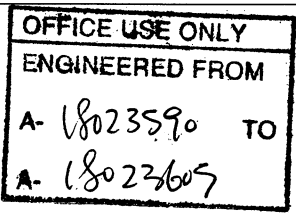


ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. (Latest Edition)
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2X4 SPF #2 24"O.C.
WITH A VERT.POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING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



Job Track:	45147
Layout ID:	292603
Plan Log:	95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN

Project: **PINE VALLEY**

Date: 12/27/2017	Designer: AMANDA
------------------	------------------

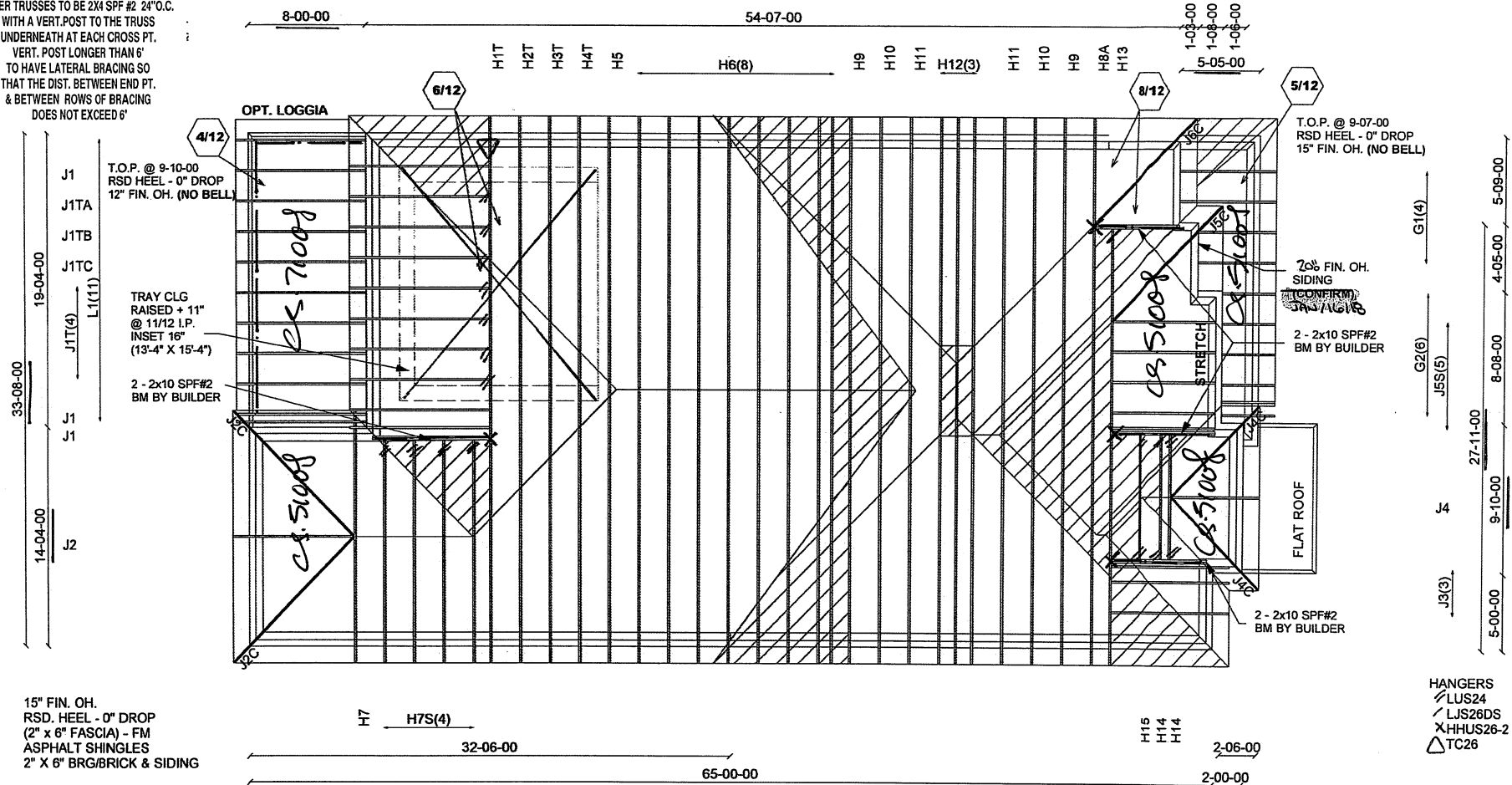
Model / Elevation:
4202 REV1

STD OR OPT 2NDFL W/5BED OR
/C OPT LOGGIA

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

ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. (Latest Edition)
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2x4 SPF #2 24"O.C.
WITH A VERT. POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'



A-18023594 - A-18023613

P.L.99352

HILLHURST ROSEDALE



Job Track: 45147
Layout ID: 292604
Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN

Project: **PINE VALLEY**

Date: 12/27/2017 Designer: AMANDA

Model / Elevation:
4202 REV1

/C OPT TRAY OR OPT LOGGIA

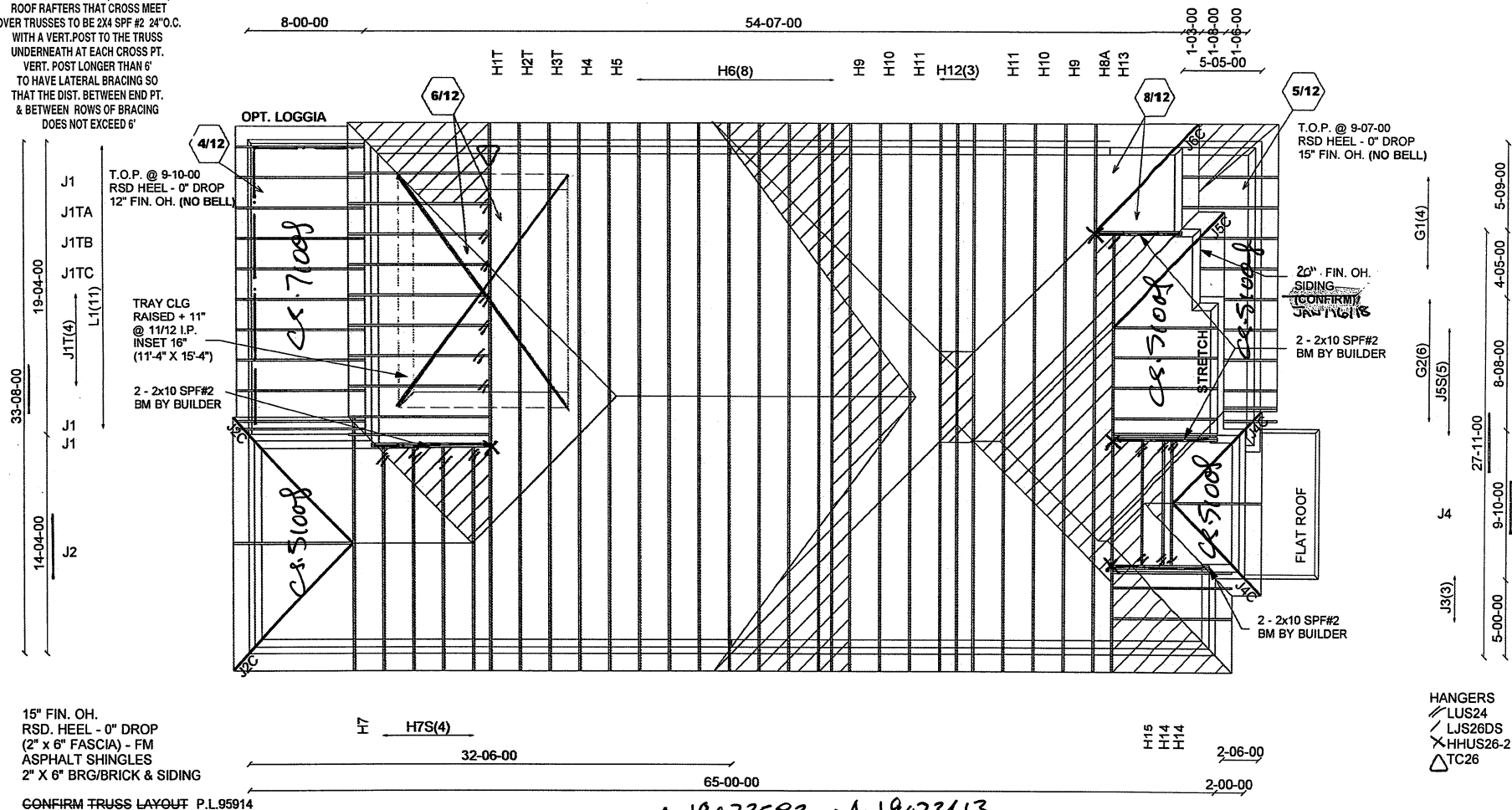
STD OR OPT 2ND FLR W/SLAB

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



ALPA-BARRIE

ALL CONV. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. (Latest Edition)
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2x4 SPF #2 24" O.C.
WITH A VERT. POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'



A-18023593 - A-18023613

PL 99352

HILLHURST ROSEDALE



Job Track: **45147**
Layout ID: **292605**
Plan Log: **95914**

Builder / Location:
GOLD PARK HOMES / VAUGHAN
Project: **PINE VALLEY**
Date: **12/27/2017** Designer: **AMANDA**

Model / Elevation:
4202 REV1 / C OPT TRAY 5 BED
OPT 2ND FLR W/ 5 BED OR OPT LOGGIA

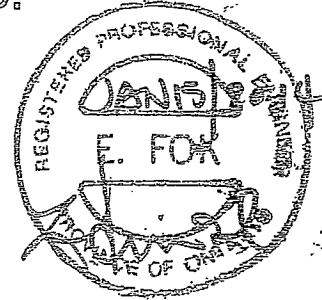
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.



HANGERS
LUS24
LJS26DS
HHUS26-2
TC26

Stracon Engineering Inc.

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



RESPONSIBILITIES

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

SPECIFICATIONS

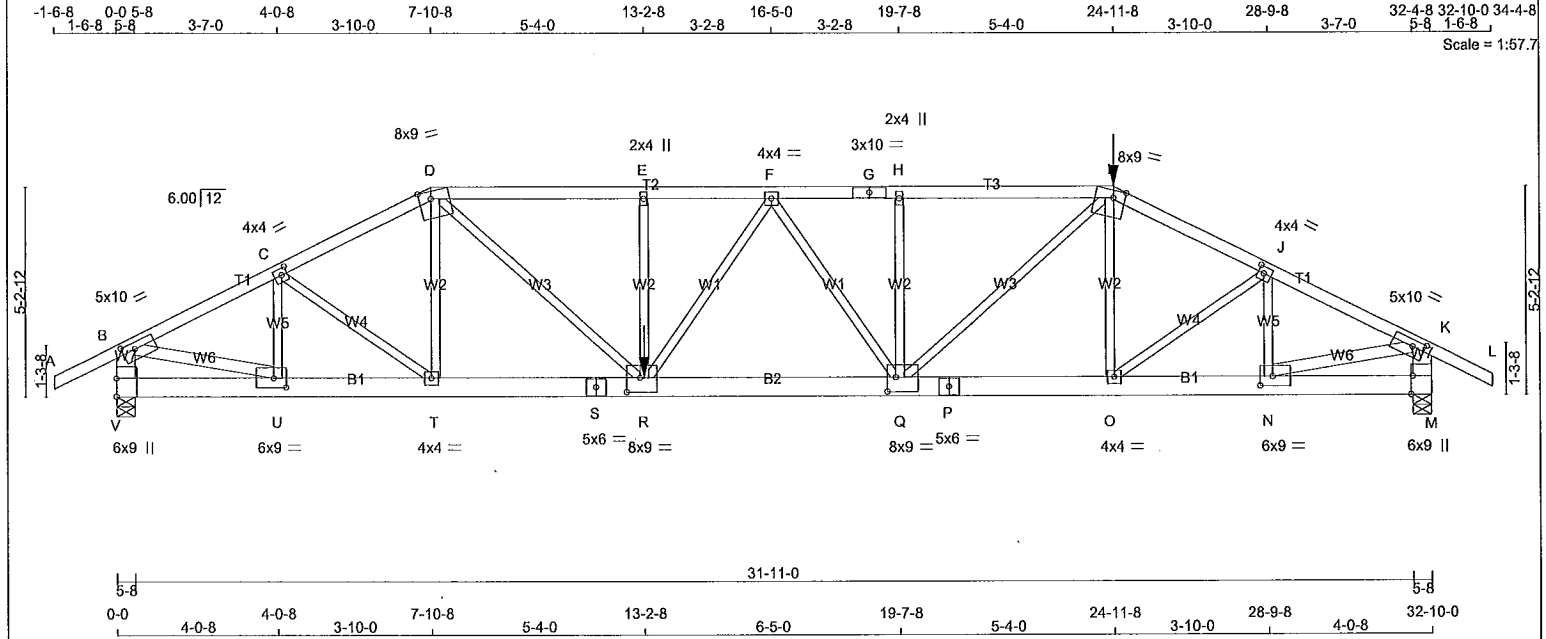
1. Trusses designed by Stracon Engineering Inc. conforms to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type indicated on the drawings as well as to the procedures established by the truss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

January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292603	H1	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 16:31:42 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-xUTzc4hmf87ezy7bn4zx0LFQIN55_HySnO9wpBzkBF?



TOTAL WEIGHT = 159 lb

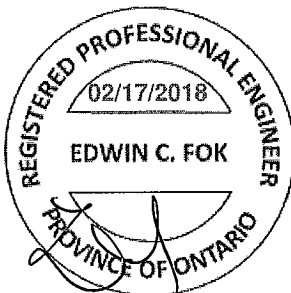
LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF			
D - G	2x4	DRY	1650F 1.5E	SPF			
G - I	2x4	DRY	1650F 1.5E	SPF			
I - L	2x4	DRY	No.2	SPF			
V - B	2x6	DRY	No.2	SPF			
M - K	2x6	DRY	No.2	SPF			
V - S	2x6	DRY	1650F 1.5E	SPF			
S - P	2x6	DRY	1650F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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	10.0	2.00	3.75
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TTWW-m	MT20	8.0	9.0	2.25	3.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	TS-t	MT20	3.0	10.0		
H	TMVW-w	MT20	2.0	4.0		
I	TTWW-m	MT20	8.0	9.0	2.25	3.50
J	TMVW-t	MT20	4.0	4.0	2.00	1.75
K	TMVW-t	MT20	5.0	10.0	2.00	3.75
M	BMV1-t	MT20	6.0	9.0	Edge	0.50
N	BMVW-t	MT20	6.0	9.0	2.75	3.75
O	BMVW-t	MT20	4.0	4.0		
P	BS-t	MT20	5.0	6.0		
Q	BMVW-t	MT20	8.0	9.0	4.25	2.50
R	BMVW-t	MT20	8.0	9.0	4.25	4.00
S	BS-t	MT20	5.0	6.0		
T	BMVW-t	MT20	4.0	4.0		
U	BMVW-t	MT20	6.0	9.0	2.75	3.75
V	BMV1-t	MT20	6.0	9.0	5.50	

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
V	3330	0	3330	0	5-8	5-5
M	3855	0	3855	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
V	2371	1467 / 0	0 / 0	0 / 0	904 / 0	0 / 0	0 / 0
M	2752	1659 / 0	0 / 0	0 / 0	1093 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 28	-78.0	-78.0 0.16 (1)	U-C	-936 / 0	0.19 (1)	
B-C	-4634 / 0	-78.0	-78.0 0.53 (1)	C-T	0 / 562	0.14 (1)	
C-D	-5169 / 0	-78.0	-78.0 0.60 (1)	T-D	-208 / 0	0.08 (1)	
D-E	-7040 / 0	-78.0	-78.0 0.75 (1)	D-R	0 / 3292	0.81 (1)	
E-F	-7040 / 0	-115.7	-115.7 0.51 (1)	R-E	-455 / 0	0.18 (1)	
F-G	-7002 / 0	-115.7	-115.7 0.64 (1)	R-F	-120 / 0	0.07 (1)	
G-H	-7002 / 0	-115.7	-115.7 0.64 (1)	F-Q	-189 / 0	0.11 (1)	
H-I	-7001 / 0	-115.7	-115.7 0.90 (1)	Q-H	-602 / 0	0.24 (1)	
I-J	-5954 / 0	-78.0	-78.0 0.72 (1)	Q-I	0 / 2283	0.57 (1)	
J-K	-5359 / 0	-78.0	-78.0 0.65 (1)	O-I	0 / 188	0.07 (4)	
K-L	0 / 28	-78.0	-78.0 0.16 (1)	O-J	0 / 630	0.16 (1)	
V-B	-3258 / 0	0.0	0.0 0.23 (1)	N-J	-1001 / 0	0.20 (1)	
M-K	-3728 / 0	0.0	0.0 0.26 (1)	B-U	0 / 4258	0.75 (1)	
				N-K	0 / 4921	0.87 (1)	
V-U	0 / 0	-18.5	-18.5 0.07 (1)				
U-T	0 / 4156	-18.5	-18.5 0.41 (1)				
T-S	0 / 4603	-18.5	-18.5 0.42 (1)				
S-R	0 / 4603	-18.5	-18.5 0.42 (1)				
R-Q	0 / 7106	-122.4	-122.4 0.80 (1)				
Q-P	0 / 5312	-122.4	-122.4 0.59 (1)				
P-O	0 / 5312	-122.4	-122.4 0.59 (1)				
O-N	0 / 4804	-45.7	-45.7 0.48 (1)				
N-M	0 / 0	-45.7	-45.7 0.09 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
I	24-11-8	-652	-652	-	FRONT	VERT	TOTAL
R	13-2-8	-1244	-1244	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 7-10-8
END SETBACK = 7-10-8
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 19-9-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

