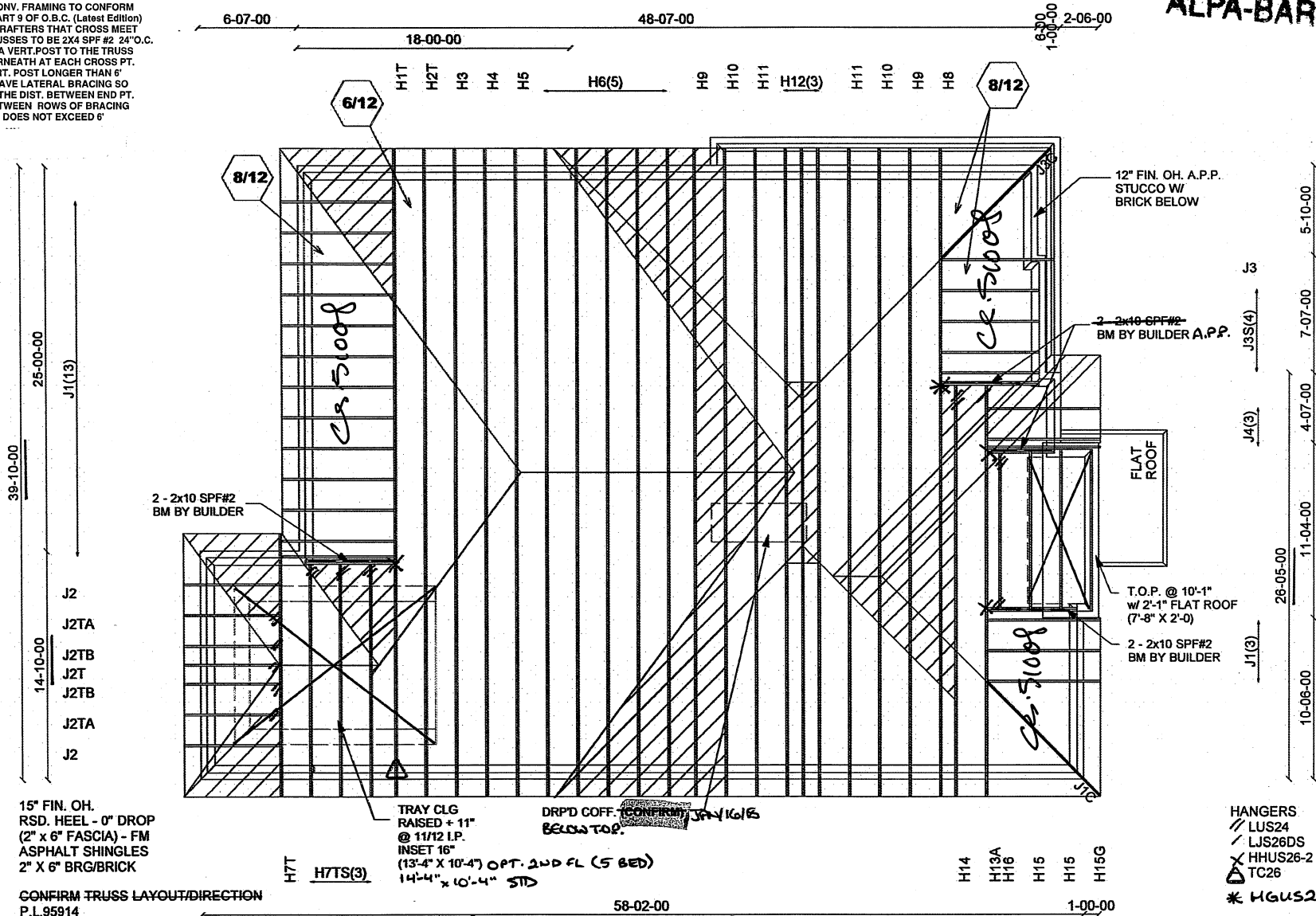


ALPA-BARRIE

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'



15" FIN. OH. RSD. HEEL - 0" DROP (2" x 6" FASCIA) - FM ASPHALT SHINGLES 2" X 6" BRG/BRICK

CONFIRM TRUSS LAYOUT/DIRECTION P.L.95914

TRAY CLG RAISED + 11" @ 11/12 I.P. INSET 16" (13'-4" X 10'-4") OPT. 2ND FL (5 BED) 14'-4" X 10'-4" STD

DRPD COFF. 10' X 16' 8" BELOW TOP.

HANGERS
 / LUS24
 / LJS26DS
 X HHUS26-2
 X TC26
 * HGUS26-3

CONVENTIONAL FRAMING BY OTHERS

A-18023915 - A-18023918
 A-18023921 - A-18023937

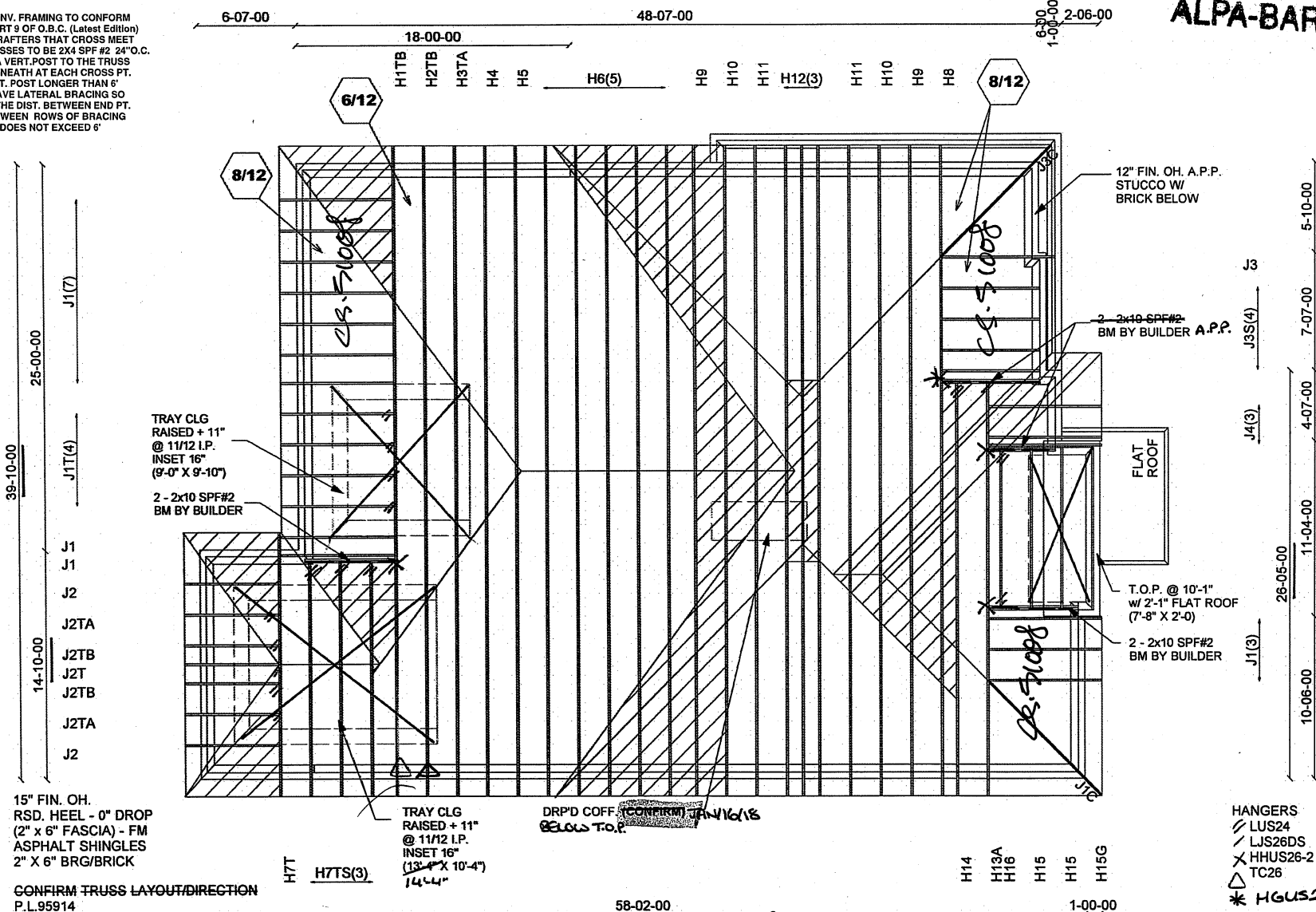
P.L.99352, 100885, 101745, 105728

CHAKGROVE

	Job Track: 45147	Builder / Location: GOLD PARK HOMES / VAUGHAN	Model / Elevation: 5003 REV1	STO W/ COFF TRAY OR OPT LOGE IN (P.T.) / C OFF TRAY MST	
	Layout ID: 292646 K	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.		
	Plan Log: 95914	Date: 12/29/2017	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'



P.L. 99352, 100885, 101745, 10528

A-18023916 - A-18023918
 A-18023921 - A-18023930
 A-18023933 - A-18023937
 A-18023940 - A-18023943

OAKGROVE



Job Track: 45147

Layout ID: 292648

Plan Log: 95914

Builder / Location:

GOLD PARK HOMES / VAUGHAN

Project: PINE VALLEY

Date: 12/29/2017 Designer: AMANDA

Model / Elevation:

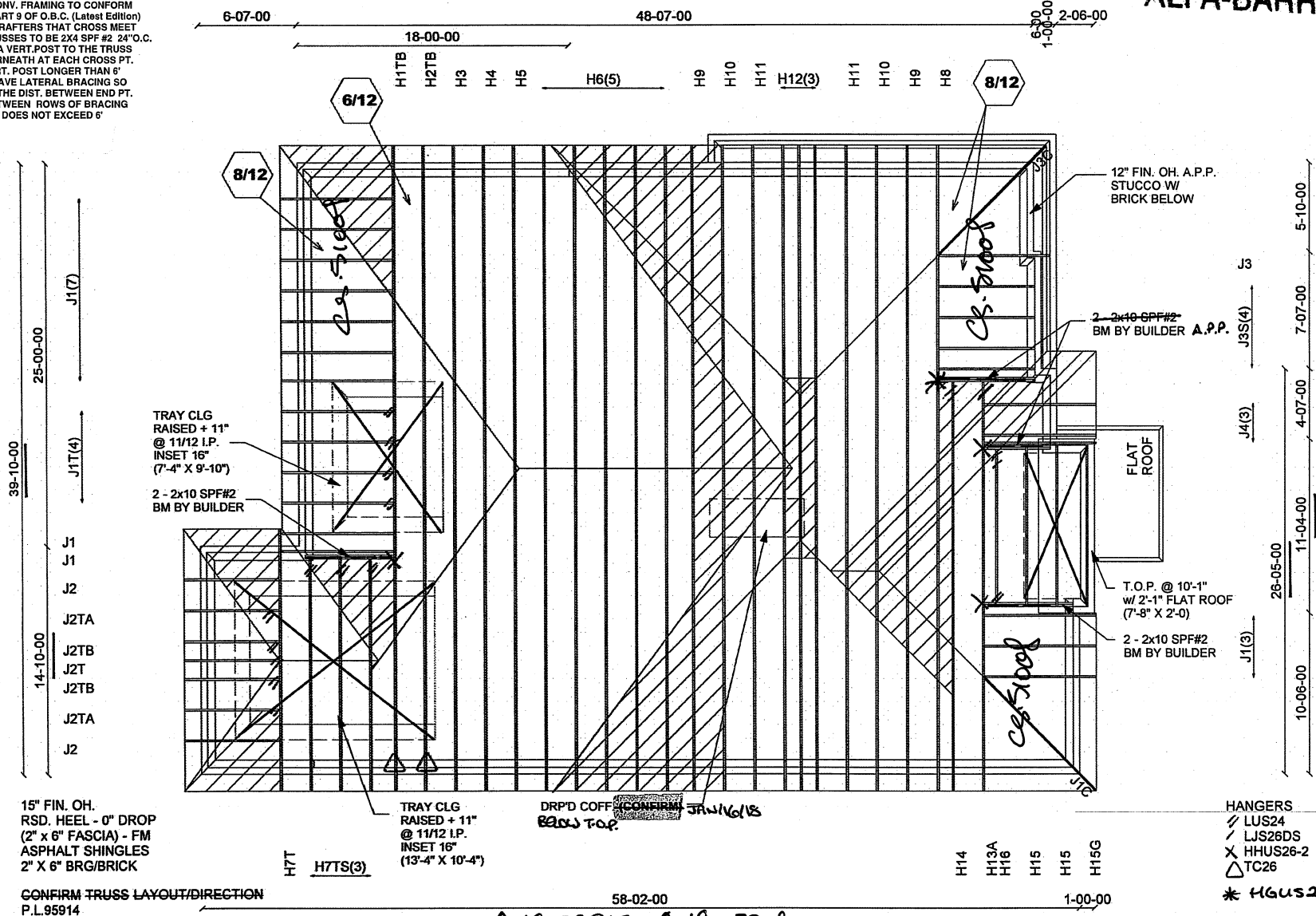
5003 REV1

SITTING
 STD W/OPT. A TRAY CLG OR OPT LOGGIA (FLAT)
 / C OPT TRAYS w/ SITTING CLG.

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

ALPA-BARRIE

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



P.L.9352, 100885, 101795, 105128

A-18023915 - A-18023918
A-18023921 - A-18023930
A-18023933 - A-18023937
A-18023941 - A-18023943 OAK GROVE



Job Track **45147**
Layout ID: **292649 K**
Plan Log: **95914**

Builder / Location:
GOLD PARK HOMES / VAUGHAN

Project: **PINE VALLEY**

Date: 12/29/2017 Designer: AMANDA

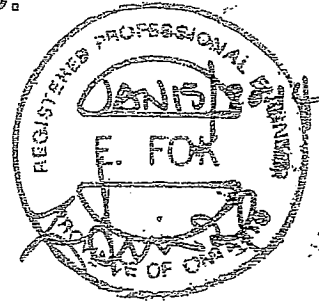
Model / Elevation:
5003 REV1

OPT 2ND FLR W/ 5BD OPT TRAY CLG OR OPT
/ C OPT TRAY & 5BD **LOGGIA (FLAT)**
W/ SITTING CLG.

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



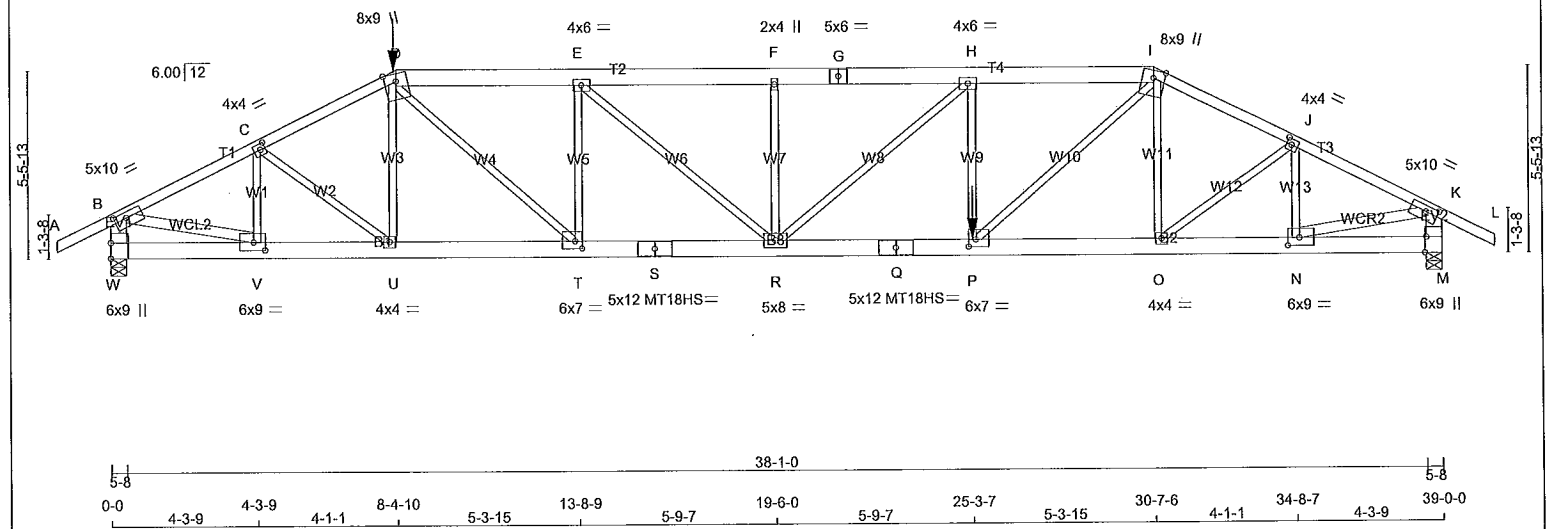
RESPONSIBILITIES

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

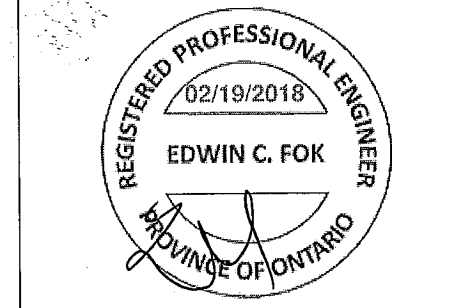
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4 DRY	No.2	SPF
D - G	2x6 DRY	No.2	SPF
G - I	2x6 DRY	No.2	SPF
I - L	2x4 DRY	No.2	SPF
W - B	2x6 DRY	No.2	SPF
M - K	2x6 DRY	No.2	SPF
W - S	2x6 DRY	1650F 1.5E	SPF
S - Q	2x6 DRY	1650F 1.5E	SPF
Q - M	2x6 DRY	1650F 1.5E	SPF
ALL WEBS	2x3 DRY	No.2	SPF
EXCEPT			
B - V	2x4 DRY	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
B	TMVW-t	MT20	5.0	10.0	2.00 4.25
C	TMVW-t	MT20	4.0	4.0	2.00 1.75
D	TTVW+m	MT20	8.0	9.0	Edge
E	TMVW-t	MT20	4.0	6.0	
F	TMVW-w	MT20	2.0	4.0	
G	TS-t	MT20	5.0	6.0	
H	TMVW-t	MT20	4.0	6.0	
I	TTVW+m	MT20	8.0	9.0	Edge
J	TMVW-t	MT20	4.0	4.0	2.00 1.75
K	TMVW-t	MT20	5.0	10.0	2.00 4.25
M	BMV1+t	MT20	6.0	9.0	Edge 0.50
N	BMVW-t	MT20	6.0	9.0	2.75 4.00
O	BMVW-t	MT20	4.0	4.0	
P	BMVW-t	MT20	6.0	7.0	2.50 2.50
Q	BS-t	MT18HS	5.0	12.0	
R	BMVW-t	MT20	5.0	8.0	
S	BS-t	MT18HS	5.0	12.0	
T	BMVW-t	MT20	6.0	7.0	2.50 2.50
U	BMVW-t	MT20	4.0	4.0	
V	BMVW-t	MT20	6.0	9.0	2.75 4.00
W	BMV1+t	MT20	6.0	9.0	5.50

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



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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
W	3751	0	3751	0	0	5-8	5-8	5-8
M	3432	0	3432	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2676	1626 / 0	0 / 0	0 / 0	0 / 0	1050 / 0	0 / 0
M	2443	1510 / 0	0 / 0	0 / 0	0 / 0	934 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.26 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)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	0 / 28	-78.0	-78.0	0.16 (1)	10.00	V-C	-934 / 0	0.19 (1)	
B-C	-5313 / 0	-78.0	-78.0	0.70 (1)	2.50	C-U	0 / 585	0.14 (1)	
C-D	-5841 / 0	-78.0	-78.0	0.77 (1)	2.26	U-D	-114 / 105	0.05 (1)	
D-E	-7117 / 0	-153.5	-153.5	0.66 (1)	2.74	D-T	0 / 2600	0.64 (1)	
E-F	-7829 / 0	-153.5	-153.5	0.76 (1)	2.52	T-E	-1596 / 0	0.65 (1)	
F-G	-7829 / 0	-153.5	-153.5	0.72 (1)	2.57	E-R	0 / 944	0.23 (1)	
G-H	-7829 / 0	-153.5	-153.5	0.72 (1)	2.57	R-F	-900 / 0	0.37 (1)	
H-I	-7258 / 0	-78.0	-78.0	0.56 (1)	2.86	H-H	0 / 757	0.19 (1)	
I-J	-5388 / 0	-78.0	-78.0	0.70 (1)	2.46	P-H	-1220 / 0	0.50 (1)	
J-K	-4865 / 0	-78.0	-78.0	0.63 (1)	2.70	P-I	0 / 3354	0.83 (1)	
K-L	0 / 28	-78.0	-78.0	0.16 (1)	10.00	O-I	-181 / 0	0.08 (1)	
W-B	-3642 / 0	0.0	0.0	0.26 (1)	5.55	O-J	0 / 578	0.14 (1)	
M-K	-3357 / 0	0.0	0.0	0.24 (1)	5.75	N-J	-932 / 0	0.19 (1)	
						B-V	0 / 4868	0.86 (1)	
W-V	0 / 0	-36.4	-36.4	0.08 (1)	10.00	N-K	0 / 4458	0.79 (1)	
V-U	0 / 4764	-36.4	-36.4	0.46 (1)	10.00				
U-T	0 / 5231	-36.4	-36.4	0.47 (1)	10.00				
T-S	0 / 7116	-36.4	-36.4	0.65 (1)	10.00				
S-R	0 / 7116	-36.4	-36.4	0.65 (1)	10.00				
R-Q	0 / 7258	-36.4	-36.4	0.68 (1)	10.00				
Q-P	0 / 7258	-36.4	-36.4	0.68 (1)	10.00				
P-O	0 / 4826	-18.5	-18.5	0.44 (1)	10.00				
O-N	0 / 4363	-18.5	-18.5	0.43 (1)	10.00				
N-M	0 / 0	-18.5	-18.5	0.08 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
D	8-4-10	-477	-477	---	FRONT	VERT	TOTAL
P	25-3-8	-964	-964	---	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 = 8.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.4 PSF

TOTAL LOAD = 34.4 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 8-4-10
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE

- ADDTL. LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 25-3-8 OF SPAN
MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***

ADDTL. USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.35")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/690 (0.88")

CSI: TC=0.77/1.00 (C-D:1), BC=0.68/1.00 (P-R:1), WB=0.86/1.00 (B-V:1), SSI=0.32/1.00 (D-E:1)

