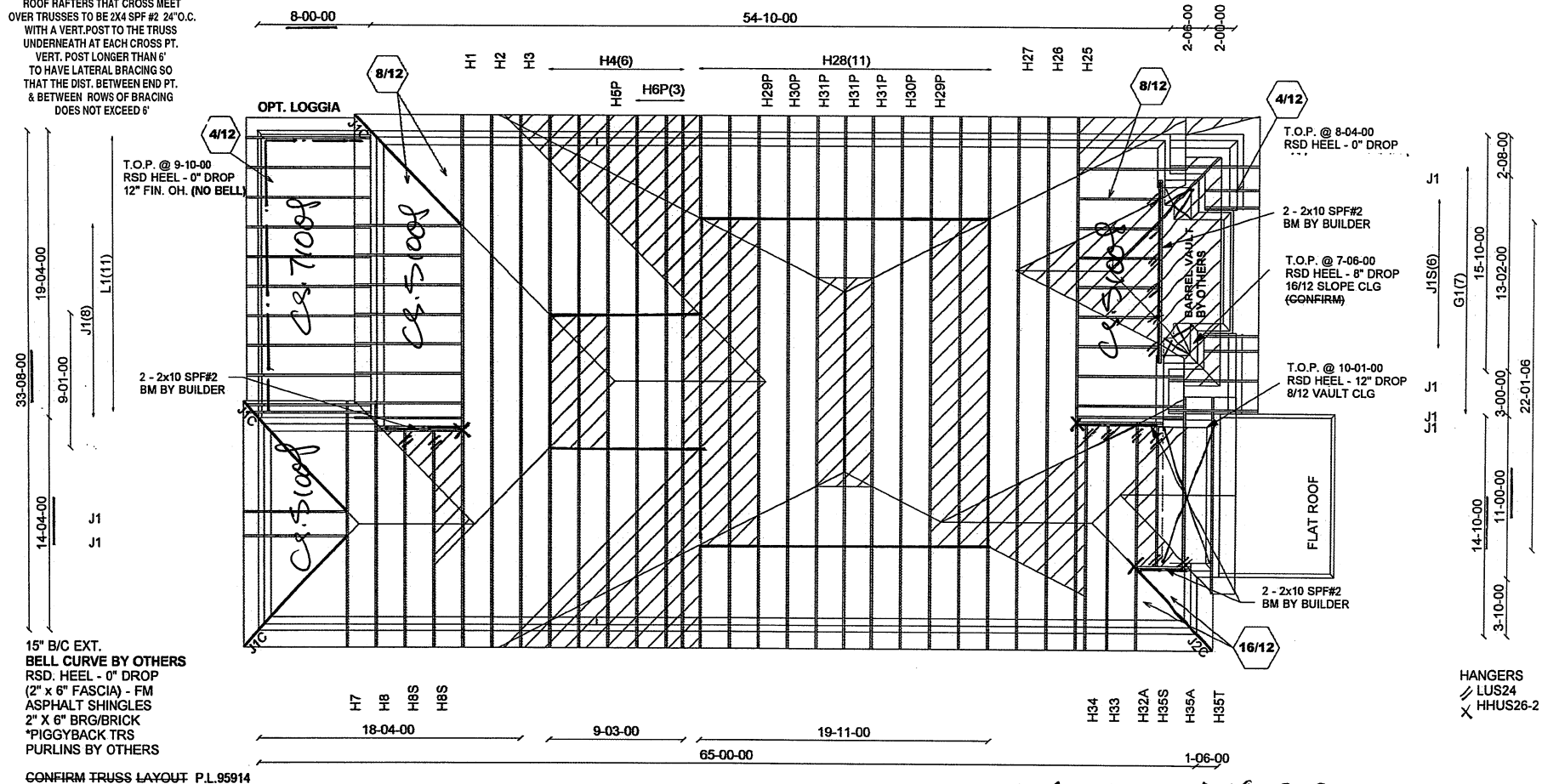


ALPA-BARRIE

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-18023522-A-18023530
A-18023552-A-18023564

CONVENTIONAL
FRAMING BY
OTHERS

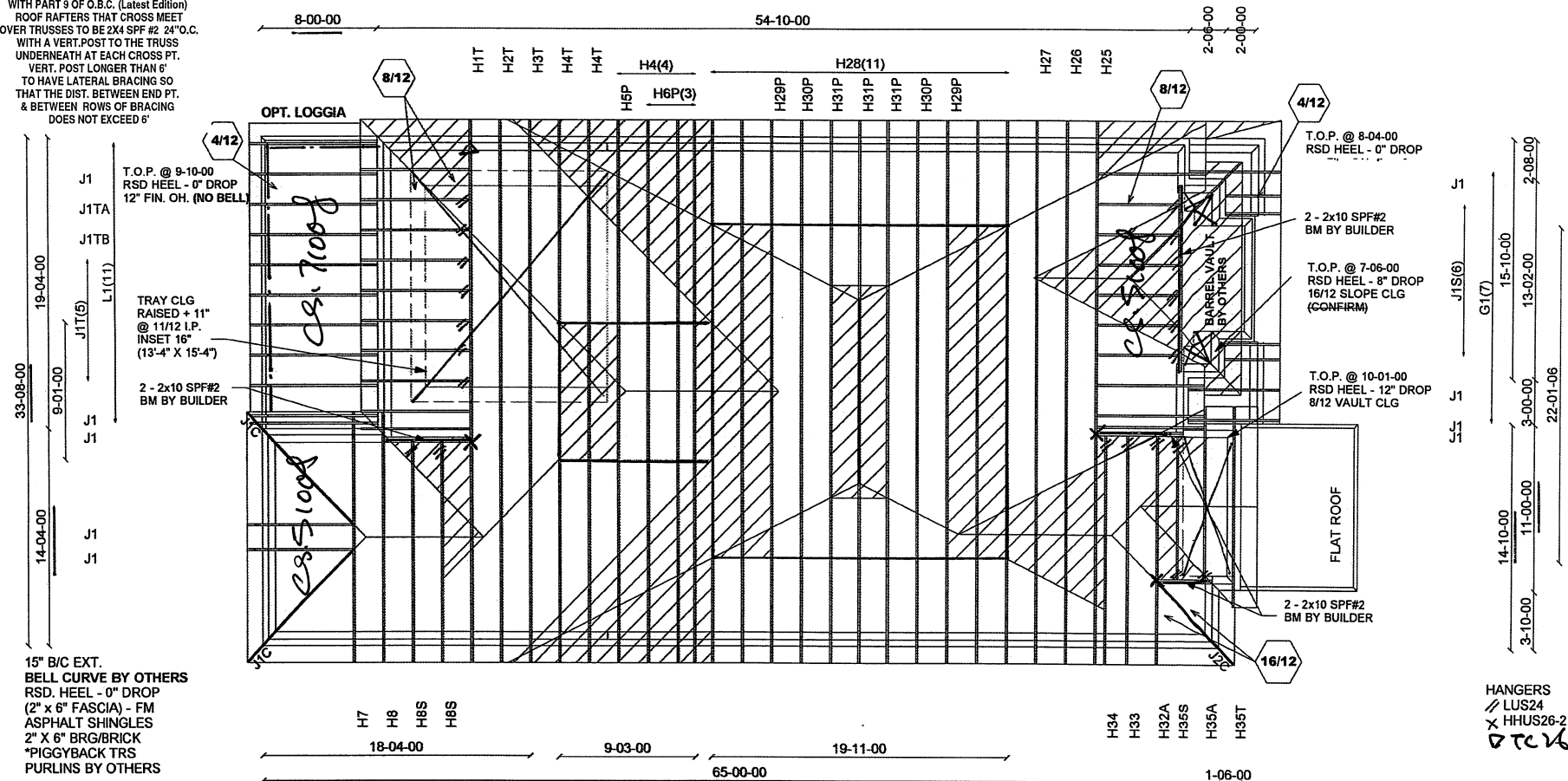
P.L. 99352

HILLHURST ROSEDALE

	Job Track: 45147	Builder / Location:			Model / Elevation:		STD OR OPT 2ND FLR W/ 5 BED OR
	Layout ID: 292600	GOLD PARK HOMES / VAUGHAN			4202 REV1		/ B OPT LOGGIA
	Plan Log: 95914	Project: PINE VALLEY			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.		
		Date: 12/27/2017	Designer: AMANDA				

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-18023522 - A-18023530
A-18023545 - A-18023564

P.L.99352

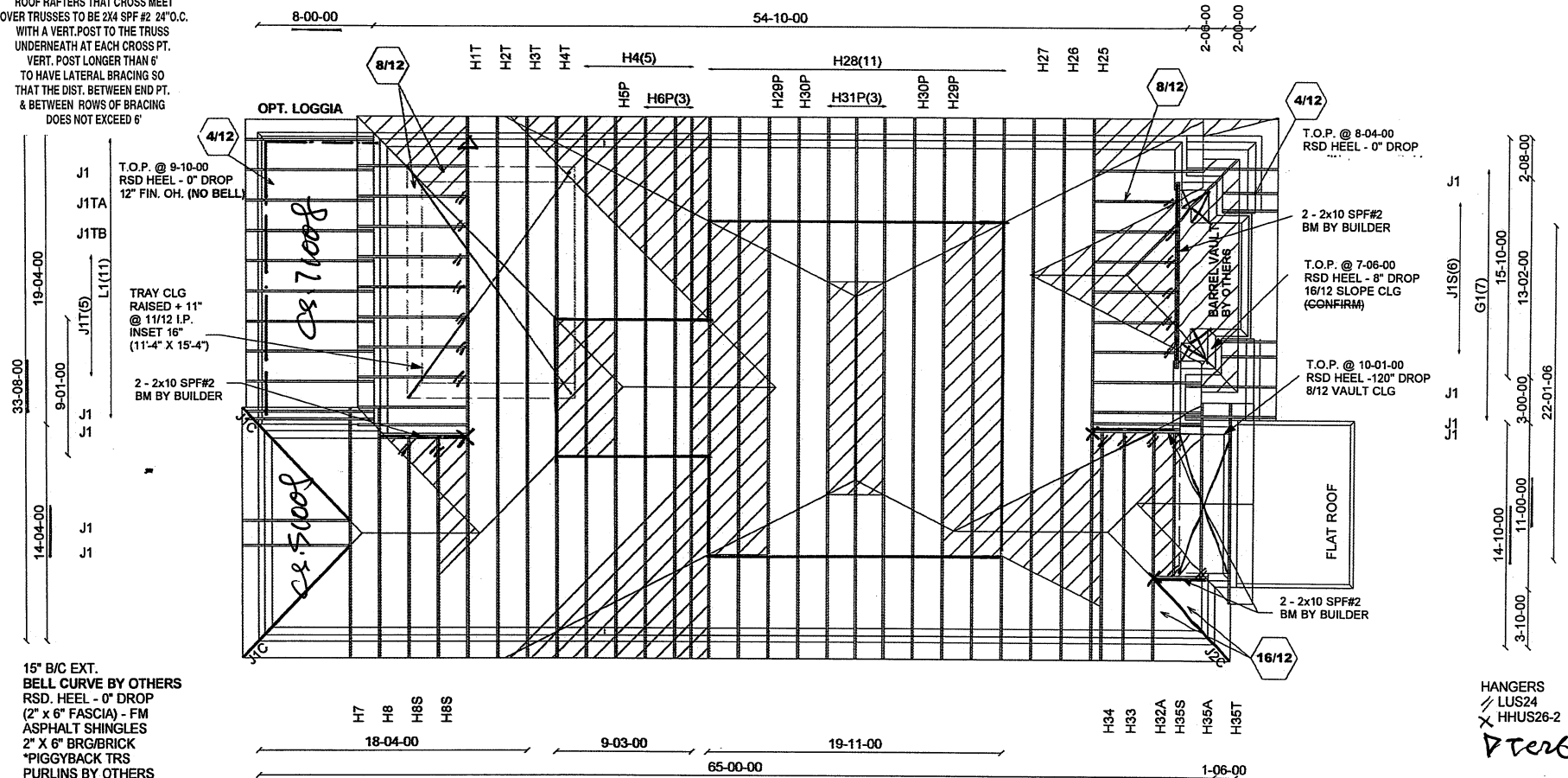
HILLHURST ROSEDALE

	Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN		Model / Elevation: 4202 REV1	STD OR OPT 2ND FL W/SLAB
	Layout ID: 292601	Project: PINE VALLEY		/B OPT TRAY OR OPT LOGGIA	
	Plan Log: 95914	Date: 12/27/2017	Designer: AMANDA	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.	

CONVENTIONAL FRAMING BY OTHERS

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-18023522 - A-18023530
A-18023545 - A-18023564

P.L.99352

HILLHURST ROSEDALE



Job Track: 45147
Layout ID: 292602
Plan Log: 95914

Builder / Location:
GOLD PARK HOMES / VAUGHAN

Project: **PINE VALLEY**

Date: 12/27/2017 Designer: AMANDA

Model / Elevation:

4202 REV1

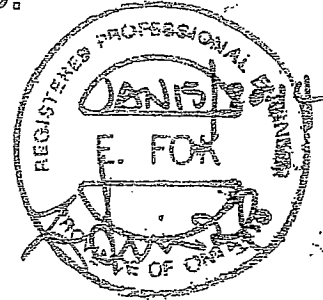
/ B OPT TRAY 5 BED

OPT 2ND FLR W/ SRED 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.

Stracon Engineering Inc.

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



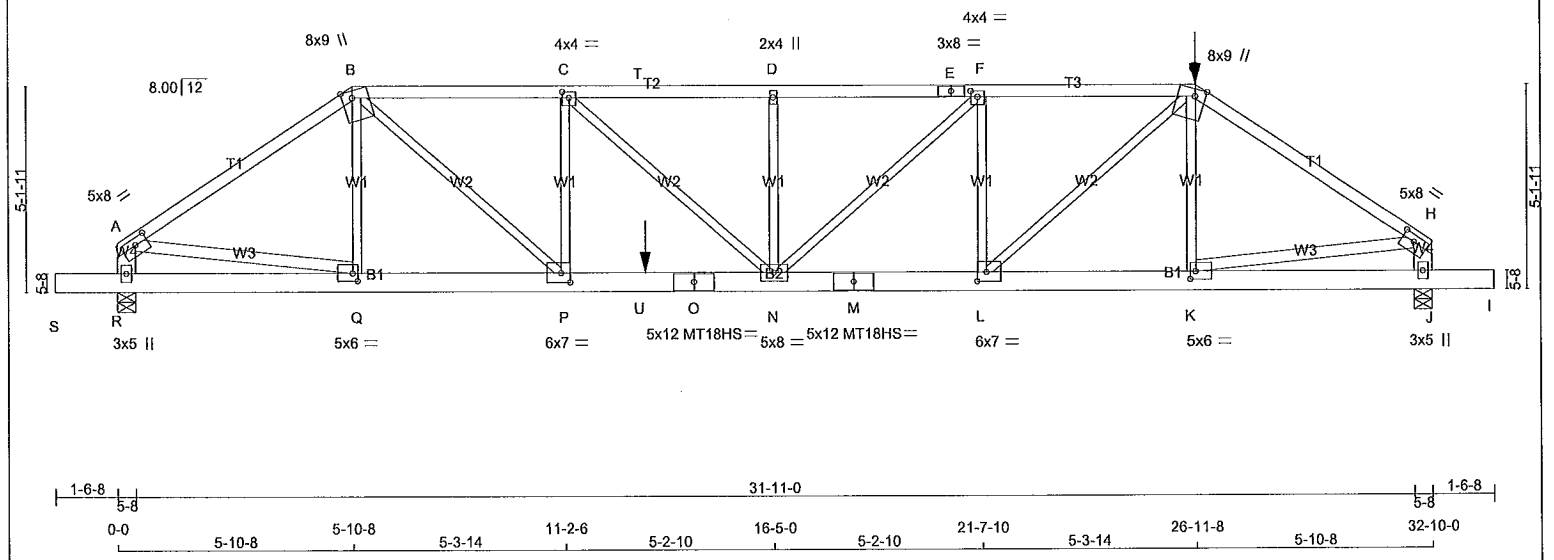
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



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

A - B	2x4	DRY	1650F 1.5E	SPF
B - E	2x4	DRY	1650F 1.5E	SPF
E - G	2x4	DRY	1650F 1.5E	SPF
G - H	2x4	DRY	1650F 1.5E	SPF
R - A	2x6	DRY	No.2	SPF
J - H	2x6	DRY	No.2	SPF
S - O	2x6	DRY	1650F 1.5E	SPF
O - M	2x6	DRY	1650F 1.5E	SPF
M - I	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
A - Q	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF

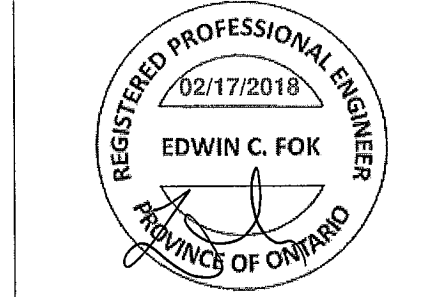
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.00 3.75
B	TTWW+m	MT20	8.0	9.0	Edge 3.00
C	TMVW-t	MT20	4.0	4.0	1.75 2.00
D	TMVW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	8.0	
F	TMVW-t	MT20	4.0	4.0	1.75 2.00
G	TTWW+m	MT20	8.0	9.0	Edge 3.00
H	TMVW-t	MT20	5.0	8.0	2.00 3.75
J	BMV1+p	MT20	3.0	5.0	
K	BMVW-t	MT20	5.0	6.0	2.25 1.50
L	BMVW-t	MT20	6.0	7.0	2.75 2.75
M	BS-t	MT18HS	5.0	12.0	
N	BMVW-t	MT20	5.0	8.0	
O	BS-t	MT18HS	5.0	12.0	
P	BMVW-t	MT20	6.0	7.0	2.75 2.75
Q	BMVW-t	MT20	5.0	6.0	2.25 1.50
R	BMV1+p	MT20	3.0	5.0	

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
VERT	HORZ	DOWN	HORZ	UPLIFT
R	2881	0	2881	0
J	3273	0	3273	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
R	2043	1308 / 0	0 / 0	0 / 0	0 / 0	735 / 0	0 / 0
J	2329	1446 / 0	0 / 0	0 / 0	0 / 0	884 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.37 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.

LOADING
 TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-3644 / 0	-78.0	-78.0 0.73 (1)	Q-B	-398 / 0	0.15 (1)	
B-C	-5284 / 0	-78.0	-78.0 0.63 (1)	B-P	0 / 3034	0.75 (1)	
C-T	-8018 / 0	-78.0	-78.0 0.75 (1)	P-C	-1190 / 0	0.45 (1)	
T-D	-6018 / 0	-153.5	-153.5 0.75 (1)	C-N	0 / 994	0.25 (1)	
D-E	-6018 / 0	-153.5	-153.5 1.00 (1)	N-D	-750 / 0	0.28 (1)	
E-F	-6018 / 0	-153.5	-153.5 1.00 (1)	N-F	0 / 951	0.24 (1)	
F-G	-5316 / 0	-153.5	-153.5 0.93 (1)	L-F	-1547 / 0	0.58 (1)	
G-H	-4186 / 0	-78.0	-78.0 0.82 (1)	L-G	0 / 2469	0.61 (1)	
R-A	-2671 / 0	0.0	0.0 0.19 (1)	K-G	-221 / 92	0.08 (1)	
J-H	-3034 / 0	0.0	0.0 0.21 (1)	A-Q	0 / 3057	0.54 (1)	
S-R	0 / 0	-96.5	-96.5 0.06 (1)	K-H	0 / 3511	0.62 (1)	
R-Q	0 / 0	-18.5	-18.5 0.06 (4)				
Q-P	0 / 3020	-18.5	-18.5 0.44 (1)				
P-U	0 / 5284	-18.5	-18.5 0.89 (1)				
U-O	0 / 5284	-36.4	-36.4 0.89 (1)				
O-N	0 / 5284	-36.4	-36.4 0.89 (1)				
N-M	0 / 5316	-36.4	-36.4 0.56 (1)				
M-L	0 / 5316	-36.4	-36.4 0.56 (1)				
L-K	0 / 3474	-36.4	-36.4 0.34 (1)				
K-J	0 / 0	-36.4	-36.4 0.10 (4)				
J-I	0 / 0	-96.5	-96.5 0.06 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
G	26-11-8	-334	-334	---	FRONT	VERT	TOTAL
U	13-2-8	-953	-953	---	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 = 5-10-8
 END SETBACK = 5-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADD'L LOADS BASED ON .55 % OF GSL.
 LOADS APPLIED TO FIRST 19-9-0 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
 ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.29")
 ALLOWABLE DEFL.(TL)= L/360 (1.09")
 CALCULATED VERT. DEFL.(TL) = L/740 (0.53")

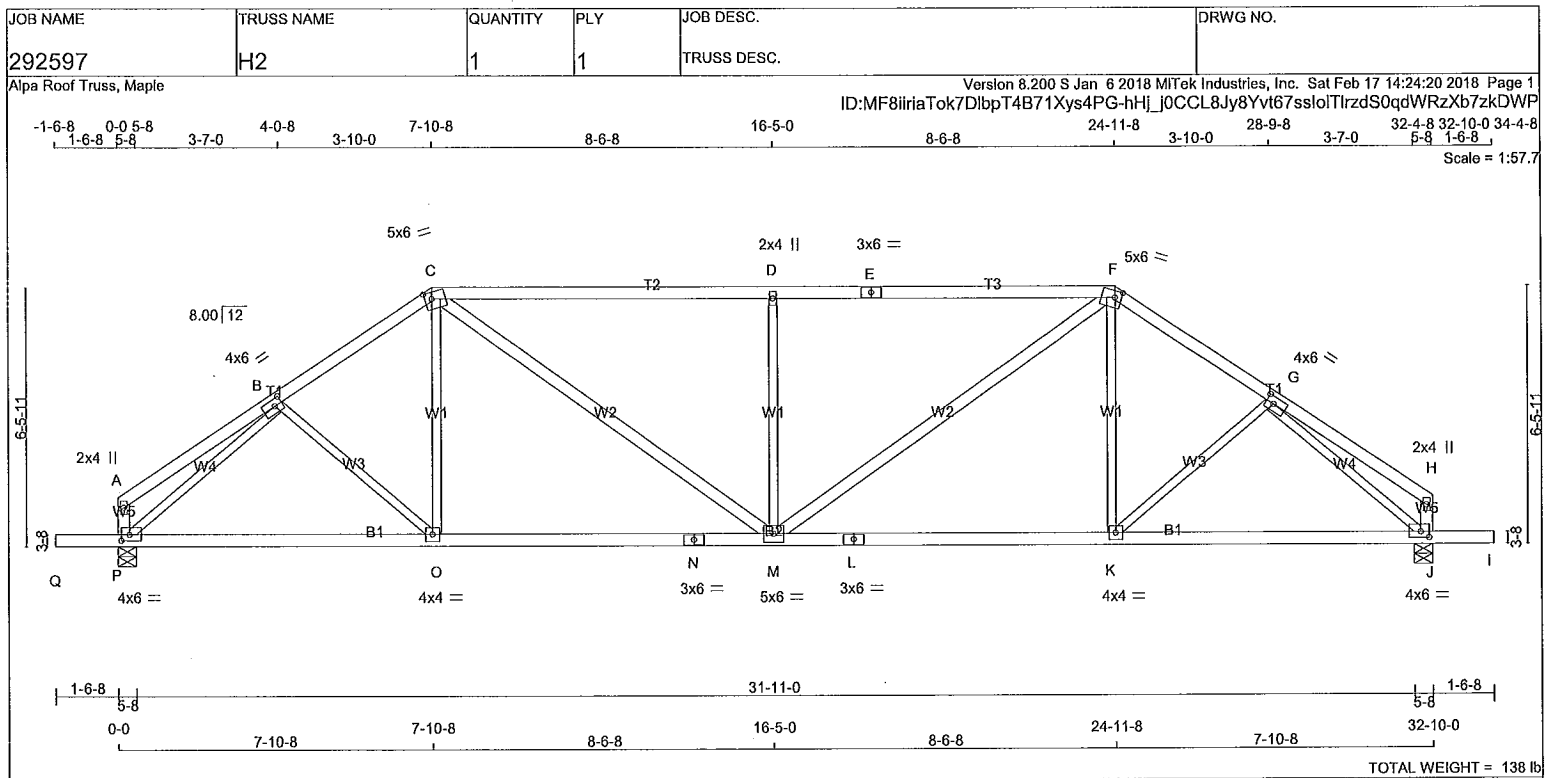
CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
 ALLOWABLE DEFL.(TL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=1.00/1.00 (D-F:1), BC=0.89/1.00 (N-P:1), WB=0.75/1.00 (B-P:1), SSI=0.47/1.00 (N-P: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