(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 (0.31")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/640 (0.62")

CSI: TC=0.90/1.00 (H-I:1), BC=0.80/1.00 (Q-R:1), WB=0.87/1.00 (K-N:1), SSI=0.31/1.00 (H-I:1)

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

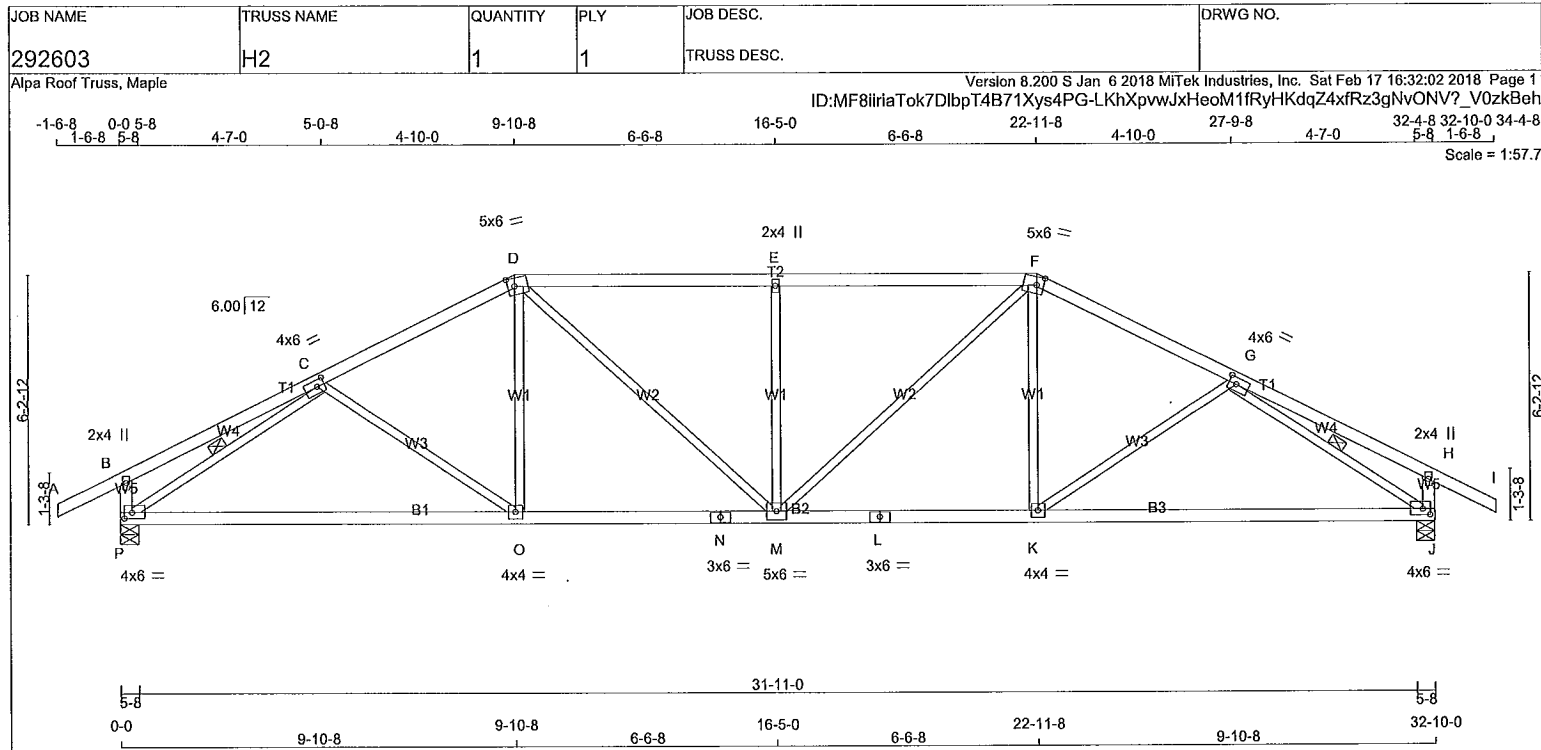
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

A-18023590

CONTINUE ON PAGE 2



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 - I	2x4	DRY No.2	SPF
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - N	2x4	DRY No.2	SPF
N - L	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF

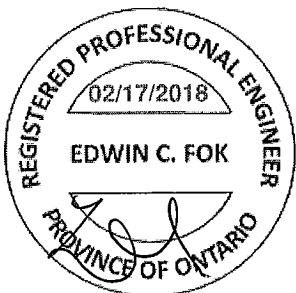
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
C TMVW-t	MT20	4.0	6.0	2.00	2.25
D TTWW-m	MT20	5.0	6.0	2.50	2.00
E TMV+w	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	6.0	2.50	2.00
G TMVW-t	MT20	4.0	6.0	2.00	2.25
H TMV+p	MT20	2.0	4.0		
J BMVW-t	MT20	4.0	6.0	1.75	2.25
K BMVW-t	MT20	4.0	4.0		
L BS-t	MT20	3.0	6.0		
M BMVW-t	MT20	5.0	6.0		
N BS-t	MT20	3.0	6.0		
O BMVW-t	MT20	4.0	4.0		
P BMVW-t	MT20	4.0	6.0	1.75	2.25

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



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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
P		1709	0	1709	0	0	5-8	1-14	
J		1709	0	1709	0	0	5-8	1-14	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
P	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0		
J	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.02 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.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-P, G-J.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 28	C-O	-90 / 42
B-C	0 / 19	D-M	0 / 245
C-D	-2111 / 0	E-F	-627 / 0
D-E	-2257 / 0	F-G	0 / 518
E-F	-2257 / 0	G-H	0 / 245
F-G	-2111 / 0	H-I	-90 / 42
G-H	0 / 19	I-J	-2370 / 0
H-I	0 / 28	J-K	-2370 / 0
I-J	-276 / 0		
J-K	-276 / 0		
P-O	0 / 1943		
O-N	0 / 1874		
N-M	0 / 1874		
M-L	0 / 1874		
L-K	0 / 1874		
K-J	0 / 1943		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.35")

CSI: TC=0.52/1.00 (D-E:1), BC=0.59/1.00 (K-M:4), WB=0.61/1.00 (G-J:1), SSI=0.25/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

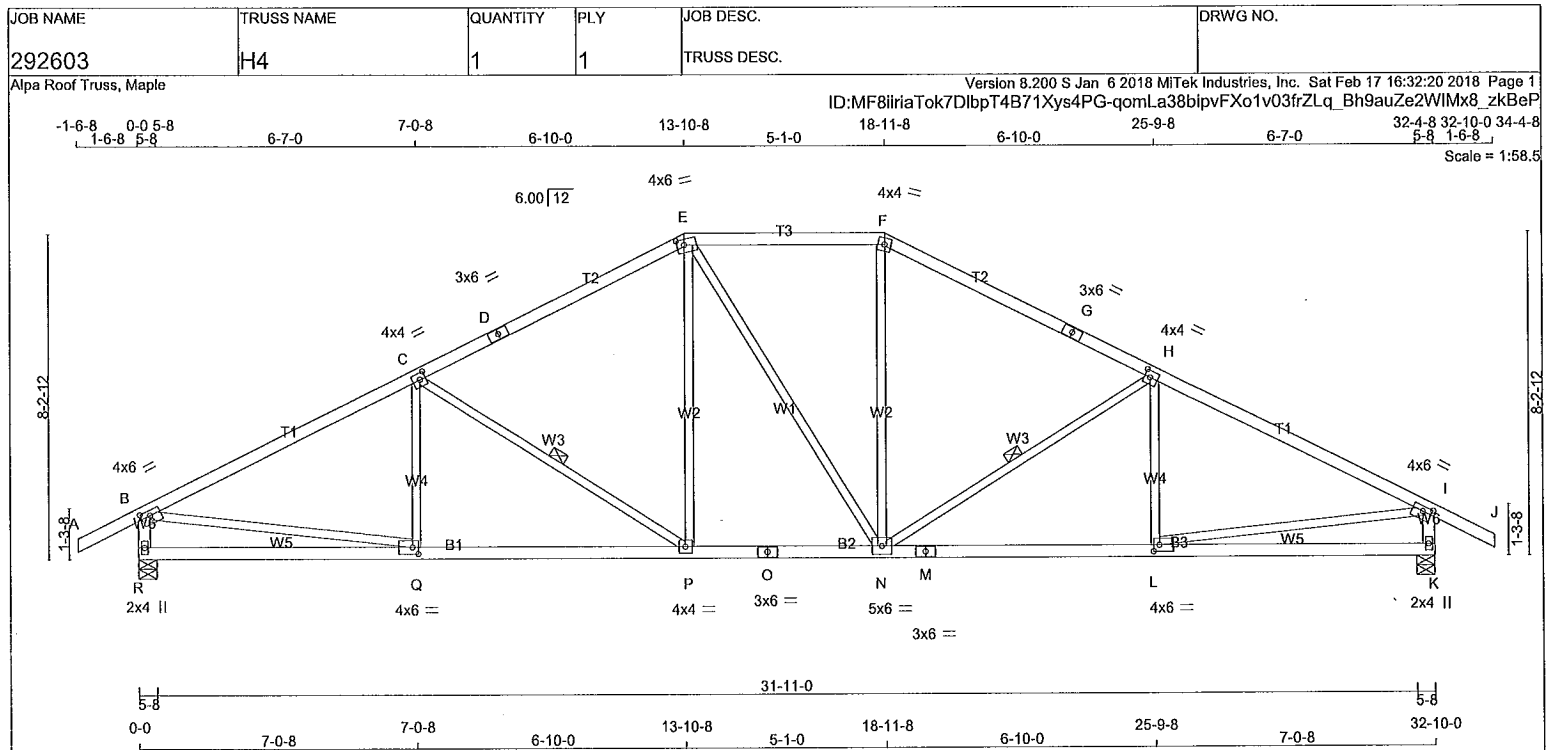
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (J) (INPUT = 0.90)
JSI METAL= 0.60 (N) (INPUT = 1.00)

A-18023591

A-18023592

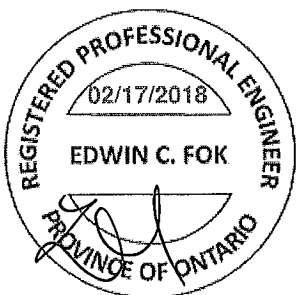


TOTAL WEIGHT = 135 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-I	MT20	4.0	6.0	1.50 2.75
C	TMVW-I	MT20	4.0	4.0	2.00 1.75
D	TS-I	MT20	3.0	6.0	
E	TTWW-m	MT20	4.0	6.0	1.75 2.25
F	TTW-m	MT20	4.0	4.0	
G	TS-I	MT20	3.0	6.0	
H	TMVW-I	MT20	4.0	4.0	2.00 1.75
I	TMVW-I	MT20	4.0	6.0	1.50 2.75
K	BMV1+p	MT20	2.0	4.0	
L	BMVW-I	MT20	4.0	6.0	2.00 1.75
M	BS-I	MT20	3.0	6.0	
N	BMVW-I	MT20	5.0	6.0	
O	BS-I	MT20	3.0	6.0	
P	BMVW-I	MT20	4.0	4.0	
Q	BMVW-I	MT20	4.0	6.0	2.00 1.75
R	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	REQD BRG
JT		VERT	HORZ	DOWN	UP
R	1709	0	1709	0	5-8
K	1709	0	1709	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0
K	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-P, H-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-78.0 -78.0	0.14 (1) 10.00	Q-C	-143 / 55	0.05 (1)	
B-C	-2278 / 0	-78.0 -78.0	0.65 (1) 3.88	C-P	-550 / 0	0.26 (1)	
C-D	-1821 / 0	-78.0 -78.0	0.57 (1) 4.33	P-E	0 / 403	0.09 (1)	
D-E	-1821 / 0	-78.0 -78.0	0.57 (1) 4.33	E-N	0 / 1	0.00 (1)	
E-F	-1607 / 0	-78.0 -78.0	0.29 (1) 4.91	N-F	0 / 405	0.09 (1)	
F-G	-1822 / 0	-78.0 -78.0	0.57 (1) 4.33	N-H	-549 / 0	0.26 (1)	
G-H	-1822 / 0	-78.0 -78.0	0.57 (1) 4.33	L-H	-144 / 55	0.05 (1)	
H-I	-2278 / 0	-78.0 -78.0	0.65 (1) 3.88	B-Q	0 / 2083	0.47 (1)	
I-J	0 / 28	-78.0 -78.0	0.14 (1) 10.00	L-I	0 / 2083	0.47 (1)	
R-B	-1655 / 0	0.0 0.0	0.17 (1) 6.44				
K-I	-1655 / 0	0.0 0.0	0.17 (1) 6.44				
R-Q	0 / 0	-18.5 -18.5	0.22 (4) 10.00				
Q-P	0 / 2063	-18.5 -18.5	0.44 (1) 10.00				
P-O	0 / 1607	-18.5 -18.5	0.33 (1) 10.00				
O-N	0 / 1607	-18.5 -18.5	0.33 (1) 10.00				
N-M	0 / 2063	-18.5 -18.5	0.44 (1) 10.00				
M-L	0 / 2063	-18.5 -18.5	0.44 (1) 10.00				
L-K	0 / 0	-18.5 -18.5	0.22 (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

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) = $L/999$ (0.10")
ALLOWABLE DEFL.(TL) = $L/360$ (1.09")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.21")

CSI: TC=0.65/1.00 (B-C:1), BC=0.44/1.00 (P-Q:1), WB=0.47/1.00 (B-Q:1), SSI=0.24/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (R) (INPUT = 0.90)
JSI METAL= 0.61 (B) (INPUT = 1.00)

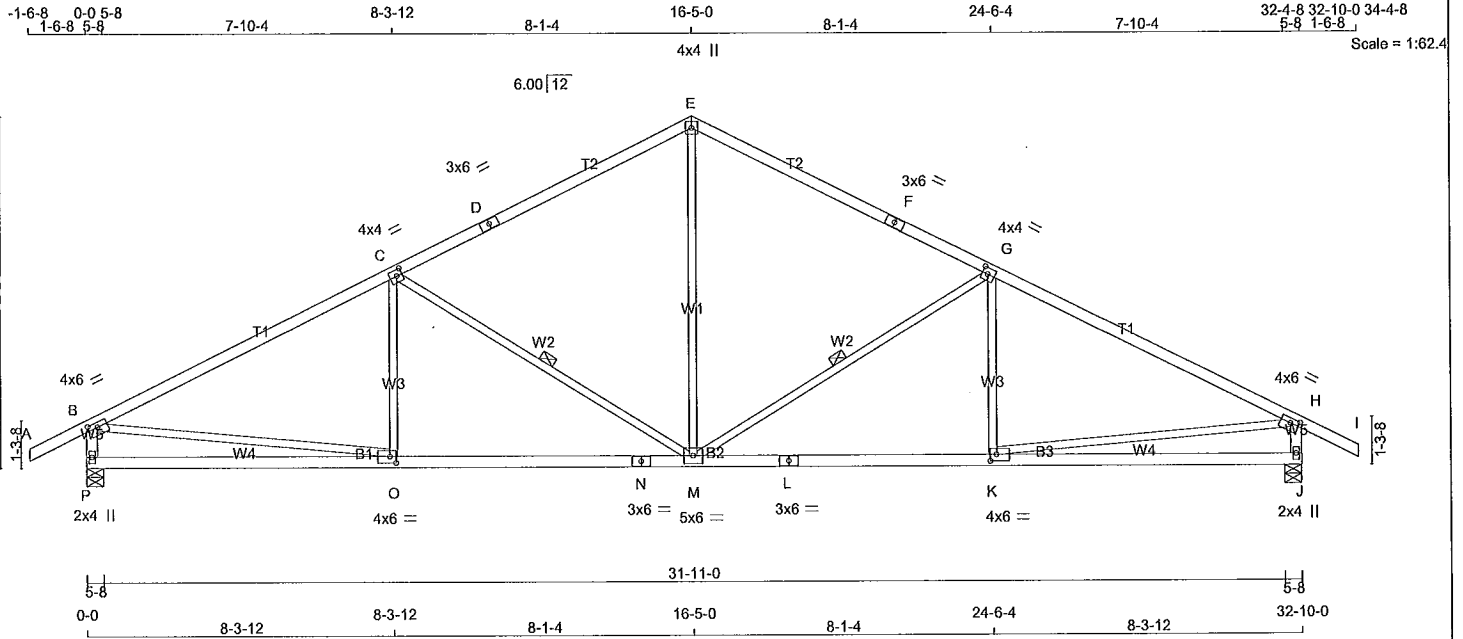
A-18023593

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292603	H6	8	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 16:32:35 2018 Page 1

ID:MF8ilriaTok7DlbpT4B71Xys4PG-ugA0kCK0AQo7q6gnOiQNgWyTSkGDvLyFz7UEAczkBeA



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	1.50	2.75
C	TMWW-t	MT20	4.0	4.0	2.00	1.75
D	TS-t	MT20	3.0	6.0		
E	TTW+p	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	4.0	4.0	2.00	1.75
H	TMVW-t	MT20	4.0	6.0	1.50	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BMWW-t	MT20	4.0	6.0	2.00	2.00
L	BS-t	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	6.0		
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	4.0	6.0	2.00	2.00
P	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
P	1709	0	1709	0	5-8	2-8
J	1709	0	1709	0	5-8	2-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0
J	1216	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.37 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-M, C-M.