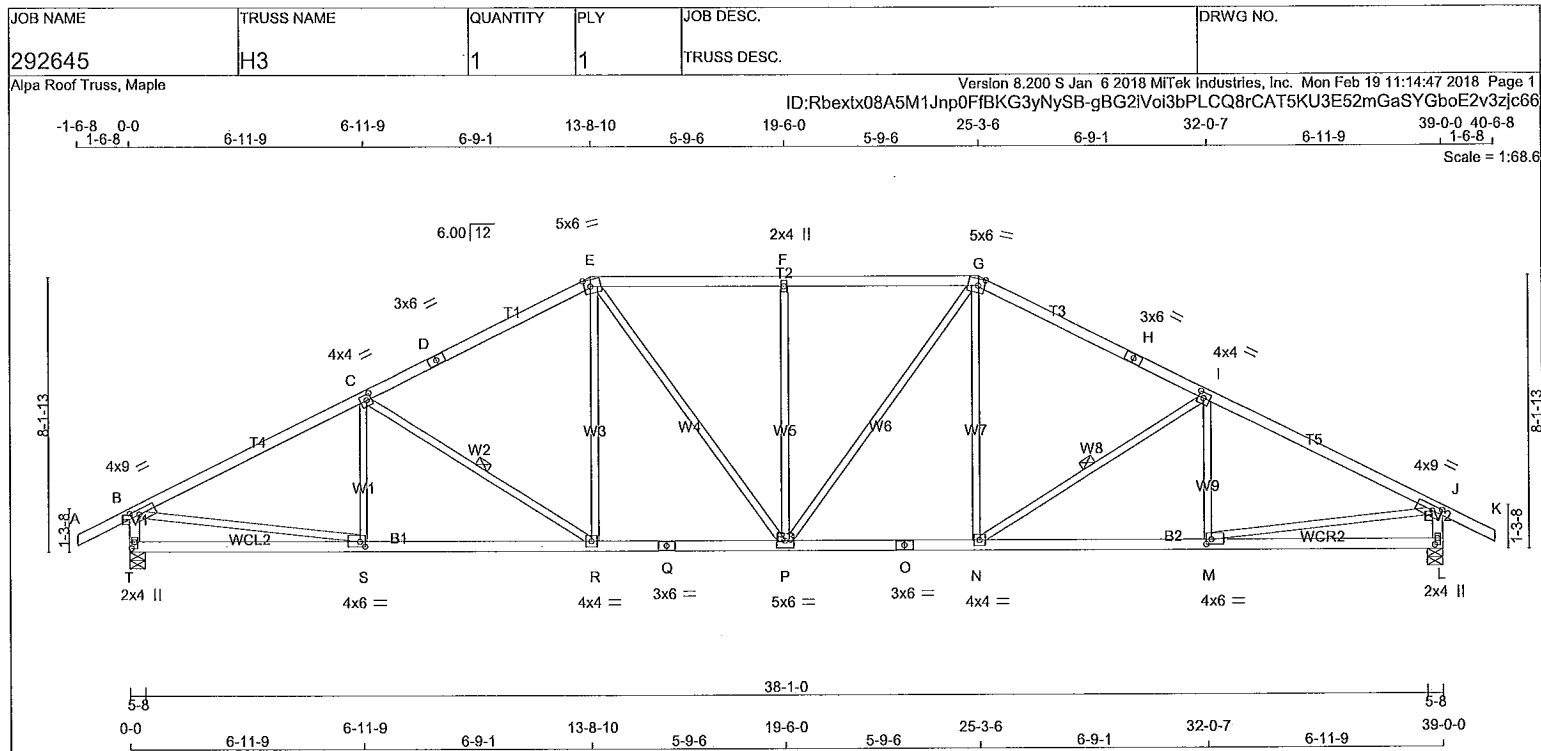
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

A-18023914



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
G - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
T - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
T - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	9.0	1.75	3.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TS-t	MT20	3.0	6.0		
E	TTVW-m	MT20	5.0	6.0	2.50	2.25
F	TMVW-w	MT20	2.0	4.0		
G	TTVW-m	MT20	5.0	6.0	2.50	2.25
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	4.0	4.0	2.00	1.75
J	TMVW-t	MT20	4.0	9.0	1.75	3.00
L	BMV1+p	MT20	2.0	4.0	2.25	1.00
M	BMVW-t	MT20	4.0	6.0	1.75	1.75
N	BMVW-t	MT20	4.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	5.0	6.0		
Q	BS-t	MT20	3.0	6.0		
R	BMVW-t	MT20	4.0	4.0		
S	BMVW-t	MT20	4.0	6.0	1.75	1.75
T	BMV1+p	MT20	2.0	4.0	2.25	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

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
T	2006	0	2006	0	5-8
L	2006	0	2006	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
L	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 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 = 3.52 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-R, I-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 28	S-C	-217 / 24
B-C	-2794 / 0	C-R	-465 / 0
C-D	-2416 / 0	R-E	0 / 372
D-E	-2416 / 0	E-P	0 / 402
E-F	-2378 / 0	P-F	-551 / 0
F-G	-2378 / 0	G-P	0 / 402
G-H	-2416 / 0	H-G	0 / 372
H-I	-2416 / 0	I-N	-465 / 0
I-J	-2794 / 0	N-I	-217 / 24
J-K	0 / 28	B-S	0 / 2549
T-B	-1952 / 0	M-J	0 / 2549
L-J	-1952 / 0		
T-S	0 / 0		
S-R	0 / 2524		
R-Q	0 / 2139		
Q-P	0 / 2139		
P-O	0 / 2139		
O-N	0 / 2139		
N-M	0 / 2524		
M-L	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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/380 (1.30")
CALCULATED VERT. DEFL.(LL)= L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/380 (1.30")
CALCULATED VERT. DEFL.(TL)= L/999 (0.29")

CSI: TC=0.70/1.00 (B-C:1), BC=0.50/1.00 (R-S:1), WB=0.71/1.00 (F-P:1), SSI=0.23/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

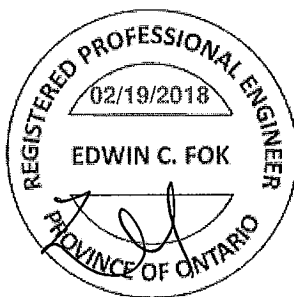
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

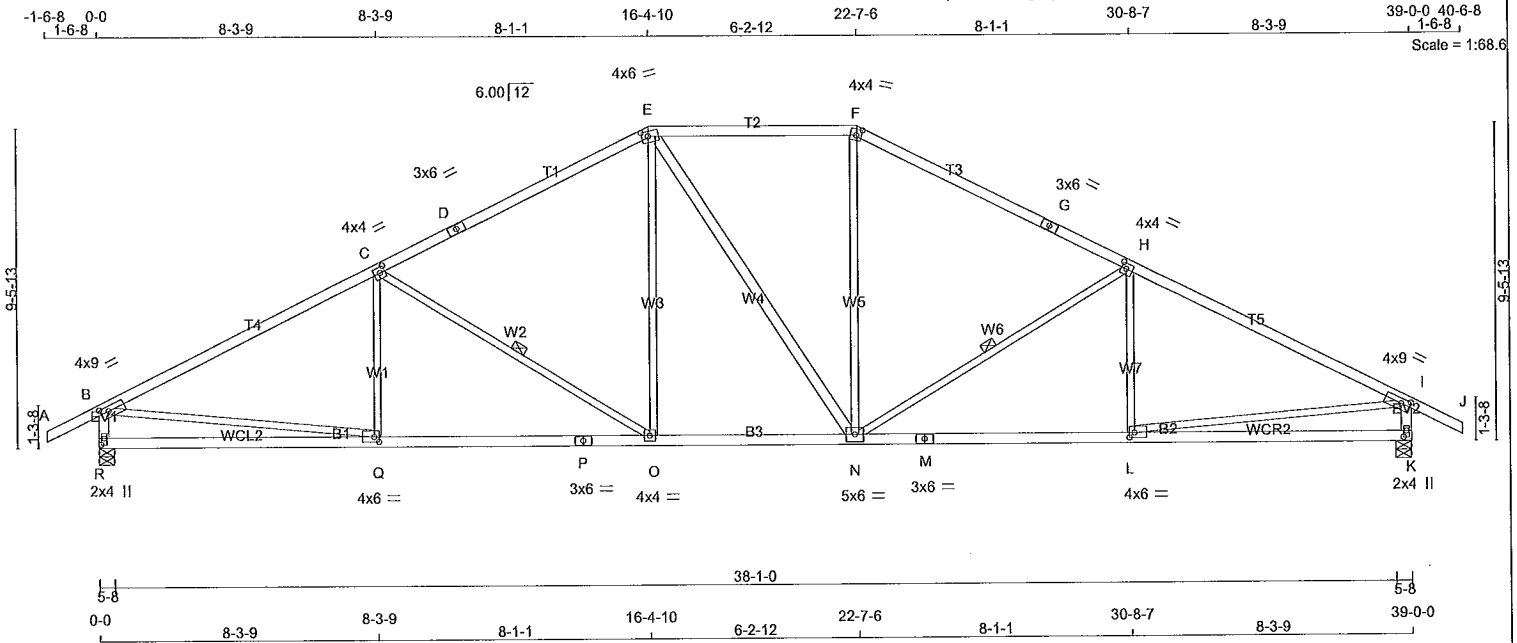
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.65 (O) (INPUT = 1.00)

A-18023915





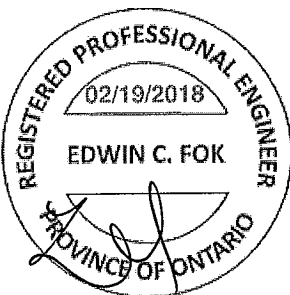
TOTAL WEIGHT = 162 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-t	MT20	4.0	9.0	1.75	3.00
C	TMWV-t	MT20	4.0	4.0	2.00	1.75
D	TS-t	MT20	3.0	6.0		
E	TTWV-m	MT20	4.0	6.0	1.75	2.25
F	TTW-m	MT20	4.0	4.0	2.25	1.75
G	TS-t	MT20	3.0	6.0		
H	TMWV-t	MT20	4.0	4.0	2.00	1.75
I	TMWV-t	MT20	4.0	9.0	1.75	3.00
K	BMV1+p	MT20	2.0	4.0	2.25	1.00
L	BMWV-t	MT20	4.0	6.0	1.75	1.75
M	BS-t	MT20	3.0	6.0		
N	BMWVWV-t	MT20	5.0	6.0		
O	BMWV-t	MT20	4.0	4.0		
P	BS-t	MT20	3.0	6.0		
Q	BMWV-t	MT20	4.0	6.0	1.75	1.75
R	BMV1+p	MT20	2.0	4.0	2.25	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



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
R	2006	0	2006	0	0	5-8	3-0
K	2006	0	2006	0	0	5-8	3-0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
K	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0

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

BRACING

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 28	-78.0	-78.0 0.12 (1)	10.00	Q-C	-128 / 80	0.06 (1)
B-C	-2807 / 0	-78.0	-78.0 0.78 (1)	3.88	C-O	-699 / 0	0.47 (1)
C-D	-2215 / 0	-78.0	-78.0 0.69 (1)	4.33	O-E	0 / 496	0.11 (1)
D-E	-2215 / 0	-78.0	-78.0 0.69 (1)	4.33	E-N	0 / 0	0.00 (1)
E-F	-1955 / 0	-78.0	-78.0 0.46 (1)	4.35	N-F	0 / 497	0.11 (1)
F-G	-2215 / 0	-78.0	-78.0 0.69 (1)	4.33	N-H	-698 / 0	0.47 (1)
G-H	-2215 / 0	-78.0	-78.0 0.69 (1)	4.33	L-H	-129 / 80	0.06 (1)
H-I	-2807 / 0	-78.0	-78.0 0.78 (1)	3.88	B-Q	0 / 2559	0.58 (1)
I-J	0 / 28	-78.0	-78.0 0.12 (1)	10.00	L-I	0 / 2559	0.58 (1)
R-B	-1944 / 0	0.0	0.0 0.20 (1)	6.03			
K-I	-1944 / 0	0.0	0.0 0.20 (1)	6.03			

R-Q	0/0	-18.5	-18.5	0.31 (4)	10.00
Q-P	0/2541	-18.5	-18.5	0.57 (1)	10.00
P-O	0/2541	-18.5	-18.5	0.57 (1)	10.00
O-N	0/1954	-18.5	-18.5	0.41 (1)	10.00
N-M	0/2541	-18.5	-18.5	0.57 (1)	10.00
M-L	0/2541	-18.5	-18.5	0.57 (1)	10.00
L-K	0/0	-18.5	-18.5	0.31 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.78/1.00 (B-C:1), BC=0.57/1.00 (O-Q:1)
 , WB=0.58/1.00 (B-Q:1), SS=0.28/1.00 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656

PLATE PLACEMENT TOL. = 0.250 inches

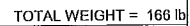
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.81 (P) (INPUT = 1.00)

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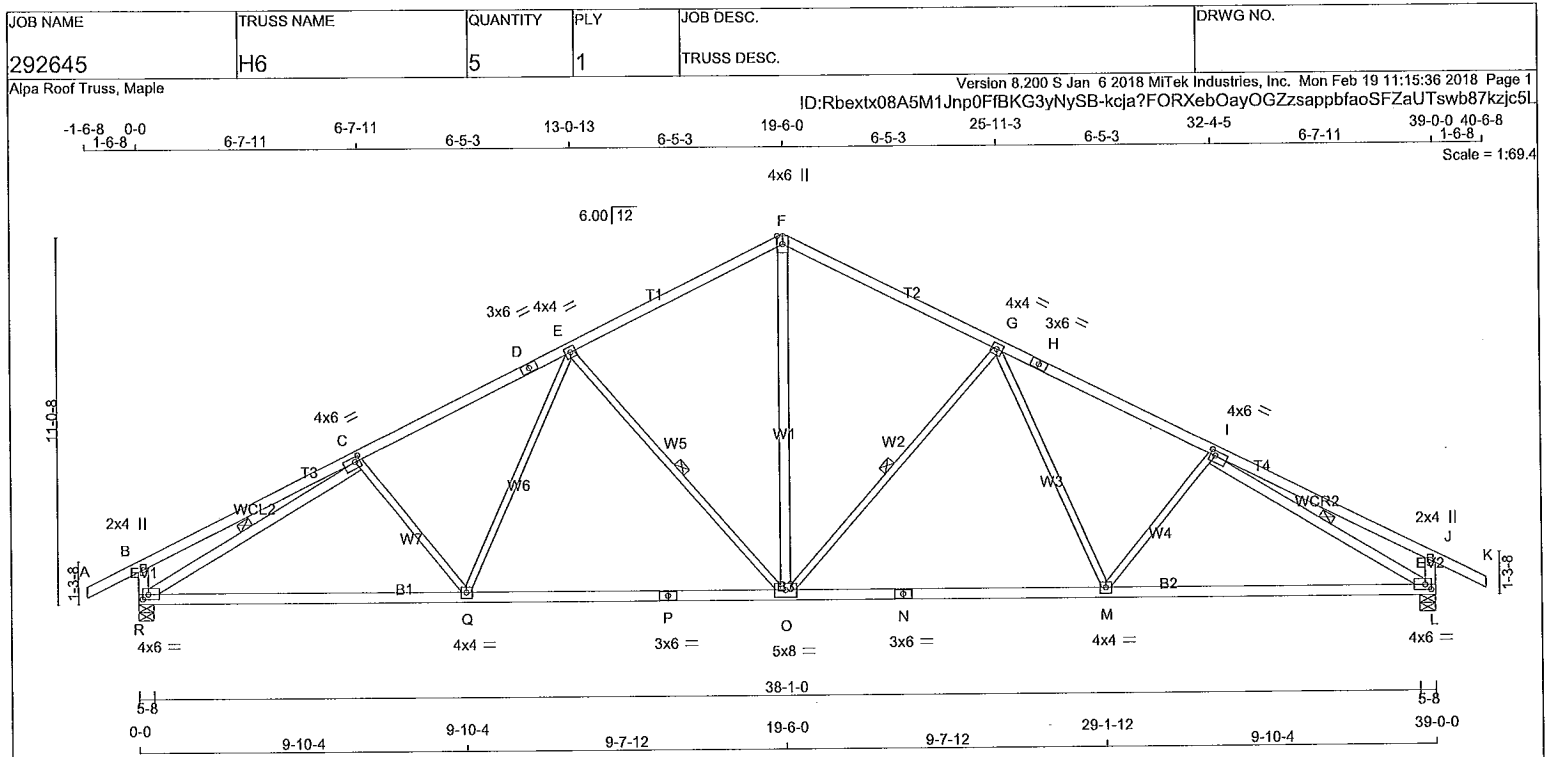
Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 11:17:16 2018 Page 1
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R-Q	0 / 2461	-18.5	-18.5	0.66 (4)	10.00
Q-P	0 / 2212	-18.5	-18.5	0.64 (4)	10.00
P-O	0 / 2212	-18.5	-18.5	0.64 (4)	10.00
O-N	0 / 2212	-18.5	-18.5	0.64 (4)	10.00
N-M	0 / 2212	-18.5	-18.5	0.64 (4)	10.00
M-L	0 / 2461	-18.5	-18.5	0.66 (4)	10.00

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.78 (P) (INPUT = 1.00)



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

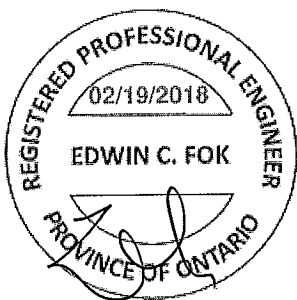
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	6.0	1.75	1.75
D	TS-t	MT20	3.0	6.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTW+p	MT20	4.0	6.0	Edge	
G	TMWW-t	MT20	4.0	4.0		
H	TS-t	MT20	3.0	6.0		
I	TMWW-t	MT20	4.0	6.0	1.75	1.75
J	TMV+p	MT20	2.0	4.0		
L	BMVW1-t	MT20	4.0	6.0	1.75	2.00
M	BMWW-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMVW1-t	MT20	5.0	8.0		
P	BS-t	MT20	3.0	6.0		
Q	BMWW-t	MT20	4.0	4.0		
R	BMVW1-t	MT20	4.0	6.0	1.75	2.00

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

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP
R	2006	0	0	5-8
L	2006	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
L	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0

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

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 G-O, E-O, C-R, I-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 28	-78.0	-78.0 0.14 (1)	10.00	O-F	0 / 1319	0.21 (1)
B-C	0 / 21	-78.0	-78.0 0.43 (1)	10.00	O-G	-756 / 0	0.53 (1)
C-D	-2634 / 0	-78.0	-78.0 0.52 (1)	3.85	G-M	0 / 366	0.08 (1)
D-E	-2634 / 0	-78.0	-78.0 0.52 (1)	3.85	M-I	-170 / 19	0.09 (1)
E-F	-1946 / 0	-78.0	-78.0 0.47 (1)	4.38	E-O	-756 / 0	0.53 (1)
F-G	-1946 / 0	-78.0	-78.0 0.47 (1)	4.38	Q-E	0 / 366	0.08 (1)
G-H	-2634 / 0	-78.0	-78.0 0.52 (1)	3.85	C-Q	-170 / 19	0.09 (1)
H-I	-2634 / 0	-78.0	-78.0 0.52 (1)	3.85	R-C	-2936 / 0	0.85 (1)
I-J	0 / 21	-78.0	-78.0 0.43 (1)	10.00	I-L	-2936 / 0	0.85 (1)
J-K	0 / 28	-78.0	-78.0 0.14 (1)	10.00			
R-B	-332 / 0	0.0	0.0 0.03 (1)	7.81			
L-J	-332 / 0	0.0	0.0 0.03 (1)	7.81			
R-Q	0 / 2461	-18.5	-18.5 0.66 (4)	10.00			
Q-P	0 / 2212	-18.5	-18.5 0.64 (4)	10.00			
P-O	0 / 2212	-18.5	-18.5 0.64 (4)	10.00			
O-N	0 / 2212	-18.5	-18.5 0.64 (4)	10.00			
N-M	0 / 2212	-18.5	-18.5 0.64 (4)	10.00			
M-L	0 / 2461	-18.5	-18.5 0.66 (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.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.36")

CSI: TC=0.52/1.00 (C-E:1), BC=0.66/1.00 (L-M:4), WB=0.85/1.00 (I-L:1), SSI=0.21/1.00 (I-J: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.

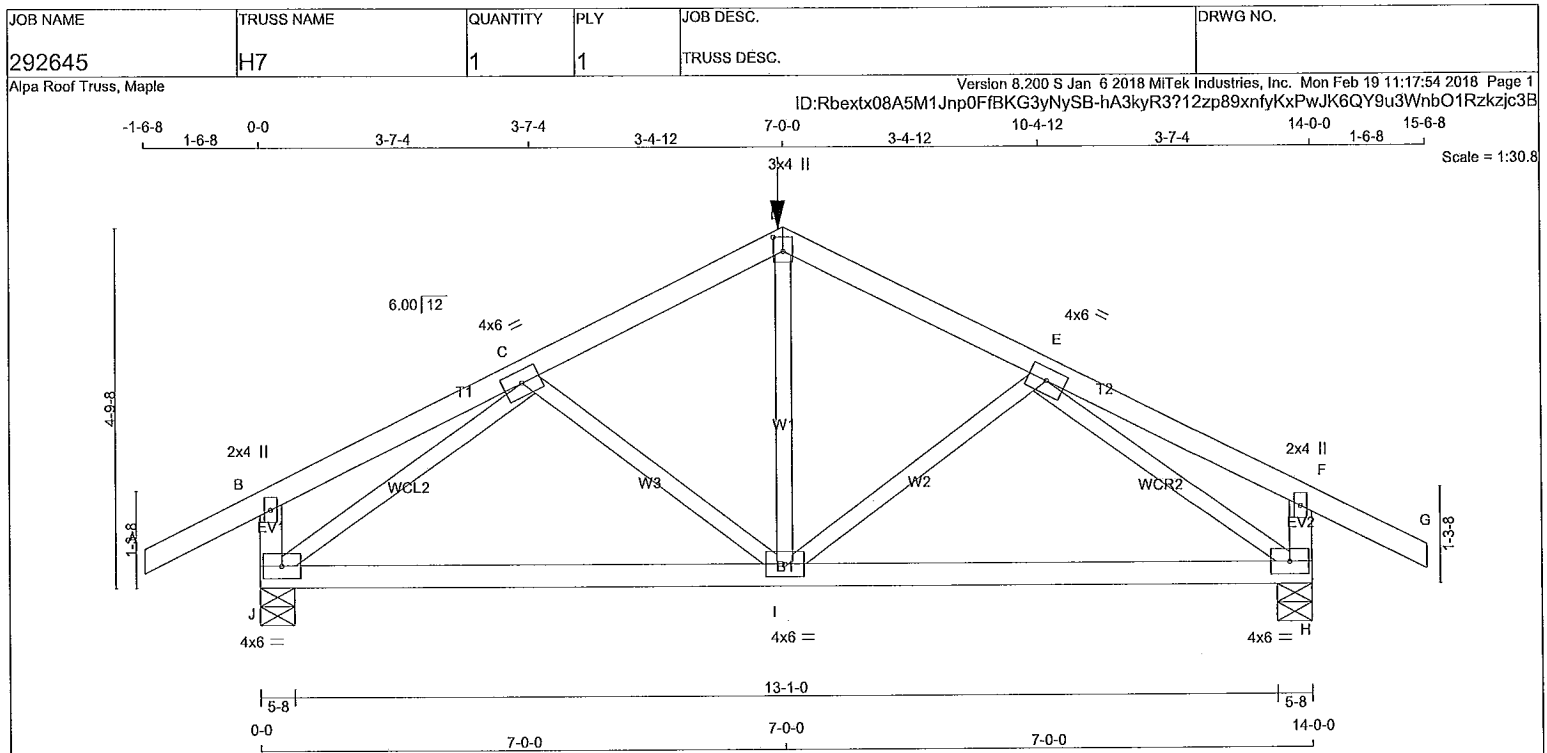
NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
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= 0.78 (P) (INPUT = 1.00)