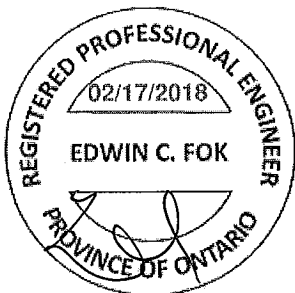
LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF			
C - E	2x4	DRY	No.2	SPF			
E - F	2x4	DRY	No.2	SPF			
F - H	2x4	DRY	No.2	SPF			
P - A	2x4	DRY	No.2	SPF			
J - H	2x4	DRY	No.2	SPF			
Q - N	2x4	DRY	No.2	SPF			
N - L	2x4	DRY	No.2	SPF			
L - I	2x4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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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		REQRD IN-SX	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX
P	1732	0	1732	0	0	5-8	1-13	
J	1732	0	1732	0	0	5-8	1-13	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
P	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0
J	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 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 = 3.26 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		W E B S		MAX. FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	MAX. FORCE (LBS)	MAX. CSI (LC)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 18	-78.0	-78.0	0.17 (1)	10.00	B-O	-15 / 47	0.02 (4)
B-C	-1890 / 0	-78.0	-78.0	0.18 (1)	4.74	O-C	0 / 181	0.06 (4)
C-D	-2229 / 0	-78.0	-78.0	0.94 (1)	3.26	C-M	0 / 828	0.13 (1)
D-E	-2230 / 0	-78.0	-78.0	0.94 (1)	3.26	M-D	-821 / 0	0.56 (1)
E-F	-2230 / 0	-78.0	-78.0	0.94 (1)	3.26	M-F	0 / 828	0.13 (1)
F-G	-1890 / 0	-78.0	-78.0	0.18 (1)	4.74	K-F	0 / 181	0.06 (4)
G-H	0 / 18	-78.0	-78.0	0.17 (1)	10.00	K-G	-15 / 47	0.02 (4)
P-A	-121 / 0	0.0	0.0	0.01 (1)	7.81	P-B	-2104 / 0	0.95 (1)
J-H	-121 / 0	0.0	0.0	0.01 (1)	7.81	G-J	-2104 / 0	0.95 (1)
Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00			
P-O	0 / 1567	-18.5	-18.5	0.44 (4)	10.00			
O-N	0 / 1559	-18.5	-18.5	0.45 (4)	10.00			
N-M	0 / 1559	-18.5	-18.5	0.45 (4)	10.00			
M-L	0 / 1559	-18.5	-18.5	0.45 (4)	10.00			
L-K	0 / 1559	-18.5	-18.5	0.45 (4)	10.00			
K-J	0 / 1567	-18.5	-18.5	0.44 (4)	10.00			
J-I	0 / 0	-96.5	-96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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")

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

CSI: TC=0.94/1.00 (C-D:1), BC=0.45/1.00 (K-M:4)
WB=0.95/1.00 (G-J:1), SSI=0.32/1.00 (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.

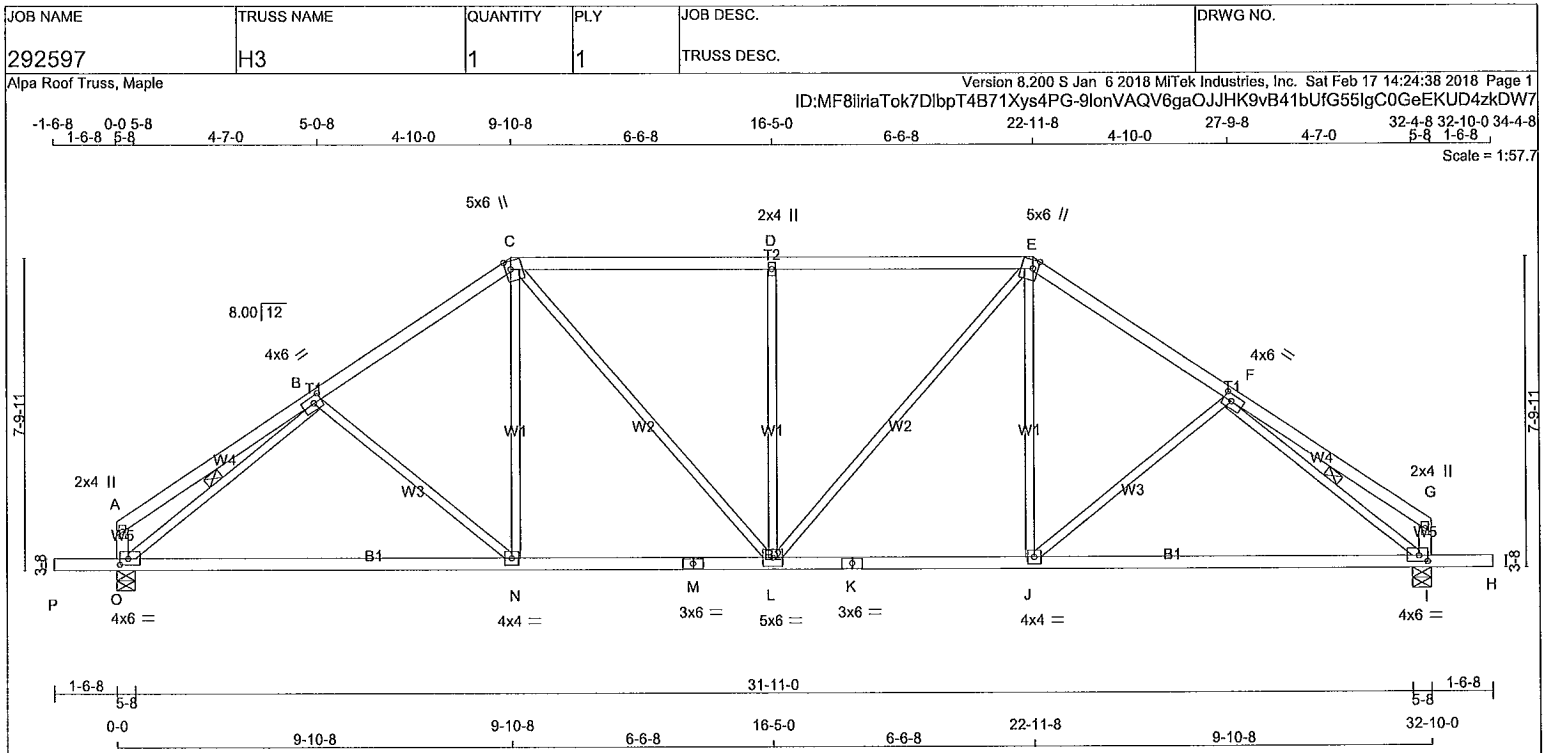
NAIL VALUES		PLATE GRIP(DRY) SHEAR		SECTION	
(PSI)	(PLI)	(PSI)	(PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (P) (INPUT = 0.90)
JSI METAL= 0.52 (B) (INPUT = 1.00)

A-18023523



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
O - A	2x4	DRY	No.2
I - G	2x4	DRY	No.2
P - M	2x4	DRY	No.2
M - K	2x4	DRY	No.2
K - H	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMV+p	MT20	2.0	4.0
B	TMVW-t	MT20	4.0	6.0 2.00 2.50
C	TTWW+m	MT20	5.0	6.0 2.50 1.50
D	TMVW+w	MT20	2.0	4.0
E	TTWW+m	MT20	5.0	6.0 2.50 1.50
F	TMVW-t	MT20	4.0	6.0 2.00 2.50
G	TMV+p	MT20	2.0	4.0
I	BMVW1-t	MT20	4.0	6.0 1.75 2.50
J	BMVW-t	MT20	4.0	4.0
K	BS-t	MT20	3.0	6.0
L	BMVW-t	MT20	5.0	6.0
M	BS-t	MT20	3.0	6.0
N	BMVW-t	MT20	4.0	4.0
O	BMVW1-t	MT20	4.0	6.0 1.75 2.50

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	BRG
O	1732	0	1732	0	0	5-8	1-13	1-13	
I	1732	0	1732	0	0	5-8	1-13	1-13	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
O	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0		
I	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 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 B-O, F-I.

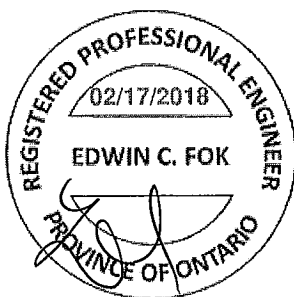
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX. (LC)	UNBRACED
FR-TO		FROM	TO	FR-TO			
A-B	0 / 24	-78.0	-78.0 0.30 (1)	B-N	-160 / 5	0.13 (1)	
B-C	-1802 / 0	-78.0	-78.0 0.28 (1)	N-C	0 / 296	0.07 (4)	
C-D	-1784 / 0	-78.0	-78.0 0.49 (1)	C-L	0 / 461	0.10 (1)	
D-E	-1784 / 0	-78.0	-78.0 0.49 (1)	L-D	-626 / 0	0.71 (1)	
E-F	-1802 / 0	-78.0	-78.0 0.28 (1)	L-E	0 / 461	0.10 (1)	
F-G	0 / 24	-78.0	-78.0 0.30 (1)	J-E	0 / 296	0.07 (4)	
O-A	-148 / 0	0.0	0.0 0.02 (1)	J-F	-160 / 5	0.13 (1)	
I-G	-148 / 0	0.0	0.0 0.02 (1)	O-B	-2100 / 0	0.60 (1)	
				F-I	-2100 / 0	0.60 (1)	
P-O	0 / 0	-96.5	-96.5 0.16 (1)				
O-N	0 / 1600	-18.5	-18.5 0.55 (4)				
N-M	0 / 1481	-18.5	-18.5 0.55 (4)				
M-L	0 / 1481	-18.5	-18.5 0.55 (4)				
L-K	0 / 1481	-18.5	-18.5 0.55 (4)				
K-J	0 / 1481	-18.5	-18.5 0.55 (4)				
J-I	0 / 1600	-18.5	-18.5 0.55 (4)				
I-H	0 / 0	-96.5	-96.5 0.16 (1)				

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



DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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) = $L/999$ (0.08")
ALLOWABLE DEFL.(TL) = $L/360$ (1.09")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.32")

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

CSI: TC=0.49/1.00 (C-D:1), BC=0.55/1.00 (J-L:4), WB=0.71/1.00 (D-L:1), SSI=0.25/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

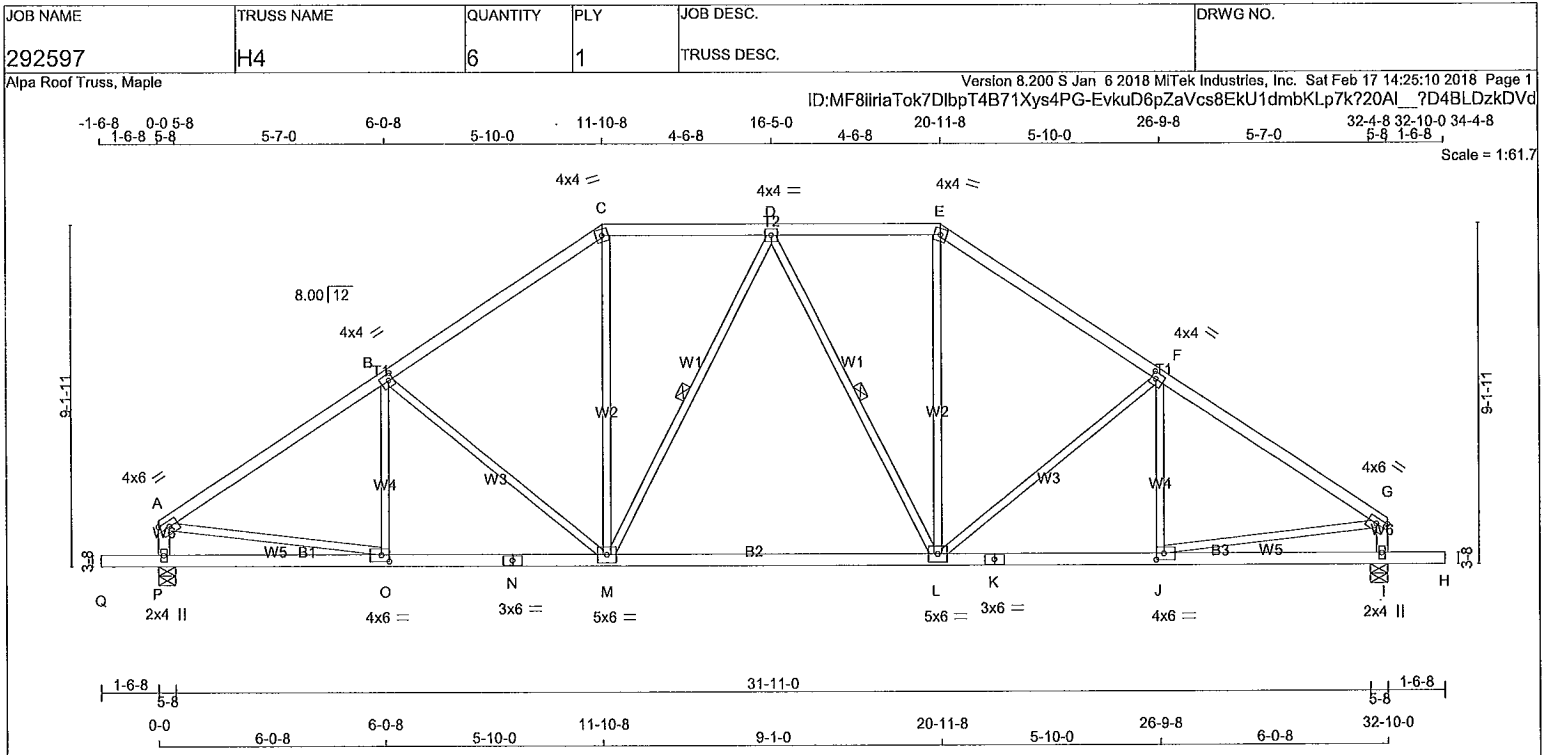
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.51 (F) (INPUT = 1.00)

A-18023524



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW-t	MT20	4.0	6.0 1.75 Edge
B	TMVW-t	MT20	4.0	4.0 2.00 1.50
C	TTW-m	MT20	4.0	4.0
D	TMVW-t	MT20	4.0	4.0
E	TTW-m	MT20	4.0	4.0
F	TMVW-t	MT20	4.0	4.0 2.00 1.50
G	TMVW-t	MT20	4.0	6.0 1.75 Edge
I	BMV1+p	MT20	2.0	4.0
J	BMVW-t	MT20	4.0	6.0 2.00 2.50
K	BS-t	MT20	3.0	6.0
L	BMVW-t	MT20	5.0	6.0
M	BMVW-t	MT20	5.0	6.0
N	BS-t	MT20	3.0	6.0
O	BMVW-t	MT20	4.0	6.0 2.00 2.50
P	BMV1+p	MT20	2.0	4.0

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
P	1766	0	1766	0	0	5-8	2-10		
I	1766	0	1766	0	0	5-8	2-10		

UNFACTORED REACTIONS						
JT	1ST CASE	MAX./MIN.	COMPONENT	REACTIONS		
JT	COMBINED		SNOW	LIVE	PERM.LIVE	WIND
P	1262	754 / 0	0 / 0	0 / 0	0 / 0	509 / 0
I	1262	754 / 0	0 / 0	0 / 0	0 / 0	509 / 0

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

BRACING
FOR SECTION C-E, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING				
TOTAL LOAD CASES: (4)				
CHORDS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CS1 (LC)	MAX. UNBRACED LENGTH
FR-TO				
A-B	-2013 / 0	-78.0 -78.0	0.45 (1)	4.34
B-C	-1731 / 0	-78.0 -78.0	0.41 (1)	4.65
C-D	-1419 / 0	-85.5 -85.5	0.24 (1)	2.00
D-E	-1419 / 0	-85.5 -85.5	0.24 (1)	2.00
E-F	-1731 / 0	-78.0 -78.0	0.41 (1)	4.65
F-G	-2013 / 0	-78.0 -78.0	0.45 (1)	4.34
P-A	-1569 / 0	0.0 0.0	0.16 (1)	6.58
I-G	-1569 / 0	0.0 0.0	0.16 (1)	6.58
Q-P	0 / 0	-96.5 -96.5	0.16 (1)	10.00
P-O	0 / 0	-18.5 -18.5	0.14 (4)	10.00
O-N	0 / 1700	-18.5 -18.5	0.41 (1)	10.00
N-M	0 / 1700	-18.5 -18.5	0.41 (1)	10.00
M-L	0 / 1537	-18.5 -18.5	0.39 (4)	10.00
L-K	0 / 1700	-18.5 -18.5	0.41 (1)	10.00
K-J	0 / 1700	-18.5 -18.5	0.41 (1)	10.00
J-I	0 / 0	-18.5 -18.5	0.14 (4)	10.00
I-H	0 / 0	-96.5 -96.5	0.16 (1)	10.00

WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CS1 (LC)	
O-B	-146 / 22	0.06 (1)	
B-M	-374 / 0	0.45 (1)	
M-C	0 / 620	0.14 (1)	
M-D	-262 / 0	0.19 (1)	
D-L	-262 / 0	0.19 (1)	
L-E	0 / 620	0.14 (1)	
L-F	-374 / 0	0.45 (1)	
J-F	-146 / 22	0.06 (1)	
A-O	0 / 1719	0.39 (1)	
J-G	0 / 1719	0.39 (1)	

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

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

CSI: TC=0.45/1.00 (F-G:1), BC=0.41/1.00 (J-L:1), WB=0.45/1.00 (F-L:1), SSI=0.19/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

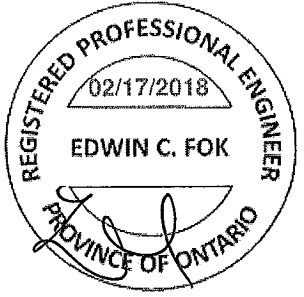
NAIL VALUES			
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

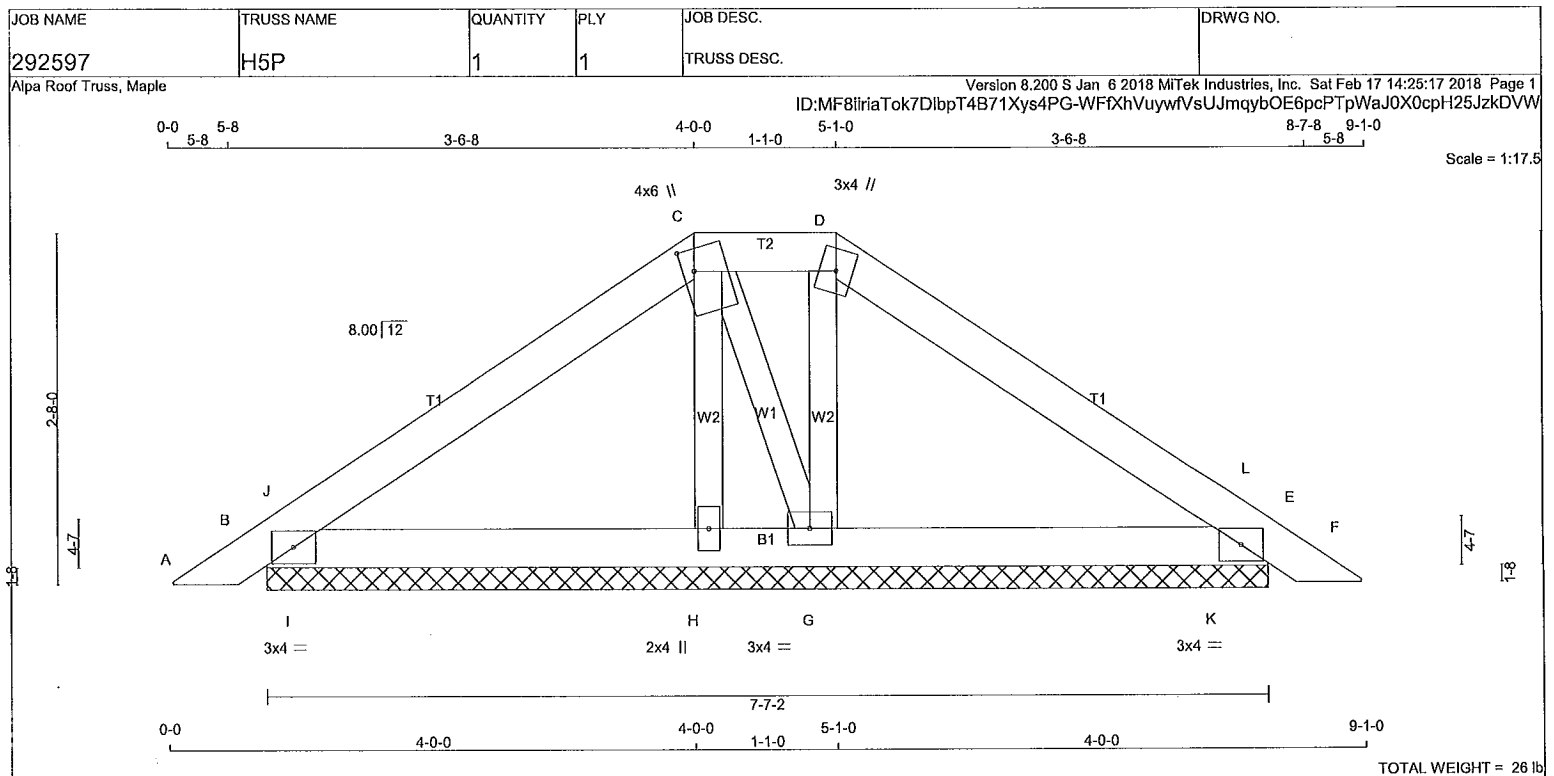
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (O) (INPUT = 0.90)
JSI METAL= 0.54 (K) (INPUT = 1.00)

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



A-18023525



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

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMB1-l	MT20	3.0	4.0		
C TTWW+m	MT20	4.0	6.0	2.00	1.00
D TTWW+m	MT20	3.0	4.0		
E TMB1-l	MT20	3.0	4.0		
G BMWW1-l	MT20	3.0	4.0		
H BMW1-w	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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
B	244	0	244	0	0	7-7-2	4-15		
E	234	0	234	0	0	7-7-2	4-15		
H	134	0	134	0	0	7-7-2	4-15		
G	220	0	220	0	0	7-7-2	4-15		