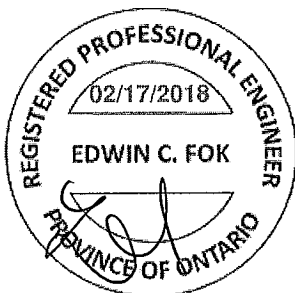
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LBS)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (L)	
FR-TO		FROM	TO	FR-TO				
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	M-E	0 / 950	0.21 (1)
B-C	-2268 / 0	-78.0	-78.0	0.96 (1)	3.37	M-G	-752 / 0	0.49 (1)
C-D	-1628 / 0	-78.0	-78.0	0.81 (1)	4.04	K-G	-75 / 98	0.03 (4)
D-E	-1628 / 0	-78.0	-78.0	0.81 (1)	4.04	C-M	-752 / 0	0.49 (1)
E-F	-1628 / 0	-78.0	-78.0	0.81 (1)	4.04	O-C	-75 / 98	0.03 (4)
F-G	-1628 / 0	-78.0	-78.0	0.81 (1)	4.04	B-O	0 / 2074	0.47 (1)
G-H	-2268 / 0	-78.0	-78.0	0.96 (1)	3.37	K-H	0 / 2074	0.47 (1)
H-I	0 / 28	-78.0	-78.0	0.14 (1)	10.00			
P-B	-1646 / 0	0.0	0.0	0.17 (1)	6.45			
J-H	-1646 / 0	0.0	0.0	0.17 (1)	6.45			
P-O	0 / 0	-18.5	-18.5	0.30 (4)	10.00			
O-N	0 / 2059	-18.5	-18.5	0.50 (4)	10.00			
N-M	0 / 2059	-18.5	-18.5	0.50 (4)	10.00			
M-L	0 / 2059	-18.5	-18.5	0.50 (4)	10.00			
L-K	0 / 2059	-18.5	-18.5	0.50 (4)	10.00			
K-J	0 / 0	-18.5	-18.5	0.30 (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

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 (0.24")

CSI: TC=0.96/1.00 (G-H:1), BC=0.50/1.00 (K-M:4), WB=0.49/1.00 (G-M:1), SSI=0.28/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

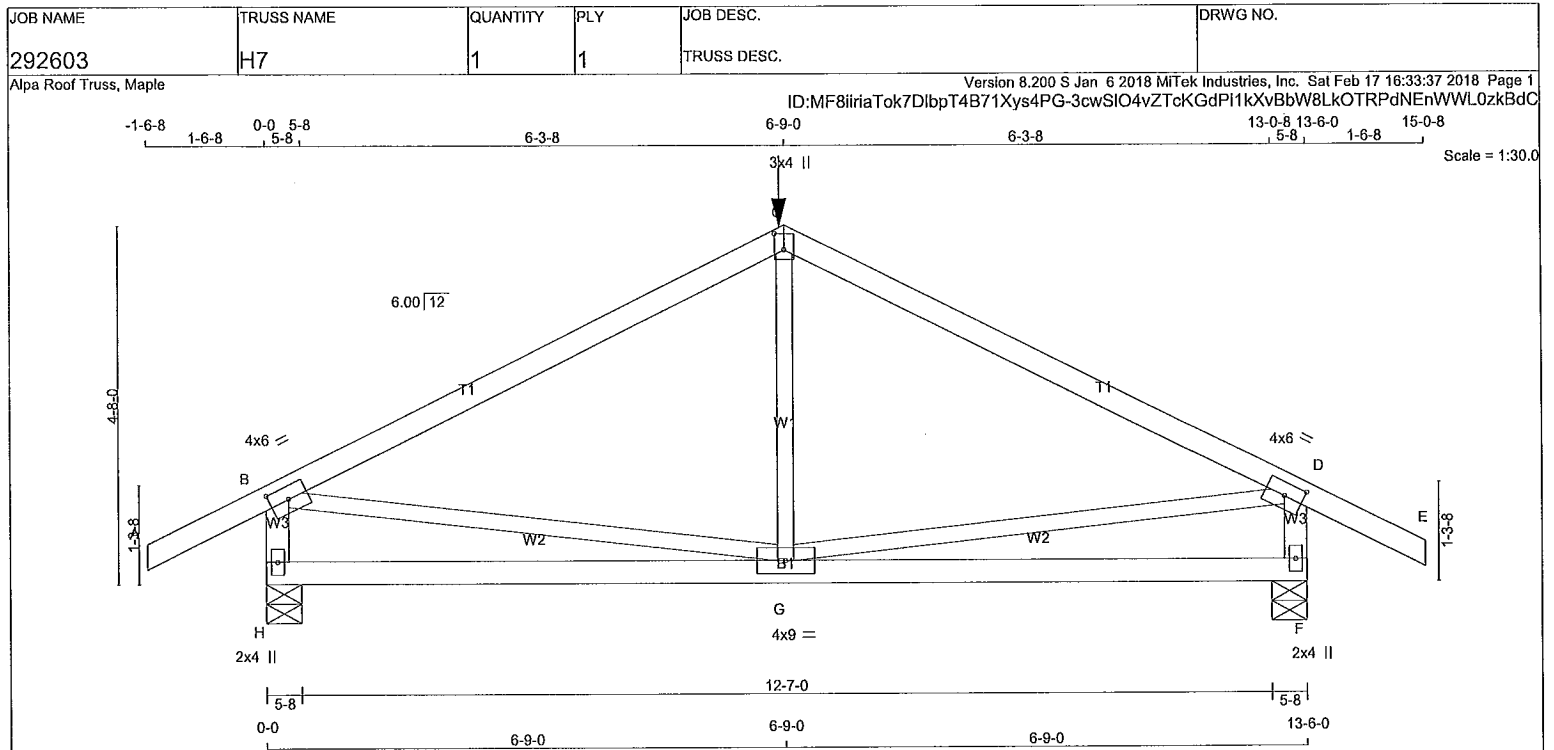
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.67 (L) (INPUT = 1.00)

A-18023595



LUMBER				DESCR.	
CHORDS	SIZE	DRY	LUMBER	SPF	
A - C	2x4	DRY	1650F 1.5E	SPF	
C - E	2x4	DRY	1650F 1.5E	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	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	2.00	3.00
C	TTW+p	MT20	3.0	4.0	2.50	1.50
D	TMVW-t	MT20	4.0	6.0	2.00	3.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	4.0	9.0		
H	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 921.0 lbs FACTORED DOWN AT 6-9-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
H	1385	0	1385	0	5-8	2-1
F	1385	0	1385	0	5-8	2-1

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
H	988	599 / 0	0 / 0	0 / 0	390 / 0	0 / 0	0 / 0
F	988	599 / 0	0 / 0	0 / 0	390 / 0	0 / 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 = 4.92 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED		MEMB.	FORCE (LBS)	FACTORED	
		VERT. LOAD	LC1 MAX			VERT. LOAD	LC1 MAX
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 28	-78.0	-78.0 0.13 (1)	G-C	-66 / 224	0.09 (4)	
B-C	-1544 / 0	-78.0	-78.0 0.67 (1)	B-G	0 / 1396	0.35 (1)	
C-D	-1544 / 0	-78.0	-78.0 0.67 (1)	G-D	0 / 1396	0.35 (1)	
D-E	0 / 28	-78.0	-78.0 0.13 (1)				
H-B	-1280 / 0	0.0	0.0 0.14 (1)				
F-D	-1280 / 0	0.0	0.0 0.14 (1)				
H-G	0 / 0	-40.5	-40.5 0.58 (4)				
G-F	0 / 0	-40.5	-40.5 0.58 (4)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	6-9-0	-921	-921	—	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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-9-0
END SETBACK = 6-9-0
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.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL)= L/999 (0.12")

CSI: TC=0.67/1.00 (C-D:1), BC=0.58/1.00 (F-G:4), WB=0.35/1.00 (B-G:1), SSI=0.25/1.00 (G-H:4)

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

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

NAIL VALUES

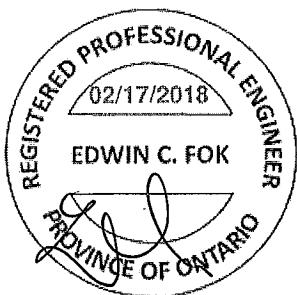
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 Inches

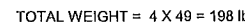
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (C) (INPUT = 0.90)
JSI METAL= 0.43 (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-18023596

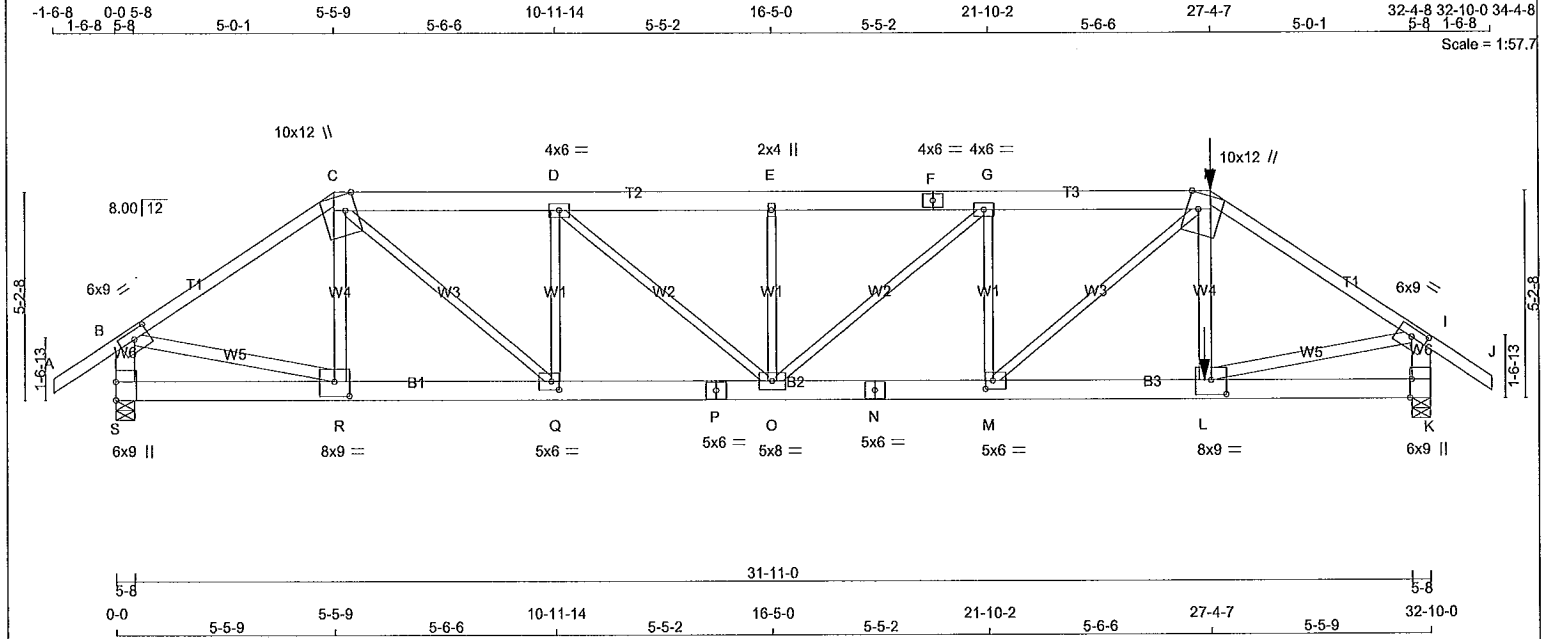


A-18023597

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292603	H8A	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sat Feb 17 16:43:15 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-8ory214SS3RJCsbou7vScUStekessjKS8iW5eWzkBUA



TOTAL WEIGHT = 175 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	9.0	2.50	4.50
C	TTWW+m	MT20	10.0	12.0	Edge	3.25
D	TMVW-t	MT20	4.0	6.0		
E	TMVW-w	MT20	2.0	4.0		
F	TS-t	MT20	4.0	6.0		
G	TMVW-t	MT20	4.0	6.0		
H	TTWW+m	MT20	10.0	12.0	Edge	3.25
I	TMVW-t	MT20	6.0	9.0	2.50	4.50
K	BMV1-t	MT20	6.0	9.0	Edge	0.50
L	BMVW-t	MT20	8.0	9.0	4.25	4.50
M	BMVW-t	MT20	5.0	6.0	2.50	2.25
N	BS-t	MT20	5.0	6.0		
O	BMVW-t	MT20	5.0	8.0		
P	BS-t	MT20	5.0	6.0		
Q	BMVW-t	MT20	5.0	6.0	2.50	2.25
R	BMVW-t	MT20	8.0	9.0	4.25	4.50
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

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

BEARINGS

	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ
S	2250	0	2250	0
K	4390	0	4390	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1601	994 / 0	0 / 0	0 / 0	0 / 0	607 / 0	0 / 0
K	3130	1910 / 0	0 / 0	0 / 0	0 / 0	1220 / 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) K (BASED ON SUPPORT DEPTH = 1-8)

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 35	-78.0 -78.0	0.13 (1)	10.00	R-C	-325 / 0	0.08 (1)
B-C	-2578 / 0	-78.0 -78.0	0.50 (1)	4.33	C-Q	0 / 2100	0.52 (1)
C-D	-3729 / 0	-78.0 -78.0	0.26 (1)	4.22	Q-D	-1277 / 0	0.46 (1)
D-E	-4623 / 0	-78.0 -78.0	0.30 (1)	3.81	D-O	0 / 1188	0.29 (1)
E-F	-4623 / 0	-78.0 -78.0	0.30 (1)	3.81	O-E	-395 / 0	0.14 (1)
F-G	-4623 / 0	-78.0 -78.0	0.30 (1)	3.81	O-G	-455 / 0	0.44 (1)
G-H	-4985 / 0	-78.0 -78.0	0.34 (1)	3.66	M-G	-200 / 0	0.07 (1)
H-I	-5436 / 0	-78.0 -78.0	0.85 (1)	2.95	M-H	0 / 490	0.12 (1)
I-J	0 / 35	-78.0 -78.0	0.13 (1)	10.00	L-H	0 / 2000	0.35 (1)
S-B	-2208 / 0	0.0 0.0	0.16 (1)	6.84	B-R	0 / 2196	0.39 (1)
K-I	-4280 / 0	0.0 0.0	0.31 (1)	5.15	L-I	0 / 4630	0.82 (1)
S-R	0 / 0	-18.5 -18.5	0.07 (4)	10.00			
R-Q	0 / 2140	-18.5 -18.5	0.32 (1)	10.00			
Q-P	0 / 3729	-18.5 -18.5	0.54 (1)	10.00			
P-O	0 / 3729	-18.5 -18.5	0.54 (1)	10.00			
O-N	0 / 4965	-18.5 -18.5	0.69 (1)	10.00			
N-M	0 / 4965	-18.5 -18.5	0.69 (1)	10.00			
M-L	0 / 4594	-18.5 -18.5	0.66 (1)	10.00			
L-K	0 / 0	-36.4 -36.4	0.15 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
H	27-4-7	-311	-	-	FRONT	VERT	TOTAL
L	27-2-8	-2808	-2808	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 5-5-9
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL. LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 5-9-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

(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 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")

CSI: TC=0.85/1.00 (H-I:1), BC=0.69/1.00 (M-O:1), WB=0.82/1.00 (L-I:1), SSI=0.17/1.00 (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

