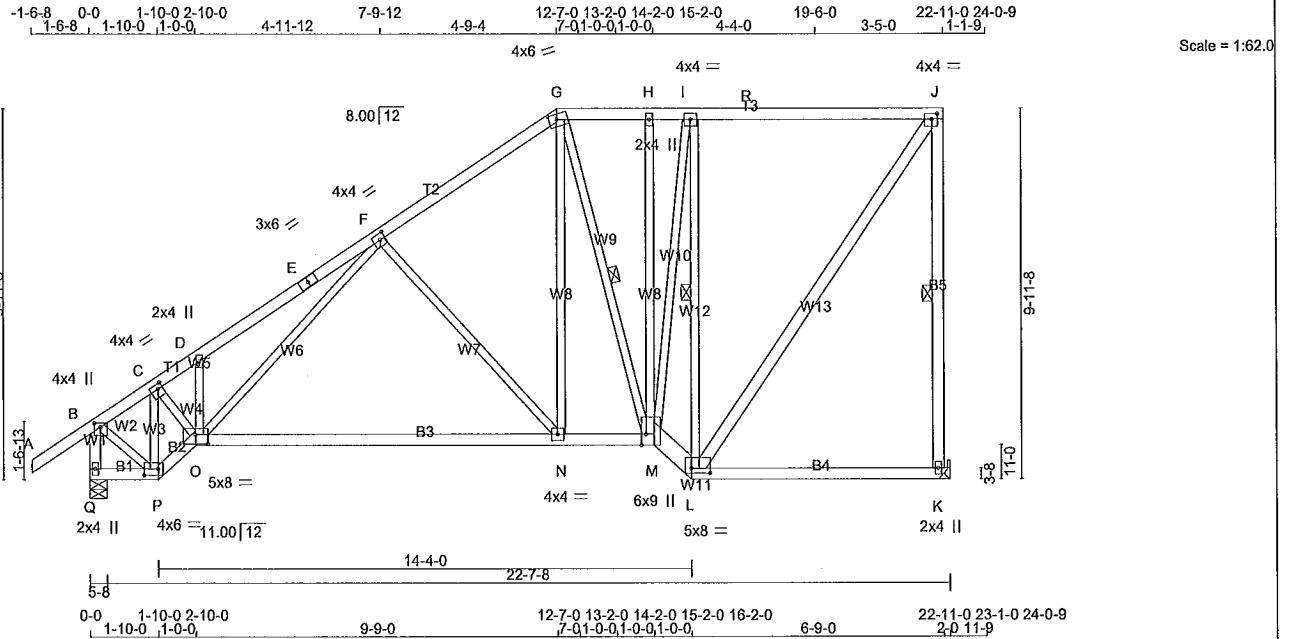
January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
301030	H10TB	6	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.210 S Jun 13 2018 MiTek Industries, Inc. Wed Aug 15 16:19:14 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWJP-19lwnOzpSNOL17JVozRP0ufHdpF0kf35TIDeuBznZSx



Scale = 1:62.0

TOTAL WEIGHT = 6 X 138 = 829 lb

LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE		LUMBER	DESCR	
Q - B	2x4	DRY	No.2	SPF	
A - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	No.2	SPF	
G - J	2x4	DRY	No.2	SPF	
Q - P	2x4	DRY	No.2	SPF	
P - O	2x4	DRY	No.2	SPF	
O - M	2x4	DRY	No.2	SPF	
L - K	2x4	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
L - J	2x4	DRY	No.2	SPF	
M - L	2x6	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	4.0	1.25 2.00
C	TMVW-t	MT20	4.0	4.0	1.50 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	2.00 1.75
G	TTVW-m	MT20	4.0	6.0	1.75 2.50
H	TMVW+w	MT20	2.0	4.0	
I	TMVW-t	MT20	4.0	4.0	
J	TMVW-t	MT20	4.0	4.0	1.75 1.75
K	BMV1+p	MT20	2.0	4.0	
L	BWVW-t	MT20	5.0	8.0	1.50 6.00
M	BWVW-t+m	MT20	6.0	9.0	Edge 1.50
N	BMVW-t	MT20	4.0	4.0	
O	BBVW-p	MT20	5.0	8.0	3.00 4.00
P	BBVW-t	MT20	4.0	6.0	2.00 4.50
Q	BMV1+p	MT20	2.0	4.0	

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

Note: Lateral brace(s) shown shall be 2x4 SPF#2.



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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	UPLIFT	IN-SX	IN-SX	IN-SX
Q	1240	0	1240	0	5-8	1-13	
K	1140	0	1140	0	MECHANICAL		

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT K. MINIMUM BEARING LENGTH AT JOINT K = 1-8.

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	883	548 / 0	0 / 0	0 / 0	0 / 0	334 / 0	0 / 0
K	817	476 / 0	0 / 0	0 / 0	0 / 0	341 / 0	0 / 0

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

BRACING

FOR SECTION G-J, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.11 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.08 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 I-L, G-M.

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

LOADING

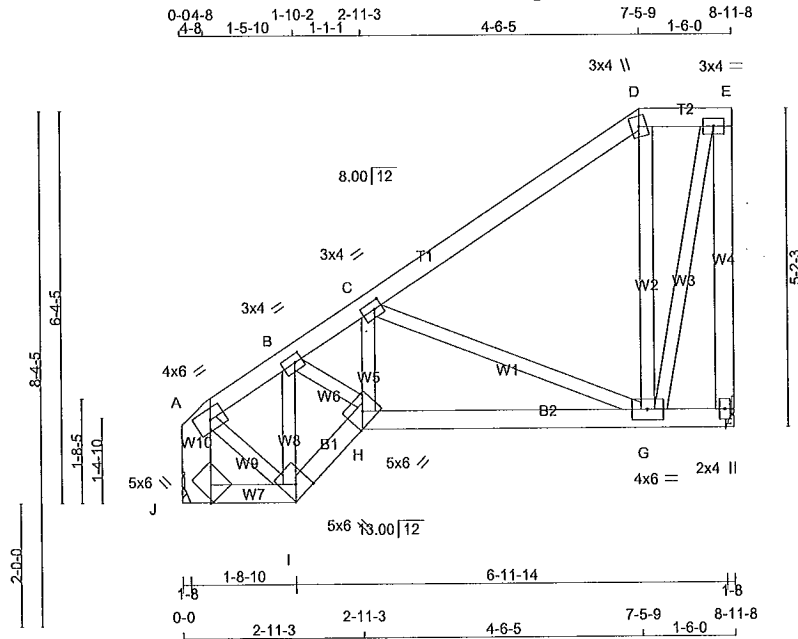
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE	VERT. LOAD	MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
Q-B	-1223 / 0	0.0	0.0	0.13 (1)	7.25	B-P	0 / 851
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	P-C	-1054 / 0
B-C	-899 / 0	-78.0	-78.0	0.12 (1)	6.25	C-O	0 / 978
C-D	-1442 / 0	-78.0	-78.0	0.11 (1)	5.35	O-D	-332 / 0
D-E	-1497 / 0	-78.0	-78.0	0.25 (1)	5.11	L-I	-1263 / 0
E-F	-1497 / 0	-78.0	-78.0	0.25 (1)	5.11	L-J	0 / 1036
F-G	-906 / 0	-78.0	-78.0	0.23 (1)	6.21	M-L	0 / 763
G-H	-850 / 0	-85.5	-85.5	0.09 (1)	2.00	N-G	0 / 543
H-I	-851 / 0	-85.5	-85.5	0.43 (1)	2.00	M-H	0 / 265
I-R	-588 / 0	-85.5	-85.5	0.45 (1)	2.00	G-M	-321 / 0
R-J	-588 / 0	-85.5	-85.5	0.45 (1)	2.00	M-I	0 / 469
						O-F	0 / 330
						F-N	-458 / 0
Q-P	0 / 0	-18.5	-18.5	0.02 (4)	10.00		
P-O	0 / 898	-18.5	-18.5	0.15 (1)	10.00		
O-N	0 / 1035	-18.5	-18.5	0.51 (4)	10.00		
N-M	0 / 739	-18.5	-18.5	0.50 (4)	10.00		
L-K	0 / 0	-18.5	-18.5	0.24 (4)	10.00		
K-J	-1079 / 0	0.0	0.0	0.52 (1)	6.08		

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H25A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:19:12 2018 Page 1
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Scale = 1:37.5

TOTAL WEIGHT = 47 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
J - A	2x6	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	2x3	DRY	No.2	SPF	
EXCEPT	2x4	DRY	No.2	SPF	
DRIED, 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
J	412	0	0	0
F	418	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	COMBINED	193 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 0
F	298	183 / 0	0 / 0	0 / 0	0 / 0	115 / 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)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM	TO			FR-TO		
J-A	-420 / 0	0.0	0.0	0.03 (1)	7.81	H-C	0 / 54	0.02 (4)
A-B	-283 / 0	-78.0	-78.0	0.05 (1)	6.25	C-G	-417 / 0	0.17 (1)
B-C	-525 / 0	-78.0	-78.0	0.20 (1)	6.25	G-D	-128 / 0	0.05 (1)
C-D	-148 / 0	-78.0	-78.0	0.20 (1)	6.25	G-E	0 / 383	0.09 (1)
D-E	-105 / 0	-78.0	-78.0	0.03 (1)	6.25	J-I	-88 / 0	0.01 (1)
F-E	-426 / 0	0.0	0.0	0.20 (1)	7.81	I-B	-400 / 0	0.06 (1)
I-H	0 / 312	-18.5	-18.5	0.05 (1)	10.00	A-I	0 / 365	0.08 (1)
H-G	0 / 492	-18.5	-18.5	0.13 (1)	10.00	B-H	0 / 370	0.08 (1)
G-F	0 / 0	-18.5	-18.5	0.08 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.29")
CALCULATED VERT. DEFL.(LL) = 1/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = 1/999 (0.03")

CSI: TC=0.20/1.00 (B-C:1), BC=0.13/1.00 (G-H:1), WB=0.17/1.00 (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) 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= 0.82 (E) (INPUT = 0.90)
JSI METAL= 0.17 (A) (INPUT = 1.00)

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

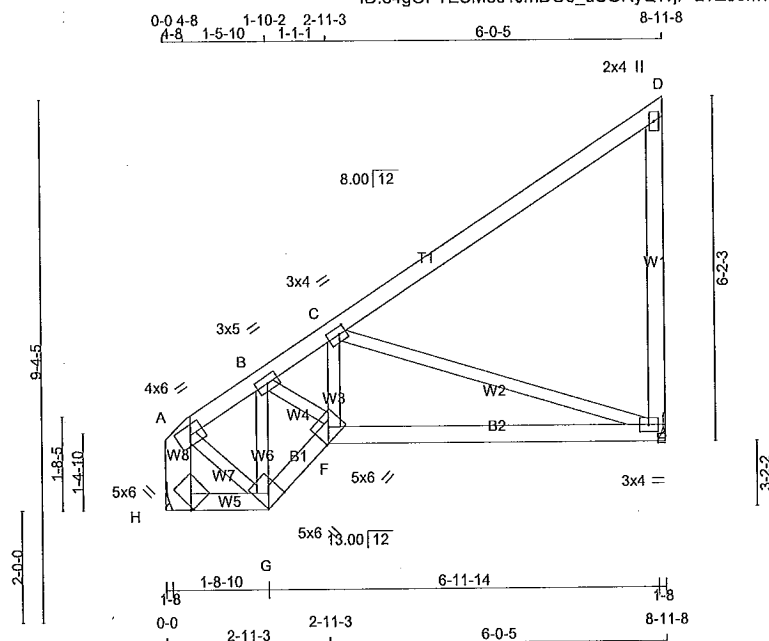


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H25	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:18:45 2018 Page 1
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Scale = 1:41.3

TOTAL WEIGHT = 4 X 42 = 167 lb

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
H - A	2x6	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	2x3	DRY	No.2		SPF
EXCEPT					
H - G	2x4	DRY	No.2		SPF
SEASONED LUMBER.					

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		
H	412	0	412	0	0	HANGER BY OTHERS
E	418	0	418	0	0	MIN. SEAT SIZE: 1-8 HANGER BY OTHERS MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
H	291	193 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 0
E	298	183 / 0	0 / 0	0 / 0	0 / 0	115 / 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)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FORCE (LBS)	MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO					
H-A	-420 / 0	0.0	0.0	0.03 (1)	7.81	F-C	-20 / 60	0.02 (4)
A-B	-277 / 0	-78.0	-78.0	0.08 (1)	6.25	C-E	-589 / 0	0.38 (1)
B-C	-536 / 0	-78.0	-78.0	0.38 (1)	6.25	H-G	-88 / 0	0.01 (1)
C-D	-26 / 0	-78.0	-78.0	0.37 (1)	6.25	G-B	-380 / 0	0.06 (1)
E-D	-185 / 0	0.0	0.0	0.13 (1)	7.81	A-G	0 / 351	0.08 (1)
						B-F	0 / 472	0.11 (1)
G-F	0 / 295	-18.5	-18.5	0.05 (1)	10.00			
F-E	0 / 561	-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/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 (0.29")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.38/1.00 (B-C:1), BC=0.24/1.00 (E-F:4),
WB=0.38/1.00 (C-E:1), SSI=0.19/1.00 (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.

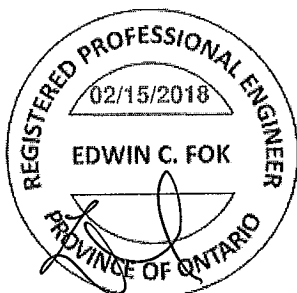
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)	(PLI)	(PSI)	(PLI)	(PLI)	(PLI)
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.21 (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

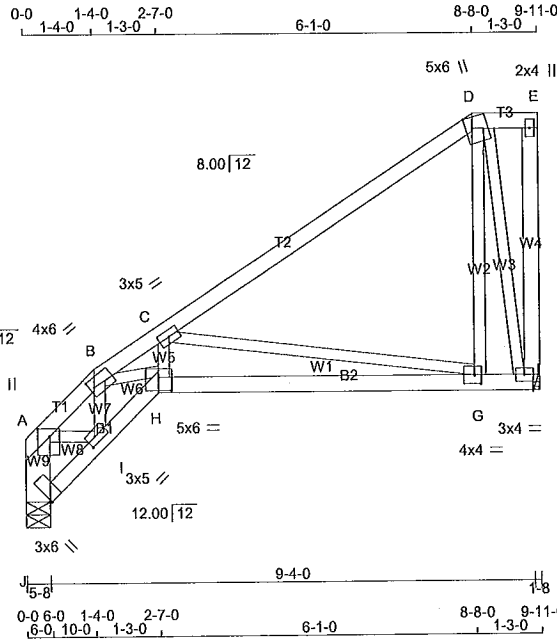


A-18023070

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H20T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:18:02 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRYQWjP-jCTs5f?orbLhRLZ5nGQI42dQ9eZTe4t?NqLIDizkz3p



Scale = 1:44.5

TOTAL WEIGHT = 50 lb
(M)F

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
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
T				
DR... 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	478	0	5-8	1-8
J	478	0	5-8	1-8

UNFACTORED REACTIONS

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

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	FR-TO	
A-B	-640 / 0	-78.0 -78.0 0.02 (1)	H-C	0 / 420
B-C	-1354 / 0	-78.0 -78.0 0.27 (1)	C-G	-1064 / 0
C-D	-156 / 0	-78.0 -78.0 0.33 (1)	G-D	0 / 307
D-E	0 / 0	-78.0 -78.0 0.02 (1)	D-F	-489 / 0
F-E	-49 / 0	0.0 0.0 0.02 (1)	I-B	-347 / 0
J-A	-463 / 0	0.0 0.0 0.03 (1)	A-I	0 / 452
			B-H	0 / 785
J-I	-1 / 0	-18.5 -18.5 0.01 (4)		
I-H	0 / 588	-18.5 -18.5 0.10 (1)		
H-G	0 / 1160	-18.5 -18.5 0.27 (1)		
G-F	0 / 117	-18.5 -18.5 0.17 (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

(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 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = 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.