UNFACTORED REACTIONS

1ST LOASE		MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
B	172	115 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0		
E	166	109 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0		
H	97	51 / 0	0 / 0	0 / 0	0 / 0	46 / 0	0 / 0		
G	157	98 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)	MAX. UNBRAC LENGTH (LC)	MAX. CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 13	-78.0	-78.0 0.02 (1)	10.00	H-C	-65 / 0	0.01 (1)
B-J	-42 / 0	-78.0	-78.0 0.03 (1)	6.25	C-G	-41 / 0	0.01 (1)
J-C	-88 / 0	-78.0	-78.0 0.10 (1)	6.25	G-D	-112 / 0	0.02 (1)
C-D	-50 / 0	-78.0	-78.0 0.02 (1)	6.25	I-J	-200 / 0	0.00 (1)
D-L	-71 / 0	-78.0	-78.0 0.10 (1)	6.25	K-L	-202 / 0	0.00 (1)
L-E	-30 / 0	-78.0	-78.0 0.03 (1)	6.25			
E-F	0 / 13	-78.0	-78.0 0.02 (1)	10.00			
B-I	0 / 70	-18.5	-18.5 0.09 (1)	10.00			
I-H	0 / 70	-18.5	-18.5 0.09 (1)	10.00			
H-G	0 / 67	-18.5	-18.5 0.07 (1)	10.00			
G-K	0 / 55	-18.5	-18.5 0.09 (1)	10.00			
K-E	0 / 55	-18.5	-18.5 0.09 (1)	10.00			

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.10/1.00 (C-J:1), BC=0.09/1.00 (B-I:1), WB=0.02/1.00 (D-G:1), SSI=0.16/1.00 (E-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

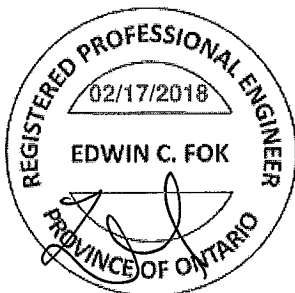
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

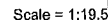
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



A-18023526



TOTAL WEIGHT = $3 \times 23 = 69$ lb

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMB1-I	MT20	3.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

BEARINGS

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

CSI: TC=0.13/1.00 (C-J:1), BC=0.13/1.00 (F-I:1),
WB=0.02/1.00 (C-F:1), SSI=0.22/1.00 (B-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

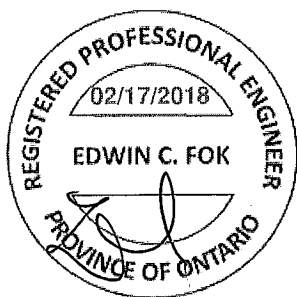
PLATE	GRIP (DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

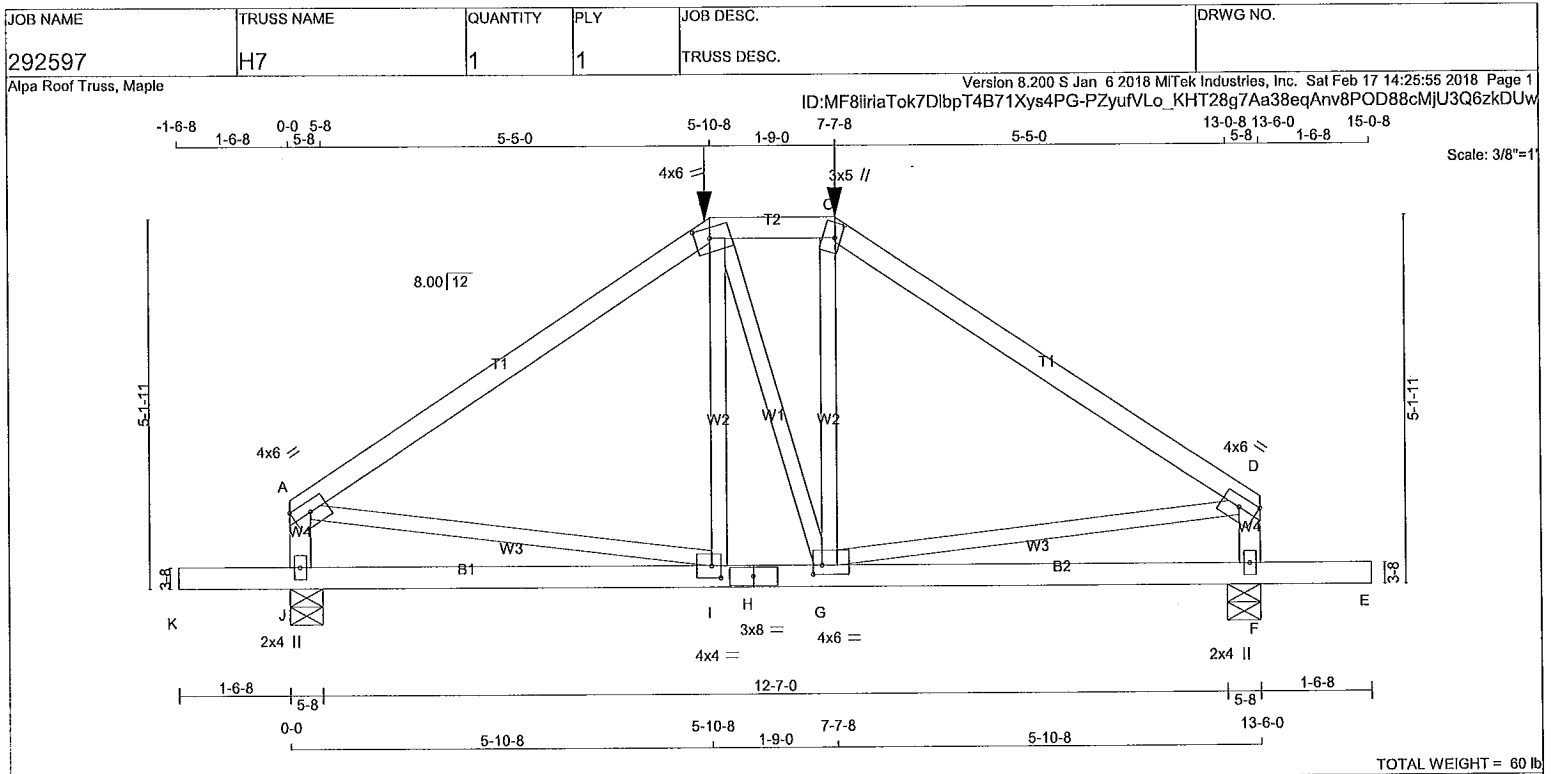
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.06 (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-18023527



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-l	MT20	4.0	6.0	1.75 Edge
B	TTWW-m	MT20	4.0	6.0	1.75 2.50
C	TTWW-m	MT20	3.0	5.0	2.50 1.00
D	TMVW-l	MT20	4.0	6.0	1.75 Edge
F	BMV1+p	MT20	2.0	4.0	
G	BMVWW-l	MT20	4.0	6.0	1.50 1.50
H	BS-l	MT20	3.0	8.0	
I	BMVW-l	MT20	4.0	4.0	2.00 1.50
J	BMV1+p	MT20	2.0	4.0	

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 334.0 lbs FACTORED DOWN AT 7-7-8, AND 334.0 lbs FACTORED DOWN AT 5-10-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
J	1321	0	1321	0	0	1-15
F	1321	0	1321	0	0	1-15

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
J	944	563 / 0	0 / 0	0 / 0	0 / 0	381 / 0	0 / 0
F	944	563 / 0	0 / 0	0 / 0	0 / 0	381 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
A-B	-1251 / 0	-78.0 -78.0	0.61 (1)	I-B	-5 / 110	0.04 (4)	
B-C	-1040 / 0	-153.5 -153.5	0.10 (1)	B-G	0 / 6	0.00 (4)	
C-D	-1252 / 0	-78.0 -78.0	0.61 (1)	G-C	-1 / 115	0.04 (4)	
J-A	-1082 / 0	0.0 0.0	0.12 (1)	A-I	0 / 1051	0.26 (1)	
F-D	-1081 / 0	0.0 0.0	0.12 (1)	G-D	0 / 1052	0.26 (1)	
K-J	0 / 0	-96.5 -96.5	0.17 (1)				
J-I	0 / 0	-36.4 -36.4	0.30 (4)				
I-H	0 / 1039	-36.4 -36.4	0.42 (4)				
H-G	0 / 1039	-36.4 -36.4	0.42 (4)				
G-F	0 / 0	-36.4 -36.4	0.31 (4)				
F-E	0 / 0	-96.5 -96.5	0.17 (1)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	5-10-8	-334	-334	---	FRONT	VERT	TOTAL
C	7-7-8	-334	-334	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

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

CS: TC=0.61/1.00 (C-D-1), BC=0.42/1.00 (G-I-4), WB=0.26/1.00 (D-G-1), SSI=0.19/1.00 (F-G-4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

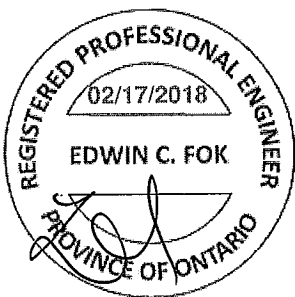
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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CONTINUED ON PAGE 2

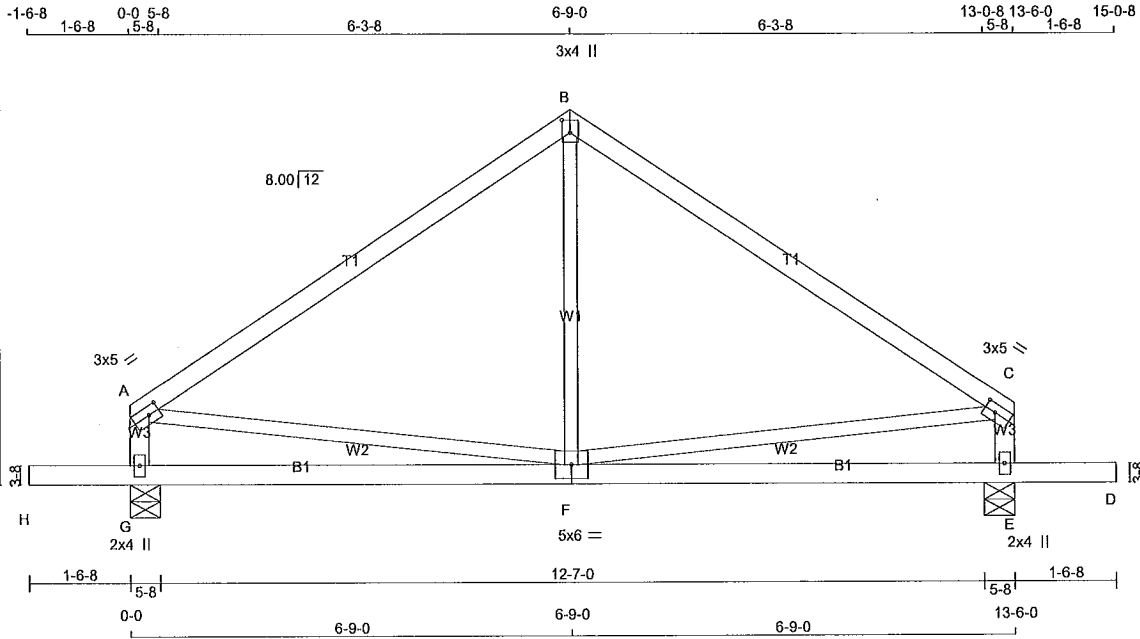


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292597	H8	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:35.3

TOTAL WEIGHT = 54 lb

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

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
G	800	0	800	0
E	800	0	800	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	570	348 / 0	0 / 0	0 / 0	0 / 0	222 / 0	0 / 0
E	570	348 / 0	0 / 0	0 / 0	0 / 0	222 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (UNBRACED LENGTH)	W E B S	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO				FR-TO		
A - B	-489 / 0	-78.0	-78.0	0.30 (1)	6.25	F - B	0 / 98	0.03 (4)
B - C	-489 / 0	-78.0	-78.0	0.30 (1)	6.25	A - F	0 / 410	0.09 (1)
G - A	-589 / 0	0.0	0.0	0.06 (1)	7.81	F - C	0 / 410	0.09 (1)
E - C	-589 / 0	0.0	0.0	0.06 (1)	7.81			
H - G	0 / 0	-96.5	-96.5	0.16 (1)	10.00			
G - F	0 / 0	-18.5	-18.5	0.25 (4)	10.00			
F - E	0 / 0	-18.5	-18.5	0.25 (4)	10.00			
E - D	0 / 0	-96.5	-96.5	0.16 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

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

CSI: TC=0.30/1.00 (B-C:1), BC=0.25/1.00 (E-F:4), WB=0.09/1.00 (C-F:1), SSI=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

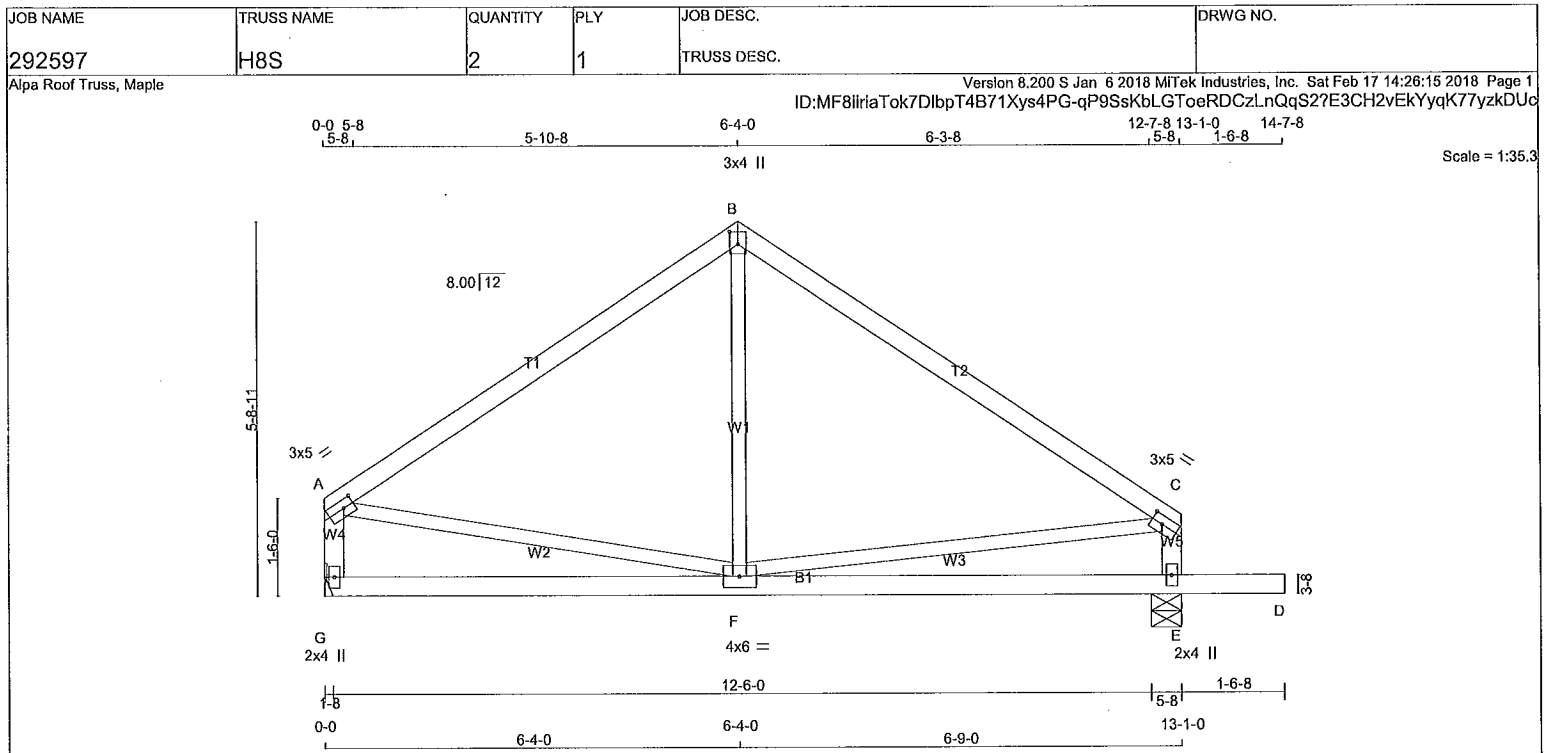
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.54 (A) (INPUT = 0.90)
JSI METAL= 0.19 (A) (INPUT = 1.00)

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



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LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - B	2x4	DRY	No.2		SPF
B - C	2x4	DRY	2100F 1.8E		SPF
G - A	2x4	DRY	No.2		SPF
E - C	2x4	DRY	No.2		SPF
G - 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	5.0	1.50	2.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
G	631	0	631	0	0	0
E	780	0	780	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	450	275 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0
E	556	339 / 0	0 / 0	0 / 0	0 / 0	217 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-480 / 0	-78.0	-78.0 0.41 (1)	6.25	F-B	0 / 115	0.04 (4)
B-C	-480 / 0	-78.0	-78.0 0.30 (1)	6.25	A-F	0 / 406	0.09 (1)
G-A	-587 / 0	0.0	0.0 0.06 (1)	7.81	F-C	0 / 403	0.09 (1)
E-C	-583 / 0	0.0	0.0 0.06 (1)	7.81			
G-F	0 / 0	-18.5	-18.5 0.23 (4)	10.00			
F-E	0 / 0	-18.5	-18.5 0.23 (4)	10.00			
E-D	0 / 0	-96.5	-96.5 0.16 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.44")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.44")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

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

CSI: TC=0.41/1.00 (A-B:1), BC=0.23/1.00 (E-F:4), WB=0.09/1.00 (A-F:1), SSI=0.17/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

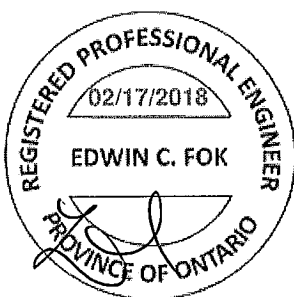
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

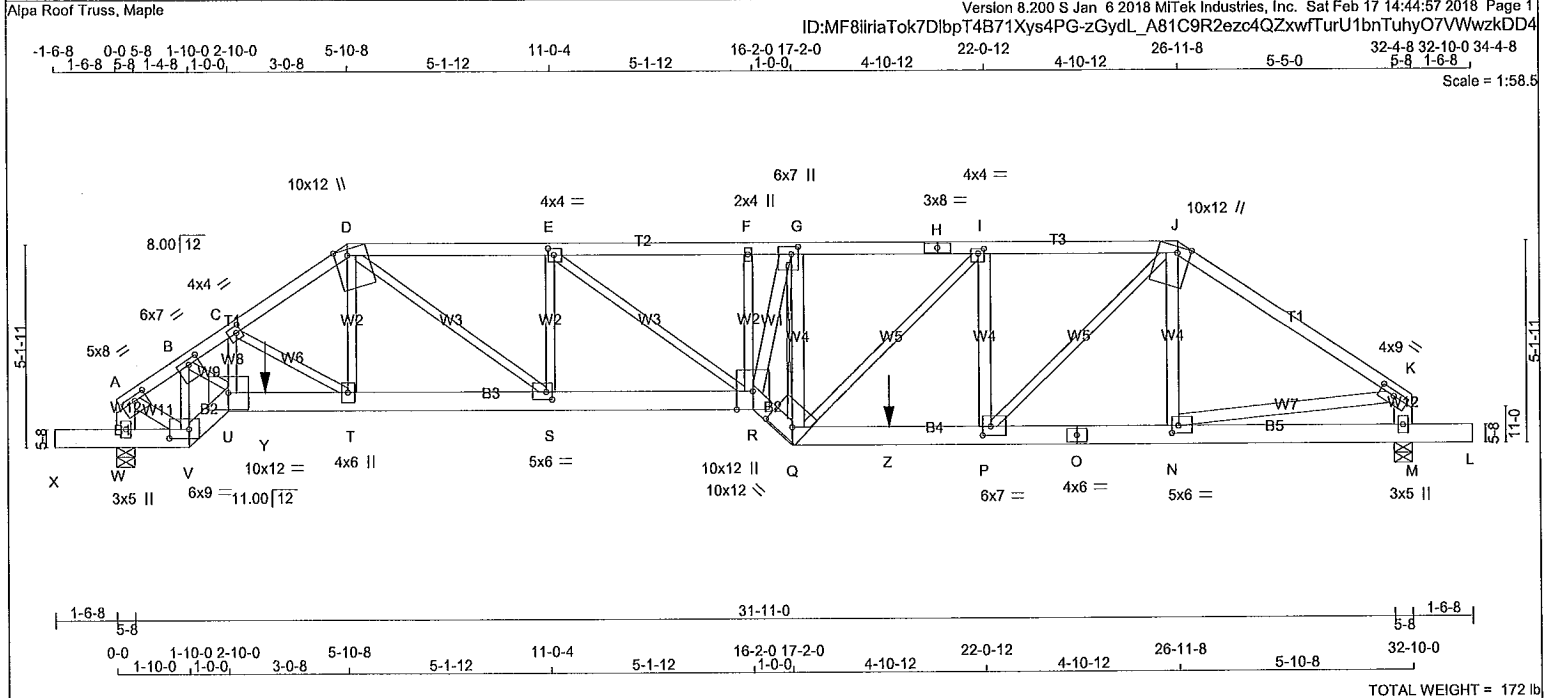
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.55 (F) (INPUT = 0.90)
JSI METAL= 0.19 (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-18023530



LUMBER

N.L.G.A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY 1650F 1.5E	SPF
D - H	2x4	DRY 1650F 1.5E	SPF
H - J	2x4	DRY 1650F 1.5E	SPF
J - K	2x4	DRY 1650F 1.5E	SPF
W - A	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
X - V	2x6	DRY No.2	SPF
V - U	2x6	DRY 1650F 1.5E	SPF
U - R	2x6	DRY 1650F 1.5E	SPF
R - Q	2x6	DRY 1650F 1.5E	SPF
Q - O	2x6	DRY 1650F 1.5E	SPF
O - L	2x6	DRY 1650F 1.5E	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF
R - G	2x4	DRY No.2	SPF
Q - G	2x4	DRY No.2	SPF
P - I	2x4	DRY No.2	SPF
N - J	2x4	DRY No.2	SPF
A - V	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
A	TMVW-t	MT20	5.0	8.0	1.50	3.75
B	TMVW-t	MT20	6.0	7.0	1.50	3.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TTWW+m	MT20	10.0	12.0	Edge	4.00
E	TMVW-t	MT20	4.0	4.0	2.00	1.75
F	TMVW-t	MT20	2.0	4.0		
G	TMVW-t	MT20	6.0	7.0	2.25	2.00
H	TS-t	MT20	3.0	8.0		
I	TMVW-t	MT20	4.0	4.0	1.50	1.75
J	TTWW+m	MT20	10.0	12.0	Edge	4.00
K	TMVW-t	MT20	4.0	9.0	1.50	4.50
M	BMV1+p	MT20	3.0	5.0		
N	BMVW-t	MT20	5.0	6.0	2.25	2.00
O	BS-t	MT20	4.0	6.0		
P	BMVW-t	MT20	6.0	7.0	2.75	2.50

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQD
	VERT	HORZ	DOWN	HORZ
JT	3448	0	3448	0
W	2875	0	2875	0
M	2875	0	2875	0

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS
	COMBINED	SNOW
JT	2444	1570 / 0
W	2038	1308 / 0
M	2038	1308 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

	CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO										
A-B	-3448 / 0	-78.0	-78.0	0.16 (1)	4.15		V-B	-3679 / 0	0.61 (1)	
B-C	-6027 / 0	-78.0	-78.0	0.28 (1)	3.13		B-U	0 / 3250	0.80 (1)	
C-D	-5246 / 0	-78.0	-78.0	0.28 (1)	3.37		U-C	0 / 616	0.15 (1)	
D-E	-6555 / 0	-78.0	-78.0	0.70 (1)	2.74		C-T	-762 / 0	0.18 (1)	
E-F	-7402 / 0	-78.0	-78.0	0.79 (1)	2.49		T-D	0 / 1014	0.25 (1)	
F-G	-7399 / 0	-78.0	-78.0	0.40 (1)	2.73		D-S	0 / 2707	0.67 (1)	
G-H	-6000 / 0	-78.0	-78.0	0.56 (1)	2.95		S-E	-1092 / 0	0.29 (1)	
H-I	-6000 / 0	-78.0	-78.0	0.56 (1)	2.95		E-R	0 / 1054	0.26 (1)	
I-J	-5124 / 0	-78.0	-78.0	0.49 (1)	3.25		R-F	-128 / 0	0.03 (1)	
J-K	-3635 / 0	-78.0	-78.0	0.73 (1)	3.59		F-G	0 / 5442	0.96 (1)	
W-A	-3219 / 0	0.0	0.0	0.23 (1)	5.86		Q-G	-5496 / 0	0.90 (1)	
M-K	-2662 / 0	0.0	0.0	0.19 (1)	6.34		K-I	0 / 1218	0.30 (1)	
							P-I	-1268 / 0	0.34 (1)	
X-W	0 / 0	-96.5	-96.5	0.08 (1)	10.00		P-J	0 / 2949	0.73 (1)	
W-V	-1 / 0	-18.5	-18.5	0.08 (1)	10.00		N-J	-429 / 0	0.12 (1)	
V-U	0 / 3593	-18.5	-18.5	0.29 (1)	10.00		A-V	0 / 3093	0.55 (1)	
U-Y	0 / 5006	-18.5	-18.5	0.55 (1)	10.00		N-K	0 / 3049	0.54 (1)	
Y-T	0 / 5006	-112.0	-112.0	0.55 (1)	10.00					
T-S	0 / 4384	-112.0	-112.0	0.50 (1)	10.00					
S-R	0 / 6555	-112.0	-112.0	0.68 (1)	10.00					
R-Q	0 / 7909	-112.0	-112.0	0.65 (1)	10.00					
Q-Z	0 / 5124	-112.0	-112.0	0.99 (1)	10.00					
Z-P	0 / 5124	-18.5	-18.5	0.99 (1)	10.00					
P-O	0 / 3008	-18.5	-18.5	0.48 (1)	10.00					
O-N	0 / 3008	-18.5	-18.5	0.48 (1)	10.00					
N-M	0 / 0	-18.5	-18.5	0.06 (4)	10.00					
M-L	0 / 0	-96.5	-96.5	0.06 (1)	10.00					

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: CStdGirder
START DISTANCE = 3-9-4
START SPAN CARRIED = 5-10-8
END DISTANCE = 19-7-8
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL. LOADS BASED ON 55 % OF GSL.