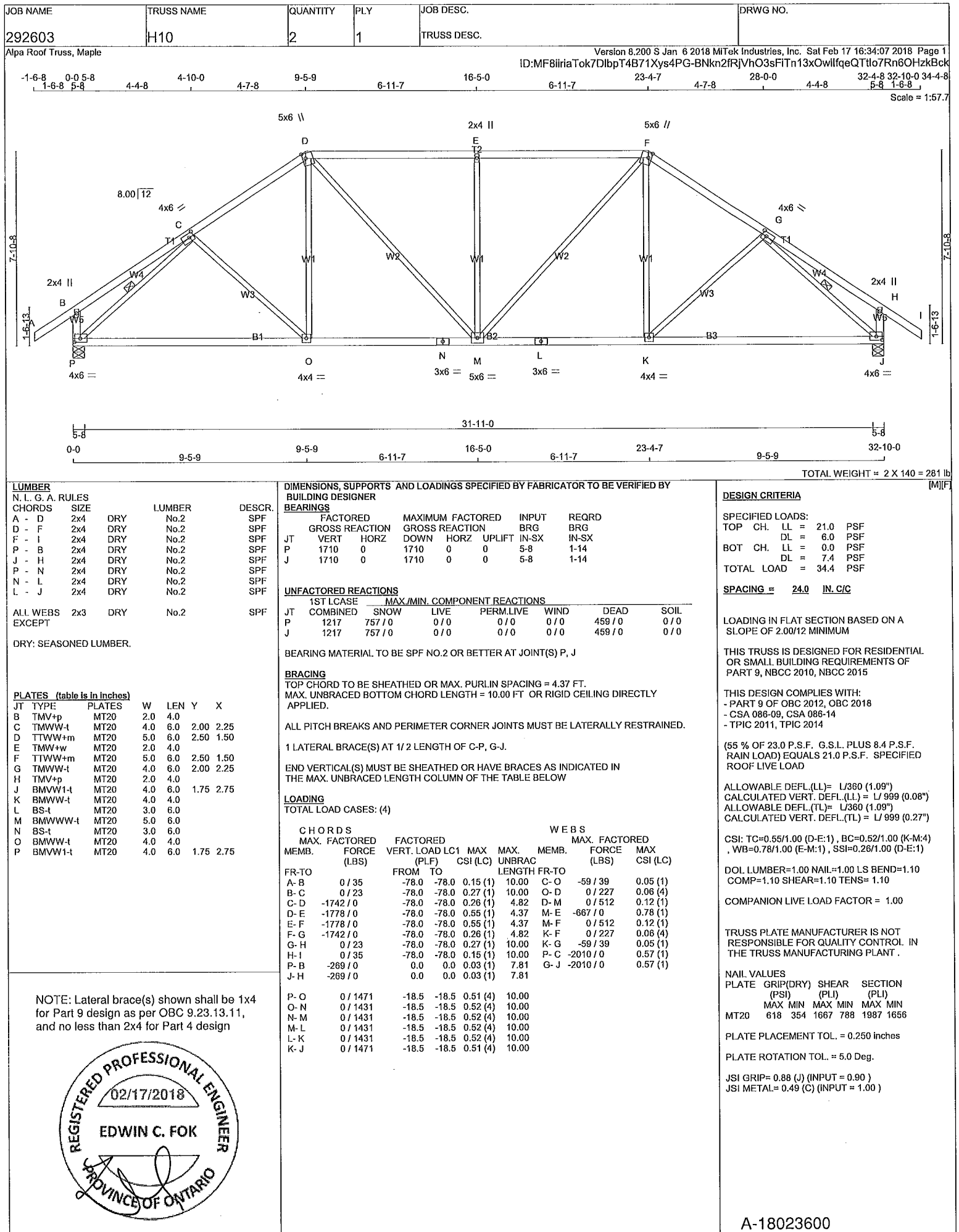
AUTOSOLVE HEELS OFF

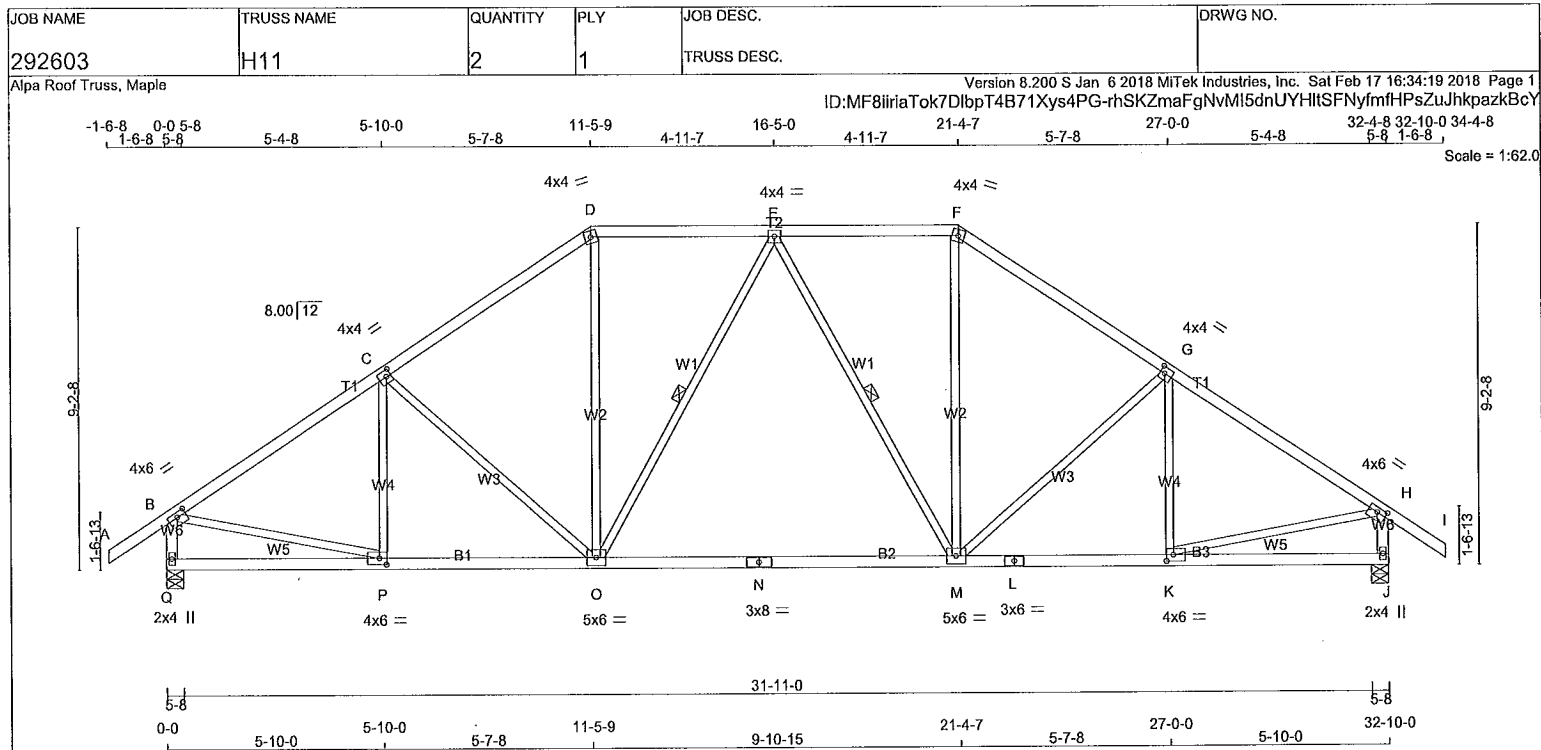
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

A-18023598

CONTINUED ON PAGE 2







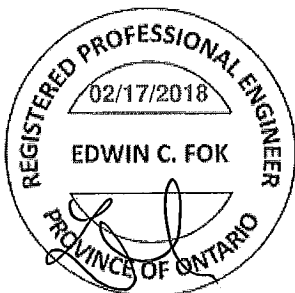
LUMBER		N. L. G. A. RULES		LUMBER	DESCR
CHORDS	SIZE				
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
Q - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)				W	LEN	Y	X
JT	TYPE	PLATES					
B	TMVW-t	MT20	4.0	6.0	1.50	3.00	
C	TMVW-t	MT20	4.0	4.0	2.00	1.50	
D	TTW-m	MT20	4.0	4.0			
E	TMVW-t	MT20	4.0	4.0			
F	TTW-m	MT20	4.0	4.0			
G	TMVW-t	MT20	4.0	4.0	2.00	1.50	
H	TMVW-t	MT20	4.0	6.0	1.50	3.00	
J	BMV1+p	MT20	2.0	4.0			
K	BMVW-t	MT20	4.0	6.0	2.00	2.25	
L	BS-t	MT20	3.0	6.0			
M	BMVW-t	MT20	5.0	6.0			
N	BS-t	MT20	3.0	8.0			
O	BMVW-t	MT20	5.0	6.0			
P	BMVW-t	MT20	4.0	6.0	2.00	2.25	
Q	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
Q	1710	0	1710	0	5-8	2-9	2-9	
J	1710	0	1710	0	5-8	2-9	2-9	

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
Q	1217	757/0	0/0	0/0	0/0	459/0	0/0
J	1217	757/0	0/0	0/0	0/0	459/0	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 = 4.57 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-O, E-M.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		W E B S		MAX. FACTORED	
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE	MAX
		(LBS)	FROM	TO	LENGTH			CS1 (LC)
FR-TO						FR-TO		
A-B	0/35	-78.0	-78.0	0.15 (1)	10.00	P-C	-232/0	0.10 (1)
B-C	-1828/0	-78.0	-78.0	0.40 (1)	4.57	C-O	-279/0	0.34 (1)
C-D	-1640/0	-78.0	-78.0	0.38 (1)	4.79	O-D	0/579	0.13 (1)
D-E	-1344/0	-78.0	-78.0	0.26 (1)	5.31	O-E	-267/0	0.20 (1)
E-F	-1344/0	-78.0	-78.0	0.26 (1)	5.31	E-M	-267/0	0.20 (1)
F-G	-1640/0	-78.0	-78.0	0.38 (1)	4.79	M-F	0/579	0.13 (1)
G-H	-1828/0	-78.0	-78.0	0.40 (1)	4.57	M-G	-279/0	0.34 (1)
H-I	0/35	-78.0	-78.0	0.15 (1)	10.00	K-G	-232/0	0.10 (1)
Q-B	-1662/0	0.0	0.0	0.17 (1)	6.43	B-P	0/1580	0.36 (1)
J-H	-1662/0	0.0	0.0	0.17 (1)	6.43	K-H	0/1580	0.36 (1)
Q-P	0/0	-18.5	-18.5	0.14 (4)	10.00			
P-O	0/1545	-18.5	-18.5	0.43 (4)	10.00			
O-N	0/1472	-18.5	-18.5	0.42 (4)	10.00			
N-M	0/1472	-18.5	-18.5	0.42 (4)	10.00			
M-L	0/1545	-18.5	-18.5	0.43 (4)	10.00			
L-K	0/1545	-18.5	-18.5	0.43 (4)	10.00			
K-J	0/0	-18.5	-18.5	0.14 (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) = $L/999$ (0.06")
ALLOWABLE DEFL.(TL) = $L/360$ (1.09")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.26")

CSI: TC=0.40/1.00 (G-H:1), BC=0.43/1.00 (K-M:4), WB=0.36/1.00 (H-K:1), SSI=0.19/1.00 (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

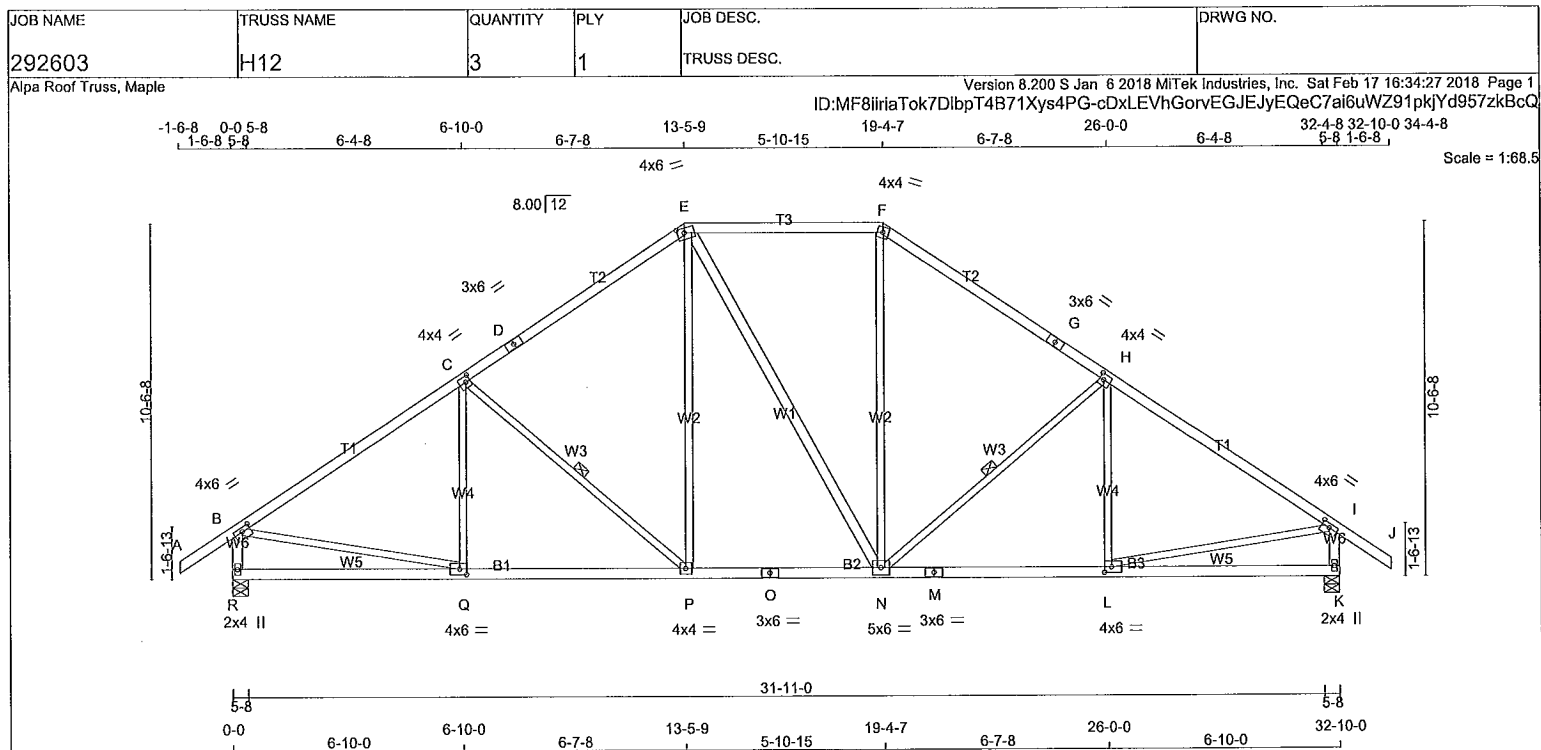
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)
JSI METAL= 0.69 (N) (INPUT = 1.00)

A-18023601



LUMBER
N. L. G. A. RULES

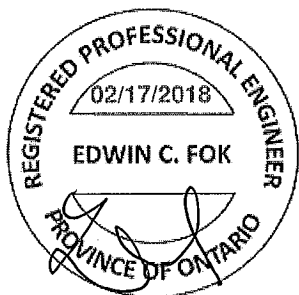
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
F - G	2x4	DRY	No.2
G - J	2x4	DRY	No.2
R - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - K	2x4	DRY	No.2
ALL WEBS EXCEPT E - N	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	6.0	1.50	3.00
C	TMVW-I	MT20	4.0	4.0	2.00	1.50
D	TS-I	MT20	3.0	6.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.50
F	TTW-m	MT20	4.0	4.0		
G	TS-I	MT20	3.0	6.0		
H	TMVW-I	MT20	4.0	4.0	2.00	1.50
I	TMVW-I	MT20	4.0	6.0	1.50	3.00
K	BMV1+p	MT20	2.0	4.0		
L	BMVW-I	MT20	4.0	6.0	2.00	2.50
M	BS-I	MT20	3.0	6.0		
N	BMVW-I	MT20	5.0	6.0		
O	BS-I	MT20	3.0	6.0		
P	BMVW-I	MT20	4.0	4.0		
Q	BMVW-I	MT20	4.0	6.0	2.00	2.50
R	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
R	1710	0	1710	0	5-8	2-9
K	1710	0	1710	0	5-8	2-9

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1217	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0
K	1217	757 / 0	0 / 0	0 / 0	0 / 0	459 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32 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, H-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED	FACTORED		MAX. UNBRACED	MEMB.	MAX. FACTORED	MAX. CSI (LC)	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)			FORCE (LBS)		
FR-TO		FROM	TO	LENGTH	FR-TO			
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	Q-C	-144 / 50	0.09 (1)
B-C	-1846 / 0	-78.0	-78.0	0.58 (1)	4.32	C-P	-442 / 0	0.24 (1)
C-D	-1516 / 0	-78.0	-78.0	0.53 (1)	4.72	P-E	0 / 398	0.09 (1)
D-E	-1516 / 0	-78.0	-78.0	0.53 (1)	4.72	E-N	0 / 0	0.00 (1)
E-F	-1235 / 0	-78.0	-78.0	0.37 (1)	5.32	N-F	0 / 400	0.09 (1)
F-G	-1517 / 0	-78.0	-78.0	0.53 (1)	4.72	N-H	-441 / 0	0.24 (1)
G-H	-1517 / 0	-78.0	-78.0	0.53 (1)	4.72	L-H	-145 / 50	0.09 (1)
H-I	-1846 / 0	-78.0	-78.0	0.58 (1)	4.32	B-Q	0 / 1591	0.36 (1)
I-J	0 / 35	-78.0	-78.0	0.15 (1)	10.00	L-I	0 / 1591	0.36 (1)
R-B	-1659 / 0	0.0	0.0	0.17 (1)	6.44			
K-I	-1658 / 0	0.0	0.0	0.17 (1)	6.44			
R-Q	0 / 0	-18.5	-18.5	0.21 (4)	10.00			
Q-P	0 / 1565	-18.5	-18.5	0.36 (1)	10.00			
P-O	0 / 1234	-18.5	-18.5	0.28 (1)	10.00			
O-N	0 / 1234	-18.5	-18.5	0.28 (1)	10.00			
N-M	0 / 1565	-18.5	-18.5	0.36 (1)	10.00			
M-L	0 / 1565	-18.5	-18.5	0.36 (1)	10.00			
L-K	0 / 0	-18.5	-18.5	0.21 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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 (0.14")

