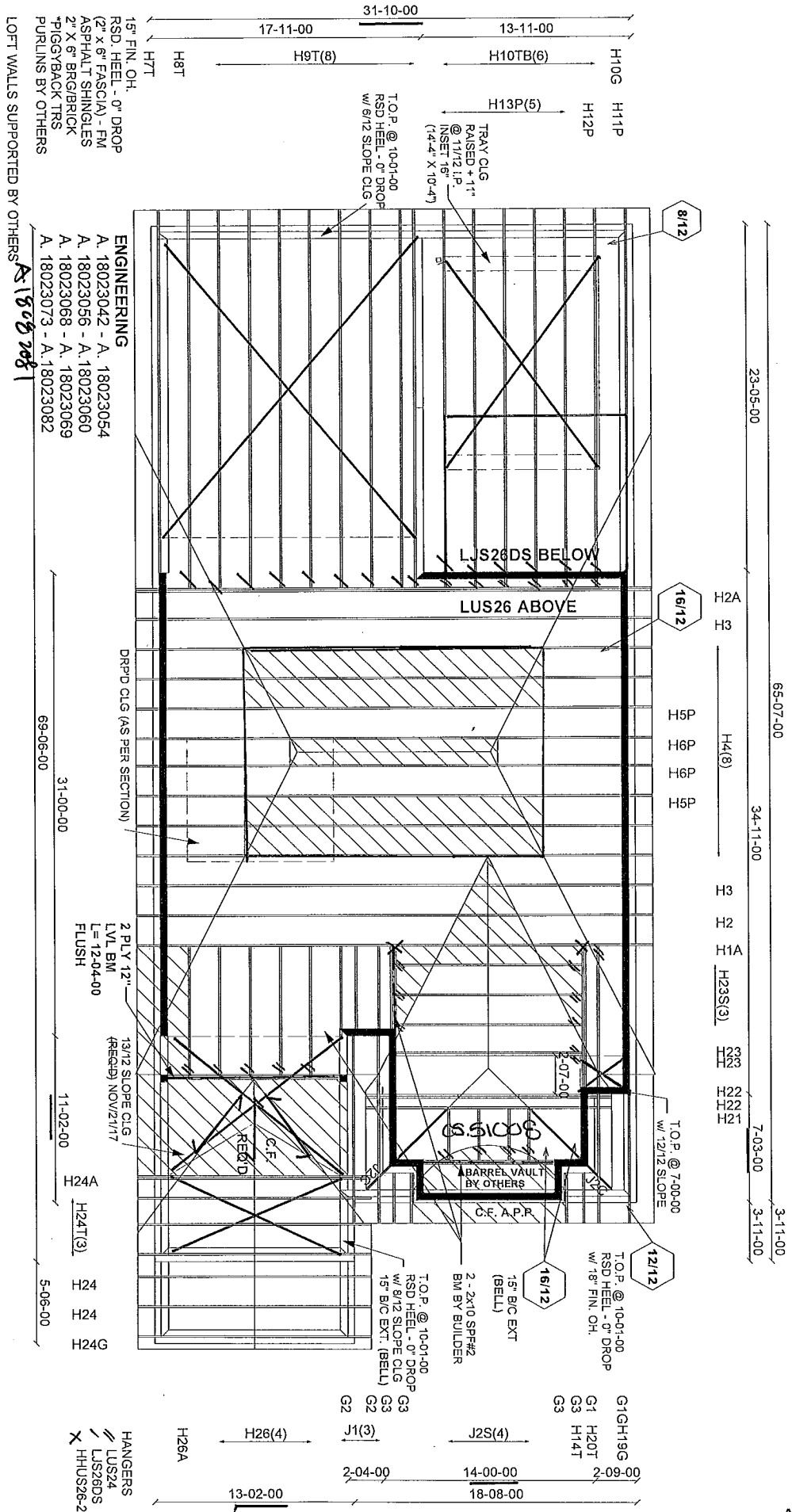




Job Track: 45147
Layout ID: 301031
Plan Log: 99352

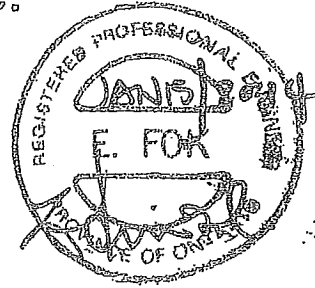
Builder / Location: GOLD PARK HOMES / VAUGHAN
Project: PINE VALLEY
Date: 8/13/2018 Designer: AMANDA

Model / Elevation: 4000 / B 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.

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.

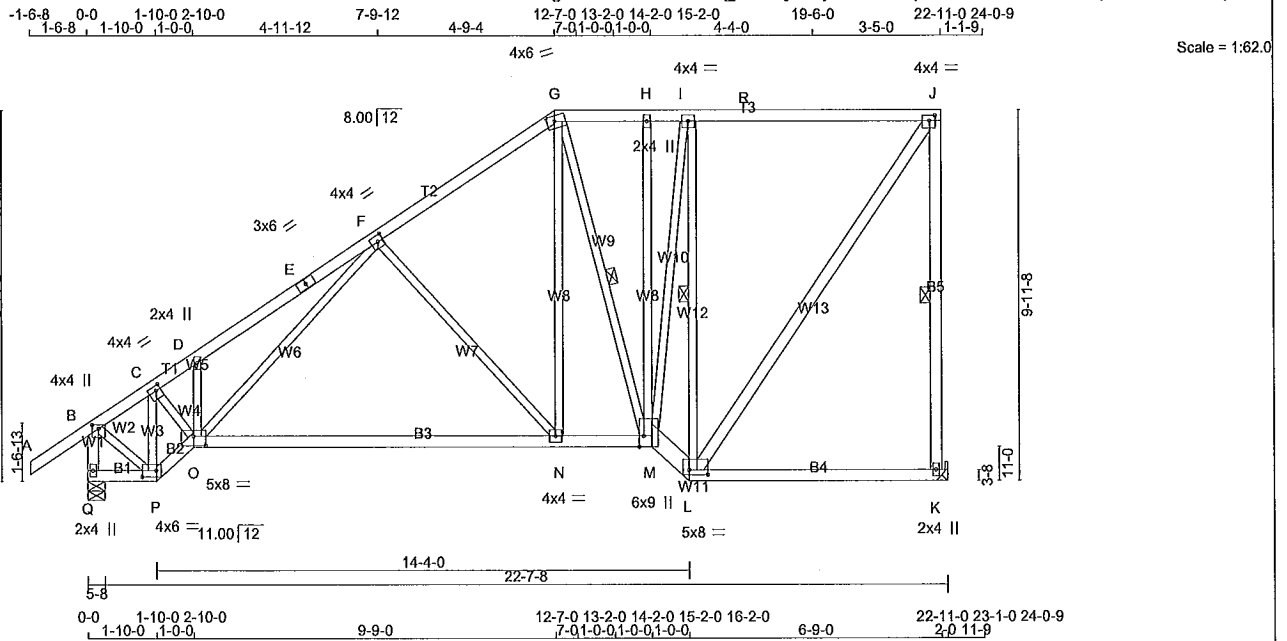
January 15, 2014

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-19IwnOzpSNOL17JvzRP0ufHdpF0kf35TIDeuBznZSx



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+J	MT20	5.0	8.0 1.50 6.00
M	BWVWV+m	MT20	6.0	9.0 Edge 1.50
N	BMVW-t	MT20	4.0	4.0
O	BBVWV-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		REQD	
GROSS	REACTION	GROSS	REACTION	BRG	BRG	IN-SX	IN-SX
JT	VERT	DOWN	HORZ	UPLIFT	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		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	MAX. FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO			
Q-B	-1223 / 0	0.0	0.0 0.13 (1)	B-P	0 / 851	0.19 (1)	
A-B	0 / 35	-78.0	-78.0 0.15 (1)	P-C	-1054 / 0	0.17 (1)	
B-C	-899 / 0	-78.0	-78.0 0.12 (1)	C-O	0 / 978	0.22 (1)	
C-D	-1442 / 0	-78.0	-78.0 0.11 (1)	O-D	-332 / 0	0.05 (1)	
D-E	-1497 / 0	-78.0	-78.0 0.25 (1)	L-I	-1263 / 0	0.85 (1)	
E-F	-1497 / 0	-78.0	-78.0 0.25 (1)	L-J	0 / 1036	0.17 (1)	
F-G	-906 / 0	-78.0	-78.0 0.23 (1)	M-L	0 / 763	0.09 (1)	
G-H	-650 / 0	-85.5	-85.5 0.09 (1)	N-G	0 / 543	0.12 (1)	
H-I	-651 / 0	-85.5	-85.5 0.43 (1)	M-H	0 / 265	0.06 (1)	
I-R	-588 / 0	-85.5	-85.5 0.45 (1)	G-M	-321 / 0	0.18 (1)	
R-J	-588 / 0	-85.5	-85.5 0.45 (1)	M-I	0 / 469	0.11 (1)	
				O-F	0 / 330	0.07 (1)	
				F-N	-458 / 0	0.49 (1)	
Q-P	0 / 0	-18.5	-18.5 0.02 (4)				
P-O	0 / 898	-18.5	-18.5 0.15 (1)				
O-N	0 / 1035	-18.5	-18.5 0.51 (4)				
N-M	0 / 739	-18.5	-18.5 0.50 (4)				
L-K	0 / 0	-18.5	-18.5 0.24 (4)				
K-J	-1079 / 0	0.0	0.0 0.52 (1)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL)= L/867 (0.32")

CSI: TC=0.45/1.00 (I-J:1), BC=0.52/1.00 (J-K:1), WB=0.85/1.00 (L-L:1), SSI=0.35/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

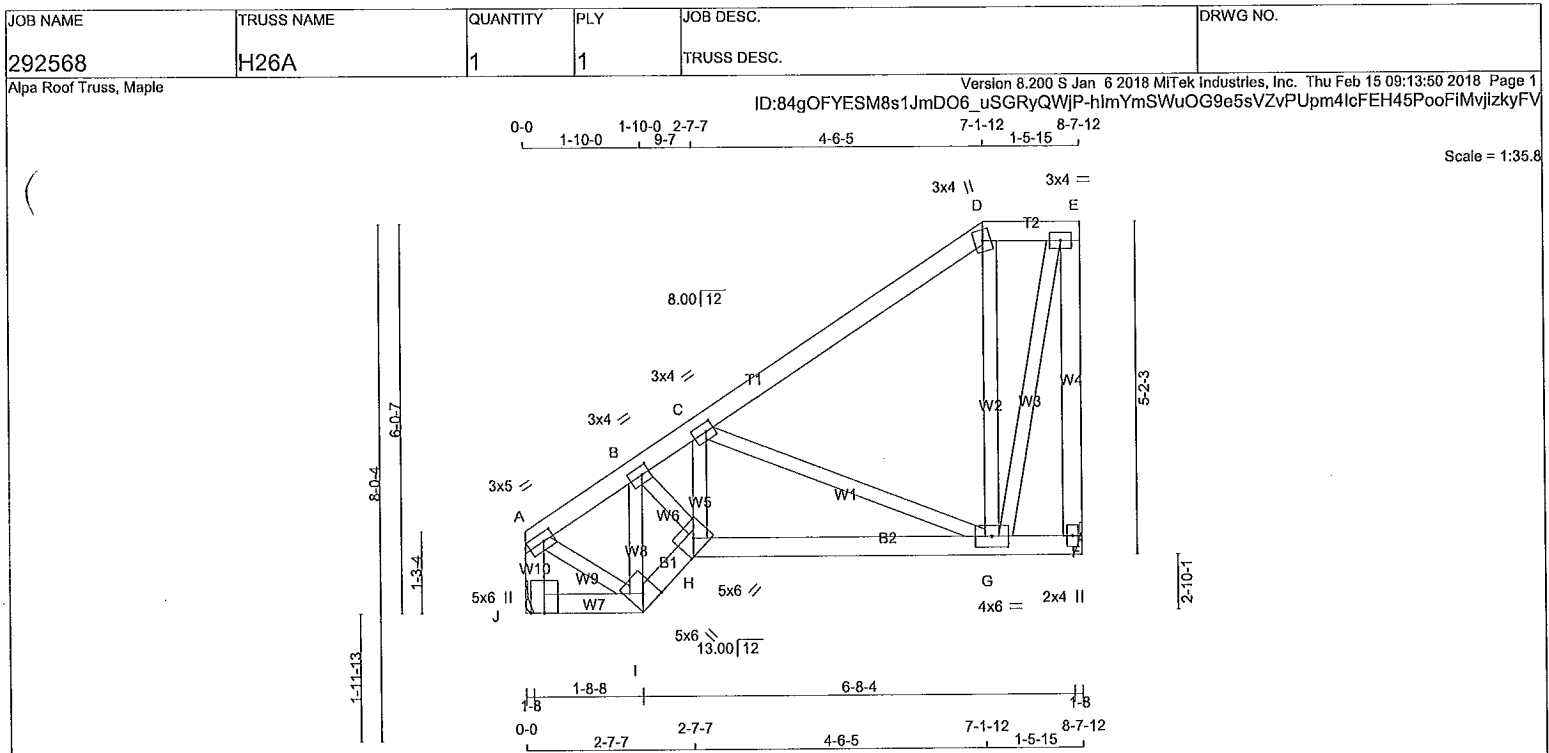
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (P) (INPUT = 0.90)
JSI METAL= 0.32 (O) (INPUT = 1.00)



TOTAL WEIGHT = 45 lb

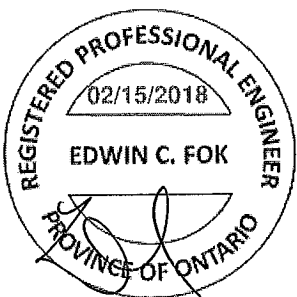
LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
J - A	2x4 DRY No.2	SPF			
A - D	2x4 DRY No.2	SPF			
D - E	2x4 DRY No.2	SPF			
F - E	2x4 DRY No.2	SPF			
I - H	2x4 DRY No.2	SPF			
H - F	2x4 DRY No.2	SPF			

ALL WEBS EXCEPT	2x3 DRY No.2	SPF			
J	2x4 DRY No.2	SPF			
D	2x4 DRY No.2	SPF			

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	2.00	
B	TMVW-t	MT20	3.0	4.0	1.50	1.50	
C	TMVW-t	MT20	3.0	4.0	1.50	1.50	
D	TTW+m	MT20	3.0	4.0			
E	TMVW-t	MT20	3.0	4.0			
F	BMV1+p	MT20	2.0	4.0			
G	BMVWW-t	MT20	4.0	6.0			
H	BBVW-h	MT20	5.0	6.0	Edge		
I	BVWW+m	MT20	5.0	6.0	Edge		
J	VWV1-t	MT20	5.0	6.0	2.50		

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

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



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
J	393	0	0	0
F	407	0	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE
J	278	185 / 0	0 / 0	0 / 0
F	290	178 / 0	0 / 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 (LC2)	MAX. FACTORED VERT. LOAD (LC3)	MAX. FACTORED VERT. LOAD (LC4)	MAX. FACTORED VERT. LOAD (LC5)	MAX. FACTORED VERT. LOAD (LC6)	MAX. FACTORED VERT. LOAD (LC7)	MAX. FACTORED VERT. LOAD (LC8)	MAX. FACTORED VERT. LOAD (LC9)	MAX. FACTORED VERT. LOAD (LC10)
FR-TO												
J-A	-397 / 0	0.0	0.0	0.04 (1)	7.81	H-C	-24 / 33	0.01 (4)				
A-B	-300 / 0	-78.0	-78.0	0.05 (1)	6.25	C-G	-385 / 0	0.15 (1)				
B-C	-459 / 0	-78.0	-78.0	0.20 (1)	6.25	G-D	-128 / 0	0.05 (1)				
C-D	-144 / 0	-78.0	-78.0	0.20 (1)	6.25	D-E	0 / 371	0.08 (1)				
D-E	-102 / 0	-78.0	-78.0	0.03 (1)	6.25	E-F	-60 / 0	0.01 (1)				
F-E	-414 / 0	0.0	0.0	0.19 (1)	7.81	F-G	-391 / 0	0.06 (1)				
I-H	0 / 332	-18.5	-18.5	0.06 (1)	10.00	H-I	0 / 341	0.08 (1)				
H-G	0 / 459	-18.5	-18.5	0.12 (1)	10.00	I-J	0 / 392	0.09 (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 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.20/1.00 (B-C:1), BC=0.12/1.00 (G-H:1), WB=0.15/1.00 (C-G:1), SSI=0.13/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