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

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

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

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 (0.39")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/533 (0.74")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/287 (0.06")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/152 (0.12")

CSI: TC=0.79/1.00 (E-F:1), BC=0.99/1.00 (P-Q:1), WB=0.96/1.00 (G-R:1), SSI=0.45/1.00 (P-Q: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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292598	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Q	BBWW-h	MT20	10.0	12.0	3.50	7.75
R	BBWWW+p	MT20	10.0	12.0	Edge	
S	BMWW-t	MT20	5.0	6.0	2.25	1.75
T	BMWW-t	MT20	4.0	6.0		
U	BBWW-l	MT20	10.0	12.0		
V	BBWW-l	MT20	6.0	9.0	2.75	6.00
W	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 423.2 lbs FACTORED DOWN AT 3-9-4, AND 953.0 lbs FACTORED DOWN AT 19-7-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
Y	3-9-4	-423	-423	---	FRONT	VERT	TOTAL
Z	19-7-8	-953	-953	---	FRONT	VERT	TOTAL

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

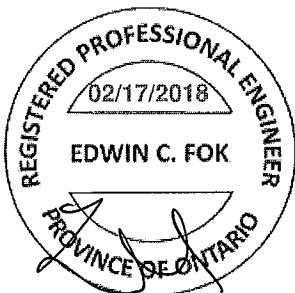
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

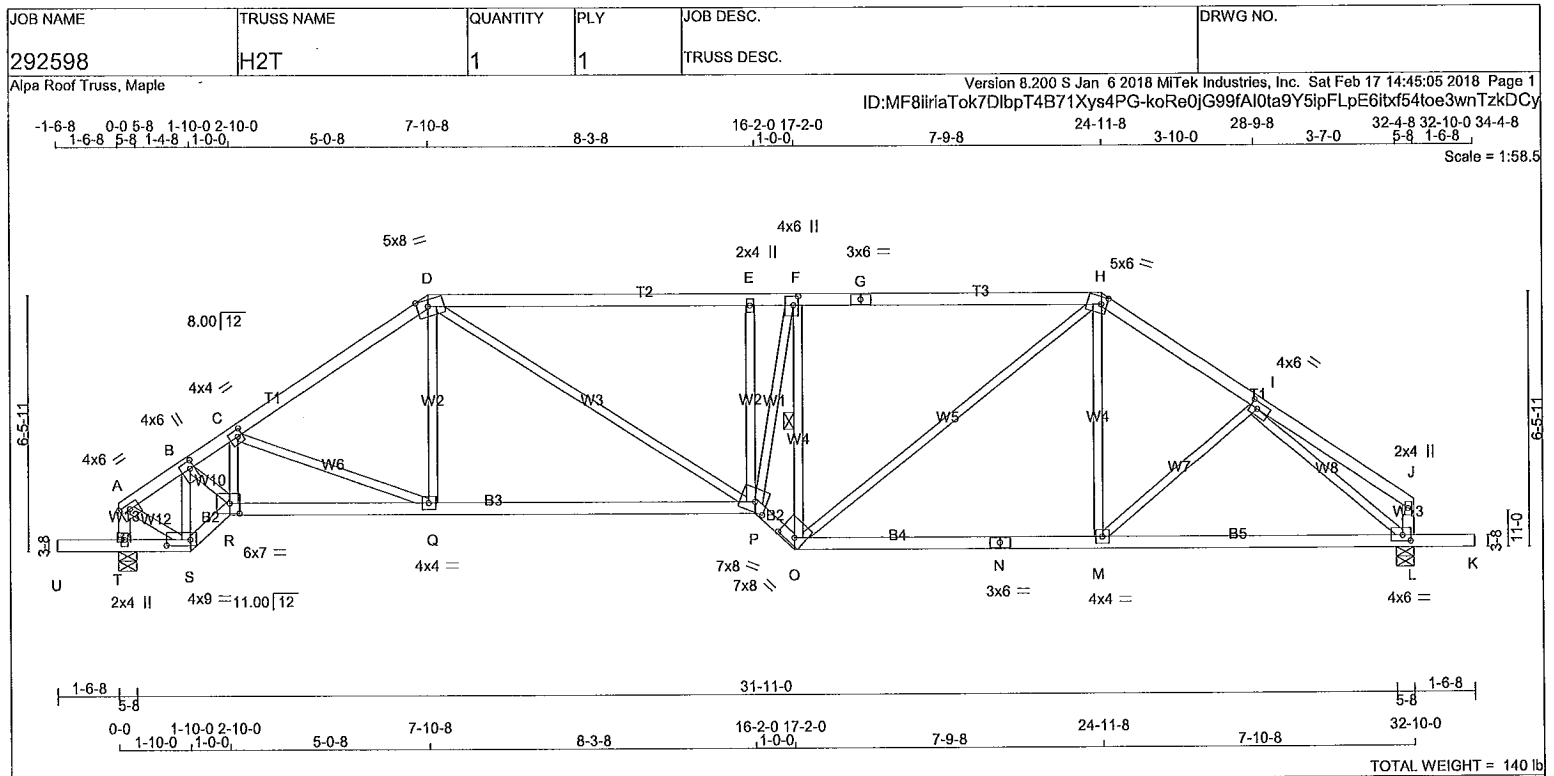
JSI GRIP= 0.90 (V) (INPUT = 0.90)

JSI METAL= 0.87 (O) (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-18023545(2)



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - G	2x4	DRY No.2	SPF
G - H	2x4	DRY No.2	SPF
H - J	2x4	DRY No.2	SPF
T - A	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
U - S	2x4	DRY No.2	SPF
S - R	2x4	DRY No.2	SPF
R - P	2x4	DRY No.2	SPF
P - O	2x4	DRY No.2	SPF
O - N	2x4	DRY No.2	SPF
N - K	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

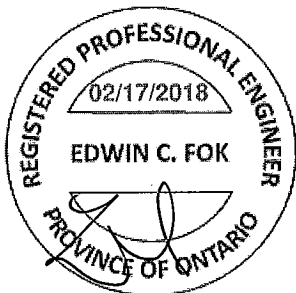
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	6.0	1.50	3.00
B	TMVW+t	MT20	4.0	6.0	2.25	1.25
C	TMVW-t	MT20	4.0	4.0	2.00	1.50
D	TTVW-m	MT20	5.0	8.0	2.00	3.25
E	TMVW-w	MT20	2.0	4.0		
F	TMVW+t	MT20	4.0	6.0	2.75	1.50
G	TS-t	MT20	3.0	6.0		
H	TTVW-m	MT20	5.0	6.0	2.25	1.75
I	TMVW-t	MT20	4.0	6.0	2.00	2.25
J	TMV+p	MT20	2.0	4.0		
L	BMVW-t	MT20	4.0	6.0	1.75	2.50
M	BMVW-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BBVW-h	MT20	7.0	8.0	2.00	5.00
P	BBVW-m	MT20	7.0	8.0	3.00	3.50
Q	BMVW-t	MT20	4.0	4.0		
R	BBVW-t	MT20	6.0	7.0	3.00	3.00
S	BBVW-t	MT20	4.0	9.0	1.75	7.25
T	BMV+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	HORZ	UPLIFT
T	1736	0	1736	0	0
L	1729	0	1729	0	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1238	755 / 0	0 / 0	0 / 0	0 / 0	482 / 0	0 / 0
L	1233	752 / 0	0 / 0	0 / 0	0 / 0	480 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.39 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. (PLF)	LOAD LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	UNBRAC
FR-TO						FR-TO			
A-B	-1496 / 0	-78.0	-78.0	0.11 (1)	5.27	S-B	-1675 / 0	0.26 (1)	
B-C	-2587 / 0	-78.0	-78.0	0.24 (1)	4.10	B-R	0 / 1550	0.35 (1)	
C-D	-2192 / 0	-78.0	-78.0	0.30 (1)	4.35	R-C	-6 / 41	0.01 (4)	
D-E	-2570 / 0	-78.0	-78.0	0.84 (1)	3.39	C-Q	-461 / 0	0.23 (1)	
E-F	-2561 / 0	-78.0	-78.0	0.64 (1)	3.50	Q-D	0 / 308	0.08 (4)	
F-G	-2180 / 0	-78.0	-78.0	0.68 (1)	3.87	D-P	0 / 896	0.20 (1)	
G-H	-2180 / 0	-78.0	-78.0	0.68 (1)	3.87	P-E	-440 / 0	0.20 (1)	
H-I	-1866 / 0	-78.0	-78.0	0.18 (1)	4.75	E-F	0 / 2045	0.46 (1)	
I-J	0 / 18	-78.0	-78.0	0.17 (1)	10.00	O-F	-2385 / 0	0.65 (1)	
T-A	-1508 / 0	0.0	0.0	0.15 (1)	6.68	O-H	0 / 796	0.18 (1)	
L-J	-121 / 0	0.0	0.0	0.01 (1)	7.81	M-H	0 / 182	0.06 (4)	
						M-I	-15 / 47	0.02 (4)	
						A-S	0 / 1363	0.31 (1)	
U-T	0 / 0	-96.5	-96.5	0.16 (1)	10.00	I-L	-2099 / 0	0.95 (1)	
T-S	0 / 0	-18.5	-18.5	0.12 (1)	10.00				
S-R	0 / 1552	-18.5	-18.5	0.25 (1)	10.00				
R-Q	0 / 2236	-18.5	-18.5	0.51 (1)	10.00				
Q-P	0 / 1812	-18.5	-18.5	0.45 (4)	10.00				
P-O	0 / 2903	-18.5	-18.5	0.47 (1)	10.00				
O-N	0 / 1555	-18.5	-18.5	0.47 (4)	10.00				
N-M	0 / 1555	-18.5	-18.5	0.47 (4)	10.00				
M-L	0 / 1563	-18.5	-18.5	0.47 (4)	10.00				
L-K	0 / 0	-96.5	-96.5	0.16 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.39")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/611 (0.03")

CSI: TC=0.84/1.00 (D-E:1), BC=0.51/1.00 (Q-R:1), WB=0.95/1.00 (I-L:1), SSI=0.30/1.00 (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

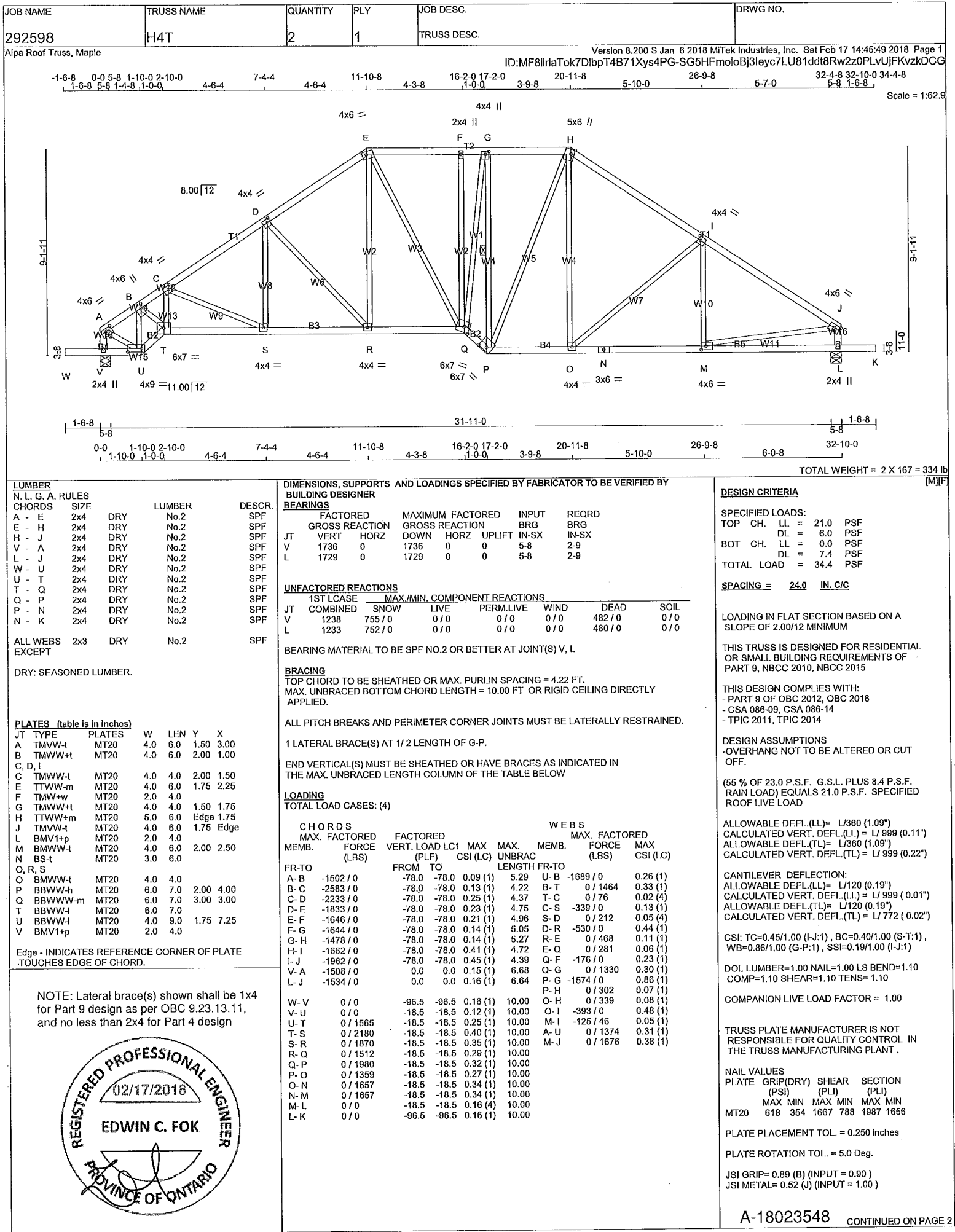
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)
JSI METAL= 0.52 (I) (INPUT = 1.00)

A-18023546

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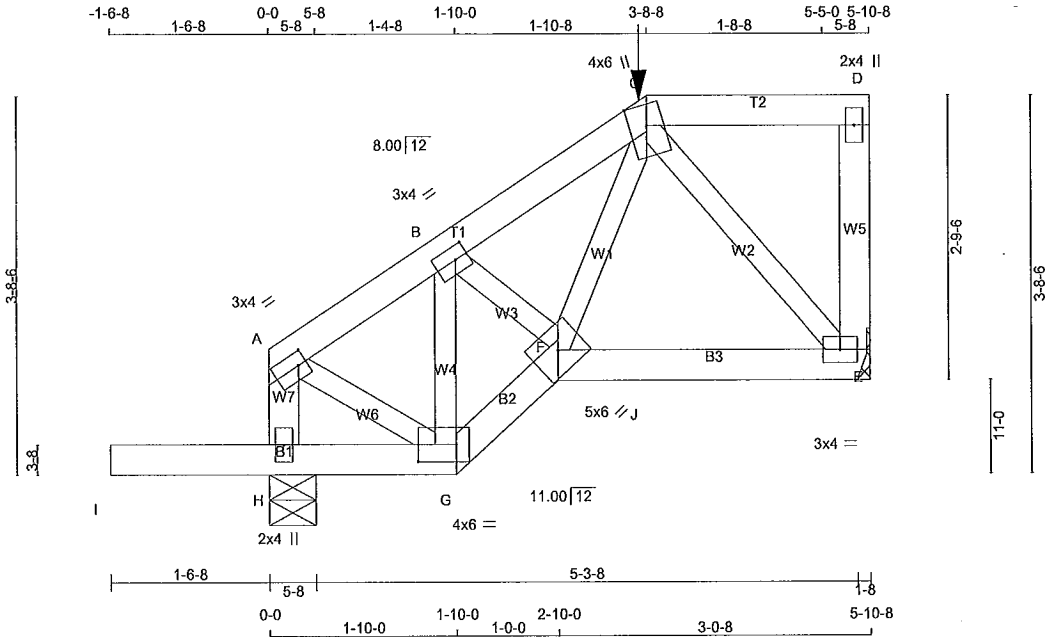


A-18023549

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292598	J1TA	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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Scale = 1:22.5

TOTAL WEIGHT = 28 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
C	TTWW+m	MT20	4.0	6.0	Edge	
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BBWW-h	MT20	5.0	6.0		
G	BBWW-l	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 106.4 lbs FACTORED DOWN AT 3-8-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	413	0	413	0
H	527	0	527	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	294	183 / 0	0 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0
H	377	225 / 0	0 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 0

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

BRACING

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

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

LOADING

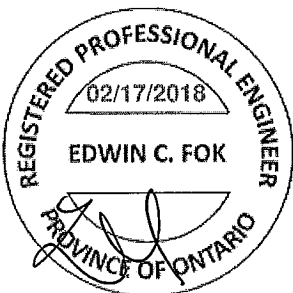
TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (LC)	MAX. FACTORED UNBRACED LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX (LC)
MEMB.					MEMB.		
FR-TO		FROM	TO		FR-TO		
A-B	-243 / 0	-78.0	-78.0	0.04 (1)	6.25	G-B	-302 / 0
B-C	-339 / 0	-78.0	-78.0	0.04 (1)	6.25	B-F	0 / 118
C-D	0 / 0	-111.3	-111.3	0.10 (1)	10.00	F-C	0 / 157
E-D	-121 / 0	0.0	0.0	0.02 (1)	7.81	C-E	-338 / 0
H-A	-292 / 0	0.0	0.0	0.03 (1)	7.81	A-G	0 / 231
I-H	0 / 0	-96.5	-96.5	0.17 (1)	10.00		
H-G	0 / 0	-26.4	-26.4	0.17 (1)	10.00		
G-F	0 / 261	-26.4	-26.4	0.05 (1)	10.00		
F-J	0 / 223	-26.4	-26.4	0.10 (4)	10.00		
J-E	0 / 223	-26.4	-26.4	0.10 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-8-8	-106	-106	---	FRONT	VERT	TOTAL

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



DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/617 (0.03")

CSI: TC=0.10/1.00 (C-D:1), BC=0.17/1.00 (G-H:1), WB=0.07/1.00 (C-E:1), SS=0.13/1.00 (H-I:1)

DOI 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.