CSI: TC=0.58/1.00 (B-C:1), BC=0.36/1.00 (P-Q:1), WB=0.36/1.00 (B-Q:1), GSI=0.21/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

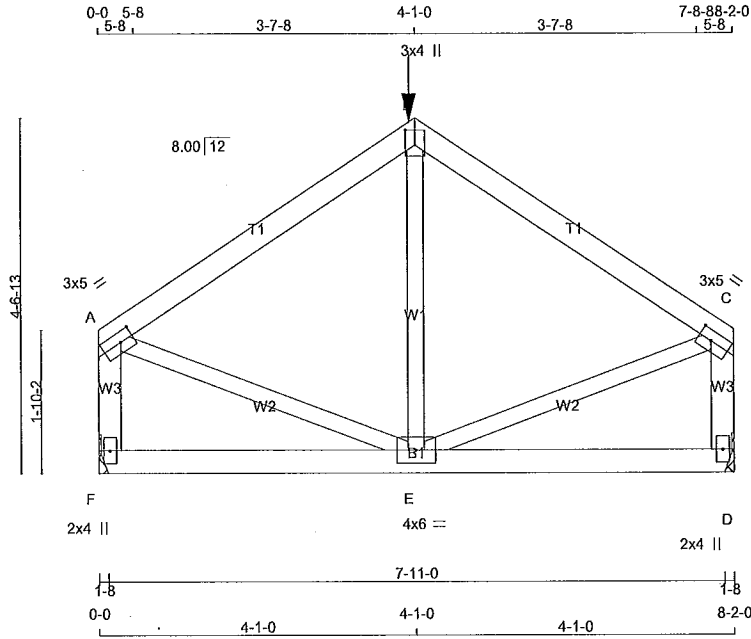
JSI GRIP= 0.88 (Q) (INPUT = 0.90)
JSI METAL= 0.52 (B) (INPUT = 1.00)

A-18023602

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292603	H14	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 16:37:16 2018 Page 1
ID:MF8iiriaTok7DlbpT4B71Xys4PG-9kEIHkG_mCF1HfoMDyGZm4ge0FIFWncbL3bXqzkBZn



TOTAL WEIGHT = 2 X 34 = 68 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-l	MT20	3.0	5.0	1.50	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-l	MT20	3.0	5.0	1.50	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-l	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 318.4 lbs FACTORED DOWN AT 4-1-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
F	600	0	600	0	0	HANGER BY OTHERS
D	600	0	600	0	0	MIN. SEAT SIZE: 1-8 HANGER BY OTHERS MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
F	429	257 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0
D	429	257 / 0	0 / 0	0 / 0	0 / 0	172 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED
	FORCE	VERT. LOAD LC1	FORCE	VERT. LOAD LC1
	(LBS)	(PLF)	(LBS)	(PLF)
FR-TO		FROM TO	FR-TO	
A-B	-455 / 0	-78.0 -78.0 0.25 (1)	E-B	-132 / 60 0.04 (1)
B-C	-455 / 0	-78.0 -78.0 0.25 (1)	A-E	0 / 404 0.10 (1)
F-A	-553 / 0	0.0 0.0 0.07 (1)	E-C	0 / 404 0.10 (1)
D-C	-553 / 0	0.0 0.0 0.07 (1)		
F-E	0 / 0	-30.1 -30.1 0.15 (4) 10.00		
E-D	0 / 0	-30.1 -30.1 0.15 (4) 10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	4-1-0	-318	-318	--	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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-1-0
END SETBACK = 4-6-0
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.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.27")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.25/1.00 (B-C:1), BC=0.15/1.00 (D-E:4), WB=0.10/1.00 (A-E:1), SSI=0.11/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(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= 0.62 (E) (INPUT = 0.90)
JSI METAL= 0.16 (C) (INPUT = 1.00)

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

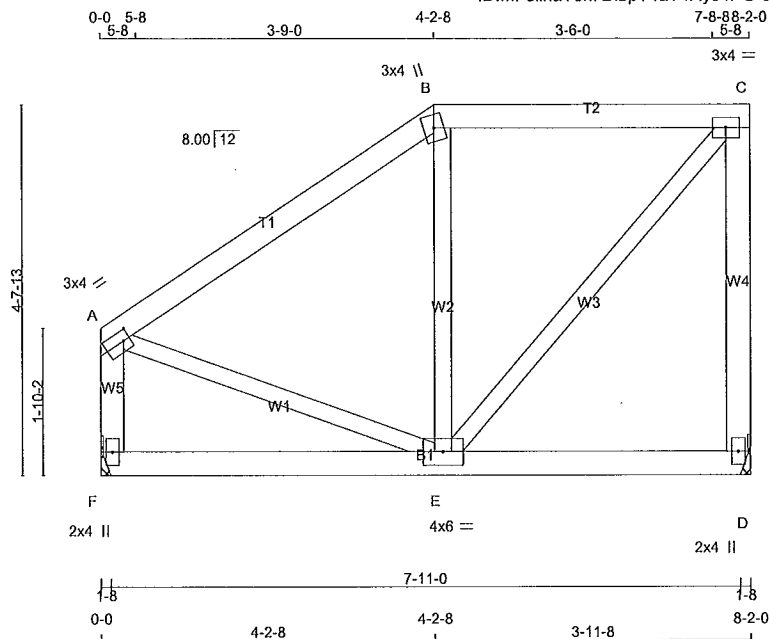


A-18023604

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292603	H15	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sat Feb 17 16:43:27 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-o6aUa8D_dlyc2lW5be6G5?y5BZl9gJ4DuZRj3pzkBU



TOTAL WEIGHT = 37 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TTW+m	MT20	3.0	4.0		
C	TMVW-t	MT20	3.0	4.0		
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
D	394	0	394	0	0	
F	394	0	394	0	0	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
D	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	281	171 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0
F	281	171 / 0	0 / 0	0 / 0	0 / 0	109 / 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)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1)	
FR-TO		FROM	TO	FR-TO			
A-B	-233 / 0	-78.0	-78.0 0.18 (1)	E-B	-190 / 0	0.06 (1)	
B-C	-189 / 0	-78.0	-78.0 0.16 (1)	E-C	0 / 285	0.06 (1)	
D-C	-367 / 0	0.0	0.0 0.13 (1)	A-E	0 / 205	0.05 (1)	
F-A	-362 / 0	0.0	0.0 0.04 (1)				
F-E	0 / 0	-18.5	-18.5 0.09 (4)				
E-D	0 / 0	-18.5	-18.5 0.09 (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 (0.27")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.18/1.00 (A-B:1), BC=0.09/1.00 (D-E:4), WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (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.

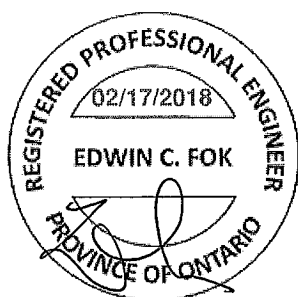
NAIL VALUES		PLATE GRIP(DRY)		SHEAR		SECTION	
(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656	

PLATE PLACEMENT TOL. = 0.250 inches

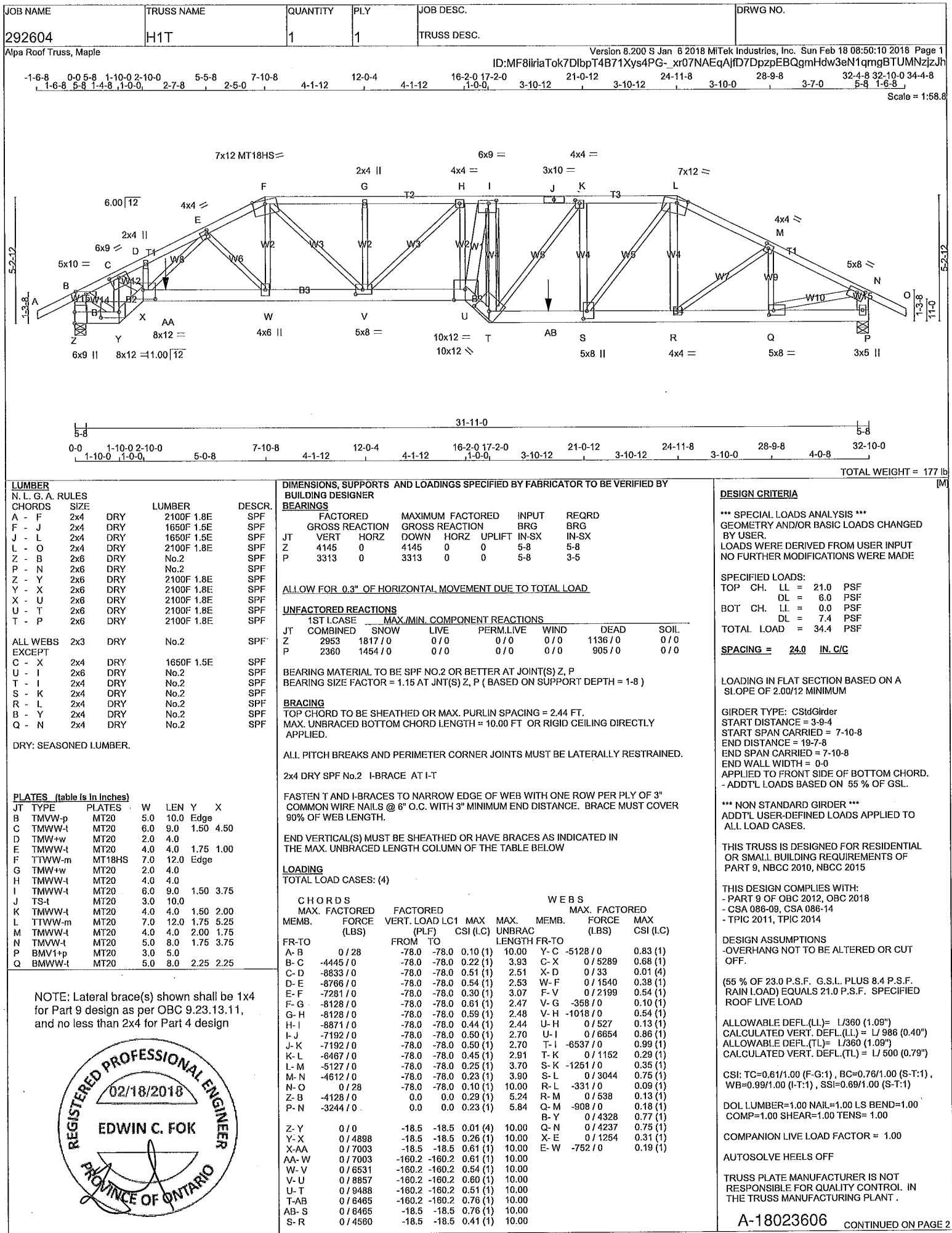
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.67 (A) (INPUT = 0.90)
JSI METAL= 0.12 (A) (INPUT = 1.00)

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



A-18023605



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292604	H1T	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 08:50:10 2018 Page 2					
ID:MF8iiriaTok7DlbpT4B71Xys4PG- xr07NAEqAjfD7DpzpEBQgmHdw3eN1qmgBTUMNzjzJh					

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
R	BMWW-t	MT20	4.0	4.0		
S	BMWW-t	MT20	5.0	8.0	3.75	1.75
T	BBWW-h	MT20	10.0	12.0	3.00	7.25
U	BBWW-l	MT20	10.0	12.0	5.25	5.50
V	BMWW-t	MT20	5.0	8.0	2.25	3.50
W	BMWW-t	MT20	4.0	6.0		
X	BBWW-p	MT20	8.0	12.0	4.50	6.00
Y	BBWW-l	MT20	8.0	12.0	2.75	9.00
Z	BMV1-p	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 549.8 lbs FACTORED DOWN AT 3-9-4, AND 1244.1 lbs FACTORED DOWN AT 19-7-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE	FACTORED		MEMB.	FORCE	FACTORED	
(LBS)	(PLF)	VERT. LOAD	LC1	(LBS)	(PLF)	VERT. LOAD	LC1
FR-TO		FROM	TO	FR-TO		FROM	TO
R-Q	0 / 4136	-18.5	-18.5	0.27 (1)	10.00		
Q-P	0 / 0	-18.5	-18.5	0.05 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
AA	3-9-4	-550	-550	---	FRONT	VERT	TOTAL
AB	19-7-8	-1244	-1244	---	FRONT	VERT	TOTAL

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLJ)	(PLJ)	(PLJ)
MAX	MIN	MAX	MIN
MT18HS	511	354	2455
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

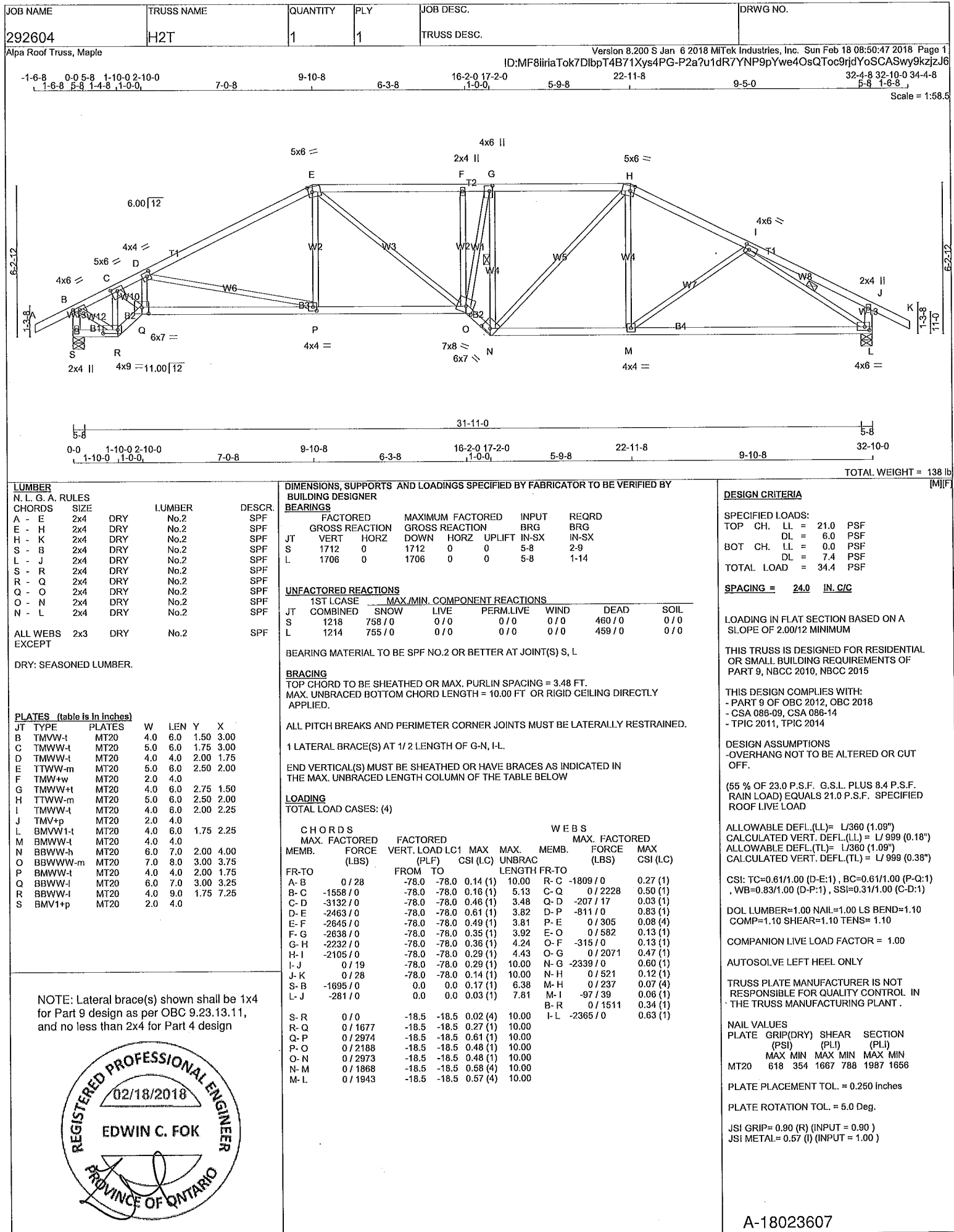
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.99 (U) (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-18023606(2)



