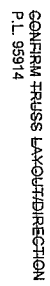


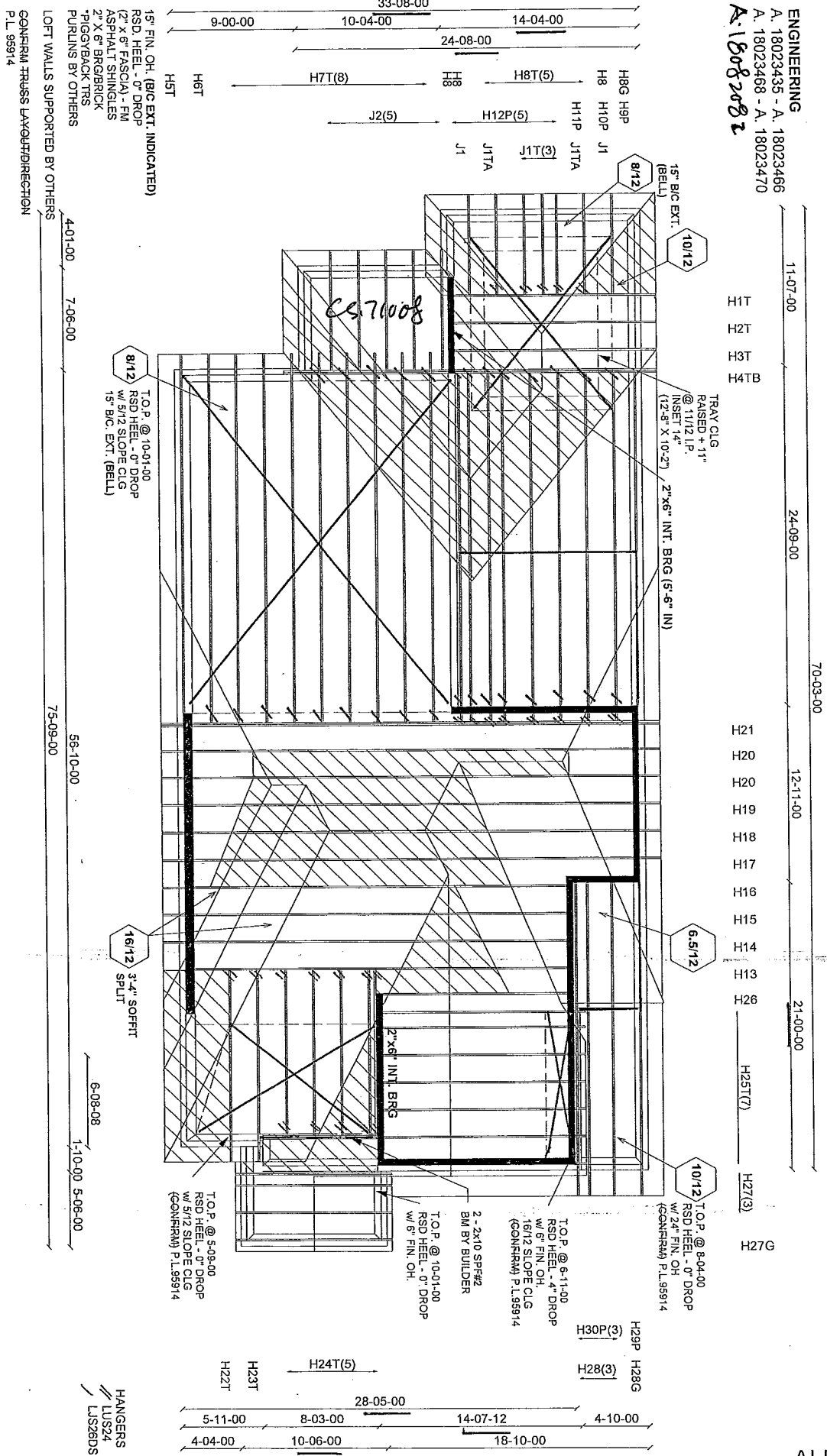
H21
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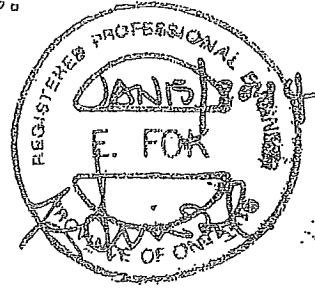
4201 REV2 / A

ENGINEERING
A. 18023435 - A. 18023466
A. 18023468 - A. 18023470
A. 18082082



Stracon Engineering Inc.

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



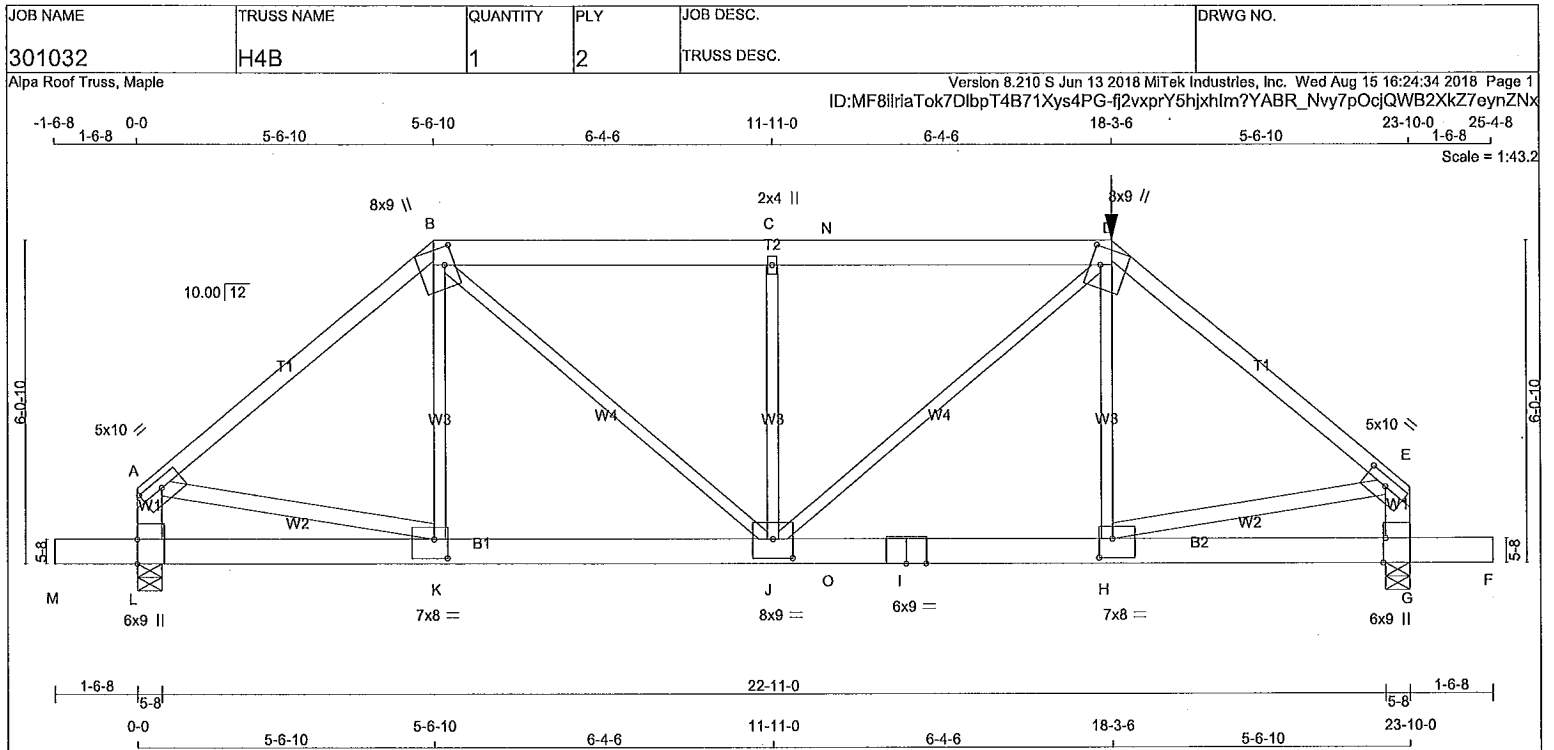
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	1650F 1.5E	SPF
B - D	2x6	DRY	No.2	SPF
D - E	2x4	DRY	1650F 1.5E	SPF
L - A	2x6	DRY	No.2	SPF
G - E	2x6	DRY	No.2	SPF
M - I	2x6	DRY	1650F 1.5E	SPF
I - F	2x6	DRY	1650F 1.5E	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
A - K	2x4	DRY	No.2	SPF
H - E	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 - B	12	TOP
D - E	12	SIDE(59.7)
B - D	12	SIDE(49.5)
L - A	12	TOP
G - E	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
M - I	8	SIDE(329.8)
I - F	8	SIDE(329.8)
WEBS : (0.122"x3") SPIRAL NAILS		
H - D	1	SIDE(94.0)
2x3	1	
2x4	1	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	JT	VERT	IN-SX		IN-SX	
L	8370	0	8370	0	5-8	5-8	
G	8898	0	8898	0	5-8	5-8	

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	5967	3645 / 0	0 / 0	0 / 0	0 / 0	2322 / 0	0 / 0
G	6348	3853 / 0	0 / 0	0 / 0	0 / 0	2495 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.50 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A - B	-8648 / 0	-78.0	-78.0	0.52 (1)	3.63	K - B	0 / 2666	0.33 (1)
B - C	-9493 / 0	-78.0	-78.0	0.26 (1)	3.81	B - J	0 / 3718	0.46 (1)
C - N	-9493 / 0	-78.0	-78.0	0.32 (1)	3.74	J - C	-700 / 0	0.18 (1)
N - D	-9493 / 0	-109.5	-109.5	0.32 (1)	3.74	J - D	0 / 3044	0.38 (1)
D - E	-9296 / 0	-78.0	-78.0	0.57 (1)	3.50	H - D	0 / 3015	0.37 (1)
L - A	-6918 / 0	0.0	0.0	0.25 (1)	5.68	A - K	0 / 6759	0.60 (1)
G - E	-7421 / 0	0.0	0.0	0.27 (1)	5.50	H - E	0 / 7266	0.64 (1)
M - L	0 / 0	-96.5	-96.5	0.03 (1)	10.00			
L - K	0 / 0	-583.4	-583.4	0.50 (1)	10.00			
K - J	0 / 6704	-583.4	-583.4	0.77 (1)	10.00			
J - O	0 / 7210	-583.4	-583.4	0.86 (1)	10.00			
O - I	0 / 7210	-678.2	-678.2	0.86 (1)	10.00			
I - H	0 / 7210	-678.2	-678.2	0.86 (1)	10.00			
H - G	0 / 0	-607.6	-607.6	0.56 (1)	10.00			
G - F	0 / 0	-96.5	-96.5	0.03 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
D	18-3-6	-414	-414	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 7-2-14
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: PARTIAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 10-10-0 OF SPAN MEASURED FROM THE RIGHT.

GIRDER TYPE: CStdGlrder
START DISTANCE = 0-0
START SPAN CARRIED = 25-5-1
END DISTANCE = 23-10-0
END SPAN CARRIED = 25-5-1
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 (0.79")
CALCULATED VERT. DEFL.(LL)= L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL)= L/999 (0.26")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.57/1.00 (D-E:1), BC=0.86/1.00 (H-J:1), WB=0.64/1.00 (E-H:1), SSI=0.72/1.00 (H-J:1)

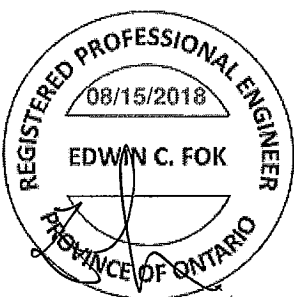
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

A-18082082

CONTINUED ON PAGE 2



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	10.0	2.00	5.00
B	TTWW+m	MT20	8.0	9.0	4.00	2.25
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	8.0	9.0	4.00	2.25
E	TMVW-t	MT20	5.0	10.0	2.00	5.00
G	BMV1+t	MT20	6.0	9.0	Edge	0.50
H	BMVW-t	MT20	7.0	8.0	4.25	3.00
I	BS-t	MT20	6.0	9.0		
J	BMVWW-t	MT20	8.0	9.0	4.25	4.50
K	BMVW-t	MT20	7.0	8.0	4.25	3.00
L	BMV1+t	MT20	6.0	9.0	Edge	

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 414.1 lbs FACTORED DOWN AT 18-3-6 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES

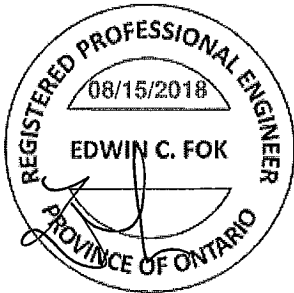
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (A) (INPUT = 0.90)
JSI METAL= 0.94 (D) (INPUT = 1.00)

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



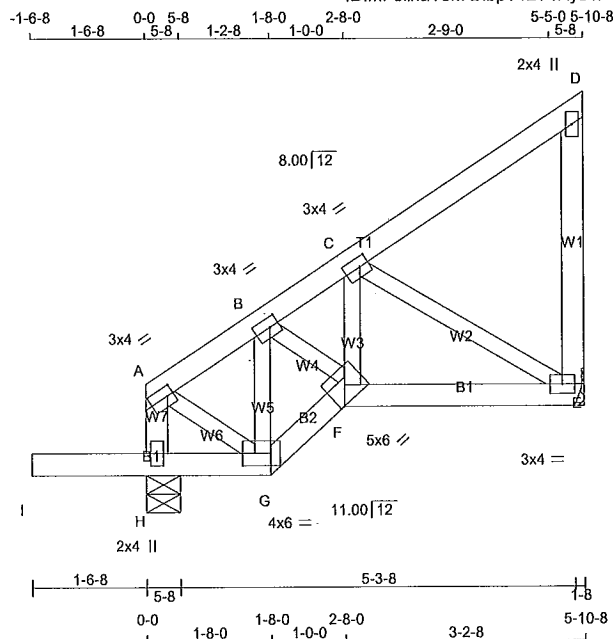
A-18082082(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292590	J1T	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:31.0

TOTAL WEIGHT = 3 X 30 = 89 lb

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

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	BMVW1-t	MT20	3.0	4.0	1.50	1.50
F	BBWW-t	MT20	5.0	6.0	2.00	4.50
G	BBWW-t	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0	1.50	1.00

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

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				W E B S			
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		
H-A	-219 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 149
A-B	-159 / 0	-78.0	-78.0	0.03 (1)	6.25	G-B	-223 / 0
B-C	-250 / 0	-78.0	-78.0	0.09 (1)	6.25	B-F	0 / 154
C-D	-12 / 0	-78.0	-78.0	0.09 (1)	6.25	F-C	0 / 52
E-D	-100 / 0	0.0	0.0	0.03 (1)	7.81	C-E	-268 / 0
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00		
H-G	-1 / 0	-18.5	-18.5	0.16 (1)	10.00		
G-F	0 / 162	-18.5	-18.5	0.03 (1)	10.00		
F-E	0 / 231	-18.5	-18.5	0.08 (4)	10.00		

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/626 (0.03")

CSI: TC=0.09/1.00 (B-C:1), BC=0.16/1.00 (G-H:1), WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (A) (INPUT = 0.90)
JSI METAL= 0.09 (E) (INPUT = 1.00)

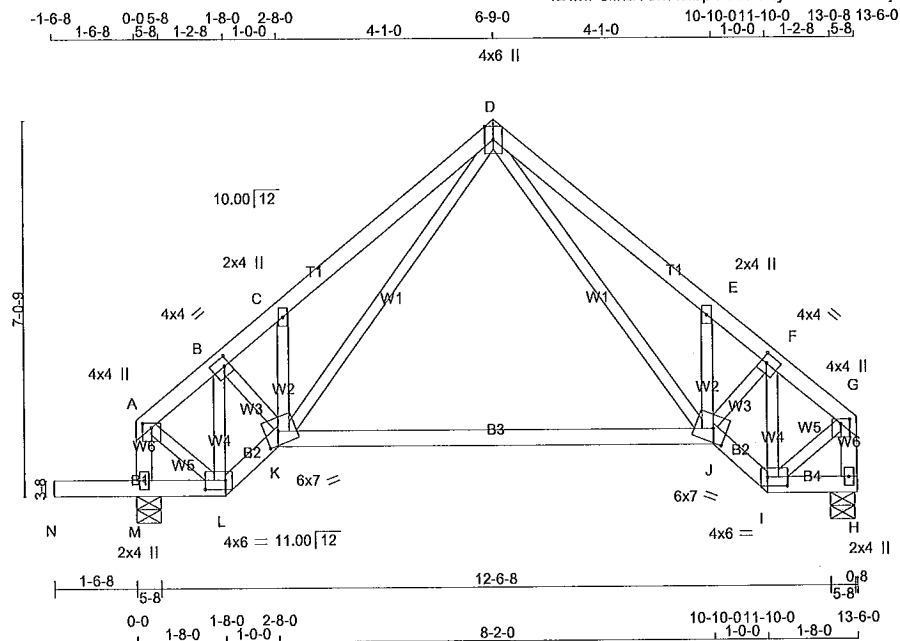
A-18023469



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292590	H3T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 64 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
M - A	2x4	DRY	No.2	SPF	
H - G	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
L - K	2x4	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	
J - I	2x4	DRY	No.2	SPF	
I - H	2x4	DRY	No.2	SPF	
BS	2x3	DRY	No.2	SPF	
PT					

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	4.0	1.00	2.00
B	TMVW-t	MT20	4.0	4.0	2.00	1.25
C	TMVW+w	MT20	2.0	4.0		
D	TTVW+p	MT20	4.0	6.0	Edge	
E	TMVW+w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0	2.00	1.25
G	TMVW+p	MT20	4.0	4.0	1.00	2.00
H	BMV1+p	MT20	2.0	4.0		
I	BBVW-t	MT20	4.0	6.0	2.00	4.50
J	BBVW-w	MT20	6.0	7.0	3.00	3.00
K	BBVW-w	MT20	6.0	7.0	3.00	3.00
L	BBVW-t	MT20	4.0	6.0	2.00	4.50
M	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
H	643	0	643	0
M	808	0	808	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
H	458	280 / 0	0 / 0	0 / 0	0 / 0	179 / 0	0 / 0
M	576	352 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	W E B S	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO									
A-B	-454 / 0	-78.0	-78.0	0.03 (1)	6.25	D-J	0 / 484	0.11 (1)	
B-C	-707 / 0	-78.0	-78.0	0.11 (1)	6.25	J-E	-331 / 0	0.06 (1)	
C-D	-791 / 0	-78.0	-78.0	0.16 (1)	6.25	I-F	0 / 437	0.10 (1)	
D-E	-829 / 0	-78.0	-78.0	0.16 (1)	6.25	I-F	-545 / 0	0.09 (1)	
E-F	-745 / 0	-78.0	-78.0	0.11 (1)	6.25	K-D	0 / 434	0.10 (1)	
F-G	-500 / 0	-78.0	-78.0	0.04 (1)	6.25	K-C	-332 / 0	0.06 (1)	
M-A	-575 / 0	0.0	0.0	0.06 (1)	7.81	B-K	0 / 449	0.10 (1)	
H-G	-627 / 0	0.0	0.0	0.06 (1)	7.81	L-B	-559 / 0	0.09 (1)	
						A-L	0 / 410	0.09 (1)	
						I-G	0 / 452	0.10 (1)	
N-M	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
M-L	-1 / 0	-18.5	-18.5	0.12 (1)	10.00				
L-K	0 / 436	-18.5	-18.5	0.07 (1)	10.00				
K-J	0 / 344	-18.5	-18.5	0.39 (4)	10.00				
J-I	0 / 484	-18.5	-18.5	0.08 (1)	10.00				
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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 (0.45")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL)= L/709 (0.23")

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

CSI: TC=0.16/1.00 (D-E:1), BC=0.39/1.00 (J-K:4), WB=0.11/1.00 (D-J:1), SSI=0.12/1.00 (M-N:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

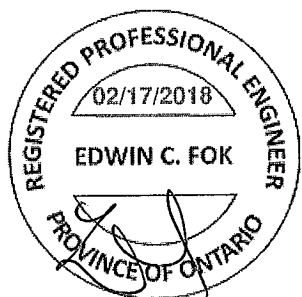
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (K) (INPUT = 0.90)
JSI METAL= 0.18 (E) (INPUT = 1.00)

A-18023466

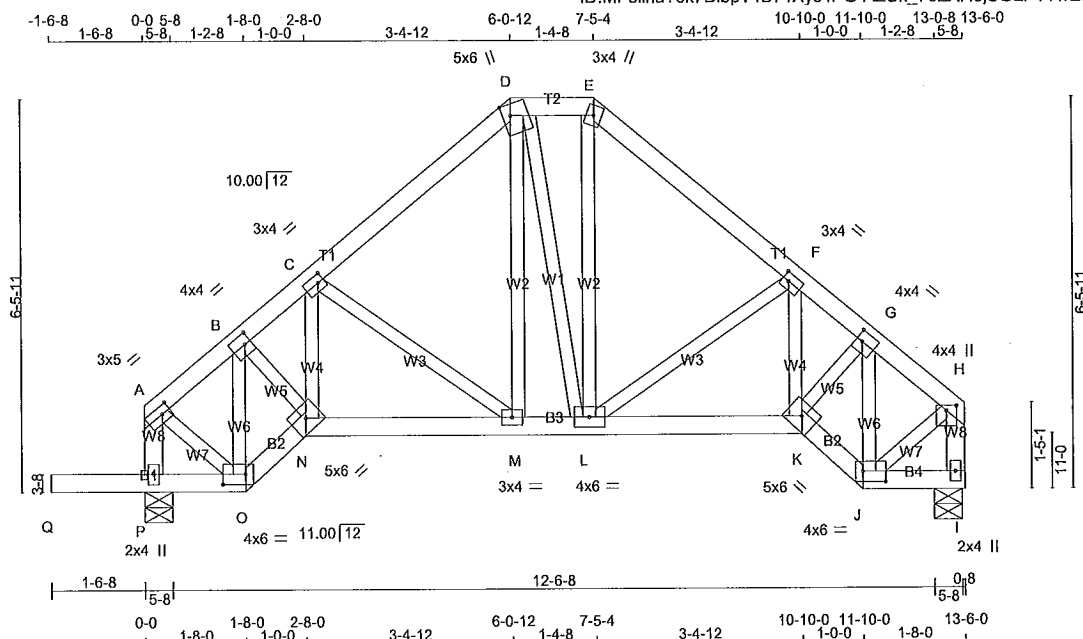
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292590	H2T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8ilriaTok7DlbpT4B71Xys4PG-AZUk_7eZXH3JSGLP?TwEsTTDypLG90e_pVgs9zkF77



Scale = 1:38.0

TOTAL WEIGHT = 72 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
P - A	2x4	DRY	No.2
I - H	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2
K - J	2x4	DRY	No.2
A - EBS	2x3	DRY	No.2
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	3.0	5.0 1.50 1.75
B	TMVW-t	MT20	4.0	4.0 2.00 1.25
C	TMVW-t	MT20	3.0	4.0 1.50 1.25
D	TTW+m	MT20	5.0	6.0 2.25 1.50
E	TTW+m	MT20	3.0	4.0
F	TMVW-t	MT20	3.0	4.0 1.50 1.25
G	TMVW-t	MT20	4.0	4.0 2.00 1.25
H	TMVW-p	MT20	4.0	4.0 1.00 2.00
I	BMV1+p	MT20	2.0	4.0
J	BBVW-I	MT20	4.0	6.0 2.00 4.50
K	BBVW-h	MT20	5.0	6.0
L	BMVWV-t	MT20	4.0	6.0
M	BMVW-t	MT20	3.0	4.0
N	BBVW-h	MT20	5.0	6.0
O	BBVW-I	MT20	4.0	6.0 2.00 4.50
P	BMV1+p	MT20	2.0	4.0

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	643	0	643	0	0	5-8	1-8		
P	808	0	808	0	0	5-8	1-8		

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS					
JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	458	280 / 0	0 / 0	0 / 0	0 / 0	179 / 0	0 / 0
P	576	352 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
A-B	-454 / 0	-78.0 -78.0	0.03 (1)	6.25	O-B	-559 / 0	0.09 (1)
B-C	-706 / 0	-78.0 -78.0	0.08 (1)	6.25	B-N	0 / 419	0.09 (1)
C-D	-539 / 0	-78.0 -78.0	0.10 (1)	6.25	N-C	0 / 35	0.01 (4)
D-E	-409 / 0	-78.0 -78.0	0.02 (1)	6.25	C-M	-215 / 0	0.06 (1)
E-F	-544 / 0	-78.0 -78.0	0.10 (1)	6.25	M-D	0 / 161	0.04 (1)
F-G	-744 / 0	-78.0 -78.0	0.08 (1)	6.25	D-L	0 / 17	0.00 (1)
G-H	-500 / 0	-78.0 -78.0	0.04 (1)	6.25	L-E	0 / 181	0.04 (1)
P-A	-575 / 0	0.0 0.0	0.06 (1)	7.81	L-F	-244 / 0	0.07 (1)
I-H	-627 / 0	0.0 0.0	0.06 (1)	7.81	K-F	0 / 49	0.02 (4)
					K-G	0 / 409	0.09 (1)
Q-P	0 / 0	-96.5 -96.5	0.16 (1)	10.00	J-G	-545 / 0	0.09 (1)
P-O	-1 / 0	-18.5 -18.5	0.12 (1)	10.00	A-O	0 / 410	0.09 (1)
O-N	0 / 436	-18.5 -18.5	0.07 (1)	10.00	J-H	0 / 451	0.10 (1)
N-M	0 / 575	-18.5 -18.5	0.12 (1)	10.00			
M-L	0 / 405	-18.5 -18.5	0.10 (1)	10.00			
L-K	0 / 603	-18.5 -18.5	0.13 (1)	10.00			
K-J	0 / 484	-18.5 -18.5	0.08 (1)	10.00			
J-I	0 / 0	-18.5 -18.5	0.02 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
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/829 (0.02")

CSI: TC=0.10/1.00 (E-F:1), BC=0.16/1.00 (P-Q:1), WB=0.10/1.00 (H-J:1), SSI=0.12/1.00 (P-Q: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.