A-18023550

CONTINUED ON PAGE 2

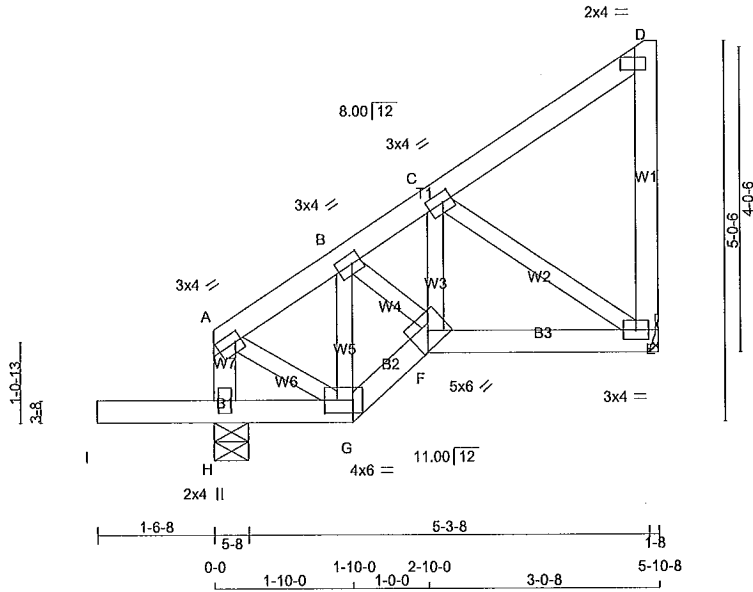
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292598	J1TB	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sat Feb 17 14:46:32 2018 Page 1
ID:MF8IriaTok7DlbpT4B71Xys4PG-hYCXHTKjfo7yyFkt8smDHv11nfVYfagagd0LwzkDBb

-1-6-8 1-6-8 0-0 5-8 1-4-8 1-10-0 2-10-0 2-7-0 5-5-0 5-8-8 5-10-8
3-8-2-0

Scale = 1:30.5



TOTAL WEIGHT = 30 lb

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

ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					

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	TMWW-t	MT20	3.0	4.0	1.50	1.50
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TVM-p	MT20	2.0	4.0	0.50	2.25
E	BMVW1-t	MT20	3.0	4.0		
F	BBWW-h	MT20	5.0	6.0		
G	BBWW-l	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG
E	264	0	264	0	0	5-8	1-8	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
H	452	0	452	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
E	188	115 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
H	322	197 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT.	LOAD LC1	MAX	MAX.	MEMB.	FORCE (LBS)	MAX	MAX
FR-TO		FROM	TO	CS1 (LC)	UNBRAC	FR-TO			
A-B	-165 / 0	-78.0	-78.0	0.04 (1)	6.25	G-B	-220 / 0	0.03 (1)	
B-C	-239 / 0	-78.0	-78.0	0.08 (1)	6.25	B-F	0 / 130	0.03 (1)	
C-D	-11 / 0	-78.0	-78.0	0.08 (1)	6.25	F-C	0 / 63	0.02 (4)	
E-D	-95 / 0	0.0	0.0	0.03 (1)	7.81	C-E	-259 / 0	0.06 (1)	
H-A	-223 / 0	0.0	0.0	0.02 (1)	7.81	A-G	0 / 154	0.03 (1)	
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00				
H-G	0 / 0	-18.5	-18.5	0.16 (1)	10.00				
G-F	0 / 173	-18.5	-18.5	0.03 (1)	10.00				
F-E	0 / 216	-18.5	-18.5	0.07 (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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/588 (0.03")

CSI: TC=0.08/1.00 (B-C:1), BC=0.16/1.00 (G-H:1)
WB=0.06/1.00 (C-E:1), SSI=0.12/1.00 (H-I:1)

DOL LUMBER=1.00 NAIL=1.00 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

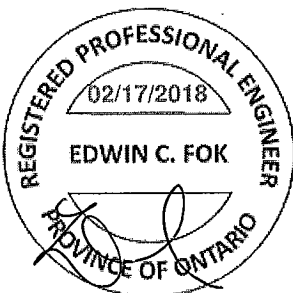
PLATE PLACEMENT TOL. = 0.250 inches

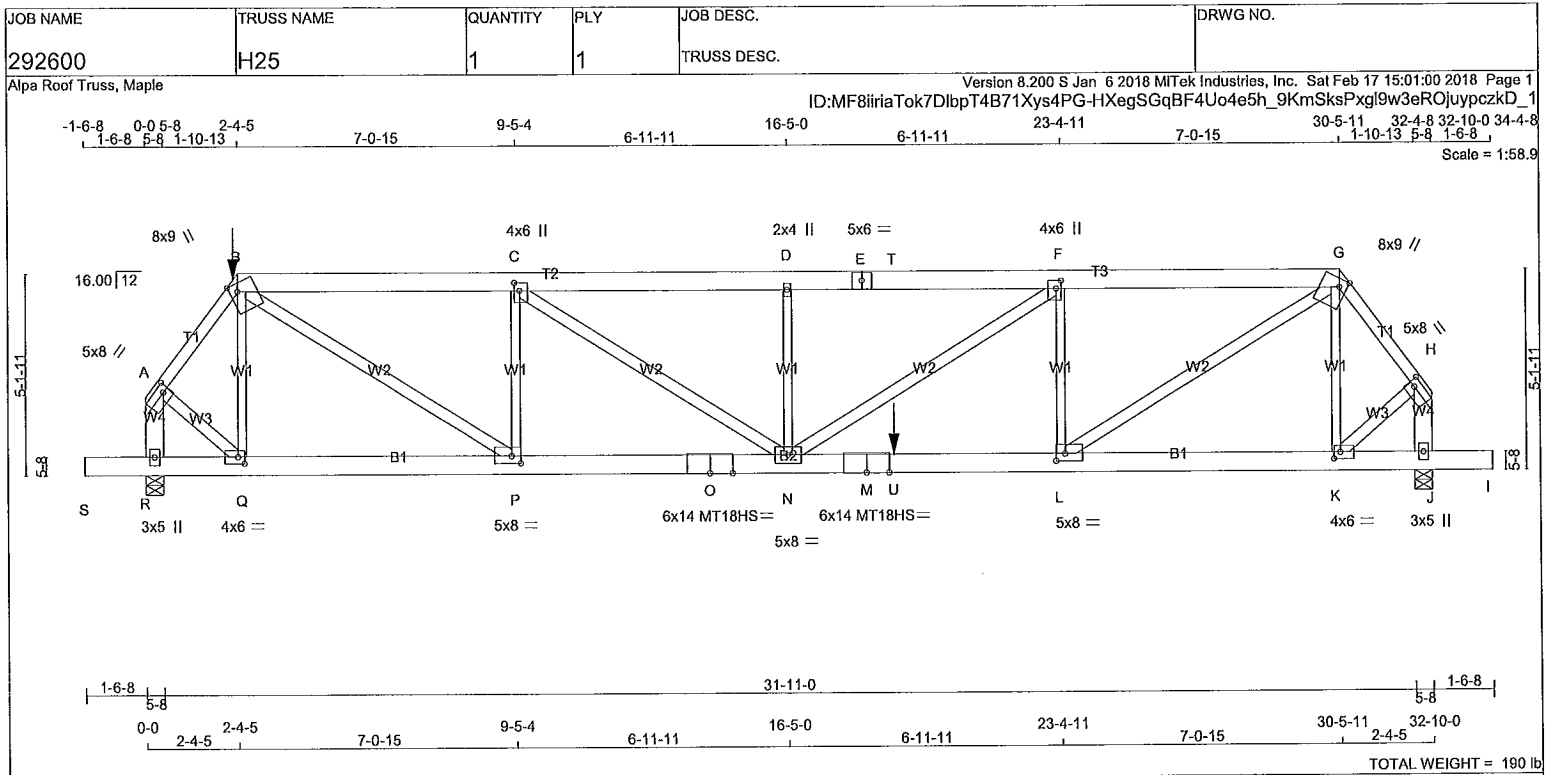
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.50 (A) (INPUT = 0.90)
JSI METAL= 0.08 (D) (INPUT = 1.00)

A-18023551

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





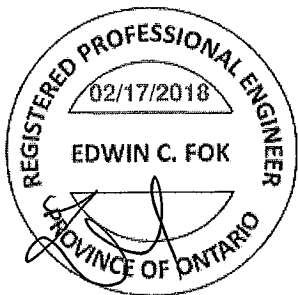
LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2 SPF
B - E	2x6	DRY	No.2 SPF
E - G	2x6	DRY	No.2 SPF
G - H	2x4	DRY	No.2 SPF
R - A	2x6	DRY	No.2 SPF
J - H	2x6	DRY	No.2 SPF
S - O	2x6	DRY	2100F 1.8E SPF
O - M	2x6	DRY	2100F 1.8E SPF
M - I	2x6	DRY	2100F 1.8E SPF
ALL WEBS EXCEPT	2x4	DRY	No.2 SPF
Q - B	2x3	DRY	No.2 SPF
P - C	2x3	DRY	No.2 SPF
N - D	2x3	DRY	No.2 SPF
L - F	2x3	DRY	No.2 SPF
K - G	2x3	DRY	No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	5.0	8.0	2.25	2.00
B	TTWW+m	MT20	8.0	9.0	2.50	2.25
C	TMVW-t	MT20	4.0	6.0	2.50	1.50
D	TMW+w	MT20	2.0	4.0		
E	TS-t	MT20	5.0	6.0		
F	TMVW-t	MT20	4.0	6.0	2.50	1.50
G	TTWW+m	MT20	8.0	9.0	2.50	2.25
H	TMVW-t	MT20	5.0	8.0	2.25	2.00
J	BMV1+p	MT20	3.0	5.0		
K	BMVW-t	MT20	4.0	6.0	2.00	2.00
L	BMVW-t	MT20	5.0	8.0	2.25	2.75
M	BS-t	MT18HS	6.0	14.0		
N	BMVW-t	MT20	5.0	8.0		
O	BS-t	MT18HS	6.0	14.0		
P	BMVW-t	MT20	5.0	8.0	2.25	2.75
Q	BMVW-t	MT20	4.0	6.0	2.00	2.00
R	BMV1+p	MT20	3.0	5.0		

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	UPLIFT
R	3395	0	3395	0	5-8
J	2874	0	2874	0	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
R	2413	1513 / 0	0 / 0	0 / 0	0 / 0	900 / 0
J	2038	1308 / 0	0 / 0	0 / 0	0 / 0	730 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.43 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. (LC)	MEMB.	MAX. FACTORED (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	-2739 / 0	-78.0	-78.0 0.19 (1)	Q-B	-697 / 0
B-C	-4993 / 0	-153.5	-153.5 0.84 (1)	B-P	0 / 4035
C-D	-6307 / 0	-153.5	-153.5 0.98 (1)	P-C	-2118 / 0
D-E	-6307 / 0	-153.5	-153.5 0.65 (1)	C-N	0 / 1582
E-F	-6307 / 0	-153.5	-153.5 0.65 (1)	N-D	-920 / 0
F-G	-6307 / 0	-78.0	-78.0 0.65 (1)	M-F	0 / 1861
G-H	-2217 / 0	-78.0	-78.0 0.16 (1)	L-G	0 / 4137
H-A	-3299 / 0	0.0	0.0 0.27 (1)	K-G	-825 / 0
J-H	-2688 / 0	0.0	0.0 0.22 (1)	A-Q	0 / 1929
S-R	0 / 0	-96.5	-96.5 0.05 (1)	K-H	0 / 1561
R-Q	0 / 0	-36.4	-36.4 0.10 (4)		
Q-P	0 / 1626	-36.4	-36.4 0.18 (1)		
P-O	0 / 4993	-36.4	-36.4 0.51 (1)		
O-N	0 / 4993	-36.4	-36.4 0.51 (1)		
N-M	0 / 4762	-36.4	-36.4 0.78 (1)		
M-U	0 / 4762	-36.4	-36.4 0.78 (1)		
U-L	0 / 4762	-18.5	-18.5 0.78 (1)		
L-K	0 / 1310	-18.5	-18.5 0.27 (1)		
K-J	0 / 0	-18.5	-18.5 0.03 (4)		
J-I	0 / 0	-96.5	-96.5 0.05 (1)		

FACTORED CONCENTRATED LOADS (LBS)		LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
JT								
B	2-4-5	-134	-134	---	---	FRONT	VERT	TOTAL
U	19-1-8	-1081	-1081	---	---	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 = 2-4-5
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 19-1-8 OF SPAN MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.30")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/ 720 (0.55")

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

CSI: TC=0.98/1.00 (C-D:1), BC=0.78/1.00 (L-N:1), WB=0.75/1.00 (C-P:1), SSI=0.51/1.00 (L-N:1)

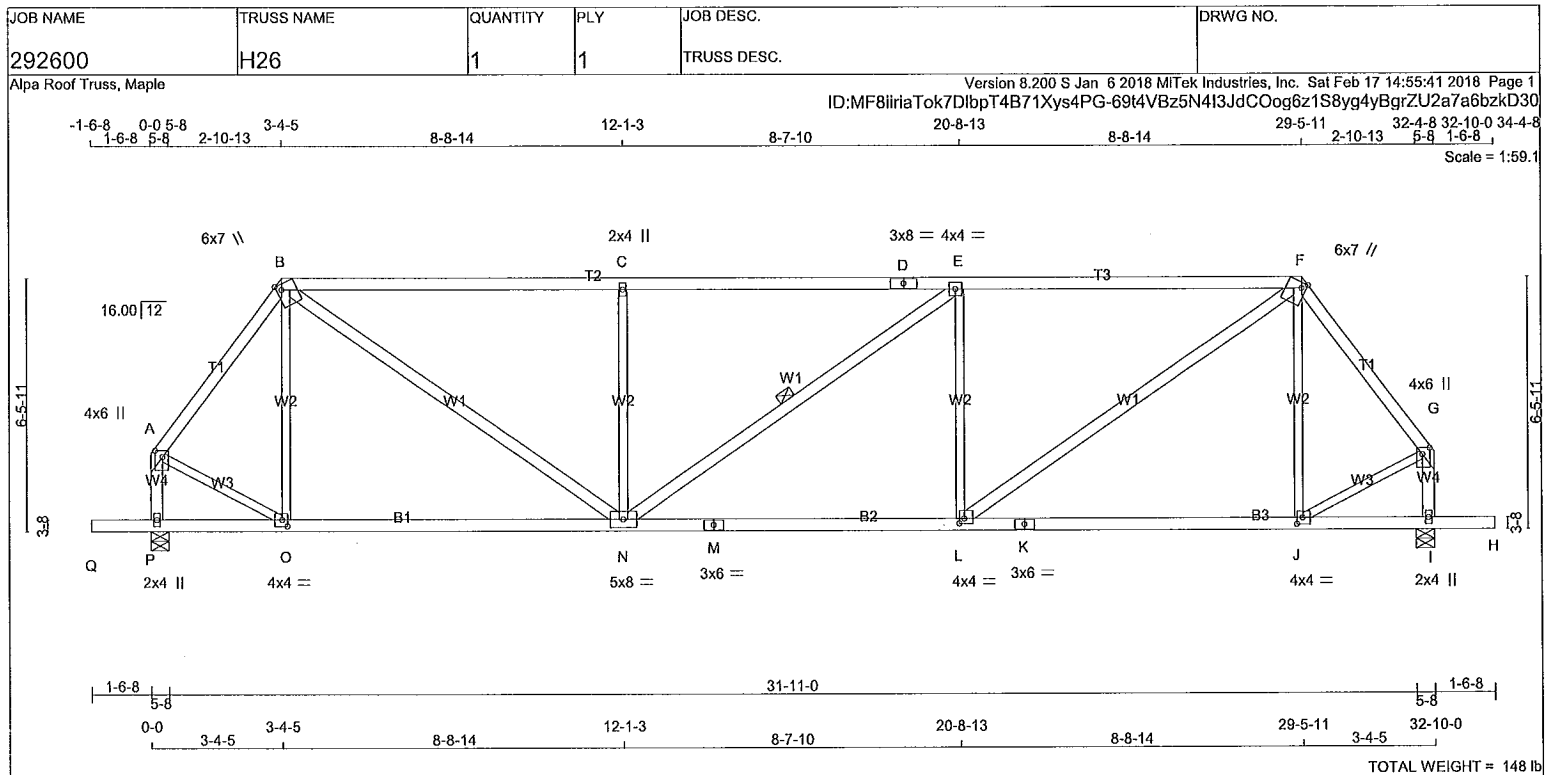
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

A-18023552

CONTINUE ON PAGE 2



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
B - D	2x4	DRY	2100F 1.8E
D - F	2x4	DRY	2100F 1.8E
F - G	2x4	DRY	No.2
P - A	2x4	DRY	No.2
I - G	2x4	DRY	No.2
Q - M	2x4	DRY	No.2
M - K	2x4	DRY	No.2
K - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
B - N	2x4	DRY	No.2
N - E	2x4	DRY	No.2
L - F	2x4	DRY	No.2

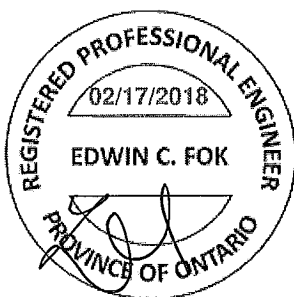
DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.25
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.25
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BS-t	MT20	3.0	6.0		
N	BMWW-t	MT20	5.0	8.0		
O	BMWW-t	MT20	4.0	4.0	2.00	1.75
P	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
P	1732	0	1732	0	5-8	2-9
I	1732	0	1732	0	5-8	2-9

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
P	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0
I	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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-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					W E B S		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED		MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED	
		VERT. LOAD	LC1			FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
A - B	-1340 / 0	-78.0	-78.0	0.19 (1)	5.40	O - B	-235 / 1 0.16 (1)
B - C	-2068 / 0	-78.0	-78.0	0.71 (1)	4.81	B - N	0 / 1556 0.25 (1)
C - D	-2069 / 0	-78.0	-78.0	0.70 (1)	4.80	N - C	-732 / 0 0.50 (1)
D - E	-2069 / 0	-78.0	-78.0	0.70 (1)	4.80	N - E	0 / 0 0.00 (1)
E - F	-2069 / 0	-78.0	-78.0	0.71 (1)	4.80	L - E	-732 / 0 0.50 (1)
F - G	-1340 / 0	-78.0	-78.0	0.19 (1)	5.40	L - F	0 / 1557 0.25 (1)
P - A	-1578 / 0	0.0	0.0	0.18 (1)	6.57	J - F	-235 / 1 0.16 (1)
I - G	-1578 / 0	0.0	0.0	0.18 (1)	6.57	A - O	0 / 880 0.20 (1)
						J - G	0 / 880 0.20 (1)
Q - P	0 / 0	-96.5	-96.5	0.16 (1)	10.00		
P - O	0 / 0	-18.5	-18.5	0.21 (4)	10.00		
O - N	0 / 795	-18.5	-18.5	0.35 (4)	10.00		
N - M	0 / 2069	-18.5	-18.5	0.49 (1)	10.00		
M - L	0 / 2069	-18.5	-18.5	0.49 (1)	10.00		
L - K	0 / 795	-18.5	-18.5	0.36 (4)	10.00		
K - J	0 / 795	-18.5	-18.5	0.36 (4)	10.00		
J - I	0 / 0	-18.5	-18.5	0.21 (4)	10.00		
I - H	0 / 0	-96.5	-96.5	0.16 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

(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) = $L/999$ (0.08")
ALLOWABLE DEFL.(TL) = $L/360$ (1.09")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.20")

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

CSI: TC=0.71/1.00 (E-F:1), BC=0.49/1.00 (L-N:1), WB=0.50/1.00 (E-L:1), SSI=0.32/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

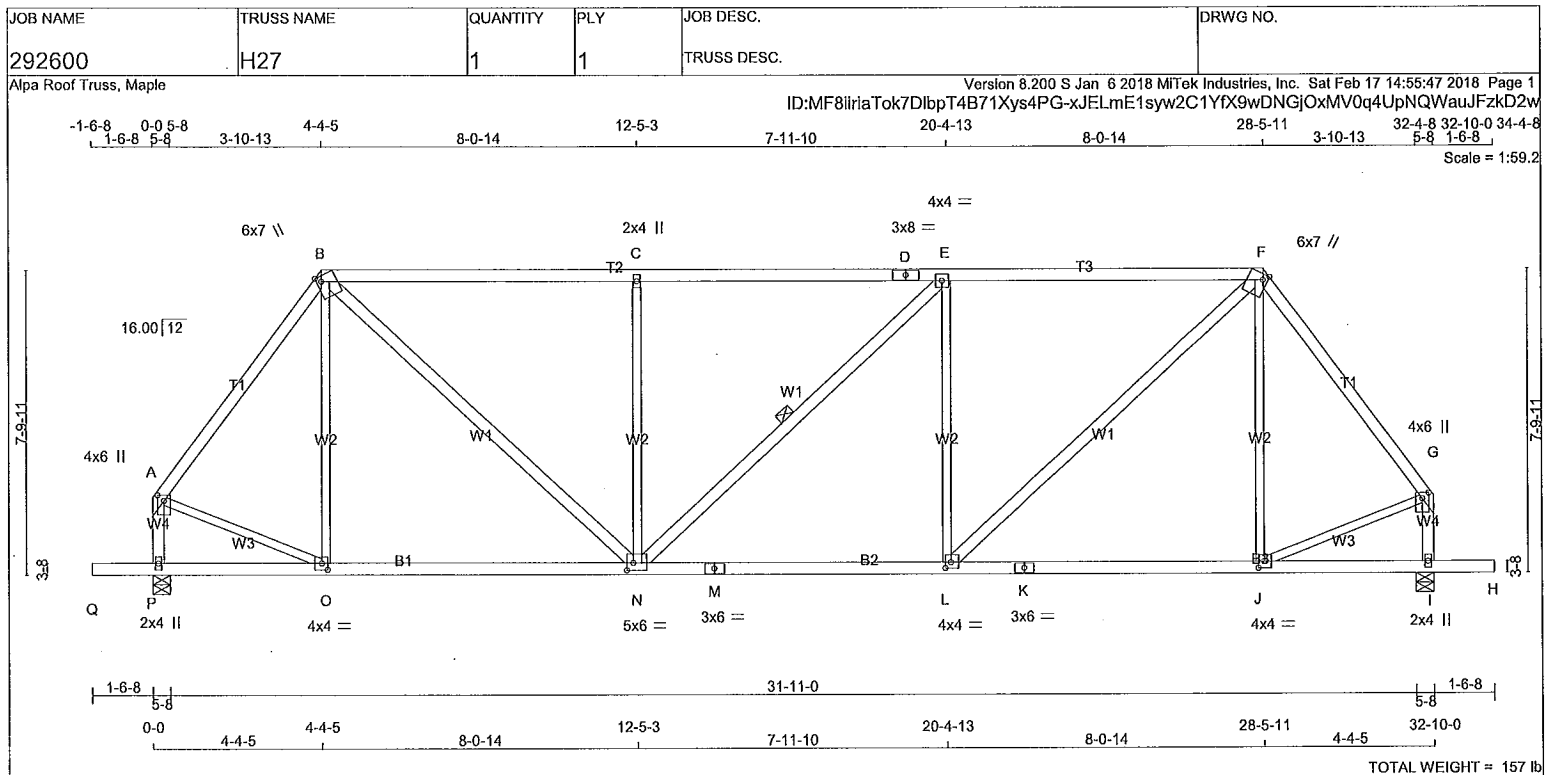
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL= 0.65 (M) (INPUT = 1.00)



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

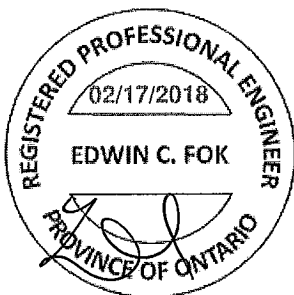
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	1.75	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-l	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	1.75	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-l	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMWW-l	MT20	4.0	4.0	1.75	1.75
M	BS-t	MT20	3.0	6.0		
N	BMWW-l	MT20	5.0	6.0	2.25	2.00
O	BMWW-l	MT20	4.0	4.0	2.00	1.75
P	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
P	1732	0	1732	0	0	5-8	2-9	
I	1732	0	1732	0	0	5-8	2-9	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
P	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0
I	1235	754 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 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-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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH (LC)		WEBS MAX. FACTORED FORCE (LBS)		MAX. UNBRACED LENGTH (LC)	
	FR-TO		FROM	TO	FR-TO		FR-TO		FROM	TO
A-B	-1367 / 0		-78.0	-78.0	0.34 (1)	5.21	O-B	-163 / 28	0.19 (1)	
B-C	-1706 / 0		-78.0	-78.0	0.95 (1)	3.86	B-N	0 / 1216	0.20 (1)	
C-D	-1706 / 0		-78.0	-78.0	0.94 (1)	3.85	N-C	-676 / 0	0.77 (1)	
D-E	-1706 / 0		-78.0	-78.0	0.94 (1)	3.85	N-E	-1 / 0	0.00 (1)	
E-F	-1706 / 0		-78.0	-78.0	0.95 (1)	3.85	L-E	-676 / 0	0.77 (1)	
F-G	-1366 / 0		-78.0	-78.0	0.34 (1)	5.21	L-F	0 / 1217	0.20 (1)	
P-A	-1560 / 0		0.0	0.0	0.18 (1)	6.60	J-F	-164 / 28	0.19 (1)	
I-G	-1560 / 0		0.0	0.0	0.18 (1)	6.60	A-O	0 / 867	0.20 (1)	
							J-G	0 / 867	0.20 (1)	

Q-P	0 / 0	-96.5	-96.5	0.16 (1)	10.00
P-O	0 / 0	-18.5	-18.5	0.18 (4)	10.00
O-N	0 / 813	-18.5	-18.5	0.31 (4)	10.00
N-M	0 / 1707	-18.5	-18.5	0.41 (1)	10.00
M-L	0 / 1707	-18.5	-18.5	0.41 (1)	10.00
L-K	0 / 813	-18.5	-18.5	0.32 (4)	10.00
K-J	0 / 813	-18.5	-18.5	0.32 (4)	10.00
J-I	0 / 0	-18.5	-18.5	0.18 (4)	10.00
I-H	0 / 0	-96.5	-96.5	0.16 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/999 (0.16")

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

CSI: TC=0.95/1.00 (E-F:1), BC=0.41/1.00 (L-N:1), WB=0.77/1.00 (E-L:1), SSI=0.29/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