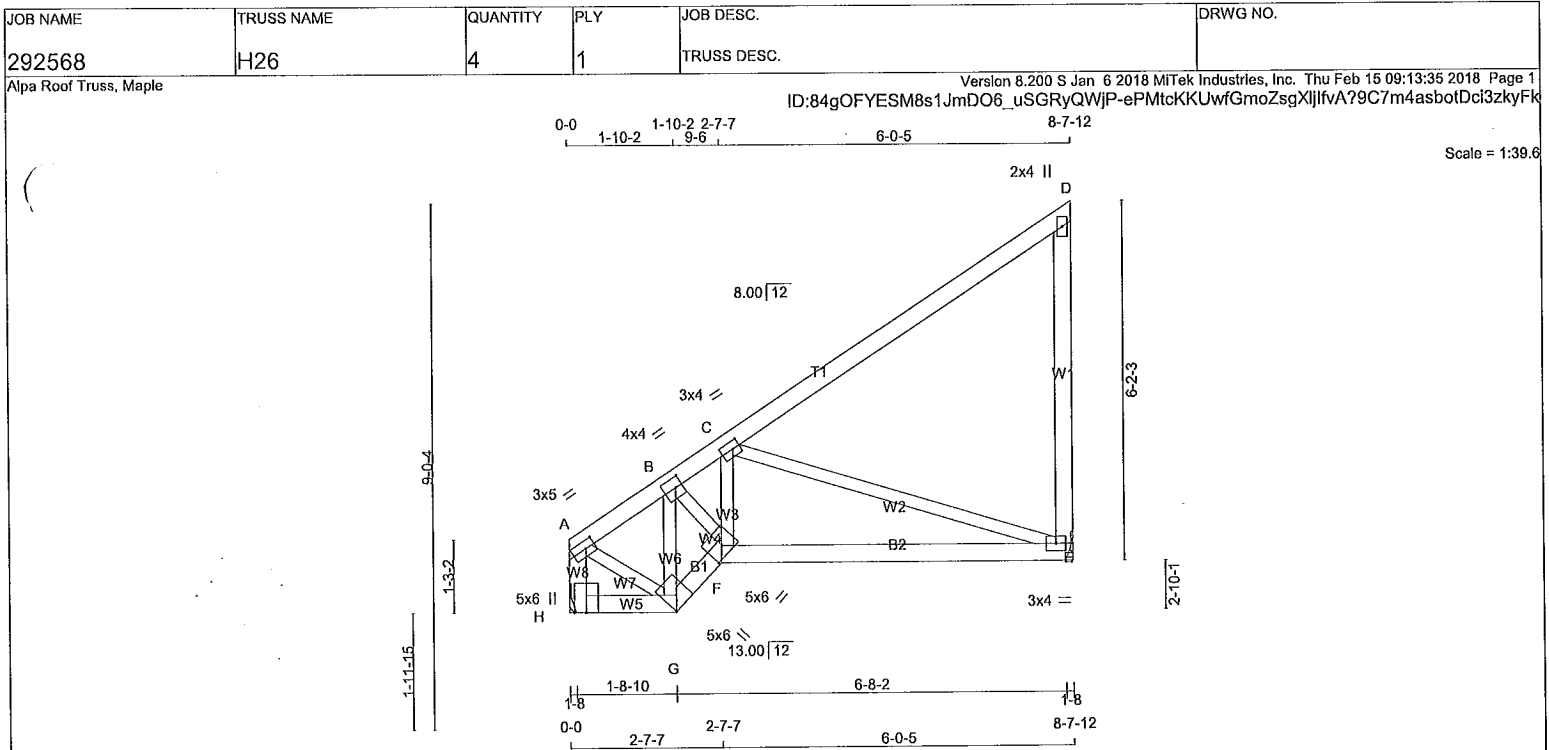
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023082



TOTAL WEIGHT = 4 X 40 = 159 lb (M)

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

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
H - G	2x4	DRY	No.2	SPF

SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	3.0	5.0	1.50	2.00
B	TMVW-I	MT20	4.0	4.0	2.00	1.50
C	TMVW-I	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-I	MT20	3.0	4.0		
F	BBVW-h	MT20	5.0	6.0	2.00	3.00
G	BBVW+tm	MT20	5.0	6.0	Edge	
H	VMW1-I	MT20	5.0	6.0	2.50	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	IN-SX	
H	393	0	393	0	0		HANGER BY OTHERS		
E	407	0	407	0	0		MIN. SEAT SIZE: 1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
H	278	185 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
E	290	178 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LC)
FR-TO		FROM	TO	FR-TO			
H-A	-397 / 0	0.0	0.0 0.04 (1)	7.81	F-C	-120 / 30	0.02 (1)
A-B	-296 / 0	-78.0	-78.0 0.07 (1)	6.25	C-E	-557 / 0	0.36 (1)
B-C	-450 / 0	-78.0	-78.0 0.39 (1)	6.25	H-G	-61 / 0	0.01 (1)
C-D	-27 / 0	-78.0	-78.0 0.39 (1)	6.25	G-B	-376 / 0	0.06 (1)
E-D	-183 / 0	0.0	0.0 0.13 (1)	7.81	A-G	0 / 331	0.07 (1)
G-F	0 / 321	-18.5	-18.5 0.05 (1)	10.00	B-F	0 / 521	0.12 (1)
F-E	0 / 530	-18.5	-18.5 0.24 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

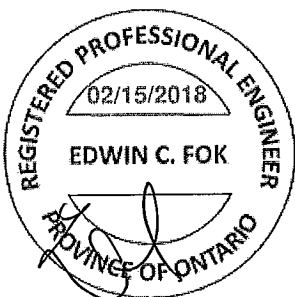
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

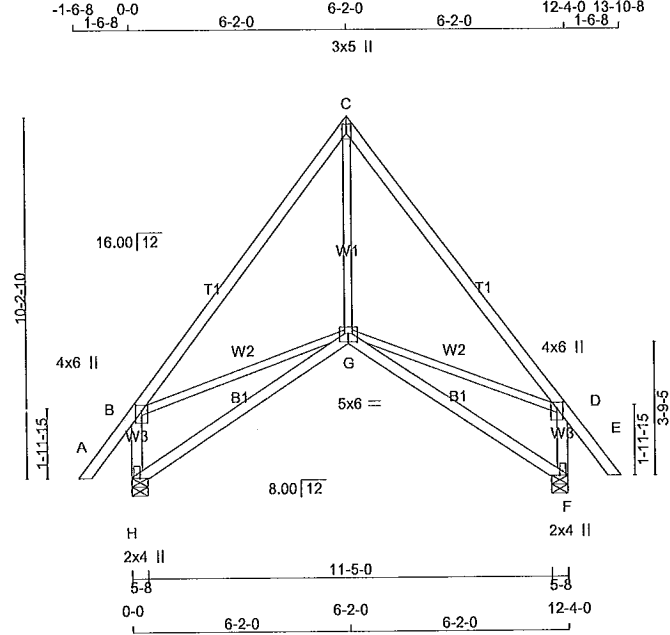
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (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-18023081



Scale = 1:65.3

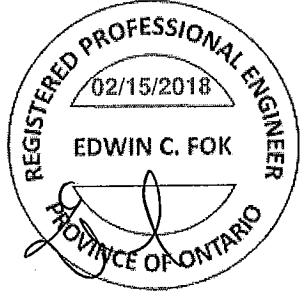
TOTAL WEIGHT = 3 X 65 = 195 lb
[M][F]

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 - G	2x4	DRY	No.2	SPF
G - F	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW+p	MT20	4.0	6.0 2.00 2.00
C	TTW+p	MT20	3.0	5.0 2.00 Edge
D	TMVW+p	MT20	4.0	6.0 2.00 2.00
F	BMV1+p	MT20	2.0	4.0 Edge
G	BBWW+p	MT20	5.0	6.0 2.75 3.00
H	BMV1+p	MT20	2.0	4.0 Edge

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

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
H	702	0	702	0	0
F	702	0	702	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
H	499	317 / 0	0 / 0
F	499	317 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.28/1.00 (B-C:1), BC=0.21/1.00 (G-H:4), WB=0.07/1.00 (C-G:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

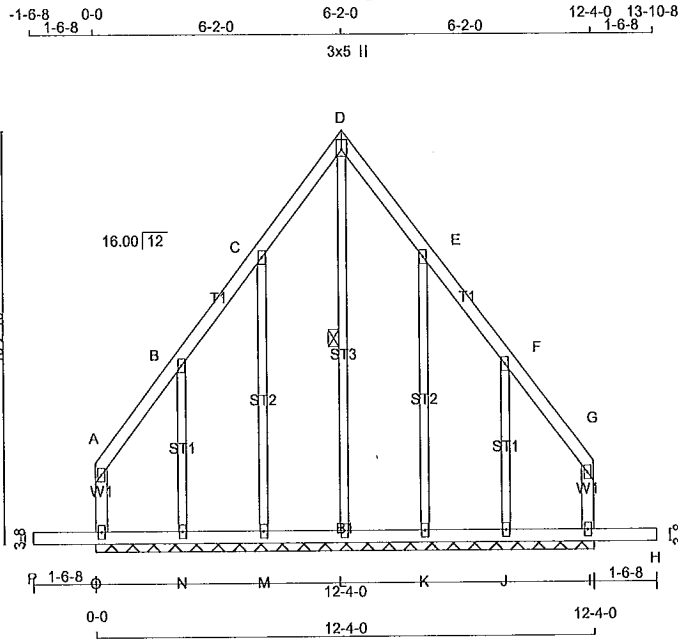
JSI GRIP= 0.82 (H) (INPUT = 0.90)
JSI METAL= 0.32 (F) (INPUT = 1.00)

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

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:13:20 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-aXyCTB93S2NuVFCo96ynY12XK91Z3rLNL25JgRzkyFz



Scale = 1:57.2

TOTAL WEIGHT = 71 lb

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
O - A	2x4	DRY	No.2	SPF	
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
P - H	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
SEASONED LUMBER.					
STUDS SPACED AT	2'-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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-L.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	MAX. FACTORED	MAX
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
(LBS)	(PLF)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)	
FR-TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	
O-A	-118 / 0	0.0	0.0	0.04 (1)	7.81	L-D	-111 / 0	0.08 (1)	
A-B	-47 / 0	-78.0	-78.0	0.04 (1)	6.25	M-C	-154 / 0	0.16 (1)	
B-C	-41 / 0	-78.0	-78.0	0.04 (1)	6.25	N-B	-153 / 0	0.05 (1)	
C-D	-35 / 0	-78.0	-78.0	0.04 (1)	6.25	K-E	-154 / 0	0.16 (1)	
D-E	-35 / 0	-78.0	-78.0	0.04 (1)	6.25	J-F	-153 / 0	0.05 (1)	
E-F	-41 / 0	-78.0	-78.0	0.04 (1)	6.25				
F-G	-47 / 0	-78.0	-78.0	0.04 (1)	6.25				
I-G	-118 / 0	0.0	0.0	0.04 (1)	7.81				
P-O	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
O-N	0 / 29	-18.5	-18.5	0.02 (4)	10.00				
N-M	0 / 25	-18.5	-18.5	0.02 (4)	10.00				
M-L	0 / 22	-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 / 25	-18.5	-18.5	0.02 (4)	10.00				
J-I	0 / 29	-18.5	-18.5	0.02 (4)	10.00				
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 788 1987 1656

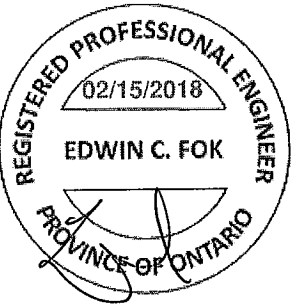
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (C) (INPUT = 0.90)

JSI METAL= 0.07 (E) (INPUT = 1.00)

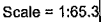
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023079

DRWG NO.	
----------	--

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-_q6vXP_Hllctp585K9lV_oT56VEvnXSK7siaBFzkyGB



TOTAL WEIGHT = 2 X 65 = 130 lb

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	6-2-0	-1046	-1046	—	FRONT	VERT	TOTAL

CONTINUED ON PAGE 2

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

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:13:06 2018 Page 2

ID:84gOFYESM8s1JmDO6 uSGRyQWjP- q6vXP Hllctp585K9IV oT56VEvnXSK7siaBFzkyGB

PLATES (table is in inches)

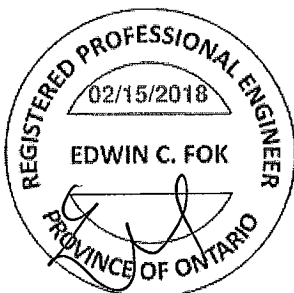
JT	DE	PLATES	W	LEN	Y	X
B	W+p	MT20	4.0	6.0	2.00	2.00
C	W+p	MT20	3.0	5.0	2.00	Edge
D	1MVW+p	MT20	4.0	6.0	2.00	2.00
F	8MV1+p	MT20	2.0	4.0	Edge	
G	BBWWWW-p	MT20	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	

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

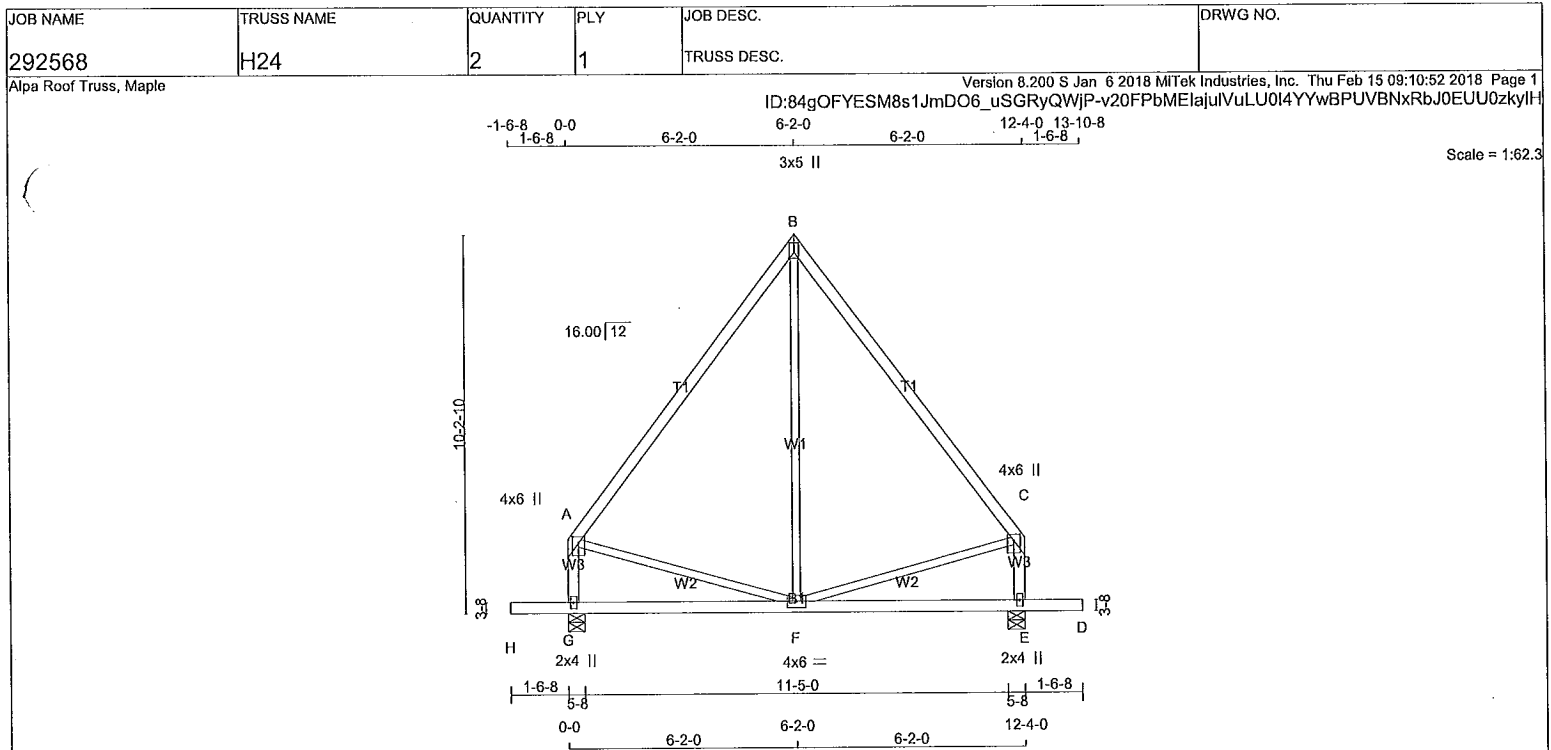
HANGERS NOTES

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

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



A: 1802307862



TOTAL WEIGHT = 2 X 63 = 126 lb

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

SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT		VERT	HORZ	UPLIFT	IN-SX
G		744	0	744	0
E		744	0	744	0