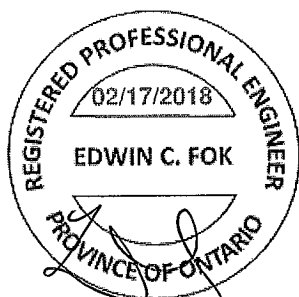
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

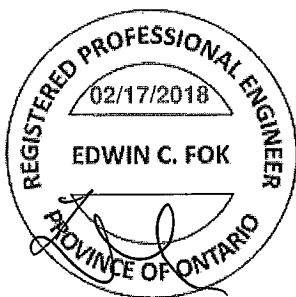
PLATE PLACEMENT TOL. = 0.250 Inches

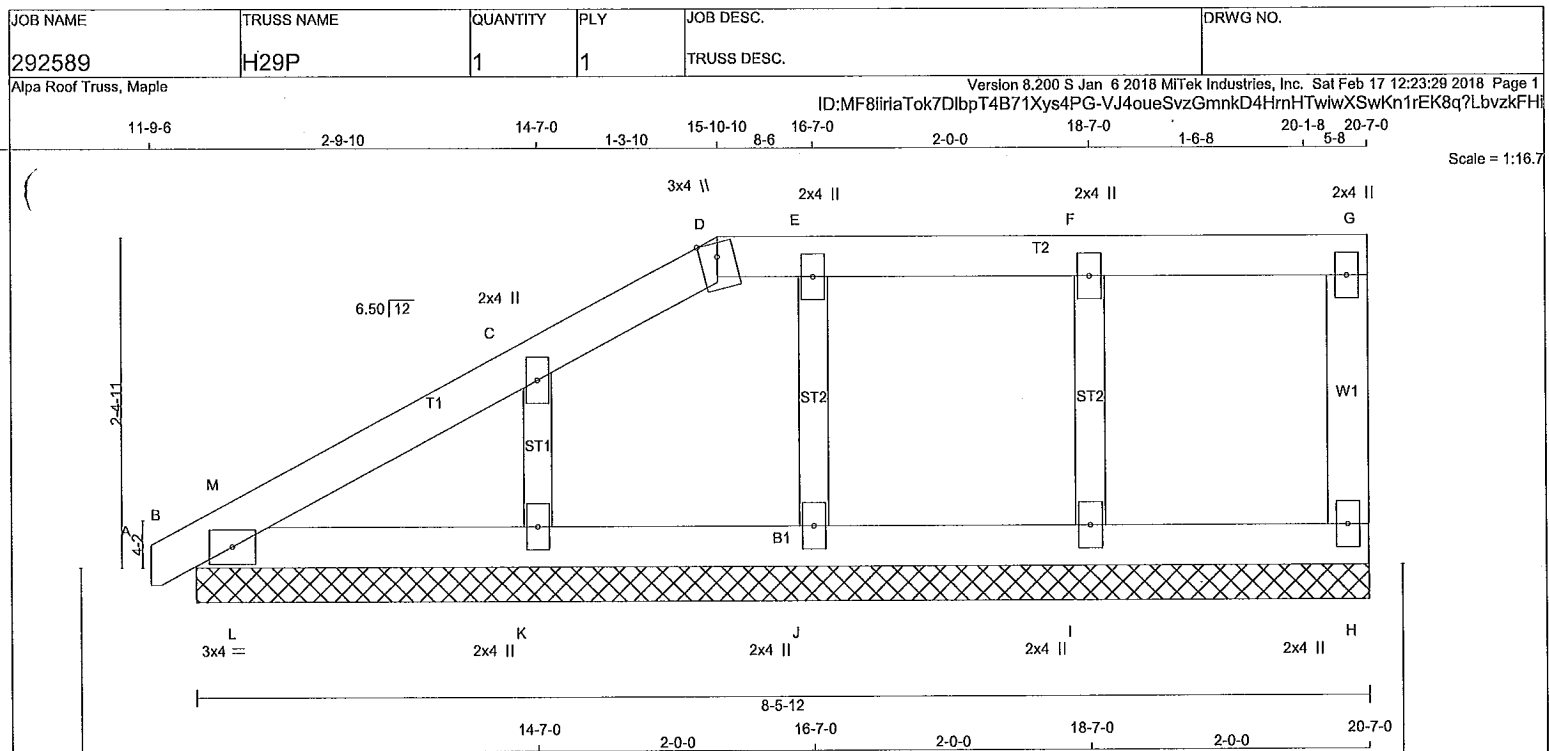
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (A) (INPUT = 0.90)
JSI METAL= 0.15 (A) (INPUT = 1.00)

A-18023465







LUMBER				
N. L. G. A. RULES	SIZE	DRY	LUMBER	DESCR.
CHORDS				
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
B - H	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
GABLE STUDS SPACED AT 2-0-0 OC.				

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
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)

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=0.06/1.00 (C-D:1), BC=0.03/1.00 (B-L:1), WB=0.03/1.00 (F-I:1), SSI=0.07/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

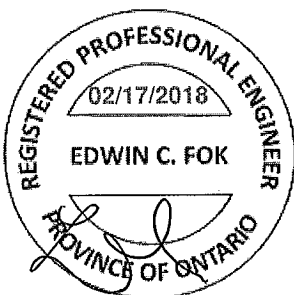
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.11 (C) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB-I	MT20	3.0	4.0	
C, E, F					
C	TMW+w	MT20	2.0	4.0	Edge
D	TT+m	MT20	3.0	4.0	
G	TMV+p	MT20	2.0	4.0	
H	BMV1+p	MT20	2.0	4.0	
I, J, K					
I	BMW1+w	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	FACTORED VERT. LOAD LC1 MAX (LC) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	FACTORED VERT. LOAD LC1 MAX (LC) (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0/6	-78.0	-78.0 0.01 (1)	10.00	I-F	-167/0	0.03 (1)
B-M	-18/0	-78.0	-78.0 0.01 (4)	6.25	J-E	-160/0	0.02 (1)
M-C	0/1	-78.0	-78.0 0.06 (1)	10.00	K-C	-180/0	0.03 (1)
C-D	-14/0	-78.0	-78.0 0.06 (1)	6.25	L-M	-58/3	0.00 (1)
D-E	0/0	-78.0	-78.0 0.05 (1)	10.00			
E-F	0/0	-78.0	-78.0 0.05 (1)	10.00			
F-G	0/0	-78.0	-78.0 0.04 (1)	10.00			
H-G	-63/0	0.0	0.0 0.01 (1)	7.81			
B-L	0/9	-18.5	-18.5 0.03 (1)	10.00			
L-K	0/9	-18.5	-18.5 0.03 (1)	10.00			
K-J	0/0	-18.5	-18.5 0.03 (4)	10.00			
J-I	0/0	-18.5	-18.5 0.02 (4)	10.00			
I-H	0/0	-18.5	-18.5 0.02 (4)	10.00			

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



A-18023462

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H28G	1	1	TRUSS DESC.	

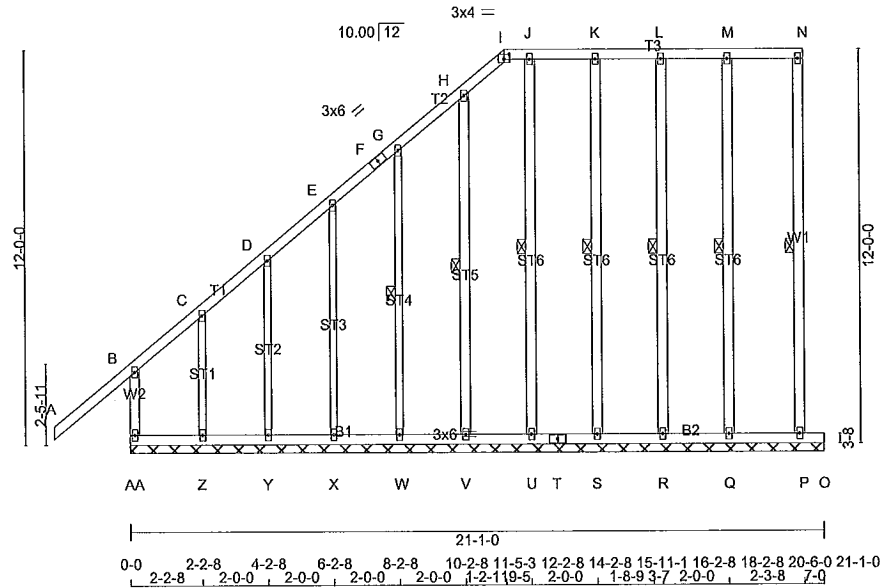
Alpa Roof Truss, Maple

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2-3-8 0-0-5-8 2-2-8 4-2-8 6-2-8 8-2-8 10-2-8 11-5-3 11-9-6 12-2-8 14-2-8 15-11-1 16-2-8 18-2-8 20-1-8 20-6-0
2-3-8 5-8 1-9-0 2-0-0 2-0-0 2-0-0 2-0-0 1-2-11 4-3 5-2 2-0-0 1-8-9 3-7 2-0-0 1-11-0 4-8

Scale = 1:70.2



TOTAL WEIGHT = 155 lb

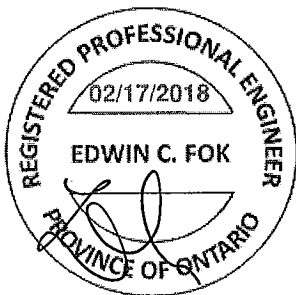
LUMBER					DESCR.				
N. L. G. A. RULES									
CHORDS	SIZE		LUMBER						
A - F	2x4	DRY	No.2		SPF				
F - I	2x4	DRY	No.2		SPF				
P - N	2x4	DRY	No.2		SPF				
AA- B	2x4	DRY	No.2		SPF				
I - N	2x4	DRY	No.2		SPF				
AA- T	2x4	DRY	No.2		SPF				
T - O	2x4	DRY	No.2		SPF				
ALL WEBS					SPF				
F - T	2x3	DRY	No.2		SPF				
X - D	2x3	DRY	No.2		SPF				
Y - D	2x3	DRY	No.2		SPF				
Z - C	2x3	DRY	No.2		SPF				
ALL GABLE WEBS					SPF				
EXCEPT	2x4	DRY	No.2		SPF				
ST6	2x3	DRY	No.2		SPF				
ST7	2x3	DRY	No.2		SPF				
ST8	2x3	DRY	No.2		SPF				
ST9	2x3	DRY	No.2		SPF				

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C, D, E, G, H, J, K, L, M					
C	TMW+w	MT20	2.0	4.0	
F	TS-t	MT20	3.0	6.0	
I	TT-t	MT20	3.0	4.0	1.75 2.00
N	TMV+p	MT20	2.0	4.0	
P	BMV1+p	MT20	2.0	4.0	
Q, R, S, U, V, W, X, Y, Z					
Q	BMW1+w	MT20	2.0	4.0	
T	BS-t	MT20	3.0	6.0	
AA	BMV1+p	MT20	2.0	4.0	

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



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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

FOR SECTION I-N, MAX. PURLIN SPACING = 2.00 FT.

FOR OTHER SECTIONS, 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 N-P, M-Q, L-R, K-S, J-U, H-V, G-W.

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 LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO	
A-B	0/60	-78.0	-78.0 0.31 (1)	Q-M	-204/0
B-C	-72/0	-78.0	-78.0 0.25 (1)	R-L	-165/0
C-D	0/4	-78.0	-78.0 0.05 (1)	S-K	-171/0
D-E	-9/0	-78.0	-78.0 0.05 (1)	U-J	-173/0
E-F	-4/0	-78.0	-78.0 0.03 (1)	V-H	-161/0
F-G	-4/0	-78.0	-78.0 0.03 (1)	W-G	-152/0
G-H	0/0	-78.0	-78.0 0.04 (1)	X-E	-150/0
H-I	-20/0	-78.0	-78.0 0.04 (1)	Y-D	-181/0
P-N	-83/0	0.0	0.0 0.01 (1)	Z-C	-42/0
AA-B	-370/0	0.0	0.0 0.08 (1)		
I-J	0/1	-85.5	-85.5 0.04 (1)		
J-K	0/0	-85.5	-85.5 0.04 (1)		
K-L	0/0	-85.5	-85.5 0.04 (1)		
L-M	0/0	-85.5	-85.5 0.05 (1)		
M-N	0/0	-85.5	-85.5 0.05 (1)		
AA-Z	0/9	-18.5	-18.5 0.08 (1)		
Z-Y	0/8	-18.5	-18.5 0.02 (4)		
Y-X	0/5	-18.5	-18.5 0.02 (4)		
X-W	0/3	-18.5	-18.5 0.01 (4)		
W-V	0/2	-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 0.01 (4)		
R-Q	0/0	-18.5	-18.5 0.02 (4)		
Q-P	0/0	-18.5	-18.5 0.02 (4)		
P-O	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 PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

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

CSI: TC=0.31/1.00 (A-B:1), BC=0.08/1.00 (Z-AA:1), WB=0.16/1.00 (E-X:1), SS=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

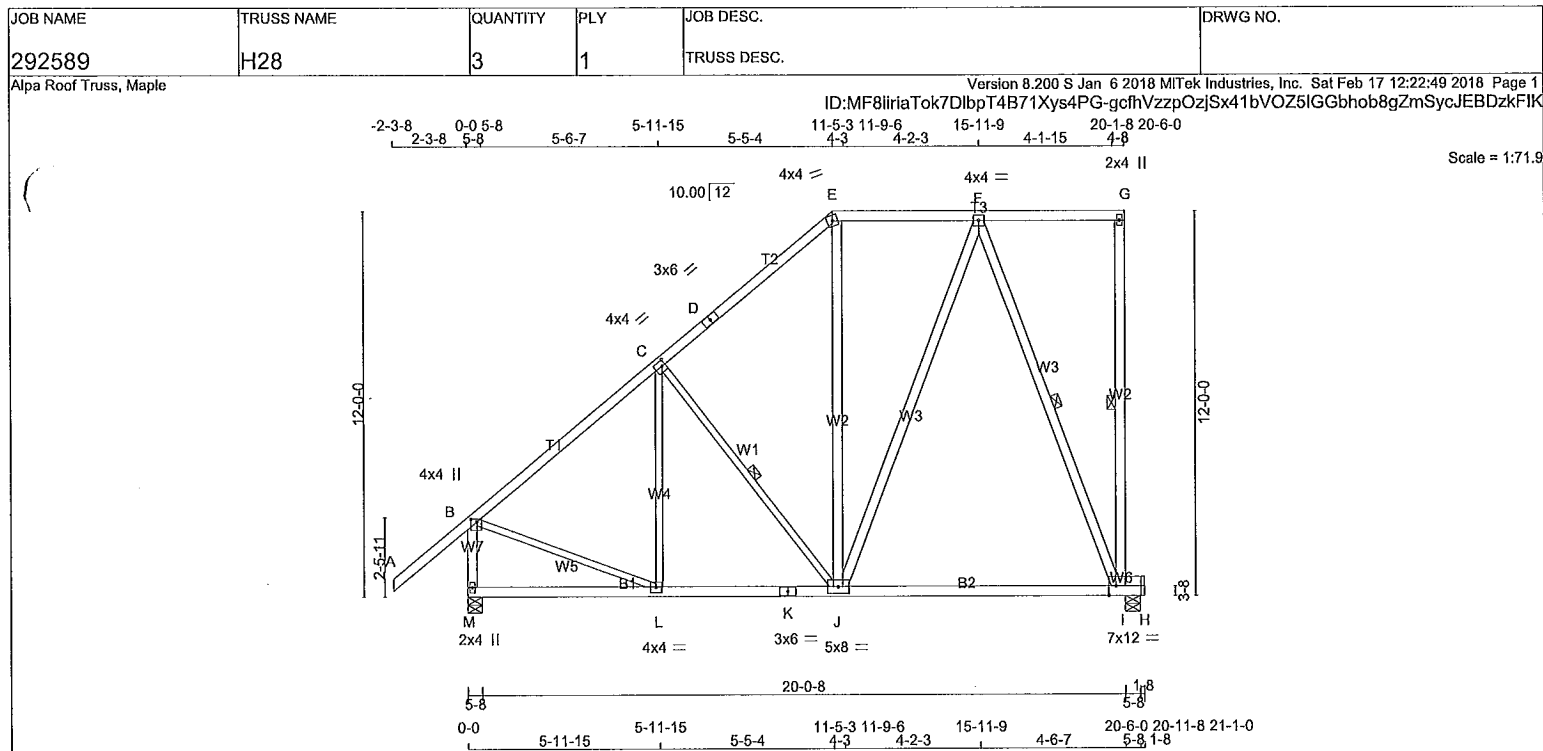
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (I) (INPUT = 0.90)
JSI METAL= 0.20 (B) (INPUT = 1.00)

A-18023461

CONTINUED ON PAGE 2



TOTAL WEIGHT = 3 X 129 = 388 lb

LUMBER				LUMBER		DESCR.
N. L. G. A. RULES	CHORDS	SIZE	DRY	No.2		
A - D	2x4	DRY	No.2	SPF		
D - E	2x4	DRY	No.2	SPF		
I - G	2x4	DRY	No.2	SPF		
M - B	2x4	DRY	No.2	SPF		
E - G	2x4	DRY	No.2	SPF		
M - K	2x4	DRY	No.2	SPF		
K - H	2x4	DRY	No.2	SPF		
I - H	2x4	DRY	No.2	SPF		
A' - T	2x3	DRY	No.2	SPF		
J - F	2x4	DRY	No.2	SPF		
F - I	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	4.0	1.00	2.25
C	TMWW-t	MT20	4.0	4.0	2.00	1.25
D	TS-t	MT20	3.0	6.0		
E	TTW-m	MT20	4.0	4.0		
F	TMWW-t	MT20	4.0	4.0		
G	TMV+p	MT20	2.0	4.0		
I	BMVWW1-t	MT20	7.0	12.0	Edge	2.75
J	BMVWW-t	MT20	5.0	8.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0		
M	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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
I	1098	0	1098	0	0	5-8	1-8
M	1190	0	1190	0	0	5-8	1-12

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
I	787	455 / 0	0 / 0	0 / 0	0 / 0	333 / 0
M	846	530 / 0	0 / 0	0 / 0	0 / 0	315 / 0

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

BRACING

FOR SECTION E-G, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.01 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-I, C-J, F-I.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LBS)	MEMB.	FORCE (LBS)	MAX. FACTORED	MAX. FACTORED
FR-TO		FROM	TO	FR-TO		CS1 (LBS)	CS1 (LBS)
A-B	0 / 60	-78.0	-78.0	0.31 (1)	10.00	L-C	-134 / 18
B-C	-813 / 0	-78.0	-78.0	0.49 (1)	6.01	C-J	-326 / 0
C-D	-624 / 0	-78.0	-78.0	0.47 (1)	6.25	B-L	0 / 691
D-E	-624 / 0	-78.0	-78.0	0.47 (1)	6.25	J-E	0 / 85
I-G	-146 / 0	0.0	0.0	0.12 (1)	6.25	J-F	0 / 371
M-B	-1141 / 0	0.0	0.0	0.15 (1)	7.44	F-I	-888 / 0
E-F	-450 / 0	-85.5	-85.5	0.30 (1)	2.00		
F-G	0 / 0	-85.5	-85.5	0.29 (1)	10.00		
M-L	0 / 0	-18.5	-18.5	0.15 (4)	10.00		
L-K	0 / 651	-18.5	-18.5	0.37 (4)	10.00		
K-J	0 / 651	-18.5	-18.5	0.37 (4)	10.00		
J-I	0 / 321	-18.5	-18.5	0.34 (4)	10.00		
I-H	0 / 0	-96.5	-96.5	0.01 (1)	10.00		

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.68")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.68")
CALCULATED VERT. DEFL.(TL)= L/999 (0.18")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.49/1.00 (B-C:1), BC=0.37/1.00 (J-L:4), WB=0.83/1.00 (F-I:1), SSI=0.19/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

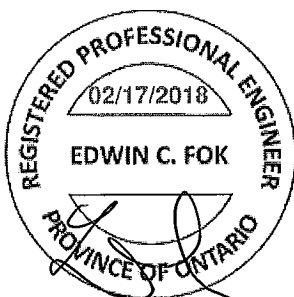
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.33 (K) (INPUT = 1.00)

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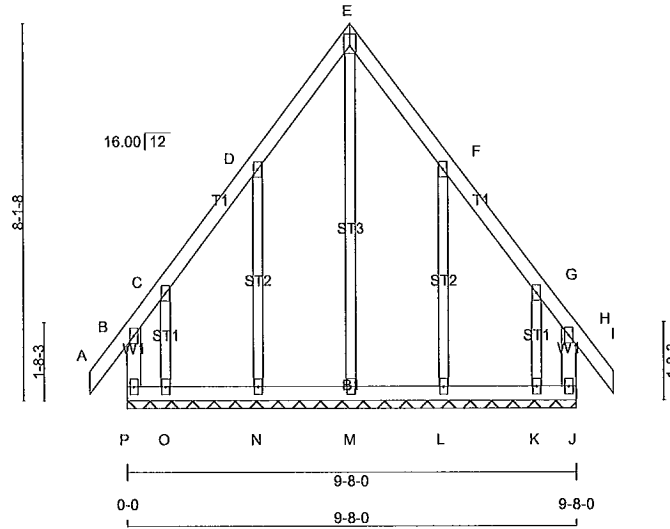
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H27G	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8iiriaTok7DlbpT4B71Xys4PG-3aBFj6mjiZFVZsyaB5HnOgneutTzxNtBiqUCSzkFJt

-9-8 0-0 5-8 4-4-8 4-10-0 4-4-8 9-2-8 9-8-0 10-5-8
9-8 5-8 3x5 II 5-8 9-8

Scale = 1:49.7



TOTAL WEIGHT = 54 lb [M]

LUMBER				
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	
CHORDS				
P - B	2x4 DRY	No.2	SPF	
A - E	2x4 DRY	No.2	SPF	
E - I	2x4 DRY	No.2	SPF	
J - H	2x4 DRY	No.2	SPF	
P - J	2x4 DRY	No.2	SPF	
ALL WEBS	2x3 DRY	No.2	SPF	
ALL GABLE WEBS	2x3 DRY	No.2	SPF	
D ⁺ 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, F, G				
C - TMW+w	MT20	2.0	4.0	
E - TTW+p	MT20	3.0	5.0	2.00 Edge
H - TMV+p	MT20	2.0	4.0	
J - BMV1+p	MT20	2.0	4.0	
K, L, M, N, O				
K - BMW1+w	MT20	2.0	4.0	
P - BMV1+p	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.				

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
P-B	-136 / 0	0.0	0.0 0.02 (1)	7.81	M-E	-154 / 0	0.18 (1)		
A-B	0 / 28	-78.0	-78.0 0.05 (1)	10.00	N-D	-164 / 0	0.07 (1)		
B-C	-36 / 0	-78.0	-78.0 0.04 (1)	6.25	O-C	-71 / 0	0.01 (1)		
C-D	-6 / 0	-78.0	-78.0 0.04 (1)	10.00	L-F	-164 / 0	0.07 (1)		
D-E	-7 / 0	-78.0	-78.0 0.04 (1)	10.00	K-G	-71 / 0	0.01 (1)		
E-F	-7 / 0	-78.0	-78.0 0.04 (1)	10.00					
F-G	-6 / 0	-78.0	-78.0 0.04 (1)	10.00					
G-H	-36 / 0	-78.0	-78.0 0.04 (1)	6.25					
H-I	0 / 28	-78.0	-78.0 0.05 (1)	10.00					
J-H	-136 / 0	0.0	0.0 0.02 (1)	7.81					
P-O	0 / 11	-18.5	-18.5 0.02 (1)	10.00					
O-N	0 / 7	-18.5	-18.5 0.02 (4)	10.00					
N-M	0 / 3	-18.5	-18.5 0.02 (4)	10.00					
M-L	0 / 3	-18.5	-18.5 0.02 (4)	10.00					
L-K	0 / 7	-18.5	-18.5 0.02 (4)	10.00					
K-J	0 / 11	-18.5	-18.5 0.02 (1)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

(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=0.05/1.00 (H-I:1), BC=0.02/1.00 (J-K:1), WB=0.18/1.00 (E-M:1), SSI=0.04/1.00 (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.