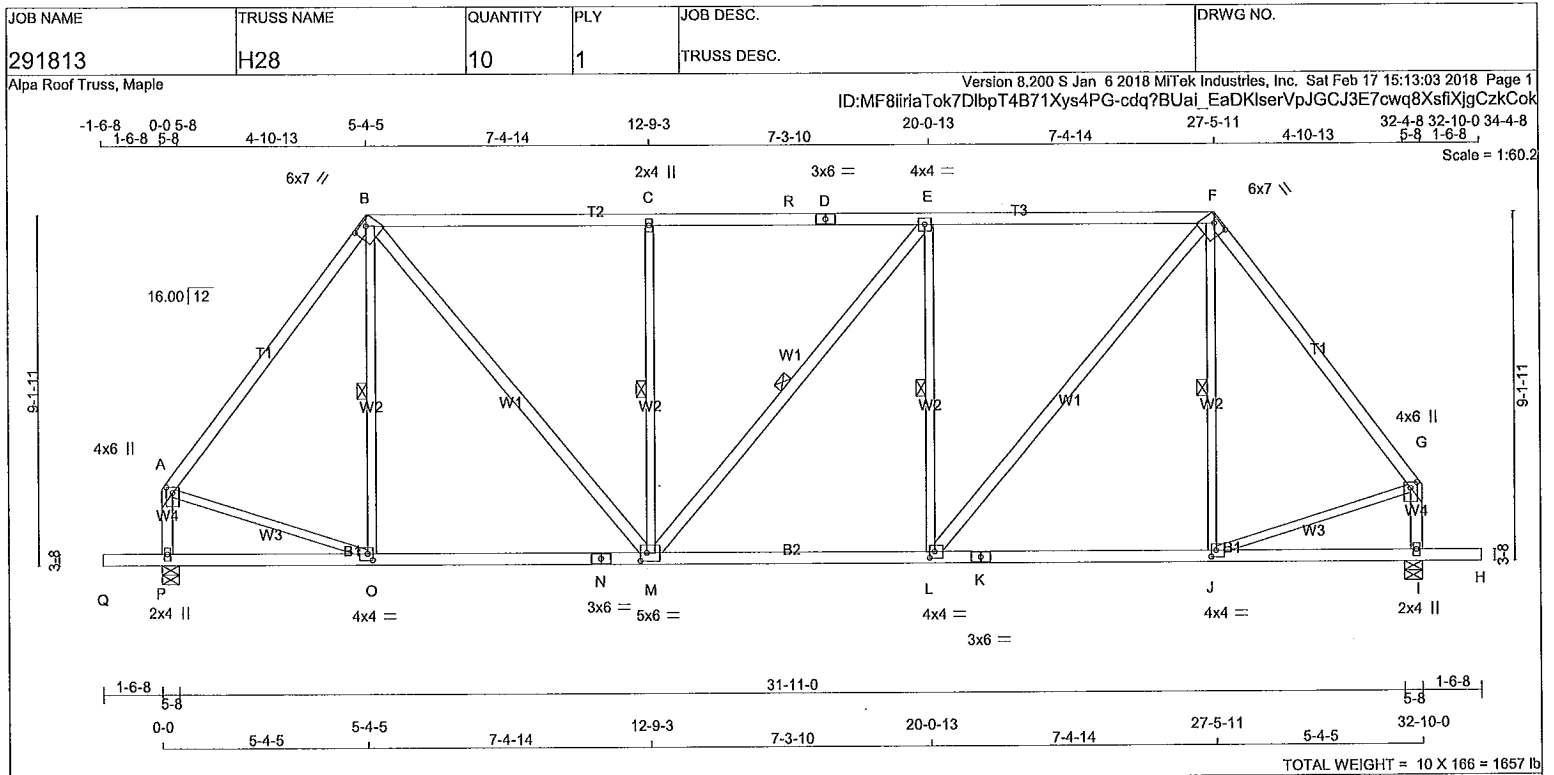
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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CONTINUED ON PAGE 2



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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW+p	MT20	4.0	6.0 1.75 2.00
B	TTWW-h	MT20	6.0	7.0 1.50 3.75
C	TMW+w	MT20	2.0	4.0
D	TS-t	MT20	3.0	6.0
E	TMWW-t	MT20	4.0	4.0
F	TTWW-h	MT20	6.0	7.0 1.50 3.75
G	TMVW+p	MT20	4.0	6.0 1.75 2.00
I	BMV1+p	MT20	2.0	4.0
J, L, O				
J	BMWW-t	MT20	4.0	4.0 2.00 1.50
K	BS-t	MT20	3.0	6.0
M	BMWW-t	MT20	5.0	6.0 2.50 2.00
N	BS-t	MT20	3.0	6.0
P	BMV1+p	MT20	2.0	4.0

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
P	1815	0	0	1815	0	5-8	2-11		
I	1815	0	0	1815	0	5-8	2-11		

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
P	1302	754 / 0	0 / 0	0 / 0	0 / 0	548 / 0	0 / 0		
I	1302	754 / 0	0 / 0	0 / 0	0 / 0	548 / 0	0 / 0		

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

BRACING

FOR SECTION B-F, MAX. PURLIN SPACING = 2.00 FT.
FOR OTHER SECTIONS, TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF B-O, C-M, E-M, E-L, F-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		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-1454 / 0	-78.0	-78.0 0.38 (1)	5.08	O-B	-123 / 35	0.07 (1)
B-C	-1552 / 0	-85.5	-85.5 0.61 (1)	2.00	B-M	0 / 1065	0.17 (1)
C-R	-1553 / 0	-85.5	-85.5 0.54 (1)	2.00	M-C	-679 / 0	0.37 (1)
R-D	-1553 / 0	-85.5	-85.5 0.54 (1)	2.00	M-E	-2 / 0	0.00 (1)
D-E	-1553 / 0	-85.5	-85.5 0.54 (1)	2.00	L-E	-680 / 0	0.37 (1)
E-F	-1553 / 0	-85.5	-85.5 0.61 (1)	2.00	L-F	0 / 1067	0.17 (1)
F-G	-1453 / 0	-78.0	-78.0 0.38 (1)	5.08	J-F	-124 / 35	0.07 (1)
P-A	-1630 / 0	0.0	0.0 0.19 (1)	6.48	A-O	0 / 905	0.20 (1)
I-G	-1630 / 0	0.0	0.0 0.19 (1)	6.48	J-G	0 / 905	0.20 (1)

Q-P	0 / 0	-96.5	-96.5 0.16 (1)	10.00
P-O	0 / 0	-18.5	-18.5 0.18 (4)	10.00
O-N	0 / 867	-18.5	-18.5 0.28 (4)	10.00
N-M	0 / 867	-18.5	-18.5 0.28 (4)	10.00
M-L	0 / 1554	-18.5	-18.5 0.36 (4)	10.00
L-K	0 / 867	-18.5	-18.5 0.29 (4)	10.00
K-J	0 / 867	-18.5	-18.5 0.29 (4)	10.00
J-I	0 / 0	-18.5	-18.5 0.18 (4)	10.00
I-H	0 / 0	-96.5	-96.5 0.16 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= 1/360 (1.09")
CALCULATED VERT. DEFL.(LL)= 1/999 (0.05")
ALLOWABLE DEFL.(TL)= 1/360 (1.09")
CALCULATED VERT. DEFL.(TL)= 1/999 (0.14")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(LL)= 1/999 (0.01")
ALLOWABLE DEFL.(TL)= 1/120 (0.19")
CALCULATED VERT. DEFL.(TL)= 1/999 (0.01")

CSI: TC=0.61/1.00 (E-F:1), BC=0.36/1.00 (L-M:4), WB=0.37/1.00 (E-L:1), SSI=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

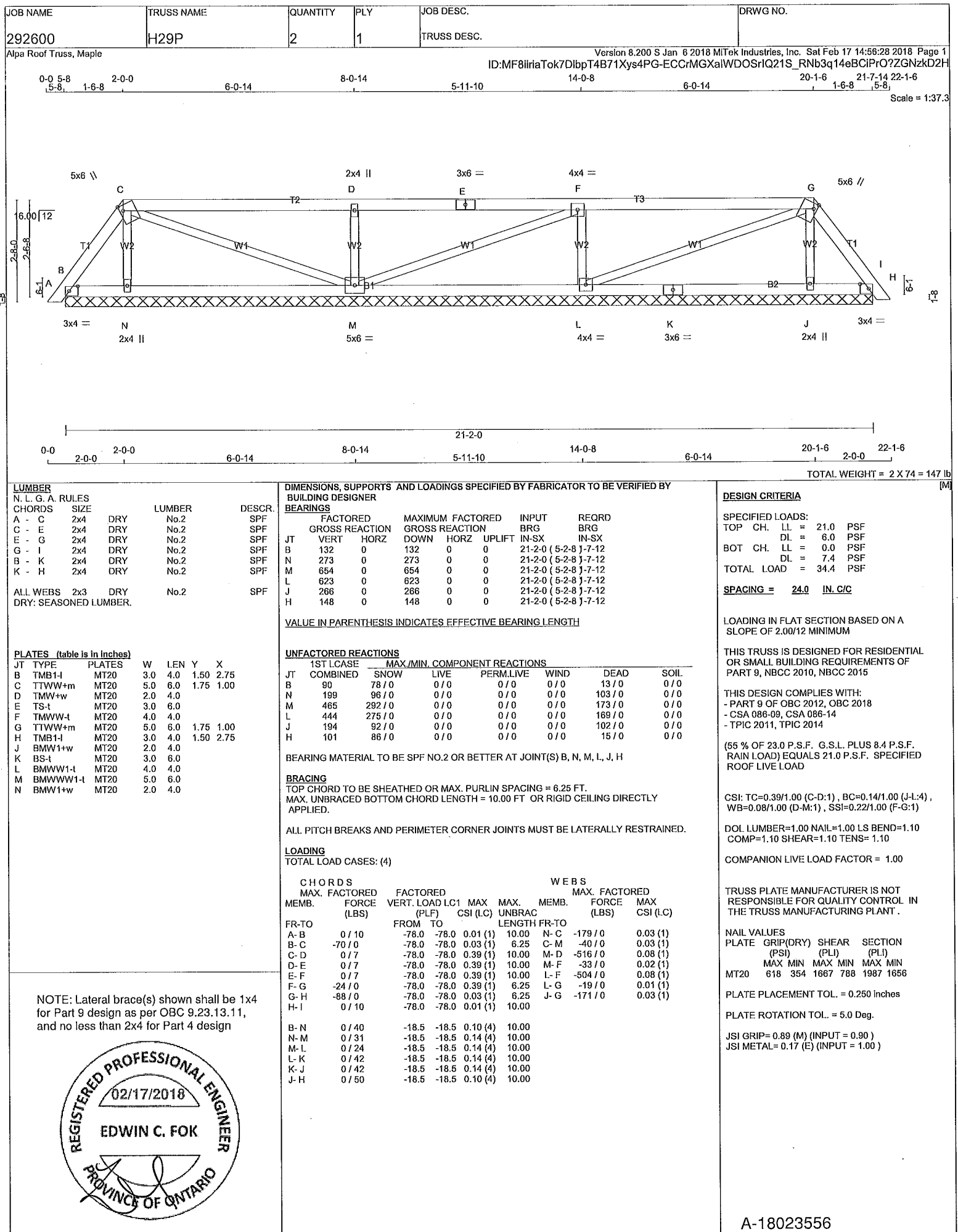
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

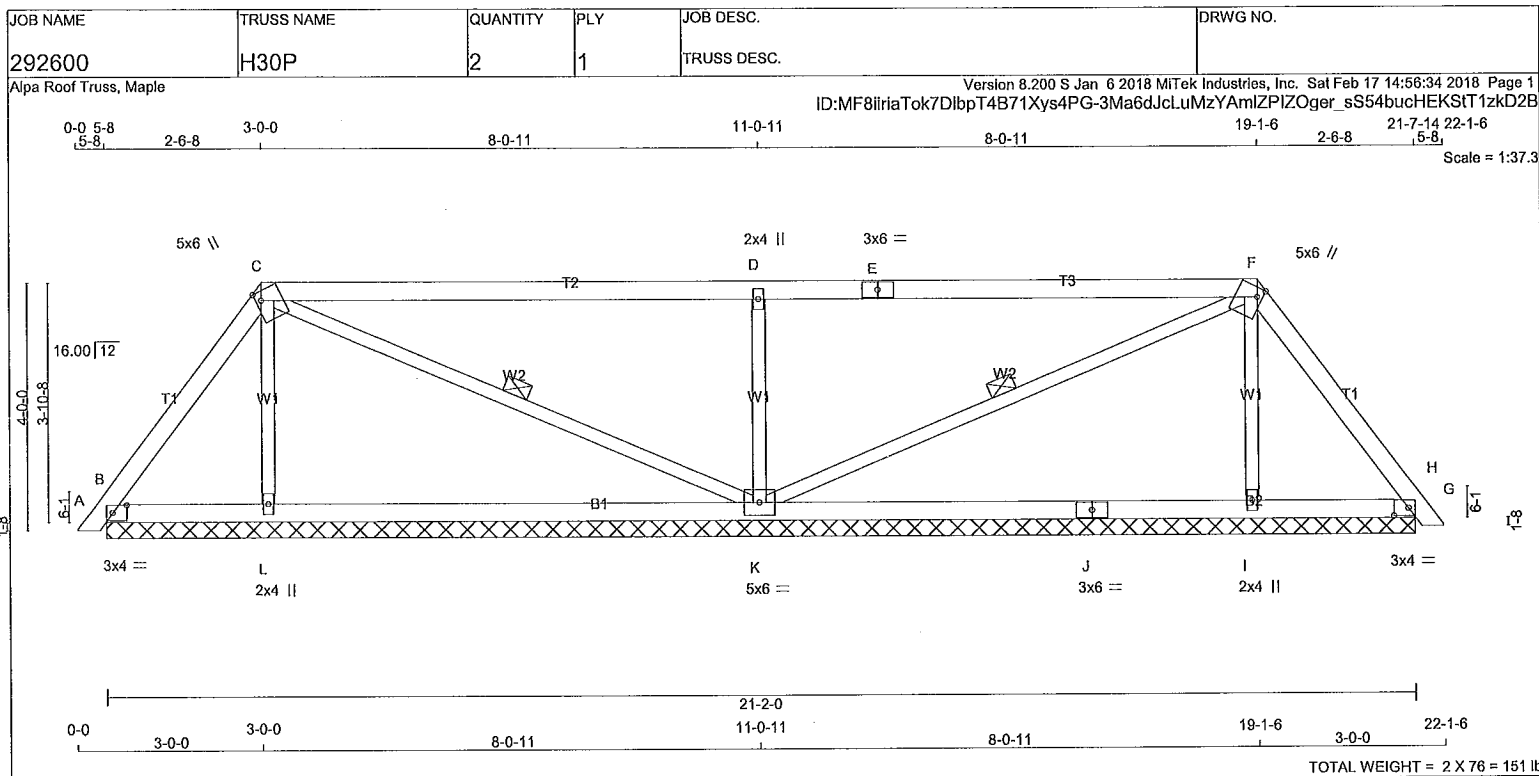
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (P) (INPUT = 0.90)
JSI METAL= 0.53 (A) (INPUT = 1.00)

A-18023555





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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
B	TMB1-I	MT20	3.0	4.0	1.50 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TMW+w	MT20	2.0	4.0	
E	TS-t	MT20	3.0	6.0	
F	TTWW+m	MT20	5.0	6.0	1.75 1.00
G	TMB1-I	MT20	3.0	4.0	1.50 2.75
I	BMW1+w	MT20	2.0	4.0	
J	BS-t	MT20	3.0	6.0	
K	BMWW1-I	MT20	5.0	6.0	
L	BMW1+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
B	224	0	224	0	0	21-2-0	(5-2-8 2-0-12)		
L	343	0	343	0	0	21-2-0	(5-2-8 2-0-12)		
K	963	0	963	0	0	21-2-0	(5-2-8 2-0-12)		
I	343	0	343	0	0	21-2-0	(5-2-8 2-0-12)		
G	224	0	224	0	0	21-2-0	(5-2-8 2-0-12)		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
B	155	122 / 0	0 / 0	0 / 0	0 / 0
L	251	120 / 0	0 / 0	0 / 0	131 / 0
K	683	434 / 0	0 / 0	0 / 0	249 / 0
I	251	120 / 0	0 / 0	0 / 0	131 / 0
G	155	122 / 0	0 / 0	0 / 0	32 / 0

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

BRACING

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

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-K, F-K.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS (LC) UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
A-B	0 / 10	-78.0 -78.0	0.01 (1) 10.00	L-C	-223 / 0
B-C	-124 / 0	-78.0 -78.0	0.09 (1) 6.25	C-K	-27 / 0
C-D	-41 / 0	-78.0 -78.0	0.86 (1) 6.25	K-D	-784 / 0
D-E	-42 / 0	-78.0 -78.0	0.86 (1) 6.25	K-F	-27 / 0
E-F	-42 / 0	-78.0 -78.0	0.86 (1) 6.25	I-F	-223 / 0
F-G	-124 / 0	-78.0 -78.0	0.09 (1) 6.25		
G-H	0 / 10	-78.0 -78.0	0.01 (1) 10.00		
B-L	0 / 72	-18.5 -18.5	0.17 (4) 10.00		
L-K	0 / 66	-18.5 -18.5	0.26 (4) 10.00		
K-J	0 / 66	-18.5 -18.5	0.26 (4) 10.00		
J-I	0 / 66	-18.5 -18.5	0.26 (4) 10.00		
I-G	0 / 72	-18.5 -18.5	0.17 (4) 10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.86/1.00 (D-F:1), BC=0.26/1.00 (K-L:4), WB=0.18/1.00 (D-K:1), SSI=0.31/1.00 (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.

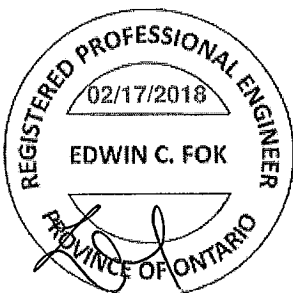
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

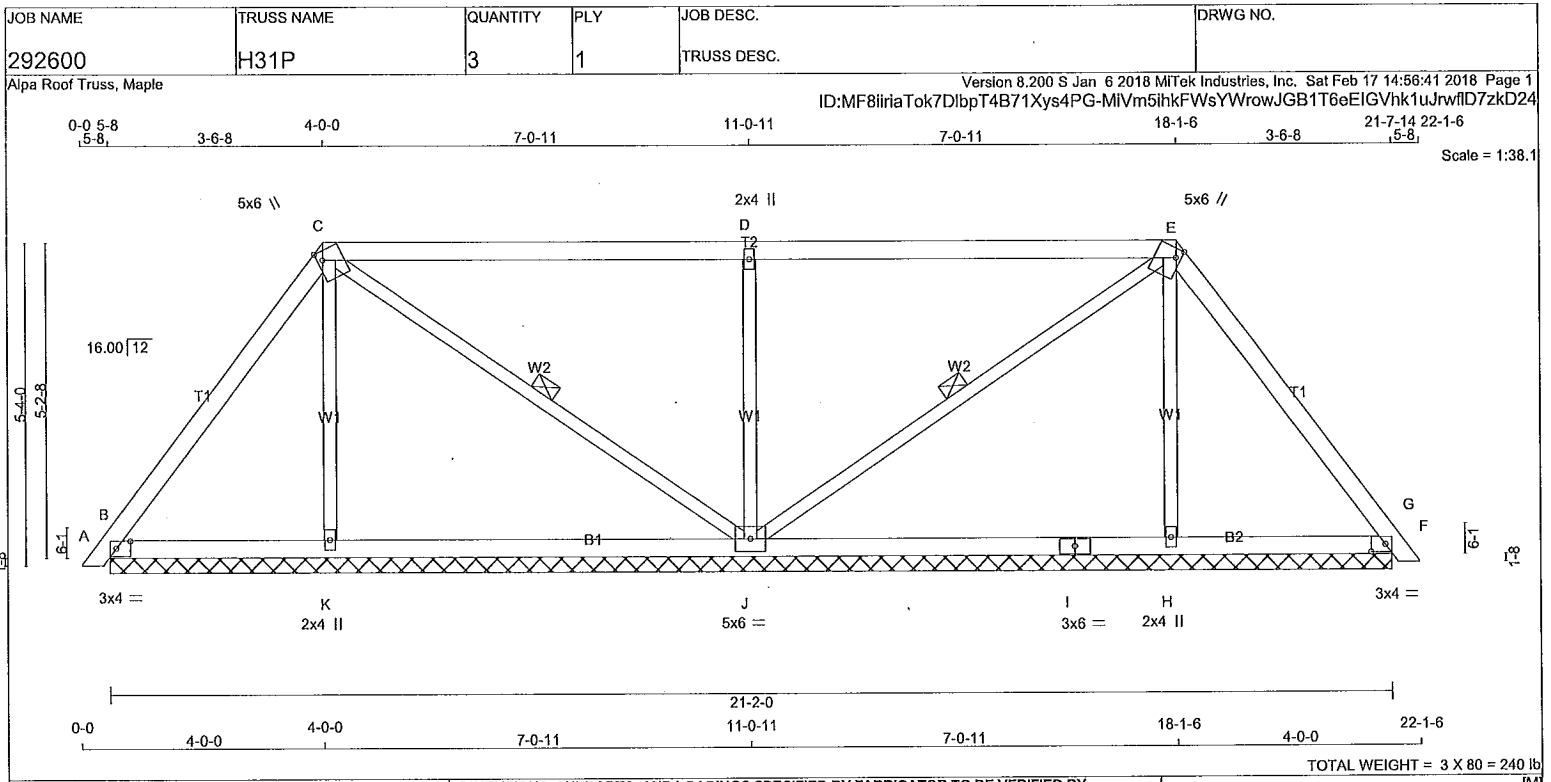
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (K) (INPUT = 0.90)
JSI METAL= 0.21 (J) (INPUT = 1.00)

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



A-18023557



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - I	2x4	DRY	No.2	SPF
I - 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	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTWW+m	MT20	5.0	6.0	1.75	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	1.75	1.00
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H	BMW1+w	MT20	2.0	4.0		
I	BS-I	MT20	3.0	6.0		
J	BMWW1-I	MT20	5.0	6.0		
K	BMW1+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
B	279	0	279	0	21-2.0 (5-2.8) J-11-8	
K	318	0	318	0	21-2.0 (5-2.8) J-11-8	
J	902	0	902	0	21-2.0 (5-2.8) J-11-8	
H	318	0	318	0	21-2.0 (5-2.8) J-11-8	
F	279	0	279	0	21-2.0 (5-2.8) J-11-8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	195	140 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
K	232	112 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
J	639	412 / 0	0 / 0	0 / 0	0 / 0	227 / 0	0 / 0
H	232	112 / 0	0 / 0	0 / 0	0 / 0	120 / 0	0 / 0
F	195	140 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS					WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 10	-78.0	-78.0 0.01 (1)	10.00	K-C	-209 / 0	0.08 (1)	
B-C	-119 / 0	-78.0	-78.0 0.17 (1)	6.25	C-J	-69 / 0	0.03 (1)	
C-D	-8 / 0	-78.0	-78.0 0.66 (1)	10.00	J-D	-687 / 0	0.28 (1)	
D-E	-8 / 0	-78.0	-78.0 0.66 (1)	10.00	E-J	-69 / 0	0.03 (1)	
E-F	-119 / 0	-78.0	-78.0 0.17 (1)	6.25	H-E	-209 / 0	0.08 (1)	
F-G	0 / 10	-78.0	-78.0 0.01 (1)	10.00				
B-K	0 / 70	-18.5	-18.5 0.14 (4)	10.00				
K-J	0 / 65	-18.5	-18.5 0.20 (4)	10.00				
J-I	0 / 65	-18.5	-18.5 0.20 (4)	10.00				
I-H	0 / 65	-18.5	-18.5 0.20 (4)	10.00				
H-F	0 / 70	-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

CSI: TC=0.66/1.00 (D-E:1), BC=0.20/1.00 (J-K:4), WB=0.28/1.00 (D-J:1), SSI=0.27/1.00 (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.