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	6.0		
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMWW-t	MT20	4.0	6.0		
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-t	MT20	4.0	6.0		
I	BMWW-t	MT20	4.0	6.0		
J	BMVW1-t	MT20	4.0	6.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 795.9 lbs FACTORED DOWN AT 7'-0" ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
J	1324	0	0	5-8
H	1324	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX / MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
J	944	576 / 0	0 / 0	0 / 0	0 / 0	368 / 0	0 / 0
H	944	576 / 0	0 / 0	0 / 0	0 / 0	368 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.21 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MEMB.	FORCE (LBS)
FR-TO		FROM TO	LENGTH FR-TO	
A-B	0 / 28	-78.0 -78.0 0.16 (1)	10.00	I-D 0 / 282
B-C	0 / 12	-78.0 -78.0 0.14 (1)	10.00	I-E 0 / 59
C-D	-1457 / 0	-78.0 -78.0 0.18 (1)	5.21	C-I 0 / 59
D-E	-1457 / 0	-78.0 -78.0 0.18 (1)	5.21	J-C -1611 / 0
E-F	0 / 12	-78.0 -78.0 0.14 (1)	10.00	E-H -1611 / 0
F-G	0 / 28	-78.0 -78.0 0.16 (1)	10.00	
J-B	-235 / 0	0.0 0.0 0.03 (1)	7.81	
H-F	-235 / 0	0.0 0.0 0.03 (1)	7.81	
J-I	0 / 1271	-36.4 -36.4 0.68 (4)	10.00	
I-H	0 / 1271	-36.4 -36.4 0.68 (4)	10.00	

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
D	7'-0"	-796	-796	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 7'-0"
END SETBACK = 5'-10"
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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.18/1.00 (C-D:1), BC=0.68/1.00 (I-J:4), WB=0.54/1.00 (C-J:1), SS=0.23/1.00 (I-J:4)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

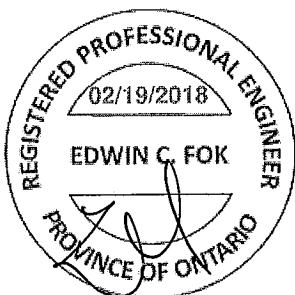
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

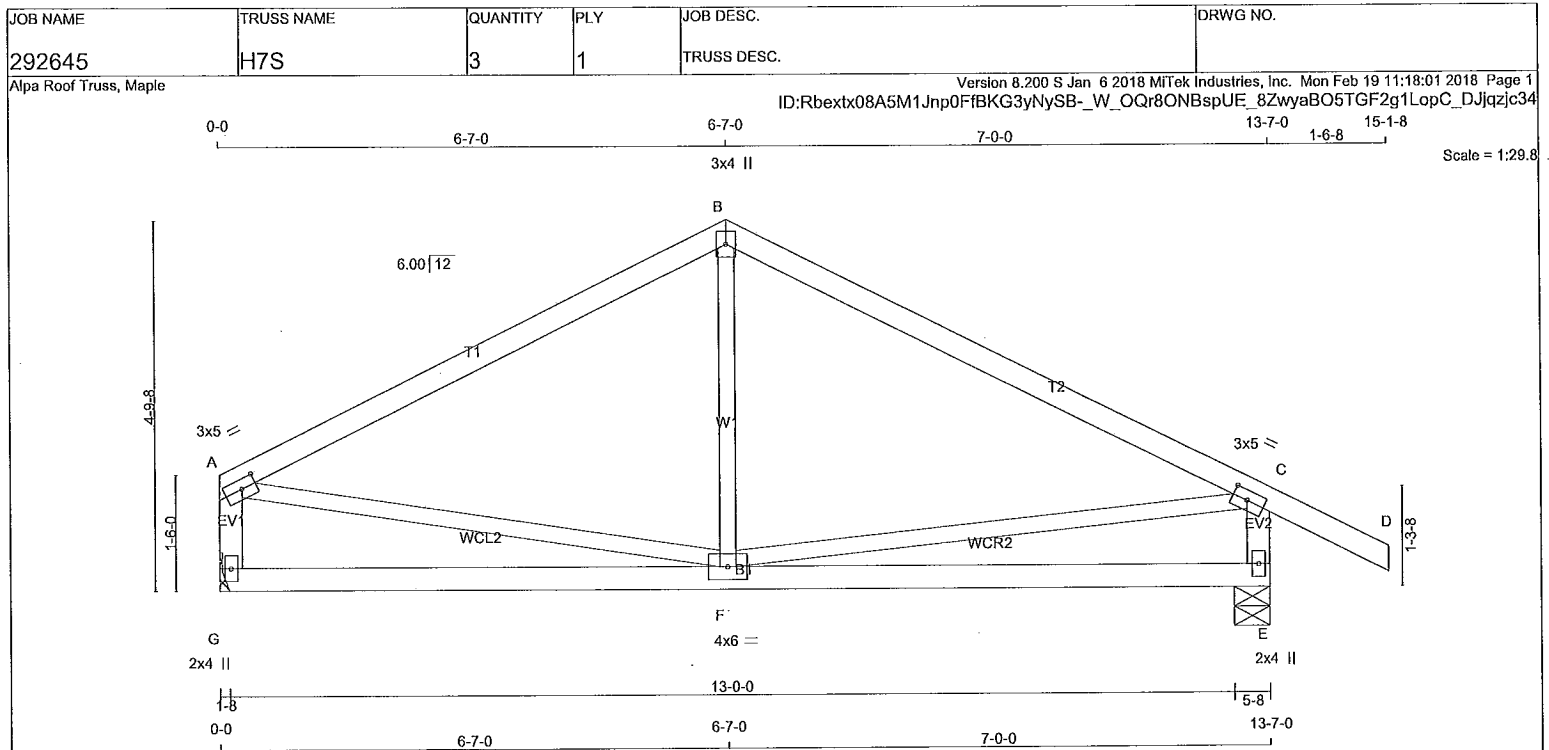
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (D) (INPUT = 0.90)
JSI METAL= 0.40 (E) (INPUT = 1.00)

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



A-18023919



TOTAL WEIGHT = 3 X 51 = 153 lb

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	SNOW	GROSS REACTION	LIVE	BRG	IN-SX	BRG	IN-SX
G	655	0	655	0	0	5-8	1-8	5-8	1-8
E	780	0	780	0	0	5-8	1-8	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
G	467	285 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
E	554	353 / 0	0 / 0	0 / 0	0 / 0	201 / 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED (LBS)
FR-TO		FROM	TO	FR-TO			
A-B	-579 / 0	-78.0	-78.0 0.44 (1)	6.25	F-B	-11 / 105	0.04 (4)
B-C	-579 / 0	-78.0	-78.0 0.33 (1)	6.25	A-F	0 / 527	0.12 (1)
C-D	0 / 28	-78.0	-78.0 0.09 (1)	10.00	F-C	0 / 523	0.12 (1)
G-A	-609 / 0	0.0	0.0 0.06 (1)	7.81			
E-C	-730 / 0	0.0	0.0 0.07 (1)	7.81			
G-F	0 / 0	-18.5	-18.5 0.24 (4)	10.00			
F-E	0 / 0	-18.5	-18.5 0.24 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.44/1.00 (A-B:1), BC=0.24/1.00 (F-G:4), WB=0.12/1.00 (A-F:1), SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

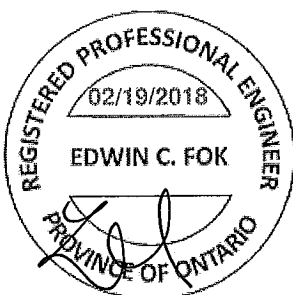
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

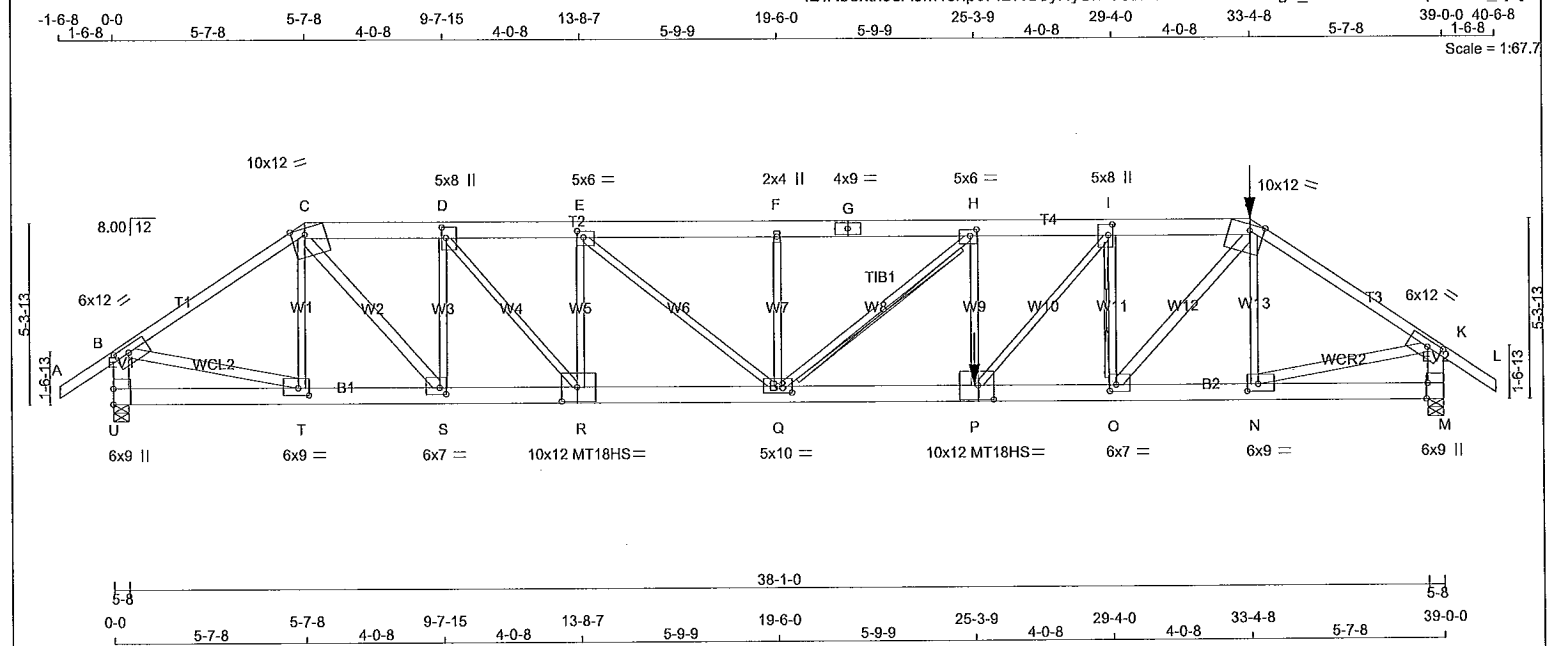
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.71 (F) (INPUT = 0.90)
JSI METAL = 0.23 (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-18023920

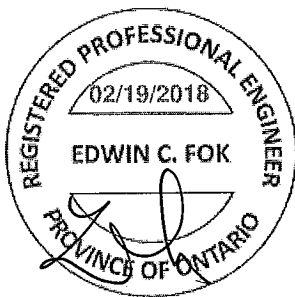


<u>LUMBER</u>				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - G	2x6	DRY	No.2	SPF
G - J	2x6	DRY	No.2	SPF
J - L	2x4	DRY	2100F 1.8E	SPF
U - B	2x6	DRY	No.2	SPF
M - K	2x6	DRY	No.2	SPF
U - R	2x6	DRY	1650F 1.5E	SPF
R - P	2x6	DRY	1650F 1.5E	SPF
P - M	2x6	DRY	1650F 1.5E	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
C - S	2x4	DRY	No.2	SPF
O - J	2x4	DRY	No.2	SPF
B - T	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWW-t	MT20	6.0	12.0	2.25	5.00
C	TTVWW-m	MT20	10.0	12.0	Edge	4.75
D	TMWW-t	MT20	5.0	8.0	3.75	1.50
E	TMWW-t	MT20	5.0	6.0	2.25	2.25
F	TMWW-w	MT20	2.0	4.0		
G	TS-t	MT20	4.0	9.0		
H	TMWW-t	MT20	5.0	6.0	2.25	2.25
I	TMWW-t	MT20	5.0	8.0	3.75	1.50
J	TTVWW-m	MT20	10.0	12.0	Edge	4.75
K	TMWW-t	MT20	6.0	12.0	2.25	5.00
M	BMV1-t	MT20	6.0	9.0	Edge	0.50
N	BMWW-t	MT20	6.0	9.0	2.50	3.75
O	BMWW-t	MT20	6.0	7.0	2.25	2.25
P	BSWW-t	MT18HS	10.0	12.0	5.00	5.00
Q	BMWWWW-t	MT20	5.0	10.0	2.25	5.00
R	BSWW-t	MT18HS	10.0	12.0	5.00	5.00
S	BMWW-t	MT20	6.0	7.0	2.25	2.25
T	BMWW-t	MT20	6.0	9.0	2.50	3.75
U	BMV1-t	MT20	6.0	9.0	5.50	

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT	REQRD
GROSS REACTION		GROSS REACTION				BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
	3290	0	3290	0	0	5-8	5-3
M	4926	0	4926	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2343	1446 / 0	0 / 0	0 / 0	0 / 0	896 / 0	0 / 0
M	3513	2142 / 0	0 / 0	0 / 0	0 / 0	1370 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.05 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT H-Q, I-O

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (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 / 35	-78.0	-78.0	0.10 (1)	10.00	T-C	-605 / 0	0.24 (1)	
B-C	-3981 / 0	-78.0	-78.0	0.52 (1)	3.91	C-S	0 / 3220	0.57 (1)	
C-D	-5385 / 0	-78.0	-78.0	0.29 (1)	3.58	S-D	-2403 / 0	0.91 (1)	
D-E	-7075 / 0	-78.0	-78.0	0.41 (1)	3.05	D-R	0 / 2645	0.65 (1)	
E-F	-8943 / 0	-78.0	-78.0	0.76 (1)	2.42	R-E	-1937 / 0	0.73 (1)	
F-G	-8943 / 0	-78.0	-78.0	0.78 (1)	2.39	E-Q	0 / 2437	0.60 (1)	
G-H	-8943 / 0	-78.0	-78.0	0.78 (1)	2.39	Q-F	-490 / 0	0.19 (1)	
H-I	-10122 / 0	-163.2	-163.2	0.89 (1)	2.05	Q-H	-1539 / 0	0.66 (1)	
I-J	-8026 / 0	-163.2	-163.2	0.64 (1)	2.62	P-H	0 / 492	0.12 (1)	
J-K	-6162 / 0	-78.0	-78.0	0.78 (1)	3.08	P-I	0 / 3279	0.81 (1)	
K-L	0 / 35	-78.0	-78.0	0.10 (1)	10.00	O-I	-3313 / 0	0.72 (1)	
U-B	-3243 / 0	0.0	0.0	0.24 (1)	5.84	O-J	0 / 4502	0.80 (1)	
M-K	-4830 / 0	0.0	0.0	0.35 (1)	4.85	N-J	-878 / 0	0.35 (1)	
						B-T	0 / 3393	0.60 (1)	
						N-K	0 / 5252	0.93 (1)	
U-T	0 / 0	-18.5	-18.5	0.05 (4)	10.00				
T-S	0 / 3333	-18.5	-18.5	0.28 (1)	10.00				
S-R	0 / 5384	-18.5	-18.5	0.45 (1)	10.00				
R-Q	0 / 7075	-18.5	-18.5	0.63 (1)	10.00				
Q-P	0 / 10122	-18.5	-18.5	0.88 (1)	10.00				
P-O	0 / 8026	-38.7	-38.7	0.69 (1)	10.00				
O-N	0 / 5157	-38.7	-38.7	0.45 (1)	10.00				
N-M	0 / 0	-38.7	-38.7	0.09 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
J	33-4-8	-356	-356	—	FRONT	VERT	TOTAL
P	25-3-8	-2878	-2878	—	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: CPrimeHlp
SIDE SETBACK = 5-7-8
END SETBACK = 6-4-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'TL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 13-10-0 OF SPAN
MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADD'T'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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.39")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/ 616 (0.76")

CSI: TC=0.89/1.00 (H-I:1), BC=0.88/1.00 (P-Q:1),
WR=0.93/1.00 (K-N:1), SS=0.25/1.00 (L-J:1)

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

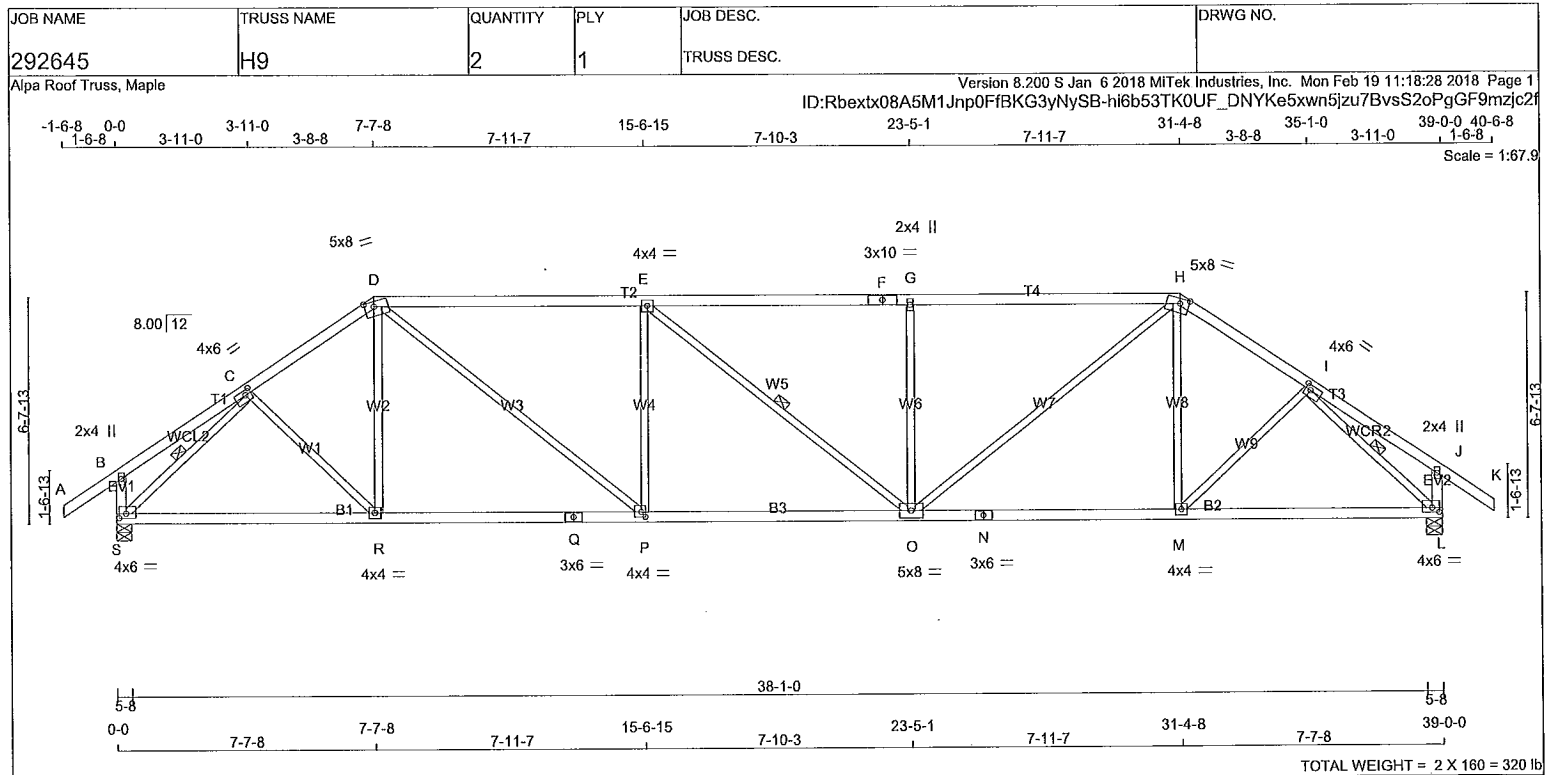
COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

A-18023921

CONTINUED ON PAGE 2



LUMBER
N. L. G. A. RULES

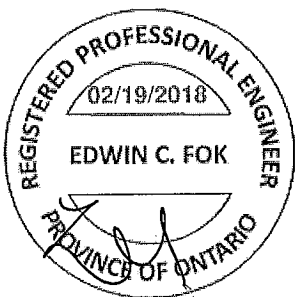
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY 1650F 1.5E	SPF
F - H	2x4	DRY 1650F 1.5E	SPF
H - K	2x4	DRY No.2	SPF
S - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
S - Q	2x4	DRY No.2	SPF
Q - N	2x4	DRY No.2	SPF
N - L	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	6.0	1.75	2.00
D	TTWW-m	MT20	5.0	8.0	1.75	3.25
E	TMWW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	10.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW-m	MT20	5.0	8.0	1.75	3.25
I	TMWW-t	MT20	4.0	6.0	1.75	2.00
J	TMV+p	MT20	2.0	4.0		
L	BMVW1-t	MT20	4.0	6.0	1.50	2.50
M	BMWW-t	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMWWW-t	MT20	5.0	8.0		
P	BMWW-t	MT20	4.0	4.0	1.75	1.50
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	4.0	4.0		
S	BMVW1-t	MT20	4.0	6.0	1.50	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 BRG
	VERT	HORZ	DOWN	HORZ UPLIFT		
S	2008	0	2008	0	5-8	2-3
L	2008	0	2008	0	5-8	2-3

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1429	887 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
L	1429	887 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-O, C-S, I-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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)
FR-TO					FR-TO		
A-B	0 / 35	-78.0	-78.0 0.15 (1)	10.00	C-R	0 / 168	0.04 (4)
B-C	0 / 17	-78.0	-78.0 0.16 (1)	10.00	R-D	0 / 103	0.04 (4)
C-D	-2228 / 0	-78.0	-78.0 0.24 (1)	4.37	D-P	0 / 1301	0.29 (1)
D-E	-2855 / 0	-78.0	-78.0 0.86 (1)	3.83	P-E	-670 / 0	0.49 (1)
E-F	-2854 / 0	-78.0	-78.0 0.85 (1)	3.83	E-O	0 / 0	0.00 (1)
F-G	-2854 / 0	-78.0	-78.0 0.85 (1)	3.83	O-G	-670 / 0	0.49 (1)
G-H	-2854 / 0	-78.0	-78.0 0.86 (1)	3.85	O-H	0 / 1300	0.29 (1)
H-I	-2229 / 0	-78.0	-78.0 0.24 (1)	4.37	M-H	0 / 103	0.04 (4)
I-J	0 / 17	-78.0	-78.0 0.16 (1)	10.00	M-I	0 / 168	0.04 (4)
J-K	0 / 35	-78.0	-78.0 0.15 (1)	10.00	S-C	-2420 / 0	0.53 (1)
S-B	-244 / 0	0.0	0.0 0.03 (1)	7.81	I-L	-2420 / 0	0.53 (1)
L-J	-244 / 0	0.0	0.0 0.03 (1)	7.81			
S-R	0 / 1716	-18.5	-18.5 0.43 (4)	10.00			
R-Q	0 / 1838	-18.5	-18.5 0.45 (4)	10.00			
Q-P	0 / 1838	-18.5	-18.5 0.45 (4)	10.00			
P-O	0 / 2855	-18.5	-18.5 0.57 (1)	10.00			
O-N	0 / 1838	-18.5	-18.5 0.45 (4)	10.00			
N-M	0 / 1838	-18.5	-18.5 0.45 (4)	10.00			
M-L	0 / 1716	-18.5	-18.5 0.43 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.35")