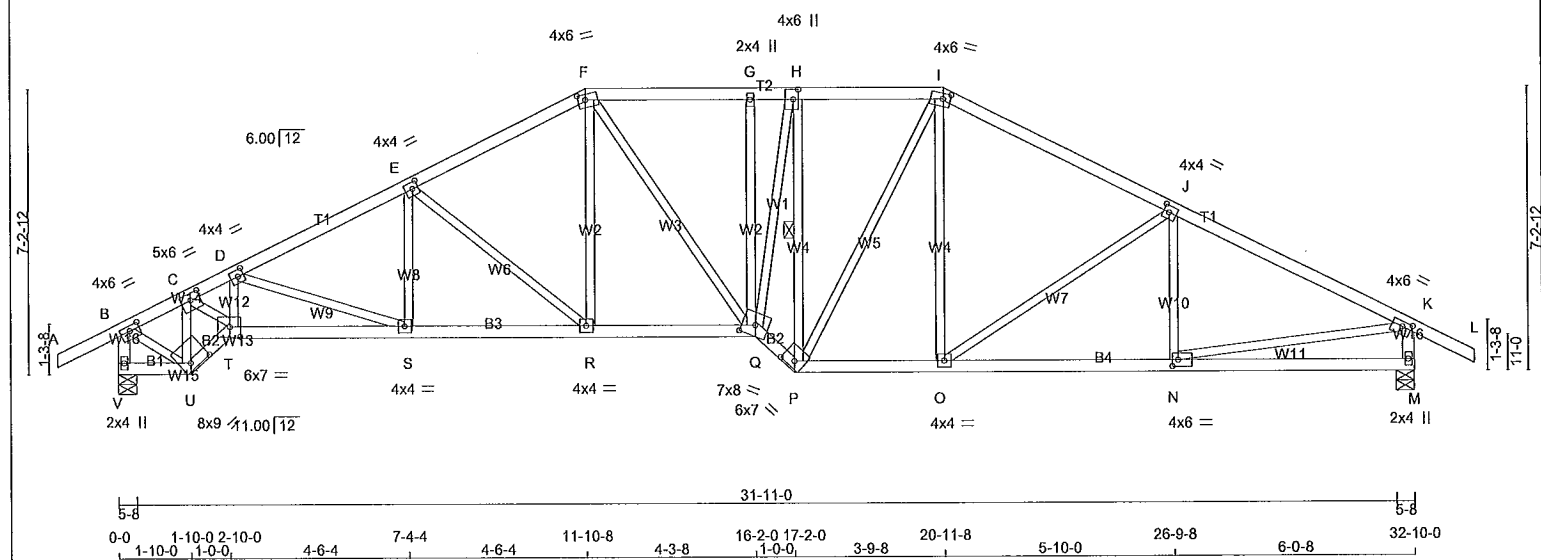
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292604	H3T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 08:50:55 2018 Page 1

ID:MF8ilriaTok7DlbpT4B71Xys4PG-Ab31amjSE7NH719S6mXkk97?f3UHQUUN0hsNRGzJzJ

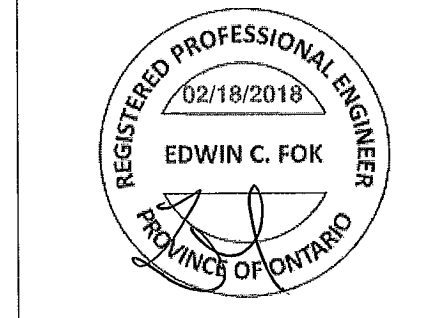
-1-6-8 0-0 5-8 1-10-0 2-10-0 4-6-4 7-4-4 4-6-4 11-10-8 4-3-8 16-2-0 17-2-0 3-9-8 20-11-8 5-10-0 26-9-8 5-7-0 32-4-8 32-10-0 34-4-8
1-6-8 5-8 1-4-8 1-0-0 4-6-4 7-4-4 4-6-4 11-10-8 4-3-8 16-2-0 17-2-0 3-9-8 20-11-8 5-10-0 26-9-8 5-7-0 32-4-8 32-10-0 34-4-8
Scale = 1:58.5



LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES					
A - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
I - L	2x4	DRY	No.2	SPF	
V - B	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
V - U	2x4	DRY	No.2	SPF	
U - T	2x4	DRY	No.2	SPF	
T - Q	2x4	DRY	No.2	SPF	
Q - P	2x4	DRY	No.2	SPF	
P - M	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
DRY: SEASONED LUMBER.					

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
B	TMVW-t	MT20	4.0	6.0	1.50	3.00	
C	TMWW-t	MT20	5.0	6.0	2.00	3.00	
D, E, J							
D	TMWW-t	MT20	4.0	4.0	2.00	1.75	
F	TTWW-m	MT20	4.0	6.0	1.75	2.25	
G	TMW-w	MT20	2.0	4.0			
H	TMWW-t	MT20	4.0	6.0	3.00	1.50	
I	TTWW-m	MT20	4.0	6.0	1.75	2.25	
K	TMVW-t	MT20	4.0	6.0	1.50	2.75	
M	BMV1+p	MT20	2.0	4.0			
N	BMWW-t	MT20	4.0	6.0	2.00	1.75	
O, R, S							
O	BMWW-t	MT20	4.0	4.0			
P	BBWW-h	MT20	6.0	7.0	2.00	4.00	
Q	BBWWW-m	MT20	7.0	8.0	3.25	4.00	
T	BBWW-t	MT20	6.0	7.0	3.00	3.25	
U	BBWW-h	MT20	8.0	9.0	2.00	6.00	
V	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
V	1712	0	1712	0
M	1706	0	1706	0

UNFACTORED REACTIONS	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE
V	1218	758 / 0	0 / 0	0 / 0
M	1214	755 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF H-P.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO						FR-TO			
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	U-C	-1854 / 0	0.28 (1)	
B-C	-1579 / 0	-78.0	-78.0	0.13 (1)	5.14	C-T	0 / 1943	0.44 (1)	
C-D	-3055 / 0	-78.0	-78.0	0.17 (1)	3.88	T-D	-7 / 45	0.02 (4)	
D-E	-2719 / 0	-78.0	-78.0	0.28 (1)	4.00	D-S	-346 / 0	0.13 (1)	
E-F	-2237 / 0	-78.0	-78.0	0.25 (1)	4.36	S-E	0 / 183	0.05 (4)	
F-G	-2172 / 0	-78.0	-78.0	0.24 (1)	4.42	E-R	-590 / 0	0.36 (1)	
G-H	-2169 / 0	-78.0	-78.0	0.15 (1)	4.50	R-F	0 / 452	0.10 (1)	
H-I	-1887 / 0	-78.0	-78.0	0.15 (1)	4.77	F-Q	0 / 309	0.07 (1)	
I-J	-1959 / 0	-78.0	-78.0	0.41 (1)	4.41	Q-G	-183 / 0	0.12 (1)	
J-K	-2255 / 0	-78.0	-78.0	0.45 (1)	4.13	Q-H	0 / 1716	0.39 (1)	
K-L	0 / 28	-78.0	-78.0	0.14 (1)	10.00	H-P	-1939 / 0	0.64 (1)	
V-B	-1695 / 0	0.0	0.0	0.17 (1)	6.38	P-I	0 / 319	0.07 (1)	
M-K	-1658 / 0	0.0	0.0	0.17 (1)	6.44	O-I	0 / 295	0.07 (1)	
						O-J	-373 / 0	0.37 (1)	
V-U	0 / 0	-18.5	-18.5	0.02 (4)	10.00	N-J	-211 / 12	0.06 (1)	
U-T	0 / 1718	-18.5	-18.5	0.28 (1)	10.00	B-U	0 / 1548	0.35 (1)	
T-S	0 / 2770	-18.5	-18.5	0.50 (1)	10.00	N-K	0 / 2065	0.46 (1)	
S-R	0 / 2443	-18.5	-18.5	0.44 (1)	10.00				
R-Q	0 / 1992	-18.5	-18.5	0.37 (1)	10.00				
Q-P	0 / 2521	-18.5	-18.5	0.41 (1)	10.00				
P-O	0 / 1734	-18.5	-18.5	0.34 (1)	10.00				
O-N	0 / 2039	-18.5	-18.5	0.40 (1)	10.00				
N-M	0 / 0	-18.5	-18.5	0.15 (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 (1.09")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.30")

CSI: TC=0.45/1.00 (J-K:1), BC=0.50/1.00 (S-T:1), WB=0.64/1.00 (H-P:1), SSI=0.20/1.00 (J-K: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

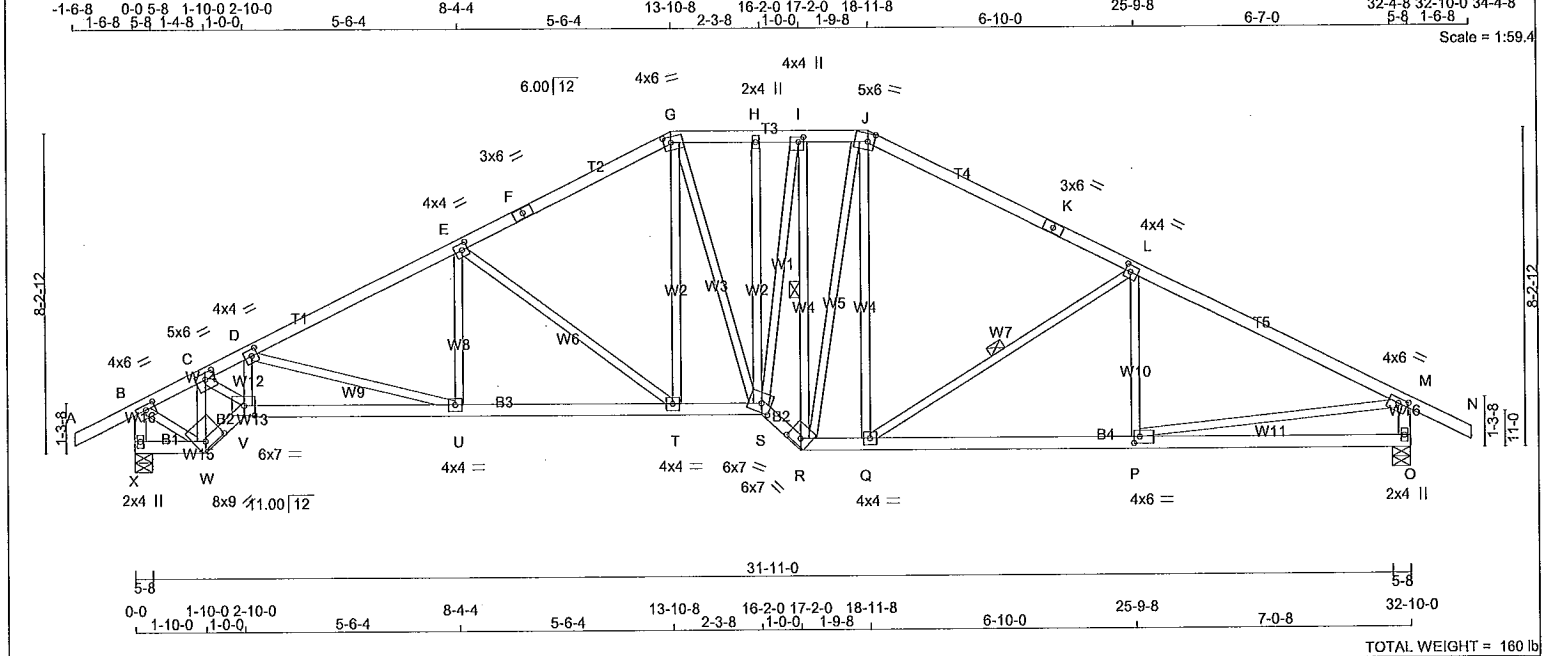
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

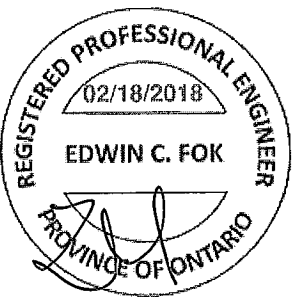
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (N) (INPUT = 0.90)
JSI METAL= 0.60 (K) (INPUT = 1.00)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. A - F 2x4 DRY No.2 SPF F - G 2x4 DRY No.2 SPF G - J 2x4 DRY No.2 SPF J - K 2x4 DRY No.2 SPF K - N 2x4 DRY No.2 SPF X - B 2x4 DRY No.2 SPF O - M 2x4 DRY No.2 SPF X - W 2x4 DRY No.2 SPF W - V 2x4 DRY No.2 SPF V - S 2x4 DRY No.2 SPF S - R 2x4 DRY No.2 SPF R - O 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQD JT VERT HORZ DOWN HORZ UPLIFT IN-SX BRG IN-SX X 1712 0 1712 0 0 5-8 2-9 O 1706 0 1706 0 0 5-8 2-8 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL X 1218 758 / 0 0 / 0 0 / 0 460 / 0 0 / 0 O 1214 755 / 0 0 / 0 0 / 0 459 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, O BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.86 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 I-R, L-Q. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) CSI (MAX) UNBRAC LENGTH FR-TO FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC) FR-TO FROM TO FR-TO A-B 0 / 28 -78.0 -78.0 0.14 (1) 10.00 W-C -1848 / 0 0.28 (1) B-C -1576 / 0 -78.0 -78.0 0.13 (1) 5.15 C-V 0 / 1983 0.45 (1) C-D -3066 / 0 -78.0 -78.0 0.19 (1) 3.86 V-D -35 / 44 0.02 (4) D-E -2645 / 0 -78.0 -78.0 0.40 (1) 3.94 D-U -437 / 0 0.24 (1) E-F -2032 / 0 -78.0 -78.0 0.35 (1) 4.43 U-E 0 / 220 0.06 (4) F-G -2032 / 0 -78.0 -78.0 0.35 (1) 4.43 E-T -727 / 0 0.69 (1) G-H -1844 / 0 -78.0 -78.0 0.14 (1) 4.83 T-G 0 / 500 0.11 (1) H-I -1843 / 0 -78.0 -78.0 0.09 (1) 4.88 G-S 0 / 122 0.03 (1) I-J -1635 / 0 -78.0 -78.0 0.05 (1) 5.15 S-H -48 / 7 0.05 (1) J-K -1815 / 0 -78.0 -78.0 0.57 (1) 4.33 S-I 0 / 1467 0.33 (1) K-L -1815 / 0 -78.0 -78.0 0.57 (1) 4.33 R-I -1609 / 0 0.69 (1) L-M -2272 / 0 -78.0 -78.0 0.65 (1) 3.89 R-J 0 / 153 0.03 (1) M-N 0 / 28 -78.0 -78.0 0.14 (1) 10.00 Q-J 0 / 381 0.09 (1) X-B -1695 / 0 0.0 0.0 0.17 (1) 6.38 Q-L -550 / 0 0.26 (1) O-M -1652 / 0 0.0 0.0 0.17 (1) 6.45 P-L -143 / 55 0.05 (1) X-W 0 / 0 -18.5 -18.5 0.02 (4) 10.00 P-W 0 / 1543 0.35 (1) W-V 0 / 1713 -18.5 -18.5 0.28 (1) 10.00 P-M 0 / 2078 0.47 (1) V-U 0 / 2799 -18.5 -18.5 0.52 (1) 10.00 U-T 0 / 2378 -18.5 -18.5 0.45 (1) 10.00 T-S 0 / 1806 -18.5 -18.5 0.33 (1) 10.00 S-R 0 / 2190 -18.5 -18.5 0.36 (1) 10.00 R-Q 0 / 1601 -18.5 -18.5 0.33 (1) 10.00 Q-P 0 / 2058 -18.5 -18.5 0.44 (1) 10.00 P-O 0 / 0 -18.5 -18.5 0.22 (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 (1.09") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.14") ALLOWABLE DEFL.(TL)= L/360 (1.09") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.29") CSI: TC=0.65/1.00 (L-M:1), BC=0.52/1.00 (U-V:1), WB=0.69/1.00 (I-R:1), SSI=0.24/1.00 (L-M:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 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 (V) (INPUT = 0.90) JSI METAL= 0.61 (M) (INPUT = 1.00)		
---	--	--	---	--	--	--	--	--