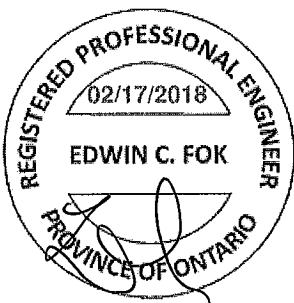
NAIL VALUES				
PLATE	GRIP(DRY)	SHEAR	SECTION	
(PSI)	(PLI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	MAX MIN	
MT20	618 354	1667 788	1987 1656	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (E) (INPUT = 0.90)
JSI METAL= 0.08 (F) (INPUT = 1.00)

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



A-18023459

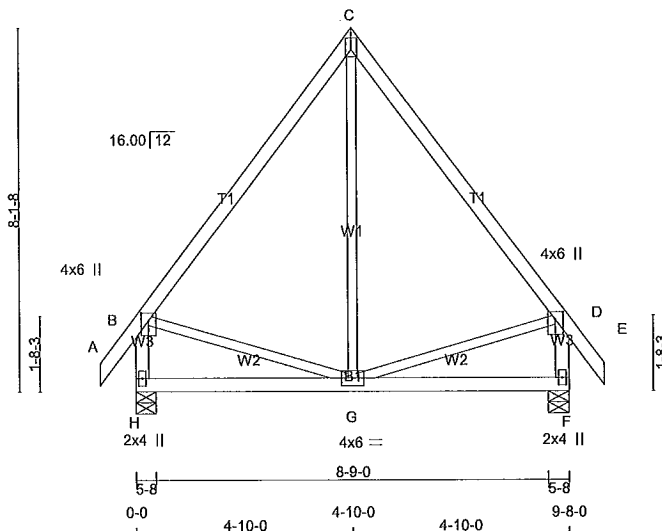
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H27	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 12:21:04 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-FQp_T3hy7JVMrxVQrqATY7QJFTpTZGB_omNA?pzKFJz

9-8 0-0 5-8 4-4-8 4-10-0 4-4-8 9-2-8 9-8-0 10-5-8
9-8 5-8 3x5 II 5-8 9-8

Scale = 1:51.6



TOTAL WEIGHT = 3 X 50 = 149 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 - B	2x4	DRY	No.2	SPF
F - D	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
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		
G	BMVWW-t	MT20	4.0	6.0		
H	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
H	537	0	537	0	0	5-8	1-8	1-8	1-8
F	537	0	537	0	0	5-8	1-8	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	381	241 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0
F	381	241 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 28	-78.0	-78.0 0.05 (1)	10.00	G-C	0 / 90	0.03 (4)
B-C	-254 / 0	-78.0	-78.0 0.23 (1)	6.25	B-G	0 / 158	0.04 (1)
C-D	-254 / 0	-78.0	-78.0 0.23 (1)	6.25	G-D	0 / 158	0.04 (1)
D-E	0 / 28	-78.0	-78.0 0.05 (1)	10.00			
H-B	-503 / 0	0.0	0.0 0.05 (1)	7.81			
F-D	-503 / 0	0.0	0.0 0.05 (1)	7.81			
H-G	0 / 0	-18.5	-18.5 0.12 (4)	10.00			
G-F	0 / 0	-18.5	-18.5 0.12 (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) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.23/1.00 (B-C:1), BC=0.12/1.00 (G-H:4), WB=0.04/1.00 (D-G:1), SSI=0.09/1.00 (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.

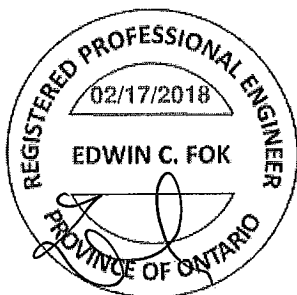
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (B) (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

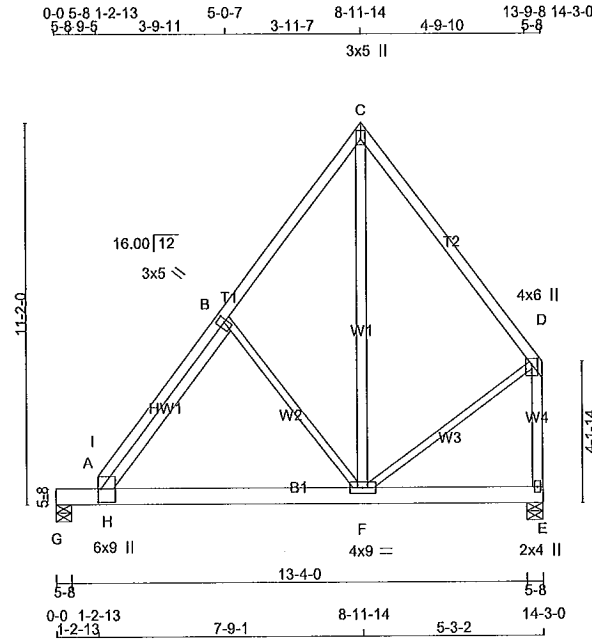


A-18023458

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H26	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8ilriaTok7DlbpT4B71Xys4PG-IUeNvIGNbfyTWPIVKGX14XxWqyR27x7hWafGkuzkFKX



Scale = 1:67.6

TOTAL WEIGHT = 84 lb

LUMBER				DESCR.	
CHORDS	SIZE	LUMBER	No.2	SPF	
A - C	2x4	DRY	No.2	SPF	
C - D	2x4	DRY	No.2	SPF	
E - D	2x4	DRY	No.2	SPF	
G - E	2x6	DRY	No.2	SPF	
REINFORCING MEMBERS				DESCR.	
HW1	2x4	DRY	No.2	SPF	
ALL WEBS				DESCR.	
F	2x3	DRY	No.2	SPF	
G	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TBMW+H	MT20	6.0	9.0	4.75	1.00
B	TMWW+H	MT20	3.0	5.0	2.25	1.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMWWW+H	MT20	4.0	9.0		

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	JT	VERT	JT	IN-SX	JT	IN-SX
G	687	G	687	G	5-8	G	1-8
E	687	E	687	E	5-8	E	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS
G	490	299 / 0	G	490	299 / 0
E	490	299 / 0	E	490	299 / 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 = 5.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO				FR-TO			
A-I	-1427 / 0	-78.0	-78.0 0.11 (1)	F-C	0 / 292	0.05 (1)	
I-B	-1298 / 0	-78.0	-78.0 0.26 (1)	F-D	0 / 280	0.06 (1)	
B-C	-414 / 0	-78.0	-78.0 0.22 (1)	B-F	-298 / 0	0.24 (1)	
C-D	-382 / 0	-78.0	-78.0 0.39 (1)	H-I	0 / 56	0.00 (1)	
E-D	-672 / 0	0.0	0.0 0.18 (1)	H-B	0 / 741	0.12 (1)	
G-A	0 / 0	-96.5	-96.5 0.41 (1)				
A-H	0 / 809	-18.5	-18.5 0.51 (1)				
H-F	0 / 405	-18.5	-18.5 0.24 (1)				
F-E	0 / 0	-18.5	-18.5 0.13 (4)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.48")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.39/1.00 (C-D:1), BC=0.51/1.00 (A-H:1), WB=0.24/1.00 (B-F:1), SSI=0.41/1.00 (A-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.

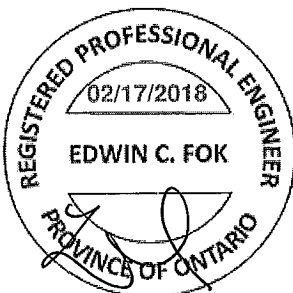
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.38 (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



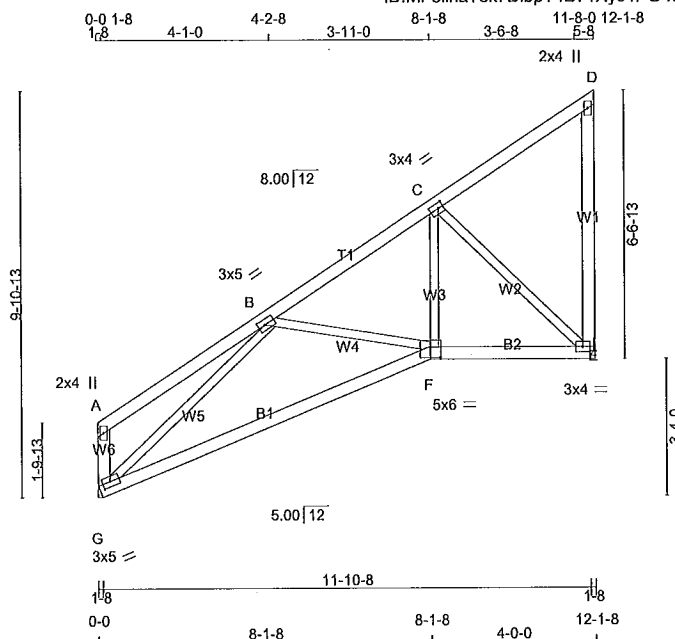
A-18023457

A-18023456

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H24T	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8IriaTok7DibpT4B71Xys4PG-xvgwSAzFonUeBz3xzl6xFz7IRqxZZTKxw0E6UbkFMC



Scale = 1:56.3

TOTAL WEIGHT = 5 X 54 = 272 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
G - 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
DRY: SEASONED LUMBER.				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMVW-I	MT20	3.0	5.0	1.50	2.00
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	BMVW-I	MT20	5.0	6.0	3.00	3.00
G	BMVW1-I	MT20	3.0	5.0	1.50	2.25

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	585	0	585	0	0	HANGER BY OTHERS	
E	585	0	585	0	0	MIN. SEAT SIZE: 1-8	HANGER BY OTHERS
						MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
G	417	255 / 0	0 / 0	0 / 0	0 / 0	162 / 0	0 / 0
E	417	255 / 0	0 / 0	0 / 0	0 / 0	162 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. MEMB. FORCE (LBS)	LC1 MAX
FR-TO		FROM TO	CS1 (LC)	UNBRACED LENGTH	FR-TO		
G-A	-132 / 0	0.0	0.0	0.01 (1)	7.81	F-C	0 / 396
A-B	0 / 16	-78.0	-78.0	0.16 (1)	10.00	C-E	-626 / 0
B-C	-562 / 0	-78.0	-78.0	0.13 (1)	6.25	G-B	-874 / 0
C-D	-17 / 0	-78.0	-78.0	0.13 (1)	6.25	B-F	-141 / 0
E-D	-121 / 0	0.0	0.0	0.10 (1)	7.81		
G-F	0 / 656	-18.5	-18.5	0.41 (4)	10.00		
F-E	0 / 457	-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

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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/641 (0.23")

CSI: TC=0.16/1.00 (A-B:1), BC=0.41/1.00 (F-G:4), WB=0.51/1.00 (B-G:1), SSI=0.12/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

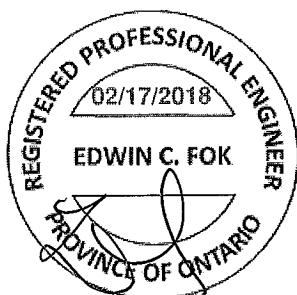
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

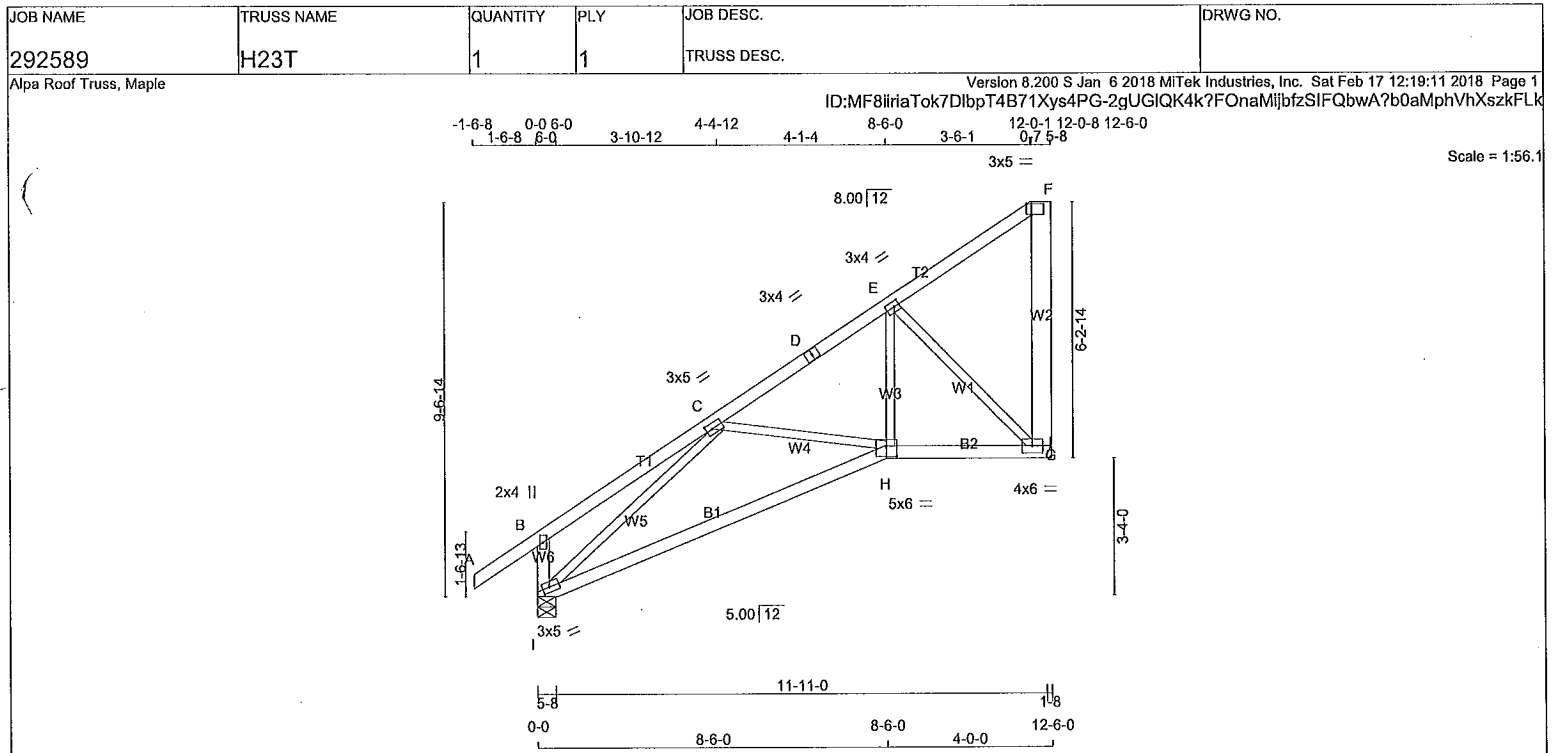
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (G) (INPUT = 0.90)
JSI METAL= 0.26 (G) (INPUT = 1.00)

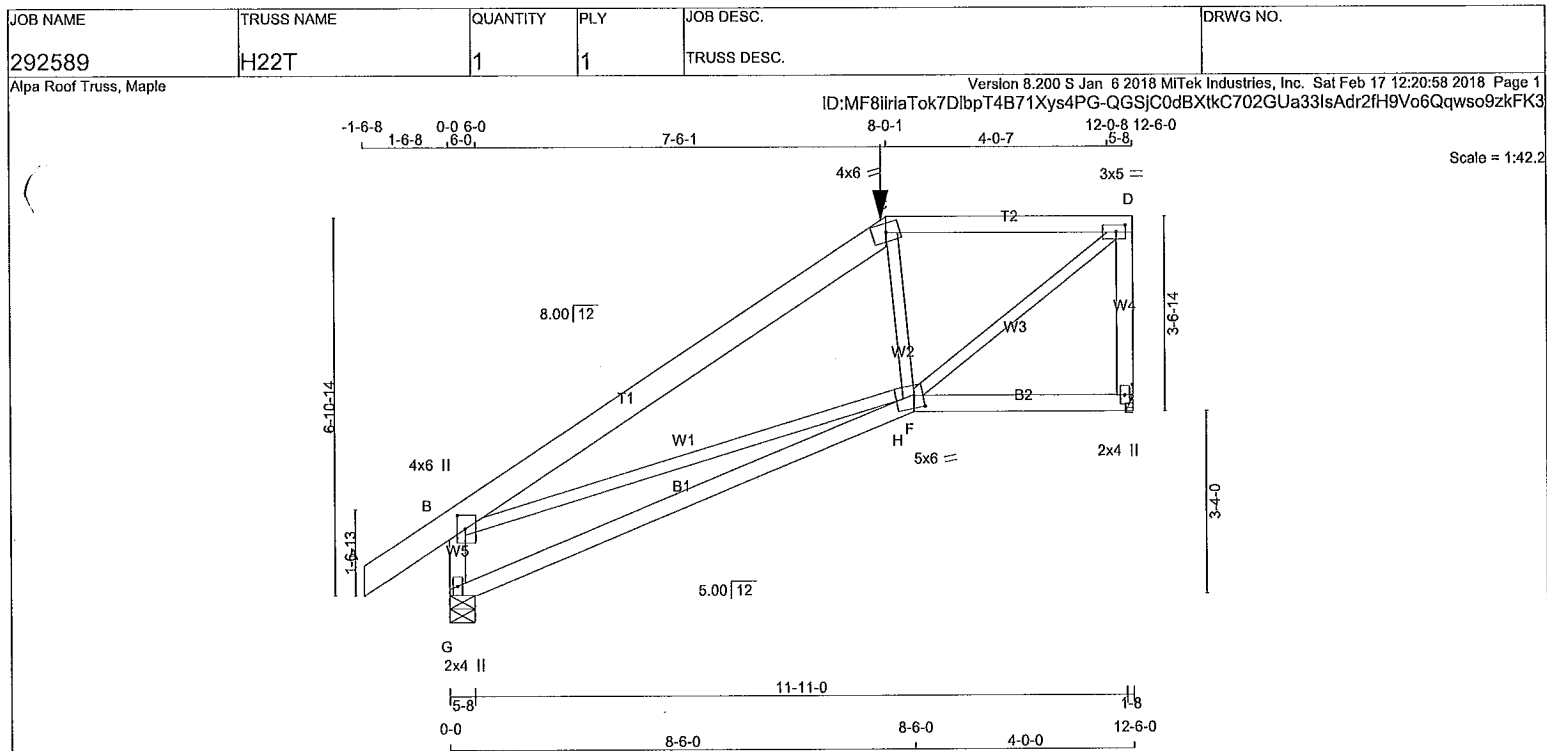
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023455



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										TOTAL WEIGHT = 61 lb
N. L. G. A. RULES															[M]F
CHORDS SIZE LUMBER DESCR.															
A - D 2x4 DRY No.2 SPF															
D - F 2x4 DRY No.2 SPF															
G - F 2x6 DRY No.2 SPF															
I - B 2x4 DRY No.2 SPF															
I - H 2x4 DRY No.2 SPF															
H - G 2x4 DRY No.2 SPF															
ALL WEBS 2x3 DRY No.2 SPF															
EXCEPT															
EASONED LUMBER.															
PLATES (table is in inches)															
JT TYPE PLATES W LEN Y X															
B TMV+p MT20 2.0 4.0															
C TMVW+I MT20 3.0 5.0 1.50 1.75															
D TS-t MT20 3.0 4.0															
E TMVW+I MT20 3.0 4.0 1.50 1.50															
F TMV+p MT20 3.0 5.0 Edge 1.50															
G BMVW+I MT20 4.0 6.0															
H BMVW+I MT20 5.0 6.0 3.00 3.00															
I BMVW+I MT20 3.0 5.0 1.50 2.00															
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.															
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design															
															



LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
A - C	2x6	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - B	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				

SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN
B	TMVW+p	MT20	4.0	6.0
C	TTW-m	MT20	4.0	6.0
D	TMVW-t	MT20	3.0	5.0
E	BMV1+p	MT20	2.0	4.0
F	BBWW-m	MT20	5.0	6.0
G	BMV1+p	MT20	2.0	4.0

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 173.4 lbs FACTORED DOWN AT 8-0-1 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT	VERT	JT	VERT	BRG	BRG	IN-SX	IN-SX
E	832	0	832	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
G	847	0	847	0	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
E	592	367 / 0	0 / 0	224 / 0	0 / 0
G	603	376 / 0	0 / 0	227 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 36	C-F	-233 / 19
B-C	-879 / 0	F-D	0 / 896
C-D	-693 / 0	B-F	0 / 752
E-D	-784 / 0		
G-B	-746 / 0		
G-H	0 / 0		
H-F	0 / 0		
F-E	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)		FACE		TYPE	
JT	LOC.	LOC.	LOC.	FACE	DIR.
C	8-0-1	-173	-173	FRONT	VERT

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 8-0-1
RIGHT SETBACK = 0-0
END SETBACK = 3-2-0
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.42")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.42")
CALCULATED VERT. DEFL.(TL) = L/433 (0.35")

CSI: TC=0.49/1.00 (B-C:1), BC=0.56/1.00 (F-G:4), WB=0.22/1.00 (D-F:1), SSI=0.19/1.00 (C-D: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

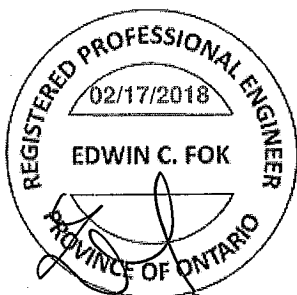
PLATE PLACEMENT TOL. = 0.250 inches

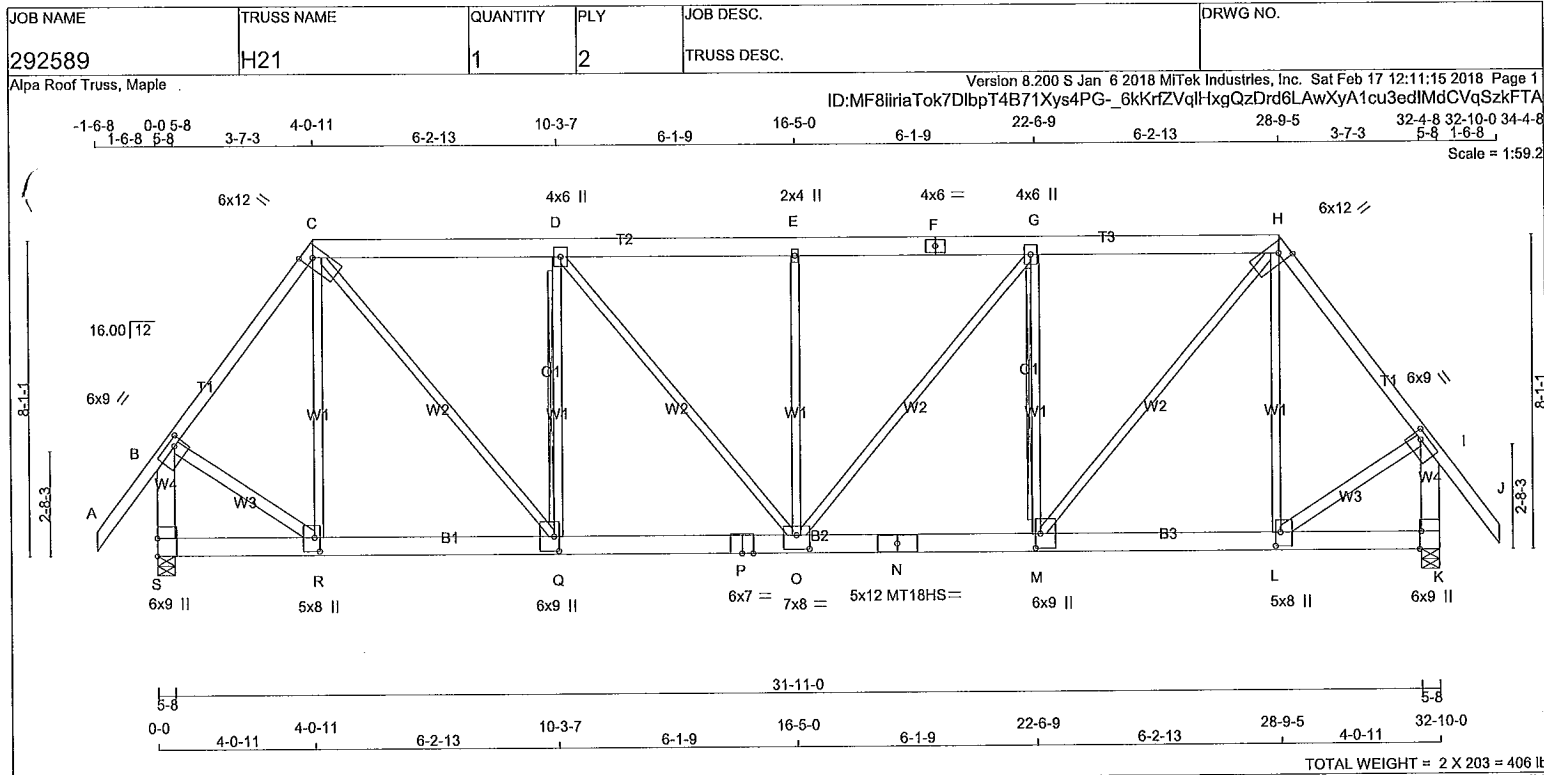
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.52 (B) (INPUT = 1.00)

A-18023453

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	SIZE	DRY	DESCR.
N. L. G. A. RULES			
CHORDS			
A - C	2x4	DRY	No.2
C - F	2x6	DRY	No.2
F - H	2x6	DRY	No.2
H - J	2x4	DRY	No.2
S - B	2x6	DRY	No.2
K - I	2x6	DRY	No.2
S - P	2x6	DRY	1650F 1.5E
P - N	2x6	DRY	1650F 1.5E
N - K	2x6	DRY	1650F 1.5E
BRACES	2x3	DRY	No.2
B - R	2x4	DRY	No.2
L - I	2x4	DRY	No.2

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	1	12
H - J	1	12
C - F	2	12
F - H	2	12
S - B	2	12
K - I	2	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
S - P	2	9
P - N	2	9
N - K	2	9
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6
2x4	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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	DOWN	BRG	BRG
S	10986 0	10986 0	5-8	5-8
K	10986 0	10986 0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	PERM.LIVE		
S	7830 4794 / 0	0 / 0	3036 / 0	0 / 0
K	7830 4794 / 0	0 / 0	3036 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.02 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-Q, G-M