CSI: TC=0.86/1.00 (D-E:1), BC=0.57/1.00 (O-P:1), WB=0.53/1.00 (I-L:1), SSI=0.29/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

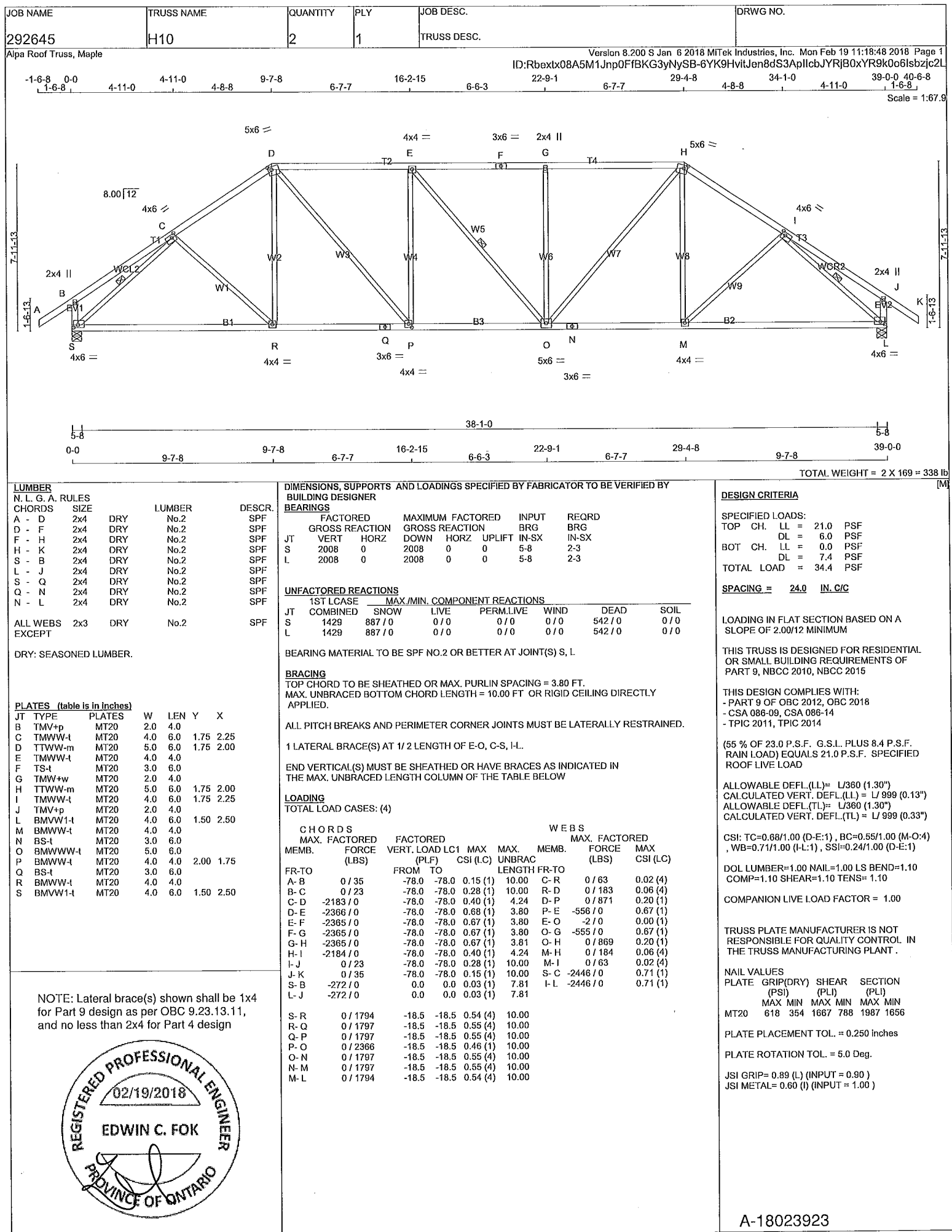
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

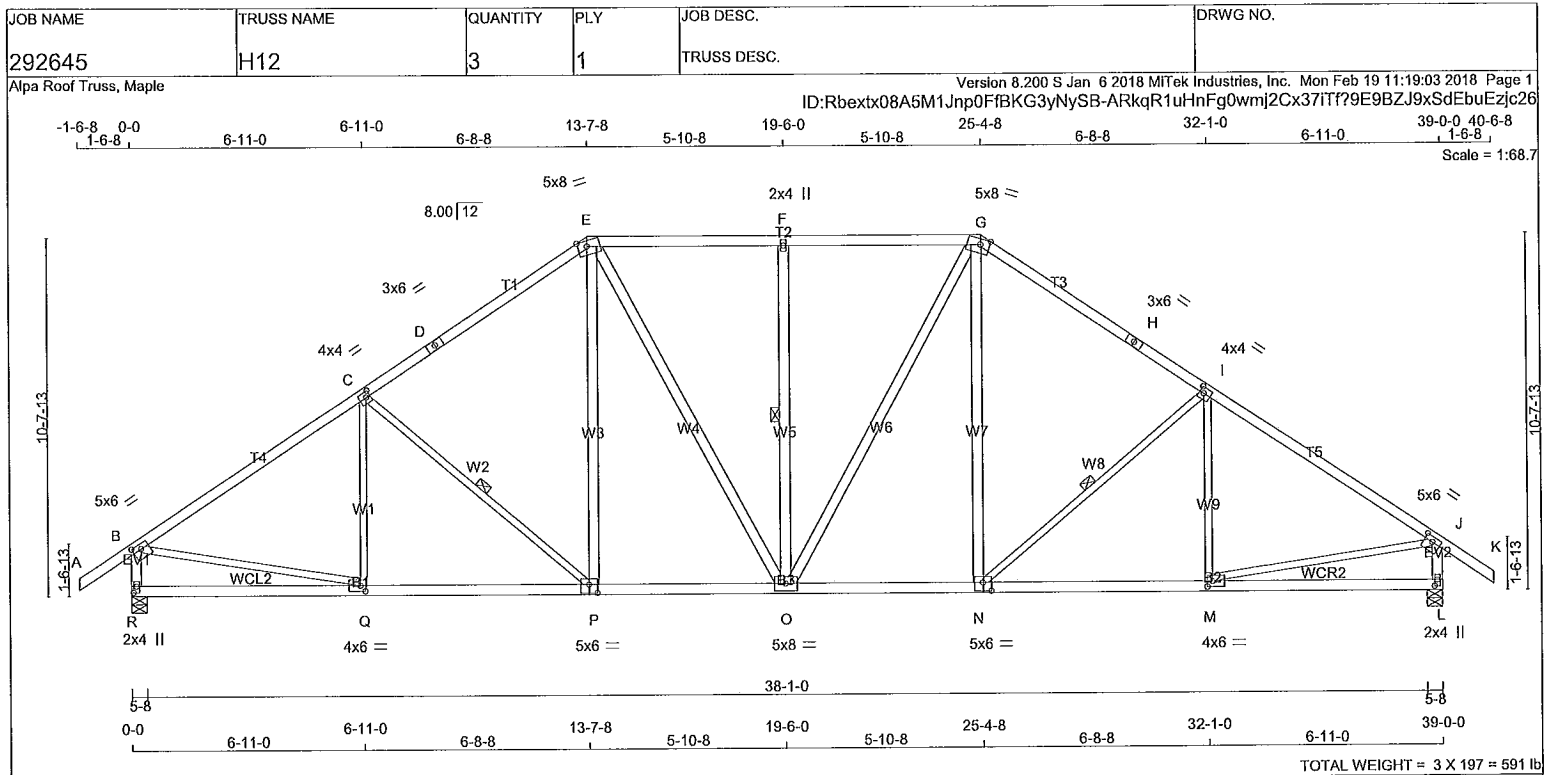
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)
JSI METAL= 0.60 (I) (INPUT = 1.00)

A-18023922



A-18023924 CONTINUED ON PAGE 2



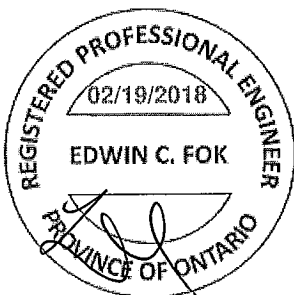
LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
H - K	2x4	DRY	No.2	SPF	
R - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
R - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
C	TMWW-t	MT20	4.0	4.0	2.00	1.50
D	TS-t	MT20	3.0	6.0		
E	TTWW-m	MT20	5.0	8.0	2.00	3.25
F	TMW-w	MT20	2.0	4.0		
G	TTWW-m	MT20	5.0	8.0	2.00	3.25
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	4.0	4.0	2.00	1.50
J	TMVW-t	MT20	5.0	6.0	1.75	3.00
L	BMV1+p	MT20	2.0	4.0	2.25	1.00
M	BMWW-t	MT20	4.0	6.0	2.00	1.75
N	BSWW-t	MT20	5.0	6.0	3.00	3.00
O	BMWW-t	MT20	5.0	8.0		
P	BSWW-t	MT20	5.0	6.0	3.00	3.00
Q	BMWW-t	MT20	4.0	6.0	2.00	1.75
R	BMV1+p	MT20	2.0	4.0	2.25	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



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	
R	2008	0	2008	0	0	5-8	3-0	3-0	
L	2008	0	2008	0	0	5-8	3-0	3-0	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
R	1429	887 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0		
L	1429	887 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.91 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 LATERAL BRACE(S) AT 1/2 LENGTH OF C-P, F-O, I-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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (L/C)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (L/C)	LC1 MAX (L/C)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 35	-78.0	-78.0 0.15 (1)	10.00	Q-C	-191 / 42	0.12 (1)
B-C	-2270 / 0	-78.0	-78.0 0.68 (1)	3.91	C-P	-409 / 0	0.23 (1)
C-D	-1970 / 0	-78.0	-78.0 0.60 (1)	4.19	P-E	0 / 356	0.06 (1)
D-E	-1970 / 0	-78.0	-78.0 0.60 (1)	4.19	E-O	0 / 397	0.06 (1)
E-F	-1809 / 0	-78.0	-78.0 0.40 (1)	4.57	O-F	-560 / 0	0.32 (1)
F-G	-1809 / 0	-78.0	-78.0 0.40 (1)	4.57	O-G	0 / 397	0.06 (1)
G-H	-1970 / 0	-78.0	-78.0 0.60 (1)	4.19	N-G	0 / 356	0.06 (1)
H-I	-1970 / 0	-78.0	-78.0 0.60 (1)	4.19	N-I	-409 / 0	0.23 (1)
I-J	-2270 / 0	-78.0	-78.0 0.66 (1)	3.91	M-I	-191 / 42	0.12 (1)
J-K	0 / 35	-78.0	-78.0 0.15 (1)	10.00	B-Q	0 / 1950	0.44 (1)
R-B	-1957 / 0	0.0	0.0 0.21 (1)	6.02	M-J	0 / 1950	0.44 (1)
L-J	-1957 / 0	0.0	0.0 0.21 (1)	6.02			
R-Q	0 / 0	-18.5	-18.5 0.24 (4)	10.00			
Q-P	0 / 1919	-18.5	-18.5 0.44 (1)	10.00			
P-O	0 / 1613	-18.5	-18.5 0.36 (1)	10.00			
O-N	0 / 1613	-18.5	-18.5 0.36 (1)	10.00			
N-M	0 / 1919	-18.5	-18.5 0.44 (1)	10.00			
M-L	0 / 0	-18.5	-18.5 0.24 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.66/1.00 (I-J:1), BC=0.44/1.00 (M-N:1), WB=0.44/1.00 (J-M:1), SSI=0.22/1.00 (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.

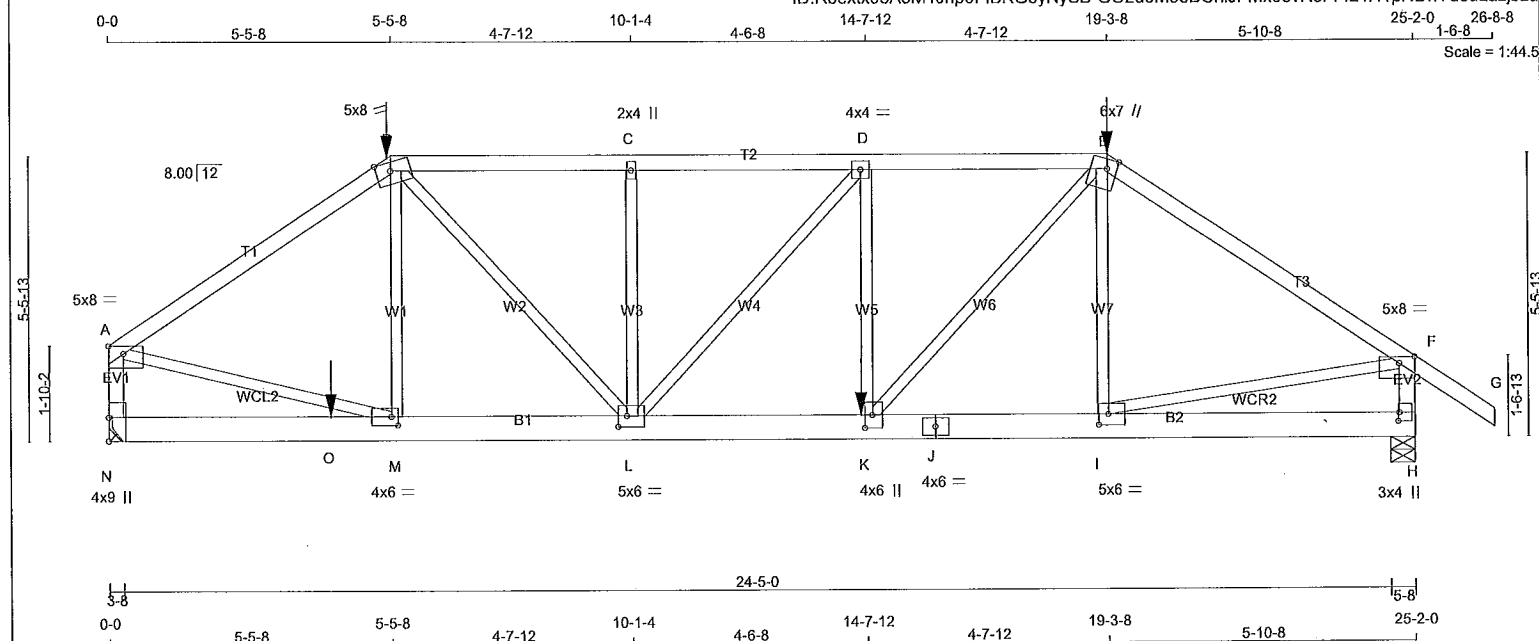
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (Q) (INPUT = 0.90)
JSI METAL= 0.62 (J) (INPUT = 1.00)

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 11:23:33 2018 Page 1
ID: Rhexrtx08A5M1.Jnn0FfBKg3vNvSR-GQ2u6M9eBCbLJFMx0evRePr4z4H1pNDhYdeuLazjibzu



TOTAL WEIGHT = 121 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
B - E	2x4	DRY No.2	SPF
E - G	2x4	DRY No.2	SPF
N - A	2x4	DRY No.2	SPF
H - F	2x4	DRY No.2	SPF
N - J	2x6	DRY No.2	SPF
J - H	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	5.0	8.0	1.75	Edge
B	TTVVW-m	MT20	5.0	8.0	2.00	3.25
C	TMVW-w	MT20	2.0	4.0		
D	TMVW-t	MT20	4.0	4.0		
E	TTVVW+m	MT20	6.0	7.0	2.25	2.25
F	TMVW-p	MT20	5.0	8.0	1.50	3.50
H	BMV1+p	MT20	3.0	4.0	2.00	0.25
I	BMVW-t	MT20	5.0	6.0	2.50	2.25
J	BS-t	MT20	4.0	6.0		
K	BMVW+t	MT20	4.0	6.0	3.00	1.75
L	BMVWWW-t	MT20	5.0	6.0	2.50	2.00
M	BMVW-t	MT20	4.0	6.0	2.00	1.50
N	BMV1+t	MT20	4.0	9.0	5.50	

Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD

[illegible]

HANGERS NOTES

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



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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
N	2435	0	2435	0	0	IN-SX HANGER BY OTHERS
H	2562	0	2562	0	0	MIN. SEAT SIZE: 3-8 4-13

UNFACTORED REACTION:

1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
N	1737	1055/0	0/0	0/0	0/0	682/0
U	1227	1116/0	0/0	0/0	0/0	711/0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.05 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

ALL INTERIOR CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	-2682 / 0	-78.0	-78.0 0.72 (1)	3.52	M-B	0 / 158	0.06 (4)
B-C	-2950 / 0	-78.0	-78.0 0.39 (1)	3.67	B-L	0 / 1067	0.26 (1)
C-D	-2950 / 0	-78.0	-78.0 0.56 (1)	3.43	L-C	-347 / 0	0.15 (1)
D-E	-3357 / 0	-153.5	-153.5 0.69 (1)	3.05	L-D	-612 / 0	0.52 (1)
E-F	-2943 / 0	-78.0	-78.0 0.92 (1)	3.19	K-D	-148 / 45	0.06 (1)
F-G	0 / 35	-78.0	-78.0 0.16 (1)	10.00	K-E	0 / 1360	0.34 (1)
N-A	-2282 / 0	0.0	0.0 0.27 (1)	5.58	I-E	-244 / 74	0.11 (1)
H-F	-2468 / 0	0.0	0.0 0.28 (1)	5.39	A-M	0 / 2302	0.57 (1)
					I-F	0 / 2492	0.62 (1)
N-O	0 / 0	-29.5	-29.5 0.28 (1)	10.00			
O-M	0 / 0	-29.5	-29.5 0.28 (1)	10.00			
M-L	0 / 2231	-18.5	-18.5 0.52 (1)	10.00			
L-K	0 / 3357	-18.5	-18.5 0.52 (1)	10.00			
K-J	0 / 2441	-36.4	-36.4 0.38 (1)	10.00			
J-I	0 / 2441	-36.4	-36.4 0.38 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	5-5-8	-204	-204	—	FRONT	VERT	TOTAL
E	19-3-8	-334	-334	—	FRONT	VERT	TOTAL
K	14-6-6	-745	-745	—	FRONT	VERT	TOTAL
O	4-3-8	-560	-560	—	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	=	24.4	PSF

SPACING = $\frac{24.0}{\text{IN. C/C}}$

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 5-5-8
RIGHT 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
- ADDTL. LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 10-8-0 OF SPAN
MEASURED FROM THE RIGHT.

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 5-5-8
RIGHT SETBACK = 5-10-8
END SETBACK = 4-4-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL.
APPLIED TO FRONT SIDE
- ADJUST. LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 5-5-8 OF SPAN
MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADD'L USER-DEFINED LOADS APPLIED TO
MEMBER 21252

THIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF

PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

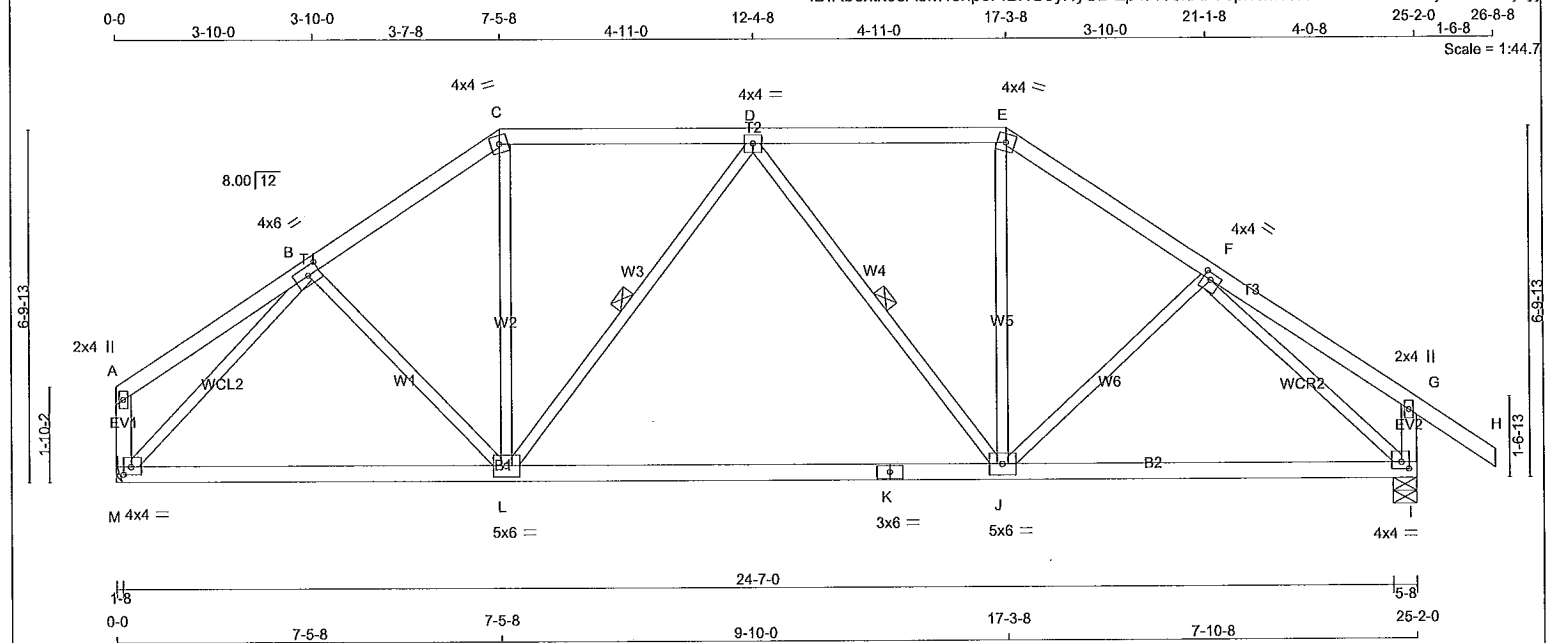
- PART 9 OF OBC 2012, OBC 2018
- CSA 086-09, CSA 086-14

(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 (0.84")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.84")

CS1: TC=0.92/1.00 (E-F:1), BC=0.52/1.00 (L-M:1),
WB=0.62/1.00 (F-I:1), SS1=0.38/1.00 (M-N:1)

A-18023926 CONTINUED ON PAGE



TOTAL WEIGHT = 106 lb

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

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
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DRY: SEASONED LUMBER.