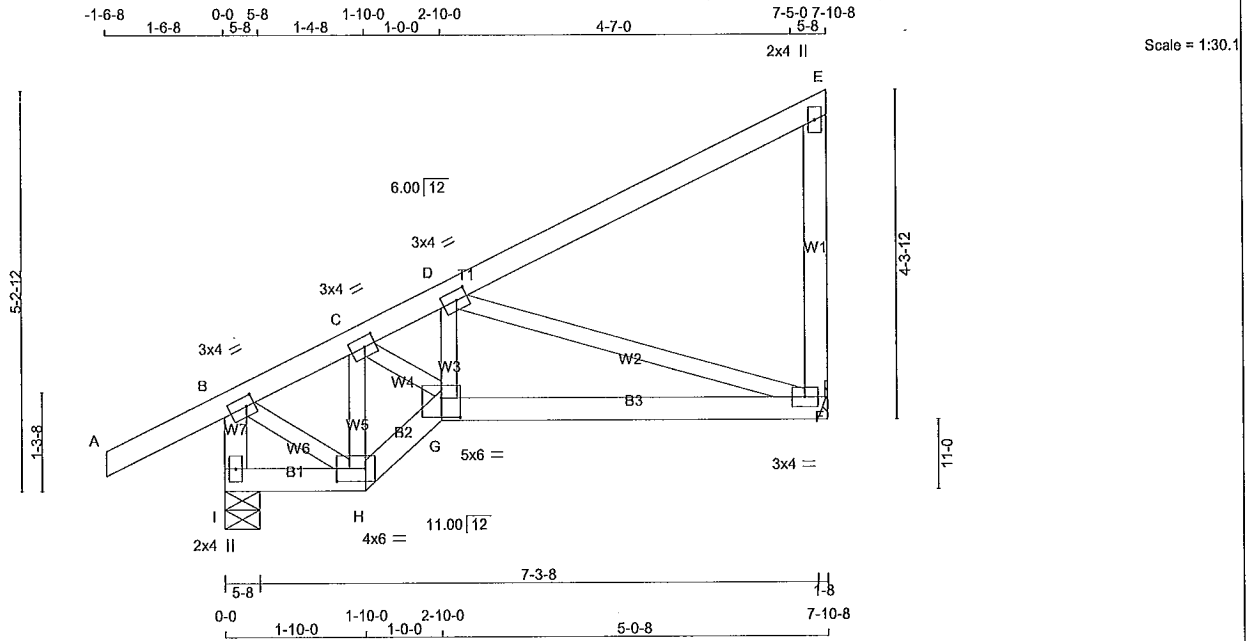
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292604	J1T	4	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sun Feb 18 08:51:10 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-EUTijuuticG8QLpLUPJFrKFdg6hfRMVbTX7fSvzjzll



TOTAL WEIGHT = 4 X 35 = 142 lb

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	3.0	4.0	1.50	1.25
C	TMVW-1	MT20	3.0	4.0	1.50	1.75
D	TMVW-1	MT20	3.0	4.0	1.50	1.75
E	TMV+P	MT20	2.0	4.0		
F	BMVW1-1	MT20	3.0	4.0		
G	BBVW-1	MT20	5.0	6.0	3.00	3.00
H	BBVW-1	MT20	4.0	6.0	2.00	4.50
I	BMV1+P	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
I	518	0	518	0	5-8	1-8
F	367	0	367	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
I	366	240 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
F	262	158 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS						WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED			MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED			
		VERT. LOAD (PLF)	LC1	MAX CSI (LC)			FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO			FR-TO				
I-B	-501 / 0	0.0	0.0	0.05 (1)	7.81	B-H	0 / 243	0.05 (1)		
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	H-C	-270 / 0	0.04 (1)		
B-C	-280 / 0	-78.0	-78.0	0.11 (1)	6.25	C-G	0 / 435	0.10 (1)		
C-D	-514 / 0	-78.0	-78.0	0.19 (1)	6.25	G-D	-34 / 57	0.02 (4)		
D-E	-16 / 0	-78.0	-78.0	0.21 (1)	6.25	D-F	-564 / 0	0.24 (1)		
F-E	-156 / 0	0.0	0.0	0.04 (1)	7.81					
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00					
H-G	0 / 271	-18.5	-18.5	0.05 (1)	10.00					
G-F	0 / 539	-18.5	-18.5	0.19 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.21/1.00 (D-E:1), BC=0.19/1.00 (F-G:4), WB=0.24/1.00 (D-F:1), SSI=0.17/1.00 (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.

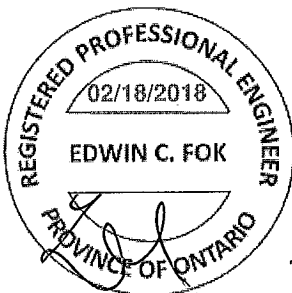
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

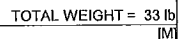
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (F) (INPUT = 0.90)
JSI METAL= 0.20 (F) (INPUT = 1.00)

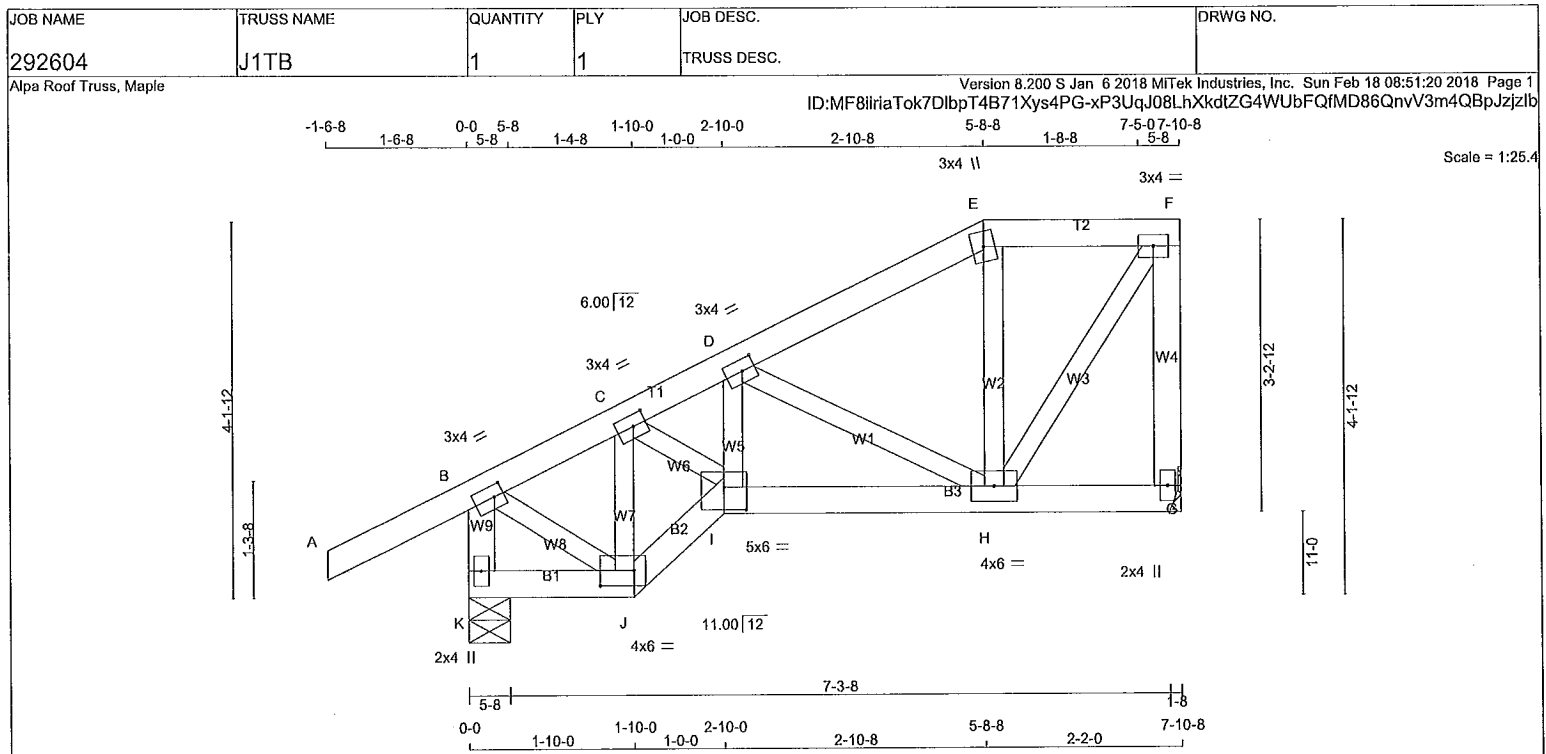
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design



A-18023610



CONTINUED ON PAGE 2



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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-I	MT20	3.0	4.0	1.50 1.25
C	TMWW-I	MT20	3.0	4.0	1.50 1.75
D	TMWW-I	MT20	3.0	4.0	1.50 1.75
E	TTW+m	MT20	3.0	4.0	
F	TMVW-I	MT20	3.0	4.0	
G	BMV1+p	MT20	2.0	4.0	
H	BMWWW-I	MT20	4.0	6.0	
I	BBWW-I	MT20	5.0	6.0	3.00 3.00
J	BBWW-I	MT20	4.0	6.0	2.00 4.50
K	BMV1+p	MT20	2.0	4.0	

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
G	367	0	367	0	5-8	1-8
K	518	0	518	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. LIVE		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
G	262	158 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
K	366	240 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 28	-78.0 -78.0	0.14 (1)	10.00	J-C	-290 / 0	0.04 (1)
B-C	-290 / 0	-78.0 -78.0	0.11 (1)	6.25	C-I	0 / 312	0.07 (1)
C-D	-480 / 0	-78.0 -78.0	0.05 (1)	6.25	I-D	0 / 51	0.02 (4)
D-E	-223 / 0	-78.0 -78.0	0.06 (1)	6.25	D-H	-295 / 0	0.06 (1)
E-F	-189 / 0	-78.0 -78.0	0.05 (1)	6.25	H-E	-79 / 1	0.01 (1)
G-F	-353 / 0	0.0 0.0	0.06 (1)	7.81	H-F	0 / 329	0.07 (1)
K-B	-501 / 0	0.0 0.0	0.05 (1)	7.81	B-J	0 / 259	0.06 (1)
K-J	0 / 0	-18.5 -18.5	0.02 (4)	10.00			
J-I	0 / 289	-18.5 -18.5	0.05 (1)	10.00			
I-H	0 / 452	-18.5 -18.5	0.09 (1)	10.00			
H-G	0 / 0	-18.5 -18.5	0.03 (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, NBC 2010, NBC 2015

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.14/1.00 (A-B:1), BC=0.09/1.00 (H-I:1), WB=0.07/1.00 (F-H:1), SSI=0.10/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

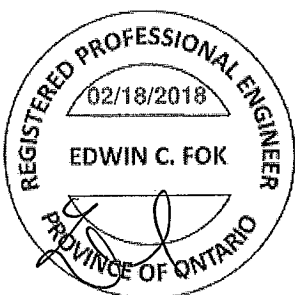
NAIL VALUES		PLATE GRIP(DRY)		SHEAR		SECTION	
(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)	(PSI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656	

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (B) (INPUT = 0.90)
JSI METAL= 0.14 (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

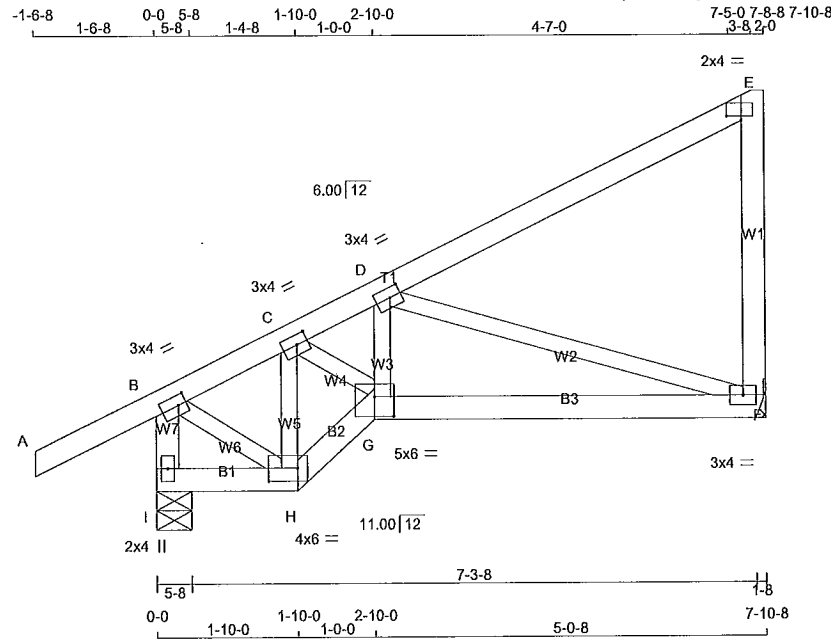


A-18023612

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292604	J1TC	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Sun Feb 18 08:51:29 2018 Page 1
ID:MF8ilriaTok7DlbpT4B71Xys4PG-A86uiO7nESgSCGI_5v8i7KXttmA5OyCOq_5AdIzjzIS



TOTAL WEIGHT = 35 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.25
C	TMVW-I	MT20	3.0	4.0	1.50	1.75
D	TMVW-I	MT20	3.0	4.0	1.50	1.75
E	TVM-I	MT20	2.0	4.0	0.75	2.25
F	BMVW-I	MT20	3.0	4.0		
G	BBWW-I	MT20	5.0	6.0	3.00	3.00
H	BBWW-I	MT20	4.0	6.0	2.00	4.50
I	BMV-I+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	367	0	367	0
I	518	0	518	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX / MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	262	158 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
I	366	240 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CS (LC)	UNBRAC LENGTH	FR-TO	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	H-C	-270 / 0	0.04 (1)			
B-C	-280 / 0	-78.0	-78.0	0.11 (1)	6.25	C-G	0 / 435	0.10 (1)			
C-D	-514 / 0	-78.0	-78.0	0.19 (1)	6.25	G-D	-34 / 57	0.02 (4)			
D-E	-16 / 0	-78.0	-78.0	0.21 (1)	6.25	D-F	-564 / 0	0.24 (1)			
F-E	-156 / 0	0.0	0.0	0.05 (1)	7.81	B-H	0 / 243	0.05 (1)			
I-B	-501 / 0	0.0	0.0	0.05 (1)	7.81						
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00						
H-G	0 / 271	-18.5	-18.5	0.05 (1)	10.00						
G-F	0 / 539	-18.5	-18.5	0.19 (4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.21/1.00 (D-E:1), BC=0.19/1.00 (F-G:4), WB=0.24/1.00 (D-F:1), SSI=0.17/1.00 (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.

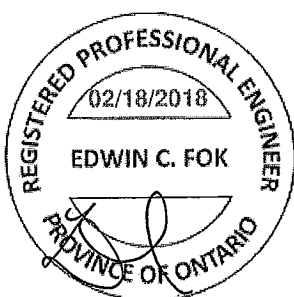
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MT20	618	354	1667
	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

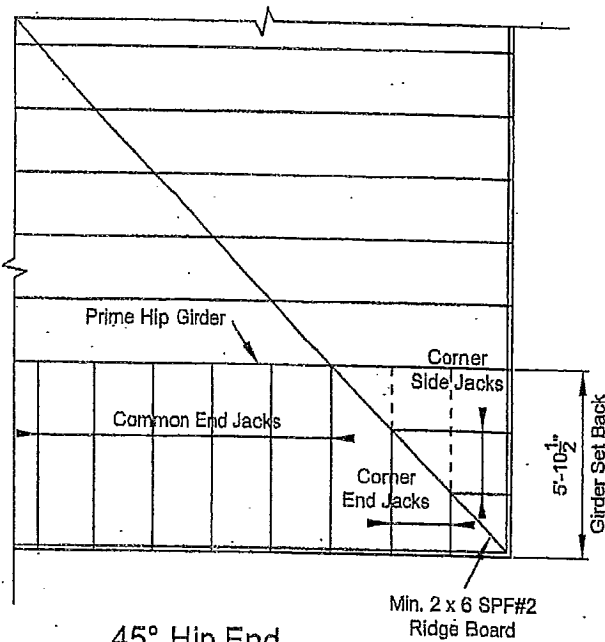
JSI GRIP= 0.81 (F) (INPUT = 0.90)
JSI METAL= 0.20 (F) (INPUT = 1.00)

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-18023613

STRACON ENGINEERING INC.