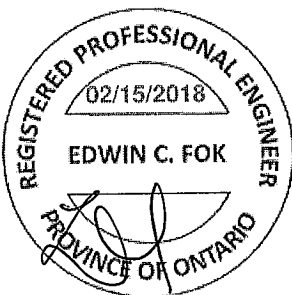
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

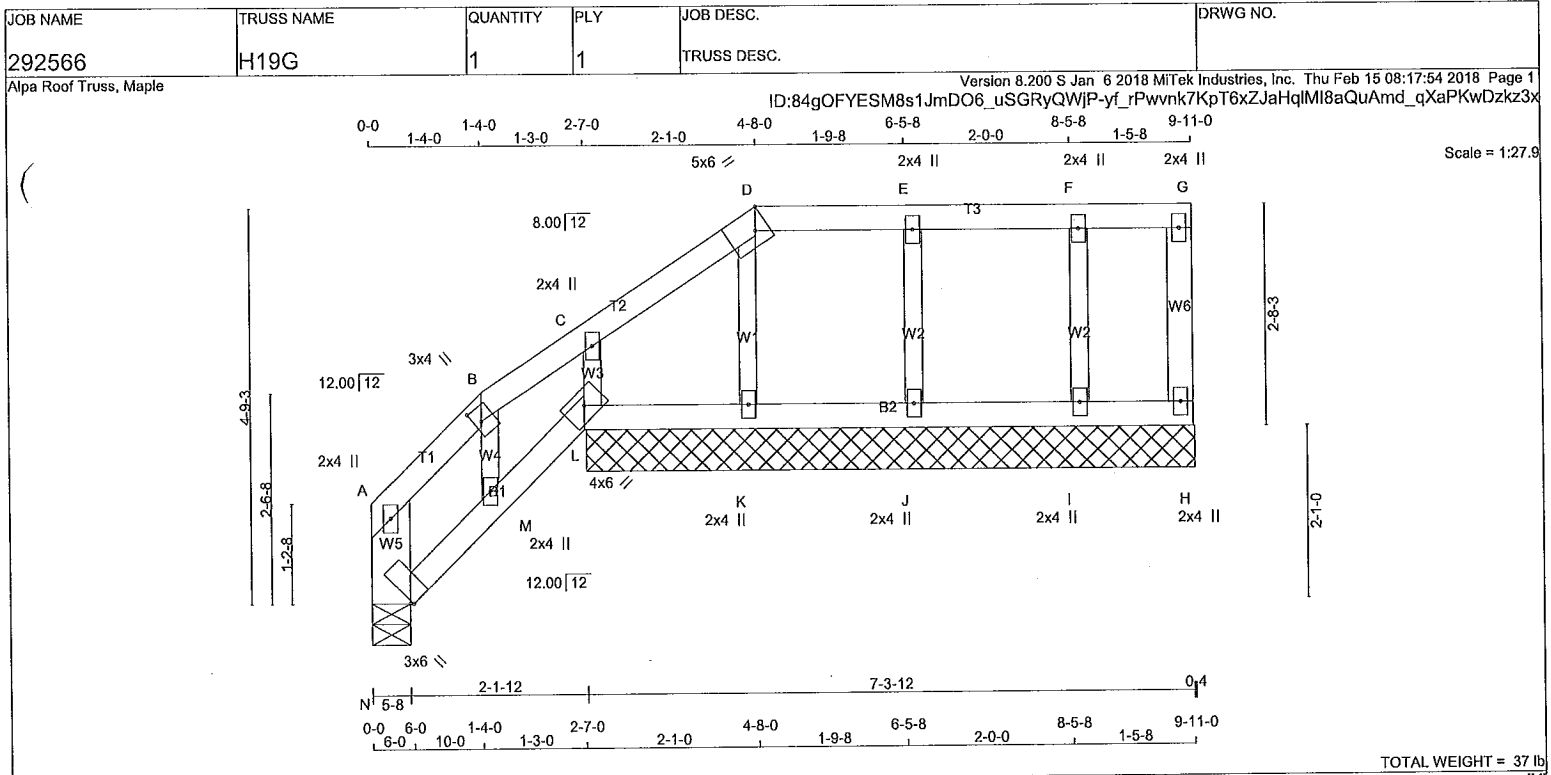
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (B) (INPUT = 0.90)
JSI METAL= 0.39 (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-18023069



LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
N - A	2x6	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
L - H	2x4	DRY	No.2	SPF
A - WEBS	2x3	DRY	No.2	SPF
EASONS LUMBER.				
G... 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.

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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. LC1 (LC)
FR-TO		FROM TO		FR-TO			
N-A	-79 / 0	0.0	0.0 0.01 (1)	M-B	-43 / 0	0.01 (1)	
A-B	-29 / 0	-78.0	-78.0 0.03 (1)	K-D	-139 / 0	0.02 (1)	
B-C	0 / 14	-78.0	-78.0 0.05 (1)	L-C	-175 / 0	0.02 (1)	
C-D	-15 / 0	-78.0	-78.0 0.05 (1)	J-E	-159 / 0	0.03 (1)	
D-E	-15 / 0	-78.0	-78.0 0.04 (1)	I-F	-124 / 0	0.02 (1)	
E-F	-15 / 0	-78.0	-78.0 0.04 (1)				
F-G	-15 / 0	-78.0	-78.0 0.03 (1)				
H-G	-54 / 0	0.0	0.0 0.03 (1)				
N-M	0 / 2	-18.5	-18.5 0.04 (1)				
M-L	0 / 43	-18.5	-18.5 0.04 (1)				
L-K	0 / 9	-18.5	-18.5 0.04 (1)				
K-J	0 / 15	-18.5	-18.5 0.02 (4)				
J-I	0 / 15	-18.5	-18.5 0.02 (4)				
I-H	0 / 15	-18.5	-18.5 0.03 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.05/1.00 (B-C:1), BC=0.04/1.00 (L-M:1), WB=0.03/1.00 (E-J:1), SSI=0.06/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

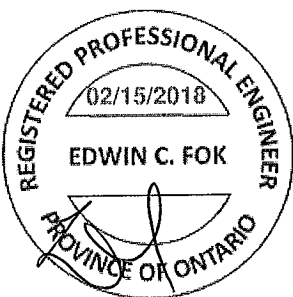
NAIL VALUES	PLATE GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (L) (INPUT = 0.90)
JSI METAL= 0.09 (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



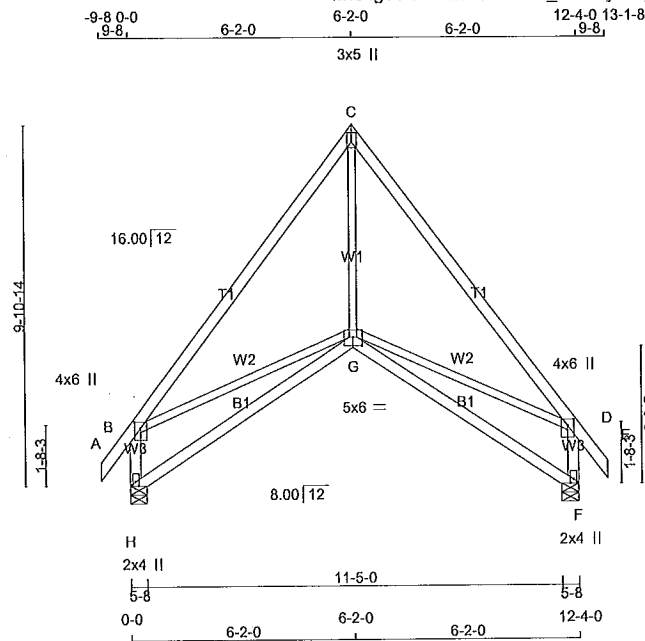
A-18023068

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H18T	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:17:45 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWJP-jwxRWro8rMB5uklqHbCjITQYconW9YrVThkL7EzKz44



Scale: 3/16\"

TOTAL WEIGHT = 3 X 63 = 188 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				
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	BBVWW+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
JT	VERT	DOWN	HORZ	UPLIFT
H	666	0	666	0
F	666	0	666	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE
H	473	297 / 0	0 / 0
F	473	297 / 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	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO							
A-B	0 / 28	-78.0	-78.0	0.03 (1)	10.00	G-C	0 / 376
B-C	-536 / 0	-78.0	-78.0	0.26 (1)	6.25	B-G	0 / 347
C-D	-536 / 0	-78.0	-78.0	0.26 (1)	6.25	G-D	0 / 347
D-E	0 / 28	-78.0	-78.0	0.03 (1)	10.00		
H-B	-609 / 0	0.0	0.0	0.07 (1)	7.81		
F-D	-609 / 0	0.0	0.0	0.07 (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=0.08/1.00 (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.

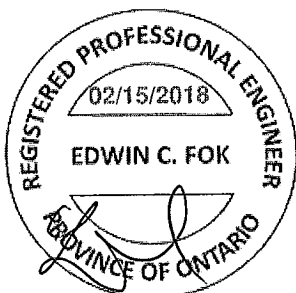
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (H) (INPUT = 0.90)
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



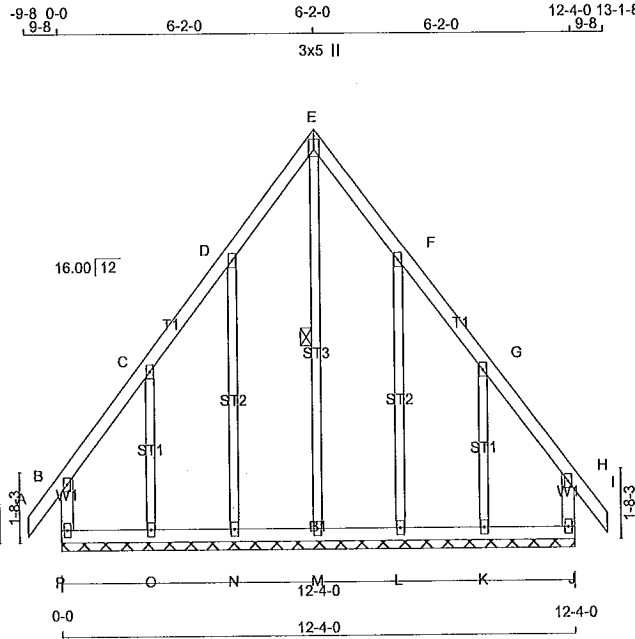
A-18023067

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H18G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:17:04 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-Q1zxwqIQVm1vUR7yN4N5jqDbDGqp2_qTolgA6zkz4j



Scale = 1:55.5

TOTAL WEIGHT = 69 lb

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

ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
EASONED LUMBER.					

GROUND 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, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	5.0	2.00	Edge
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O						
K	BMV1+w	MT20	2.0	4.0		
P	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS
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 E-M.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
P-B	-187 / 0	0.0	0.0 0.03 (1)	7.81	M-E	-118 / 0	0.07 (1)
A-B	0 / 28	-78.0	-78.0 0.05 (1)	10.00	N-D	-155 / 0	0.14 (1)
B-C	-45 / 0	-78.0	-78.0 0.04 (1)	6.25	O-C	-150 / 0	0.05 (1)
C-D	-36 / 0	-78.0	-78.0 0.04 (1)	6.25	L-F	-155 / 0	0.14 (1)
D-E	-30 / 0	-78.0	-78.0 0.04 (1)	6.25	K-G	-150 / 0	0.05 (1)
E-F	-30 / 0	-78.0	-78.0 0.04 (1)	6.25			
F-G	-36 / 0	-78.0	-78.0 0.04 (1)	6.25			
G-H	-45 / 0	-78.0	-78.0 0.04 (1)	6.25			
H-I	0 / 28	-78.0	-78.0 0.05 (1)	10.00			
J-H	-187 / 0	0.0	0.0 0.03 (1)	7.81			
P-O	0 / 26	-18.5	-18.5 0.02 (1)	10.00			
O-N	0 / 22	-18.5	-18.5 0.02 (4)	10.00			
N-M	0 / 19	-18.5	-18.5 0.02 (4)	10.00			
M-L	0 / 19	-18.5	-18.5 0.02 (4)	10.00			
L-K	0 / 22	-18.5	-18.5 0.02 (4)	10.00			
K-J	0 / 26	-18.5	-18.5 0.02 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

(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

CSI: TC=0.05/1.00 (H-I:1), BC=0.02/1.00 (J-K:1), WB=0.14/1.00 (O-N:1), SSI=0.04/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

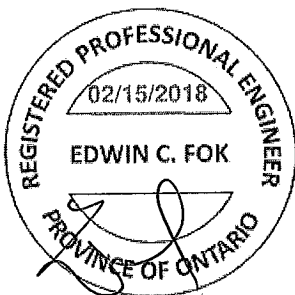
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)

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

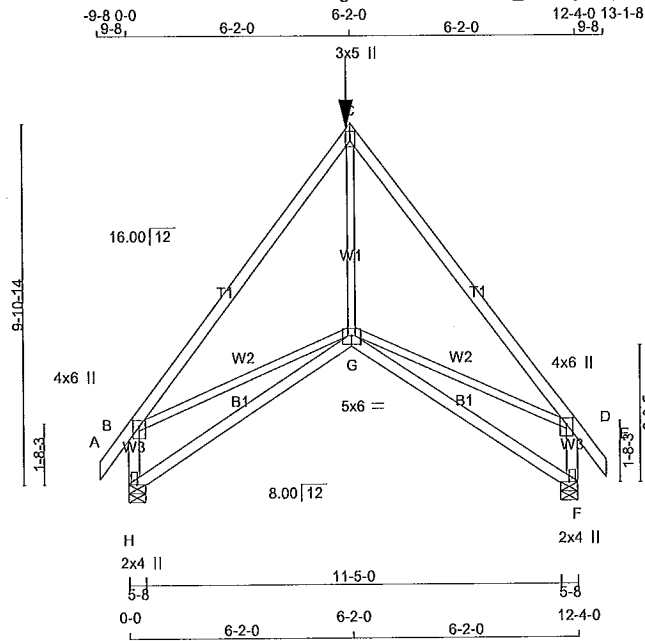


A-18023066

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H18A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:18:36 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWJP-kkWJDHP7r1dsWZ9dmP1gSD1GKLB7ccs?B6aYPnzKz3H



Scale: 3/16"=1'

TOTAL WEIGHT = 2 X 63 = 126 lb

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
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					
EASONED 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(9.3)
G - F	12	SIDE(9.3)
WEBS : (0.122"x3") SPIRAL NAILS		
G - C	6	SIDE(128.7)
2x3	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 FACTORED GROSS REACTION	REQRD FACTORED GROSS REACTION
JT	VERT	DOWN	UP	IN-SX
H	1288	0	0	1-8
F	1288	0	0	1-8

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
H	928	514/0 0/0 0/0 0/0 414/0 0/0
F	928	514/0 0/0 0/0 0/0 414/0 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

CHORDS	MAX. FACTORED MEMB. 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)
FR-TO									
A-B	0/28	-78.0	-78.0	0.02 (1)	10.00	G-C	0/993	0.12 (1)	
B-C	-1546/0	-78.0	-78.0	0.22 (1)	6.25	B-G	0/1001	0.12 (1)	
C-D	-1546/0	-78.0	-78.0	0.22 (1)	6.25	G-D	0/1001	0.12 (1)	
D-E	0/28	-78.0	-78.0	0.02 (1)	10.00				
H-B	-1170/0	0.0	0.0	0.07 (1)	7.81				
F-D	-1170/0	0.0	0.0	0.07 (1)	7.81				
H-G	0/0	-38.5	-38.5	0.24 (4)	10.00				
G-F	0/0	-38.5	-38.5	0.24 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
	C	6-2-0	-999	-999	---	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 (G-H:4), WB=0.12/1.00 (B-G:1), SS=0.07/1.00 (G-H:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

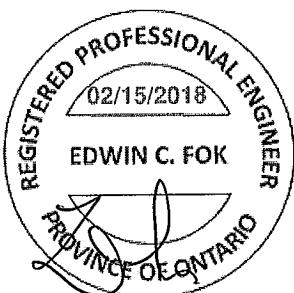
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (C) (INPUT = 0.90)
JSI METAL= 0.29 (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.
292566	H18A	1	2	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:18:36 2018 Page 2					
ID:84gOFYESM8s1JmDO6 uSGRyQWJP-kkWJDHP7r1dsWZ9dmp1gSD1GKLB?ccs?B6aYPnzkz3H					

PLATES (table is in inches)

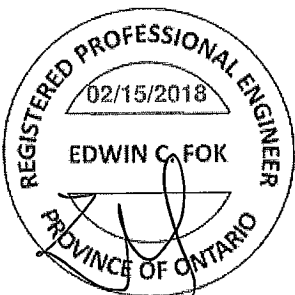
PE	PLATES	W	LEN	Y	X
√W+p	MT20	4.0	6.0	2.00	2.00
W+p	MT20	3.0	5.0	2.00	Edge
TMVW+p	MT20	4.0	6.0	2.00	2.00
BMV1+p	MT20	2.0	4.0	Edge	
BBWW-p	MT20	5.0	6.0	2.75	3.00
BMV1+p	MT20	2.0	4.0	Edge	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 998.6 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