PLATES (table is in inches)		W	LEN	Y	X
JT	TMV	PLATES			
A	TMV+p	MT20	2.0	4.0	
B	TMVWV-t	MT20	4.0	6.0	2.00 2.75
C	TTW-m	MT20	4.0	4.0	
D	TMVWV-t	MT20	4.0	4.0	
E	TTW-m	MT20	4.0	4.0	
F	TMVWV-t	MT20	4.0	4.0	1.50 1.75
G	TMV+p	MT20	2.0	4.0	
I	BMVWV-1-t	MT20	4.0	4.0	1.50 1.75
J	BMVWVWV-t	MT20	5.0	6.0	
K	BS-t	MT20	3.0	6.0	
L	BMVWVWV-1-t	MT20	5.0	6.0	
M	BMVWV-1-t	MT20	4.0	4.0	1.75 1.75

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



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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
M	1214	0	1214	0	0	HANGER BY OTHERS	
I	1340	0	1340	0	0	MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
M	865	528 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0
I	953	596 / 0	0 / 0	0 / 0	0 / 0	357 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 18	-78.0	-78.0 0.16 (1)	10.00	B-L	0 / 60	0.02 (4)
B-C	-1219 / 0	-78.0	-78.0 0.14 (1)	5.66	L-C	0 / 406	0.09 (1)
C-D	-1004 / 0	-78.0	-78.0 0.25 (1)	5.94	L-D	-317 / 0	0.14 (1)
D-E	-1035 / 0	-78.0	-78.0 0.25 (1)	5.87	D-J	-285 / 0	0.12 (1)
E-F	-1257 / 0	-78.0	-78.0 0.16 (1)	5.58	J-E	0 / 420	0.09 (1)
F-G	0 / 19	-78.0	-78.0 0.18 (1)	10.00	J-F	-37 / 37	0.02 (1)
G-H	0 / 35	-78.0	-78.0 0.15 (1)	10.00	M-B	-1430 / 0	0.69 (1)
M-A	-114 / 0	0.0	0.0 0.01 (1)	7.81	F-I	-1480 / 0	0.73 (1)
I-G	-246 / 0	0.0	0.0 0.03 (1)	7.81			
M-L	0 / 974	-18.5	-18.5 0.41 (4)	10.00			
L-K	0 / 1192	-18.5	-18.5 0.45 (4)	10.00			
K-J	0 / 1192	-18.5	-18.5 0.45 (4)	10.00			
J-I	0 / 1055	-18.5	-18.5 0.43 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.84")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.84")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.25/1.00 (D-E:1) , BC=0.45/1.00 (J-L:4) ,
WB=0.73/1.00 (F-I:1) , SSI=0.19/1.00 (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

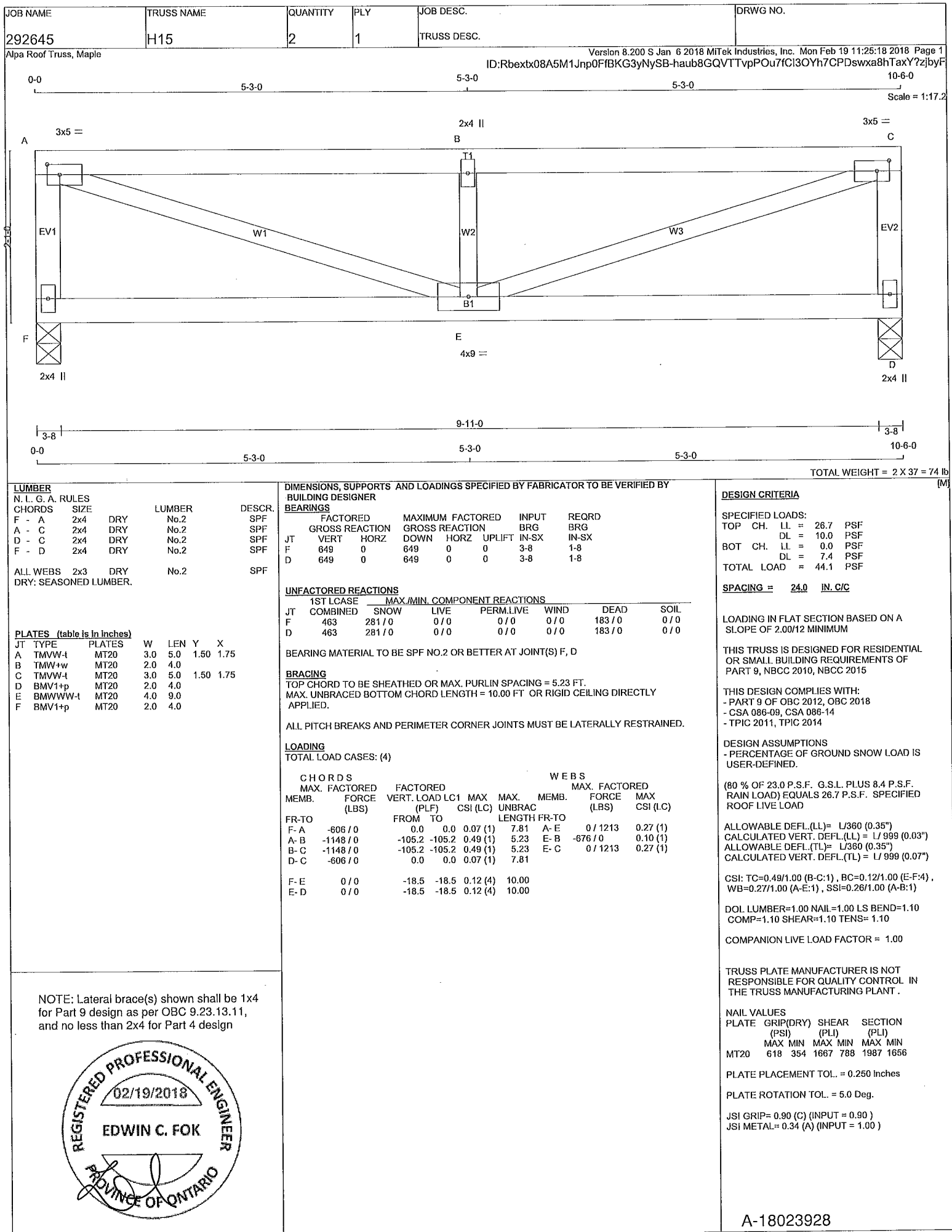
PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	788	1987	1656

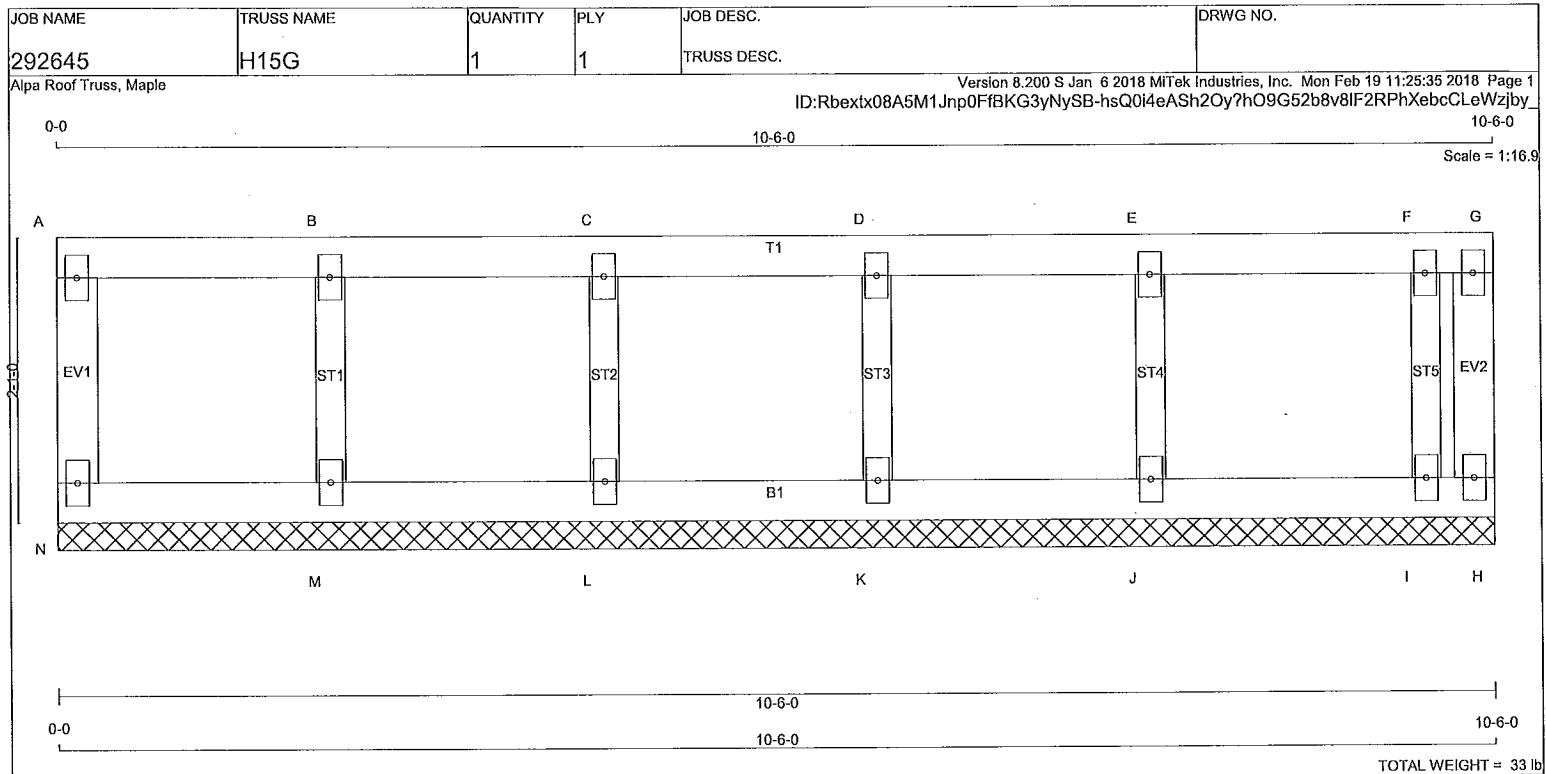
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (M) (INPUT = 0.90)
JSI METAL= 0.54 (F) (INPUT = 1.00)

A-18023927





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

ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMV+p	MT20	2.0	4.0
B, C, D, E, F	TMV+w	MT20	2.0	4.0
G	TMV+p	MT20	2.0	4.0
H	BMV1+p	MT20	2.0	4.0
I, J, K, L, M	BMV1+w	MT20	2.0	4.0
N	BMV1+p	MT20	2.0	4.0

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRACED LENGTH (FR-TO)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
N-A	-94 / 0	0.0 0.0	0.02 (1)	7.81	M-B	-224 / 0	0.03 (1)
A-B	-11 / 0	-105.2 -105.2	0.05 (1)	6.25	L-C	-208 / 0	0.03 (1)
B-C	-11 / 0	-105.2 -105.2	0.05 (1)	6.25	K-D	-209 / 0	0.03 (1)
C-D	-11 / 0	-105.2 -105.2	0.05 (1)	6.25	J-E	-220 / 0	0.03 (1)
D-E	-11 / 0	-105.2 -105.2	0.05 (1)	6.25	I-F	-142 / 0	0.02 (1)
E-F	-11 / 0	-105.2 -105.2	0.05 (1)	6.25			
F-G	-11 / 0	-105.2 -105.2	0.03 (1)	6.25			
H-G	-7 / 0	0.0 0.0	0.02 (1)	10.00			
N-M	0 / 11	-18.5 -18.5	0.02 (4)	10.00			
M-L	0 / 11	-18.5 -18.5	0.02 (4)	10.00			
L-K	0 / 11	-18.5 -18.5	0.02 (4)	10.00			
K-J	0 / 11	-18.5 -18.5	0.02 (4)	10.00			
J-I	0 / 11	-18.5 -18.5	0.02 (4)	10.00			
I-H	0 / 11	-18.5 -18.5	0.01 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	26.7	PSF
	DL	=	10.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.4	PSF
TOTAL LOAD	=	44.1	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

- PERCENTAGE OF GROUND SNOW LOAD IS USER-DEFINED.

(80 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 26.7 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.05/1.00 (A-B:1), BC=0.02/1.00 (M-N:4), WB=0.03/1.00 (B-M:1), SSI=0.09/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

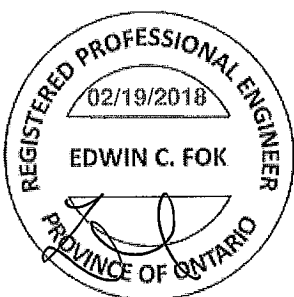
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	
MT20	618 354	1667 788	1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

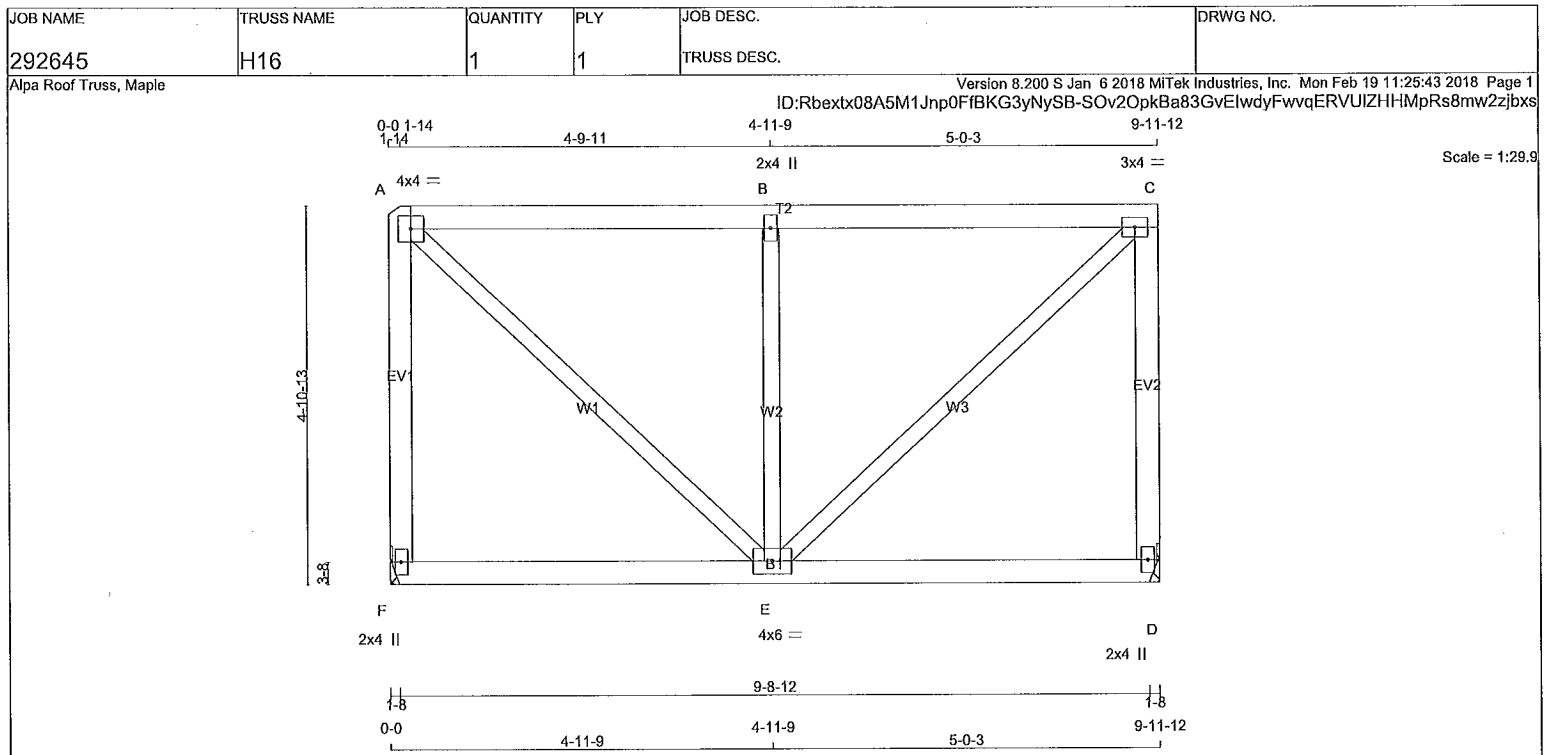
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (M) (INPUT = 0.90)
JSI METAL= 0.05 (M) (INPUT = 1.00)

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



A-18023929



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMW-I	MT20	4.0	4.0
B	TMW-w	MT20	2.0	4.0
C	TMW-I	MT20	3.0	4.0
D	BMV1+p	MT20	2.0	4.0
E	BMVWW-I	MT20	4.0	6.0
F	BMV1+p	MT20	2.0	4.0

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
D	481	0	481	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
F	481	0	481	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
D	343	209 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0
F	343	209 / 0	0 / 0	0 / 0	0 / 0	134 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
A-B	-322 / 0	-78.0	-78.0 0.32 (1)	A-E	0 / 439
B-C	-322 / 0	-78.0	-78.0 0.32 (1)	E-B	-483 / 0
D-C	-445 / 0	0.0	0.0 0.18 (1)	E-C	0 / 437
F-A	-445 / 0	0.0	0.0 0.21 (1)		
F-E	0 / 0	-18.5	-18.5 0.13 (4)		
E-D	0 / 0	-18.5	-18.5 0.13 (4)		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.33")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL)= L/999 (0.02")

CSI: TC=0.32/1.00 (B-C:1), BC=0.13/1.00 (E-F:4), WB=0.17/1.00 (B-E:1), SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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

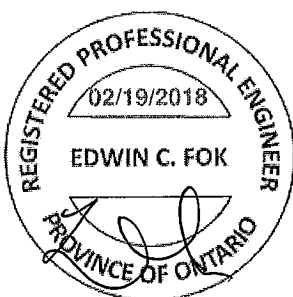
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (C) (INPUT = 0.90)
JSI METAL= 0.20 (A) (INPUT = 1.00)

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



A-18023930

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292646	H1T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-ZI5pNanNQzI7eBUhS2fKEZC7c?rbXODwREKLAhzjbmA

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
T	BBW-m	MT20	7.0	12.0	Edge	8.00
U	BMWW-t	MT20	5.0	8.0		
V	BS-t	MT18HS	5.0	12.0		
W	BMWW-t	MT20	5.0	6.0	2.25	1.75
X	BMWW-t	MT20	4.0	4.0		
Y	BMWW-t	MT20	6.0	9.0	2.75	4.00
Z	BMV1+p	MT20	3.0	5.0	2.75	1.50

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) 476.7 lbs FACTORED DOWN AT 8-4-10
ON TOP CHORD, AND 963.6 lbs FACTORED
DOWN AT 25-3-8 ON BOTTOM CHORD. DESIGN
FOR UNSPECIFIED CONNECTION(S) IS
DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES

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

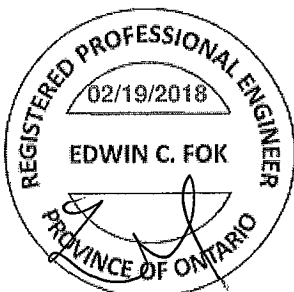
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

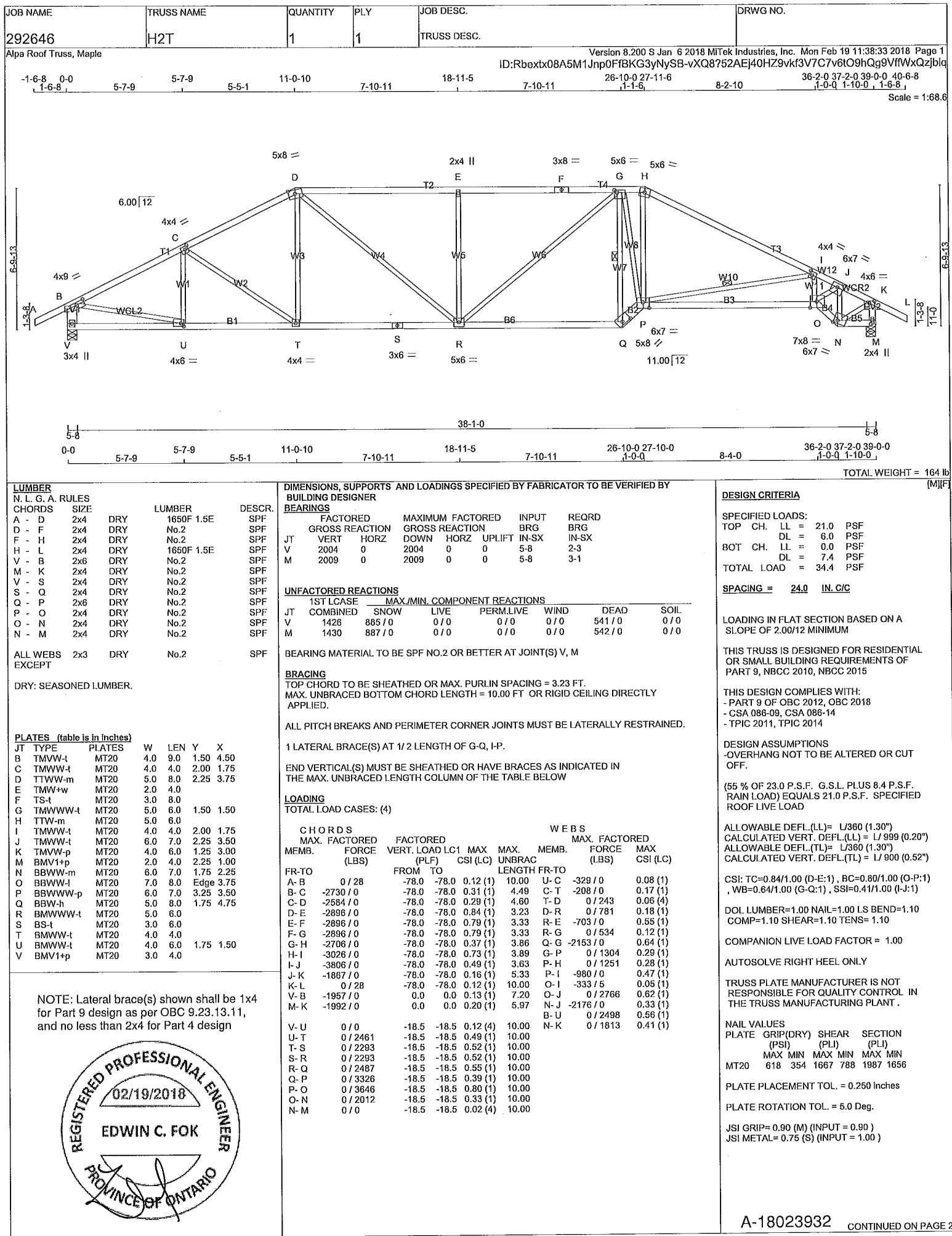
JSI GRIP = 0.90 (H) (INPUT = 0.90)

JSI METAL = 0.94 (T) (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-18023931(2)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
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292646

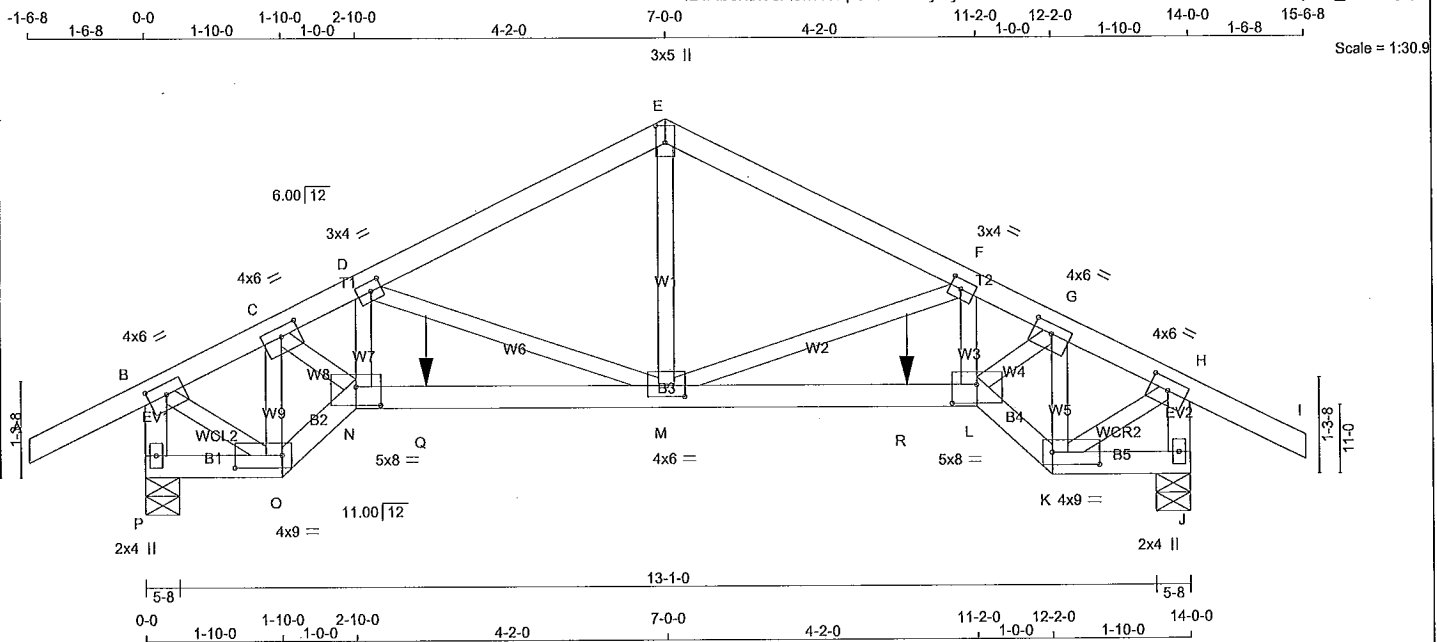
H7T

1

1

TRUSS DESC.