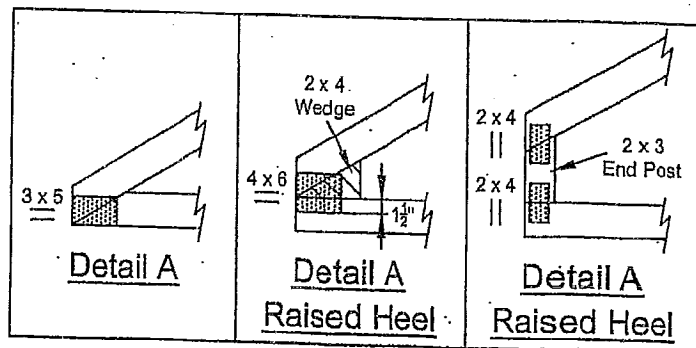
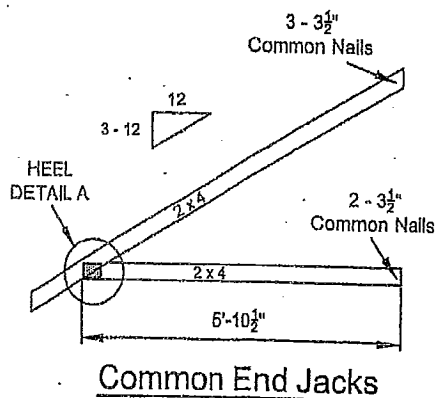
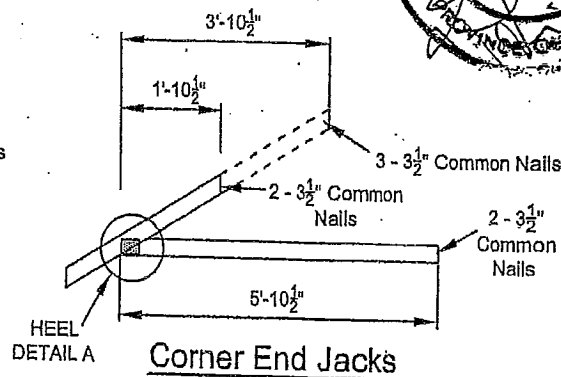
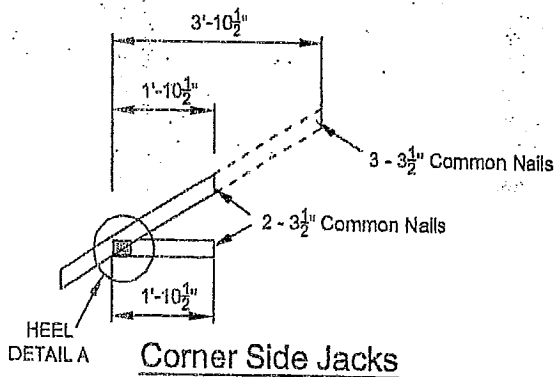


LUMBER SPECIFICATION

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

DESIGN LOAD

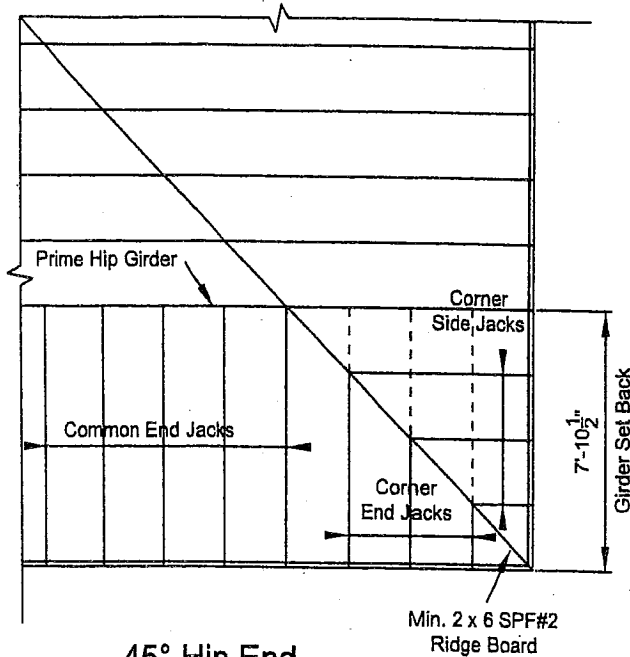
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



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

CS-51008

STRACON ENGINEERING INC.



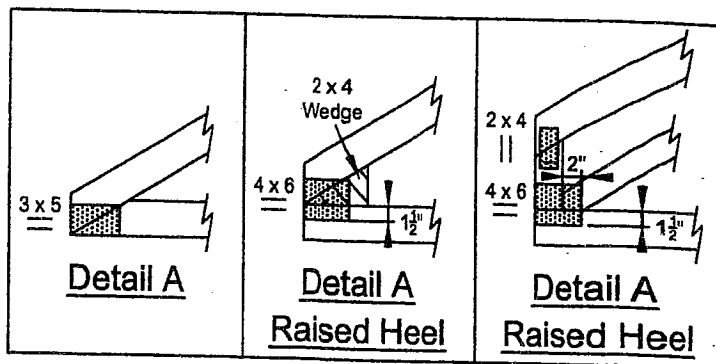
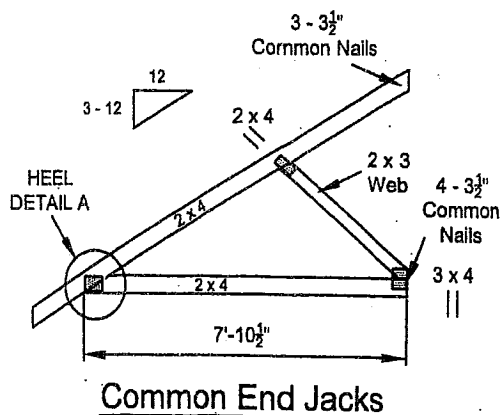
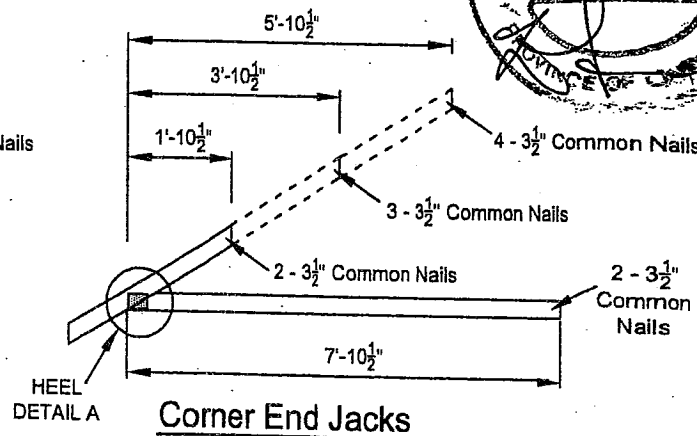
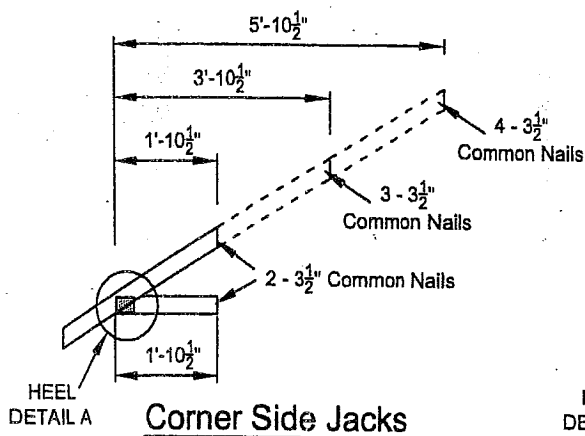
LUMBER SPECIFICATION

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

DESIGN LOAD

TOP CHORD SNOW LOAD : 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:

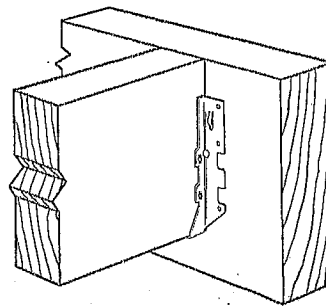
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

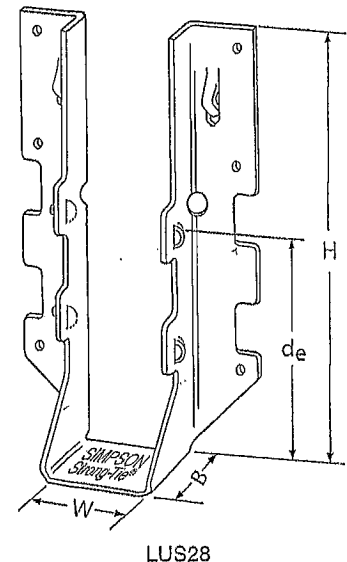
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



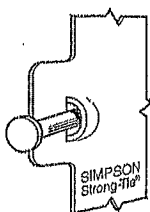
Typical LUS Installation



LUS28

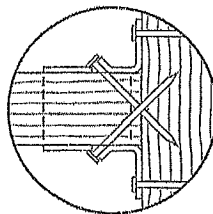
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d ₁	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1½	3½	1¾	1 15/16	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1 15/16	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3%	(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	4%	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6%	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	4%	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7 15/16	1¾	3%	(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	4%	8 5/16	2	5¼	(8) 16d	(6) 16d	2580	3345	2320	2375

1. d₁ is the distance from the seat of the hanger to the highest joist nail.

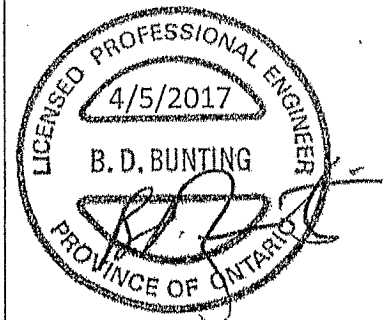


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

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 at strongtie.com.

© 2017 Simpson Strong-Tie Company Inc.

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

(800) 999-5099
strongtie.com

HHUS – Double Shear Joist Hangers

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

Material: 14 gauge

Finish: G90 galvanized

Design:

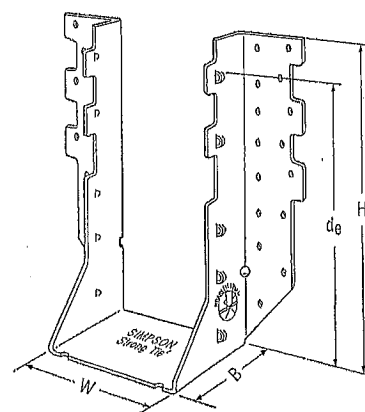
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

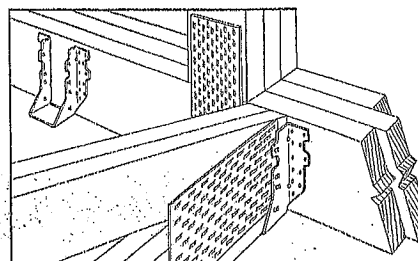
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

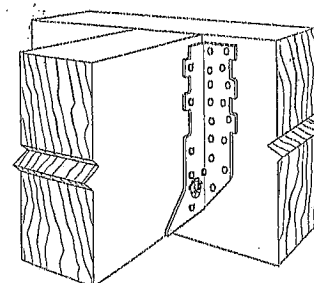
- See current catalogue for options



HHUS410



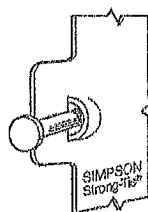
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

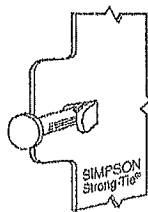
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	dg ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _p =1.15)	(K _p =1.00)	(K _p =1.15)	(K _p =1.00)
HHUS26-2	14	3 1/16	5 1/16	3	3 1/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 5/16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

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

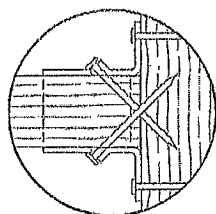


Double Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,680



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

© 2017, Simpson Strong-Tie Company Inc.

T-SPECHHUS17 3/17 exp: 6/19

(800) 999-5099
strongtie.com

TC – Truss Connectors



The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

Material: 16 gauge

Finish: G90 galvanized

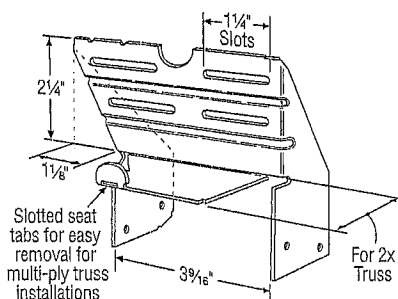
Design: Factored resistances are in accordance with CSA 086-14

Installation:

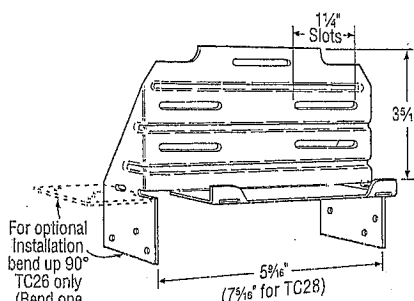
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½ = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow room under the nail head for movement of the truss with respect to the wall.

Optional TC Installation:

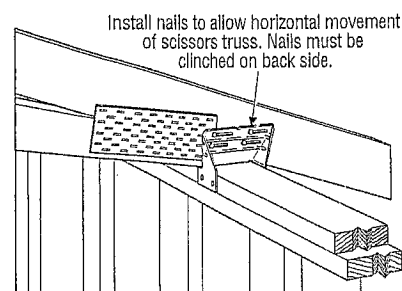
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



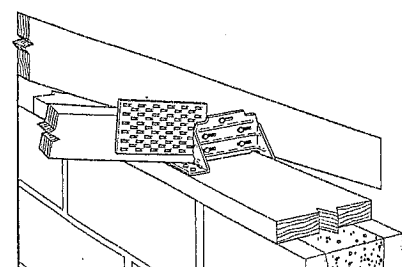
TC24
U.S. Patent 4,932,173



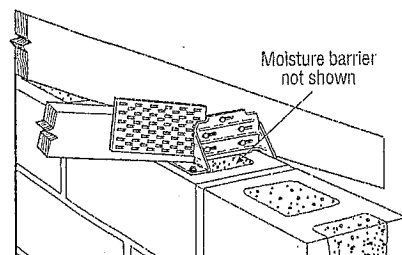
TC26
(TC28 Similar)



Typical TC24 Installation



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer (8", 10", 12" Wall Installation Similar)



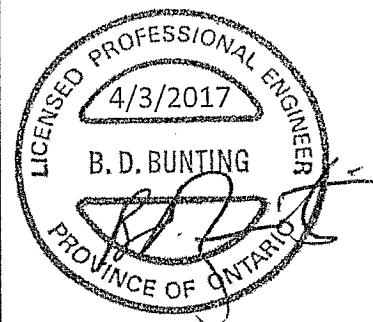
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC24	(4) 10d	(4) 10d	lb.	lb.
TC26	(5) 10d	(6) 10d	605	430
TC28	(5) 10d	(6) 10d	1015	720
			1015	720

Optional TC Installation Table

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K ₀ =1.15)	Uplift (K ₀ =1.15)
TC26	(5) 10d	(6) 10d x 1½"	810	660
	(5) 10d	(6) 10d	930	660

1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) – ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT
STATES
DESIGN

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

© 2017 Simpson Strong-Tie Company, Inc.

T-SPECTC17 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:

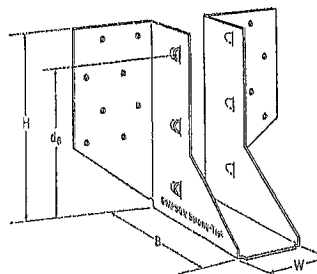
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

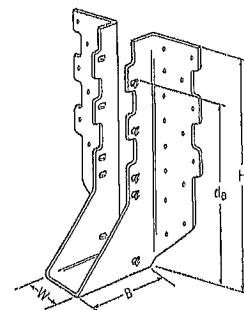
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

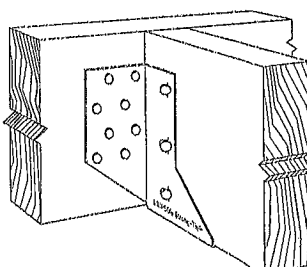
- See current catalogue for options



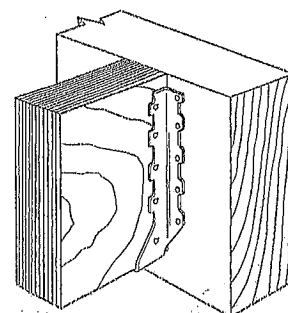
LJS26DS



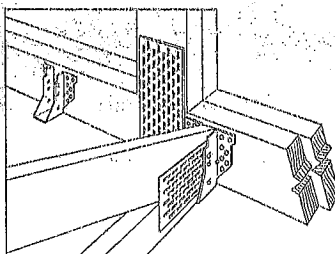
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



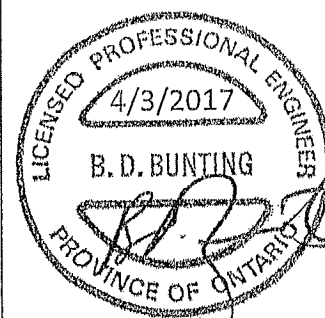
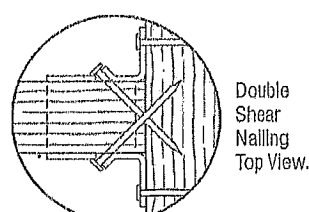
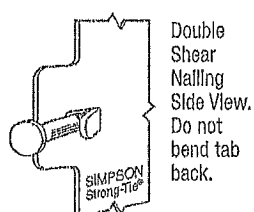
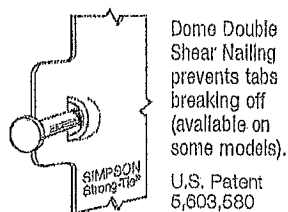
Typical HUS
Installation



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

Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d 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	1⅞	5	3½	4⅝	(16) 16d	(6) 16d	2055	4265	1460	4115
HUS26	16	1⅞	5⅝	3	3⅝	(14) 16d	(6) 16d	2705	4940	2065	3875
HUS28	16	1⅞	7⅝	3	6⅝	(22) 16d	(8) 16d	3605	5365	2675	4345
HUS210	16	1⅞	9⅝	3	7⅝	(30) 16d	(10) 16d	4505	5795	4010	4740
HUS1.81/10	16	1⅞	9	3	8	(30) 16d	(10) 16d	4505	6450	4010	5200

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



LIMIT
STATES
DESIGN

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

© 2017 Simpson Strong-Tie Company Inc.

T-SPECUS17 3/17 Exp. 6/19

(800) 999-5099
strongtie.com