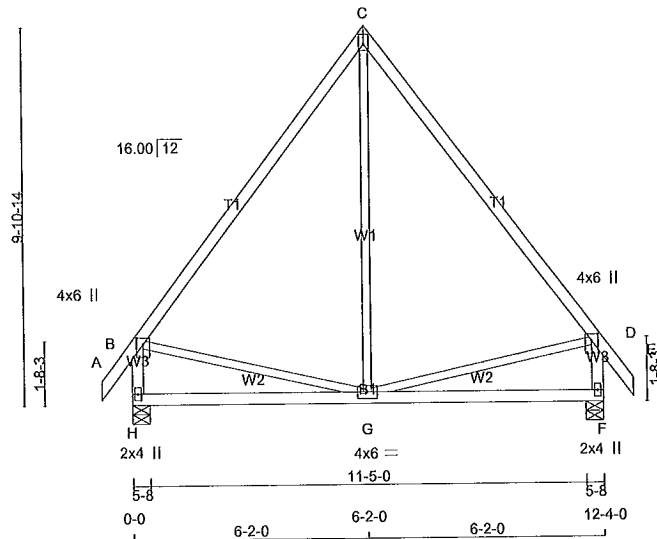
A-18023065(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H18	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:15:02 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-7ZbpJ6puEHfDrhoVESBUn5Aip48STr5V_qIDuBzkz6d

-9-8 0-0 6-2-0 6-2-0 6-2-0 12-4-0 13-1-8
9-8, 6-2-0 3x5 II 9-8, Scale = 1:60.5



TOTAL WEIGHT = 2 X 61 = 123 lb (M)(F)

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 - F	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

EASONED LUMBER.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
H	666	0	666	0	0	5-8	1-8		
F	666	0	666	0	0	5-8	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
H	473	297 / 0	0 / 0	0 / 0	0 / 0	176 / 0	0 / 0		
F	473	297 / 0	0 / 0	0 / 0	0 / 0	176 / 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		FACTORED		MEMB.		WEBS		FACTORED	
MAX. FORCE		VERT. LOAD LC1		MAX. MEMB.		MAX. FORCE		MAX. MEMB.	
(LBS)		(PLF)		(LC)		(LBS)		(LC)	
FR-TO		FROM	TO	UNBRAC	LENGTH FR-TO				
A-B	0 / 28	-78.0	-78.0	0.03 (1)	10.00	G-C	0 / 123	0.04 (4)	
B-C	-336 / 0	-78.0	-78.0	0.25 (1)	6.25	B-G	0 / 206	0.05 (1)	
C-D	-336 / 0	-78.0	-78.0	0.25 (1)	6.25	G-D	0 / 206	0.05 (1)	
D-E	0 / 28	-78.0	-78.0	0.03 (1)	10.00				
H-B	-622 / 0	0.0	0.0	0.07 (1)	7.81				
F-D	-622 / 0	0.0	0.0	0.07 (1)	7.81				
H-G	0 / 0	-18.5	-18.5	0.20 (4)	10.00				
G-F	0 / 0	-18.5	-18.5	0.20 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.25/1.00 (B-C:1) , BC=0.20/1.00 (F-G:4) , WB=0.05/1.00 (B-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 .

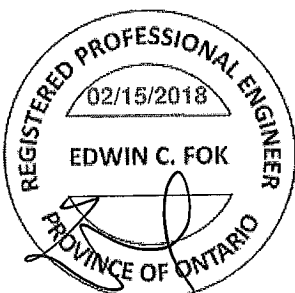
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (G) (INPUT = 0.90)
JSI METAL= 0.18 (D) (INPUT = 1.00)

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



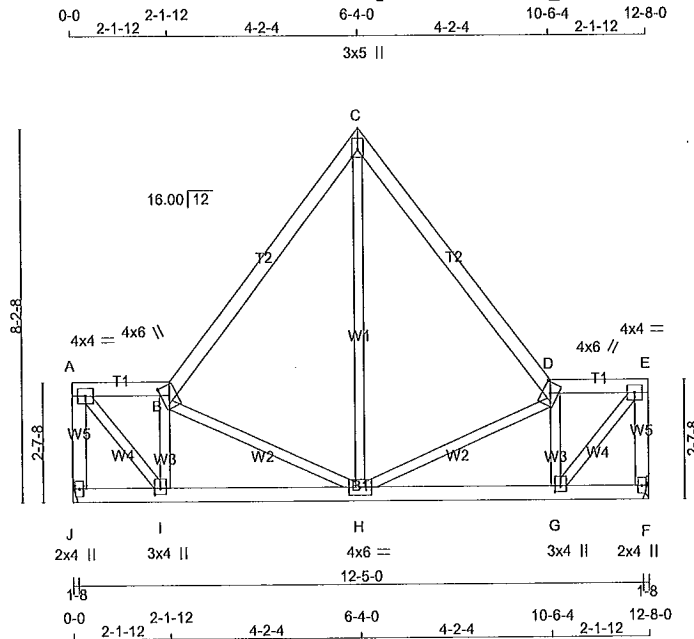
A-18023064

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H17	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:14:55 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRYQWJP-iDgArjKvI7nDVcm9KUZR_cNWkGn3KefTNEYL95zkz6k



TOTAL WEIGHT = 3 X 62 = 185 lb

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

ALL WEBS 2x3 DRY EASONED LUMBER. No.2 SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	4.0		
B	TTWW+m	MT20	4.0	6.0	2.75	2.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TTWW+m	MT20	4.0	6.0	2.75	2.00
E	TMVW-t	MT20	4.0	4.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMVW+H	MT20	3.0	4.0	1.50	1.50
H	BMVW+H	MT20	4.0	6.0		
I	BMVW+H	MT20	3.0	4.0	1.50	1.50
J	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT	611	0	611	0	0	0
J	611	0	611	0	0	0
F	611	0	611	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	436	266 / 0	0 / 0	0 / 0	0 / 0	170 / 0	0 / 0
F	436	266 / 0	0 / 0	0 / 0	0 / 0	170 / 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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	FR-TO	WEBS	
						MEMB. MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
J-A	-595 / 0	0.0	0.0	0.08 (1)	7.81	A-I	0 / 693
A-B	-456 / 0	-78.0	-78.0	0.05 (1)	6.25	I-B	-467 / 0
B-C	-417 / 0	-78.0	-78.0	0.18 (1)	6.25	B-H	-257 / 0
C-D	-417 / 0	-78.0	-78.0	0.18 (1)	6.25	H-C	0 / 338
D-E	-456 / 0	-78.0	-78.0	0.05 (1)	6.25	E-D	-257 / 0
E-F	-595 / 0	0.0	0.0	0.08 (1)	7.81	F-G	-467 / 0
J-I	0 / 0	-18.5	-18.5	0.04 (4)	10.00	G-E	0 / 693
I-H	0 / 477	-18.5	-18.5	0.12 (4)	10.00		
H-G	0 / 477	-18.5	-18.5	0.12 (4)	10.00		
G-F	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 ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-08, CSA 086-14
- TPIC 2011, TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.18/1.00 (C-D:1), BC=0.12/1.00 (H-I:4), WB=0.16/1.00 (A-I:1), SSI=0.08/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

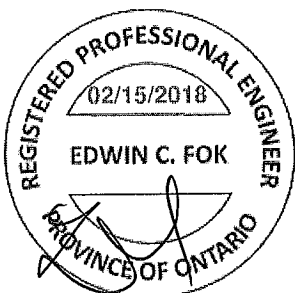
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (I) (INPUT = 0.90)
JSI METAL= 0.28 (I) (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

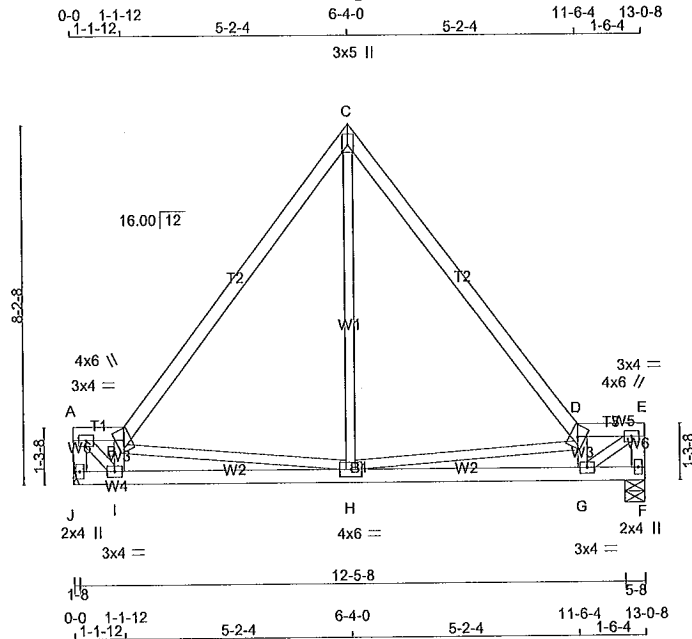


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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H16	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:20:03 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWjP-hTHcU1SLmaWSxJLMA54TZ88uQueVxRpC99fyEzKz1w



TOTAL WEIGHT = 2 X 57 = 115 lb (M)

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

ALL WEBS 2x3 DRY No.2 SPF
EASONED 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	12	TOP
A - B	12	SIDE(8.2)
B - C	12	SIDE(5.0)
C - D	12	SIDE(5.0)
D - E	12	SIDE(8.2)
E - F	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J - F	12	SIDE(2.2)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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	DOWN	UP	IN-SX
J	762	0	0	HANGER BY OTHERS
F	762	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED		
J	543	331/0	0/0
F	543	331/0	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.

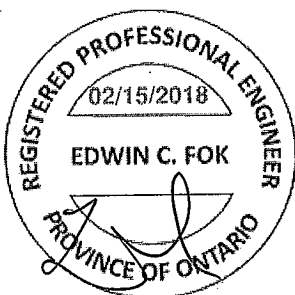
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. FACTORED UNBRACED LENGTH (FR-TO)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
J-A	-740/0	0.0	0.0	0.04 (1)	7.81	0/1035	0.13 (1)
A-B	-747/0	-94.4	-94.4	0.01 (1)	6.25	-678/0	0.05 (1)
B-C	-544/0	-94.4	-94.4	0.25 (1)	6.25	-501/0	0.13 (1)
C-D	-544/0	-94.4	-94.4	0.25 (1)	6.25	0/378	0.05 (4)
D-E	-976/0	-94.4	-94.4	0.02 (1)	6.25	-731/0	0.19 (1)
E-F	-730/0	0.0	0.0	0.04 (1)	7.81	-654/0	0.05 (1)
J-I	0/0	-22.4	-22.4	0.03 (4)	10.00	0/1194	0.15 (1)
I-H	0/820	-22.4	-22.4	0.13 (1)	10.00		
H-G	0/1047	-22.4	-22.4	0.15 (1)	10.00		
G-F	0/0	-22.4	-22.4	0.02 (4)	10.00		

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



DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 0-0
END SETBACK = 2-10-2
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.43")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.25/1.00 (B-C:1), BC=0.15/1.00 (G-H:1), WB=0.19/1.00 (D-H:1), SSI=0.06/1.00 (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.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.20 (G) (INPUT = 1.00)

A-18023062

CONTINUED ON PAGE 2

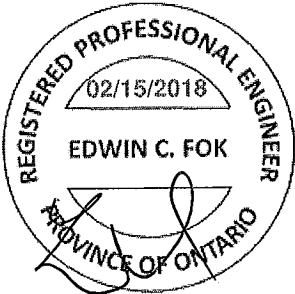
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H16	1	2	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:20:04 2018 Page 2					
ID:84gOFYESM8s1JmDO6_uSGRyQWJP-9gr_hNTK64IN45uYwucJ0nhJeqEtEOhyRpyCVhzkz1v					

PLATES (table is in inches)

JT	E	PLATES	W	LEN	Y	X
A	-W-l	MT20	3.0	4.0		
B	-VW+m	MT20	4.0	6.0		
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TTWW+m	MT20	4.0	6.0		
E	TMVW-l	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		
G	BMWW-l	MT20	3.0	4.0		
H	BMWWW-l	MT20	4.0	6.0		
I	BMWW-l	MT20	3.0	4.0		
J	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



A-1802306267

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H15T	6	1	TRUSS DESC.	

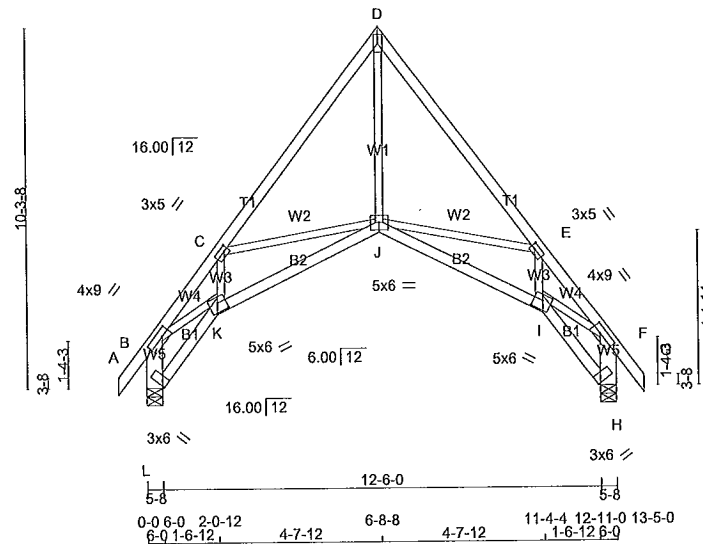
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:14:42 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWJP-ajNF6GaLx883RcGf3GqoztLHV0JgnfZ0iv9BLzkz6x

-9-8-0-0 2-0-12 4-7-12 6-8-8 4-7-12 11-4-4 13-5-0 14-2-8
9-8 2-0-12 4-7-12 6-8-8 4-7-12 11-4-4 13-5-0 14-2-8

Scale = 1:65.9



TOTAL WEIGHT = 6 X 71 = 425 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	9.0	2.00	3.00	
C	TMVW-I	MT20	3.0	5.0	1.50	1.50	
D	TTW+p	MT20	3.0	6.0			
E	TMVW-I	MT20	3.0	5.0	1.50	1.50	
F	TMVW-I	MT20	4.0	9.0	2.00	3.00	
H	BVM1+I	MT20	3.0	6.0	Edge		
I	BBWW-I	MT20	5.0	6.0	3.00	3.00	
J	BBWW-p	MT20	5.0	6.0			
K	BBWW-I	MT20	5.0	6.0	3.00	3.00	
L	BVM1+I	MT20	3.0	6.0	Edge		

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

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION	DOWN	GROSS REACTION	BRG	BRG
JT VERT	HORZ	DOWN	HORZ	UPLIFT
L	718	0	718	0
H	718	0	718	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT	COMBINED	SNOW
L	510	320 / 0
H	510	320 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.55 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	VERT. LOAD	LC1	MAX	CS1 (LC)	UNBRAC	MEMB.	MAX. FACTORED	FORCE	MAX	CS1 (LC)
FR-TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FR-TO	FROM	TO	FROM	TO
A-B	0 / 28	-78.0	-78.0	0.05 (1)	10.00	J-D	0 / 758	0.17 (1)					
B-C	-1273 / 0	-78.0	-78.0	0.15 (1)	5.55	J-E	-391 / 0	0.15 (1)					
C-D	-683 / 0	-78.0	-78.0	0.21 (1)	6.25	I-E	0 / 130	0.03 (4)					
D-E	-683 / 0	-78.0	-78.0	0.21 (1)	6.25	C-J	-391 / 0	0.15 (1)					
E-F	-1273 / 0	-78.0	-78.0	0.15 (1)	5.55	K-C	0 / 130	0.03 (4)					
F-G	0 / 28	-78.0	-78.0	0.05 (1)	10.00	B-K	0 / 913	0.21 (1)					
L-B	-699 / 0	0.0	0.0	0.05 (1)	7.81	I-F	0 / 913	0.21 (1)					
H-F	-699 / 0	0.0	0.0	0.05 (1)	7.81								
L-K	0 / 0	-18.5	-18.5	0.02 (4)	10.00								
K-J	0 / 874	-18.5	-18.5	0.21 (1)	10.00								
J-I	0 / 874	-18.5	-18.5	0.21 (1)	10.00								
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00								

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.21/1.00 (C-D:1), BC=0.21/1.00 (J-K:1), WB=0.21/1.00 (B-K:1), SSI=0.10/1.00 (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 HEELS OFF

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

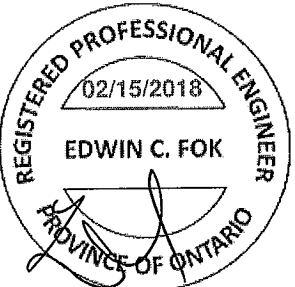
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (K) (INPUT = 0.90)
JSI METAL= 0.23 (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

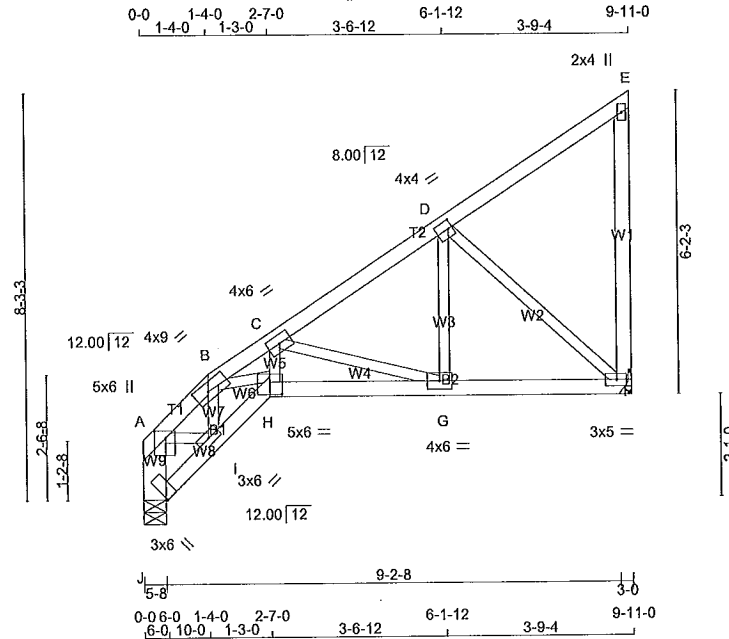


A-18023061

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 1
ID:84gOFYESM8s1JmDO6_uSGRYQWJ/P-ODTgHuCz_WGsJT4RUhNSRABT0cOHTKoE8RNBczkz0z



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.