Alpa Roof Truss, Maple

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ID:Rbextx08A5M1Jnp0FfBKG3yNySB-37klwWSHCco5I6YRZHFcwQAaDiJUVpFC_nOabzjbp6

TOTAL WEIGHT = 60 lb

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

ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-I	MT20	4.0	6.0	1.75	3.00
C TMVW-I	MT20	4.0	6.0	1.50	3.00
D TMVW-I	MT20	3.0	4.0	1.50	1.75
E TTW+p	MT20	3.0	5.0	2.75	1.50
F TMVW-I	MT20	3.0	4.0	1.50	1.75
G TMVW-I	MT20	4.0	6.0	1.50	3.00
H TMVW-I	MT20	4.0	6.0	1.75	3.00
J BMV1+p	MT20	2.0	4.0		
K BBWW-I	MT20	4.0	9.0	2.00	7.50
L BBWW-I	MT20	5.0	8.0	3.00	4.00
M BBWW-I	MT20	4.0	6.0	1.75	3.00
N BBWW-I	MT20	5.0	8.0	3.00	4.00
O BBWW-I	MT20	4.0	9.0	2.00	7.50
P BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 346.4 lbs FACTORED DOWN AT 3-9-4, AND 346.4 lbs FACTORED DOWN AT 10-2-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UP/LIFT
P	1368	0	1368	0
J	1368	0	1368	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	973	608 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0
J	973	608 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO						FR-TO			
A-B	0 / 28	-78.0	-78.0	0.16 (1)	10.00	M-E	0 / 1148	0.28 (1)	
B-C	-1203 / 0	-78.0	-78.0	0.17 (1)	5.60	M-F	-732 / 0	0.24 (1)	
C-D	-2321 / 0	-78.0	-78.0	0.19 (1)	4.28	L-F	0 / 259	0.06 (1)	
D-E	-1601 / 0	-78.0	-78.0	0.23 (1)	4.96	L-G	0 / 1512	0.37 (1)	
E-F	-1601 / 0	-78.0	-78.0	0.23 (1)	4.96	K-G	-1395 / 0	0.23 (1)	
F-G	-2321 / 0	-78.0	-78.0	0.19 (1)	4.28	D-M	-732 / 0	0.24 (1)	
G-H	-1203 / 0	-78.0	-78.0	0.17 (1)	5.60	N-D	0 / 259	0.06 (1)	
H-I	0 / 28	-78.0	-78.0	0.16 (1)	10.00	C-N	0 / 1512	0.37 (1)	
P-B	-1351 / 0	0.0	0.0	0.15 (1)	6.94	O-C	-1395 / 0	0.23 (1)	
J-H	-1351 / 0	0.0	0.0	0.15 (1)	6.94	B-O	0 / 1170	0.29 (1)	
P-O	0 / 0	-18.5	-18.5	0.02 (4)	10.00	K-H	0 / 1170	0.29 (1)	
O-N	0 / 1299	-18.5	-18.5	0.23 (1)	10.00				
N-Q	0 / 2109	-18.5	-18.5	0.85 (1)	10.00				
Q-M	0 / 2109	-86.8	-86.8	0.85 (1)	10.00				
M-R	0 / 2109	-86.8	-86.8	0.85 (1)	10.00				
R-L	0 / 2109	-18.5	-18.5	0.85 (1)	10.00				
L-K	0 / 1299	-18.5	-18.5	0.23 (1)	10.00				
K-J	0 / 0	-18.5	-18.5	0.02 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
Q	3-9-4	-346	-346	---	FRONT	VERT	TOTAL
R	10-2-12	-346	-346	---	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

GIRDER TYPE: CStdGirder
START DISTANCE = 3-9-4
START SPAN CARRIED = 4-10-0
END DISTANCE = 10-2-12
END SPAN CARRIED = 4-10-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L. LOADS BASED ON 55 % OF GSI..

*** 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, NBC 2010, NBC 2015

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.23/1.00 (E-F:1), BC=0.85/1.00 (L-M:1), WB=0.37/1.00 (G-L:1), SSI=0.28/1.00 (L-M:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656
A-18023933

CONTINUED ON PAGE 2

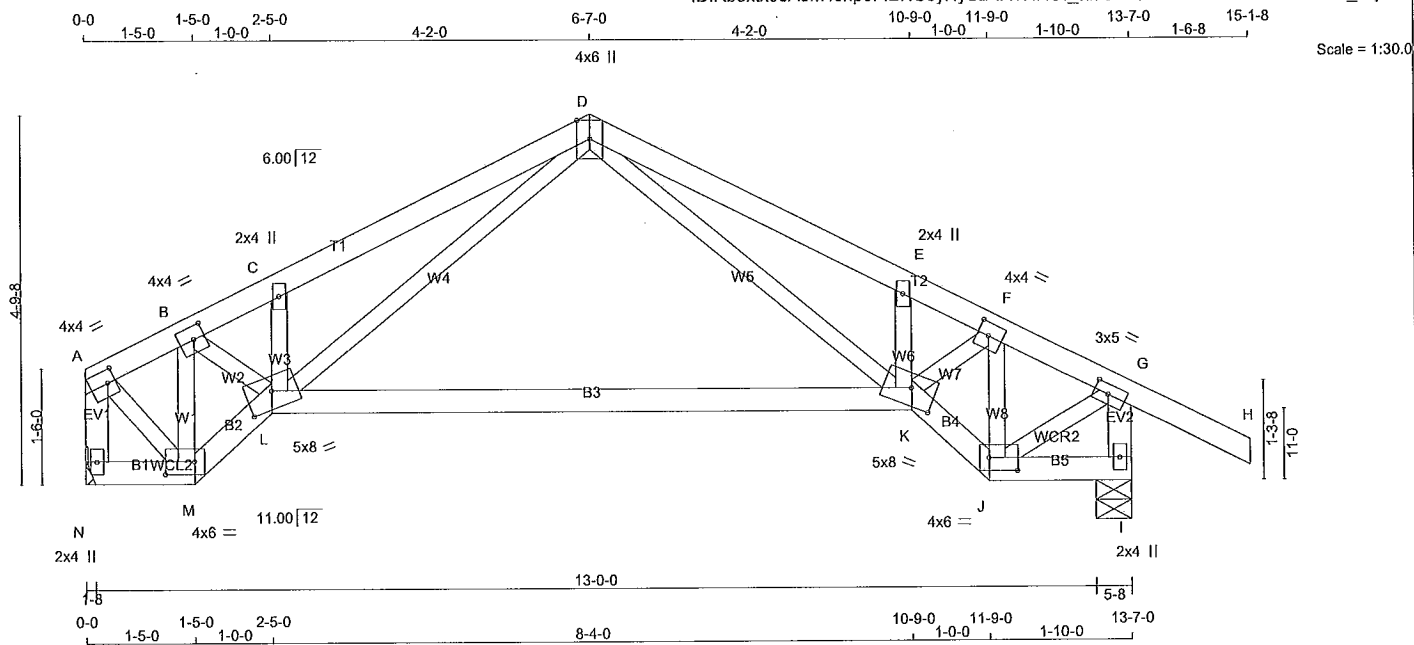


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292646	H7TS	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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TOTAL WEIGHT = 3 X 56 = 168 lb

[M][F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - H	2x4	DRY	No.2	SPF	
N - A	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
N - M	2x4	DRY	No.2	SPF	
M - L	2x4	DRY	No.2	SPF	
L - K	2x4	DRY	No.2	SPF	
K - J	2x4	DRY	No.2	SPF	
J - I	2x4	DRY	No.2	SPF	
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	4.0	4.0	2.00	1.25
B	TMVW-t	MT20	4.0	4.0	2.00	1.75
C	TMVW-t	MT20	2.0	4.0		
D	TTVW+p	MT20	4.0	6.0	Edge	
E	TMVW-t	MT20	2.0	4.0		
F	TMVW-t	MT20	4.0	4.0	2.00	1.75
G	TMVW-t	MT20	3.0	5.0	1.50	2.25
I	BMV1+p	MT20	2.0	4.0		
J	BBWW-t	MT20	4.0	6.0	2.00	4.50
K	BBWW-t	MT20	5.0	8.0	2.75	3.75
L	BBWW-t	MT20	5.0	8.0	2.75	4.00
M	BBWW-t	MT20	4.0	6.0	2.00	4.50
N	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
N		648	0	648	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8	
I		788	0	788	0	0	5-8	1-8	

UNFACTORED REACTIONS		1ST CASE		MAX/MIN. COMPONENT REACTIONS		LIVE		WIND		DEAD		SOIL	
JT		COMBINED	SNOW	VERT.	HORZ.	DOWN	HORZ.	UPLIFT	IN-SX	IN-SX			
N		462	281 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	181 / 0	0 / 0			
I		559	357 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	202 / 0	0 / 0			

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

CHORDS		MAX. FACTORED		FACTORED		VERT. LOAD		LC1 MAX		MAX. UNBRAC		MEMB. FORCE		MAX. FACTORED	
MEMB.		FORCE (LBS)	VERT.	PLF	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)	CS1 (LC)
FR-TO															
A-B		-485 / 0	-78.0	-78.0	0.04 (1)	6.25	M-B	-684 / 0	0.10 (1)						
B-C		-1007 / 0	-78.0	-78.0	0.11 (1)	6.12	B-L	0 / 721	0.16 (1)						
C-D		-1077 / 0	-78.0	-78.0	0.17 (1)	5.90	L-C	-343 / 0	0.05 (1)						
D-E		-1156 / 0	-78.0	-78.0	0.17 (1)	5.74	L-D	0 / 505	0.11 (1)						
E-F		-1081 / 0	-78.0	-78.0	0.11 (1)	5.96	D-K	0 / 598	0.13 (1)						
F-G		-579 / 0	-78.0	-78.0	0.11 (1)	6.25	K-E	-354 / 0	0.05 (1)						
G-H		0 / 28	-78.0	-78.0	0.14 (1)	10.00	K-F	0 / 733	0.16 (1)						
N-A		-635 / 0	0.0	0.0	0.07 (1)	7.81	J-F	-639 / 0	0.10 (1)						
I-G		-771 / 0	0.0	0.0	0.08 (1)	7.81	A-M	0 / 551	0.12 (1)						
							J-G	0 / 547	0.12 (1)						
N-M		0 / 0	-18.5	-18.5	0.01 (4)	10.00									
M-L		0 / 525	-18.5	-18.5	0.09 (1)	10.00									
L-K		0 / 569	-18.5	-18.5	0.42 (4)	10.00									
K-J		0 / 609	-18.5	-18.5	0.10 (1)	10.00									
J-I		0 / 0	-18.5	-18.5	0.02 (4)	10.00									

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.45")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.45")
CALCULATED VERT. DEFL.(TL) = L/630 (0.26")

CSI: TC=0.17/1.00 (D-E:1), BC=0.42/1.00 (K-L:4), WB=0.16/1.00 (F-K:1), SSI=0.13/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

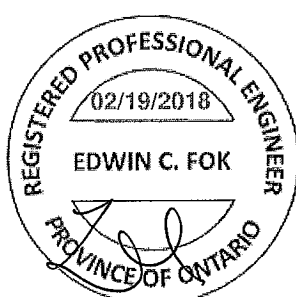
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.90)

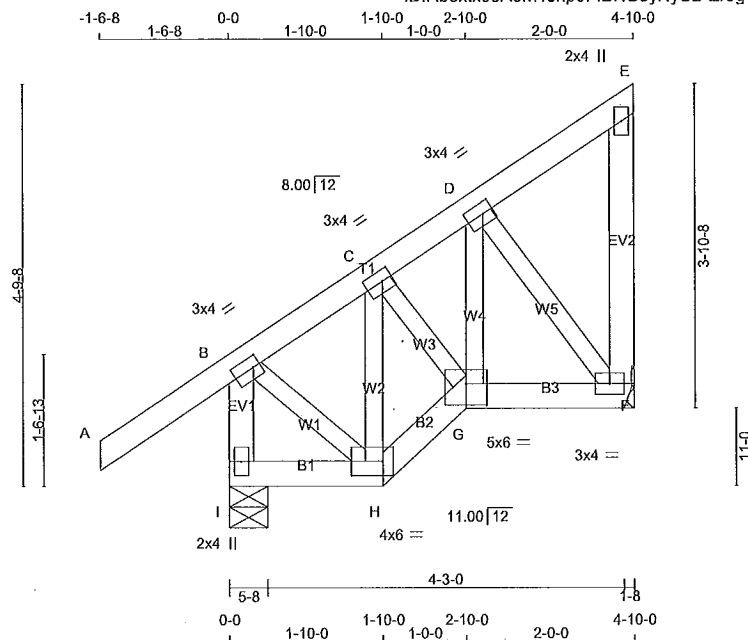
JSI METAL= 0.24 (M) (INPUT = 1.00)



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Scale = 1:27.5



TOTAL WEIGHT = 28 lb

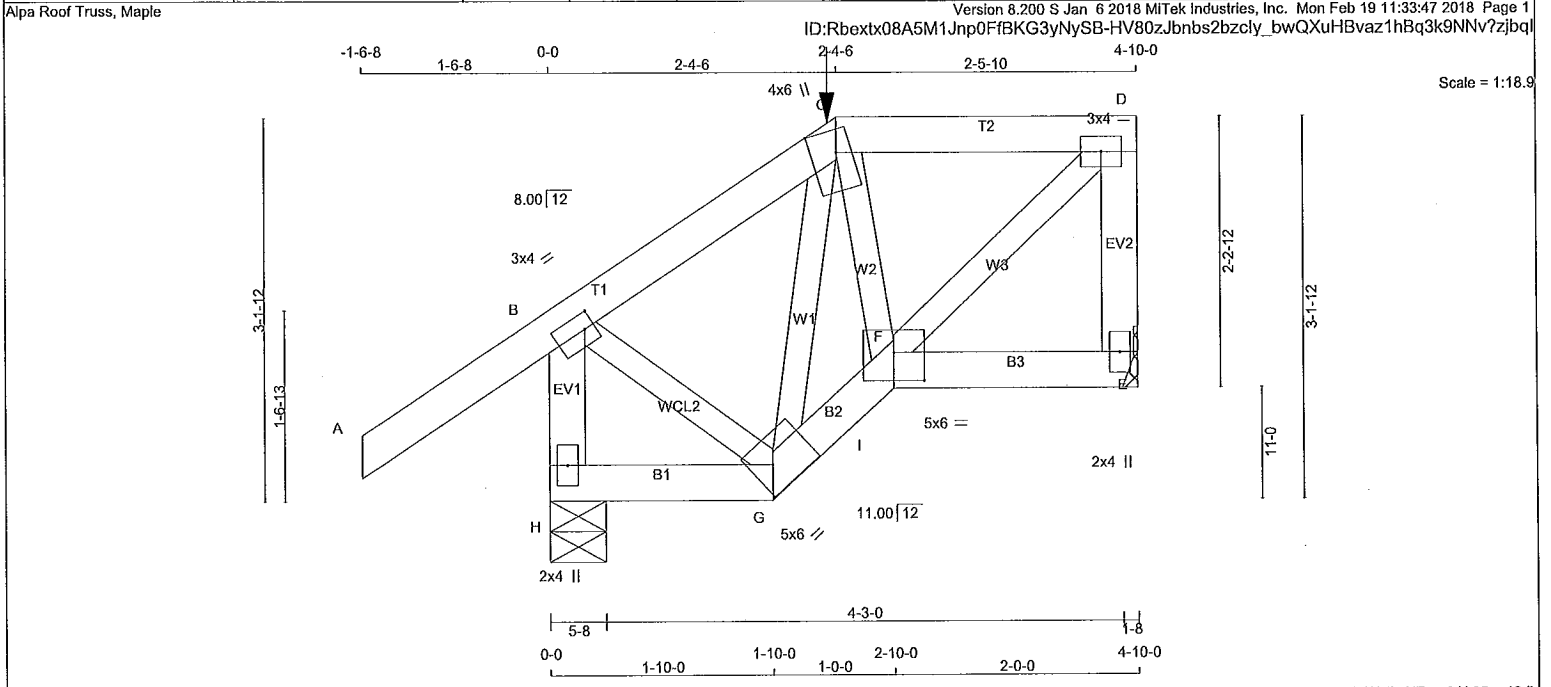
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C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
I-B	-364 / 0	0.0	0.0	0.04 (1)	7.81	B-H	0 / 91	0.02 (1)
A-B	0 / 35	-78.0	-78.0	0.15 (1)	10.00	H-C	-91 / 0	0.02 (1)
B-C	-129 / 0	-78.0	-78.0	0.14 (1)	6.25	C-G	0 / 69	0.02 (1)
C-D	-117 / 0	-78.0	-78.0	0.04 (1)	6.25	G-D	0 / 46	0.02 (4)
D-E	-8 / 0	-78.0	-78.0	0.04 (1)	10.00	D-F	-175 / 0	0.03 (1)
F-E	-60 / 0	0.0	0.0	0.01 (1)	7.81			
I-H	0 / 0	-18.5	-18.5	0.02 (4)	10.00			
H-G	0 / 98	-18.5	-18.5	0.02 (1)	10.00			
G-F	0 / 112	-18.5	-18.5	0.03 (4)	10.00			

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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292646	J2TA	2	1	TRUSS DESC.	



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
H - 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

B	TMWW-I	MT20	3.0	4.0	1.50	1.00
C	TTWW+m	MT20	4.0	6.0	Edge	2.50
D	TMWW-I	MT20	3.0	4.0		
E	BMV1+p	MT20	2.0	4.0		
F	BBWW-I	MT20	5.0	6.0	2.75	3.00
G	BBWW-h	MT20	5.0	6.0	2.50	2.00
H	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) 67.9 lbs FACTORED DOWN AT 2-4-6

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	UPLIFT
E	347	0	347	0
H	434	0	434	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
E	COMBINED	SNOW	0/0	0/0
H	308	199/0	0/0	0/0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	MAX. MEMB.	MAX. FACTORED	FORCE	MAX
		(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO			FROM TO		LENGTH	FR-TO		
A-B	0/35		-78.0	-78.0	0.16 (1)	10.00	G-C	-233/0
B-C	-172/0		-78.0	-78.0	0.08 (1)	6.25	C-F	0/35
C-D	-193/0		-111.3	-111.3	0.13 (1)	6.25	F-D	0/267
E-D	-320/0		0.0	0.0	0.04 (1)	7.81	B-G	0/172
H-B	-410/0		0.0	0.0	0.05 (1)	7.81		
H-G	0/0		-26.4	-26.4	0.03 (4)	10.00		
G-I	0/253		-26.4	-26.4	0.05 (1)	10.00		
I-F	0/253		-26.4	-26.4	0.05 (1)	10.00		
F-E	0/0		-26.4	-26.4	0.03 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-4-6	-68	-68		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: CPrimeHlp

LEFT SETBACK = 2-4-6

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

- 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 (0.19")

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

ALLOWABLE DEFL.(TL)= L/360 (0.19")

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

CSI: TC=0.16/1.00 (A-B:1) , BC=0.05/1.00 (F-G:1) ,

WB=0.07/1.00 (D-F:1) , SS=0.12/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS= 1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT

RESPONSIBLE FOR QUALITY CONTROL IN

THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (C) (INPUT = 0.90)

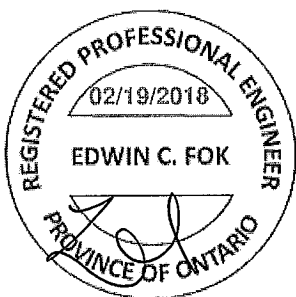
JSI METAL= 0.11 (B) (INPUT = 1.00)