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED				WEBS		FACTORED			
MEMB.	FORCE (LBS)	VERT.	LOAD	LC1	MAX	MEMB.	FORCE (LBS)	VERT.	LOAD	LC1	MAX
FR-TO		FROM	TO			FR-TO		FROM	TO		
A-B	-325 / 0	-78.0	-78.0	0.25 (1)	6.25	F-B	0 / 116	0.04	(4)		
B-C	-325 / 0	-78.0	-78.0	0.25 (1)	6.25	A-F	0 / 202	0.05	(1)		
G-A	-552 / 0	0.0	0.0	0.06 (1)	7.81	F-C	0 / 202	0.05	(1)		
E-C	-552 / 0	0.0	0.0	0.06 (1)	7.81						
H-G	0 / 0	-96.5	-96.5	0.16 (1)	10.00						
G-F	0 / 0	-18.5	-18.5	0.20 (4)	10.00						
F-E	0 / 0	-18.5	-18.5	0.20 (4)	10.00						
E-D	0 / 0	-96.5	-96.5	0.16 (1)	10.00						

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.25/1.00 (A-B:1), BC=0.20/1.00 (E-F:4), WB=0.05/1.00 (C-F:1), SS=0.12/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

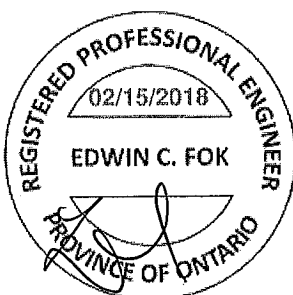
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (F) (INPUT = 0.90)
JSI METAL= 0.16 (C) (INPUT = 1.00)

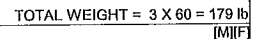
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023077

Alpa Roof Truss, Maple

Scale = 1:62.2



A-18023076

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

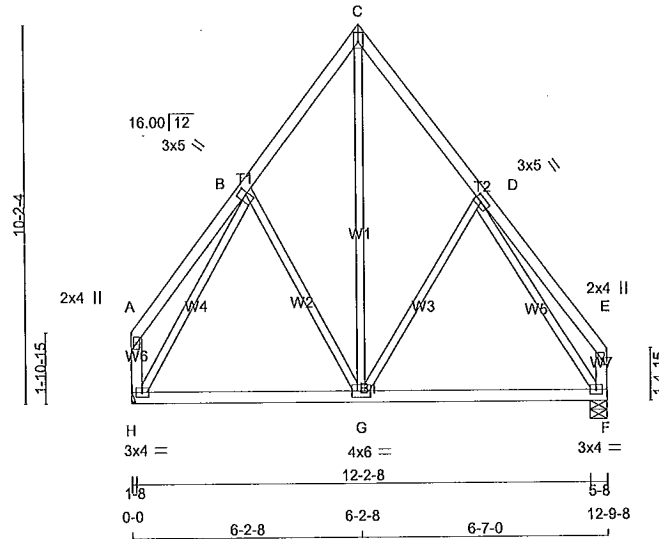
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Thu Feb 15 09:10:02 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-NR_LvUlt4CQ_lq4kYWOMW7rfAKQngDJE7rkvzkyJ3

0-0 3-2-8 3-0-0 6-2-8 3-2-4 9-4-12 3-4-12 12-9-8
3x5 II

Scale = 1:62.2



TOTAL WEIGHT = 2 X 70 = 140 lb

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

SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMVW+t	MT20	3.0	5.0	2.25	0.75
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW-t	MT20	3.0	5.0	1.50	2.25
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-t	MT20	3.0	4.0		
G	BMVW1-t	MT20	4.0	6.0		
H	BMVW1-t	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
JT				
H	726	0	726	0
F	726	0	726	0

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 0-0

END SETBACK = 2-8-8

END WALL WIDTH = 0-0

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, OBC 2018

- CSA 086-09, CSA 086-14

- TPIC 2011, TPIC 2014

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

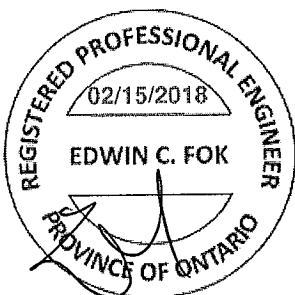
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (D) (INPUT = 0.90)
JSI METAL= 0.41 (B) (INPUT = 1.00)

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

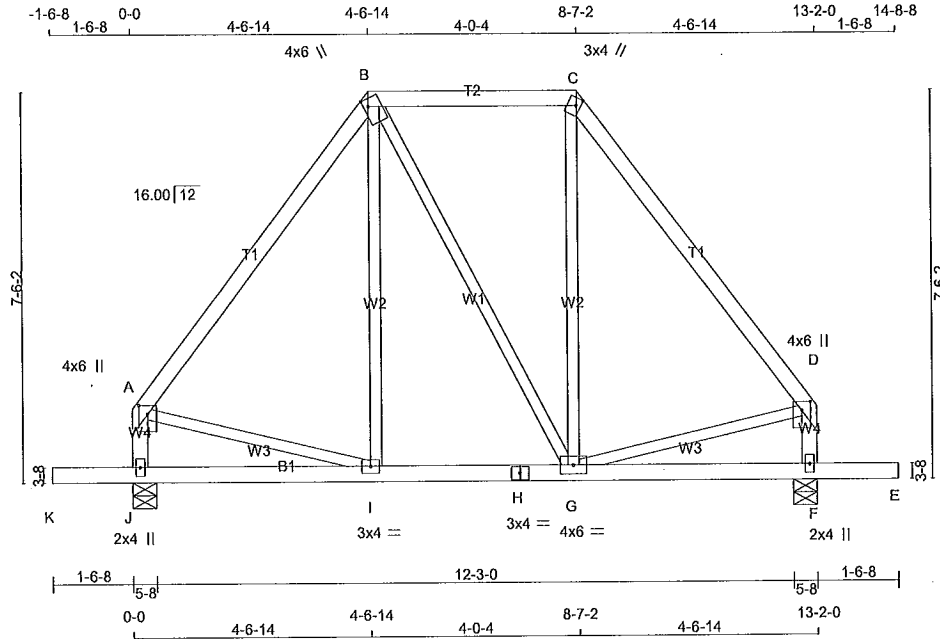


A-18023075

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292568	H22	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 09:10:37 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRYQW/P-rAcaFSAqrzq0RCFT5NWZRN0a2ROAM8AOtB6BSOzkyIW



TOTAL WEIGHT = 2 X 69 = 137 lb

LUMBER					DESCR.
CHORDS	SIZE	LUMBER	DRY	No.2	
A - B	2x4	DRY	No.2	SPF	
B - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
J - A	2x4	DRY	No.2	SPF	
F - D	2x4	DRY	No.2	SPF	
K - H	2x4	DRY	No.2	SPF	
H - E	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
F	T				
D. SEASONED LUMBER.					

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQ'D
JT	GROSS REACTION	GROSS REACTION	DOWN	HORIZ	UPLIFT
J	896	0	896	0	0
F	896	0	896	0	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	639	390 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0
F	639	390 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	MAX. UNBRACED LENGTH (FT)
FR-TO		FROM	TO	FR-TO			
A-B	-531 / 0	-91.8	-91.8 0.39 (1)	I-B	0 / 85	0.03 (4)	6.25
B-C	-317 / 0	-91.8	-91.8 0.28 (1)	B-G	0 / 0	0.00 (1)	6.25
C-D	-531 / 0	-91.8	-91.8 0.39 (1)	G-C	0 / 86	0.03 (4)	6.25
J-A	-705 / 0	0.0	0.0 0.08 (1)	A-I	0 / 324	0.08 (1)	7.81
F-D	-705 / 0	0.0	0.0 0.08 (1)	G-D	0 / 324	0.08 (1)	7.81
K-J	0 / 0	-96.5	-96.5 0.17 (1)				10.00
J-I	0 / 0	-21.8	-21.8 0.11 (4)				10.00
I-H	0 / 317	-21.8	-21.8 0.14 (4)				10.00
H-G	0 / 317	-21.8	-21.8 0.14 (4)				10.00
G-F	0 / 0	-21.8	-21.8 0.11 (4)				10.00
F-E	0 / 0	-96.5	-96.5 0.17 (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: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 2-8-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.44")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.44")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

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

CSI: TC=0.39/1.00 (C-D:1), BC=0.17/1.00 (E-F:1), WB=0.08/1.00 (D-G:1), SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

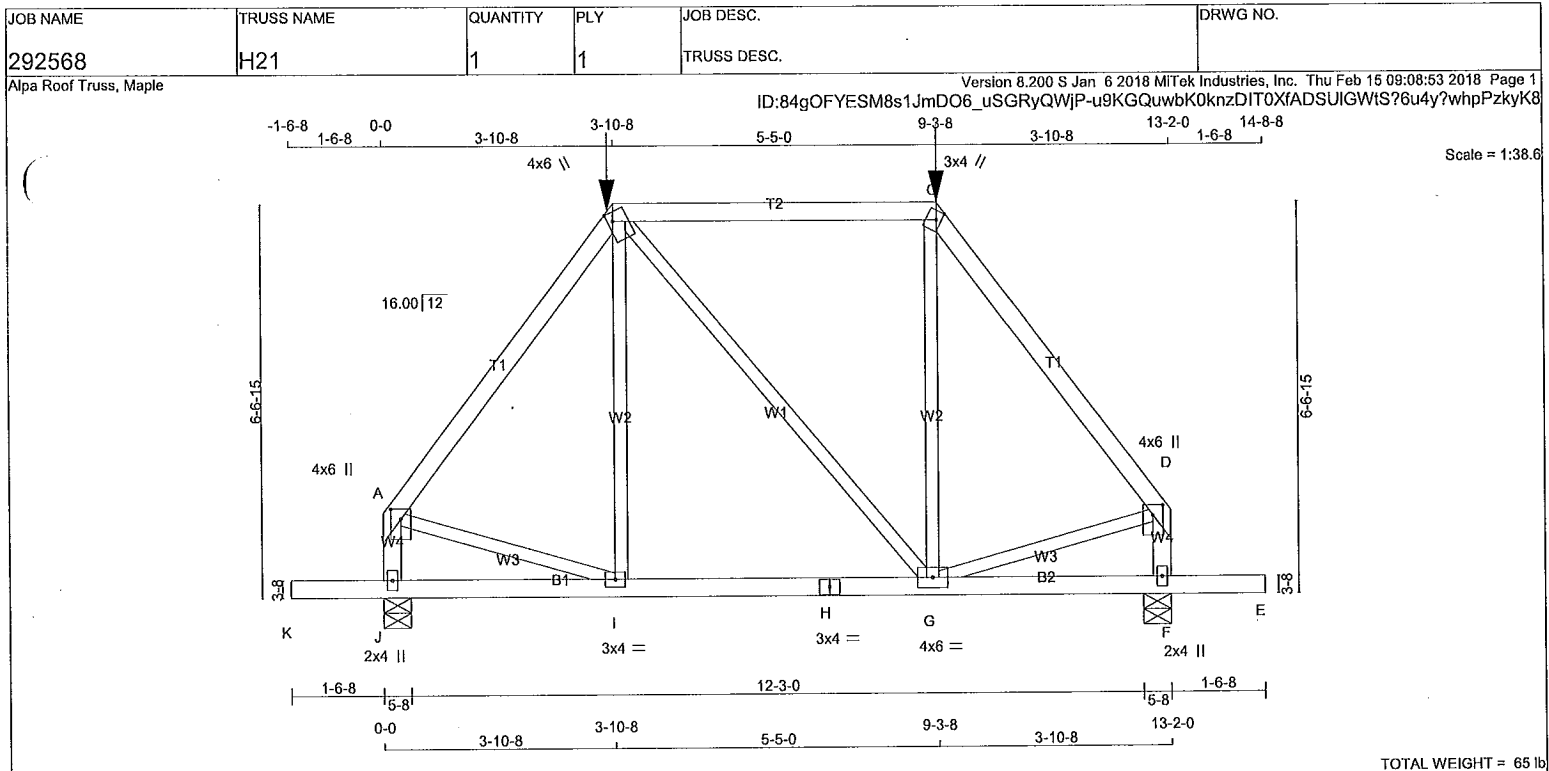
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

A-18023074 CONTINUED ON PAGE 2

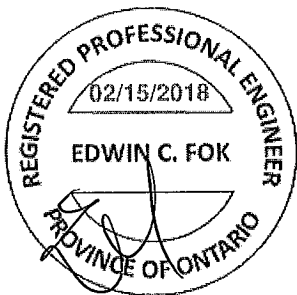
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS				DESIGN CRITERIA			
A - B	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:		
B - C	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 21.0 PSF		
C - D	2x4	DRY	No.2	SPF	VERT	DOWN	HORZ	UPLIFT	DL = 6.0 PSF		
J - A	2x4	DRY	No.2	SPF	JT 1059 0	1059 0	0	5-8	BOT CH. LL = 0.0 PSF		
F - D	2x4	DRY	No.2	SPF	F 1059 0	1059 0	0	5-8	DL = 7.4 PSF		
K - H	2x4	DRY	No.2	SPF					TOTAL LOAD = 34.4 PSF		
H - E	2x4	DRY	No.2	SPF							
AL WEBS	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C		
T					1ST LCASE	MAX./MIN. COMPONENT REACTIONS			LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM		
DRY, SEASONED LUMBER.					JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL			GIRDER TYPE: CPrimeHlp SIDE SETBACK = 3-10-8 END SETBACK = 3-10-8 END WALL WIDTH = 0-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL.		
					J 756	459 / 0 0 / 0 0 / 0 0 / 0 297 / 0 0 / 0			THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015		
					F 756	459 / 0 0 / 0 0 / 0 0 / 0 297 / 0 0 / 0			THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, OBC 2018 - CSA 086-09, CSA 086-14 - TPIC 2011, TPIC 2014		
									(55 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD		
									ALLOWABLE DEFL.(LL)= L/360 (0.44") CALCULATED VERT. DEFL.(LL)= L/999 (0.01") ALLOWABLE DEFL.(TL)= L/360 (0.44") CALCULATED VERT. DEFL.(TL)= L/999 (0.03")		
									CANTILEVER DEFLECTION: ALLOWABLE DEFL.(LL)= L/120 (0.19") CALCULATED VERT. DEFL.(LL)= L/999 (0.01") ALLOWABLE DEFL.(TL)= L/120 (0.19") CALCULATED VERT. DEFL.(TL)= L/999 (0.01")		
									CSI: TC=0.85/1.00 (B-C:1), BC=0.20/1.00 (G-I:1), WB=0.11/1.00 (D-G:1), SSI=0.27/1.00 (B-C:1)		
									DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00		
									COMPANION LIVE LOAD FACTOR = 1.00		
									TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.		
									NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 788 1987 1656		
									PLATE PLACEMENT TOL. = 0.250 inches		
									PLATE ROTATION TOL. = 5.0 Deg.		
									A-18023073		
									CONTINUED ON PAGE 2		

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



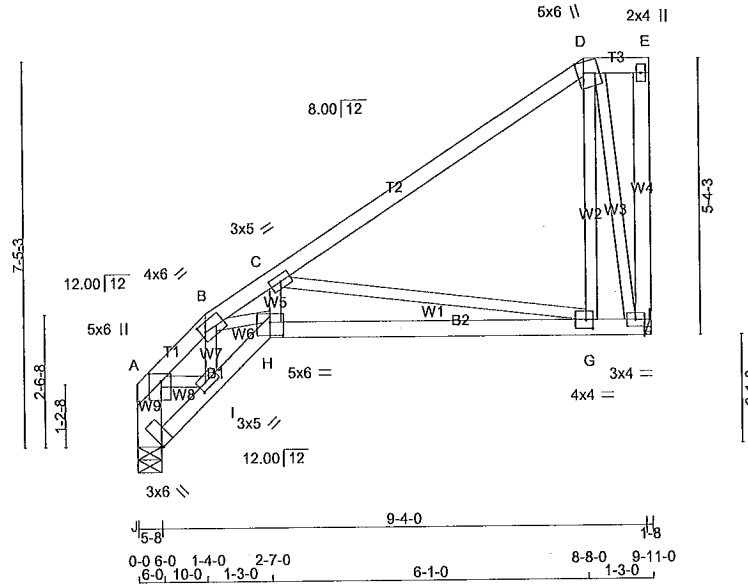
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H20T	1	1	TRUSS DESC.	