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO					
A-B	0 / 52	-78.0 -78.0	0.08 (1)	10.00	R-C	0 / 541	0.07 (1)
B-C	-8820 / 0	-78.0 -78.0	0.66 (1)	3.02	C-Q	0 / 7917	0.98 (1)
C-D	-10306 / 0	-78.0 -78.0	0.32 (1)	3.64	Q-D	-2487 / 0	0.69 (1)
D-E	-11898 / 0	-78.0 -78.0	0.36 (1)	3.38	D-O	0 / 2543	0.31 (1)
E-F	-11898 / 0	-78.0 -78.0	0.36 (1)	3.38	O-E	-459 / 0	0.26 (1)
F-G	-11898 / 0	-78.0 -78.0	0.36 (1)	3.38	O-G	0 / 2543	0.31 (1)
G-H	-10306 / 0	-78.0 -78.0	0.32 (1)	3.64	M-G	-2487 / 0	0.69 (1)
H-I	-8820 / 0	-78.0 -78.0	0.66 (1)	3.02	M-H	0 / 7917	0.98 (1)
I-J	0 / 52	-78.0 -78.0	0.08 (1)	10.00	L-H	0 / 541	0.07 (1)
S-B	-10155 / 0	0.0 0.0	0.51 (1)	4.73	B-R	0 / 5987	0.53 (1)
K-I	-10155 / 0	0.0 0.0	0.51 (1)	4.73	L-I	0 / 5987	0.53 (1)
S-R	0 / 0	-583.4 -583.4	0.40 (1)	10.00			
R-Q	0 / 5295	-583.4 -583.4	0.67 (1)	10.00			
Q-P	0 / 10306	-583.4 -583.4	0.88 (1)	10.00			
P-O	0 / 10306	-583.4 -583.4	0.88 (1)	10.00			
O-N	0 / 10306	-583.4 -583.4	0.88 (1)	10.00			
N-M	0 / 10306	-583.4 -583.4	0.88 (1)	10.00			
M-L	0 / 5295	-583.4 -583.4	0.67 (1)	10.00			
L-K	0 / 0	-583.4 -583.4	0.40 (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: CstdGlrder
START DISTANCE = 0-0
START SPAN CARRIED = 25-5-1
END DISTANCE = 32-10-0
END SPAN CARRIED = 25-5-1
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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/998 (0.39")

CSI: TC=0.66/1.00 (B-C:1), BC=0.88/1.00 (O-Q:1)
WB=0.98/1.00 (C-Q:1), SSI=0.60/1.00 (M-O:1)

DOL LUMBER=1.00 NAIL=1.00 I.S 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
MT18HS 511 354 2455 1382 3004 2010

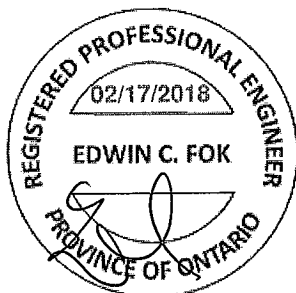
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (M) (INPUT = 0.90)
JSI METAL= 0.95 (L) (INPUT = 1.00)

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CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H21	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

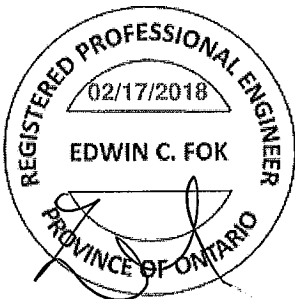
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 12:11:15 2018 Page 2
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(table is in inches)

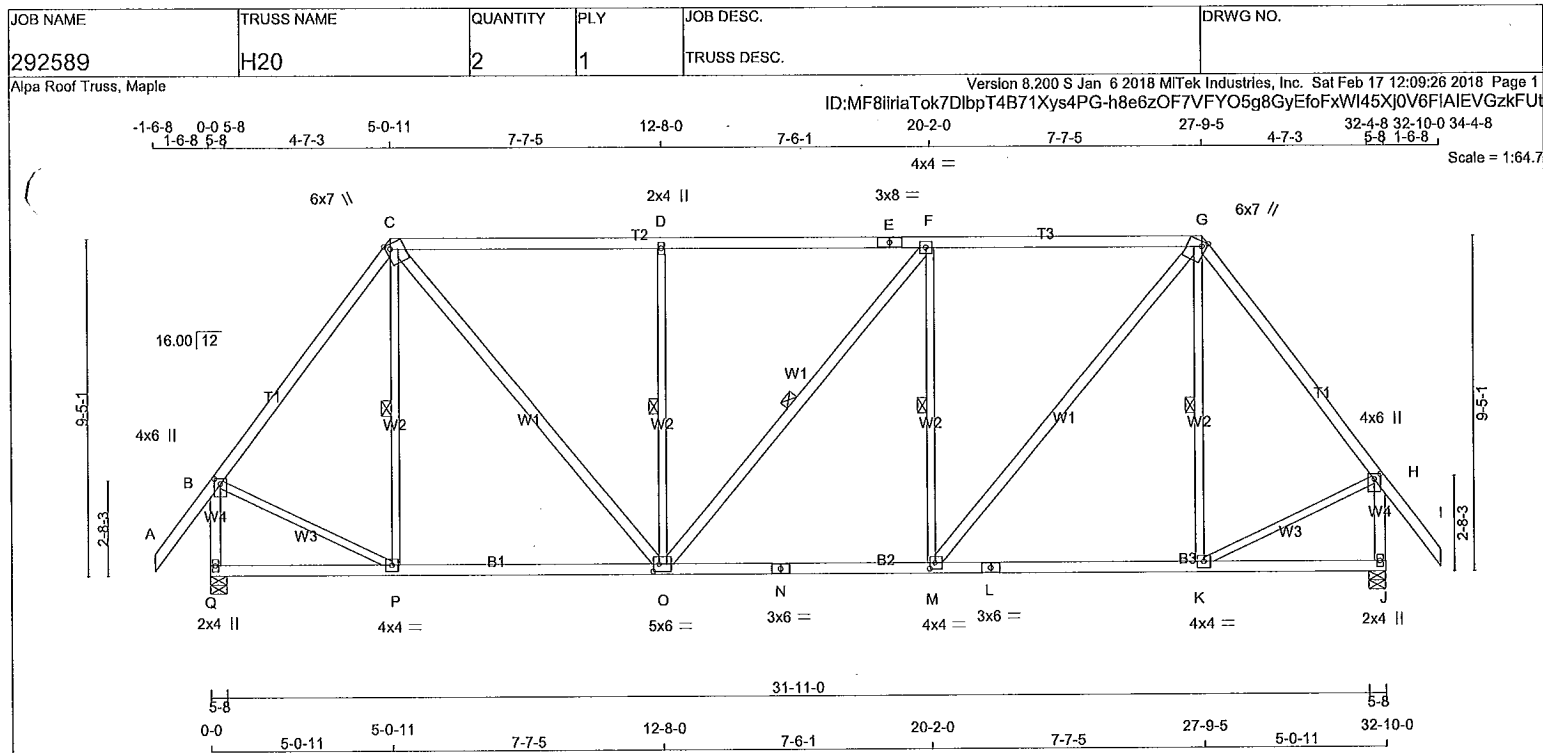
J	PLATE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	9.0	2.00	2.75
C	TTWW+h	MT20	6.0	12.0	3.25	2.75
D	TMWW+t	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	4.0	6.0		
G	TMWW+h	MT20	4.0	6.0		
H	TTWW+h	MT20	6.0	12.0	3.25	2.75
I	TMWW-t	MT20	6.0	9.0	2.00	2.75
K	BMV1+t	MT20	6.0	9.0	Edge	0.50
L	BMWW+t	MT20	5.0	8.0	4.25	1.50
M	BMWW+t	MT20	6.0	9.0	4.50	1.50
N	BS-t	MT18HS	5.0	12.0		
O	BMWWWW-t	MT20	7.0	8.0	4.25	4.00
P	BS-t	MT20	6.0	7.0		
Q	BMWW+t	MT20	6.0	9.0	4.50	1.50
R	BMWW+t	MT20	5.0	8.0	4.25	1.50
S	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-18023452 (2)



TOTAL WEIGHT = 2 X 171 = 342 lb

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	DRY	LUMBER	DESCR.	SPF	FACTORED	MAXIMUM FACTORED
A - C	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
C - E	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
E - G	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
G - I	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
Q - B	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
J - H	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
Q - N	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
N - L	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
L - J	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
BS	2x3	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
C - O	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
O - F	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED
M - G	2x4	DRY	No.2	SPF	SPF	FACTORED	MAXIMUM FACTORED

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	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
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	1.75	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	4.0	4.0	2.00	1.75
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	5.0	6.0	2.50	2.00
P	BMVW-t	MT20	4.0	4.0		
Q	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	IN-SX	IN-SX
Q	1713	0	1713	0	0	5-8	2-9	2-9	2-9
J	1713	0	1713	0	0	5-8	2-9	2-9	2-9

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1219	759 / 0	0 / 0	0 / 0	0 / 0	460 / 0	0 / 0
J	1219	759 / 0	0 / 0	0 / 0	0 / 0	460 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.44 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-P, D-O, F-O, F-M, 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)

C H O R D S				W E B S				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0 / 52	-78.0	-78.0	0.15 (1)	10.00	P-C	-205 / 12	0.12 (1)
B-C	-1268 / 0	-78.0	-78.0	0.47 (1)	5.22	C-O	0 / 1014	0.16 (1)
C-D	-1406 / 0	-78.0	-78.0	0.76 (1)	4.46	O-D	-637 / 0	0.37 (1)
D-E	-1406 / 0	-78.0	-78.0	0.76 (1)	4.44	O-F	-1 / 0	0.00 (1)
E-F	-1406 / 0	-78.0	-78.0	0.76 (1)	4.44	M-F	-638 / 0	0.37 (1)
F-G	-1407 / 0	-78.0	-78.0	0.77 (1)	4.44	M-G	0 / 1016	0.16 (1)
G-H	-1268 / 0	-78.0	-78.0	0.47 (1)	5.22	K-G	-206 / 12	0.12 (1)
H-I	0 / 52	-78.0	-78.0	0.15 (1)	10.00	B-P	0 / 829	0.19 (1)
Q-B	-1680 / 0	0.0	0.0	0.24 (1)	6.41	K-H	0 / 829	0.19 (1)
J-H	-1680 / 0	0.0	0.0	0.24 (1)	6.41			
Q-P	0 / 0	-18.5	-18.5	0.18 (4)	10.00			
P-O	0 / 755	-18.5	-18.5	0.28 (4)	10.00			
O-N	0 / 1407	-18.5	-18.5	0.34 (1)	10.00			
N-M	0 / 1407	-18.5	-18.5	0.34 (1)	10.00			
M-L	0 / 755	-18.5	-18.5	0.28 (4)	10.00			
L-K	0 / 755	-18.5	-18.5	0.28 (4)	10.00			
K-J	0 / 0	-18.5	-18.5	0.18 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.77/1.00 (F-G:1), BC=0.34/1.00 (M-O:1)
WB=0.37/1.00 (F-M:1), SSI=0.28/1.00 (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

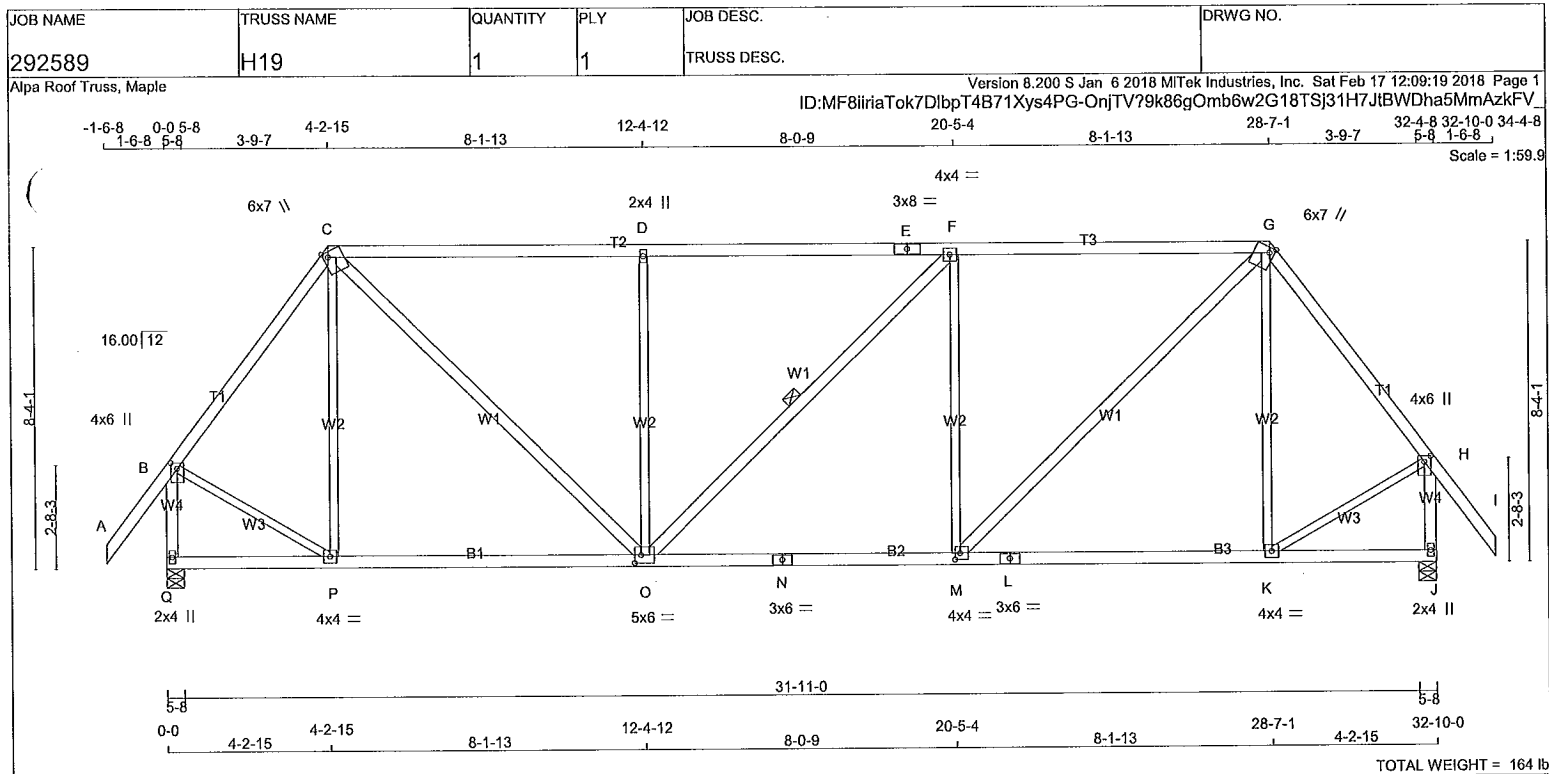
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (M) (INPUT = 0.90)
JSI METAL = 0.52 (N) (INPUT = 1.00)

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CONTINUED ON PAGE 2





TOTAL WEIGHT = 164 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	SPF
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	
Q - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
BS	2x3	DRY	No.2	SPF	
C - O	2x4	DRY	No.2	SPF	
O - F	2x4	DRY	No.2	SPF	
M - 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	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	8.0		
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	1.75	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	4.0	4.0	2.00	1.50
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	5.0	6.0	2.50	2.00
P	BMVW-t	MT20	4.0	4.0		
Q	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	DOWN	HORZ
Q	1713	0	1713	0	0
J	1713	0	1713	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
Q	1219	759 / 0	0 / 0	460 / 0
J	1219	759 / 0	0 / 0	460 / 0

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

BRACING

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

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

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

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		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)
FR-TO			
A-B	0 / 52	-78.0	-78.0 0.15 (1)
B-C	-1250 / 0	-78.0	-78.0 0.31 (1)
C-D	-1592 / 0	-78.0	-78.0 0.94 (1)
D-E	-1593 / 0	-78.0	-78.0 0.94 (1)
E-F	-1593 / 0	-78.0	-78.0 0.94 (1)
F-G	-1593 / 0	-78.0	-78.0 0.95 (1)
G-H	-1250 / 0	-78.0	-78.0 0.31 (1)
H-I	0 / 52	-78.0	-78.0 0.15 (1)
Q-B	-1691 / 0	0.0	0.0 0.24 (1)
J-H	-1691 / 0	0.0	0.0 0.24 (1)
Q-P	0 / 0	-18.5	-18.5 0.18 (4)
P-O	0 / 742	-18.5	-18.5 0.31 (4)
O-N	0 / 1593	-18.5	-18.5 0.39 (4)
N-M	0 / 1593	-18.5	-18.5 0.39 (4)
M-L	0 / 742	-18.5	-18.5 0.31 (4)
L-K	0 / 742	-18.5	-18.5 0.31 (4)
K-J	0 / 0	-18.5	-18.5 0.18 (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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.95/1.00 (F-G:1), BC=0.39/1.00 (M-O:4), WB=0.94/1.00 (F-M:1), SSI=0.30/1.00 (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
MT20 618 354 1667 788 1987 1656

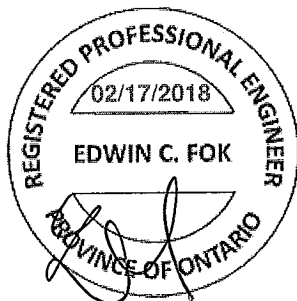
PLATE PLACEMENT TOL. = 0.250 inches

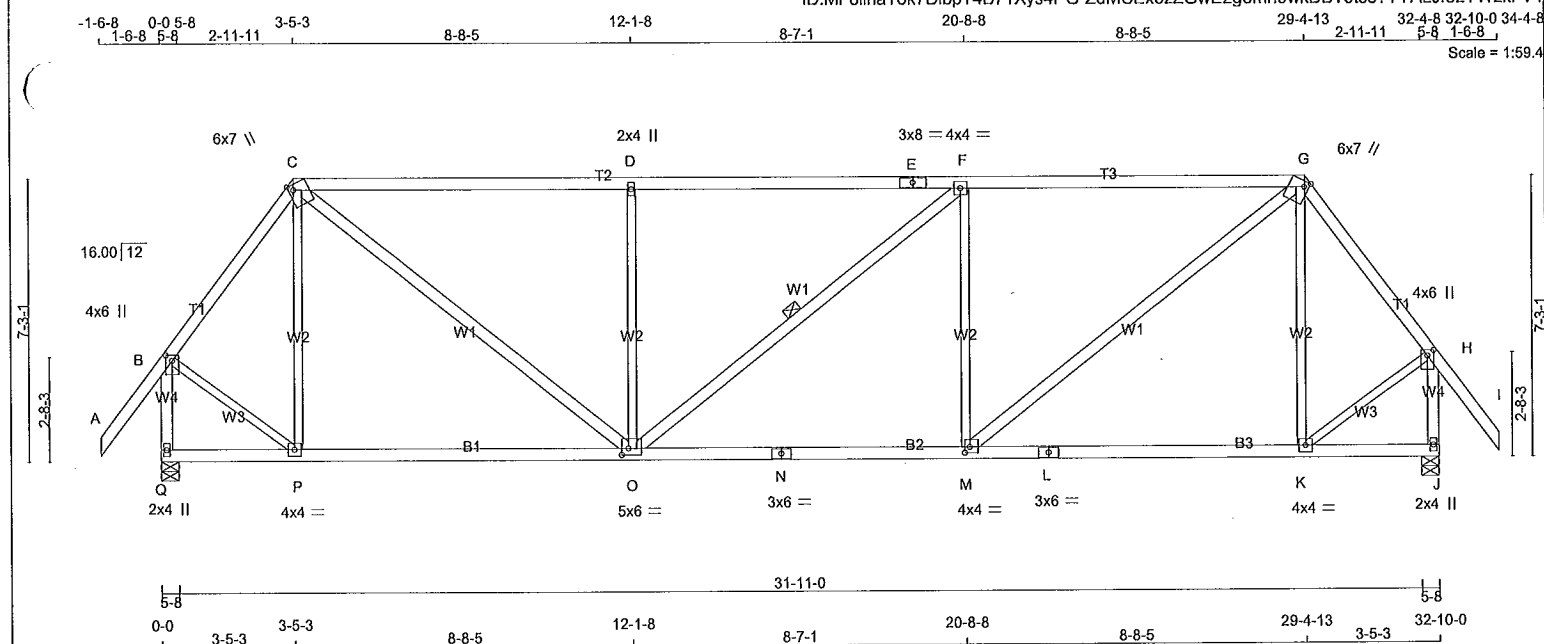
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.58 (N) (INPUT = 1.00)

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TOTAL WEIGHT = 157 lb

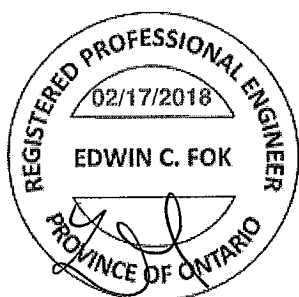
LUMBER				LUMBER		DESCR.	
N. L. G. A. RULES							
CHORDS		SIZE					
A - C	2x4	DRY	No.2	SPF			
C - E	2x4	DRY	2100F 1.8E	SPF			
E - G	2x4	DRY	2100F 1.8E	SPF			
G - I	2x4	DRY	No.2	SPF			
Q - B	2x4	DRY	No.2	SPF			
J - H	2x4	DRY	No.2	SPF			
Q - N	2x4	DRY	No.2	SPF			
N - L	2x4	DRY	No.2	SPF			
L - J	2x4	DRY	No.2	SPF			
IBS				No.2	SPF		
T							
C - O	2x4	DRY	No.2	SPF			
O - F	2x4	DRY	No.2	SPF			
M - G	2x4	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
J	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	6.0	1.75 2.00
C	TTVW+m	MT20	6.0	7.0	Edge 1.50
D	TMVW+h	MT20	2.0	4.0	
E	TS-t	MT20	3.0	8.0	
F	TMVW-t	MT20	4.0	4.0	
G	TTVW+m	MT20	6.0	7.0	Edge 1.50
H	TMVW+p	MT20	4.0	6.0	1.75 2.00
J	BMV1+p	MT20	2.0	4.0	
K	BMVW-t	MT20	4.0	4.0	
L	BS-t	MT20	3.0	6.0	
M	BMVW-t	MT20	4.0	4.0	1.75 1.50
N	BS-t	MT20	3.0	6.0	
O	BMVWWW-t	MT20	5.0	6.0	2.00 2.00
P	BMVW-t	MT20	4.0	4.0	
Q	BMV1+p	MT20	2.0	4.0	

Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD

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



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

FACTORED		MAXIMUM FACTORED		INPUT	REQRD		
GROSS REACTION		GROSS REACTION		BRG	BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
Q	1713	0	1713	0	0	5-8	2-9
J	1713	0	1713	0	0	5-8	2-9

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1219	759 / 0	0 / 0	0 / 0	0 / 0	460 / 0	0 / 0
J	1219	759 / 0	0 / 0	0 / 0	0 / 0	460 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.05 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.O.

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

LOADING

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 52	-78.0	-78.0 0.15 (1)	10.00	P-C	-334 / 0	0.31 (1)
B-C	-1213 / 0	-78.0	-78.0 0.19 (1)	5.61	C-O	0 / 1430	0.23 (1)
C-D	-1836 / 0	-78.0	-78.0 0.67 (1)	5.05	O-D	-729 / 0	0.68 (1)
D-E	-1837 / 0	-78.0	-78.0 0.66 (1)	5.05	O-F	0 / 0	0.00 (1)
E-F	-1837 / 0	-78.0	-78.0 0.66 (1)	5.05	M-F	-729 / 0	0.68 (1)
F-G	-1837 / 0	-78.0	-78.0 0.67 (1)	5.05	M-G	0 / 1431	0.23 (1)
G-H	-1212 / 0	-78.0	-78.0 0.19 (1)	5.61	K-G	-334 / 0	0.31 (1)
H-I	0 / 52	-78.0	-78.0 0.15 (1)	10.00	B-P	0 / 861	0.19 (1)
Q-B	-1705 / 0	0.0	0.0 0.25 (1)	6.36	K-H	0 / 861	0.19 (1)
J-H	-1705 / 0	0.0	0.0 0.25 (1)	6.36			
Q-P	0 / 0	-18.5	-18.5 0.20 (4)	10.00			
P-O	0 / 718	-18.5	-18.5 0.34 (4)	10.00			
O-N	0 / 1837	-18.5	-18.5 0.45 (4)	10.00			
N-M	0 / 1837	-18.5	-18.5 0.45 (4)	10.00			
M-L	0 / 717	-18.5	-18.5 0.35 (4)	10.00			
L-K	0 / 717	-18.5	-18.5 0.35 (4)	10.00			
K-J	0 / 0	-18.5	-18.5 0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.18")

CSI: TC=0.67/1.00 (F-G:1) , BC=0.45/1.00 (M-O:4)
WB=0.68/1.00 (F-M:1) , SSI=0.32/1.00 (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.