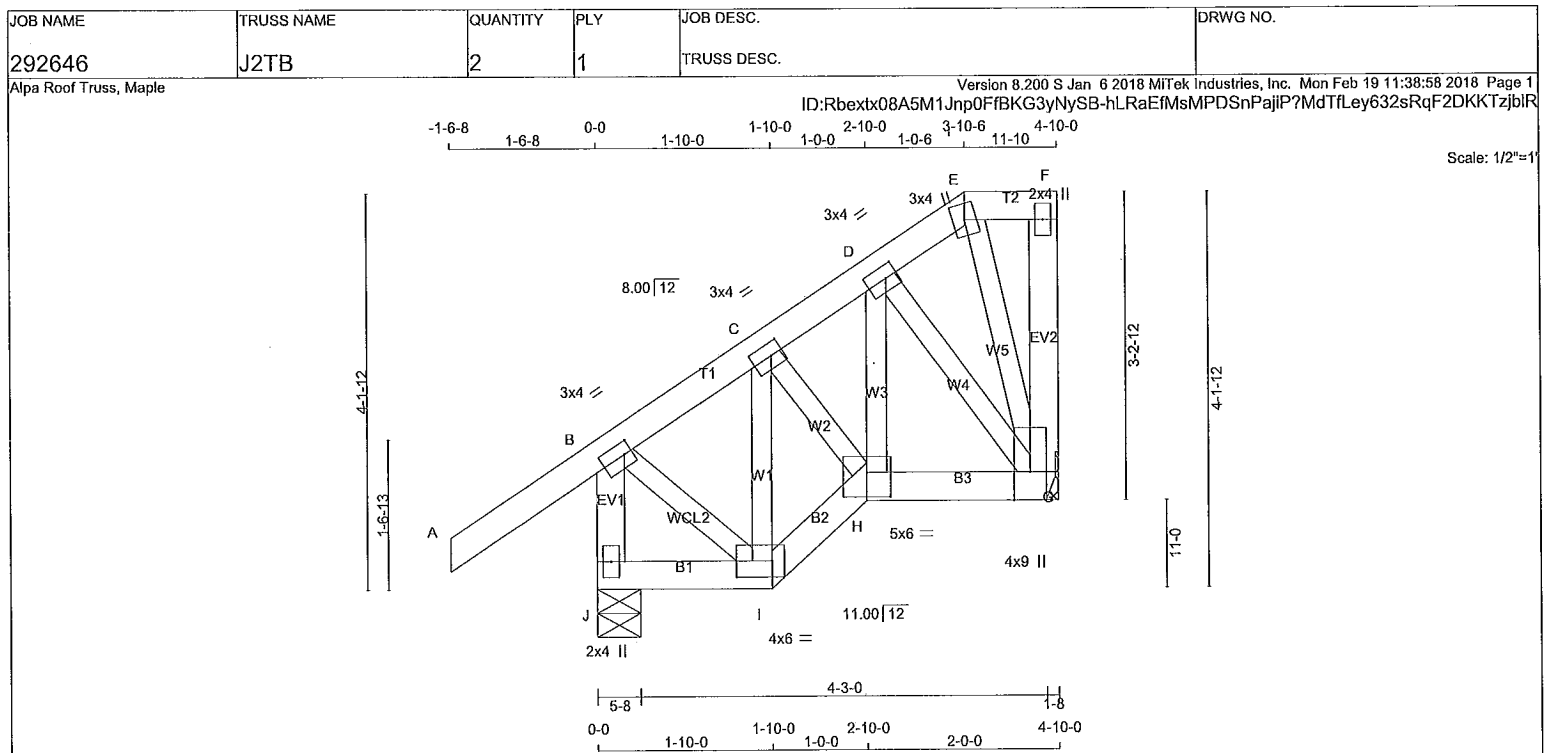
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NOTE: Lateral brace(s) shown shall be 1x4

for Part 9 design as per OBC 9.23.13.11,

and no less than 2x4 for Part 4 design





TOTAL WEIGHT = 2 X 29 = 59 lb

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.00	
C	TMVW-I	MT20	3.0	4.0	1.50	1.50	
D	TMVW-I	MT20	3.0	4.0	1.50	1.50	
E	TTW+m	MT20	3.0	4.0			
F	TMV+p	MT20	2.0	4.0			
G	BMVWV1+p	MT20	4.0	9.0	Edge		
H	BBWV-I	MT20	5.0	6.0	3.00	3.00	
I	BBWV-I	MT20	4.0	6.0	2.00	4.50	
J	BMV1+p	MT20	2.0	4.0			

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

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
JT						
G	212	0	212	0	0	0
J	381	0	381	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT							
G	152	90/0	0/0	0/0	0/0	61/0	0/0
J	269	181/0	0/0	0/0	0/0	88/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD		MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
			FROM	TO				
FR-TO								
A-B		0/35	-78.0	-78.0	0.15 (1)	10.00	I-C	-93/0
B-C		-130/0	-78.0	-78.0	0.14 (1)	6.25	C-H	0/56
C-D		-118/0	-78.0	-78.0	0.02 (1)	6.25	H-D	0/52
D-E		-27/0	-78.0	-78.0	0.01 (1)	6.25	D-G	-138/0
E-F		0/0	-78.0	-78.0	0.01 (1)	10.00	E-G	-54/0
G-F		-38/0	0.0	0.0	0.01 (1)	7.81	B-I	0/93
J-B		-364/0	0.0	0.0	0.04 (1)	7.81		
J-I		0/0	-18.5	-18.5	0.02 (4)	10.00		
I-H		0/99	-18.5	-18.5	0.02 (1)	10.00		
H-G		0/105	-18.5	-18.5	0.03 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.15/1.00 (A-B:1), BC=0.03/1.00 (G-H:4), WB=0.03/1.00 (D-G: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.

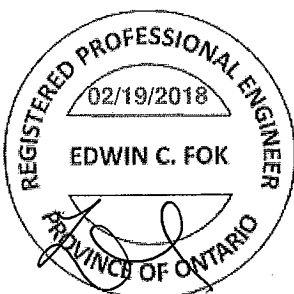
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

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



A-18023937

PLATES (table is in inches)							LOADING										COMPANION LIVE LOAD FACTOR = 1.00														
JT	TYPE	PLATES	W	LEN	Y	X	TOTAL LOAD CASES: (4)										AUTOSOLVE HEELS OFF														
R	BMWW-t	MT20	4.0	4.0			CHORDS					WEBS					TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.														
S	BMWW-t	MT20	5.0	6.0	3.00	1.75	MEMB. MAX. FACTORED FORCE (LBS)					FACTORED VERT. LOAD (PLF)					MEMB. MAX. FACTORED FORCE (LBS)					NAIL VALUES									
T	BBWW-h	MT20	10.0	12.0	3.00	7.25						LC1 MAX					UNBRAC					PLATE GRIP(DRY) (PSI)									
U	BBWW-l	MT20	10.0	12.0	5.00	5.50						CSI (LC)					LENGTH					SHEAR (PLI)									
V	BMWWW-t	MT20	5.0	6.0																		SECTION (PLI)									
W	BBWW+p	MT18HS	10.0	14.0	Edge	4.75																MAX MIN MAX MIN MAX MIN									
X	BBWW+h	MT20	10.0	16.0	3.25	5.50																MT20 650 371 1747 788 1987 1873									
Y	BMWW-t	MT20	4.0	4.0																		MT18HS 586 403 2455 1382 3163 3004									
Z	BMWW-t	MT20	6.0	7.0	3.00	1.75																PLATE PLACEMENT TOL. = 0.250 inches									
AA	BMV1-t	MT20	6.0	9.0	5.50																	PLATE ROTATION TOL. = 5.0 Deg.									
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.							FACTORED CONCENTRATED LOADS (LBS)										JSI GRIP= 0.90 (U) (INPUT = 0.90)														
							JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	JSI METAL= 0.99 (U) (INPUT = 1.00)																
							D	8-4-10	-477	-477	---	FRONT	VERT	TOTAL																	
							L	30-7-6	-477	-477	---	FRONT	VERT	TOTAL																	
HANGERS NOTES																															
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 476.7 lbs FACTORED DOWN AT 8-4-10, AND 476.7 lbs FACTORED DOWN AT 30-7-6 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

REGISTERED PROFESSIONAL ENGINEER

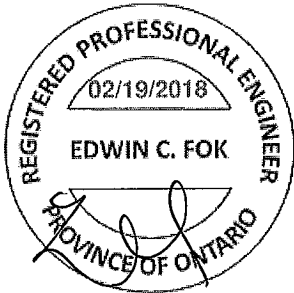
02/19/2018

EDWIN C. FOK

PROVINCE OF ONTARIO

A-18 023938(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

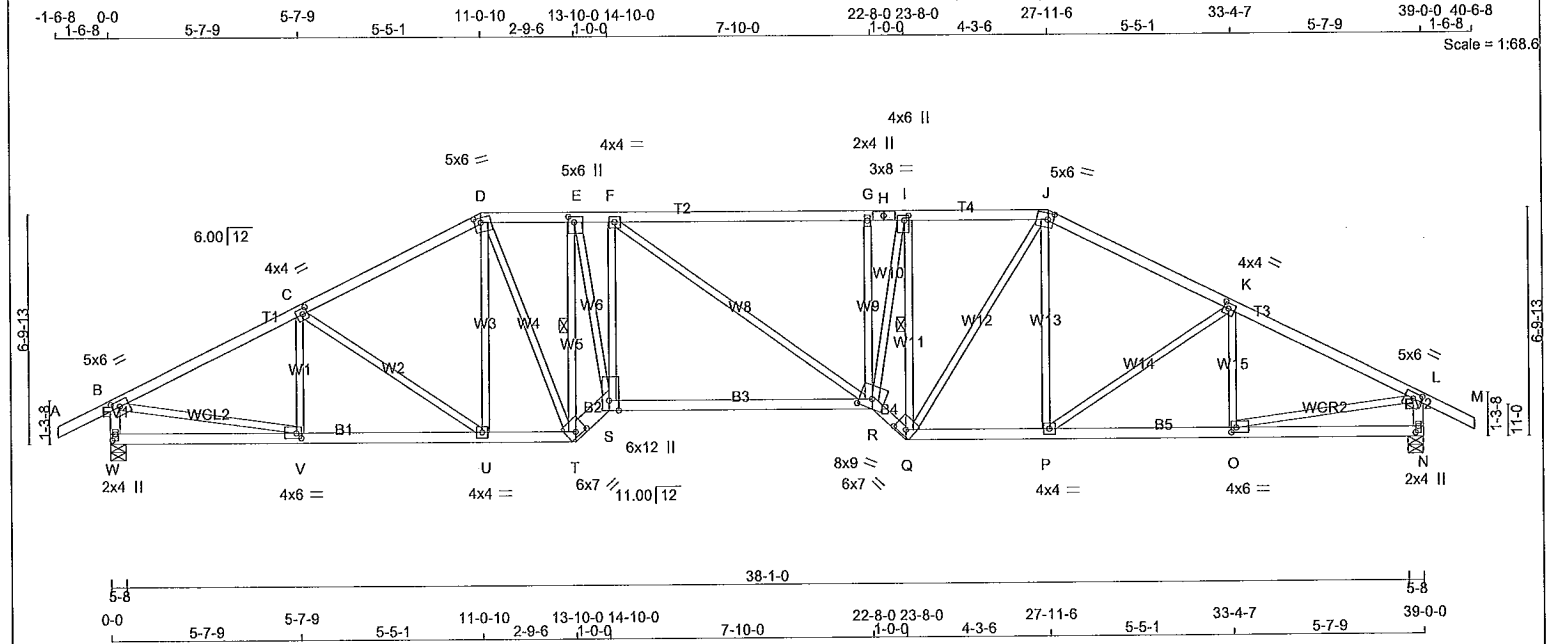


A-18 023938(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292647	H2TA	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 8.200 S Jan 6 2018 MiTek Industries, Inc. Mon Feb 19 11:47:29 2018 Page 1
ID:Rbextx08A5M1Jnp0FfBK3yNySB-DepmUNX00Pcybx8w8EgBrEKYCxL5H112I2VtmLzjbdS



TOTAL WEIGHT = 182 lb

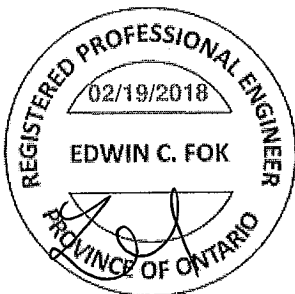
LUMBER	N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS				
A - D	2x4	DRY	No.2	SPF
D - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
J - M	2x4	DRY	No.2	SPF
W - B	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
W - T	2x4	DRY	No.2	SPF
T - S	2x6	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	5.0	6.0	2.00	2.75
C TMVW-t	MT20	4.0	4.0	2.00	1.75
D TTWW-m	MT20	5.0	6.0	1.75	2.25
E TMVW-t	MT20	5.0	6.0	2.00	2.00
F TMVW-t	MT20	4.0	4.0		
G TMVW-w	MT20	2.0	4.0		
H TS-t	MT20	3.0	8.0		
I TMVW-t	MT20	4.0	6.0	1.75	1.50
J TTWW-m	MT20	5.0	6.0	2.25	2.00
K TMVW-t	MT20	4.0	4.0	2.00	1.75
L TMVW-t	MT20	5.0	6.0	2.00	2.75
N BMV1+p	MT20	2.0	4.0	2.25	1.00
O BMVW-t	MT20	4.0	6.0	1.75	1.75
P BMVW-t	MT20	4.0	4.0		
Q BBVW-h	MT20	6.0	7.0	2.00	4.00
R BBVW-m	MT20	8.0	9.0	3.25	4.50
S BBVW+p	MT20	6.0	12.0	Edge 3.50	
T BBVW-h	MT20	6.0	7.0	1.75	3.75
U BMVW-t	MT20	4.0	4.0		
V BMVW-t	MT20	4.0	6.0	1.75	1.75
W BMV1+p	MT20	2.0	4.0	2.25	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



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

BEARINGS	FACTORED		MAXIMUM FACTORED		INPUT BRG	REQRD BRG
	GROSS REACTION	DOWN	GROSS REACTION	UP		
JT	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX
W	2006	0	2006	0	5-8	3-0
N	2006	0	2006	0	5-8	3-0

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD.

UNFACTORED REACTIONS

1ST LC CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0
N	1428	886 / 0	0 / 0	0 / 0	0 / 0	542 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.38 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-T, I-Q.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS					
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	V-C	-322 / 0	0.08 (1)	
B-C	-2737 / 0	-78.0	-78.0	0.43 (1)	3.84	C-U	-216 / 0	0.18 (1)	
C-D	-2584 / 0	-78.0	-78.0	0.40 (1)	3.96	U-D	0 / 143	0.04 (4)	
D-E	-2614 / 0	-78.0	-78.0	0.14 (1)	4.19	D-T	0 / 814	0.18 (1)	
E-F	-3176 / 0	-78.0	-78.0	0.41 (1)	3.55	T-E	-3090 / 0	0.92 (1)	
F-G	-3256 / 0	-78.0	-78.0	0.69 (1)	3.38	E-S	0 / 3186	0.72 (1)	
G-H	-3247 / 0	-78.0	-78.0	0.41 (1)	3.50	S-F	-606 / 0	0.33 (1)	
H-I	-3247 / 0	-78.0	-78.0	0.41 (1)	3.50	F-R	0 / 85	0.02 (1)	
I-J	-2714 / 0	-78.0	-78.0	0.24 (1)	4.03	R-G	-485 / 0	0.26 (1)	
J-K	-2584 / 0	-78.0	-78.0	0.40 (1)	3.96	R-I	0 / 2994	0.67 (1)	
K-L	-2736 / 0	-78.0	-78.0	0.43 (1)	3.84	Q-I	-3031 / 0	0.90 (1)	
L-M	0 / 28	-78.0	-78.0	0.14 (1)	10.00	Q-J	0 / 765	0.17 (1)	
W-B	-1961 / 0	0.0	0.0	0.20 (1)	6.01	P-J	0 / 209	0.05 (4)	
N-L	-1960 / 0	0.0	0.0	0.20 (1)	6.01	P-K	-215 / 0	0.18 (1)	
						K-O	-323 / 0	0.08 (1)	
W-V	0 / 0	-18.5	-18.5	0.13 (4)	10.00	B-V	0 / 2504	0.56 (1)	
V-U	0 / 2467	-18.5	-18.5	0.45 (1)	10.00	O-L	0 / 2504	0.56 (1)	
U-T	0 / 2292	-18.5	-18.5	0.42 (1)	10.00				
T-S	0 / 3600	-18.5	-18.5	0.43 (1)	10.00				
S-R	0 / 3187	-18.5	-18.5	0.71 (1)	10.00				
R-Q	0 / 3616	-18.5	-18.5	0.58 (1)	10.00				
Q-P	0 / 2293	-18.5	-18.5	0.43 (1)	10.00				
P-O	0 / 2467	-18.5	-18.5	0.45 (1)	10.00				
O-N	0 / 0	-18.5	-18.5	0.12 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2018
- CSA 086-14
- 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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.30")
ALLOWABLE DEFL.(TL)= L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/625 (0.75")

CSI: TC=0.69/1.00 (F-G:1), BC=0.71/1.00 (R-S:1), WB=0.92/1.00 (E-T:1), SSI=0.23/1.00 (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
MT20	650	371	1747
	788	1987	1873

PLATE ROTATION TOL. = 0.250 inches

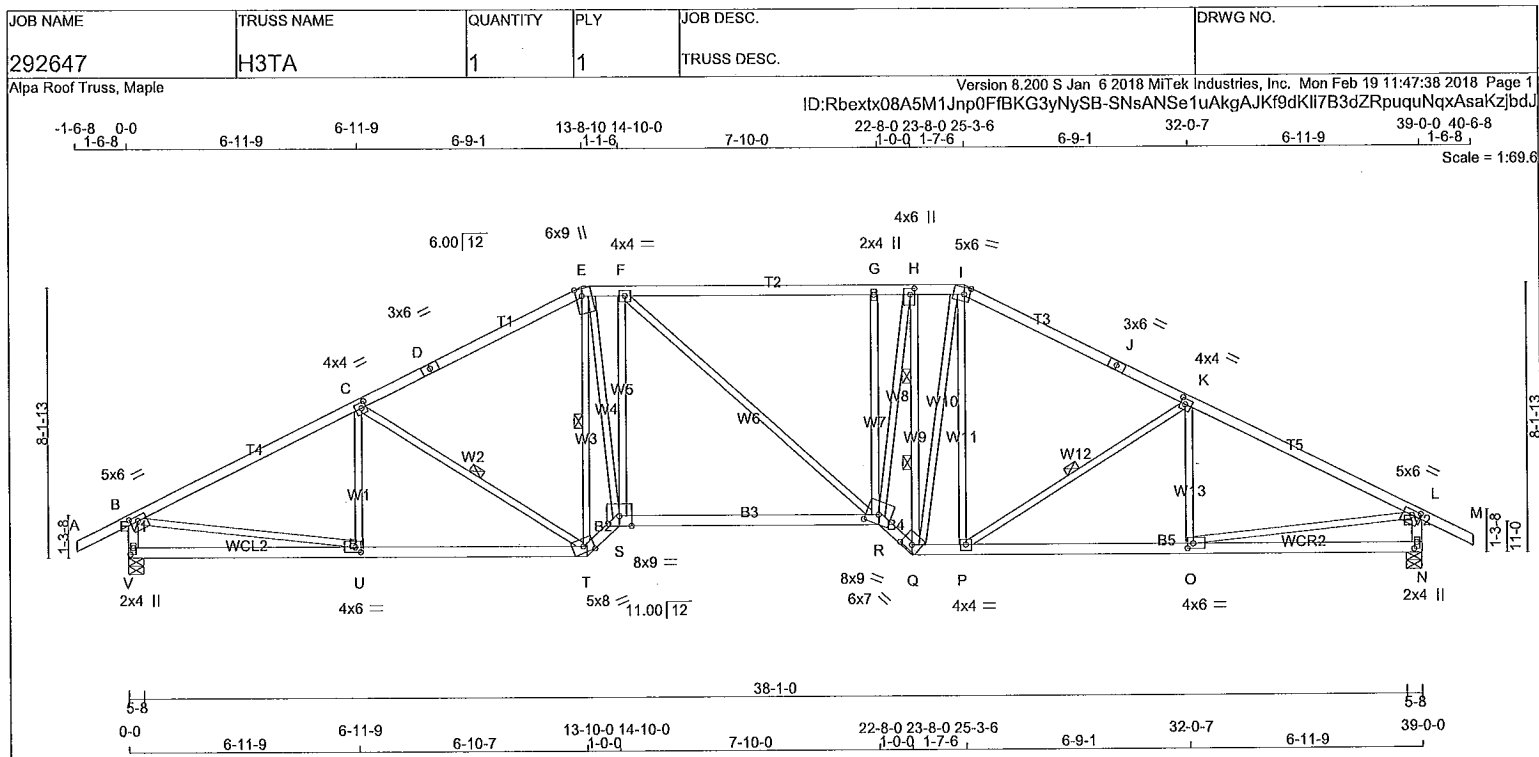
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (Q) (INPUT = 0.90)

JSI METAL= 0.66 (I) (INPUT = 1.00)

A-18023939

CONTINUED ON PAGE 2

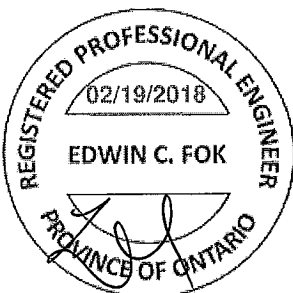


LUMBER		N. L. G. A. RULES		CHORDS		SIZE		LUMBER		DESCR.	
A - D	2x4	DRY	No.2	SPF							
D - E	2x4	DRY	No.2	SPF							
E - I	2x4	DRY	No.2	SPF							
I - J	2x4	DRY	No.2	SPF							
J - M	2x4	DRY	No.2	SPF							
N - B	2x4	DRY	No.2	SPF							
N - L	2x4	DRY	No.2	SPF							
V - T	2x4	DRY	No.2	SPF							
T - S	2x4	DRY	No.2	SPF							
S - R	2x4	DRY	No.2	SPF							
R - Q	2x4	DRY	No.2	SPF							
Q - N	2x4	DRY	No.2	SPF							
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF							

DRY: SEASONED LUMBER.