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-jCTs5f7orbLhRLZ5nGQI42dQ9eZTe4t?NqLIDizkz3p

0-0 1-4-0 2-7-0 6-1-0 8-8-0 9-11-0
1-4-0 1-3-0 1-3-0

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
A - 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	478	0
J	478	0	478	0

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	W E B S	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) , SI=0.18/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

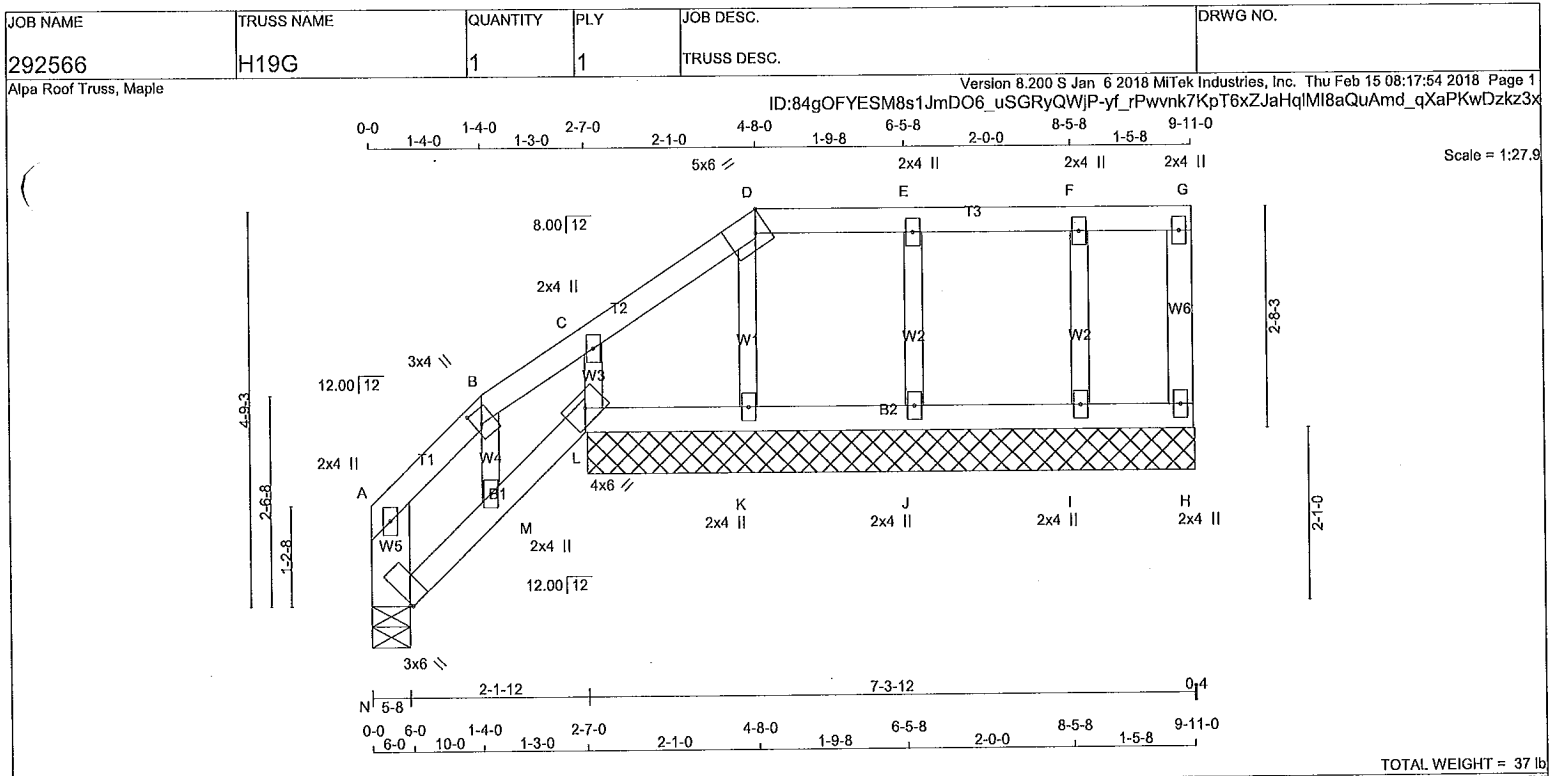
PLATE ROTATION TOL. = 5.0 Deg.

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

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
EASONED 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)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB. FORCE (LBS)	MAX. FORCE (LBS)	MAX. (LC)
FR-TO		FROM	TO			FR-TO		
N-A	-79 / 0	0.0	0.0	0.01 (1)	7.81	M-B	-43 / 0	0.01 (1)
A-B	-29 / 0	-78.0	-78.0	0.03 (1)	6.25	K-D	-139 / 0	0.02 (1)
B-C	0 / 14	-78.0	-78.0	0.05 (1)	10.00	L-C	-175 / 0	0.02 (1)
C-D	-15 / 0	-78.0	-78.0	0.05 (1)	6.25	J-E	-159 / 0	0.03 (1)
D-E	-15 / 0	-78.0	-78.0	0.04 (1)	6.25	I-F	-124 / 0	0.02 (1)
E-F	-15 / 0	-78.0	-78.0	0.04 (1)	6.25			
F-G	-15 / 0	-78.0	-78.0	0.03 (1)	6.25			
H-G	-54 / 0	0.0	0.0	0.03 (1)	7.81			
N-M	0 / 2	-18.5	-18.5	0.04 (1)	10.00			
M-L	0 / 43	-18.5	-18.5	0.04 (1)	10.00			
L-K	0 / 9	-18.5	-18.5	0.04 (1)	10.00			
K-J	0 / 15	-18.5	-18.5	0.02 (4)	10.00			
J-I	0 / 15	-18.5	-18.5	0.02 (4)	10.00			
I-H	0 / 15	-18.5	-18.5	0.03 (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.(L) = $L/360$ (0.19")
CALCULATED VERT. DEFL.(L) = $L/999$ (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), SS=0.08/1.00 (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.

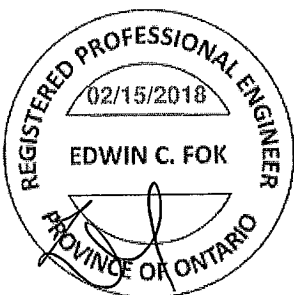
NAIL VALUES	PLATE GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1657 788 1987 1656

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

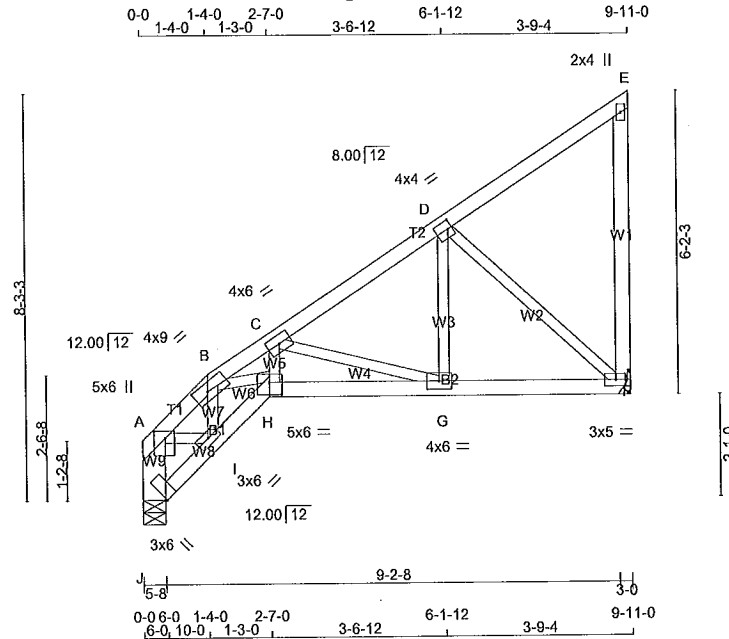


A-18023068

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	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_uSGRYQWjP-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
DPV- SEASONED LUMBER.

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	TOP
A-B	1	TOP
B-E	1	TOP
E-F	1	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
J-H	1	SIDE(95.4)
H-F	1	SIDE(133.1)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6

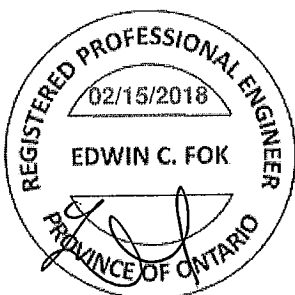
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED
TO ONE SIDE THAT THE CORRESPONDING NAILING
PATTERN SHALL BE CAPABLE OF 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	BRG		
JT	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
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		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	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: CSldGirder
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

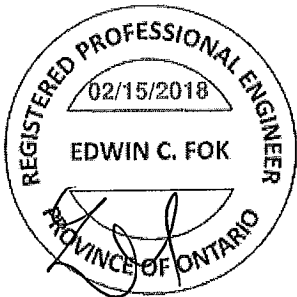
CONTINUED ON PAGE 2

PLATES (table is in inches)

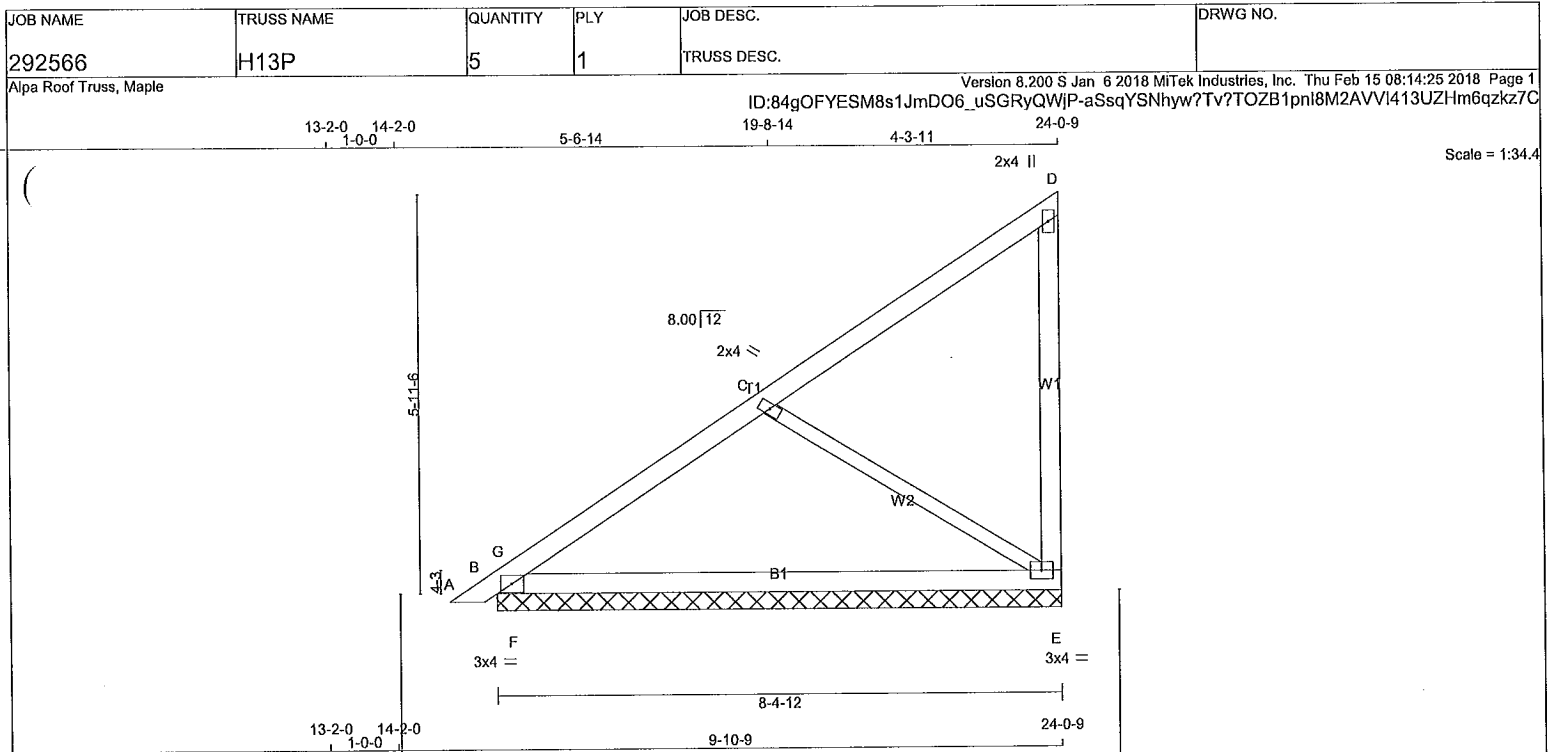
	PLATES	W	LEN	Y	X
VW-t	MT20	4.0	6.0		
WW-t	MT20	4.0	4.0	2.00	1.00
TMV+p	MT20	2.0	4.0		
BMVW1-t	MT20	3.0	5.0	1.50	2.25
BMWW-t	MT20	4.0	6.0		
BBWW-t	MT20	5.0	6.0	3.00	3.00
BMWW-t	MT20	3.0	6.0		
BVM1-t	MT20	3.0	6.0	Edge	0.25

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

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



A-18023060(27



TOTAL WEIGHT = 5 X 32 = 160 lb

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.			