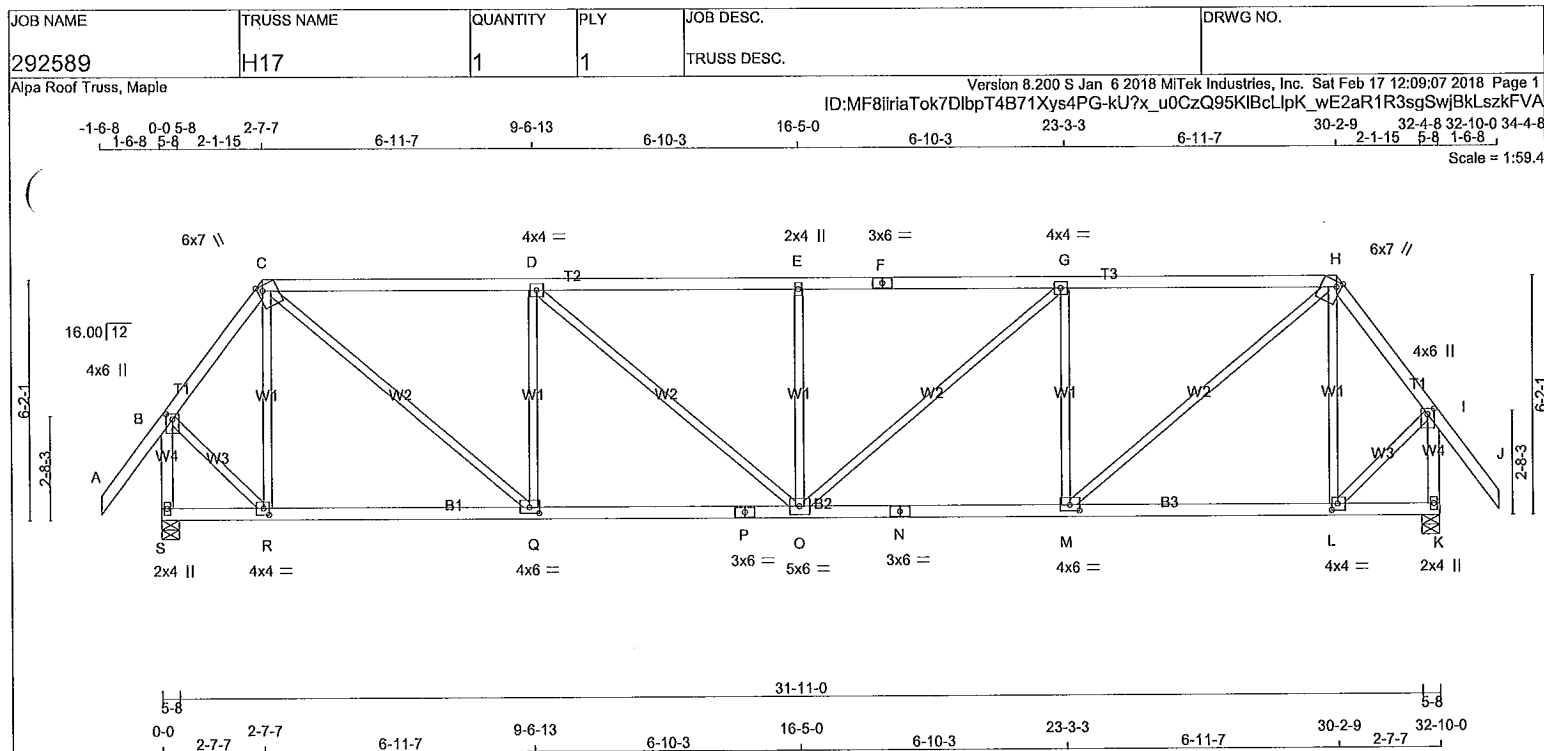
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.67 (N) (INPUT = 1.00)



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
BS	2x3	DRY	No.2	SPF
T				

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	TMWW-t	MT20	4.0	4.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0		
H	TTWW+m	MT20	6.0	7.0	Edge	1.50
I	TMVW+p	MT20	4.0	6.0	1.75	2.00
K	BMV1+p	MT20	2.0	4.0		
L	BMWW-t	MT20	4.0	4.0	2.00	1.75
M	BMWW-t	MT20	4.0	6.0	1.75	3.00
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	5.0	6.0		
P	BS-t	MT20	3.0	6.0		
Q	BMWW-t	MT20	4.0	6.0	1.75	3.00
R	BMWW-t	MT20	4.0	4.0	2.00	1.75
S	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	UP	IN-SX
S	1713	0	1713	0
K	1713	0	1713	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN, COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
S	1219	759 / 0 0 / 0 0 / 0 0 / 0 460 / 0 0 / 0
K	1219	759 / 0 0 / 0 0 / 0 0 / 0 460 / 0 0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.70 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 LC1 (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 52	-78.0 -78.0	0.15 (1)	10.00	R-C	-457 / 0 0.28 (1)	
B-C	-1134 / 0	-78.0 -78.0	0.11 (1)	5.85	C-Q	0 / 1615 0.36 (1)	
C-D	-1903 / 0	-78.0 -78.0	0.73 (1)	4.03	Q-D	-910 / 0 0.55 (1)	
D-E	-2262 / 0	-78.0 -78.0	0.79 (1)	3.70	D-O	0 / 473 0.11 (1)	
E-F	-2262 / 0	-78.0 -78.0	0.79 (1)	3.70	O-E	-492 / 0 0.30 (1)	
F-G	-2262 / 0	-78.0 -78.0	0.79 (1)	3.70	O-G	0 / 473 0.11 (1)	
G-H	-1903 / 0	-78.0 -78.0	0.73 (1)	4.03	M-G	-910 / 0 0.55 (1)	
H-I	-1134 / 0	-78.0 -78.0	0.11 (1)	5.85	M-H	0 / 1615 0.36 (1)	
I-J	0 / 52	-78.0 -78.0	0.15 (1)	10.00	L-H	-457 / 0 0.28 (1)	
S-B	-1710 / 0	0.0 0.0	0.25 (1)	6.36	B-R	0 / 881 0.20 (1)	
K-I	-1710 / 0	0.0 0.0	0.25 (1)	6.36	L-I	0 / 881 0.20 (1)	
S-R	0 / 0	-18.5 -18.5	0.13 (4)	10.00			
R-Q	0 / 666	-18.5 -18.5	0.24 (4)	10.00			
Q-P	0 / 1903	-18.5 -18.5	0.40 (1)	10.00			
P-O	0 / 1903	-18.5 -18.5	0.40 (1)	10.00			
O-N	0 / 1903	-18.5 -18.5	0.40 (1)	10.00			
N-M	0 / 1903	-18.5 -18.5	0.40 (1)	10.00			
M-L	0 / 666	-18.5 -18.5	0.24 (4)	10.00			
L-K	0 / 0	-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

ALLOWABLE DEFL.(LL) = L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.79/1.00 (E-G:1), BC=0.40/1.00 (O-Q:1), WB=0.55/1.00 (D-Q:1), SSI=0.26/1.00 (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

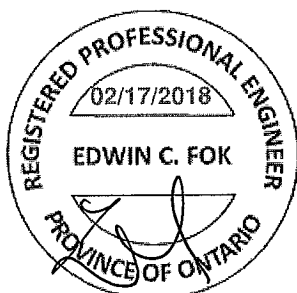
PLATE PLACEMENT TOL. = 0.250 inches

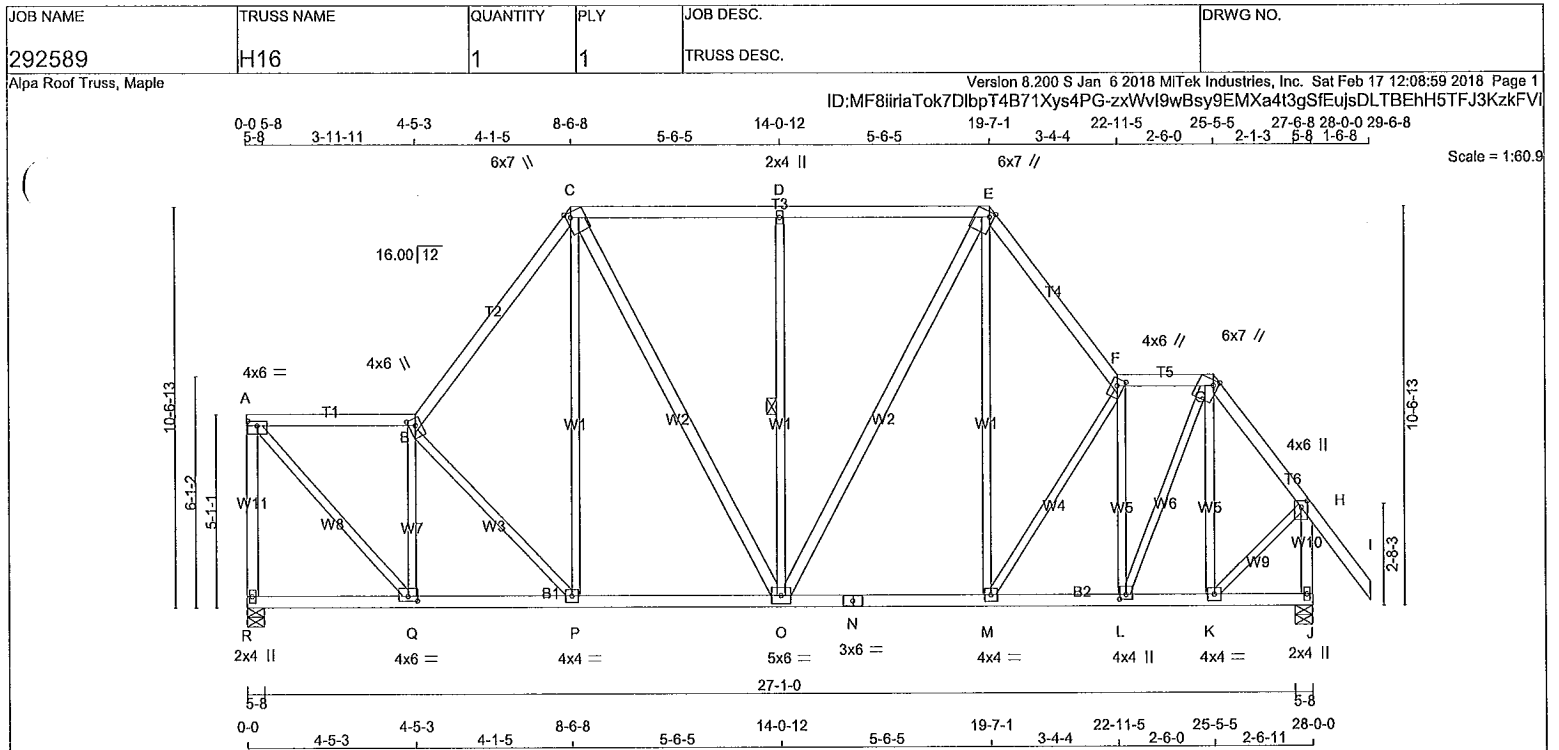
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.64 (N) (INPUT = 1.00)

A-18023448

CONTINUED ON PAGE 2





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	4.0	6.0	1.50	3.00
B	TTWW+m	MT20	4.0	6.0	2.25	2.00
C, E, G						
D	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMVW+m	MT20	2.0	4.0		
F	TTWW+m	MT20	4.0	6.0	2.25	2.00
H	TMVW+p	MT20	4.0	6.0	2.00	2.00
J	BMV1+p	MT20	2.0	4.0		
K, M, P						
K	BMWW-I	MT20	4.0	4.0		
L	BMWW-H	MT20	4.0	4.0	1.50	2.00
N	BS-I	MT20	3.0	6.0		
O	BMWW-I	MT20	5.0	6.0		
Q	BMWW-I	MT20	4.0	6.0	1.50	3.00
R	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
R	1351	0	1351	0	0	5-8	2-0	
J	1480	0	1480	0	0	5-8	2-3	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
R	963	588 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	375 / 0	0 / 0	0 / 0	0 / 0	0 / 0
J	1052	657 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	395 / 0	0 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
R-A	-1315 / 0	0.0	0.0	0.58 (1)	7.05	A-Q	0 / 1553	0.35 (1)
A-B	-1040 / 0	-78.0	-78.0	0.28 (1)	5.79	Q-B	-1072 / 0	0.41 (1)
B-C	-1305 / 0	-78.0	-78.0	0.29 (1)	5.35	B-P	-423 / 0	0.30 (1)
C-D	-953 / 0	-78.0	-78.0	0.43 (1)	5.74	P-C	0 / 405	0.09 (1)
D-E	-953 / 0	-78.0	-78.0	0.43 (1)	5.74	C-O	0 / 349	0.06 (1)
E-F	-1294 / 0	-78.0	-78.0	0.19 (1)	5.48	O-D	-518 / 0	0.41 (1)
F-G	-953 / 0	-78.0	-78.0	0.09 (1)	6.25	O-E	0 / 363	0.06 (1)
G-H	-940 / 0	-78.0	-78.0	0.10 (1)	6.25	M-E	0 / 414	0.09 (1)
H-I	0 / 52	-78.0	-78.0	0.15 (1)	10.00	M-F	-376 / 0	0.30 (1)
J-H	-1467 / 0	0.0	0.0	0.21 (1)	6.76	L-F	-941 / 0	0.55 (1)
						L-G	0 / 1044	0.23 (1)
R-Q	0 / 0	-18.5	-18.5	0.07 (4)	10.00	K-G	-405 / 0	0.24 (1)
Q-P	0 / 1063	-18.5	-18.5	0.21 (1)	10.00	K-H	0 / 738	0.17 (1)
P-O	0 / 787	-18.5	-18.5	0.20 (4)	10.00			
O-N	0 / 781	-18.5	-18.5	0.20 (4)	10.00			
N-M	0 / 781	-18.5	-18.5	0.20 (4)	10.00			
M-L	0 / 970	-18.5	-18.5	0.20 (1)	10.00			
L-K	0 / 552	-18.5	-18.5	0.13 (1)	10.00			
K-J	0 / 0	-18.5	-18.5	0.04 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, 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 (0.93")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.93")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.58/1.00 (A-R:1), BC=0.21/1.00 (P-Q:1), WB=0.55/1.00 (F-L:1), SSI=0.21/1.00 (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.

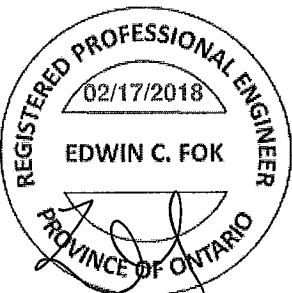
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

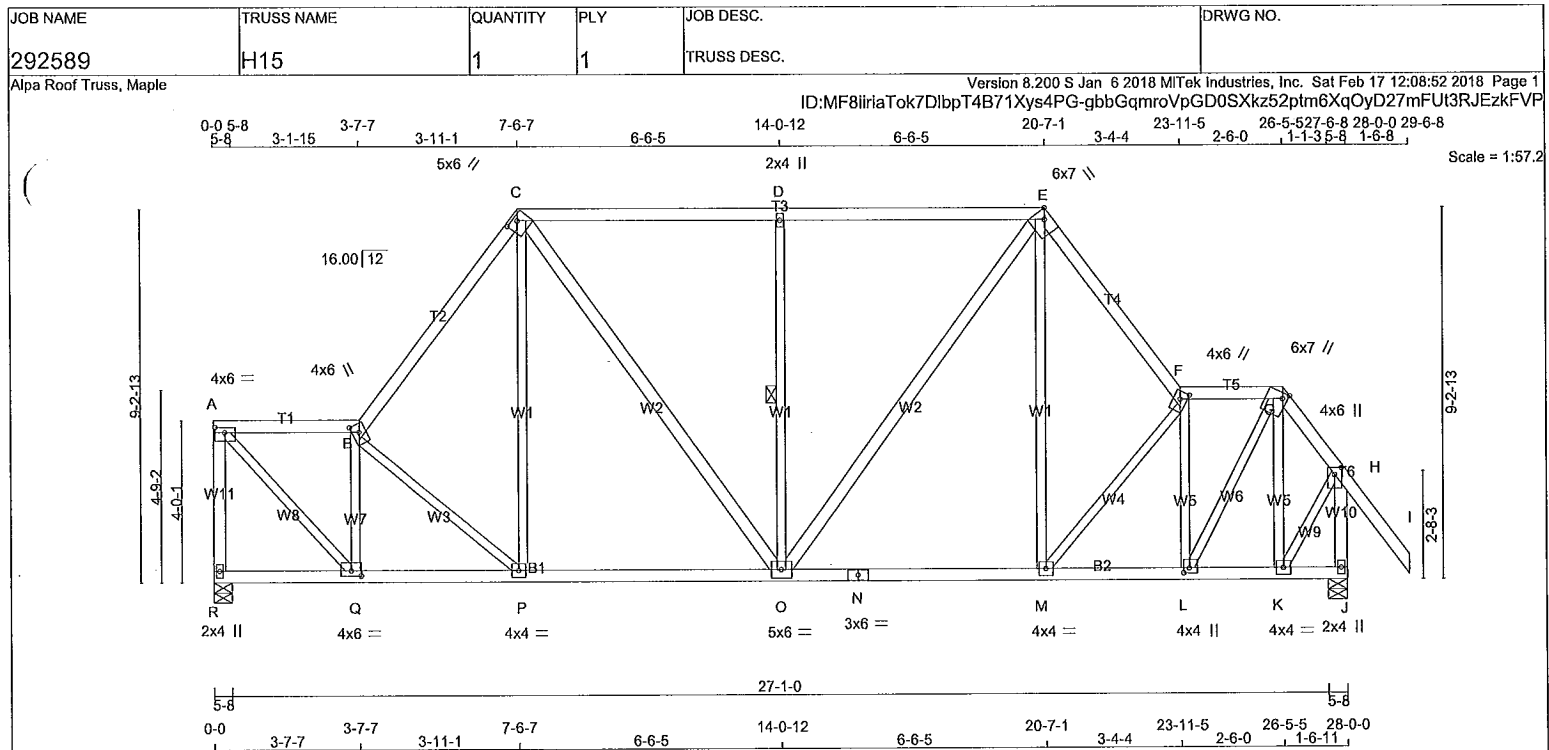
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (E) (INPUT = 0.90)
JSI METAL= 0.35 (H) (INPUT = 1.00)



A-18023447

CONTINUED ON PAGE 2



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
R - A	2x4	DRY	No.2	A - B	2x4	DRY	No.2
A - B	2x4	DRY	No.2	B - C	2x4	DRY	No.2
B - C	2x4	DRY	No.2	C - E	2x4	DRY	No.2
C - E	2x4	DRY	No.2	E - F	2x4	DRY	No.2
E - F	2x4	DRY	No.2	F - G	2x4	DRY	No.2
F - G	2x4	DRY	No.2	G - I	2x4	DRY	No.2
G - I	2x4	DRY	No.2	I - H	2x4	DRY	No.2
I - H	2x4	DRY	No.2	H - N	2x4	DRY	No.2
H - N	2x4	DRY	No.2	N - E	2x4	DRY	No.2
N - E	2x4	DRY	No.2	E - B	2x3	DRY	No.2
E - B	2x3	DRY	No.2	B - O	2x4	DRY	No.2
B - O	2x4	DRY	No.2	O - E	2x4	DRY	No.2
O - E	2x4	DRY	No.2				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	3.00
B	TTWW+m	MT20	4.0	6.0	2.50	2.00
C	TTWW-h	MT20	5.0	6.0	1.25	3.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW-h	MT20	6.0	7.0	Edge	2.75
F	TTWW+m	MT20	4.0	6.0	2.25	2.00
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	2.00	2.00
J	BMV1+p	MT20	2.0	4.0		
K, M, P						
K	BMVW-t	MT20	4.0	4.0		
L	BMVW-t	MT20	4.0	4.0	1.50	1.75
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	5.0	6.0		
Q	BMVW-t	MT20	4.0	6.0	1.50	3.00
R	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
R	1347	0	1347	0	5-8	2-0		
J	1484	0	1484	0	5-8	2-3		

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
R	960	586 / 0	0 / 0	0 / 0	0 / 0	375 / 0	0 / 0
J	1055	659 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.05 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-O.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (C/L)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (C/L)	MEMB.
FR-TO		FROM	TO	FR-TO		FROM	TO
R-A	-1314 / 0	0.0	0.0 0.33 (1)	A-Q	0 / 1635	0.37 (1)	
A-B	-1124 / 0	-78.0	-78.0 0.19 (1)	Q-B	-1129 / 0	0.28 (1)	
B-C	-1391 / 0	-78.0	-78.0 0.27 (1)	B-P	-435 / 0	0.21 (1)	
C-D	-1104 / 0	-78.0	-78.0 0.63 (1)	P-C	0 / 398	0.09 (1)	
D-E	-1104 / 0	-78.0	-78.0 0.63 (1)	C-O	0 / 448	0.07 (1)	
E-F	-1367 / 0	-78.0	-78.0 0.19 (1)	O-D	-616 / 0	0.34 (1)	
F-G	-1010 / 0	-78.0	-78.0 0.09 (1)	D-E	0 / 473	0.08 (1)	
G-H	-812 / 0	-78.0	-78.0 0.15 (1)	E-F	0 / 381	0.09 (1)	
H-I	0 / 52	-78.0	-78.0 0.15 (1)	F-G	-349 / 0	0.18 (1)	
I-J	-1486 / 0	0.0	0.0 0.21 (1)	G-H	-1047 / 0	0.35 (1)	
				H-I	0 / 1208	0.27 (1)	
				I-J	-542 / 0	0.18 (1)	
				J-K	0 / 762	0.17 (1)	
R-Q	0 / 0	-18.5	-18.5 0.05 (4)				
Q-P	0 / 1156	-18.5	-18.5 0.25 (1)				
P-O	0 / 839	-18.5	-18.5 0.25 (4)				
O-N	0 / 825	-18.5	-18.5 0.25 (4)				
N-M	0 / 825	-18.5	-18.5 0.25 (4)				
M-L	0 / 1035	-18.5	-18.5 0.23 (1)				
L-K	0 / 434	-18.5	-18.5 0.11 (1)				
K-J	0 / 0	-18.5	-18.5 0.04 (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 ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, 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 (0.93")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.93")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.63/1.00 (C-D:1), BC=0.25/1.00 (O-P:4), WB=0.37/1.00 (A-Q:1), SI=0.25/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

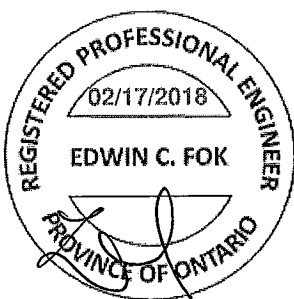
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

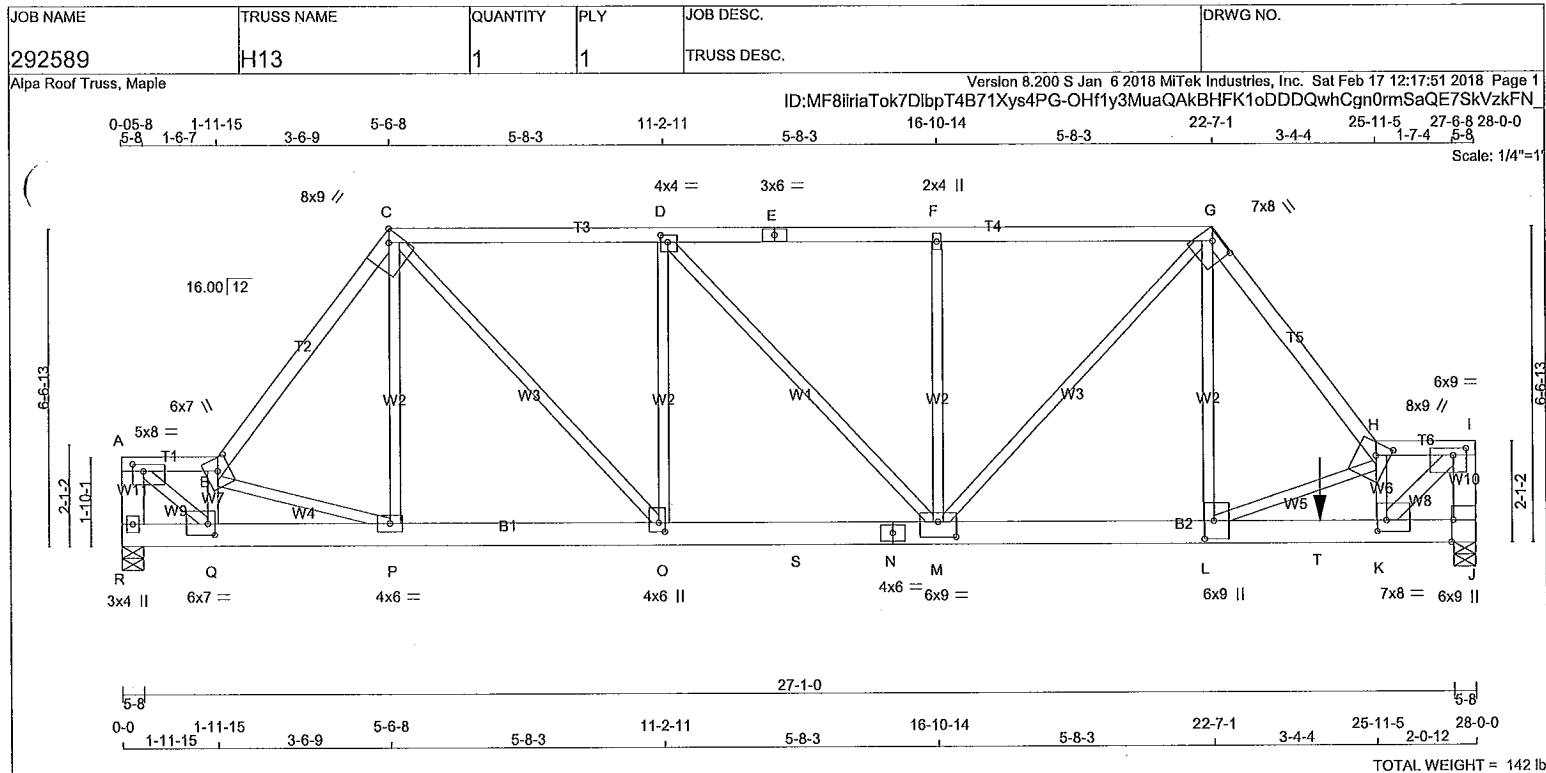
JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.35 (B) (INPUT = 1.00)