1 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
A-B	1	12
B-E	1	12
E-F	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J-H	1	12
H-F	1	8
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6

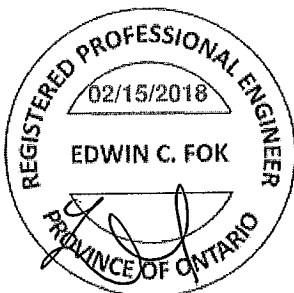
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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 TRANSFERING.
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	TMVW+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		MAXIMUM FACTORED		INPUT	REQRD
	GROSS REACTION	SNOW	GROSS REACTION	DOWN		
JT	VERT	HORZ	DOWN	HORZ	BRG	BRG
J	1799	0	1799	0	5-8	1-8
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					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC	LENGTH		(LBS)	CSI (LC)	
FR-TO		FROM	TO		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)	
						B-H	0 / 1951	0.24 (1)	
J-I	0 / 12	-284.8	-284.8	0.05 (1)	10.00				
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: Cstd Girder
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 = 0.90)
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

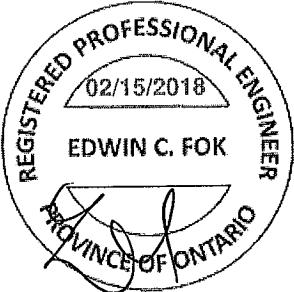
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PLATES (table is in inches)

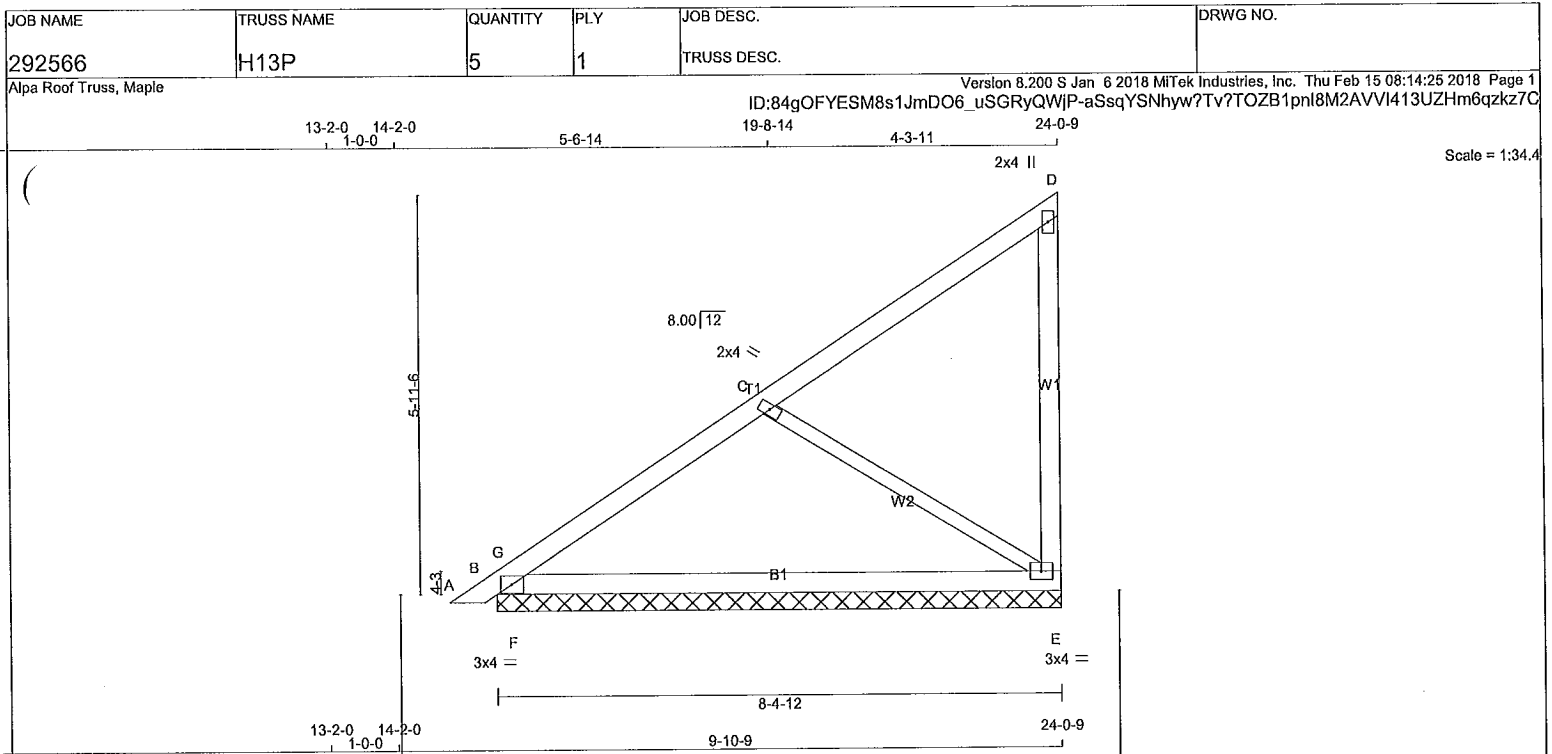
	PLATES	W	LEN	Y	X
VW-I	MT20	4.0	6.0		
WW-I	MT20	4.0	4.0	2.00	1.00
TMV+p	MT20	2.0	4.0		
BMVW1-I	MT20	3.0	5.0	1.50	2.25
BMWW-I	MT20	4.0	6.0		
BBWW-I	MT20	5.0	6.0	3.00	3.00
BMWW-I	MT20	3.0	6.0		
BVM1-I	MT20	3.0	6.0	Edge	0.25

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



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

i (table is in inches)					
J	PE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TMVW+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

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

UNFACTORED REACTIONS

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

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

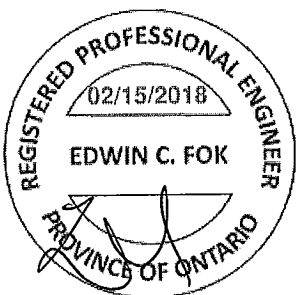
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987
			1656

PLATE PLACEMENT TOL. = 0.250 inches

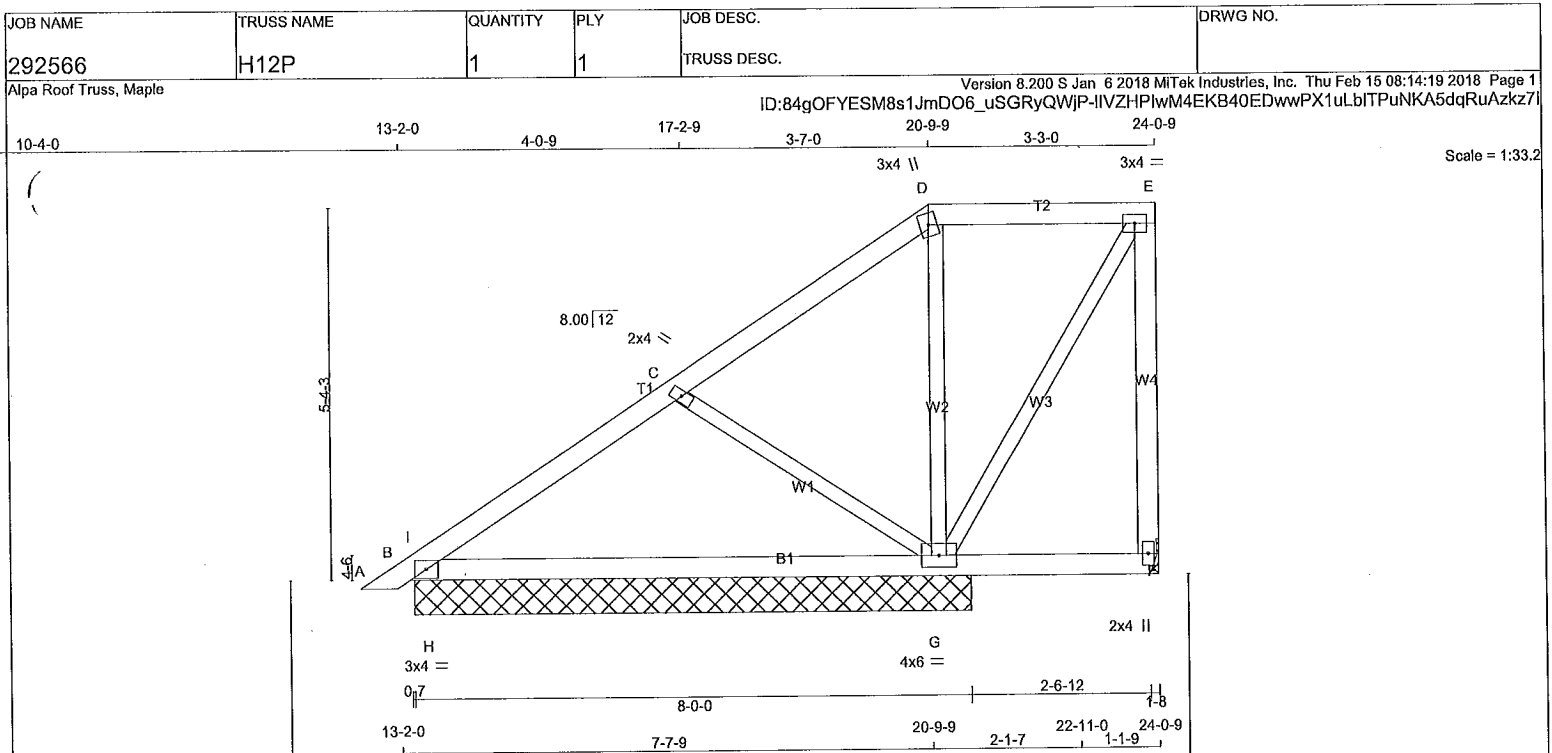
PLATE ROTATION TOL. = 5.0 Deg.

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



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
F	56	0	56	0	0/0	0/0
B	377	0	377	0	8-0-0	9-7
G	653	0	653	0	8-0-0	9-7

UNFACTORED REACTIONS

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

MEMB.	CHORDS		FACTORED		MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	CS1 (LC)			FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO						FR-TO			
A-B	0/13	-78.0	-78.0	0.02 (1)	10.00	G-D	-258/0	0.11 (1)	
B-I	-406/0	-78.0	-78.0	0.14 (4)	6.25	G-E	-84/0	0.05 (1)	
I-C	-253/0	-78.0	-78.0	0.19 (1)	6.25	C-G	-333/0	0.12 (1)	
C-D	0/26	-78.0	-78.0	0.19 (1)	10.00	H-I	0/223	0.00 (1)	
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

(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 (0.25")
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)

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.

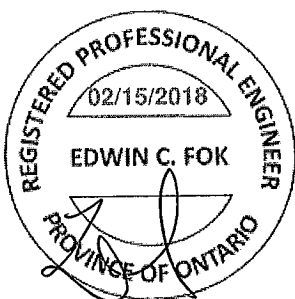
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

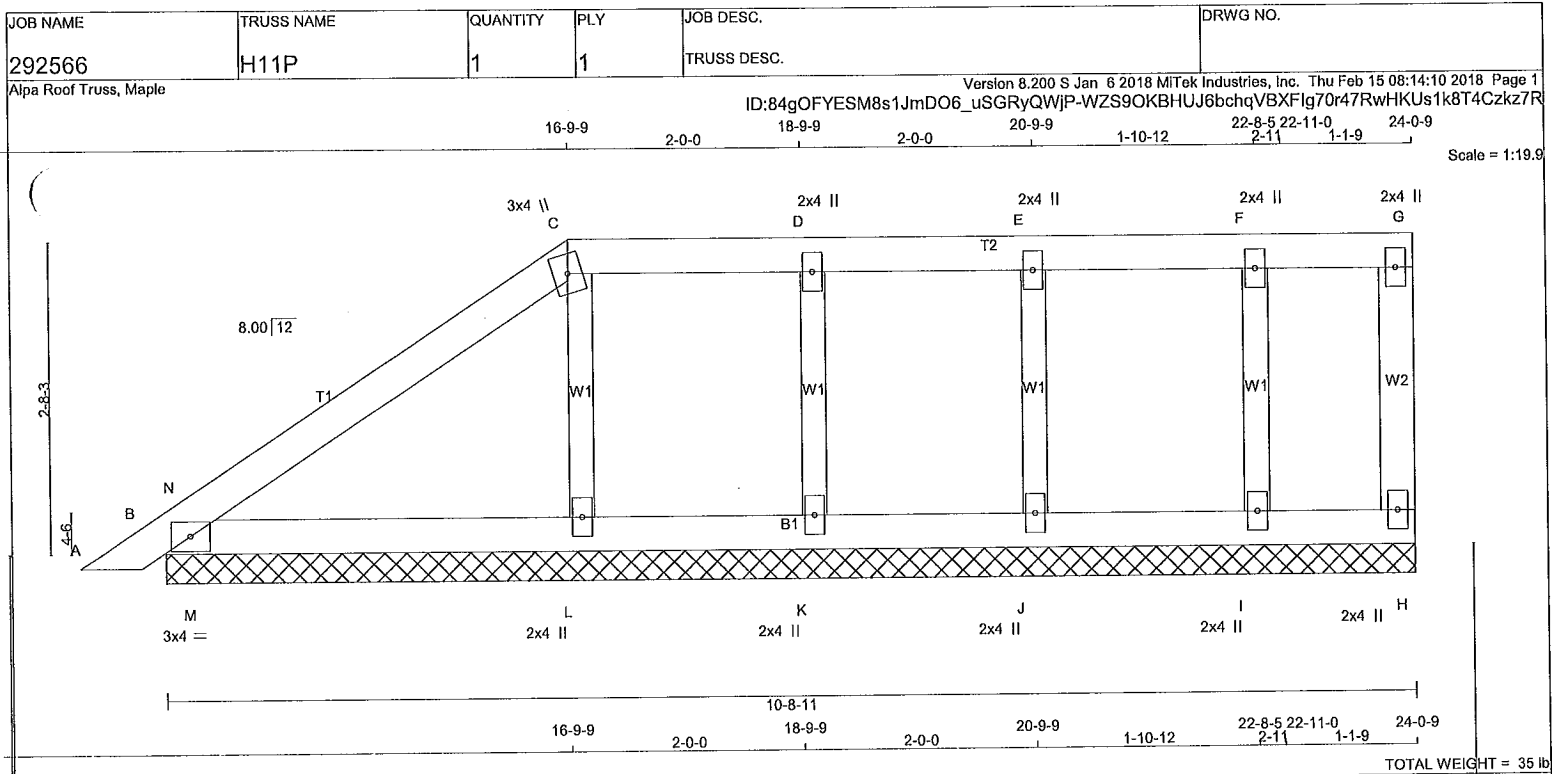
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (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



LUMBER				
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	
CHORDS				
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.