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

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

UNFACTORED REACTIONS

	1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
JT	289	176 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0	
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		FACTORED		WEBS		MAX. FACTORED	
	MAX. FORCE	FACTORED	VERT. LOAD	LC1	MAX. MEMB.	MAX. FORCE	MAX. FORCE	MAX. CSI (LC)
	(LBS)	(PLF)		CS (LC)	UNBRAC	(LBS)		
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), SSI=0.39/1.00 (B-F:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

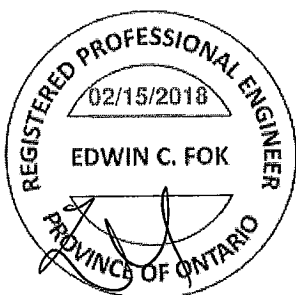
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

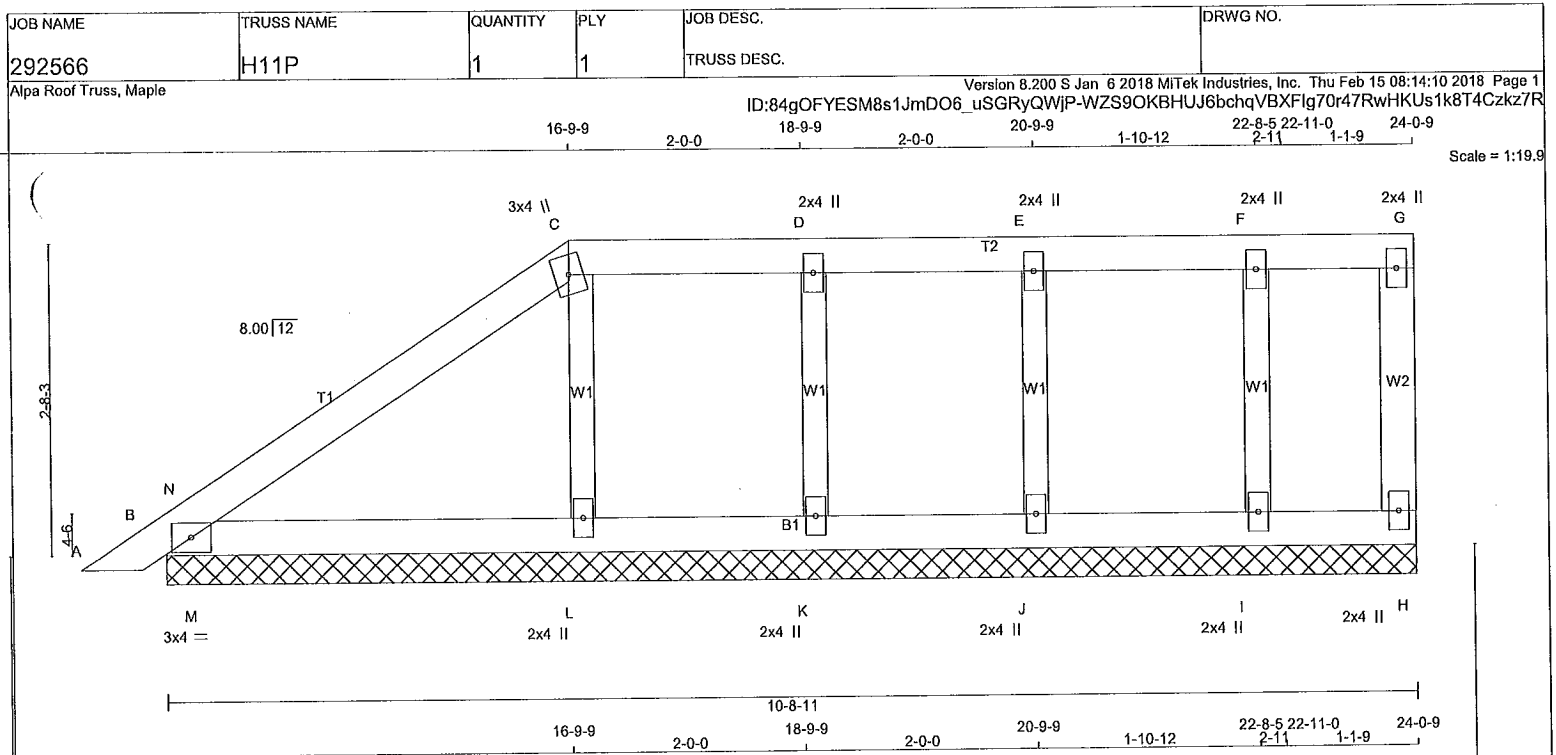
JSI GRIP= 0.53 (E) (INPUT = 0.90)
JSI METAL= 0.15 (C) (INPUT = 1.00)

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



A-18023059

[illegible]



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - G	2x4	DRY No.2	SPF
H - G	2x4	DRY No.2	SPF
B - H	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0 PSF
	DL = 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 THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

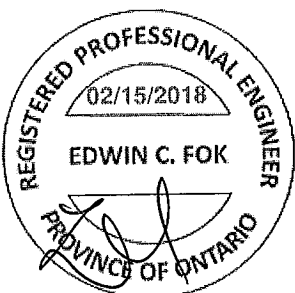
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

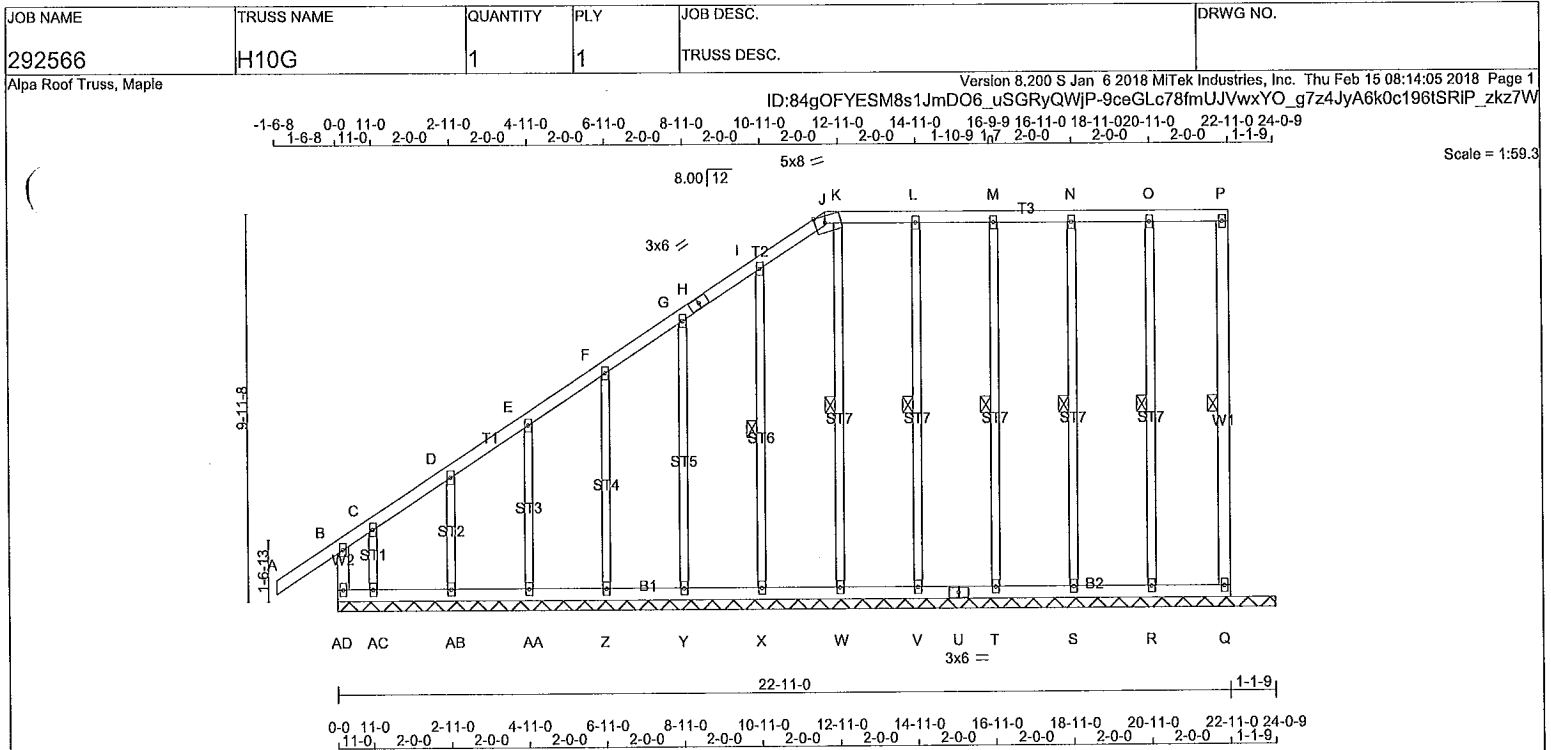
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (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



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
AD- B	2x4	DRY	No.2
A - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
J - P	2x4	DRY	No.2
AD- U	2x4	DRY	No.2
U - Q	2x4	DRY	No.2

ALL WEBS EXCEPT			
Q	2x4	DRY	No.2
ALL WEBS EXCEPT			
Q	2x4	DRY	No.2
ALL WEBS EXCEPT			
Q	2x4	DRY	No.2

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMV+p	MT20	2.0	4.0
C, D, E, F, G, I, L, M, N, O, P	TMV+w	MT20	2.0	4.0
H	TS-t	MT20	3.0	6.0
J	TTW-m	MT20	5.0	8.0
K	TTW-m	MT20	5.0	8.0
Q, R, S, T, V, W, X, Y, Z, AA, AB, AC	BMV1+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.

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
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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (L)	
FR-TO		FROM TO		FR-TO			
AD-B	-498 / 0	0.0	0.05 (1)	R-O	-162 / 0	0.11 (1)	
A-B	0 / 35	-78.0	-78.0 0.15 (1)	S-N	-157 / 0	0.11 (1)	
B-C	-188 / 0	-78.0	-78.0 0.25 (1)	T-M	-155 / 0	0.10 (1)	
C-D	0 / 55	-78.0	-78.0 0.25 (1)	V-L	-158 / 0	0.11 (1)	
D-E	-28 / 0	-78.0	-78.0 0.12 (1)	W-K	-160 / 0	0.11 (1)	
E-F	-3 / 0	-78.0	-78.0 0.04 (1)	X-I	-150 / 0	0.08 (1)	
F-G	-4 / 0	-78.0	-78.0 0.04 (1)	Y-G	-160 / 0	0.16 (1)	
G-H	-5 / 0	-78.0	-78.0 0.04 (1)	Z-F	-161 / 0	0.10 (1)	
H-I	-5 / 0	-78.0	-78.0 0.04 (1)	AA-E	-115 / 0	0.04 (1)	
I-J	-6 / 0	-78.0	-78.0 0.03 (1)	AB-D	-317 / 0	0.07 (1)	
J-K	0 / 3	-78.0	-78.0 0.03 (1)	AC-C	0 / 351	0.08 (1)	
K-L	0 / 0	-78.0	-78.0 0.04 (1)	Q-P	-59 / 0	0.03 (1)	
L-M	0 / 0	-78.0	-78.0 0.04 (1)				
M-N	0 / 0	-78.0	-78.0 0.04 (1)				
N-O	0 / 0	-78.0	-78.0 0.04 (1)				
O-P	0 / 0	-78.0	-78.0 0.03 (1)				
AD-AC	0 / 0	-18.5	-18.5 0.01 (4)				
AC-AB	0 / 16	-18.5	-18.5 0.02 (4)				
AB-AA	0 / 8	-18.5	-18.5 0.02 (4)				
AA-Z	0 / 5	-18.5	-18.5 0.01 (4)				
Z-Y	0 / 3	-18.5	-18.5 0.01 (4)				
Y-X	0 / 1	-18.5	-18.5 0.01 (4)				
X-W	0 / 0	-18.5	-18.5 0.01 (4)				
W-V	0 / 0	-18.5	-18.5 0.01 (4)				
V-U	0 / 0	-18.5	-18.5 0.01 (4)				
U-T	0 / 0	-18.5	-18.5 0.01 (4)				
T-S	0 / 0	-18.5	-18.5 0.01 (4)				
S-R	0 / 0	-18.5	-18.5 0.02 (4)				
R-Q	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

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

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

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

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

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

CSI: TC=0.25/1.00 (C-D:1), BC=0.02/1.00 (Q-R:4), WB=0.16/1.00 (G-Y:1), SSI=0.24/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

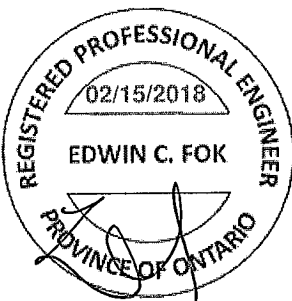
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (E) (INPUT = 0.90)
JSI METAL= 0.25 (B) (INPUT = 1.00)

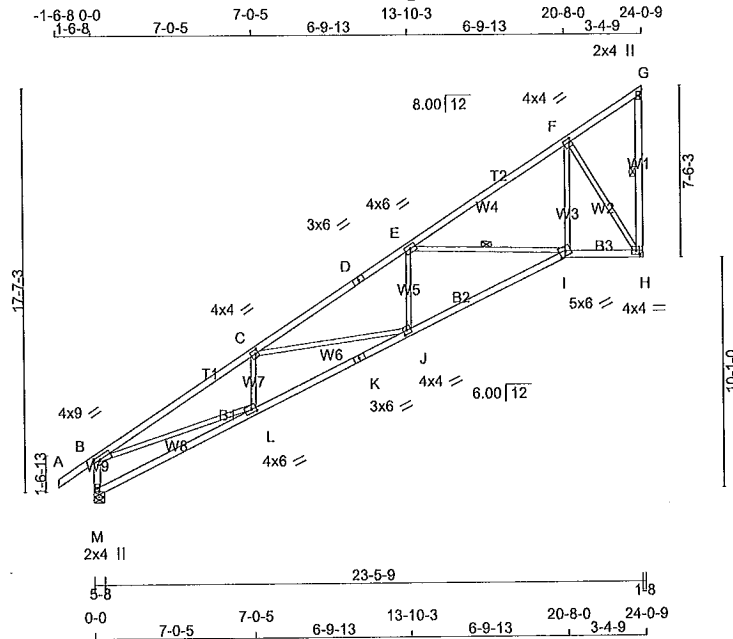
A-18023056



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
ID:84gOFYESM8s1JmDO6_uSGRYQWJP-HZtKxRtzcJqHUhqWf4oCcexFUESEBOW12hr59izkz7r



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	

ALI WEBS 2x3 DRY No.2 SPF
F SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	1.75	3.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TMVW-t	MT20	4.0	4.0	6.0	
F	TMVW-t	MT20	4.0	4.0	1.75	1.00
G	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	4.0	4.0	2.00	1.75
I	BBVW-h	MT20	5.0	6.0	2.50	3.25
J	BMVW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMVW-t	MT20	4.0	6.0	1.75	2.50
M	BMV1+p	MT20	2.0	4.0	Edge	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP
M	1286	0	1286	0
H	1160	0	1160	0

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

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

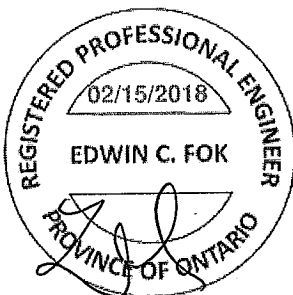
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. 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
M-B	-1228 / 0	0.0	0.0	0.13 (1)	B-L	0 / 2442	0.55 (1)
A-B	0 / 35	-78.0	-78.0	0.15 (1)	L-C	-349 / 0	0.06 (1)
B-C	-2789 / 0	-78.0	-78.0	0.77 (1)	C-J	-439 / 0	0.41 (1)
C-D	-2283 / 0	-78.0	-78.0	0.56 (1)	J-E	0 / 312	0.08 (4)
D-E	-2283 / 0	-78.0	-78.0	0.56 (1)	E-I	-1171 / 0	0.39 (1)
E-F	-878 / 0	-78.0	-78.0	0.36 (1)	I-F	0 / 1097	0.25 (1)
F-G	-42 / 0	-78.0	-78.0	0.26 (1)	F-H	-1287 / 0	0.77 (1)
H-G	-53 / 0	0.0	0.0	0.01 (1)			
M-L	0 / 5	-18.5	-18.5	0.19 (4)			
L-K	0 / 2609	-18.5	-18.5	0.52 (1)			
K-J	0 / 2609	-18.5	-18.5	0.52 (1)			
J-I	0 / 2113	-18.5	-18.5	0.44 (1)			
I-H	0 / 704	-18.5	-18.5	0.15 (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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/957 (0.30")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES	PLATE GRIP(DRY)	SHEAR (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.