Scale = 1:49.8



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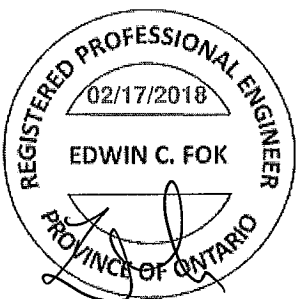
LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
R - A	2x6 DRY	No.2	SPF		
A - B	2x4 DRY	No.2	SPF		
B - C	2x4 DRY	No.2	SPF		
C - E	2x4 DRY	2100F 1.8E	SPF		
E - G	2x4 DRY	2100F 1.8E	SPF		
G - H	2x4 DRY	1650F 1.5E	SPF		
H - I	2x4 DRY	No.2	SPF		
J - I	2x6 DRY	No.2	SPF		
R - N	2x6 DRY	1650F 1.5E	SPF		
'	2x6 DRY	1650F 1.5E	SPF		
εBS	2x3 DRY	No.2	SPF		
EXCEPT					
K - I	2x4 DRY	1650F 1.5E	SPF		

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	5.0	8.0 1.75 2.75
B	TTWW+m	MT20	6.0	7.0 3.25 3.00
C	TTWW-h	MT20	8.0	9.0 Edge 2.75
D	TMVW-t	MT20	4.0	4.0 1.75 1.75
E	TS-t	MT20	3.0	6.0
F	TMVW+w	MT20	2.0	4.0
G	TTWW-h	MT20	7.0	8.0 1.75 5.00
H	TTWW+m	MT20	8.0	9.0 3.00 3.25
I	TMVW-t	MT20	6.0	9.0 1.75 3.25
J	BMV1+t	MT20	6.0	9.0 Edge 0.50
K	BMVW-t	MT20	7.0	8.0 2.75 2.25
L	BMVW+t	MT20	6.0	9.0 4.50 2.25
M	BMVWV-t	MT20	6.0	9.0 3.75 4.50
N	BS-t	MT20	4.0	6.0
O	BMVW+t	MT20	4.0	6.0 2.25 1.50
P	BMVW-t	MT20	4.0	6.0
Q	BMVW-t	MT20	6.0	7.0 2.75 1.75
R	BMV1+p	MT20	3.0	4.0

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

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



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
R	2285	0	2285	0	5-8
J	3974	0	3974	0	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
R	1629	995 / 0	0 / 0	0 / 0	0 / 0	635 / 0
J	2833	1729 / 0	0 / 0	0 / 0	0 / 0	1104 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, 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 = 3.08 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		W E B S	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
R-A	-2081 / 0	0.0	0.0 0.15 (1)	A-Q	0 / 3374
A-B	-2667 / 0	-78.0	-78.0 0.15 (1)	Q-B	-2322 / 0
B-C	-3037 / 0	-78.0	-78.0 0.41 (1)	B-P	-1088 / 0
C-D	-3218 / 0	-78.0	-78.0 0.34 (1)	P-C	0 / 586
D-E	-3970 / 0	-78.0	-78.0 0.39 (1)	C-O	0 / 2041
E-F	-3970 / 0	-78.0	-78.0 0.39 (1)	O-D	-1281 / 0
F-G	-3970 / 0	-78.0	-78.0 0.36 (1)	D-M	0 / 1112
G-H	-4928 / 0	-78.0	-78.0 0.37 (1)	M-F	-444 / 0
H-I	-4447 / 0	-78.0	-78.0 0.31 (1)	F-G	0 / 1428
J-I	-3886 / 0	0.0	0.0 0.29 (1)	I-G	0 / 2547
R-Q	0 / 0	-18.5	-18.5 0.18 (1)	Q-H	-1892 / 0
Q-P	0 / 2836	-18.5	-18.5 0.41 (1)	H-K	-3442 / 0
P-O	0 / 1832	-18.5	-18.5 0.21 (1)	K-I	0 / 5921
O-S	0 / 3218	-18.5	-18.5 0.56 (1)		
S-N	0 / 3218	-271.7	-271.7 0.56 (1)		
N-M	0 / 3218	-271.7	-271.7 0.56 (1)		
M-L	0 / 3000	-271.7	-271.7 0.59 (1)		
L-T	0 / 4660	-271.7	-271.7 0.78 (1)		
T-K	0 / 4660	-18.5	-18.5 0.78 (1)		
K-J	0 / 0	-18.5	-18.5 0.07 (1)		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
T	24-9.4	-830	-830	—	FRONT	VERT

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: Cstd Girder
START DISTANCE = 14-0-0
START SPAN CARRIED = 12-6-0
END DISTANCE = 24-9-4
END SPAN CARRIED = 12-6-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.93")
CALCULATED VERT. DEFL.(LL)= L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.93")
CALCULATED VERT. DEFL.(TL)= L/999 (0.30")

CSI: TC=0.41/1.00 (B-C:1), BC=0.78/1.00 (K-L:1), WB=0.86/1.00 (D-O:1), SSI=0.63/1.00 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

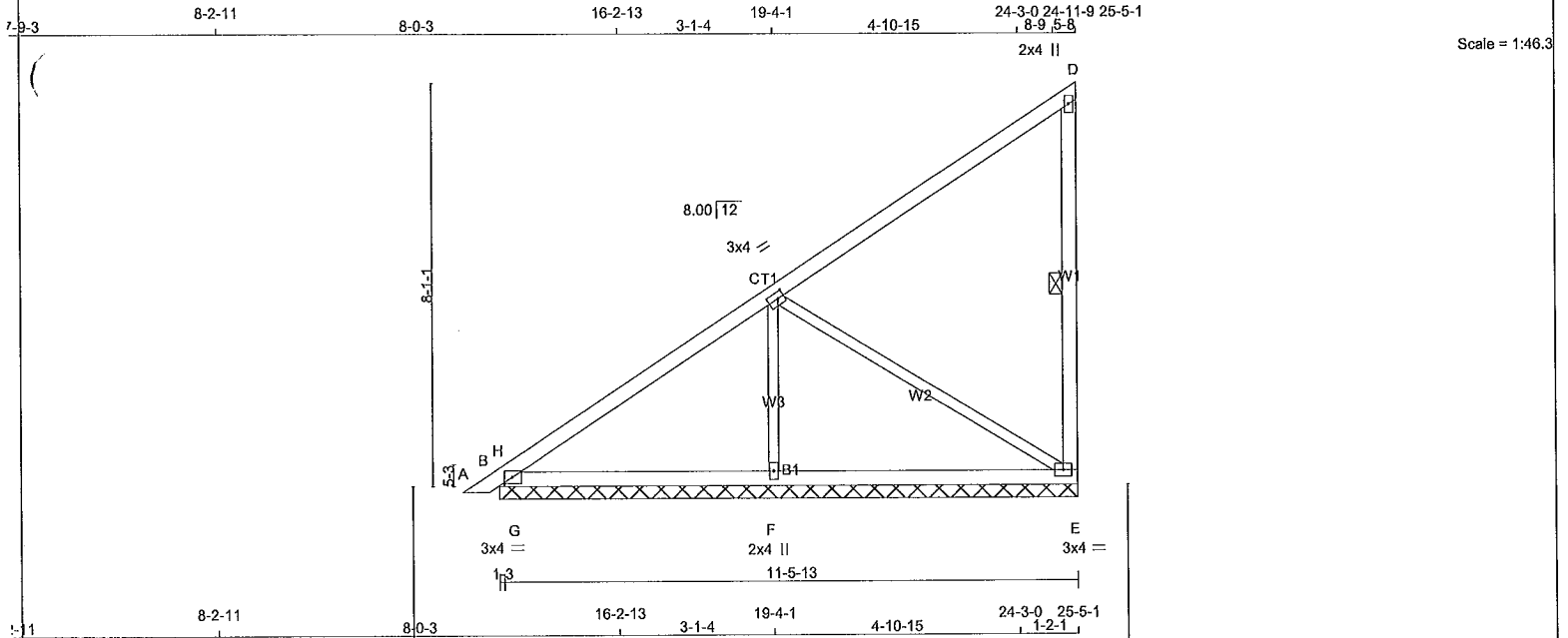
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H12P	5	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 11:42:50 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-P5Cm?fx0MuTrdP7XS20WZNPeFksk4JUKlshoUmzkFtp



TOTAL WEIGHT = 5 X 47 = 234 lb

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

S (table is in inches)	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0	Edge
C TMBW1-I	MT20	3.0	4.0	1.50 1.50
D TMBV1-p	MT20	2.0	4.0	
E BMBW1-I	MT20	3.0	4.0	
F BMBW1-w	MT20	2.0	4.0	

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
	VERT	DOWN	BRG	BRG
JT	313	0	0	0
E	313	0	0	0
B	342	0	0	0
F	512	0	0	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE		
E	222	142 / 0	0 / 0	0 / 0	80 / 0
B	241	181 / 0	0 / 0	0 / 0	80 / 0
F	367	211 / 0	0 / 0	0 / 0	156 / 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF D-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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH FR-TO	WEBS	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO
MEMB.				MEMB.		
FR-TO				FR-TO		
A-B	0 / 14	-78.0	-78.0 0.03 (1)	10.00	F-C	-363 / 0
B-H	-94 / 0	-78.0	-78.0 0.05 (1)	6.25	C-E	-163 / 0
H-C	-139 / 0	-78.0	-78.0 0.42 (1)	6.25	G-H	-248 / 11
C-D	-28 / 0	-78.0	-78.0 0.42 (1)	6.25		
E-D	-187 / 0	0.0	0.0 0.05 (1)	6.25		
B-G	0 / 139	-18.5	-18.5 0.11 (1)	10.00		
G-F	0 / 139	-18.5	-18.5 0.19 (4)	10.00		
F-E	0 / 139	-18.5	-18.5 0.19 (4)	10.00		

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

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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=0.42/1.00 (C-H:1), BC=0.19/1.00 (F-G:4), WB=0.15/1.00 (C-E:1), SSI=0.21/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

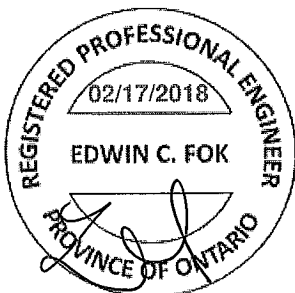
NAIL VALUES

PLATE GRIP(DRY)	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= 0.45 (C) (INPUT = 0.90)
JSI METAL= 0.10 (D) (INPUT = 1.00)



A-18023443

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H11P	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sat Feb 17 11:42:12 2018 Page 1
ID:MF8liriaTok7DlbpT4B71Xys4PG-XnvO1gTAJChE3ZDDE3Lc1Mr95QupAYtkZyUn9zzkFuP

16-9-9

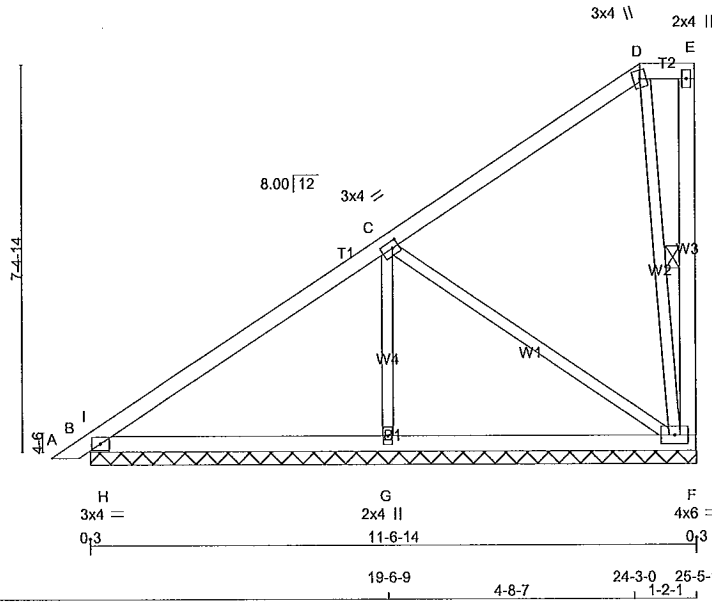
19-6-9

5-5-0

24-11-9 25-5-1

5-8

Scale = 1:44.2



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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					
BEARINGS					
JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
F	305	0	305	0	0
B	349	0	349	0	0
G	515	0	515	0	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	216	140 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
B	246	164 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
G	370	209 / 0	0 / 0	0 / 0	0 / 0	161 / 0	0 / 0

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

BRACING

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

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

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

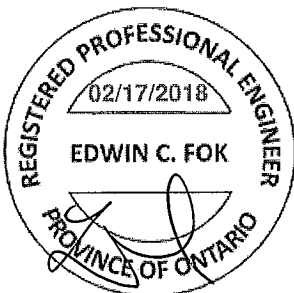
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 13	-78.0	-78.0 0.02 (1)	G-C	-355 / 0	0.09 (1)	
B-I	-59 / 0	-78.0	-78.0 0.07 (1)	D-F	-164 / 0	0.16 (1)	
I-C	-129 / 0	-78.0	-78.0 0.34 (1)	C-F	-120 / 0	0.10 (1)	
C-D	-57 / 0	-78.0	-78.0 0.34 (1)	H-I	-329 / 0	0.00 (1)	
D-E	0 / 0	-78.0	-78.0 0.01 (1)				
F-E	-40 / 0	0.0	0.0 0.01 (1)				
B-H	0 / 124	-18.5	-18.5 0.17 (1)				
H-G	0 / 124	-18.5	-18.5 0.19 (4)				
G-F	0 / 124	-18.5	-18.5 0.19 (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

CSI: TC=0.34/1.00 (C-I:1), BC=0.19/1.00 (G-H:4), WB=0.16/1.00 (D-F:1), SSI=0.27/1.00 (B-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.

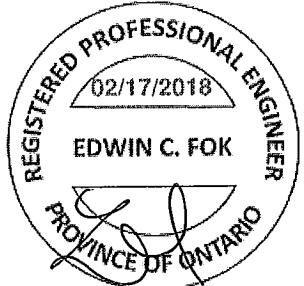
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.44 (C) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)

A-18023442



JOB NAME

TRUSS NAME

QUANTITY

PLY

JOB DESC.

DRWG NO.

292589

H9P

1

1

TRUSS DESC.

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 Mitek Industries, Inc. Sat Feb 17 11:41:22 2018 Page 1

ID:MF8ilriaTok7DlbpT4B71Xys4PG-9uVXatp4rOK4tPclZRu7pmgEGraSybN3AM8PtzkFvB

17-3-12

6-11-4

24-3-0

24-11-9

25-5-1

8-9

5-8

Scale = 1:20.7

LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

A - C

2x4

DRY

No.2

SPF

C - H

2x4

DRY

No.2

SPF

I - H

2x4

DRY

No.2

SPF

J - G

2x3

DRY

No.2

SPF

B - I

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 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-H	MT20	3.0	4.0		
C	TTW+H	MT20	3.0	5.0	Edge	1.00
D, E, F						
D	TMW+H	MT20	2.0	4.0		
G	TMV+H	MT20	2.0	4.0		
H	TMV+H	MT20	2.0	4.0		
I	BMV1+H	MT20	2.0	4.0		
J	BMV1+H	MT20	2.0	4.0		
K, L, M, N						
K	BMW1+H	MT20	2.0	4.0		

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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)	VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 13	-78.0 -78.0	0.02 (1)	10.00	K-F	-115 / 0	0.02 (1)
B-P	-9 / 42	-78.0 -78.0	0.04 (1)	10.00	L-E	-155 / 0	0.03 (1)
P-C	-15 / 0	-78.0 -78.0	0.12 (1)	6.25	M-D	-181 / 0	0.03 (1)
C-D	0 / 0	-78.0 -78.0	0.05 (1)	10.00	N-C	-176 / 0	0.03 (1)
D-E	0 / 0	-78.0 -78.0	0.05 (1)	10.00	O-P	-227 / 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	0.02 (1)	10.00			
G-H	0 / 0	-78.0 -78.0	0.02 (1)	10.00			
H-I	-42 / 0	0.0 0.0	0.01 (1)	7.81			
J-G	-73 / 0	0.0 0.0	0.01 (1)	7.81			
B-O	0 / 8	-18.5 -18.5	0.10 (1)	10.00			
O-N	0 / 8	-18.5 -18.5	0.10 (1)	10.00			
N-M	0 / 0	-18.5 -18.5	0.06 (1)	10.00			
M-L	0 / 0	-18.5 -18.5	0.02 (4)	10.00			
L-K	0 / 0	-18.5 -18.5	0.02 (4)	10.00			
K-J	0 / 0	-18.5 -18.5	0.01 (4)	10.00			
J-I	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-P:1), BC=0.10/1.00 (B-O:1), WB=0.03/1.00 (D-M:1), SSI=0.18/1.00 (B-O:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90)

JSI METAL= 0.05 (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

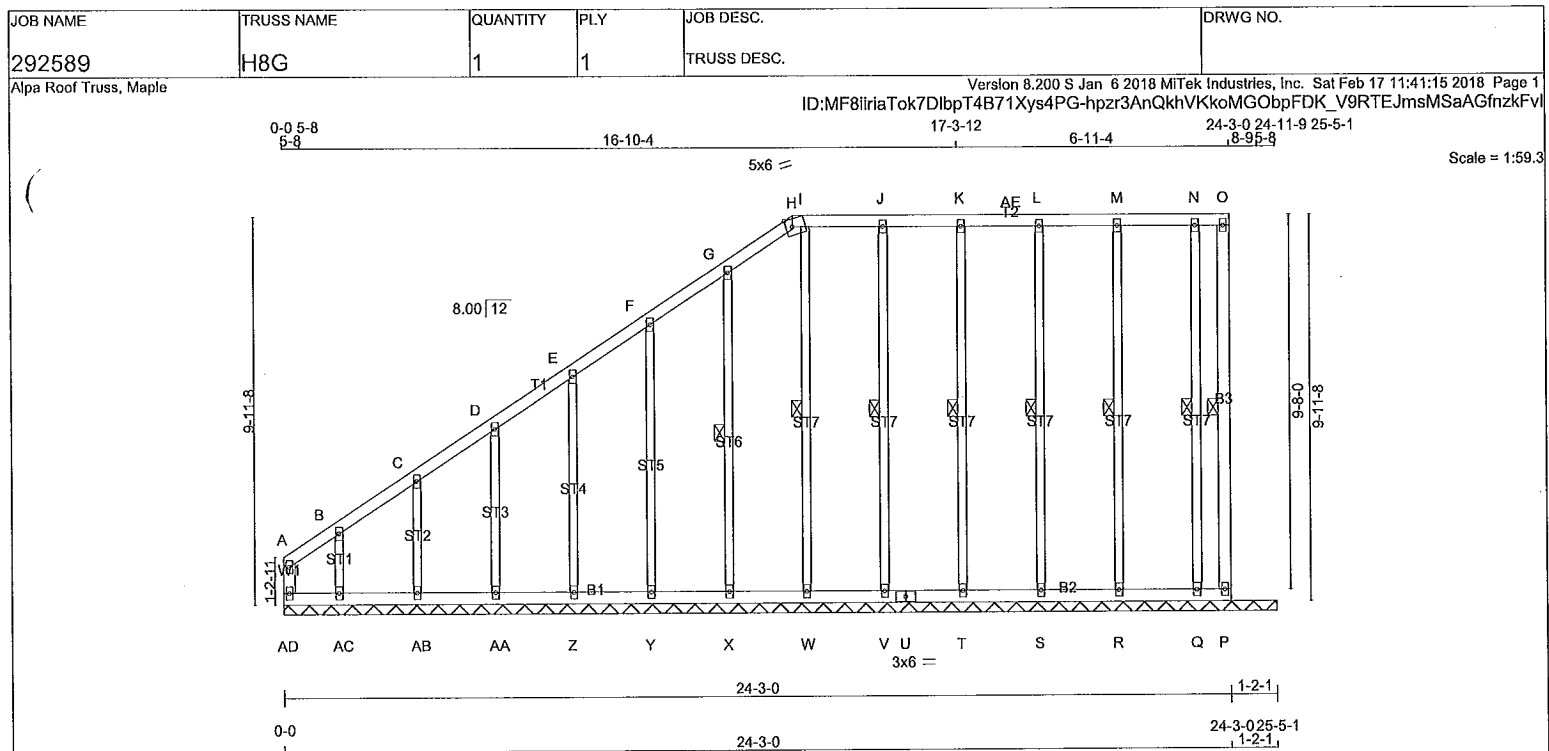
REGISTERED PROFESSIONAL ENGINEER

02/17/2018

EDWIN C. FOK

PROVINCE OF ONTARIO

A-18023440



TOTAL WEIGHT = 140 lb [M]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	
AD - A	2x4	DRY	No.2	SPF	
A - H	2x4	DRY	No.2	SPF	
H - O	2x4	DRY	No.2	SPF	
AD - U	2x4	DRY	No.2	SPF	
U - P	2x4	DRY	No.2	SPF	
P - O	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT				2x3	DRY No.2 SPF
BLE 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
A	TMV+p	MT20	2.0	4.0	
B, C, D, E, F, G, J, K, L, M, N	TMW+w	MT20	2.0	4.0	
H	TTW-m	MT20	5.0	6.0	Edge 2.00
I					
O	TMV+p	MT20	2.0	4.0	
P	BMV1+p	MT20	2.0	4.0	
Q, R, S, T, V, W, X, Y, Z, AA, AB, AC					
Q	BMW1+w	MT20	2.0	4.0	
U	BS-t	MT20	3.0	6.0	
AD	BMV1+p	MT20	2.0	4.0	

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

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.

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

BRACING

FOR SECTION H-O, MAX. PURLIN SPACING = 2.00 FT.

FOR OTHER SECTIONS, 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-P, N-Q, M-R, L-S, K-T, J-V, I-W, G-X.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO		FROM TO			FR-TO		
AD-A	-58 / 0	0.0	0.0 0.01 (1)	7.81	Q-N	-111 / 0	0.07 (1)
A-B	-19 / 0	-78.0	-78.0 0.03 (1)	6.25	R-M	-182 / 0	0.12 (1)
B-C	-14 / 0	-78.0	-78.0 0.04 (1)	6.25	S-L	-170 / 0	0.11 (1)
C-D	-11 / 0	-78.0	-78.0 0.04 (1)	6.25	T-K	-171 / 0	0.11 (1)
D-E	-7 / 0	-78.0	-78.0 0.04 (1)	10.00	V-J	-171 / 0	0.11 (1)
E-F	-5 / 0	-78.0	-78.0 0.04 (1)	10.00	W-I	-169 / 0	0.11 (1)
F-G	-2 / 0	-78.0	-78.0 0.04 (1)	10.00	X-G	-158 / 0	0.08 (1)
G-H	-5 / 0	-78.0	-78.0 0.04 (1)	10.00	Y-F	-154 / 0	0.16 (1)
H-I	0 / 2	-85.5	-85.5 0.04 (1)	2.00	Z-E	-155 / 0	0.09 (1)
I-J	0 / 0	-85.5	-85.5 0.04 (1)	2.00	AA-D	-153 / 0	0.05 (1)
J-K	0 / 0	-85.5	-85.5 0.04 (1)	2.00	AB-C	-158 / 0	0.03 (1)
K-AE	0 / 0	-85.5	-85.5 0.04 (1)	2.00	AC-B	-130 / 0	0.02 (1)
AE-L	0 / 0	-85.5	-85.5 0.04 (1)	2.00			
L-M	0 / 0	-85.5	-85.5 0.04 (1)	2.00			
M-N	0 / 0	-85.5	-85.5 0.04 (1)	2.00			
N-O	0 / 0	-85.5	-85.5 0.01 (1)	2.00			

AD-AC	0 / 19	-18.5	-18.5 0.01 (4)	10.00
AC-AB	0 / 13	-18.5	-18.5 0.02 (4)	10.00
AB-AA	0 / 9	-18.5	-18.5 0.02 (4)	10.00
AA-Z	0 / 6	-18.5	-18.5 0.01 (4)	10.00
Z-Y	0 / 4	-18.5	-18.5 0.01 (4)	10.00
Y-X	0 / 2	-18.5	-18.5 0.01 (4)	10.00
X-W	0 / 0	-18.5	-18.5 0.01 (4)	10.00
W-V	0 / 0	-18.5	-18.5 0.01 (4)	10.00
V-U	0 / 0	-18.5	-18.5 0.01 (4)	10.00
U-T	0 / 0	-18.5	-18.5 0.01 (4)	10.00
T-S	0 / 0	-18.5	-18.5 0.01 (4)	10.00
S-R	0 / 0	-18.5	-18.5 0.02 (4)	10.00
R-Q	0 / 0	-18.5	-18.5 0.02 (4)	10.00
Q-P	0 / 0	-18.5	-18.5 0.01 (4)	10.00
P-O	-22 / 0	0.0	0.0 0.01 (1)	6.25

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.04/1.00 (L-M:1), BC=0.02/1.00 (AB-AC:4), WB=0.16/1.00 (F-Y:1), SSI=0.07/1.00 (M-N: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.