GARLE 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 = 8.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

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

(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.

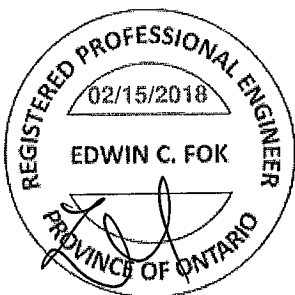
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		788	1987
			1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (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



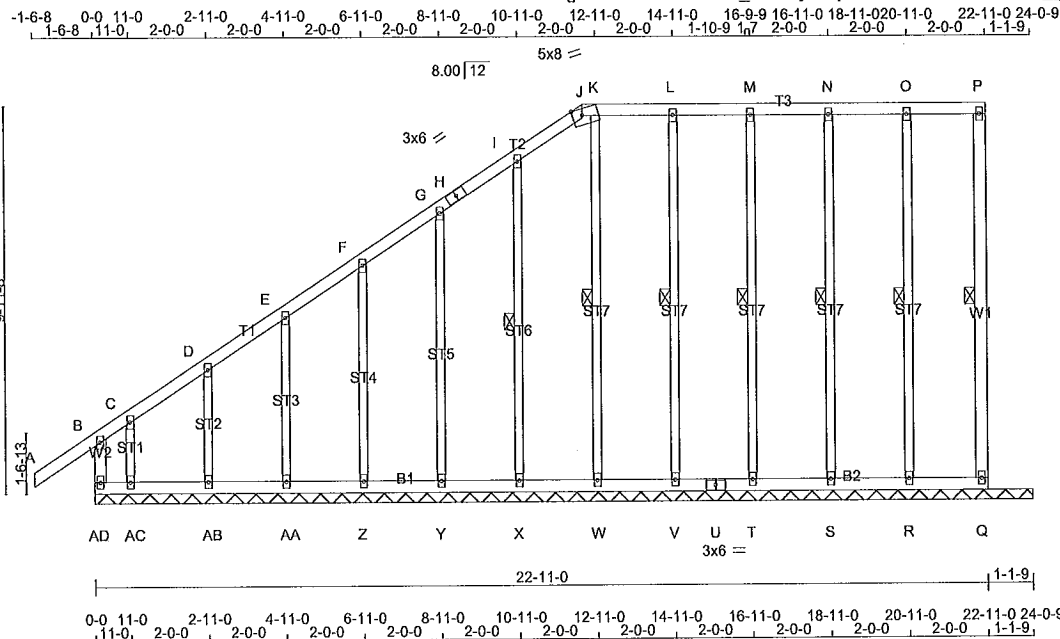
A-18023057

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

ID:84gOFYESM8s1JmDO6_uSGRYQWjP-9ceGLc78fmUJvwxYO_g7z4JyA6k0c196tSRIP_zkz7W



TOTAL WEIGHT = 132 lb

LUMBER	SIZE	DRY	No.2	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				
C	2x4	DRY	No.2	SPF
ALL .BLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
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				
K TTW-m	MT20	5.0	8.0	Edge 3.00
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.

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 AC FOR 320 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 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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CS (LC)	MAX. UNBRAC LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX CS (LC)
FR-TO		FROM	TO		FR-TO		
AD-B	-498 / 0	0.0	0.0	0.05 (1)	7.81	R-O	-162 / 0
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	S-N	-157 / 0
B-C	-188 / 0	-78.0	-78.0	0.25 (1)	6.25	T-M	-165 / 0
C-D	0 / 65	-78.0	-78.0	0.25 (1)	10.00	V-L	-158 / 0
D-E	-28 / 0	-78.0	-78.0	0.12 (1)	6.25	W-K	-160 / 0
E-F	-3 / 0	-78.0	-78.0	0.04 (1)	10.00	X-I	-150 / 0
F-G	-4 / 0	-78.0	-78.0	0.04 (1)	10.00	Y-G	-160 / 0
G-H	-5 / 0	-78.0	-78.0	0.04 (1)	10.00	Z-F	-161 / 0
H-I	-5 / 0	-78.0	-78.0	0.04 (1)	10.00	AA-E	-115 / 0
I-J	-6 / 0	-78.0	-78.0	0.03 (1)	10.00	AB-D	-317 / 0
J-K	0 / 3	-78.0	-78.0	0.03 (1)	10.00	AC-C	0 / 351
K-L	0 / 0	-78.0	-78.0	0.04 (1)	10.00	Q-P	-59 / 0
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		

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.

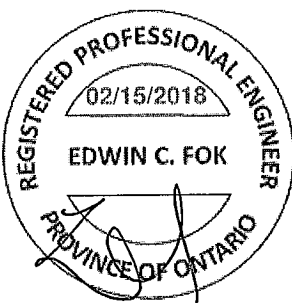
NAIL VALUES	PLATE GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667 1987 1656

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)

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

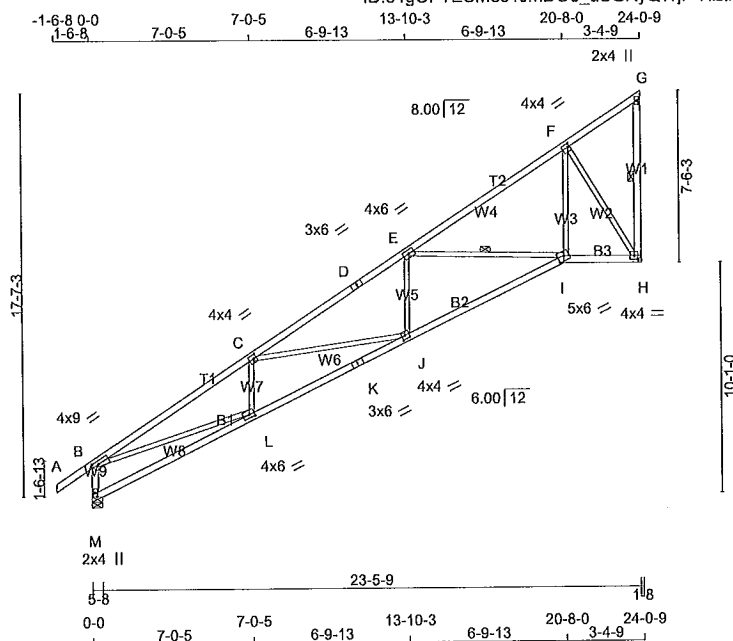


A-18023056

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

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:13:44 2018 Page 1
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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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
M	1286	0	0	1286	0	0	5-8	1-11	
H	1160	0	0	1160	0	0			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	914	573 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0
H	827	505 / 0	0 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
M-B	-1228 / 0	0.0	0.0 0.13 (1)	7.23	B-L	0 / 2442	0.55 (1)
A-B	0 / 35	-78.0	-78.0 0.15 (1)	10.00	L-C	-349 / 0	0.06 (1)
B-C	-2789 / 0	-78.0	-78.0 0.77 (1)	3.56	C-J	-439 / 0	0.41 (1)
C-D	-2283 / 0	-78.0	-78.0 0.56 (1)	4.07	J-E	0 / 312	0.08 (4)
D-E	-2283 / 0	-78.0	-78.0 0.56 (1)	4.07	E-I	-1171 / 0	0.39 (1)
E-F	-878 / 0	-78.0	-78.0 0.36 (1)	6.10	I-F	0 / 1097	0.25 (1)
F-G	-42 / 0	-78.0	-78.0 0.26 (1)	6.25	F-H	-1287 / 0	0.77 (1)
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)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

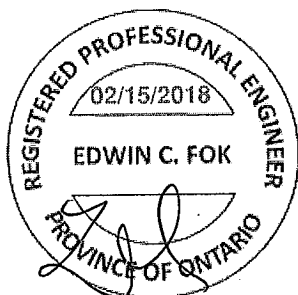
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

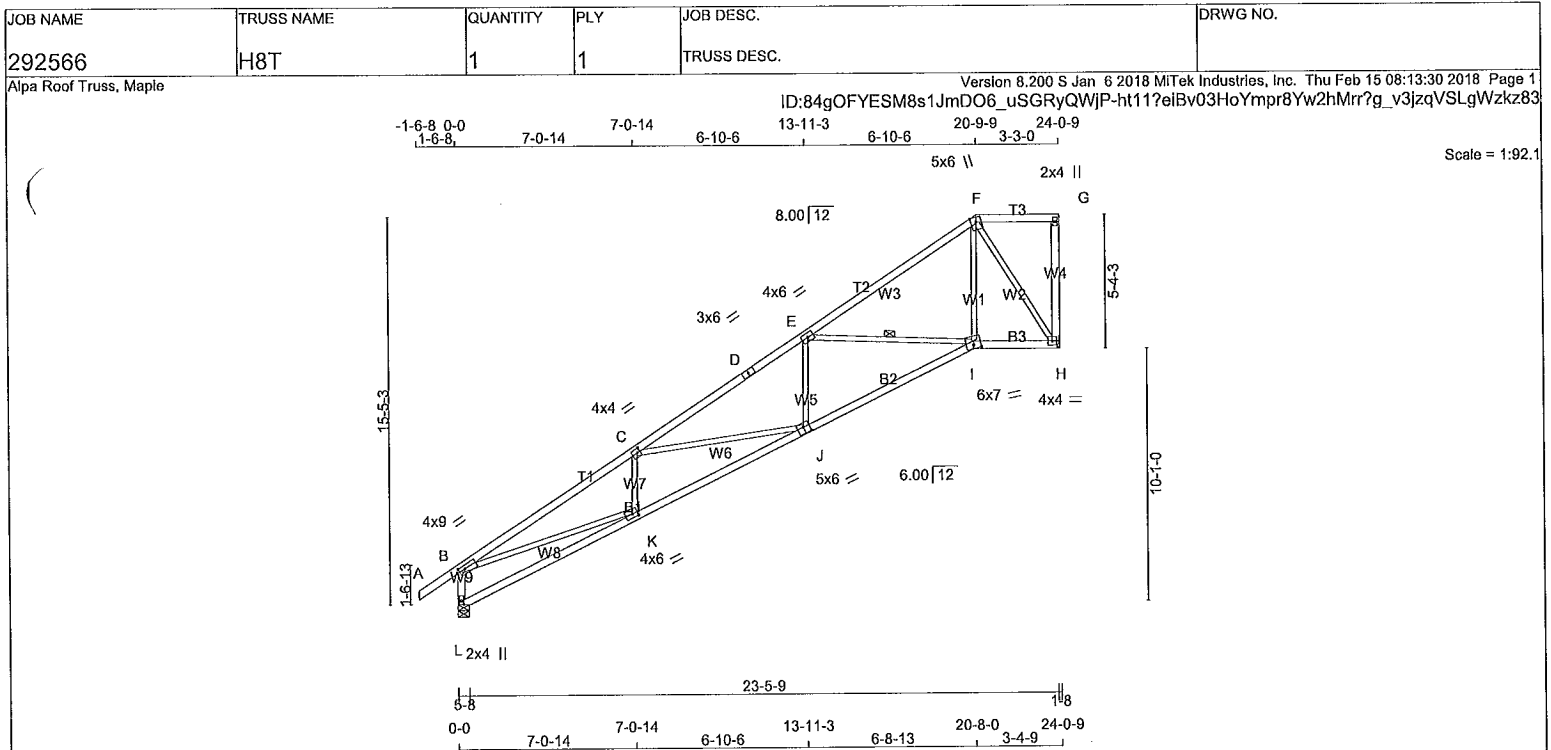
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023054





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-1	MT20	4.0	9.0 1.75 3.00
C	TMVW-1	MT20	4.0	4.0 2.00 1.50
D	TS-1	MT20	3.0	6.0
E	TMVW-1	MT20	4.0	6.0
F	TTVW+m	MT20	5.0	6.0 Edge
G	TMV+p	MT20	2.0	4.0
H	BMVW-1	MT20	4.0	4.0
I	BBVW-m	MT20	6.0	7.0 1.75 3.50
J	BSVW-1	MT20	5.0	6.0 3.00 3.00
K	BMVW-1	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		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
H	1160	0	1160	0	0	5-8	1-11	5-8	1-11
L	1286	0	1286	0	0	5-8	1-11	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	827	505 / 0	0 / 0	0 / 0	0 / 0	0 / 0	322 / 0	0 / 0
L	914	573 / 0	0 / 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		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MEMB.	MAX. FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
FR-TO		FROM	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

(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/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.

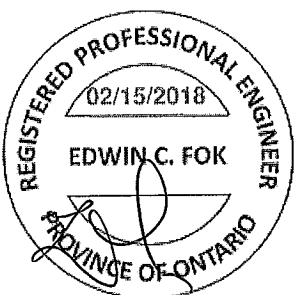
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

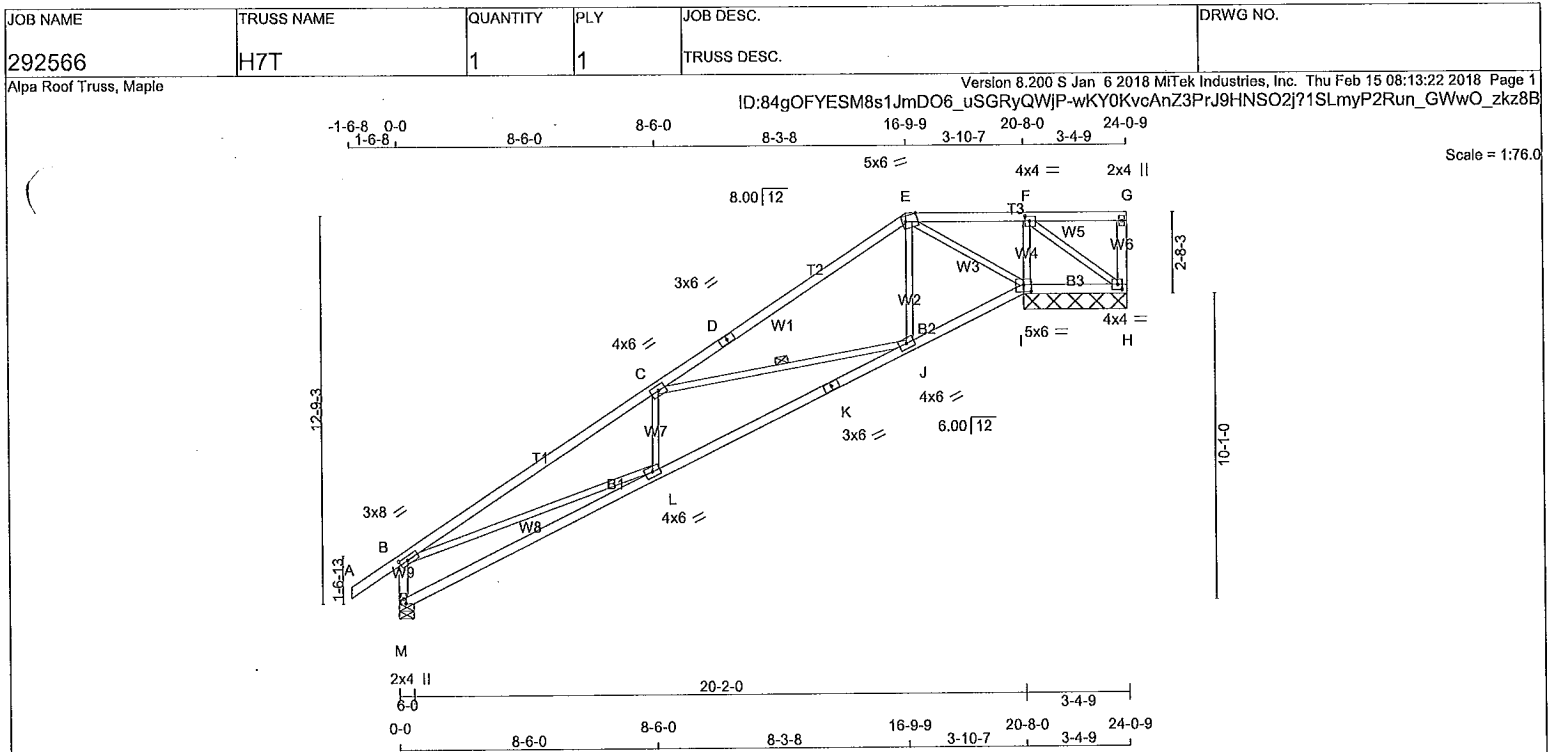
PLATE ROTATION TOL. = 5.0 Deg.