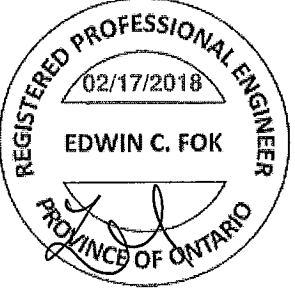
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

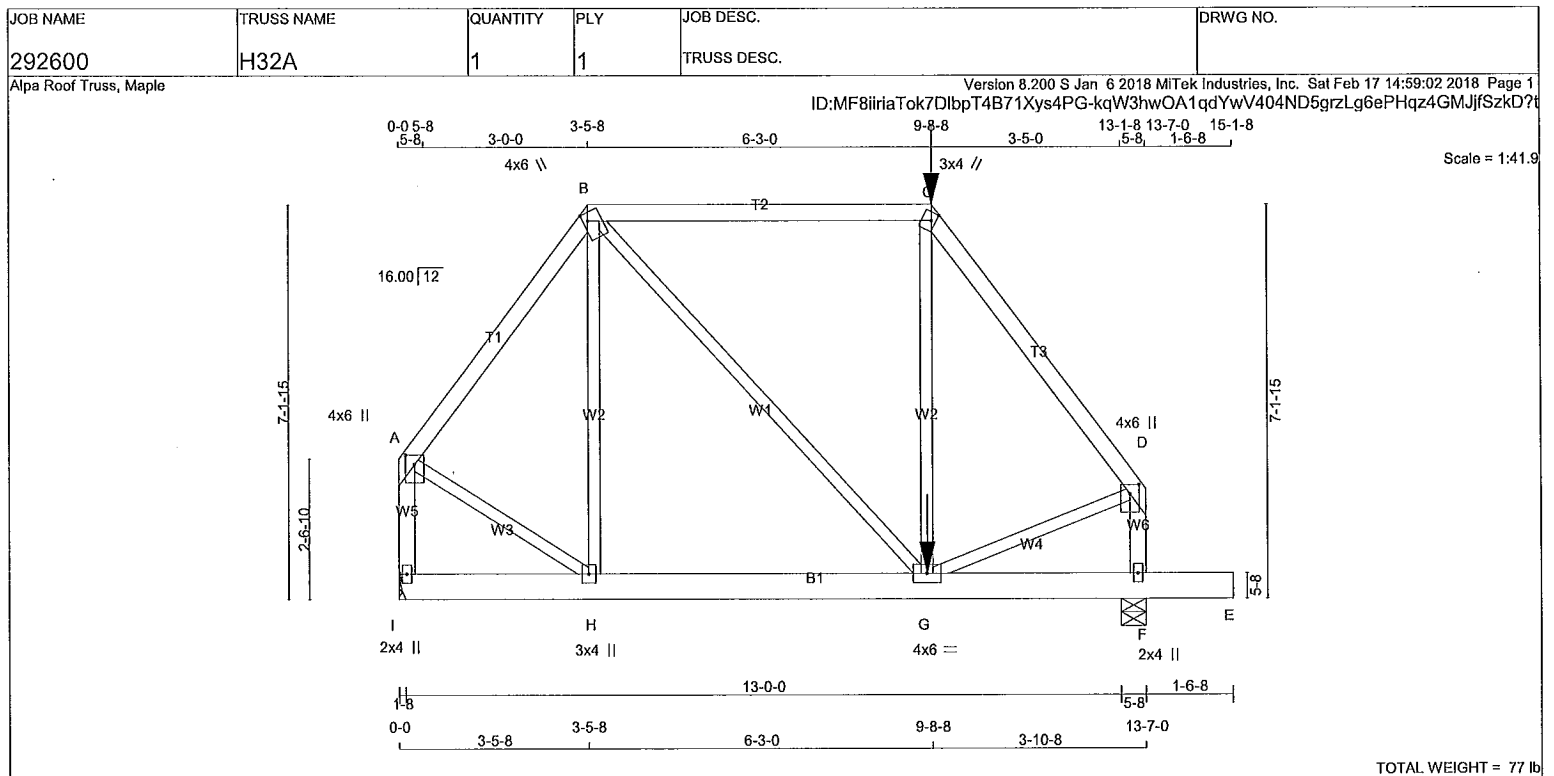
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (E) (INPUT = 0.90)
JSI METAL= 0.14 (D) (INPUT = 1.00)

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





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	4.0	6.0	1.75	1.00
C	TTW+m	MT20	3.0	4.0	1.75	1.00
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-l	MT20	4.0	6.0		
H	BMVW+l	MT20	3.0	4.0		
I	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 119.6 lbs FACTORED DOWN AT 9-8-8 ON TOP CHORD, AND 456.3 lbs FACTORED DOWN AT 9-7-6 ON BOTTOM 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	IN-SX	IN-SX
I	828	0	828	0	0	0
F	1241	0	1241	0	5-8	1-13

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	588	374 / 0	0 / 0	0 / 0	0 / 0	214 / 0	0 / 0
F	880	566 / 0	0 / 0	0 / 0	0 / 0	314 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-586 / 0	-78.0	-78.0 0.19 (1)	6.25	H-B	-97 / 38	0.08 (1)
B-C	-520 / 0	-78.0	-78.0 0.60 (1)	6.25	B-G	0 / 256	0.08 (1)
C-D	-867 / 0	-78.0	-78.0 0.25 (1)	6.24	G-C	0 / 182	0.05 (4)
I-A	-809 / 0	0.0	0.0 0.11 (1)	7.81	A-H	0 / 404	0.10 (1)
F-D	-1045 / 0	0.0	0.0 0.13 (1)	7.66	G-D	0 / 554	0.14 (1)
I-H	0 / 0	-18.5	-18.5 0.06 (4)	10.00			
H-G	0 / 348	-18.5	-18.5 0.09 (4)	10.00			
G-F	0 / 0	-27.2	-27.2 0.06 (4)	10.00			
F-E	0 / 0	-96.5	-96.5 0.08 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	9-8-8	-120	-120	---	FRONT	VERT	TOTAL
G	9-7-6	-456	-456	---	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
LEFT SETBACK = 3-5-8
RIGHT SETBACK = 3-10-8
END SETBACK = 3-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON .55 % OF GSL.
LOADS APPLIED TO FIRST 4-1-0 OF SPAN
MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

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

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

CSI: TC=0.60/1.00 (B-C:1), BC=0.09/1.00 (G-H:4), WB=0.14/1.00 (D-G:1), SSI=0.21/1.00 (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

A-18023559

CONTINUED ON PAGE 2

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

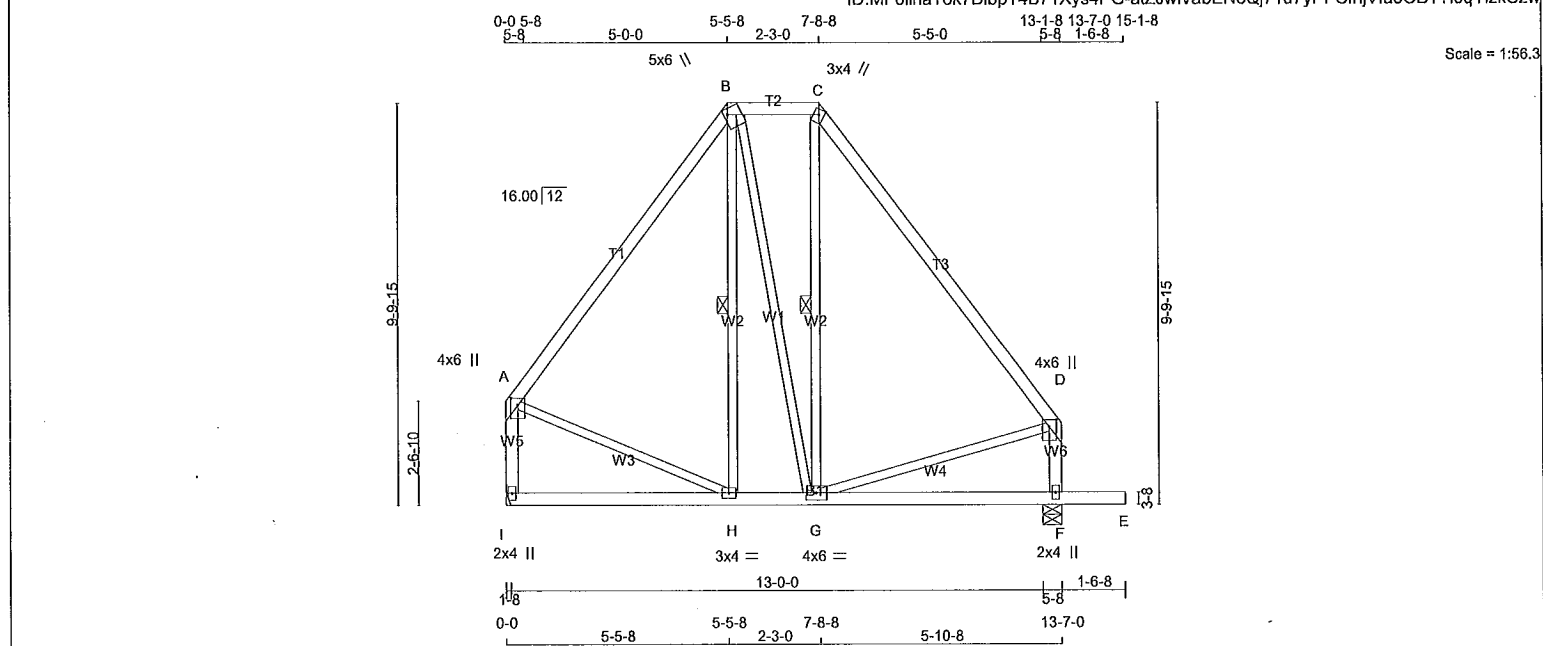


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292600	H33	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:MF8iiriaTok7DlbpT4B71Xys4PG-atZJwfvabENoQJ71u7yPFCfnjVla3OBT?I5qYizkCzw



TOTAL WEIGHT = 79 lb

[M][F]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
B - C	2x4	DRY No.2	SPF
C - D	2x4	DRY 1650F 1.5E	SPF
I - A	2x4	DRY No.2	SPF
F - D	2x4	DRY No.2	SPF
I - E	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+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	5.0	6.0	1.75	1.00
C	TTW+m	MT20	3.0	4.0	Edge	
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-l	MT20	4.0	6.0		
H	BMVWW-l	MT20	3.0	4.0		
I	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
I	VERT 655	DOWN 655	0	0
F	VERT 804	DOWN 804	0	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
I	467	285 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
F	573	350 / 0	0 / 0	0 / 0	0 / 0	223 / 0	0 / 0

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

BRACING

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

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-386 / 0	-78.0 -78.0	0.30 (1)	H-B	-16 / 45	0.02 (4)	
B-C	-236 / 0	-78.0 -78.0	0.05 (1)	B-G	0 / 25	0.01 (1)	
C-D	-395 / 0	-78.0 -78.0	0.29 (1)	G-C	0 / 60	0.02 (4)	
I-A	-612 / 0	0.0 0.0	0.08 (1)	A-H	0 / 247	0.06 (1)	
F-D	-609 / 0	0.0 0.0	0.07 (1)	G-D	0 / 244	0.05 (1)	
I-H	0 / 0	-18.5 -18.5	0.12 (4)				
H-G	0 / 230	-18.5 -18.5	0.16 (4)				
G-F	0 / 0	-18.5 -18.5	0.13 (4)				
F-E	0 / 0	-96.5 -96.5	0.16 (1)				

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 6.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")

CALCULATED VERT. DEFL.(LL) = L/999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.45")

CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")

CALCULATED VERT. DEFL.(LL) = L/999 (0.01")

ALLOWABLE DEFL.(TL)= L/120 (0.19")

CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.30/1.00 (A-B:1), BC=0.16/1.00 (G-H:4), WB=0.06/1.00 (A-H:1), SSI=0.12/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

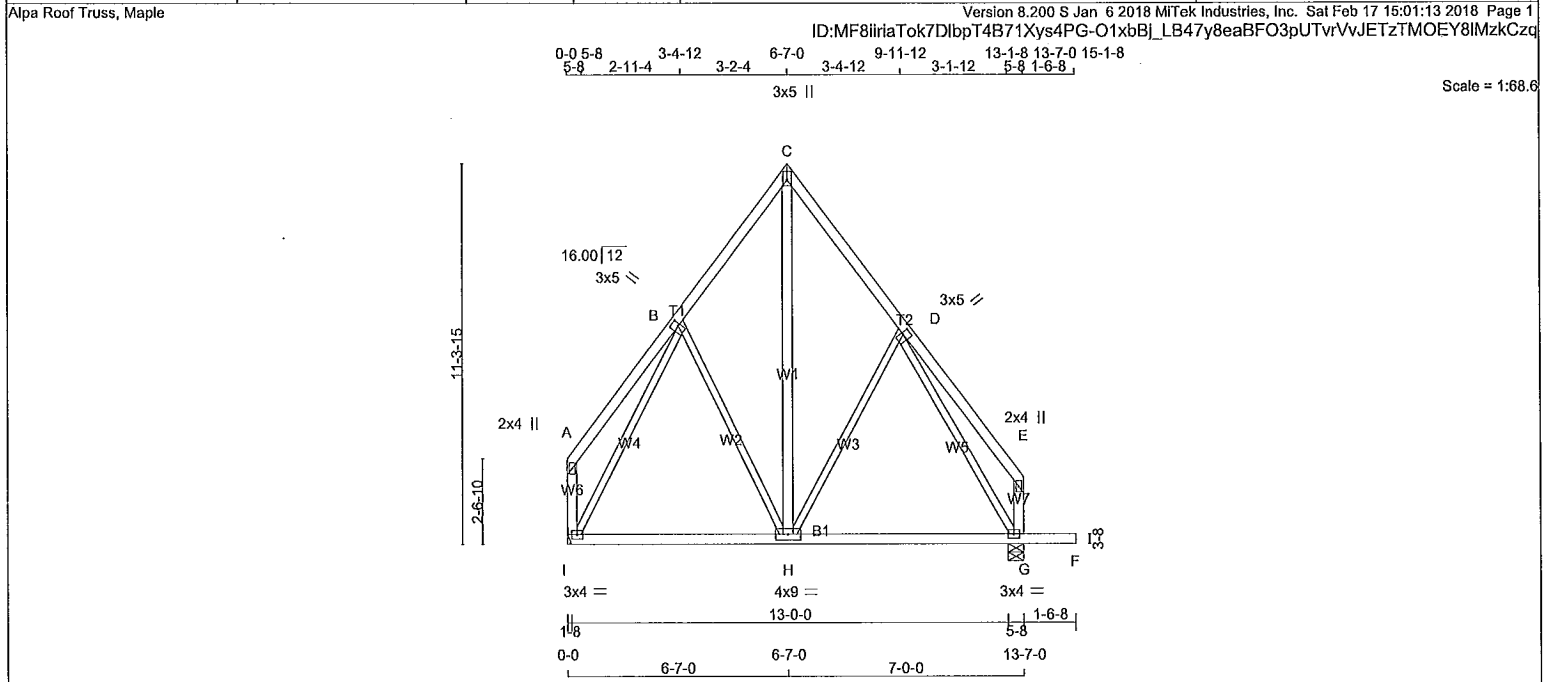
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.60 (C) (INPUT = 0.90)

JSI METAL= 0.18 (D) (INPUT = 1.00)

A-18023560

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292600	H34	1	1	TRUSS DESC.	



LUMBER							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										TOTAL WEIGHT = 83 lb	
N. L. G. A. RULES							BEARINGS										(M) [F]	
CHORDS SIZE LUMBER DESCR.																	DESIGN CRITERIA	
A - C 2x4 DRY No.2 SPF							FACTORED MAXIMUM FACTORED INPUT REQD										SPECIFIED LOADS:	
C - E 2x4 DRY No.2 SPF							GROSS REACTION GROSS REACTION BRG BRG										TOP CH. LL = 21.0 PSF	
I - A 2x4 DRY No.2 SPF							JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 6.0 PSF	
G - E 2x4 DRY No.2 SPF							I 655 0 655 0 0 0 HANGER BY OTHERS										BOT CH. LL = 0.0 PSF	
I - F 2x4 DRY No.2 SPF							G 804 0 804 0 0 5-8 1-8 MIN. SEAT SIZE: 1-8										DL = 7.4 PSF	
ALL WEBS 2x3 DRY No.2 SPF							UNFACTORED REACTIONS										TOTAL LOAD = 34.4 PSF	
EXCEPT							1ST LCASE MAX/MIN. COMPONENT REACTIONS										SPACING = 24.0 IN. C/C	
H - C 2x4 DRY No.2 SPF							JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015	
DRY: SEASONED LUMBER.							I 467 285 / 0 0 / 0 0 / 0 0 / 0 182 / 0 0 / 0										THIS DESIGN COMPLIES WITH:	
							G 573 350 / 0 0 / 0 0 / 0 0 / 0 223 / 0 0 / 0										- PART 9 OF OBC 2012, OBC 2018	
							BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G										- CSA 086-09, CSA 086-14	
							BRACING										- TPIC 2011, TPIC 2014	
							TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										(65% OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD	
							MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										ALLOWABLE DEFL.(LL)= L/360 (0.45")	
							ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										CALCULATED VERT. DEFL.(LL) = L/999 (0.01")	
							LOADING										ALLOWABLE DEFL.(TL)= L/360 (0.45")	
							TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(TL) = L/999 (0.06")	
							CHORDS WEBS										CANTILEVER DEFLECTION:	
							MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) MAX. FACTORED FORCE (LBS) MAX. FACTORED FORCE (LBS)										ALLOWABLE DEFL.(LL)= L/120 (0.19")	
							FR-TO FROM TO LENGTH FR-TO UNBRAC MEMB. FORCE (LBS) MAX. FACTORED FORCE (LBS) MAX. FACTORED FORCE (LBS)										CALCULATED VERT. DEFL.(LL) = L/999 (0.01")	
							A-B 0 / 24 -78.0 -78.0 0.14 (1) 10.00 B-H -96 / 0 0.10 (1)										ALLOWABLE DEFL.(TL)= L/120 (0.19")	
							B-C -377 / 0 -78.0 -78.0 0.10 (1) 6.25 H-C 0 / 357 0.06 (1)										CALCULATED VERT. DEFL.(TL) = L/999 (0.01")	
							C-D -379 / 0 -78.0 -78.0 0.12 (1) 6.25 H-D -135 / 0 0.14 (1)										CSI: TC=0.16/1.00 (D-E:1), BC=0.27/1.00 (G-H:4), WB=0.58/1.00 (B-I:1), SSI=0.12/1.00 (F-G:1)	
							D-E 0 / 26 -78.0 -78.0 0.16 (1) 10.00 I-B -575 / 0 0.58 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10	
							I-A -95 / 0 0.0 0.0 0.01 (1) 7.81 D-G -576 / 0 0.55 (1)										COMP=1.10 SHEAR=1.10 TENS= 1.10	
							G-E -101 / 0 0.0 0.0 0.01 (1) 7.81										COMPANION LIVE LOAD FACTOR = 1.00	
							I-H 0 / 257 -18.5 -18.5 0.27 (4) 10.00										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .	
							H-G 0 / 280 -18.5 -18.5 0.27 (4) 10.00										NAIL VALUES	
							G-F 0 / 0 -96.5 -96.5 0.16 (1) 10.00										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= 0.80 (B) (INPUT= 0.90)	
																	JSI METAL= 0.37 (D) (INPUT= 1.00)	
																	A-18023561	

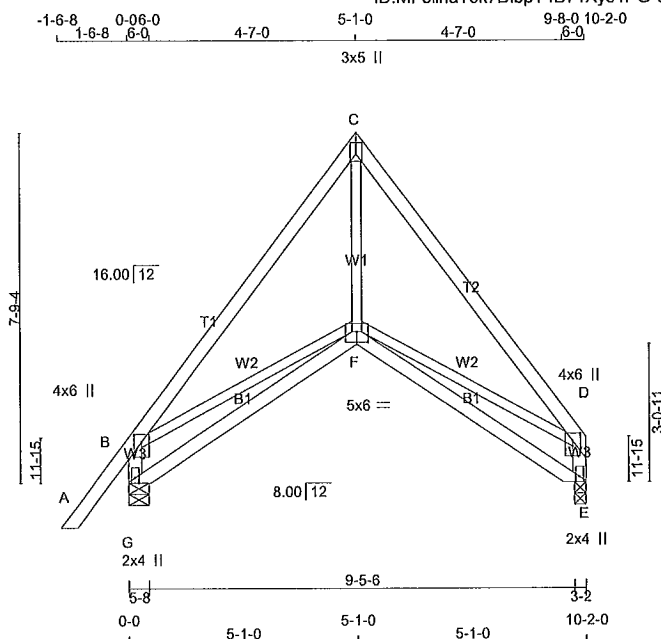
NOTE: Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design

REGISTERED PROFESSIONAL ENGINEER

02/17/2018

EDWIN C. FOK

PROVINCE OF ONTARIO



Scale = 1:51.2

TOTAL WEIGHT = 51 lb

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

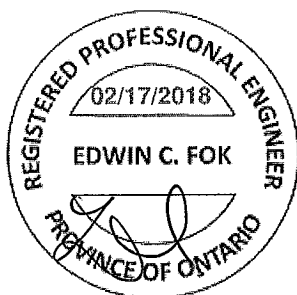
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
--------------------	-----	-----	------	-----

DRY: SEASONED LUMBER.