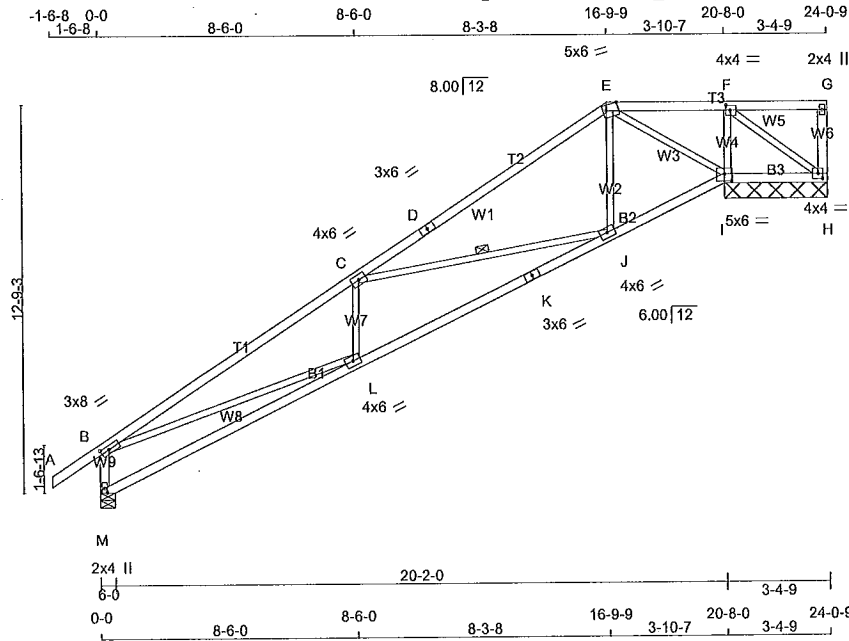
JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.80 (K) (INPUT = 1.00)

A-18023054

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

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:13:22 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRYQWjP-wkY0KvcAnZ3PrJ9HNSO2j71SLmyP2Run_GWwO_zkz8B



Scale = 1:76.0

TOTAL WEIGHT = 95 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B TMVW-1	MT20	3.0	8.0	1.50	3.25		
C TMVW-1	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-1	MT20	4.0	4.0	2.00	1.75		
G TMV+p	MT20	2.0	4.0				
H BMVW-1	MT20	4.0	4.0	2.00	1.75		
I BBWW-1	MT20	5.0	6.0	2.75	3.00		
J BMVW-1	MT20	4.0	6.0				
K BS-t	MT20	3.0	6.0				
L BMVW-1	MT20	4.0	6.0				
M BMV1+p	MT20	2.0	4.0	Edge			

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
JT	VERT	HORZ	DOWN	HORZ
H	-506	0	0	-506
I	1938	0	1938	0
M	1014	0	1014	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT H FOR 506 LBS. FACTORED UPLIFT

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

UNFACTORED REACTIONS	1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
H	-360	0 / -223	0 / 0
I	1381	847 / 0	0 / 0
M	720	454 / 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)

CHORDS	MAX. FACTORED	FACTORED	W E B S	MAX. FACTORED
MEMB.	FORCE	VERT. LOAD LC1	MEMB.	FORCE
	(LBS)	(PLF)		(LBS)
FR-TO		FROM TO	FR-TO	
A-B	0 / 35	-78.0 -78.0 0.09 (1)	L-C	-112 / 89
B-C	-1968 / 0	-78.0 -78.0 0.87 (1)	C-J	-1378 / 0
C-D	-413 / 0	-78.0 -78.0 0.62 (1)	J-E	0 / 591
D-E	-413 / 0	-78.0 -78.0 0.62 (1)	E-I	-1421 / 0
E-F	0 / 890	-78.0 -78.0 0.36 (1)	I-F	-994 / 0
F-G	0 / 0	-78.0 -78.0 0.22 (1)	F-H	0 / 1049
H-G	-79 / 0	0.0 0.0 0.01 (1)	B-L	0 / 1760
M-B	-948 / 0	0.0 0.0 0.10 (1)		
M-L	0 / 8	-18.5 -18.5 0.32 (4)		
L-K	0 / 1864	-18.5 -18.5 0.50 (4)		
K-J	0 / 1864	-18.5 -18.5 0.50 (4)		
J-I	0 / 350	-18.5 -18.5 0.20 (4)		
I-H	-847 / 0	-18.5 -18.5 0.07 (4)		

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

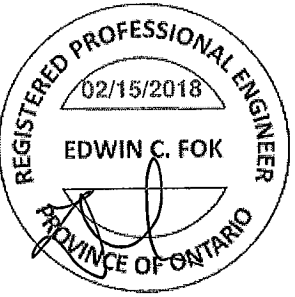
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

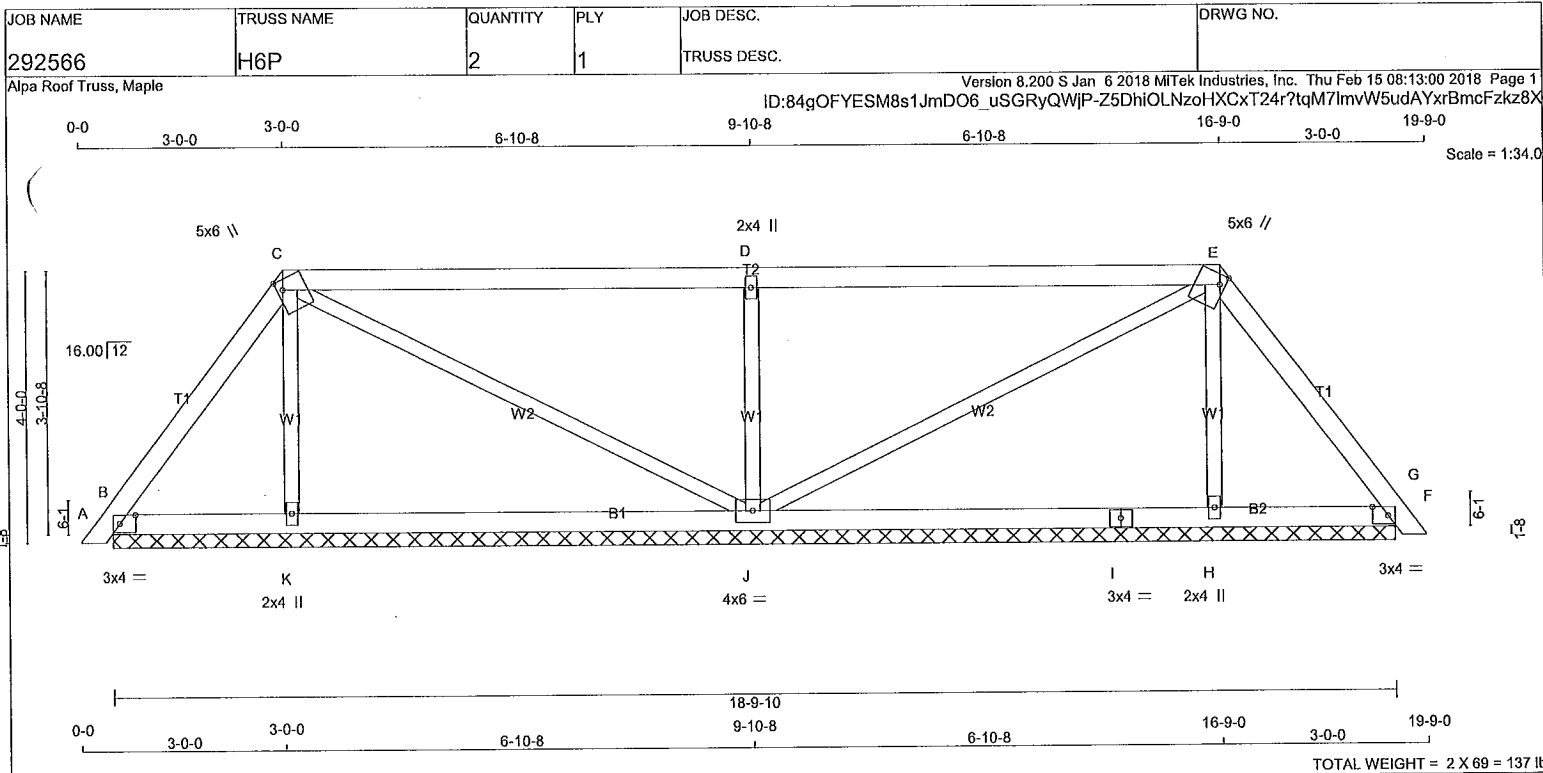
PLATE PLACEMENT TOL. = 0.250 inches

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

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

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

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

MEMB.	CHORDS		WEBS		MEMB.	MAX. FACTORED	
	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED		FORCE	MAX
	FORCE (LBS)	VERT. LOAD (PLF)	CS1 (LC)	UNBRAC LENGTH FR-TO		(LBS)	CS1 (LC)
FR-TO		FROM TO					
A-B	0 / 10	-78.0 -78.0	0.01 (1)	10.00	K-C	-196 / 0	0.05 (1)
B-C	-102 / 0	-78.0 -78.0	0.09 (1)	6.25	C-J	-48 / 0	0.05 (1)
C-D	-12 / 0	-78.0 -78.0	0.63 (1)	6.25	J-D	-670 / 0	0.16 (1)
D-E	-12 / 0	-78.0 -78.0	0.63 (1)	6.25	J-E	-48 / 0	0.05 (1)
E-F	-102 / 0	-78.0 -78.0	0.09 (1)	6.25	H-E	-196 / 0	0.05 (1)
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	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (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

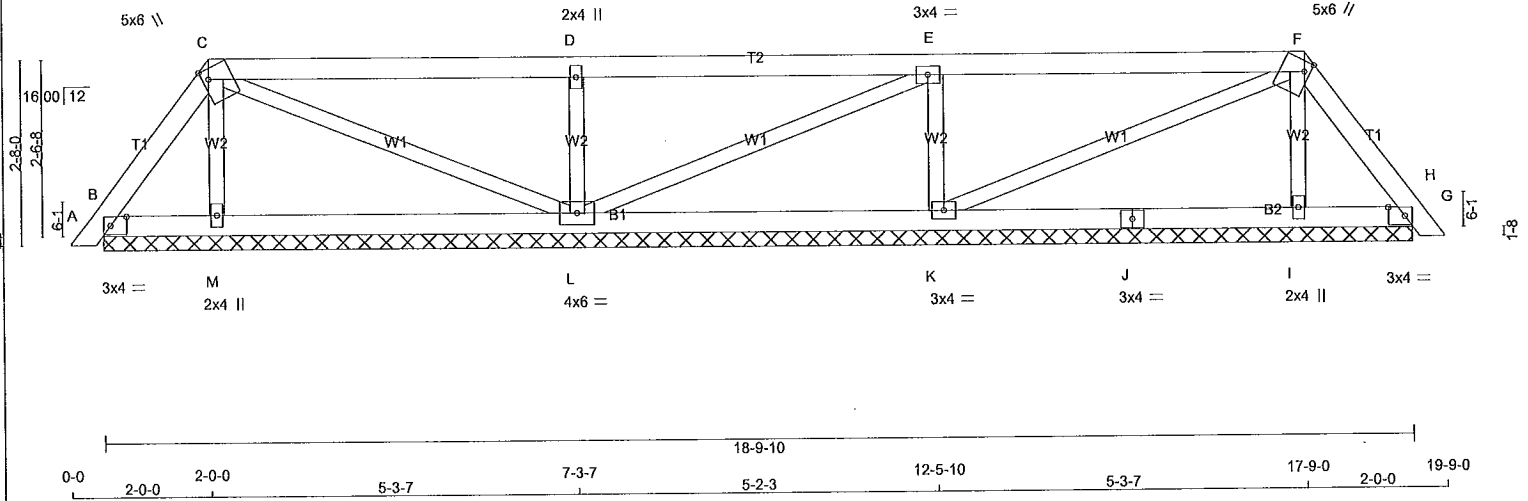


A-18023051

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

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:12:55 2018 Page 1
ID:84gOFYESM8s1JmDO6_uSGRyQWJP-D8QofgHE8GfE6Ab5IHPI7JP_FuqHDOGpnZU?x2zkz8c



TOTAL WEIGHT = 2 X 66 = 133 lb

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

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	
M	237	0	237	0	18-9-10 (4-0-0)3-14	
L	577	0	577	0	18-9-10 (4-0-0)3-14	
K	539	0	539	0	18-9-10 (4-0-0)3-14	
I	230	0	230	0	18-9-10 (4-0-0)3-14	
G	151	0	151	0	18-9-10 (4-0-0)3-14	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	FR-TO	CHORDS		WEBS	
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. MEMB. UNBRACED LENGTH FR-TO	MAX. FACTORED FORCE (LBS)
A-B	0 / 10	-78.0	-78.0 0.01 (1)	10.00	M-C -157 / 0
B-C	-84 / 0	-78.0	-78.0 0.03 (1)	6.25	C-L -42 / 0
C-D	0 / 10	-78.0	-78.0 0.29 (1)	10.00	L-D -449 / 0
D-E	0 / 9	-78.0	-78.0 0.29 (1)	10.00	L-E -37 / 0
E-F	-24 / 0	-78.0	-78.0 0.29 (1)	6.25	K-E -434 / 0
F-G	-84 / 0	-78.0	-78.0 0.03 (1)	6.25	K-F -18 / 0
G-H	0 / 10	-78.0	-78.0 0.01 (1)	10.00	I-F -149 / 0
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.

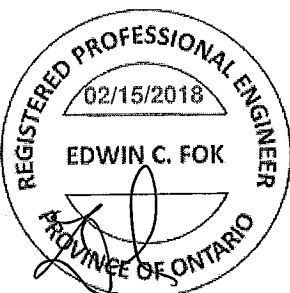
NAIL VALUES	PLATE GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

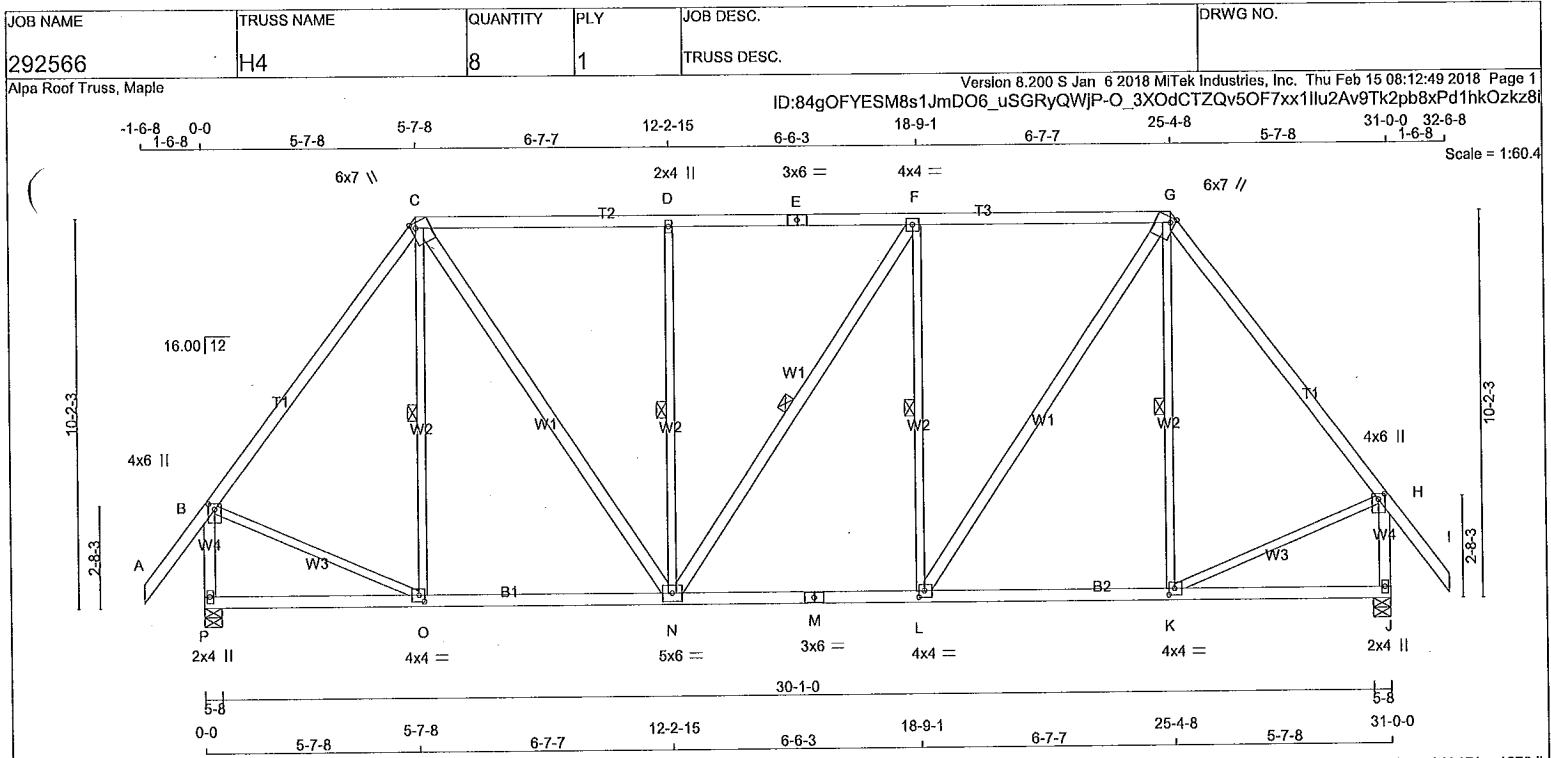
PLATE ROTATION TOL. = 5.0 Deg.