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



A-18023053



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)		W		LEN		Y		X	
JT	TYPE	PLATES	W	LEN	Y	X			
B	TMVW-t	MT20	3.0	8.0	1.50	3.25			
C	TMVW-t	MT20	4.0	6.0					
D	TS-t	MT20	3.0	6.0					
E	TTWW-m	MT20	5.0	6.0	Edge	4.75			
F	TMVW-t	MT20	4.0	4.0	2.00	1.75			
G	TMV+p	MT20	2.0	4.0					
H	BMVW1-t	MT20	4.0	4.0	2.00	1.75			
I	BBVW1-t	MT20	5.0	6.0	2.75	3.00			
J	BMVW1-t	MT20	4.0	6.0					
K	BS-t	MT20	3.0	6.0					
L	BMVW1-t	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
H	-506	0	0	0	-506	3-4-9 (3-4-9)	2-5-10	
I	1938	0	1938	0	0	3-4-9 (3-4-9)	2-5-10	
M	1014	0	1014	0	0	6-0	1-8	

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 BLDG. DESIGNER

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
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)		W E B S MAX. FACTORED FORCE (LBS)		MAX. FACTORED FORCE (LBS)	
	FR-TO	MEMB.	FROM	TO	FR-TO	MEMB.	FR-TO	MEMB.
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	0.62 (1)	6.25	J-E	0/591
D-E	-413/0		-78.0	-78.0	0.62 (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

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

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

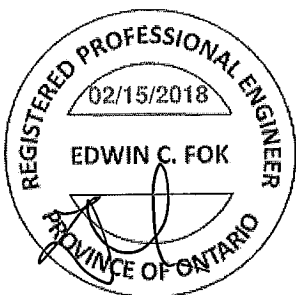
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

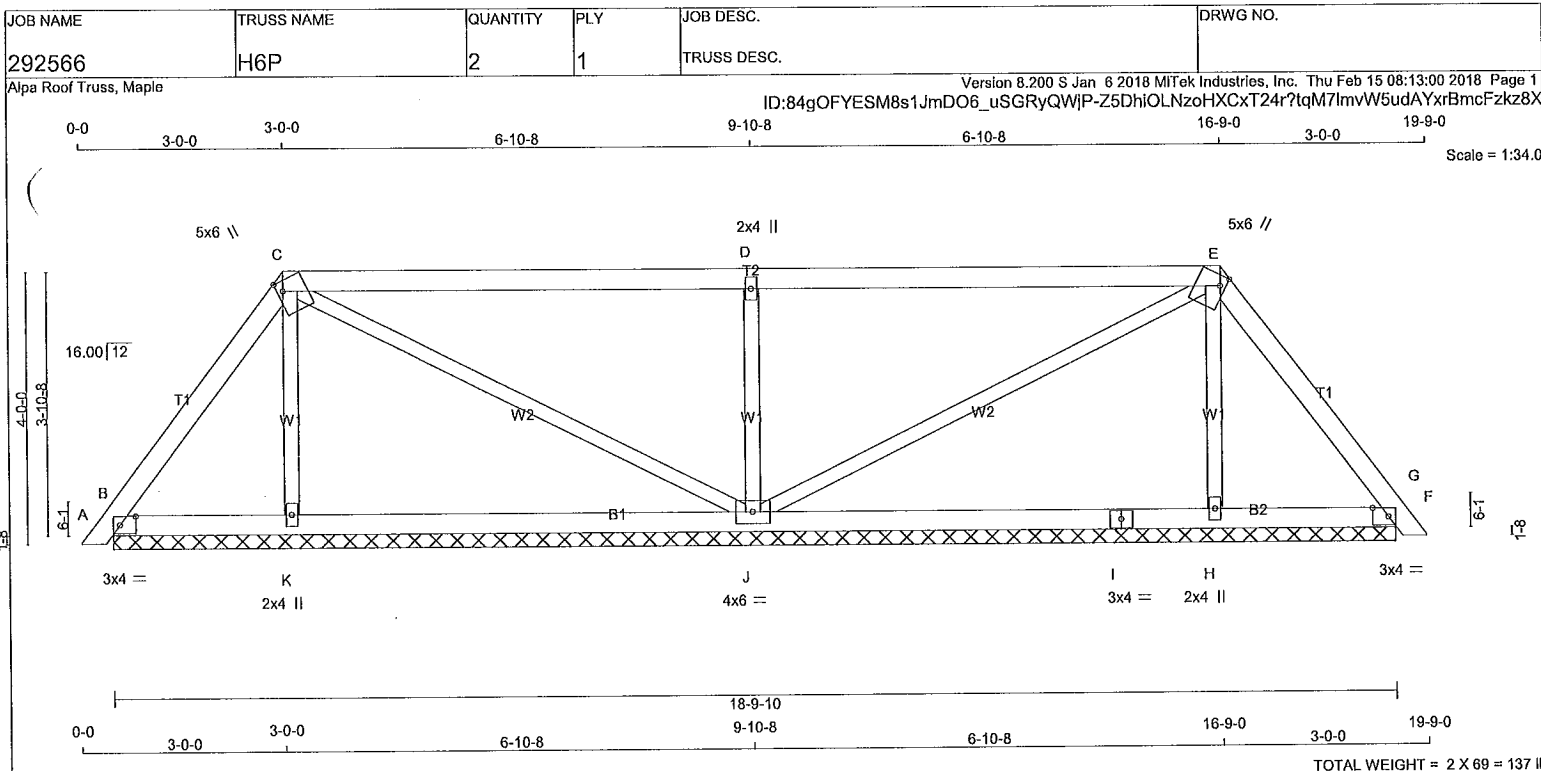
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023052





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.			

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	213	0	213	0	18-9-10 (4-0-0) 8-0	
K	299	0	299	0	18-9-10 (4-0-0) 8-0	
J	845	0	845	0	18-9-10 (4-0-0) 8-0	
H	299	0	299	0	18-9-10 (4-0-0) 8-0	
F	213	0	213	0	18-9-10 (4-0-0) 8-0	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	
B	148	112 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 0
K	218	106 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
J	600	383 / 0	0 / 0	0 / 0	0 / 0	216 / 0	0 / 0
H	218	106 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0
F	148	112 / 0	0 / 0	0 / 0	0 / 0	36 / 0	0 / 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)

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

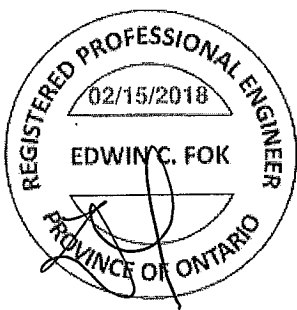
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

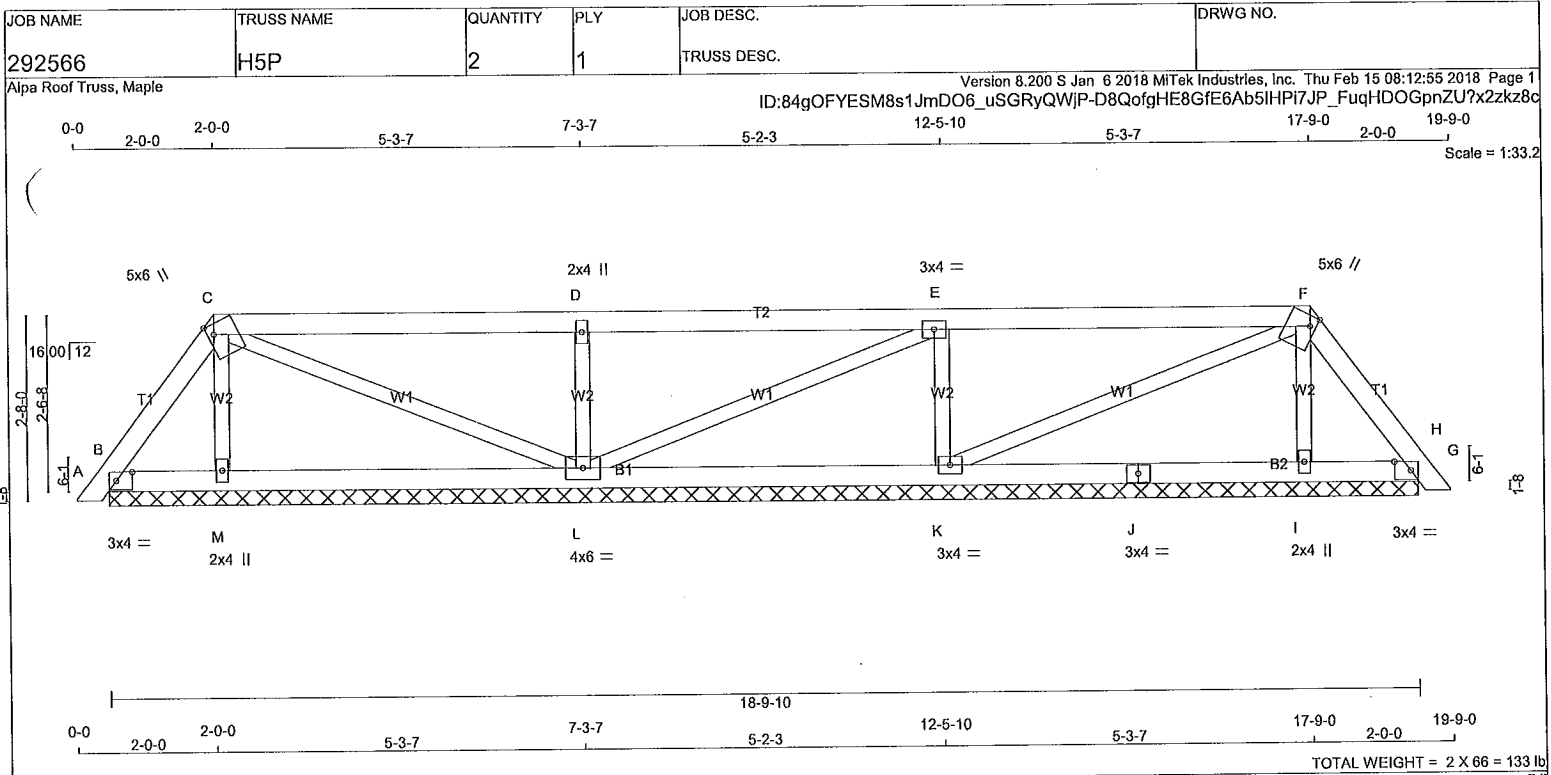
PLATE ROTATION TOL. = 5.0 Deg.

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



A-18023051



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
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

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

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

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

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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 10	-78.0 -78.0	0.01 (1)	10.00	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			

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 (I-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.

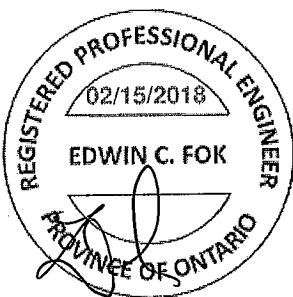
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

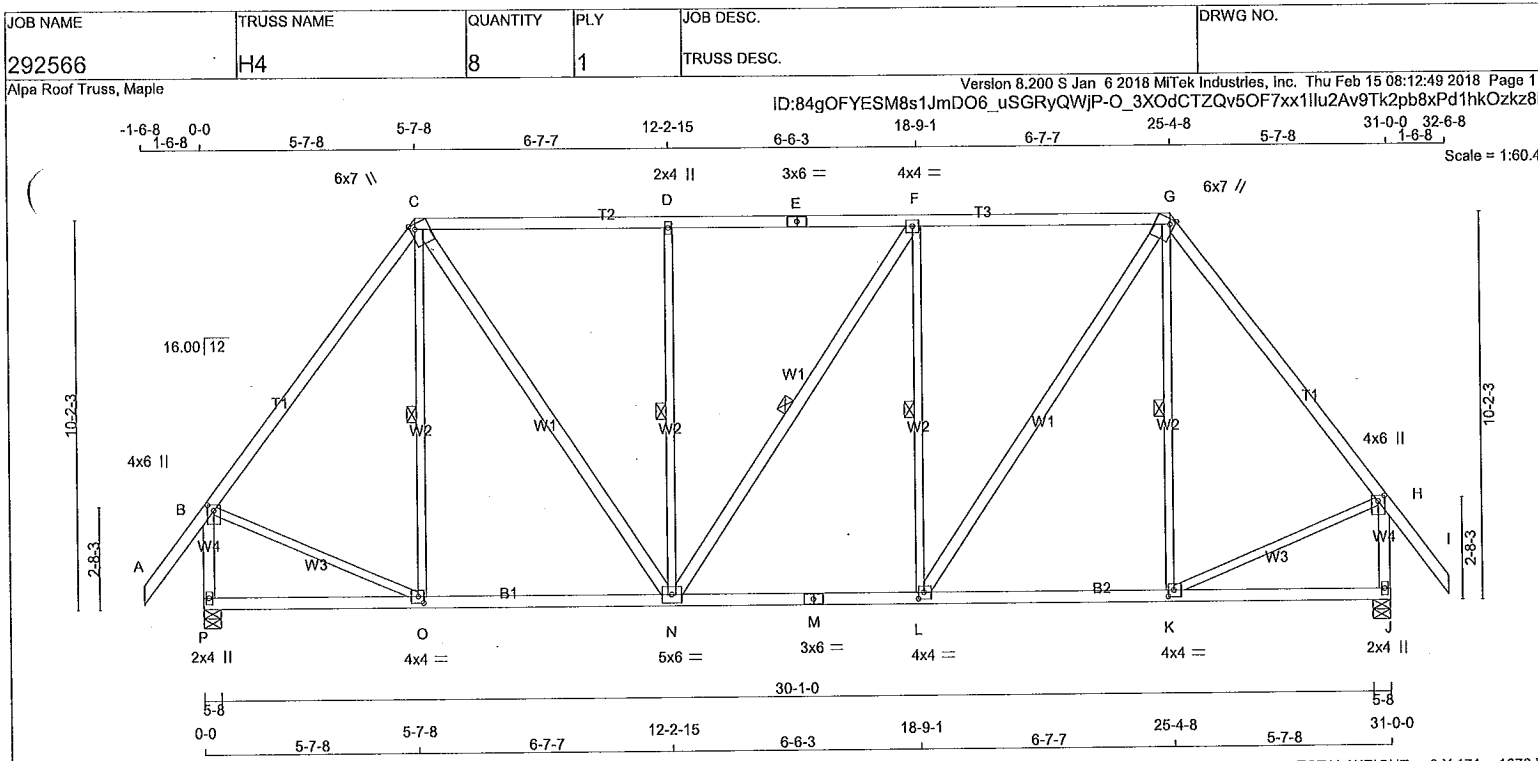
PLATE ROTATION TOL. = 5.0 Deg.