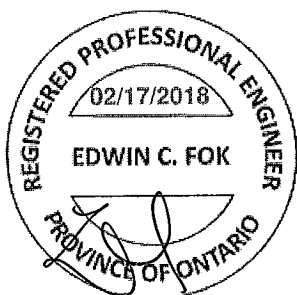
NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)	MAX	MIN
MT20	618	354	1667	788	1987 1656

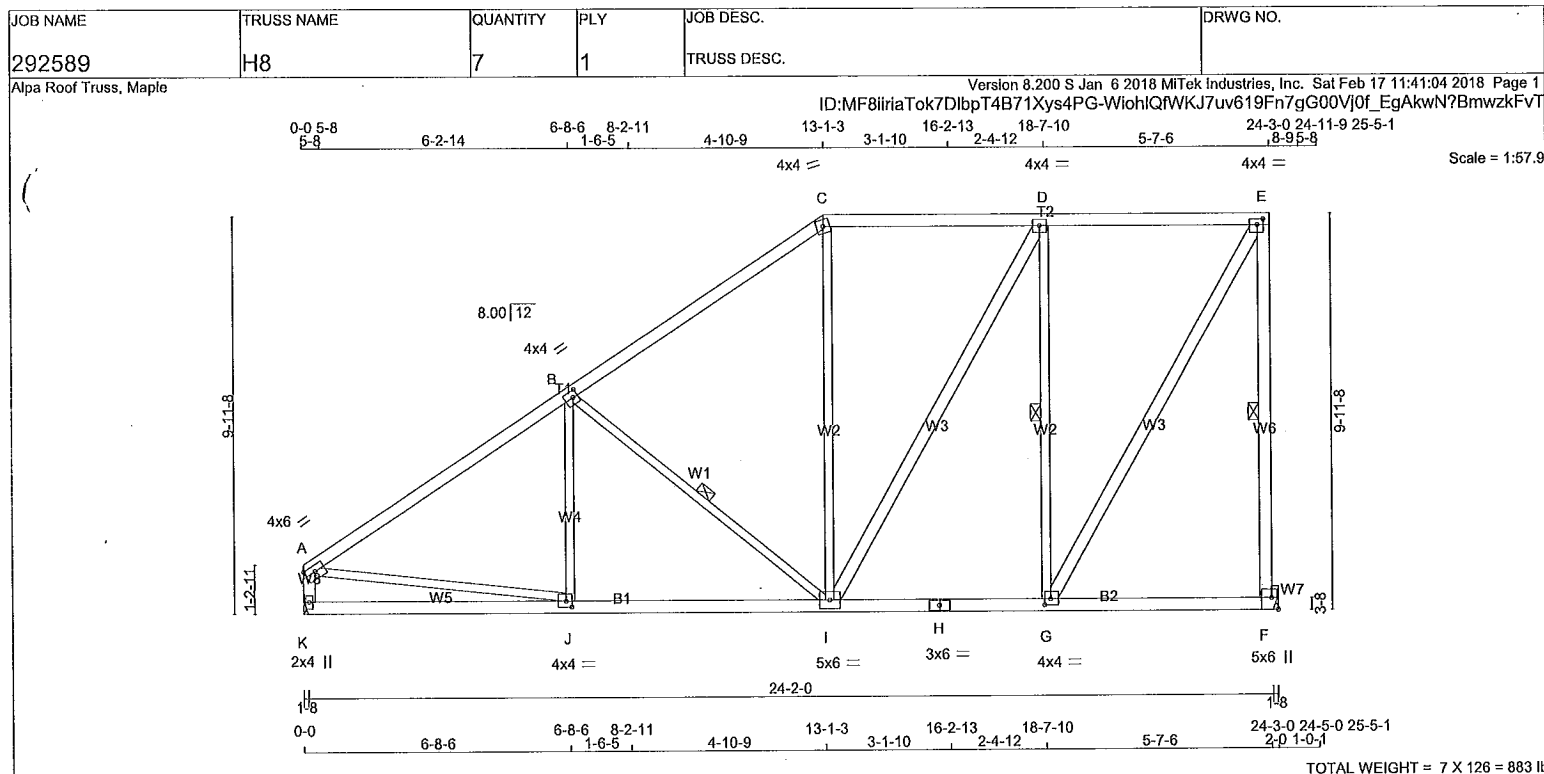
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.40 (H) (INPUT = 0.90)
JSI METAL= 0.08 (G) (INPUT = 1.00)

A-18023439





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.75	Edge
B	TMVW-t	MT20	4.0	4.0	2.00	1.50
C	TTW-m	MT20	4.0	4.0		
D	TMVW-t	MT20	4.0	4.0		
E	TMVW-t	MT20	4.0	4.0	1.75	1.75
F	BMVW1-t	MT20	5.0	6.0	3.50	Edge
G	BMVW-t	MT20	4.0	4.0	1.75	1.75
H	BS-t	MT20	3.0	6.0		
I	BMVW1-t	MT20	5.0	6.0		
J	BMVW-t	MT20	4.0	4.0	1.75	1.75
K	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	IN-SX	
K	1181	0	1181	0	0		HANGER BY OTHERS		
F	1226	0	1226	0	0		MIN. SEAT SIZE: 1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
K	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
K	844	506 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0	
F	880	506 / 0	0 / 0	0 / 0	0 / 0	374 / 0	0 / 0	

BRACING

FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.96 FT.

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC	LENGTH	MEMB.	FORCE (LBS)	MAX. FACTORED	CS1 (LC)
FR-TO		FROM TO				FR-TO			
K-A	-1131 / 0	0.0	0.0	0.11 (1)	7.48	F-E	-1185 / 0	0.57 (1)	
A-B	-1362 / 0	-78.0	-78.0	0.50 (1)	4.96	I-C	0 / 132	0.04 (4)	
B-C	-933 / 0	-78.0	-78.0	0.45 (1)	5.78	I-D	0 / 361	0.06 (1)	
C-D	-748 / 0	-85.5	-85.5	0.34 (1)	2.00	G-D	-897 / 0	0.60 (1)	
D-E	-571 / 0	-85.5	-85.5	0.33 (1)	2.00	G-E	0 / 1159	0.19 (1)	
						A-J	0 / 1172	0.26 (1)	
K-J	0 / 0	-18.5	-18.5	0.20 (4)	10.00	J-B	-18 / 94	0.03 (4)	
J-I	0 / 1162	-18.5	-18.5	0.31 (4)	10.00	B-I	-538 / 0	0.26 (1)	
I-H	0 / 571	-18.5	-18.5	0.19 (4)	10.00				
H-G	0 / 571	-18.5	-18.5	0.19 (4)	10.00				
G-F	0 / 0	-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 PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -6.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.50/1.00 (A-B:1), BC=0.31/1.00 (I-J:4), WB=0.60/1.00 (D-G:1), SSI=0.23/1.00 (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.

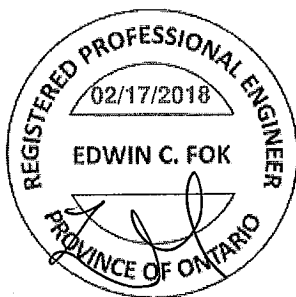
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90)
JSI METAL= 0.44 (J) (INPUT = 1.00)

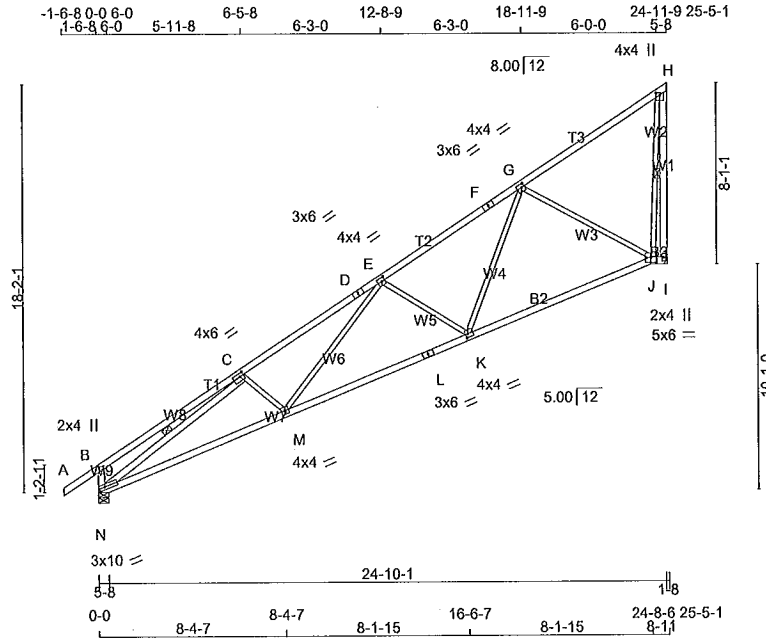
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H7T	8	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8ilriaTok7DlbpT4B71Xys4PG-4nnGK295yp_vQCYJHDxFTyy_sXVWzsNQBUX0pzkFwF



TOTAL WEIGHT = 8 X 116 = 925 lb

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

A - EBS	2x3	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	W	LEN	Y	X
JT TYPE				
B TMV+p	MT20	2.0	4.0	
C TMWW-t	MT20	4.0	6.0	1.75 2.00
D TS-t	MT20	3.0	6.0	
E TMWW-t	MT20	4.0	4.0	2.00 1.75
F TS-t	MT20	3.0	6.0	
G TMWW-t	MT20	4.0	4.0	1.75 1.50
H TMVW+p	MT20	4.0	4.0	1.00 2.00
I BMV1+p	MT20	2.0	4.0	
J BBWW-t	MT20	5.0	6.0	2.75 3.00
K BMWW-t	MT20	4.0	4.0	2.00 1.25
L BS-t	MT20	3.0	6.0	
M BMWW-t	MT20	4.0	4.0	
N BMVW1-t	MT20	3.0	10.0	1.50 3.00

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	HORIZ	UPLIFT
N	1353	0	0	5-8
I	1226	0	0	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
JT COMBINED	SNOW	LIVE	PERM.LIVE		
N	962	602 / 0	0 / 0	360 / 0	0 / 0
I	874	534 / 0	0 / 0	341 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.90 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 H-I, C-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. MEMB. FORCE (LBS)	W E B S	MAX. FACTORED FORCE (LBS)	MAX. MEMB. FORCE (LBS)
FR-TO		FROM	TO	FR-TO			
N-B	-327 / 0	0.0	0.0	0.03 (1)	7.81	N-C	-2962 / 0
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	C-M	-139 / 26
B-C	0 / 26	-78.0	-78.0	0.41 (1)	10.00	M-E	0 / 521
C-D	-2609 / 0	-78.0	-78.0	0.53 (1)	3.90	E-K	-610 / 0
D-E	-2609 / 0	-78.0	-78.0	0.53 (1)	3.90	K-G	0 / 906
E-F	-1628 / 0	-78.0	-78.0	0.43 (1)	4.76	G-J	-1120 / 0
F-G	-1628 / 0	-78.0	-78.0	0.43 (1)	4.76	J-H	0 / 1092
G-H	-151 / 0	-78.0	-78.0	0.39 (1)	6.25		
H-I	-1220 / 0	0.0	0.0	0.35 (1)	5.80		
N-M	0 / 2462	-18.5	-18.5	0.56 (1)	10.00		
M-L	0 / 2019	-18.5	-18.5	0.49 (1)	10.00		
L-K	0 / 2019	-18.5	-18.5	0.49 (1)	10.00		
K-J	0 / 1144	-18.5	-18.5	0.39 (4)	10.00		
J-I	0 / 0	-18.5	-18.5	0.00 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.85")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (0.85")
CALCULATED VERT. DEFL.(TL) = L/996 (0.31")

CSI: TC=0.53/1.00 (C-E:1), BC=0.56/1.00 (M-N:1), WB=0.98/1.00 (G-J:1), SSI=0.20/1.00 (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

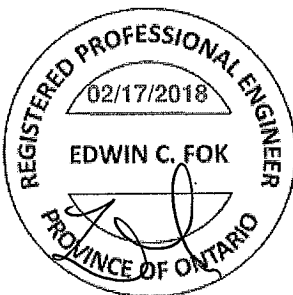
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.73 (C) (INPUT = 1.00)



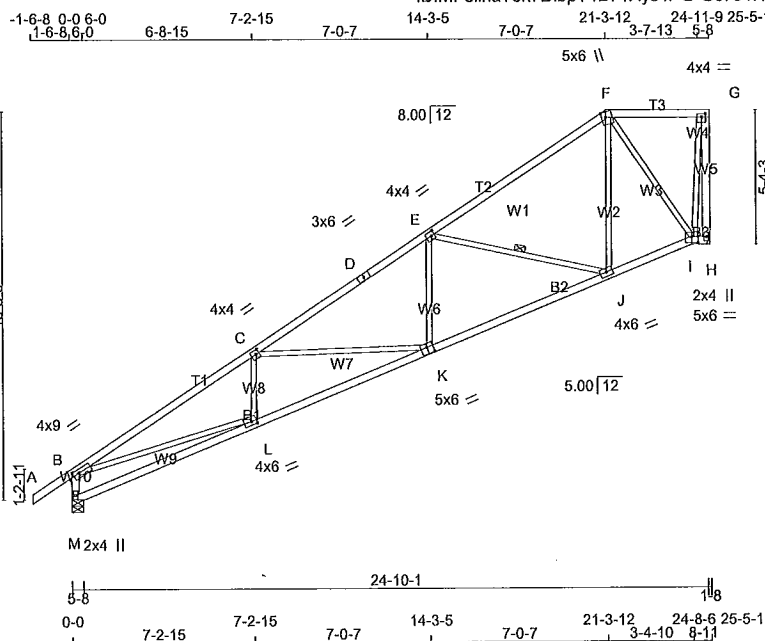
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H6T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8iiriaTok7DlbpT4B71Xys4PG-Gc791HWZSRHEegr5k2RdSB7MU7WqD9suJIECSMzkFwx



TOTAL WEIGHT = 111 lb

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

A'	EBS	2x3	DRY	No.2	SPF
I					

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	1.75	3.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0	2.00	1.50
F	TTWW+m	MT20	5.0	6.0	Edge	1.75
G	TMVW-t	MT20	4.0	4.0	1.50	1.75
H	BMV1+p	MT20	2.0	4.0		
I	BBWW-t	MT20	5.0	6.0	2.75	3.00
J	BMWW-t	MT20	4.0	6.0		
K	BSWW-t	MT20	5.0	6.0	3.00	3.00
L	BMWW-t	MT20	4.0	6.0	1.75	2.50
M	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	HORZ	DOWN	UP
H	1226	0	1226	0
M	1353	0	1353	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
H	874	534 / 0	0 / 0	0 / 0	341 / 0	0 / 0
M	962	602 / 0	0 / 0	0 / 0	360 / 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 = 3.50 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-J.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	W E B S
	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	LENGTH FR-TO
A-B	0 / 35	-78.0 -78.0 0.15 (1)
B-C	-2790 / 0	-78.0 -78.0 0.82 (1)
C-D	-2073 / 0	-78.0 -78.0 0.57 (1)
D-E	-2073 / 0	-78.0 -78.0 0.57 (1)
E-F	-819 / 0	-78.0 -78.0 0.48 (1)
F-G	-152 / 0	-78.0 -78.0 0.17 (1)
H-G	-1220 / 0	0.0 0.0 0.61 (1)
M-B	-1296 / 0	0.0 0.0 0.13 (1)
M-L	0 / 6	-18.5 -18.5 0.25 (4)
L-K	0 / 2530	-18.5 -18.5 0.52 (1)
K-J	0 / 1873	-18.5 -18.5 0.41 (1)
J-I	0 / 715	-18.5 -18.5 0.27 (4)
I-H	0 / 0	-18.5 -18.5 0.00 (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 (0.85")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (0.85")
CALCULATED VERT. DEFL.(TL) = L/961 (0.32")

CSI: TC=0.82/1.00 (B-C:1), BC=0.52/1.00 (K-L:1), WB=0.61/1.00 (C-K:1), SSI=0.22/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (L) (INPUT = 0.90)
JSI METAL= 0.62 (L) (INPUT = 1.00)

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

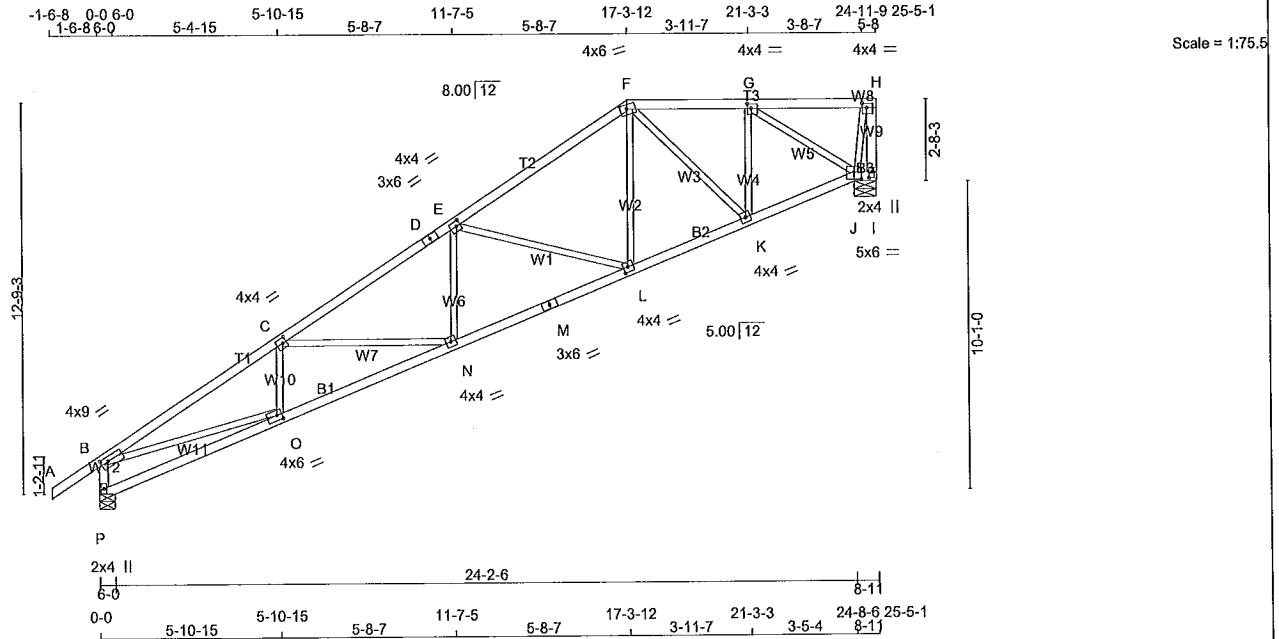


A-18023436

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H5T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8IiriaTok7DlbpT4B71Xys4PG-1t4l8CPvag8V2HfMjfmWblFtYUT9c6waErZEfOzkFx4



TOTAL WEIGHT = 105 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	4.0	9.0	1.75	3.00	
C	TMVW-1	MT20	4.0	4.0	2.00	1.50	
D	TS-t	MT20	3.0	6.0			
E	TMVW-1	MT20	4.0	4.0	2.00	1.50	
F	TTWW-m	MT20	4.0	6.0	1.75	2.50	
G	TMVW-1	MT20	4.0	4.0	1.75	1.50	
H	TMVW-1	MT20	4.0	4.0	1.75	1.75	
I	BMV1+p	MT20	2.0	4.0	2.25	1.00	
J	BBVW1-I	MT20	5.0	6.0	2.75	3.00	
K	BMVW-1	MT20	4.0	4.0			
L	BMVW-1	MT20	4.0	4.0	2.00	1.75	
M	BS-t	MT20	3.0	6.0			
N	BMVW-1	MT20	4.0	4.0			
O	BMVW-1	MT20	4.0	6.0	2.00	2.00	
P	BMV1+p	MT20	2.0	4.0			

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
I	-986	0	0	-986
J	2277	0	0	2277
P	1288	0	0	1288

PROVIDE ANCHORAGE AT BEARING JOINT I FOR 986 LBS FACTORED UPLIFT

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	-703	0/-428	0/0	0/0	0/0	0/0	0/-275	0/0
J	1624	990/0	0/0	0/0	0/0	0/0	634/0	0/0
P	916	574/0	0/0	0/0	0/0	0/0	342/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH FR-TO	W E B S	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (I.C)
A-B	0/35	-78.0	-78.0	0.15 (1)	10.00	O-C	-275/0	0.05 (1)	
B-C	-2530/0	-78.0	-78.0	0.58 (1)	3.89	C-N	-299/0	0.17 (1)	
C-D	-2182/0	-78.0	-78.0	0.52 (1)	4.16	N-E	0/243	0.06 (4)	
D-E	-2182/0	-78.0	-78.0	0.52 (1)	4.16	E-L	-811/0	0.52 (1)	
E-F	-1268/0	-78.0	-78.0	0.41 (1)	5.24	L-F	0/629	0.14 (1)	
F-G	-803/0	-78.0	-78.0	0.23 (1)	6.25	F-K	-337/0	0.16 (1)	
G-H	0/339	-78.0	-78.0	0.27 (1)	10.00	K-G	0/401	0.09 (1)	
H-I	0/993	0.0	0.0	0.16 (1)	10.00	G-J	-1390/0	0.42 (1)	
P-B	-1238/0	0.0	0.0	0.13 (1)	7.22	J-H	-1167/0	0.19 (1)	
P-O	0/4	-18.5	-18.5	0.14 (4)	10.00	B-O	0/2180	0.49 (1)	
O-N	0/2292	-18.5	-18.5	0.43 (1)	10.00				
N-M	0/1968	-18.5	-18.5	0.37 (1)	10.00				
M-L	0/1968	-18.5	-18.5	0.37 (1)	10.00				
L-K	0/1131	-18.5	-18.5	0.23 (1)	10.00				
K-J	0/868	-18.5	-18.5	0.17 (1)	10.00				
J-I	0/0	-18.5	-18.5	0.00 (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 (0.82")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.58/1.00 (B-C:1), BC=0.43/1.00 (N-O:1), WB=0.52/1.00 (E-L:1), SSI=0.18/1.00 (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 (I) (INPUT = 0.90)
JSI METAL= 0.65 (M) (INPUT = 1.00)

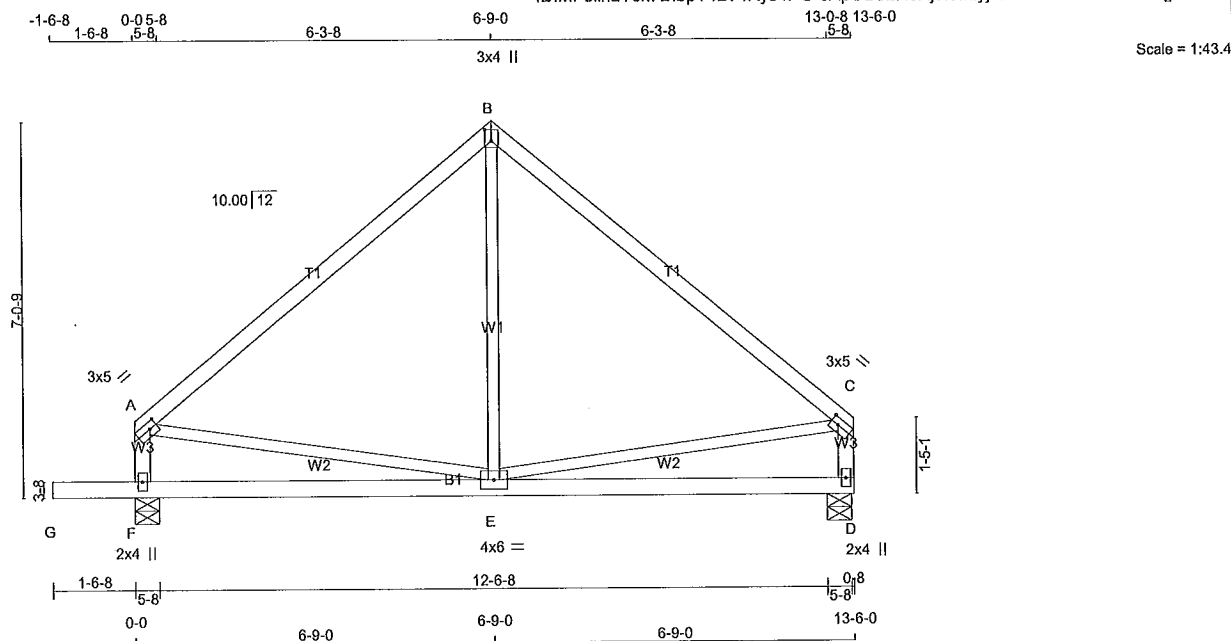
A-18023435



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292589	H3	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sat Feb 17 11:36:31 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-0ApUS3LHcRjdf9fhlyjeiSDvzVEnKnY8PNEgEzkFzk



TOTAL WEIGHT = 56 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	
F - A	2x4	DRY	No.2	SPF	
D - C	2x4	DRY	No.2	SPF	
G - D	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

SEASONED LUMBER.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
D	651	0	651	0	5-8	1-8
F	800	0	800	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	464	283 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0
F	570	348 / 0	0 / 0	0 / 0	0 / 0	222 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM TO	CSI (LC)		FR-TO				
A- B	-446 / 0	-78.0	-78.0	0.30 (1)	6.25	E- B	0 / 128 0.04 (4)		
B- C	-446 / 0	-78.0	-78.0	0.30 (1)	6.25	A- E	0 / 347 0.08 (1)		
F- A	-604 / 0	0.0	0.0	0.06 (1)	7.81	E- C	0 / 347 0.08 (1)		
D- C	-604 / 0	0.0	0.0	0.06 (1)	7.81				
G- F	0 / 0	-98.5	-96.5	0.16 (1)	10.00				
F- E	0 / 0	-18.5	-18.5	0.24 (4)	10.00				
E- D	0 / 0	-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) = $L/360$ (0.45")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.45")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

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

CSI: TC=0.30/1.00 (A-B:1), BC=0.24/1.00 (E-F:4), WB=0.08/1.00 (C-E:1), SSI=0.16/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

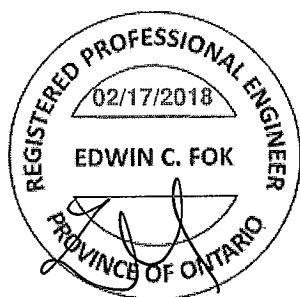
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