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	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
P - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
A - B	2x3	DRY	No.2	SPF
C - D	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	BMWW-t	MT20	5.0	6.0		
P	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

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)

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	0/52	-78.0	-78.0	0.15 (1)	10.00	O-C	-173 / 10	0.12 (1)
B-C	-1268/0	-78.0	-78.0	0.40 (1)	5.33	C-N	0 / 874	0.14 (1)
C-D	-1237/0	-85.5	-85.5	0.46 (1)	2.00	N-D	-606 / 0	0.43 (1)
D-E	-1237/0	-85.5	-85.5	0.42 (1)	2.00	N-F	-2 / 0	0.00 (1)
E-F	-1237/0	-85.5	-85.5	0.42 (1)	2.00	L-F	-606 / 0	0.43 (1)
F-G	-1238/0	-85.5	-85.5	0.46 (1)	2.00	L-G	0 / 876	0.14 (1)
G-H	-1257/0	-78.0	-78.0	0.40 (1)	5.34	K-G	-175 / 10	0.12 (1)
H-I	0/52	-78.0	-78.0	0.15 (1)	10.00	B-O	0 / 810	0.18 (1)
P-B	-1658/0	0.0	0.0	0.24 (1)	6.44	K-H	0 / 809	0.18 (1)
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 088-09, CSA 086-14
- TPIC 2011, TPIC 2014

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

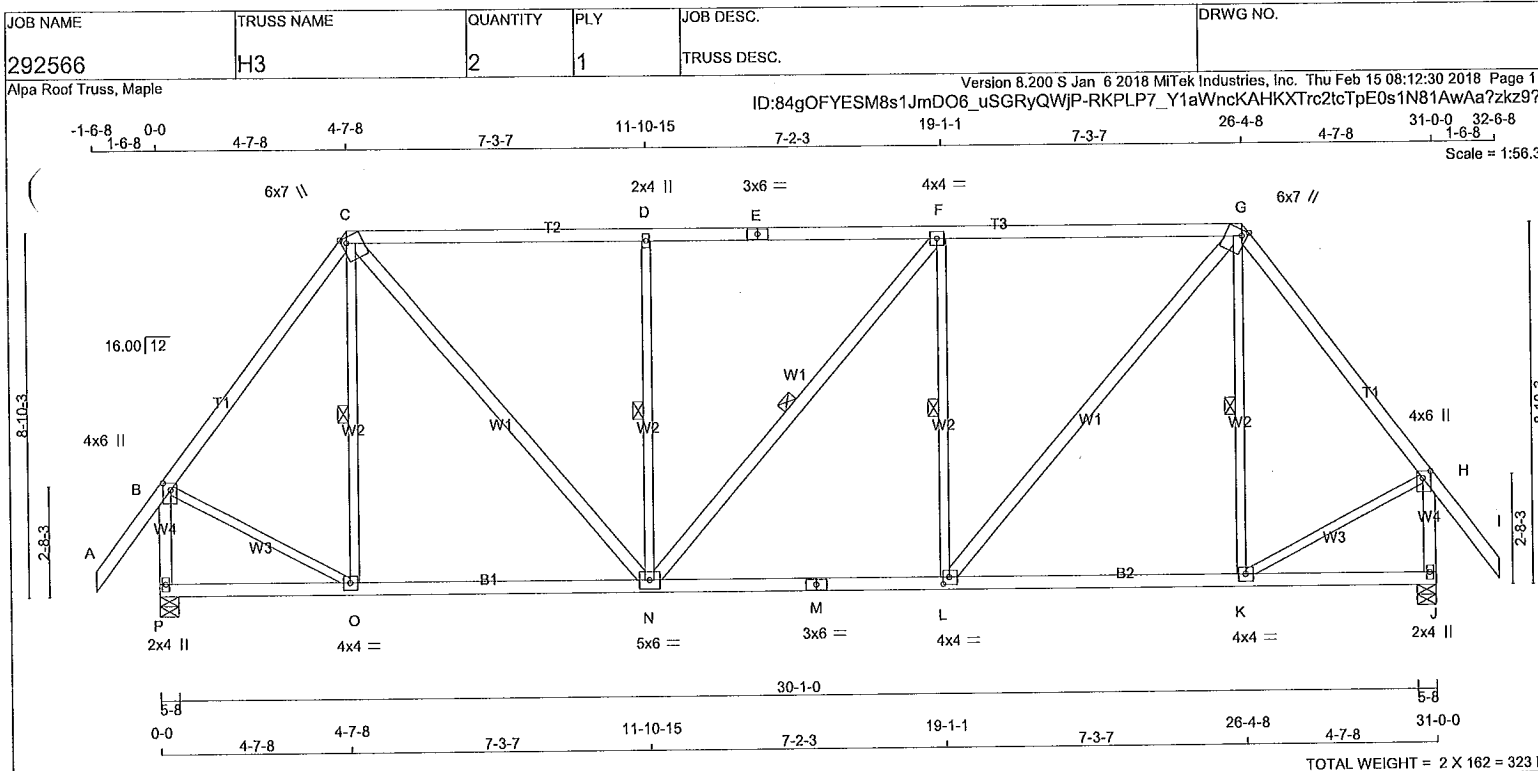
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

A-18023049





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
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	2.00	2.25
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+m	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
P	1625	0	1625	0	5-8	2-6
J	1625	0	1625	0	5-8	2-6

UNFACTORED REACTIONS							
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
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				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOAD LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
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 = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.4 PSF
TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

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

(56 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

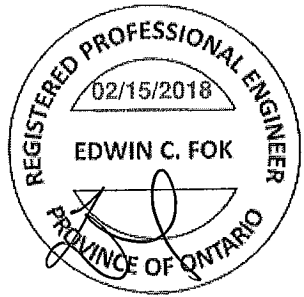
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

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

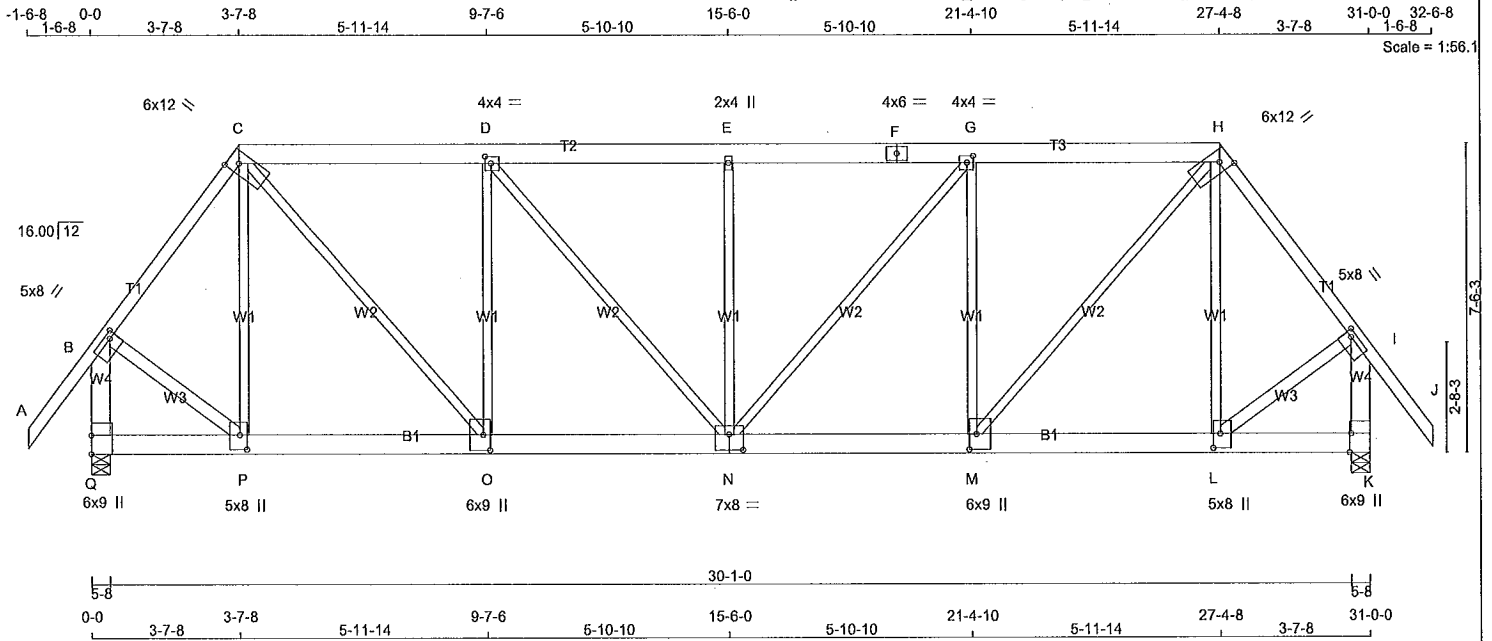


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292566	H2A	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Thu Feb 15 08:11:48 2018 Page 1

ID:84gOFYESM8s1JmDO6_uSGRyQWjP-gFtBmTCwgDIztdDij?vB8UXtnf0tOyNely5Qzkz9f



TOTAL WEIGHT = 2 X 191 = 383 lb

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
Q	9866	0	9866	0	5-8
K	9866	0	9866	0	5-8

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	7032	4307 / 0	0 / 0	0 / 0	0 / 0	2725 / 0	0 / 0
K	7032	4307 / 0	0 / 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.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 52	P-C	0 / 132
B-C	-7706 / 0	C-O	0 / 7442
C-D	-9440 / 0	O-D	-1998 / 0
D-E	-10710 / 0	D-N	0 / 1982
E-F	-10710 / 0	N-E	-452 / 0
F-G	-10710 / 0	N-G	0 / 1982
G-H	-9440 / 0	M-G	-1998 / 0
H-I	-7706 / 0	M-H	0 / 7442
I-J	0 / 52	L-H	0 / 132
Q-B	-9177 / 0	B-P	0 / 5370
K-I	-9177 / 0	L-I	0 / 5370
Q-P	0 / 0		
P-O	0 / 4621		
O-N	0 / 9440		
N-M	0 / 9440		
M-L	0 / 4621		
L-K	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL) = L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/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					
ID:84gOFYESM8s1JmDO6 uSGRyQWjP-gFtTbmTCwgDIzZtDtlj?vB8UXtnf0tOyNely5Qzkz9f					

PLATES (table is in inches)

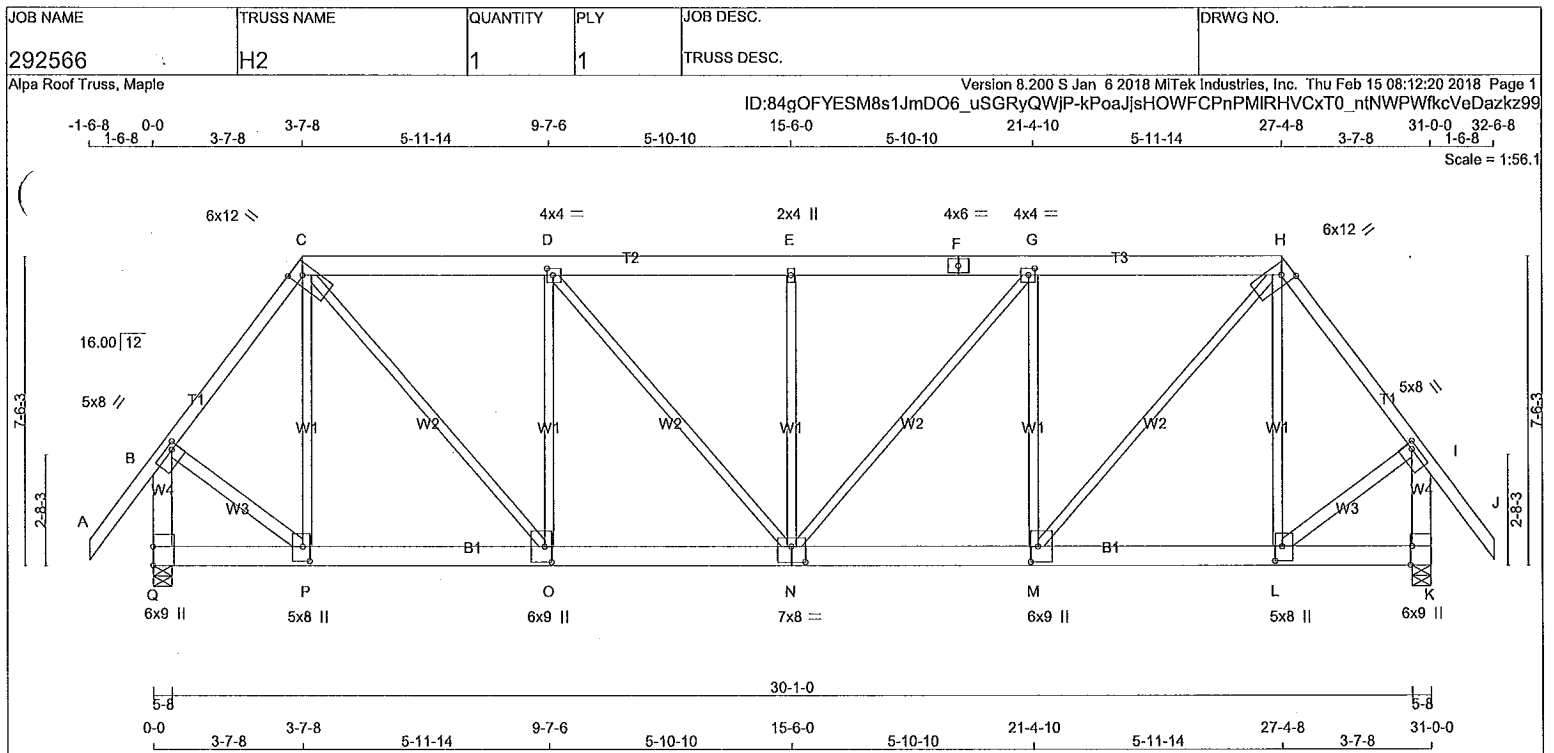
PE	PLATES	W	LEN	Y	X
J	/W-t	MT20	5.0	8.0	1.50 2.00
O	/WW+h	MT20	6.0	12.0	3.25 2.75
D	TMWW-t	MT20	4.0	4.0	2.00 1.75
E	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	4.0	6.0	
G	TMWW-t	MT20	4.0	4.0	2.00 1.75
H	TTWW+h	MT20	6.0	12.0	3.25 2.75
I	TMW-t	MT20	5.0	8.0	1.50 2.00
K	BMV1+t	MT20	6.0	9.0	Edge 0.50
L	BMWW+t	MT20	5.0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

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

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



A-18023047(2)



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

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	TTVW+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	TTVW+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.