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

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-18023050



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
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
A - BS	2x3	DRY No.2	SPF
C -	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	1.75	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMWW-t	MT20	4.0	4.0		
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+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	BMWWW-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
P	1699	0	1699	0	5-8	2-8
J	1699	0	1699	0	5-8	2-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
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		FACTORED		WEBS	
	MAX. FACTORED	FORCE	VERT. LOAD	MAX. CS	MAX. FACTORED	FORCE
FR-TO			FROM	TO	FR-TO	
A-B	0/52		-78.0	-78.0	0.15 (1)	10.00
B-C	-1258/0		-78.0	-78.0	0.40 (1)	5.33
C-D	-1237/0		-85.5	-85.5	0.46 (1)	2.00
D-E	-1237/0		-85.5	-85.5	0.42 (1)	2.00
E-F	-1237/0		-85.5	-85.5	0.42 (1)	2.00
F-G	-1237/0		-85.5	-85.5	0.46 (1)	2.00
G-H	-1257/0		-78.0	-78.0	0.40 (1)	5.34
H-I	0/52		-78.0	-78.0	0.15 (1)	10.00
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), SS=0.26/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

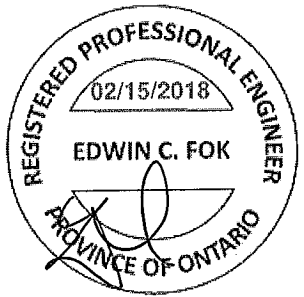
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

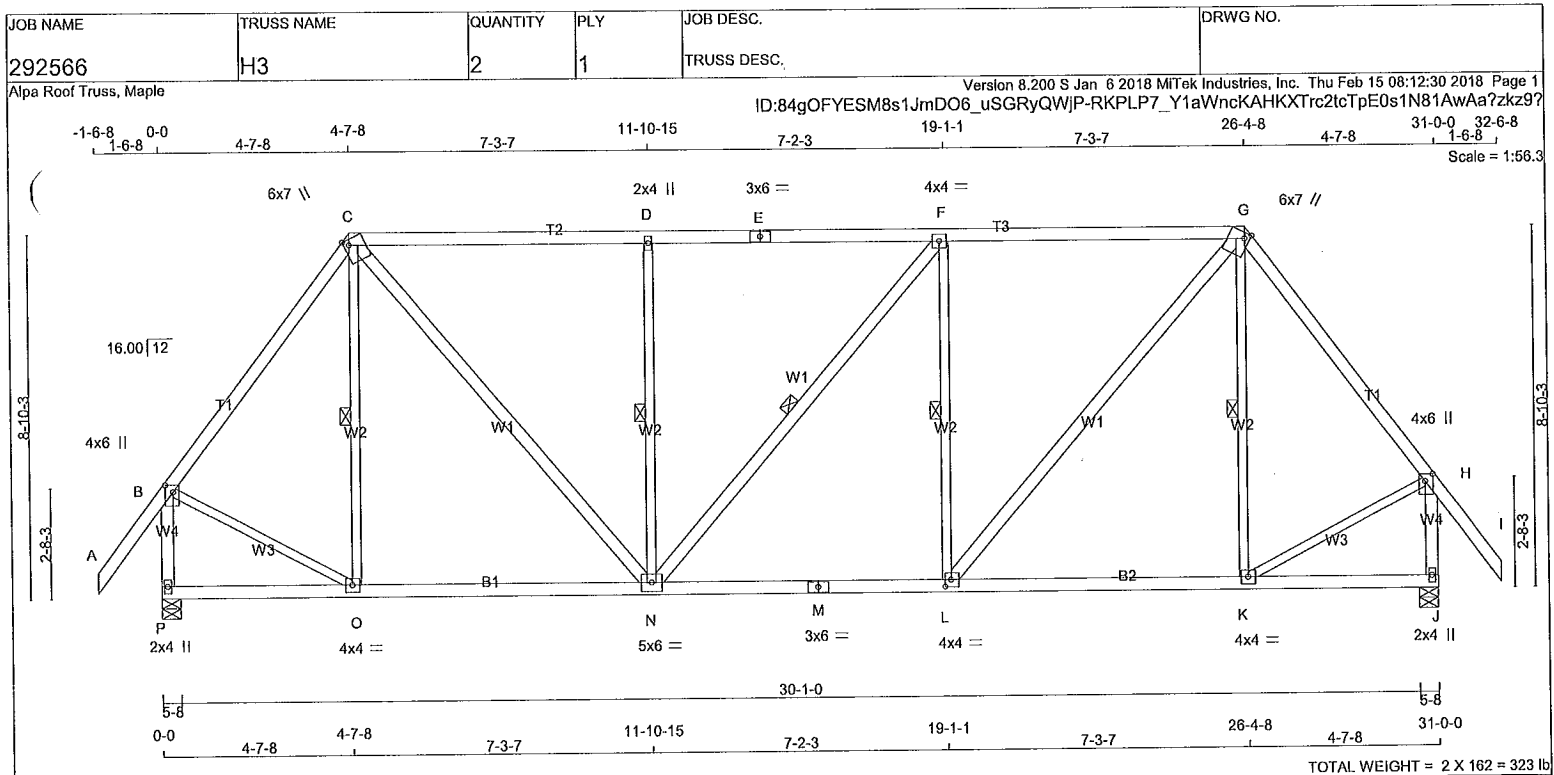
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (P) (INPUT = 0.90)
JSI METAL= 0.51 (B) (INPUT = 1.00)





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
I - B	2x4	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
J - M	2x4	DRY	No.2	SPF
M - N	2x4	DRY	No.2	SPF
N - P	2x4	DRY	No.2	SPF
P - Q	2x4	DRY	No.2	SPF
Q - R	2x4	DRY	No.2	SPF
R - S	2x4	DRY	No.2	SPF
S - T	2x4	DRY	No.2	SPF
T - U	2x4	DRY	No.2	SPF
U - V	2x4	DRY	No.2	SPF
V - W	2x4	DRY	No.2	SPF
W - X	2x4	DRY	No.2	SPF
X - Y	2x4	DRY	No.2	SPF
Y - Z	2x4	DRY	No.2	SPF
Z - A	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	TTWW+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	TTWW+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	IN-SX	IN-SX	IN-SX	IN-SX
P	1625	0	1625	0	0	5-8	2-6	2-6	2-6
J	1625	0	1625	0	0	5-8	2-6	2-6	2-6

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
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		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS1 (LC)	MEMB.	FORCE (LBS)	MAX. CS1 (LC)	MAX. CS1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 52	-78.0	-78.0 0.15 (1)	10.00	O-C	-217 / 2	0.11 (1)
B-C	-1178 / 0	-78.0	-78.0 0.37 (1)	5.47	C-N	0 / 979	0.16 (1)
C-D	-1337 / 0	-78.0	-78.0 0.67 (1)	4.69	N-D	-609 / 0	0.31 (1)
D-E	-1337 / 0	-78.0	-78.0 0.68 (1)	4.68	N-F	-2 / 0	0.00 (1)
E-F	-1337 / 0	-78.0	-78.0 0.68 (1)	4.68	L-F	-610 / 0	0.31 (1)
F-G	-1338 / 0	-78.0	-78.0 0.68 (1)	4.67	L-G	0 / 981	0.16 (1)
G-H	-1177 / 0	-78.0	-78.0 0.37 (1)	5.47	K-G	-218 / 2	0.11 (1)
H-I	0 / 52	-78.0	-78.0 0.15 (1)	10.00	B-O	0 / 781	0.18 (1)
P-B	-1595 / 0	0.0	0.0 0.23 (1)	6.54	K-H	0 / 781	0.18 (1)
J-H	-1595 / 0	0.0	0.0 0.23 (1)	6.54			
P-O	0 / 0	-18.5	-18.5 0.16 (4)	10.00			
O-N	0 / 700	-18.5	-18.5 0.26 (4)	10.00			
N-M	0 / 1338	-18.5	-18.5 0.32 (1)	10.00			
M-L	0 / 1338	-18.5	-18.5 0.32 (1)	10.00			
L-K	0 / 700	-18.5	-18.5 0.26 (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 = 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)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

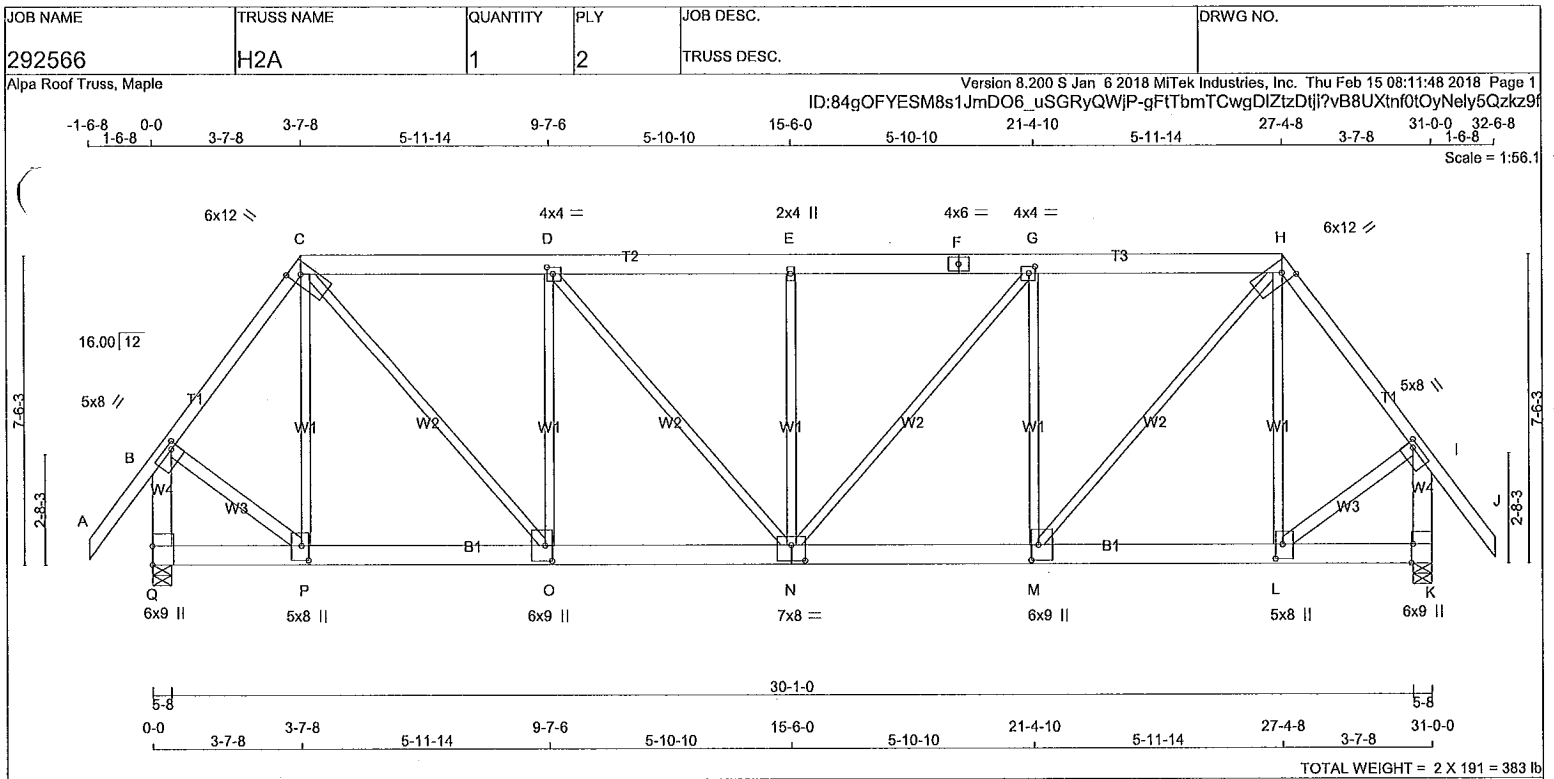
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023048





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
A' - T	2x3	DRY	No.2	SPF
L - I	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

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

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
Q	9866	0	9866	0	5-8	5-8	5-8
K	9866	0	9866	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
Q	7032 4307 / 0 0 / 0 0 / 0 2725 / 0 0 / 0
K	7032 4307 / 0 0 / 0 0 / 0 2725 / 0 0 / 0

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)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
A - B	0 / 52	P - C	0 / 132
B - C	-7706 / 0	C - D	0 / 7442
C - D	-9440 / 0	D - E	-1998 / 0
D - E	-10710 / 0	E - F	0 / 1982
E - F	-10710 / 0	F - G	-452 / 0
F - G	-10710 / 0	G - H	0 / 1982
G - H	-9440 / 0	H - I	-1998 / 0
H - I	-7706 / 0	I - J	0 / 7442
I - J	0 / 52	J - K	0 / 132
J - K	-9177 / 0	K - L	0 / 5370
K - L	-9177 / 0	L - M	0 / 5370

Q - P	0 / 0	-550.2	-550.2	0.32 (1)	10.00
P - O	0 / 4621	-550.2	-550.2	0.67 (1)	10.00
O - N	0 / 9440	-550.2	-550.2	0.87 (1)	10.00
N - M	0 / 9440	-550.2	-550.2	0.87 (1)	10.00
M - L	0 / 4621	-550.2	-550.2	0.67 (1)	10.00
L - K	0 / 0	-550.2	-550.2	0.32 (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

GIRDER TYPE: CSd Girder
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.
- ADDTL. LOADS BASED ON 55 % OF G.S.L.

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

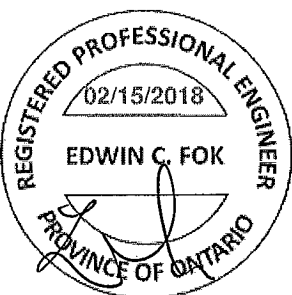
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (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

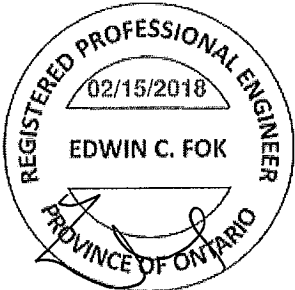
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:11:48 2018 Page 2
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PLATES (table is in inches)

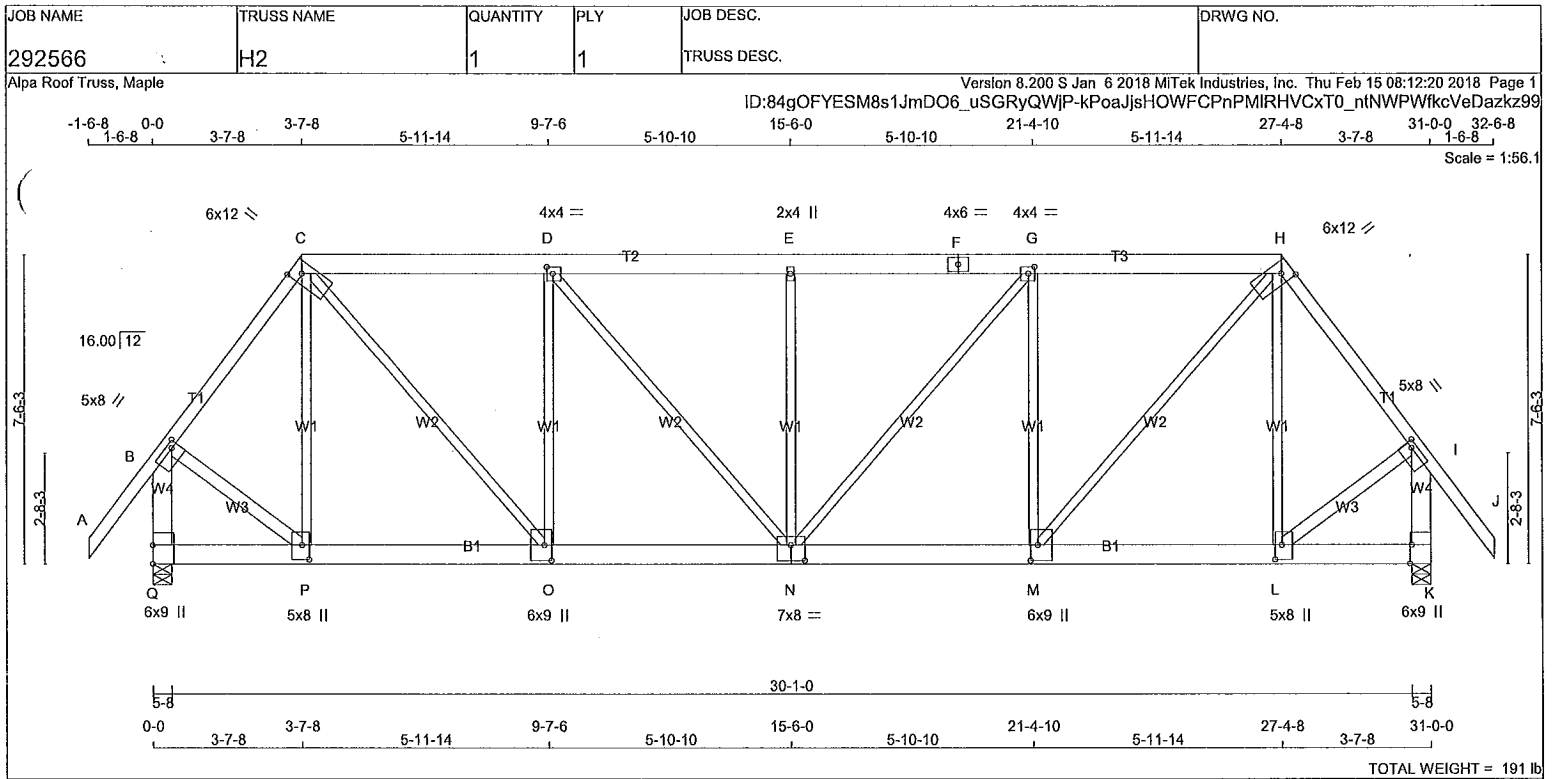
	PE	PLATES	W	LEN	Y	X
J		MT20	5.0	8.0	1.50	2.00
K	WW-t	MT20	6.0	12.0	3.25	2.75
O	WW+h	MT20	4.0	4.0	2.00	1.75
D	TMWW-t	MT20	2.0	4.0		
E	TMW+w	MT20	4.0	6.0		
F	TS-t	MT20	4.0	2.00	1.75	
G	TMWW-t	MT20	6.0	12.0	3.25	2.75
H	TTWW+h	MT20	5.0	8.0	1.50	2.00
I	TMWW-t	MT20	6.0	9.0	Edge	0.50
K	BMV1+t	MT20	5.0	8.0	4.25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

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.	SPF	
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	
J - 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	
A - WEBS	2x3	DRY	No.2	SPF	
T	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-I	MT20	5.0	8.0	1.50	2.00
C	TTWW+H	MT20	6.0	12.0	3.25	2.75
D	TMVW-I	MT20	4.0	4.0	2.00	1.75
E	TMVW+H	MT20	2.0	4.0		
F	TS-I	MT20	4.0	6.0		
G	TMVW-I	MT20	4.0	4.0	2.00	1.75
H	TTWW+H	MT20	6.0	12.0	3.25	2.75
I	TMVW-I	MT20	5.0	8.0	1.50	2.00
K	BMV1+I	MT20	6.0	9.0	Edge	0.50
L	BMVW+H	MT20	5.0	8.0	4.25	2.00
M	BMVW+H	MT20	6.0	9.0	4.50	2.00
N	BSVW+H	MT20	7.0	8.0	4.50	4.00
O	BMVW+H	MT20	6.0	9.0	4.50	2.00
P	BMVW+H	MT20	5.0	8.0	4.25	2.00
Q	BMV1+I	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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
Q	1625	0	1625	0	5-8
K	1625	0	1625	0	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1156	720 / 0	0 / 0	0 / 0	0 / 0	435 / 0	0 / 0
K	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 (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED TORSION (LBS-FT)
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.