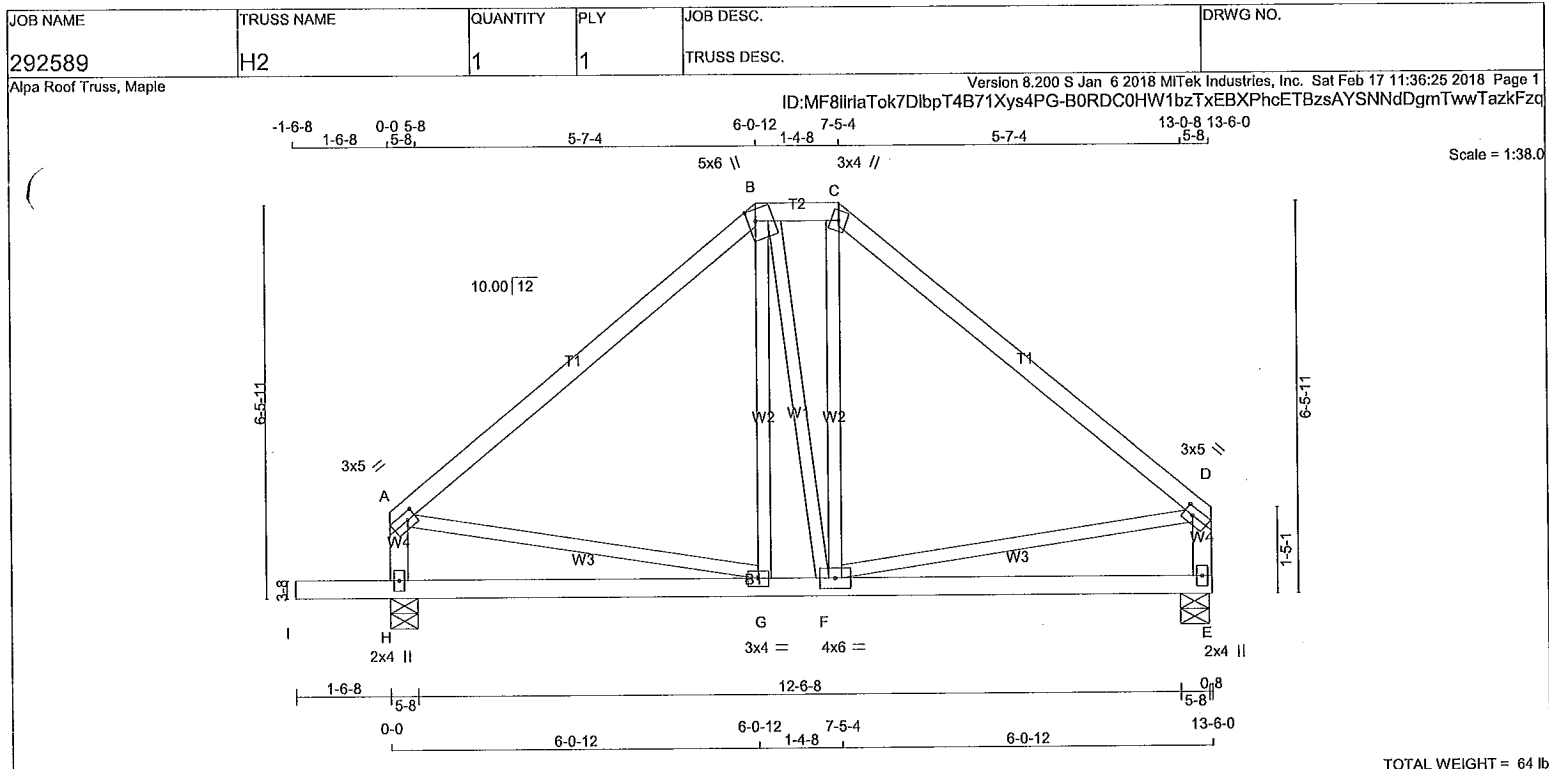
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.54 (A) (INPUT = 0.90)
JSI METAL= 0.18 (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-18023433



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

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

ASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	1.75
B	TTWW+m	MT20	5.0	6.0	2.25	1.50
C	TTWW+m	MT20	3.0	4.0		
D	TMVW-t	MT20	3.0	5.0	1.50	1.75
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMVWW-t	MT20	3.0	4.0		
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
E	651	0	0	651	0	0	5-8	1-8	1-8
H	800	0	0	800	0	0	5-8	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
E	464	283 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0		
H	570	348 / 0	0 / 0	0 / 0	0 / 0	222 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	CS1 (LC)	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM	TO			FR-TO			
A-B	-474 / 0	-78.0	-78.0	0.37 (1)	6.25	G-B	0 / 55	0.02 (4)	
B-C	-365 / 0	-78.0	-78.0	0.02 (1)	6.25	B-F	0 / 7	0.00 (4)	
C-D	-475 / 0	-78.0	-78.0	0.37 (1)	6.25	F-C	0 / 62	0.02 (4)	
H-A	-605 / 0	0.0	0.0	0.06 (1)	7.81	A-G	0 / 369	0.08 (1)	
E-D	-604 / 0	0.0	0.0	0.06 (1)	7.81	F-D	0 / 370	0.08 (1)	
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (4)	10.00				
G-F	0 / 364	-18.5	-18.5	0.21 (4)	10.00				
F-E	0 / 0	-18.5	-18.5	0.17 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

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

CSI: TC=0.37/1.00 (C-D:1), BC=0.21/1.00 (F-G:4), WB=0.08/1.00 (D-F:1), SSI=0.14/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

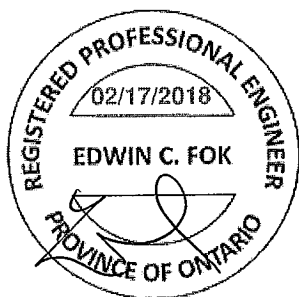
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

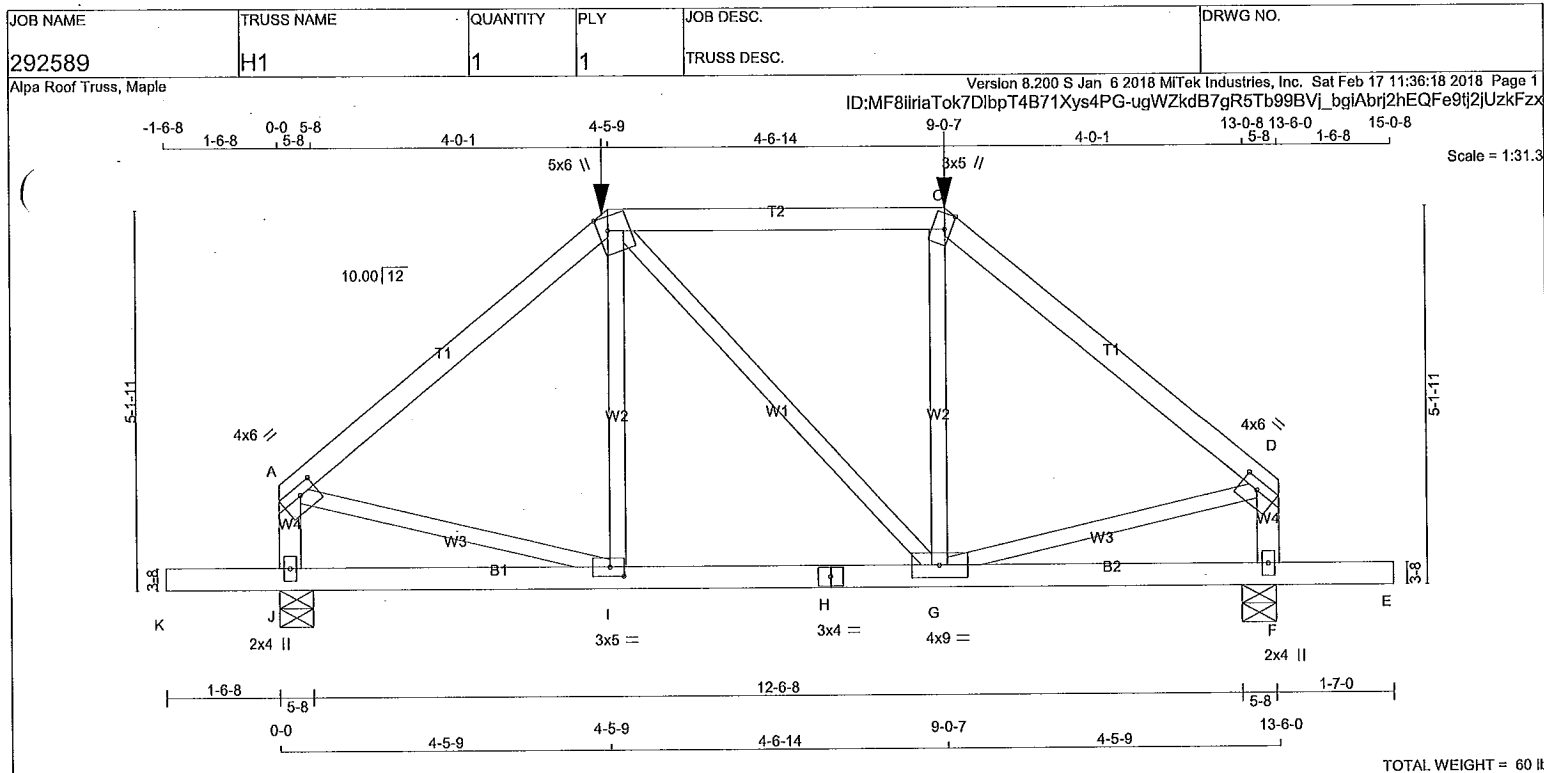
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (G) (INPUT = 0.80)
JSI METAL= 0.19 (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-18023432



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-t	MT20	4.0	6.0	1.50 2.75
B	TTWW+m	MT20	5.0	6.0	2.25 1.50
C	TTW+m	MT20	3.0	5.0	Edge 1.00
D	TMVW-t	MT20	4.0	6.0	1.50 2.75
F	BMV1+p	MT20	2.0	4.0	
G	BMWWW-t	MT20	4.0	9.0	
H	BS-t	MT20	3.0	4.0	
I	BMWW-t	MT20	3.0	5.0	1.50 2.25
J	BMV1+p	MT20	2.0	4.0	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 253.8 lbs FACTORED DOWN AT 9-0-7, AND 253.8 lbs FACTORED DOWN AT 4-5-9 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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
J	1347	0	1347	0	0	5-8	2-0	2-0
F	1347	0	1347	0	0	5-8	2-0	2-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP
J	962	578 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	385 / 0	0 / 0	0 / 0	0 / 0
F	962	578 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	385 / 0	0 / 0	0 / 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 = 5.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	-1159 / 0	-78.0	-78.0 0.34 (1)	I-B	-34 / 118	0.04 (4)	
B-C	-887 / 0	-153.5	-153.5 0.63 (1)	B-G	0 / 0	0.00 (1)	
C-D	-1159 / 0	-78.0	-78.0 0.34 (1)	G-C	-34 / 118	0.05 (4)	
J-A	-1130 / 0	0.0	0.0 0.13 (1)	A-I	0 / 913	0.23 (1)	
F-D	-1130 / 0	0.0	0.0 0.13 (1)	G-D	0 / 913	0.23 (1)	
K-J	0 / 0	-96.5	-96.5 0.17 (1)				
J-I	0 / 0	-36.4	-36.4 0.18 (4)				
I-H	0 / 888	-36.4	-36.4 0.28 (4)				
H-G	0 / 888	-36.4	-36.4 0.28 (4)				
G-F	0 / 0	-36.4	-36.4 0.18 (4)				
F-E	0 / 0	-96.5	-96.5 0.17 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	4-5-9	-254	-254	—	FRONT	VERT	TOTAL
C	9-0-7	-254	-254	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-5-9
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

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=0.63/1.00 (B-C:1), BC=0.28/1.00 (G-I:4), WB=0.23/1.00 (A-I:1), SS=0.30/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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.

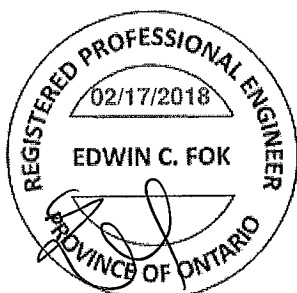
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

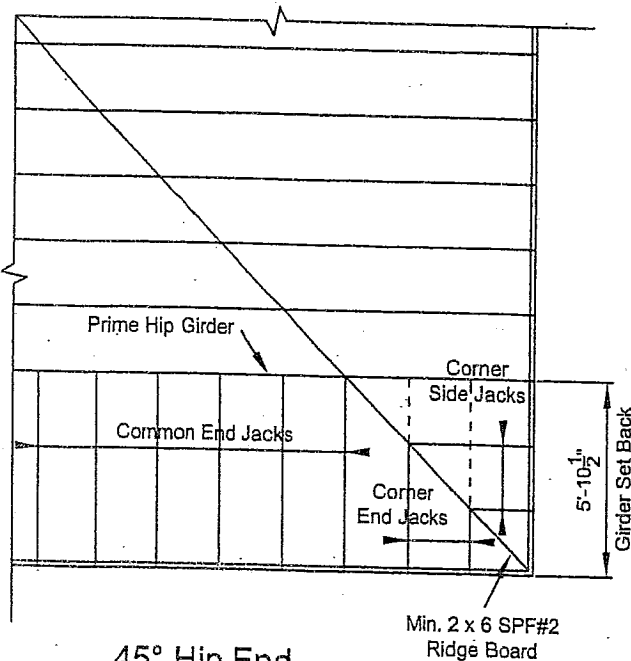
PLATE ROTATION TOL. = 5.0 Deg.

A-18023431

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STRACON ENGINEERING INC.



45° Hip End

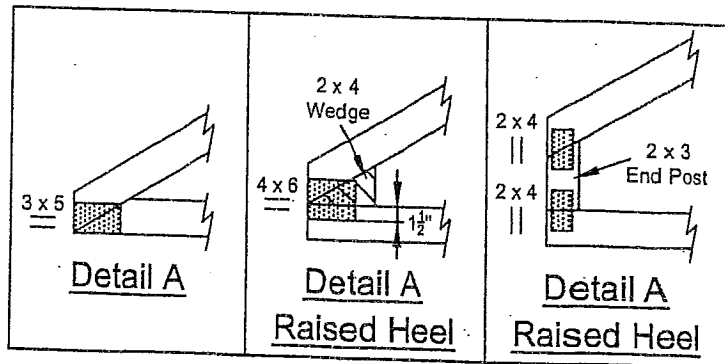
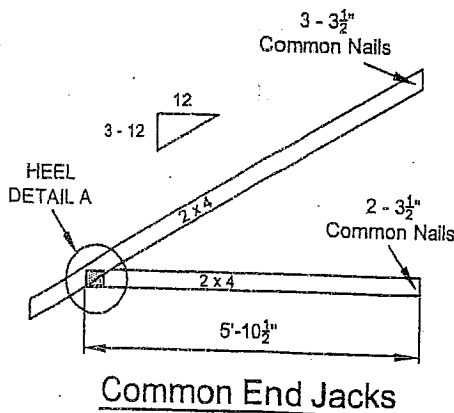
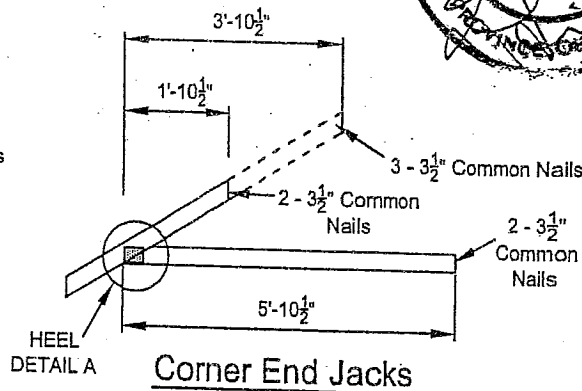
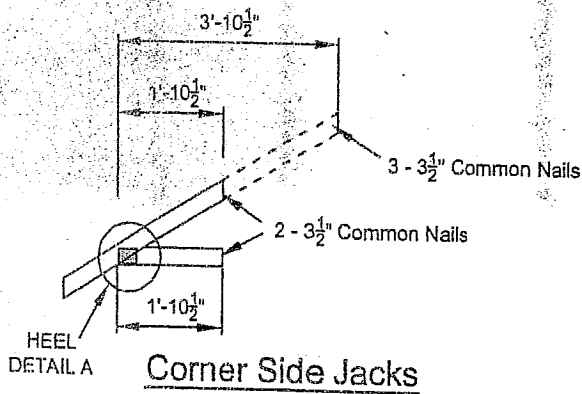
LUMBER SPECIFICATION

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

DESIGN LOAD

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

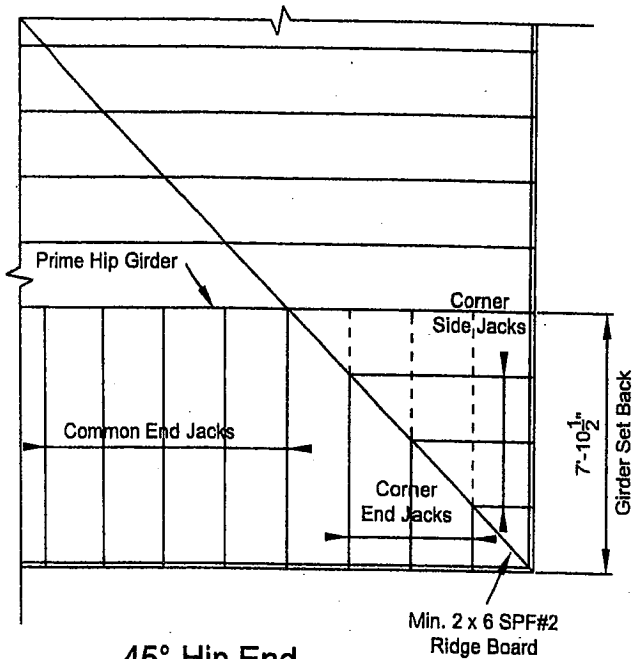
TOTAL LOAD : 50.5 P.S.F.



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

CS-51008

STRACON ENGINEERING INC.



45° Hip End

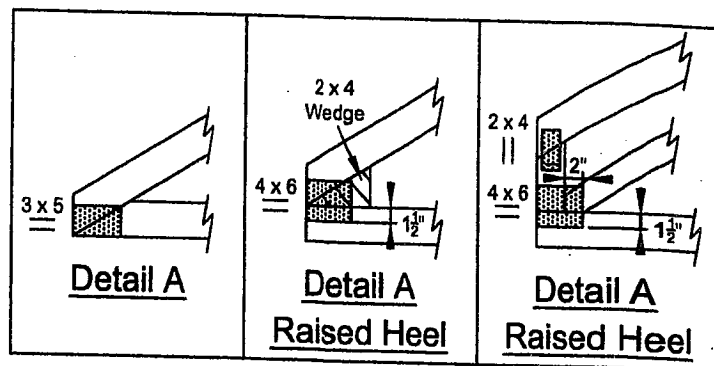
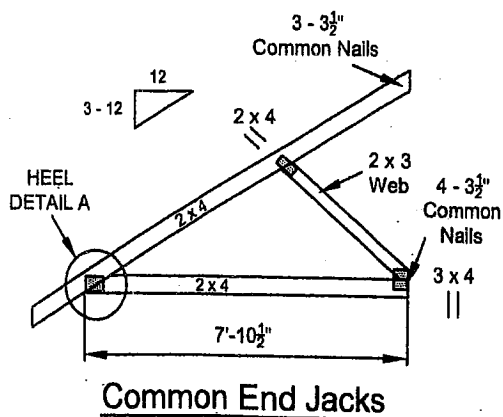
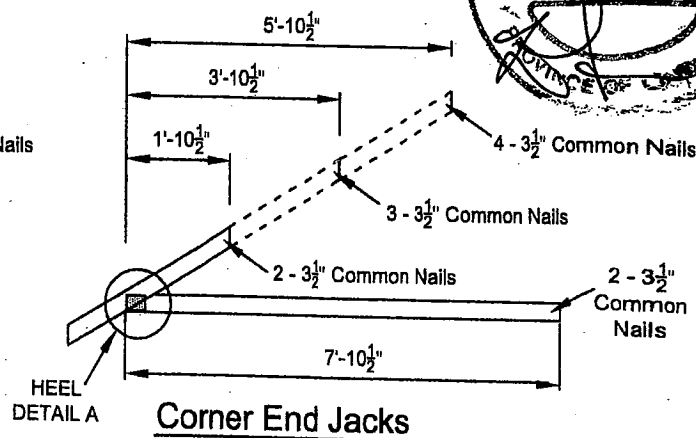
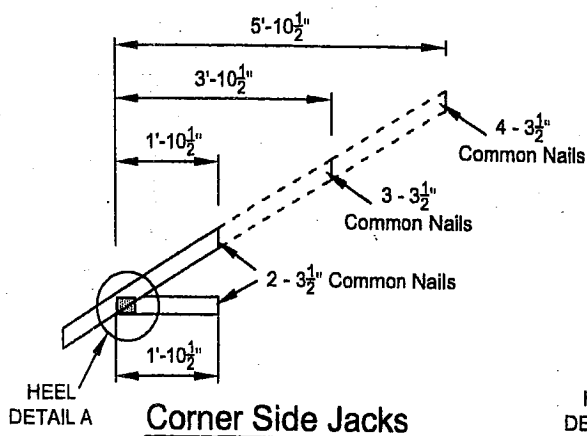
LUMBER SPECIFICATION

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

DESIGN LOAD

TOP CHORD SNOW LOAD : 34.8 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

TOTAL LOAD : 44.8 P.S.F



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

CS-71008N

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

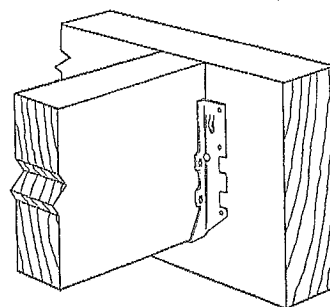
Finish: G90 galvanized

Design:

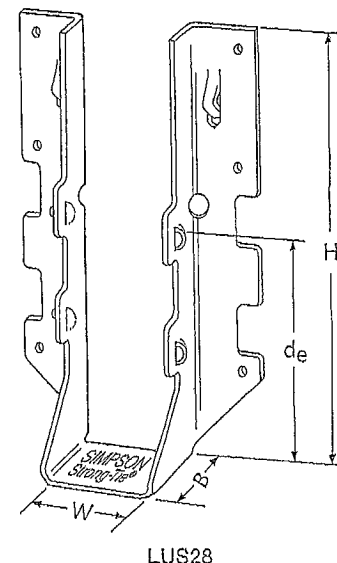
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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



Typical LUS Installation



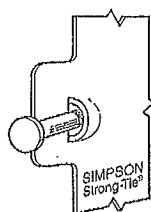
LUS28

Options:

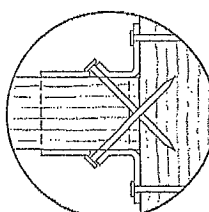
- These hangers cannot be modified

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _o =1.15)	Normal (K _o =1.00)	Uplift (K _o =1.15)	Normal (K _o =1.00)
LUS24	18	1½	3½	1¾	1 11/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 11/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3 5/8	(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	1¾	3¾	(6) 10d	(6) 10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	(6) 16d	(4) 16d	1720	3325	1545	2575
LUS28-3	18	4½	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 11/16	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4½	8 3/8	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.

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T-SPECUS17-3/17 exp. 6/19

(800) 999-5099
strongtie.com

HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

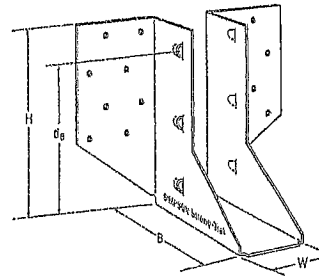
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been Increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

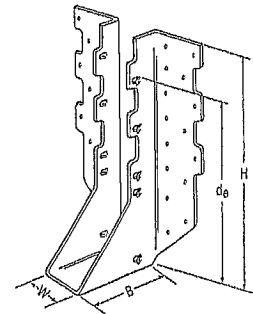
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

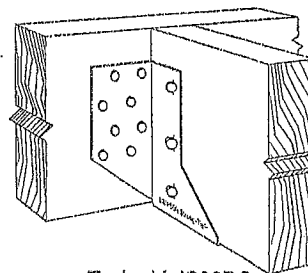
- See current catalogue for options



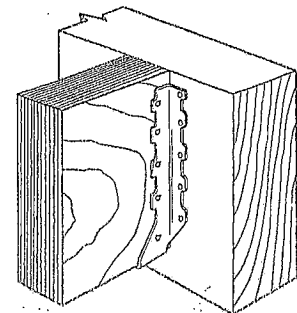
LJS26DS



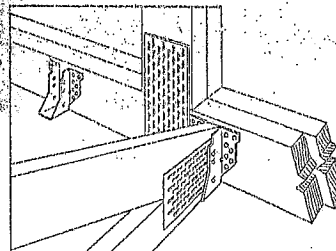
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



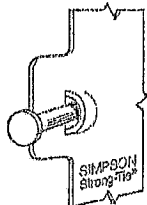
Typical HUS
Installation



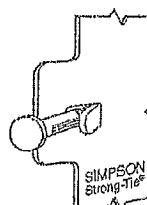
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

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

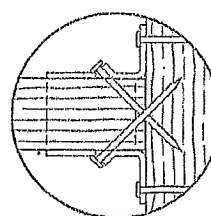
1. d₀ is the distance from the seat of the hanger to the highest joist nail.



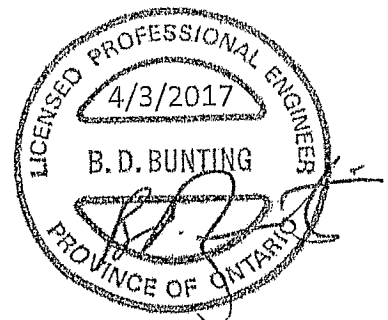
Dome Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent 5,603,580



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

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T-SPECHUS17 3/17 exp. 6/19

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