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

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

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



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

BEARINGS							
FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	598	0	598	0	0	5-8	1-8
E	490	0	490	0	0	3-2	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	424	271 / 0	0 / 0	0 / 0	0 / 0	153 / 0	0 / 0
E	350	213 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0

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

BRACING

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

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

LOADING

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
A-B	0 / 43	-78.0	-78.0	0.11 (1)	10.00	F- C	0 / 377	0.08 (1)
B-C	-483 / 0	-78.0	-78.0	0.27 (1)	6.25	B- F	0 / 323	0.07 (1)
C-D	-483 / 0	-78.0	-78.0	0.27 (1)	6.25	F- D	0 / 323	0.07 (1)
G-B	-551 / 0	0.0	0.0	0.06 (1)	7.81			
E-D	-443 / 0	0.0	0.0	0.05 (1)	7.81			
G- F	0 / 0	-18.5	-18.5	0.14 (4)	10.00			
F- F	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

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 (0.34")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.27/1.00 (B-C:1), BC=0.14/1.00 (F-G:4),
WB=0.08/1.00 (C-F:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

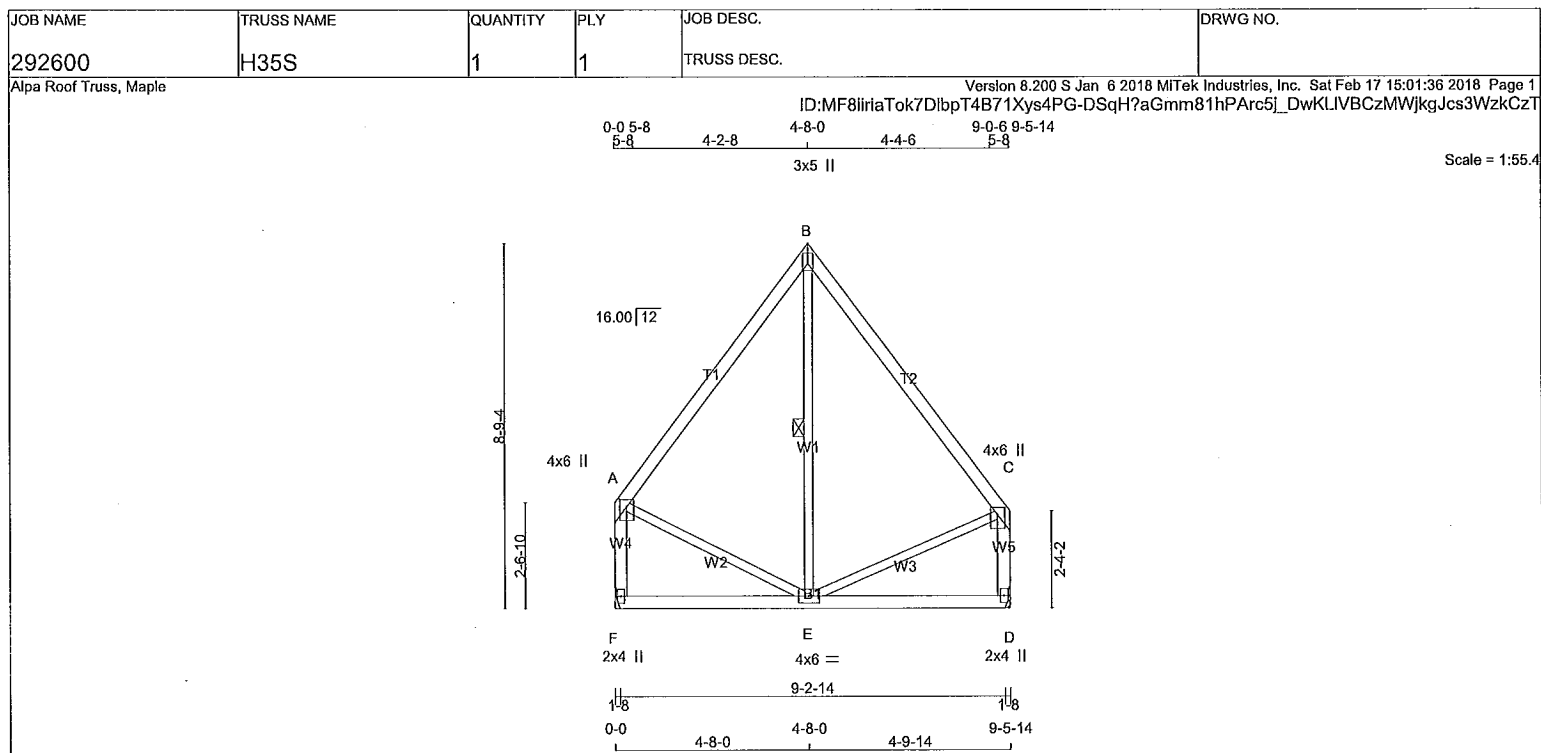
NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1667	788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (E) (INPUT = 0.90)
JSI METAL= 0.27 (G) (INPUT = 1.00)

A-18023562



TOTAL WEIGHT = 49 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+p	MT20	4.0	6.0	2.00	2.00
B	TTW+p	MT20	3.0	5.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
D	BMV1+p	MT20	2.0	4.0		
E	BMVWW-t	MT20	4.0	6.0		
F	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
F	458	0	458	0	0	HANGER BY OTHERS
D	458	0	458	0	0	HANGER BY OTHERS

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	326	199 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
D	326	199 / 0	0 / 0	0 / 0	0 / 0	127 / 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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD		MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)	
		FROM	TO			UNBRACED LENGTH	FR-TO
A-B	-226 / 0	-78.0	-78.0	E-B	-9 / 73	0.03 (4)	0.03 (4)
B-C	-226 / 0	-78.0	-78.0	A-E	0 / 149	0.03 (1)	0.03 (1)
F-A	-425 / 0	0.0	0.0	E-C	0 / 146	0.03 (1)	0.03 (1)
D-C	-423 / 0	0.0	0.0				
F-E	0 / 0	-18.5	-18.5				
E-D	0 / 0	-18.5	-18.5				

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.32")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.23/1.00 (B-C:1), BC=0.12/1.00 (D-E:4), WB=0.03/1.00 (A-E:1), SSI=0.09/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

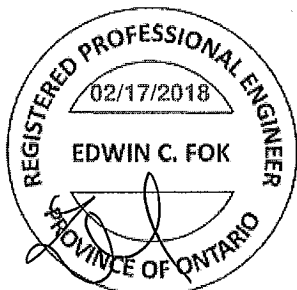
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (A) (INPUT = 0.90)
JSI METAL= 0.12 (C) (INPUT = 1.00)

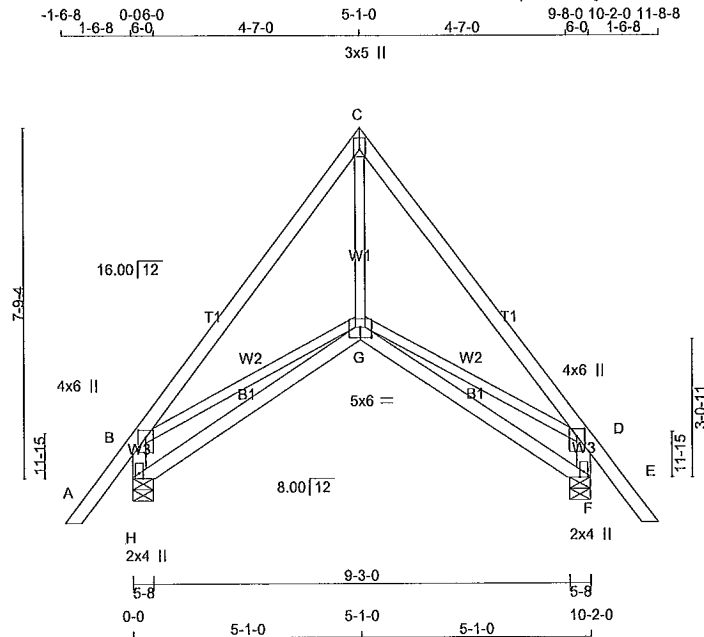
A-18023563



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292600	H35T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MITek Industries, Inc. Sat Feb 17 15:01:42 2018 Page 1
ID:MF8IriaTok7DlbpT4B71Xys4PG-2cBYGdKXM_nr75lmS_5d9bbmUcE1mDPd3F3AHAzkCzN



Scale = 1:51.2

TOTAL WEIGHT = 53 lb

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
H - B	2x4	DRY	No.2
F - D	2x4	DRY	No.2
H - G	2x4	DRY	No.2
G - F	2x4	DRY	No.2

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
H	598	0	598	0
F	598	0	598	0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	424	271 / 0	0 / 0	0 / 0	0 / 0	153 / 0	0 / 0
F	424	271 / 0	0 / 0	0 / 0	0 / 0	153 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO			FROM TO	CSI (LC)		FR-TO			
A-B	0 / 43	-78.0	-78.0	0.11 (1)	10.00	G-C	0 / 377	0.08 (1)	
B-C	-483 / 0	-78.0	-78.0	0.27 (1)	6.25	B-G	0 / 323	0.07 (1)	
C-D	-483 / 0	-78.0	-78.0	0.27 (1)	6.25	G-D	0 / 323	0.07 (1)	
D-E	0 / 43	-78.0	-78.0	0.11 (1)	10.00				
H-B	-551 / 0	0.0	0.0	0.06 (1)	7.81				
F-D	-551 / 0	0.0	0.0	0.06 (1)	7.81				
H-G	0 / 0	-18.5	-18.5	0.14 (4)	10.00				
G-F	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

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 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.27/1.00 (C-D:1), BC=0.14/1.00 (G-H:4), WB=0.08/1.00 (C-G:1), SI=0.09/1.00 (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

AUTOSOLVE HEELS OFF

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

NAIL VALUES

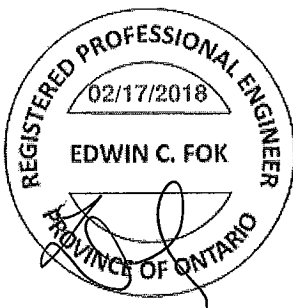
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

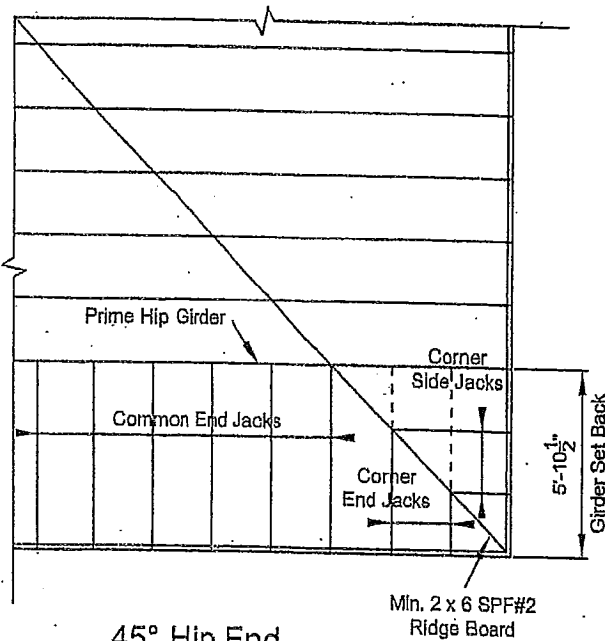
JSI GRIP= 0.70 (F) (INPUT = 0.90)
JSI METAL= 0.27 (H) (INPUT = 1.00)

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-18023564

STRACON ENGINEERING INC.

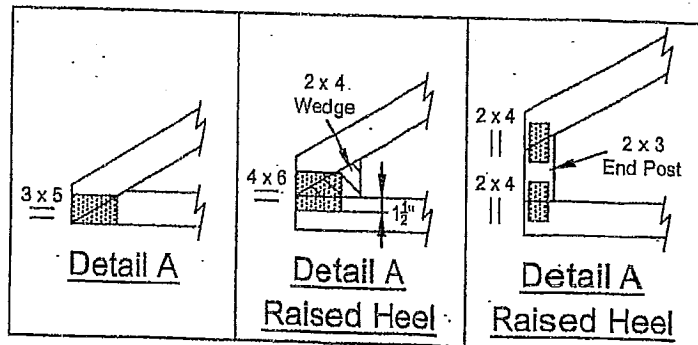
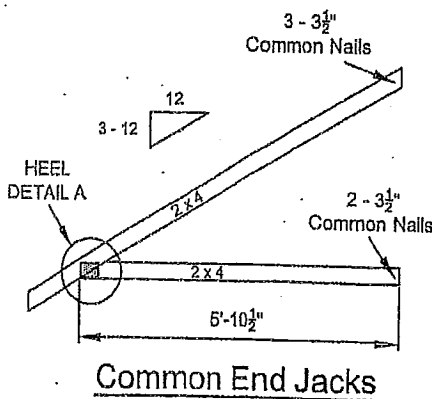
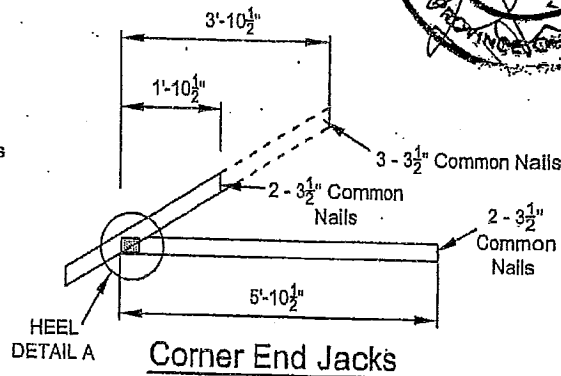
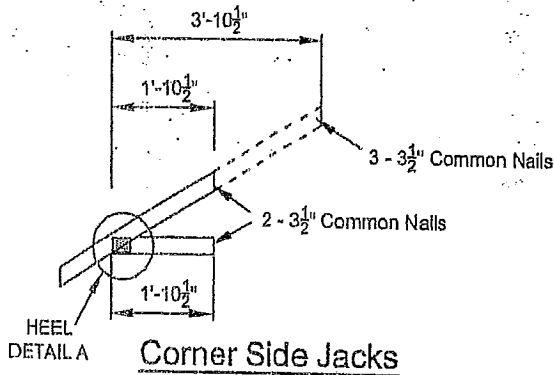


LUMBER SPECIFICATION

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

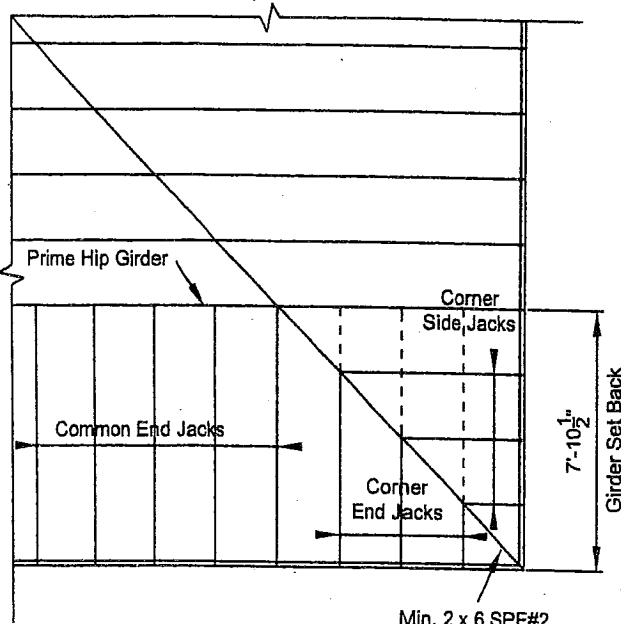
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



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

CS-51008

STRACON ENGINEERING INC.



45° Hip End

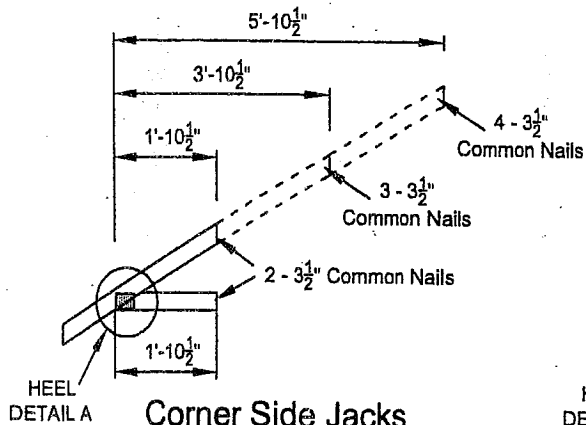
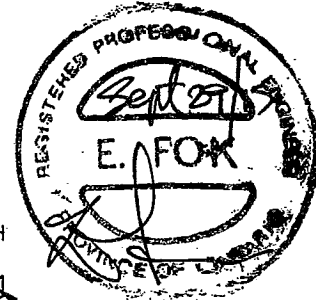
LUMBER SPECIFICATION

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

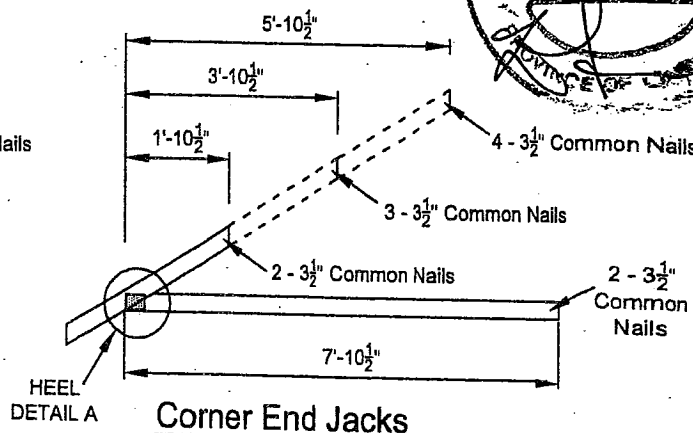
DESIGN LOAD

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

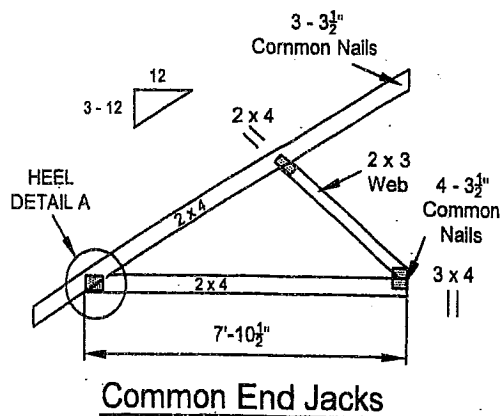
TOTAL LOAD : 44.8 P.S.F.



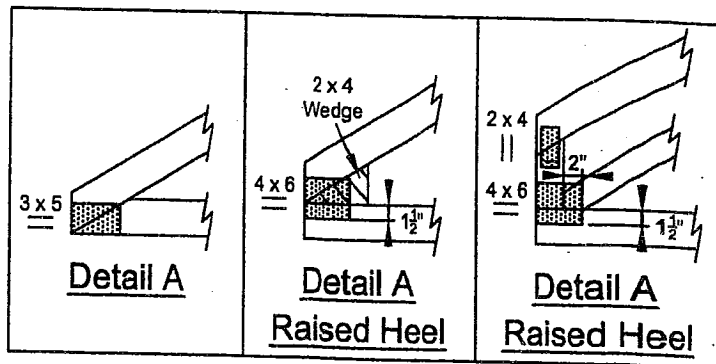
Corner Side Jacks



Corner End Jacks



Common End Jacks



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:

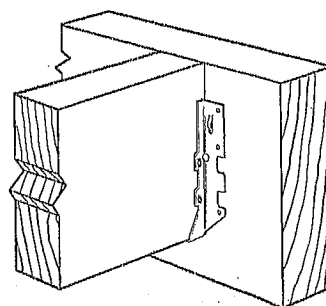
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

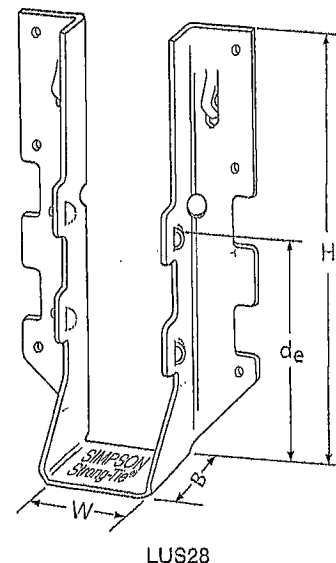
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3½" long common wire,
10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified

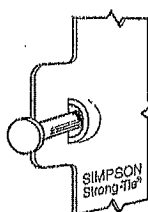


Typical LUS
Installation



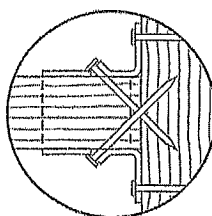
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
								D-Fir-L		S-P-F	
		W	H	B	d ₁	Face	Joist	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)	Uplift (K ₀ =1.15)	Normal (K ₀ =1.00)
LUS24	18	1½	3½	1½	1½	(4) 10d	(2) 10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	(4) 16d	(2) 16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3¾	(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	4¾	4¾	2	3¼	(4) 16d	(4) 16d	1720	2595	1545	2340
LUS28	18	1½	6¾	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	4¾	6¼	2	3¼	(6) 16d	(4) 16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¾	3¾	(8) 10d	(4) 10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	(8) 16d	(6) 16d	2580	4500	2320	3195
LUS210-3	18	4¾	8¾	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.

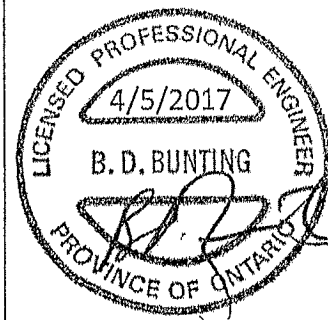


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent
5,803,580



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.

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

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HHUS – Double Shear Joist Hangers



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

Material: 14 gauge

Finish: G90 galvanized

Design:

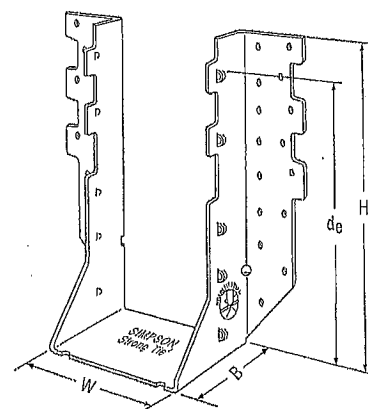
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

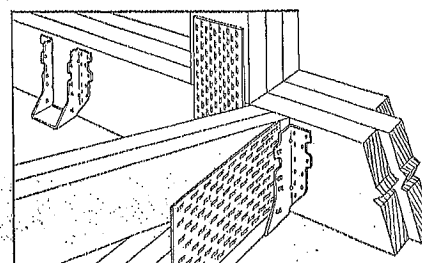
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

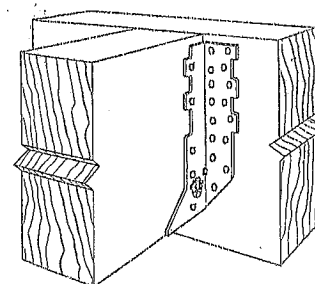
- See current catalogue for options



HHUS410



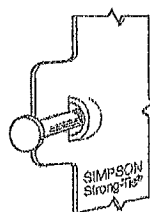
Typical HHUS Installation
(Truss Designer to provide
fastener quantity for connecting
multiple members together)



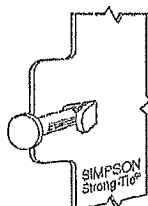
Typical HHUS
Installation

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

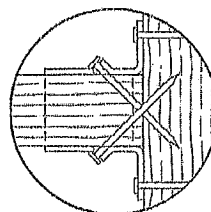
1. d_g is the distance from the seat of the hanger to the highest joist nail.



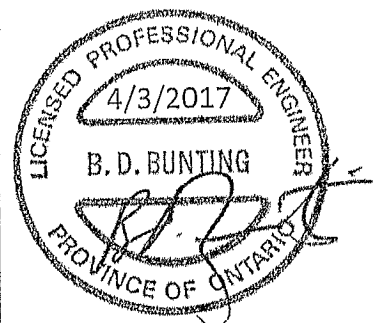
Double Shear Nailing prevents tabs breaking off (available on some models).
U.S. Patent
5,603,680



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



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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T-SPECHHUS17: 3/17, exp. 6/19

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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

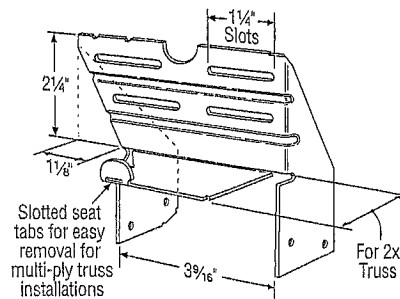
Design: Factored resistances are in accordance with CSA 086-14

Installation:

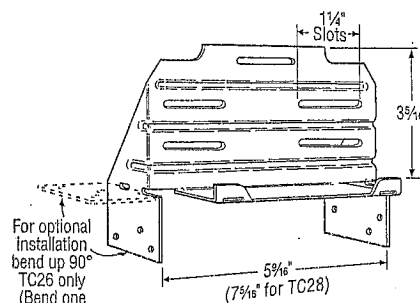
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow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

Optional TC Installation:

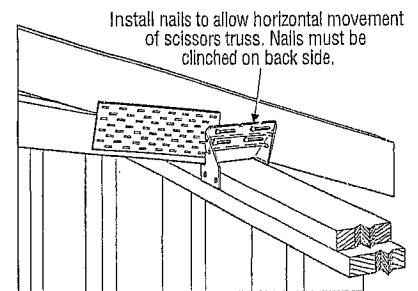
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



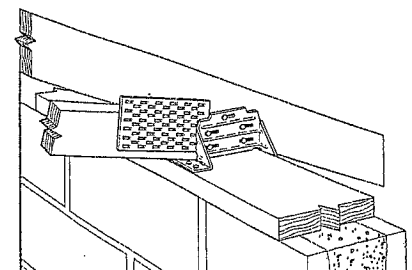
TC24
U.S. Patent 4,932,173



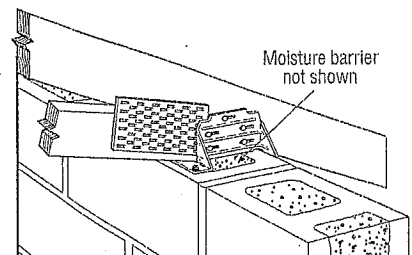
TC26
(TC28 Similar)



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)
			lb.	lb.
TC24	(4) 10d	(4) 10d	605	430
TC26	(5) 10d	(6) 10d	1015	720
TC28	(5) 10d	(6) 10d	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)
			lb.	lb.
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) – ⅜" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



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