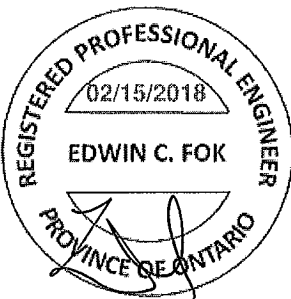
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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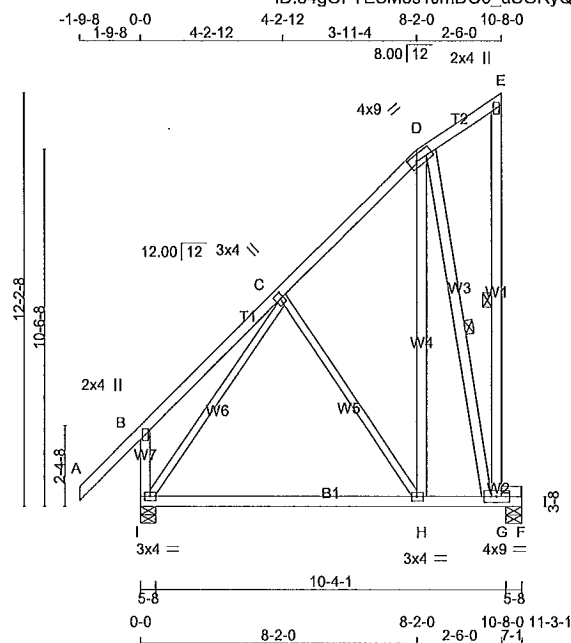
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	G2	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:07:14 2018 Page 1

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Scale = 1:88.2

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	
I - D	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	BMVW+H	MT20	4.0	9.0	
H	BMVW+H	MT20	3.0	4.0	1.50 1.75
I	BMVW+H	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	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

1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	356	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.

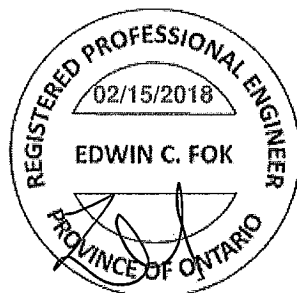
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	FORCE (LBS)	MAX. LC1 (LC)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 52	-78.0	-78.0 0.20 (1)	H-D	0 / 465	0.07 (1)	
B-C	0 / 27	-78.0	-78.0 0.22 (1)	D-G	-570 / 0	0.35 (1)	
C-D	-210 / 0	-78.0	-78.0 0.22 (1)	I-C	-435 / 0	0.45 (1)	
D-E	0 / 0	-78.0	-78.0 0.08 (1)	C-H	-198 / 0	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)				

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 (0.38")
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
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)

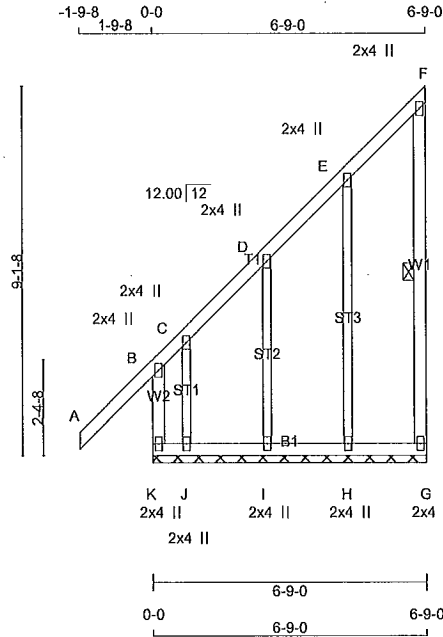
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	G1G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:07:06 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-x?qsPL3JK1hmkXP0LUfsUjSMnCkixXeRXmR1CnzkeE3



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.				

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	BMW1+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. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	
FR-TO		FROM TO		FR-TO			
K-B	-336 / 0	0.0	0.0 0.04 (1)	H-E	-165 / 0	0.15 (1)	
A-B	0 / 52	-78.0	-78.0 0.20 (1)	I-D	-161 / 0	0.06 (1)	
B-C	-116 / 0	-78.0	-78.0 0.17 (1)	J-C	0 / 55	0.01 (1)	
C-D	-4 / 0	-78.0	-78.0 0.04 (1)				
D-E	-5 / 0	-78.0	-78.0 0.04 (1)				
E-F	-9 / 0	-78.0	-78.0 0.04 (1)				
G-F	-67 / 0	0.0	0.0 0.01 (1)				
K-J	0 / 5	-18.5	-18.5 0.04 (1)				
J-I	0 / 7	-18.5	-18.5 0.02 (4)				
I-H	0 / 3	-18.5	-18.5 0.02 (4)				
H-G	0 / 0	-18.5	-18.5 0.02 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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.

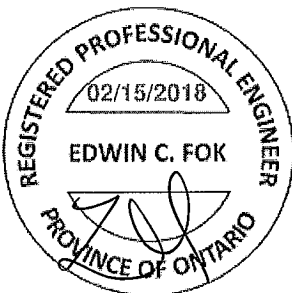
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (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

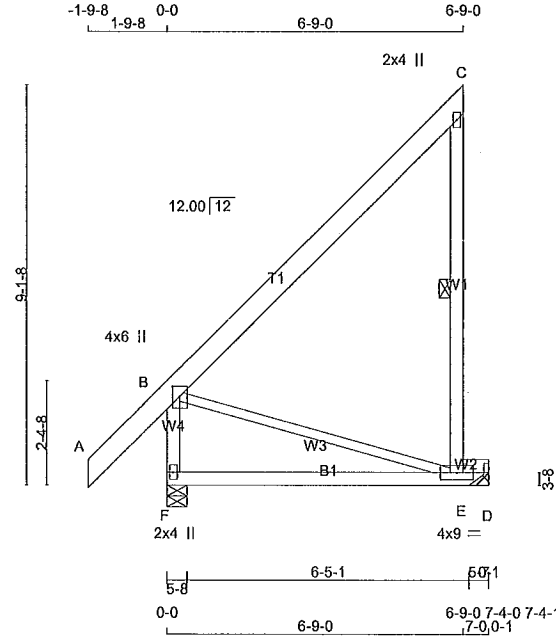


A-18023043

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	G1	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 08:07:00 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWJP-6rTb9l_ZlBxc0cys?EYSESCJInckXrUZ9q_l_7zkzE9



Scale = 1:52.6

TOTAL WEIGHT = 2 X 48 = 96 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	DRY	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.				

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	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE			
F	357	235 / 0	0 / 0	0 / 0	122 / 0	0 / 0
D	222	130 / 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	WEBS MAX. FACTORED FORCE (LBS)	
	FR-TO	FROM	TO	CSI (LC)		FR-TO	TO
A-B	0 / 54	-78.0	-78.0	0.11 (1)	10.00	B-E	0 / 0
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/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

(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 (0.24")
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.

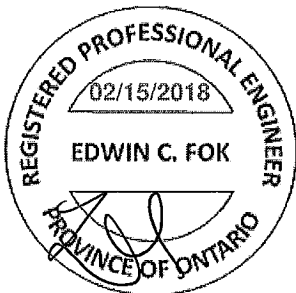
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

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

LUS – Double Shear Joist Hangers



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

Material: 18 gauge

Finish: G90 galvanized

Design:

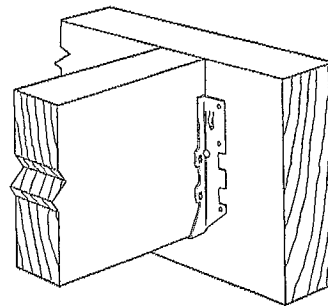
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

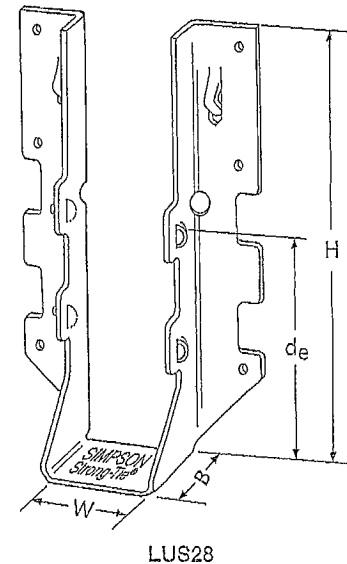
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



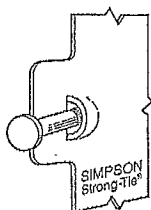
Typical LUS Installation



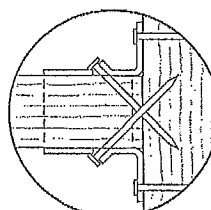
LUS28

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LUS24	18	1½	3½	1¼	1½	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¼	3½	(4) 10d	(4) 10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	(4) 16d	(4) 16d	1720	2595	1545	1920
LUS26-3	18	4½	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6½	1¼	3¼	(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	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¼	3½	(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

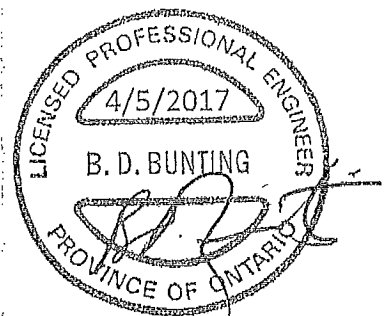
1. d_e is the distance from the seat of the hanger to the highest joist nail.



Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,580



Double Shear Nailing Top View.



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

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T-SPECLUS17-3/17 exp. 6/19

(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

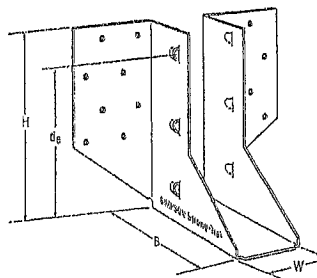
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

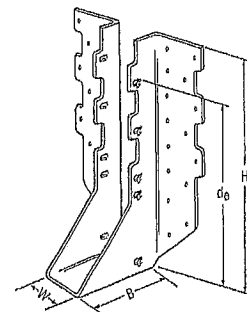
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double-shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

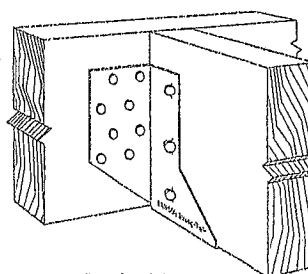
- See current catalogue for options



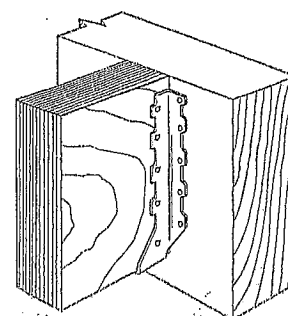
LJS26DS



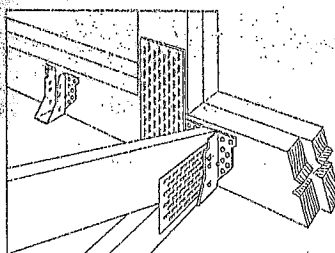
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



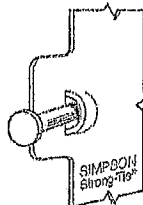
Typical HUS
Installation



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

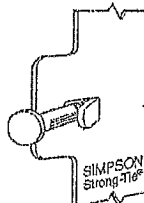
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₀ ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LJS26DS	18	1 1/4	5	3 1/2	4 5/8	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1 1/4	5 3/4	3	3 15/16	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1 5/8	7 3/4	3	6 1/2	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1 5/8	9 3/4	3	7 3/4	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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

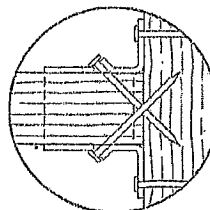


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

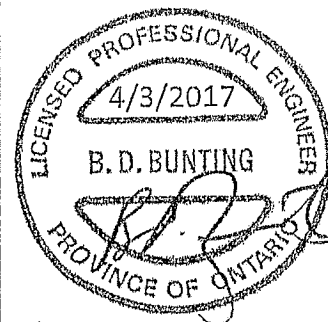
U.S. Patent
5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

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

(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers



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

Material: 14 gauge

Finish: G90 galvanized

Design:

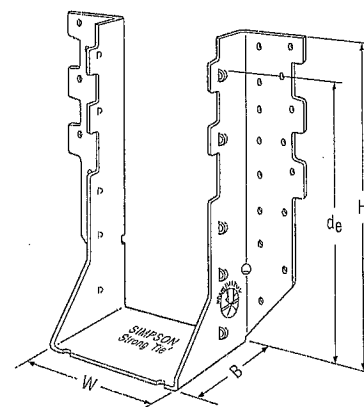
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

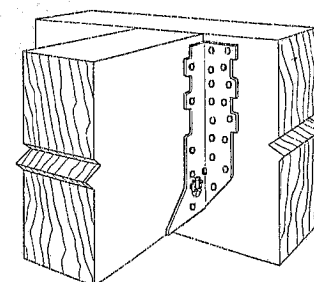
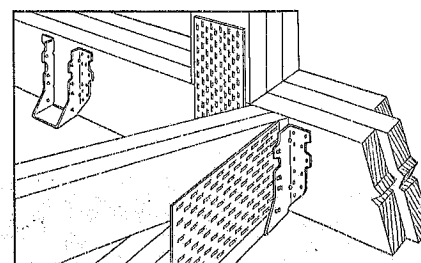
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options



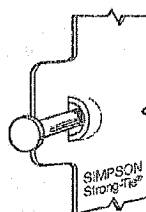
HHUS410



Typical HHUS Installation

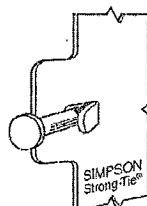
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 5/16	5 15/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16	7 1/2	3	6 5/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2	14	3 5/16	9 9/32	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 15/32	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_e is the distance from the seat of the hanger to the highest joist nail.

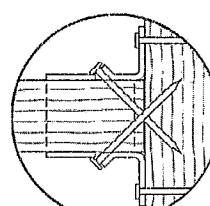


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

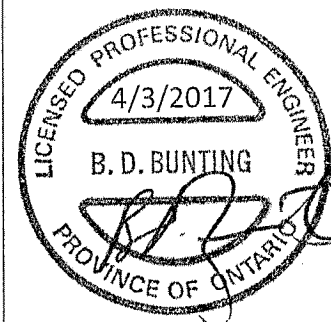
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

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