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

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

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		MAX. FACTORED		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX	MAX. UNBRACED LENGTH
FR-TO		FROM	TO			FR-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 088-09, CSA 088-14
- 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.

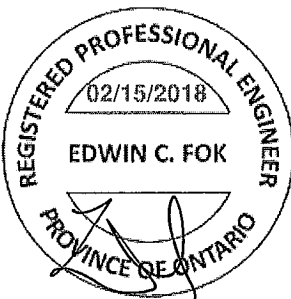
NAIL VALUES		PLATE GRIP(DRY) SHEAR		SECTION	
PLATE	GRIP(DRY)	SHEAR	SECTION	PLI	PLI
(PSI)	(PLI)	(PLI)			
MT20	618	354	1667	788	1987

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)

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-18023046

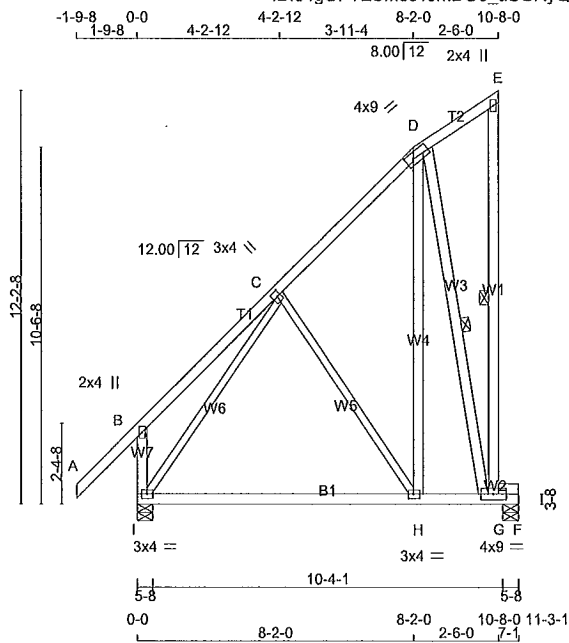
A-18023045 CONTINUED ON PAGE 2

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

ID:84gOFYESM8s1JmDO6_uSGRyQWJP-IXJu549LSUIdhm0ZpAokpPojURNdp3sdN0NSTJkzDx



Scale = 1:68.2

TOTAL WEIGHT = 2 X 84 = 168 lb

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
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	TMV+p	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	BMVWW-I	MT20	4.0	9.0		
H	BMVWW-I	MT20	3.0	4.0	1.50	1.75
I	BMVWW-I	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		
F	498	0	498	0	5-8 (5-7)	1-8
I	689	0	689	0	5-8	1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	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					WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 52	-78.0	-78.0	0.20 (1)	10.00	H-D	0 / 465	0.07 (1)
B-C	0 / 27	-78.0	-78.0	0.22 (1)	10.00	D-G	-570 / 0	0.35 (1)
C-D	-210 / 0	-78.0	-78.0	0.22 (1)	6.25	I-C	-435 / 0	0.45 (1)
D-E	0 / 0	-78.0	-78.0	0.08 (1)	10.00	C-H	-198 / 0	0.22 (1)
G-E	-97 / 0	0.0	0.0	0.08 (1)	6.25			
I-B	-269 / 0	0.0	0.0	0.03 (1)	7.81			
I-H	0 / 242	-18.5	-18.5	0.33 (4)	10.00			
H-G	0 / 136	-18.5	-18.5	0.42 (1)	10.00			
G-F	0 / 0	-18.5	-18.5	0.16 (1)	10.00			

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



DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.38")
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) , SS=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 .

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)

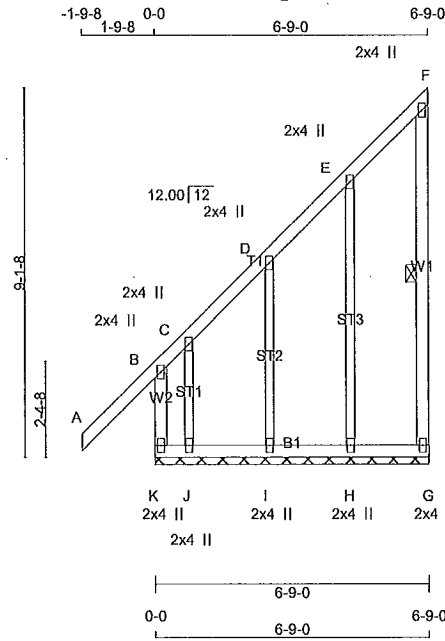
A-18023044

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?qsPL3JK1hmkXP0LUfsUjSMnCkixXeRXmR1CnzKzE3



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	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	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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
K-B	-336 / 0	0.0	0.0 0.04 (1)	7.81	H-E	-165 / 0	0.15 (1)
A-B	0 / 52	-78.0	-78.0 0.20 (1)	10.00	I-D	-161 / 0	0.06 (1)
B-C	-116 / 0	-78.0	-78.0 0.17 (1)	6.25	J-C	0 / 55	0.01 (1)
C-D	-4 / 0	-78.0	-78.0 0.04 (1)	10.00			
D-E	-5 / 0	-78.0	-78.0 0.04 (1)	10.00			
E-F	-9 / 0	-78.0	-78.0 0.04 (1)	10.00			
G-F	-67 / 0	0.0	0.0 0.01 (1)	6.25			
K-J	0 / 5	-18.5	-18.5 0.04 (1)	10.00			
J-I	0 / 7	-18.5	-18.5 0.02 (4)	10.00			
I-H	0 / 3	-18.5	-18.5 0.02 (4)	10.00			
H-G	0 / 0	-18.5	-18.5 0.02 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

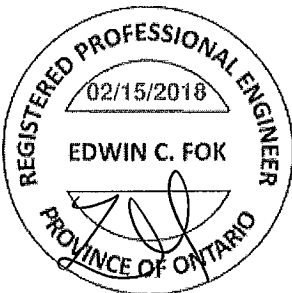
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

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



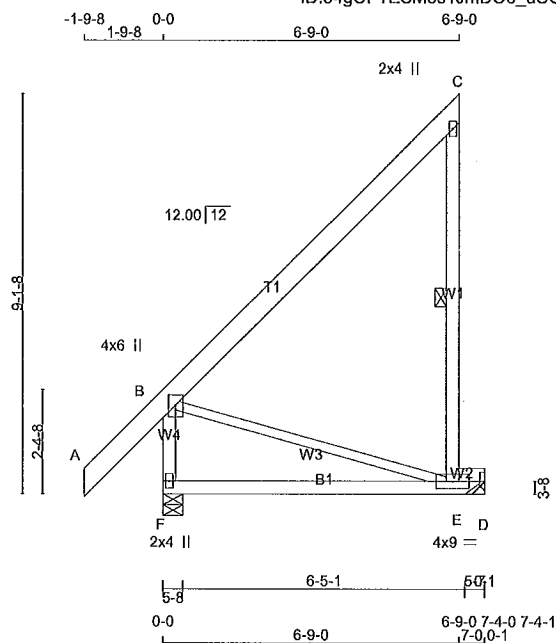
A-18023043

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_ZIBxc0cys?EYESCJInckXrUZ9q_l_7zkzE9



Scale = 1:52.6

TOTAL WEIGHT = 2 X 48 = 96 lb

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT	REQRD
		GROSS REACTION		GROSS REACTION		BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	504	0	504	0	0	5-8	1-8
D	310	0	310	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

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	357	235 / 0	0 / 0	0 / 0	0 / 0	122 / 0	0 / 0
D	222	130 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FACTORED	VERT. LOAD	LC1 MAX	MEMB.	MAX. FACTORED	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)		(LBS)	CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 54	-78.0 -78.0	0.11 (1)	B-E	0 / 0	0.00 (1)	
B-C	0 / 0	-78.0 -78.0	0.30 (1)				
E-C	-263 / 0	0.0 0.0	0.09 (1)				
F-B	-415 / 0	0.0 0.0	0.05 (1)				
F-E	0 / 0	-18.5 -18.5	0.33 (4)				
E-D	0 / 0	-18.5 -18.5	0.10 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
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

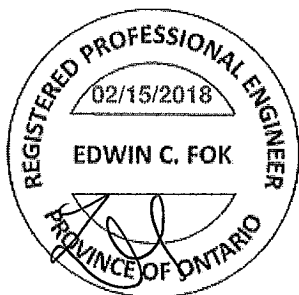
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX
MT20	618	354	1667

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:

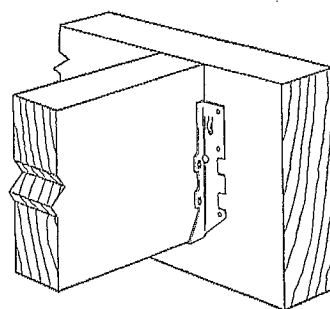
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

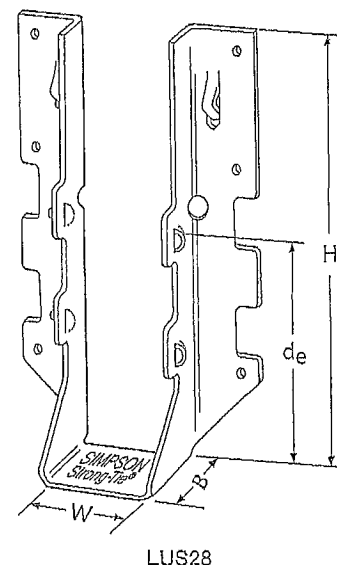
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



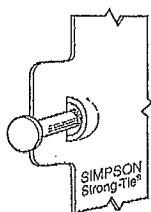
Typical LUS Installation



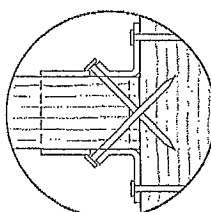
LUS28

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 _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1¼	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	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	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4½	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 11/16	1¼	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4½	8 11/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

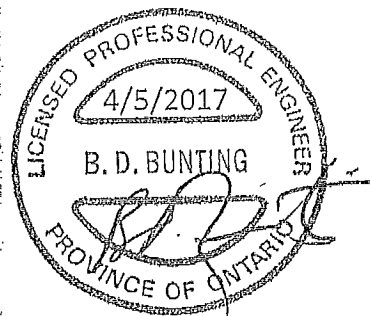
1. d_e is the distance from the seat of the hanger to the highest joist nail.



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



Double Shear Nailing Top View.



LIMIT STATES DESIGN

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

© 2017 Simpson Strong-Tie Company Inc.

T-SPEC/LUS17-3/17 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:

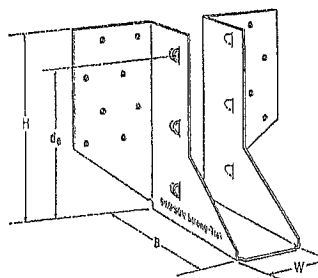
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

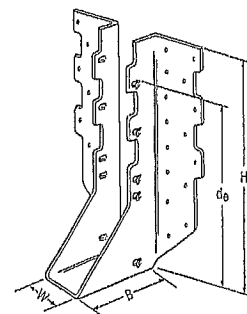
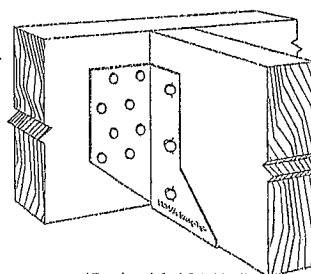
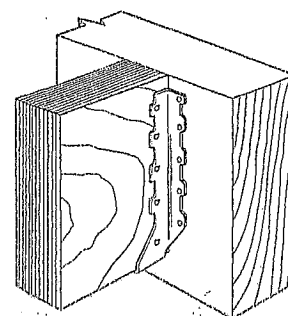
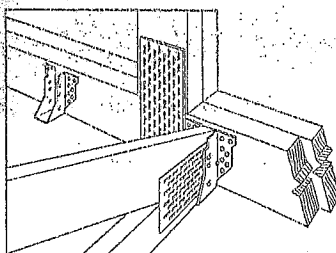
- Use all specified fasteners
- Nails: $16d = 0.162"$ dia. $\times 3\frac{1}{2}"$ long common wire
- Double-shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options

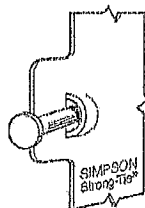


LJS26DS

HUS210
(HUS26, HUS28, similar)Typical LJS26DS
InstallationTypical HUS
InstallationTypical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

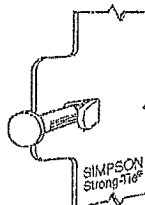
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d_a^1	Face	Joist	D-Fir-L		S-P-F	
								Uplift ($K_D=1.15$) lb.	Normal ($K_D=1.00$) lb.	Uplift ($K_D=1.15$) lb.	Normal ($K_D=1.00$) lb.
LJS26DS	18	1 $\frac{1}{4}$	5	3 $\frac{1}{2}$	4 $\frac{5}{8}$	(16) 16d	(6) 16d	2055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

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

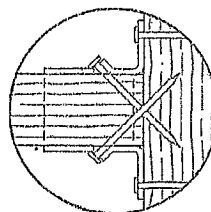


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

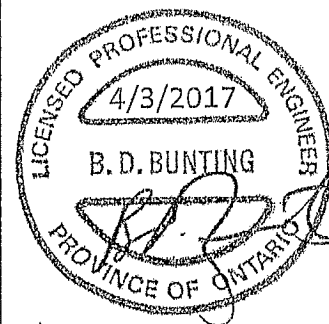
U.S. Patent
5,603,580



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.

© 2017 Simpson Strong-Tie Company Inc.

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:

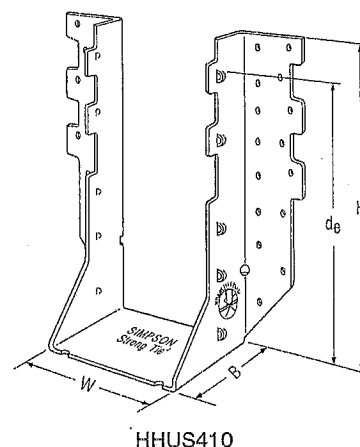
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

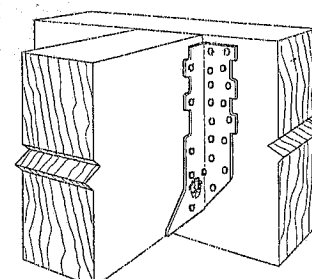
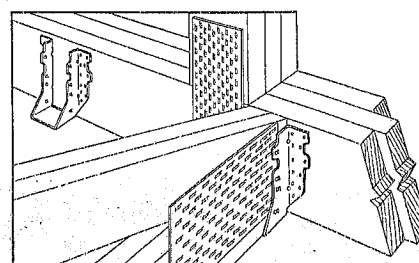
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

- See current catalogue for options

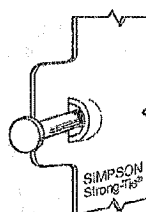


HHUS410



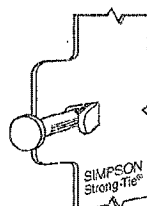
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	dg ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
HHUS26-2	14	3 1/16	5 1/16	3	3 1/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 9/16	7 1/2	3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

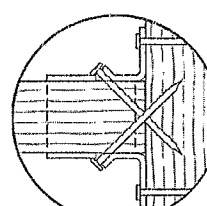


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

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.

© 2017 Simpson Strong-Tie Company Inc.

T-SPECHHUS17 3/17 exp. 6/19

(800) 999-5099
strongtie.com