PLATES (table is in inches)		JT TYPE		PLATES		W		LEN		Y		X	
B	TMVW-I	MT20	5.0	6.0	1.75	2.75							
C	TMVW-I	MT20	4.0	4.0	2.00	1.75							
D	TS-I	MT20	3.0	6.0									
E	TTWW+m	MT20	6.0	9.0	Edge	2.25							
F	TMVW-I	MT20	4.0	4.0									
G	TMVW+m	MT20	2.0	4.0									
H	TMVW+m	MT20	4.0	6.0	2.25	1.50							
I	TTWW-m	MT20	5.0	6.0	2.50	2.00							
J	TS-I	MT20	3.0	6.0									
K	TMVW-I	MT20	4.0	4.0	2.00	1.75							
L	TMVW-I	MT20	5.0	6.0	1.75	2.75							
N	BMV1+p	MT20	2.0	4.0	2.25	1.00							
O	BMVW-I	MT20	4.0	6.0	1.75	2.00							
P	BMVW-I	MT20	4.0	4.0									
Q	BBVW-h	MT20	6.0	7.0	2.00	4.00							
R	BBVWW-m	MT20	8.0	9.0	3.25	4.50							
S	BBVW-I	MT20	8.0	9.0	Edge								
T	BBVW-m	MT20	5.0	8.0	Edge								
U	BMVW-I	MT20	4.0	6.0	1.75	2.00							
V	BMV1+p	MT20	2.0	4.0	2.25	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



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	UP	IN-SX	IN-SX	IN-SX	IN-SX
V	2006	0	2006	0	5-8	3-0	3-0	
N	2006	0	2006	0	5-8	3-0	3-0	

UNFACTORED REACTIONS

JT	1ST CASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP
V	1428		886 / 0		0 / 0		0 / 0		0 / 0		542 / 0		0 / 0	
N	1428		886 / 0		0 / 0		0 / 0		0 / 0		542 / 0		0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.52 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-T, E-T, K-P.
- 2 LATERAL BRACE(S) AT 1/3 LENGTH OF H-Q.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CS (LC)	MAX. CS (LC)	UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CS (LC)	MEMB.	FORCE (LBS)	MAX. CS (LC)
FR-TO						FR-TO			FR-TO		
A-B	0 / 28	-78.0	-78.0	0.14 (1)	10.00	U-C	-214 / 34	0.07 (1)	U-C	-214 / 34	0.07 (1)
B-C	-2798 / 0	-78.0	-78.0	0.71 (1)	3.52	C-T	-470 / 0	0.21 (1)	C-T	-470 / 0	0.21 (1)
C-D	-2416 / 0	-78.0	-78.0	0.63 (1)	3.81	T-E	-1609 / 0	0.88 (1)	T-E	-1609 / 0	0.88 (1)
D-E	-2416 / 0	-78.0	-78.0	0.63 (1)	3.81	E-S	0 / 2691	0.61 (1)	E-S	0 / 2691	0.61 (1)
E-F	-2537 / 0	-78.0	-78.0	0.37 (1)	3.96	S-F	-641 / 0	0.59 (1)	S-F	-641 / 0	0.59 (1)
F-G	-2628 / 0	-78.0	-78.0	0.57 (1)	3.79	F-R	0 / 108	0.02 (1)	F-R	0 / 108	0.02 (1)
G-H	-2619 / 0	-78.0	-78.0	0.37 (1)	3.91	R-G	-631 / 0	0.58 (1)	R-G	-631 / 0	0.58 (1)
H-I	-2228 / 0	-78.0	-78.0	0.12 (1)	4.49	I-H	0 / 2686	0.60 (1)	I-H	0 / 2686	0.60 (1)
I-J	-2416 / 0	-78.0	-78.0	0.62 (1)	3.81	H-Q	-2423 / 0	0.94 (1)	H-Q	-2423 / 0	0.94 (1)
J-K	-2416 / 0	-78.0	-78.0	0.62 (1)	3.81	Q-I	0 / 442	0.10 (1)	Q-I	0 / 442	0.10 (1)
K-L	-2794 / 0	-78.0	-78.0	0.70 (1)	3.52	P-I	0 / 330	0.07 (1)	P-I	0 / 330	0.07 (1)
L-M	0 / 28	-78.0	-78.0	0.14 (1)	10.00	P-K	-466 / 0	0.21 (1)	P-K	-466 / 0	0.21 (1)
V-B	-1954 / 0	0.0	0.0	0.20 (1)	6.03	O-K	-216 / 25	0.07 (1)	O-K	-216 / 25	0.07 (1)
N-L	-1952 / 0	0.0	0.0	0.20 (1)	6.03	B-U	0 / 2553	0.57 (1)	B-U	0 / 2553	0.57 (1)
V-U	0 / 0	-18.5	-18.5	0.24 (4)	10.00	O-L	0 / 2549	0.57 (1)	O-L	0 / 2549	0.57 (1)
U-T	0 / 2528	-18.5	-18.5	0.52 (1)	10.00						
T-S	0 / 2862	-18.5	-18.5	0.46 (1)	10.00						
S-R	0 / 2548	-18.5	-18.5	0.60 (1)	10.00						
R-Q	0 / 2978	-18.5	-18.5	0.48 (1)	10.00						
Q-P	0 / 2138	-18.5	-18.5	0.42 (1)	10.00						
P-O	0 / 2524	-18.5	-18.5	0.50 (1)	10.00						
O-N	0 / 0	-18.5	-18.5	0.21 (4)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2018
- CSA 086-14
- 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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.25")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/726 (0.65")

CSI: TC=0.71/1.00 (B-C:1), BC=0.60/1.00 (R-S:1), WB=0.94/1.00 (H-Q:1), SSI=0.28/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

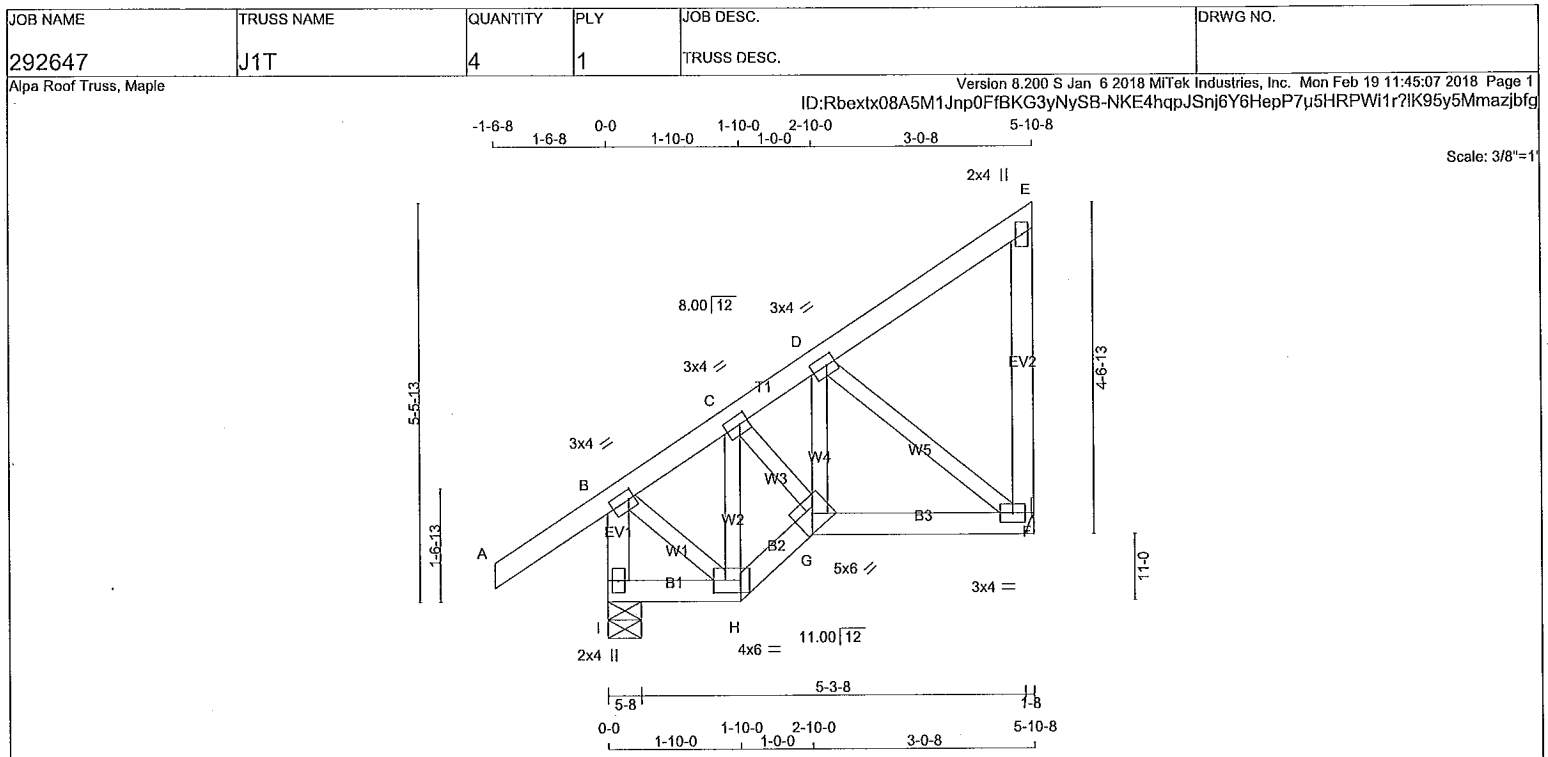
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (U) (INPUT = 0.90)
JSI METAL= 0.72 (E) (INPUT = 1.00)



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

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

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	GROSS REACTION	DOWN	BRG	BRG
I	427	0	427	0	0
F	266	0	266	0	0
HANGER BY OTHERS					
MIN. SEAT SIZE: 1-8					

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS	DEAD	SOIL
I	302	201 / 0	0 / 0	0 / 0	101 / 0
F	190	114 / 0	0 / 0	0 / 0	76 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED	MEMB.	MAX. FACTORED
FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)
I-B	-410 / 0	B-H	0 / 129
A-B	0 / 35	H-C	-138 / 0
B-C	-170 / 0	C-G	0 / 144
C-D	-187 / 0	G-D	0 / 49
D-E	-12 / 0	D-F	-238 / 0
F-E	-93 / 0		
I-H	0 / 0		
H-G	0 / 138		
G-F	0 / 188		

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, NBC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2018
- CSA 086-14
- TPC 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")

CSI: TC=0.15/1.00 (A-B:1), BC=0.07/1.00 (F-G:4), WB=0.06/1.00 (D-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.

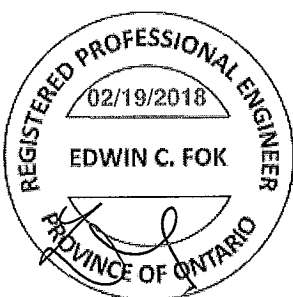
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

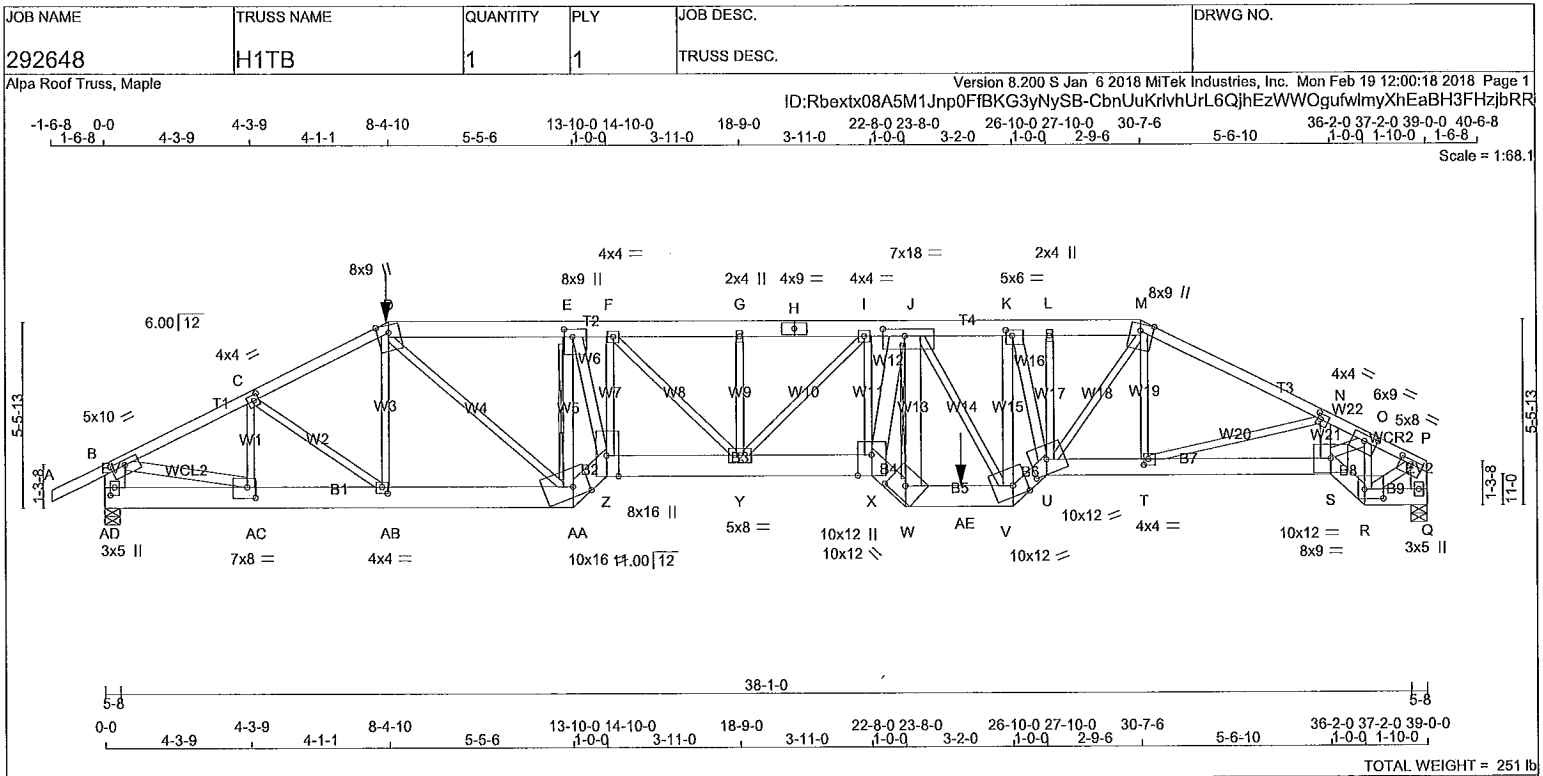
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.39 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)

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



A-18023941



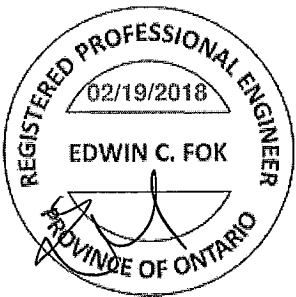
LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF			
D - H	2x6	DRY	No.2	SPF			
H - M	2x6	DRY	No.2	SPF			
M - P	2x4	DRY	1650F 1.5E	SPF			
AD - B	2x8	DRY	No.2	SPF			
Q - P	2x6	DRY	No.2	SPF			
AD - AA	2x8	DRY	No.2	SPF			
AA - Z	2x8	DRY	1950F 1.7E	SPF			
Z - X	2x8	DRY	1950F 1.7E	SPF			
X - W	2x8	DRY	1950F 1.7E	SPF			
W - V	2x8	DRY	1950F 1.7E	SPF			
V - U	2x6	DRY	1650F 1.5E	SPF			
U - S	2x6	DRY	No.2	SPF			
S - R	2x6	DRY	1650F 1.5E	SPF			
R - Q	2x6	DRY	No.2	SPF			
ALL WEBS	2x3	DRY	No.2	SPF			
EXCEPT							
AA - E	2x4	DRY	1650F 1.5E	SPF			
E - Z	2x4	DRY	1650F 1.5E	SPF			
X - J	2x6	DRY	No.2	SPF			
W - J	2x6	DRY	No.2	SPF			
V - K	2x4	DRY	No.2	SPF			
K - U	2x4	DRY	1650F 1.5E	SPF			
S - N	2x4	DRY	No.2	SPF			
S - O	2x4	DRY	No.2	SPF			
B - AC	2x4	DRY	No.2	SPF			
R - P	2x4	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	10.0	1.75	5.00
C	TMVW-t	MT20	4.0	4.0	2.00	1.75
D	TTVW+m	MT20	8.0	9.0	Edge	
E	TMVW-t	MT20	8.0	9.0	2.75	3.00
F	TMVW-t	MT20	4.0	4.0		
G	TMVW-w	MT20	2.0	4.0		
H	TS-t	MT20	4.0	9.0		
I	TMVW-t	MT20	4.0	4.0		

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
AD	3756	0	3756	0	0	5-8	4-15	
Q	3310	0	3310	0	0	5-8	5-4	

ALLOW FOR 0.5" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	AD	Q	2679	1628 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1051 / 0	0 / 0	915 / 0	0 / 0	0 / 0	0 / 0
Q	2359		1444 / 0		0 / 0		0 / 0		0 / 0		915 / 0		0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 1.94 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 E-AA, J-W

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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED VERT. LOAD (PLF)	
	FR-TO	MEMB.	FR-TO	MEMB.	FR-TO	MEMB.	FR-TO	MEMB.	FR-TO	MEMB.	FR-TO	MEMB.	FR-TO	MEMB.
A-B	0 / 28		-78.0	-78.0	0.16 (1)	10.00	AC-C	-969 / 0	0.19 (1)					
B-C	-5375 / 0		-78.0	-78.0	0.71 (1)	2.47	C-AB	0 / 624	0.15 (1)					
C-D	-5942 / 0		-78.0	-78.0	0.79 (1)	2.22	AB-D	-116 / 126	0.05 (4)					
D-E	-7347 / 0		-153.5	-153.5	0.68 (1)	2.68	D-AA	0 / 2731	0.68 (1)					
E-F	-9111 / 0		-153.5	-153.5	0.81 (1)	2.11	AA-E	-8197 / 0	0.94 (1)					
F-G	-9633 / 0		-78.0	-78.0	0.91 (1)	1.94	E-Z	0 / 7264	0.93 (1)					
G-H	-9633 / 0		-78.0	-78.0	0.82 (1)	2.12	Z-F	-57 / 0	0.02 (4)					
H-I	-9633 / 0		-78.0	-78.0	0.82 (1)	2.12	F-Y	0 / 759	0.19 (1)					
I-J	-9566 / 0		-78.0	-78.0	0.77 (1)	2.16	Y-G	-546 / 0	0.15 (1)					
J-K	-6789 / 0		-78.0	-78.0	0.41 (1)	3.08	G-I	0 / 103	0.03 (1)					
K-L	-7519 / 0		-78.0	-78.0	0.64 (1)	2.62	X-I	0 / 151	0.04 (1)					
L-M	-7512 / 0		-78.0	-78.0	0.65 (1)	2.62	X-J	0 / 7403	0.96 (1)					
M-N	-6582 / 0		-78.0	-78.0	0.80 (1)	2.72	W-J	-6007 / 0	0.69 (1)					
N-O	-7385 / 0		-78.0	-78.0	0.46 (1)	2.62	J-V	-1813 / 0	0.89 (1)					
O-P	-3668 / 0		-78.0	-78.0	0.24 (1)	3.95	V-K	-2939 / 0	0.80 (1)					
AD-B	-3599 / 0		0.0	0.0	0.19 (1)	6.27	K-U	0 / 2558	0.33 (1)					
Q-P	-3293 / 0		0.0	0.0	0.23 (1)	5.80	U-L	0 / 253	0.06 (1)					
							U-M	0 / 2897	0.72 (1)					
AD-AC	0 / 0		-36.4	-36.4	0.17 (1)	10.00	T-M	0 / 172	0.05 (4)					
AC-AB	0 / 4819		-36.4	-36.4	0.68 (1)	10.00	T-N	-820 / 0	0.43 (1)					
AB-AA	0 / 5322		-36.4	-36.4	0.63 (1)	10.00	S-N	0 / 145	0.03 (4)					
AA-Z	0 / 9635		-36.4	-36.4	0.44 (1)	10.00	S-O	0 / 4586	0.81 (1)					
Z-Y	0 / 9114		-112.0	-112.0	0.50 (1)	10.00	R-O	-4246 / 0	0.69 (1)					
Y-X	0 / 9564		-112.0	-112.0	0.52 (1)	10.00	B-AC	0 / 4907	0.87 (1)					
X-W	0 / 10016		-112.0	-112.0	0.46 (1)	10.00	R-P	0 / 3587	0.63 (1)					
W-AE	0 / 7665		-112.0	-112.0	0.54 (1)	10.00								
AE-V	0 / 7665		-18.5	-18.5	0.54 (1)	10.00								
V-U	0 / 8460		-18.5	-18.5	0.69 (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: CPrimeHip
SIDE SETBACK = 8-4-10
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 14-10-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CStdGlrder
START DISTANCE = 14-10-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 25-3-8
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, 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 (1.30")
CALCULATED VERT. DEFL.(LL) = L/859 (0.54")
ALLOWABLE DEFL.(TL) = L/360 (1.30")
CALCULATED VERT. DEFL.(TL) = L/439 (1.07")

CSI: TC=0.91/1.00 (F-G:1), BC=0.91/1.00 (S-T:1), WB=0.96/1.00 (J-X:1), SSI=0.46/1.00 (E-F: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-18023942

CONTINUED ON PAGE 2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
J	TMVWW-t	MT20	7.0	18.0	2.50	7.75
K	TMVWW-t	MT20	5.0	6.0	2.00	2.25
L	TMVW+w	MT20	2.0	4.0		
M	TTWW+m	MT20	8.0	9.0	Edge	4.50
N	TMVWW-t	MT20	4.0	4.0	2.00	1.25
O	TMVWW-t	MT20	6.0	9.0	2.25	4.50
P	TMVW-t	MT20	5.0	8.0	1.50	4.00
Q	BMV1+p	MT20	3.0	5.0		
R	BBWW-t	MT20	8.0	9.0	3.25	6.75
S	BBWW-t	MT20	10.0	12.0		
T	BMWW-t	MT20	4.0	4.0	2.00	1.50
U	BBWWWW-m	MT20	10.0	12.0	5.00	5.75
V	BBWW-m	MT20	10.0	12.0	Edge	5.00
W	BBW-h	MT20	10.0	12.0	4.25	6.00
X	BBWW+p	MT20	10.0	12.0	Edge	5.00
Y	BMWWWW-t	MT20	5.0	8.0		
Z	BBWW+p	MT20	8.0	16.0	Edge	4.25
AA	BBWW-m	MT20	10.0	16.0	Edge	5.75
AB	BMWW-t	MT20	4.0	4.0	2.25	2.00
AC	BMWW-t	MT20	7.0	8.0	3.75	3.00
AD	BMV1+p	MT20	3.0	5.0	2.75	1.50

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) 476.7 lbs FACTORED DOWN AT 8-4-10 ON TOP CHORD, AND 963.6 lbs FACTORED DOWN AT 25-3-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

LOADING
 TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRAC (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
U-T	0/5887	-18.5	-18.5	0.78 (1)	10.00		
T-S	0/6682	-18.5	-18.5	0.91 (1)	10.00		
S-R	0/4060	-18.5	-18.5	0.33 (1)	10.00		
R-Q	0/0	-18.5	-18.5	0.01 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
D	8-4-10	-477	-477	---	FRONT	VERT	TOTAL
AE	25-3-8	-964	-964	---	FRONT	VERT	TOTAL

AUTOSOLVE HEELS OFF

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

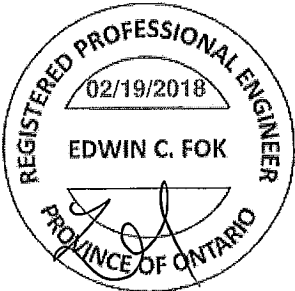
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)
 JSI METAL= 1.00 (X) (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-18023942(2)

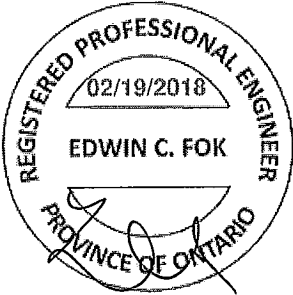
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
292648	H2TB	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 8.200 S Jan 6 2018 MITek Industries, Inc. Mon Feb 19 12:00:55 2018 Page 2					
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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
U	BBW-h	MT20	8.0	9.0		
V	BBWWW-m	MT20	8.0	9.0	3.00	4.50
W	BBWW+p	MT20	6.0	12.0	Edge	3.50
X	BBWW-h	MT20	6.0	7.0	1.75	3.75
Y	BMWW-t	MT20	4.0	4.0		
Z	BMWW-t	MT20	4.0	6.0	1.75	1.50
AA	BMV1+p	MT20	2.0	4.0	2.25	1.00

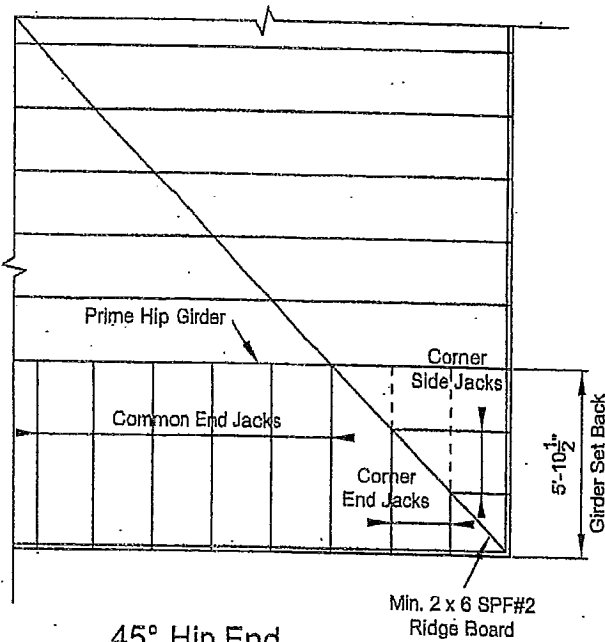
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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



A-18023943(2)

STRACON ENGINEERING INC.



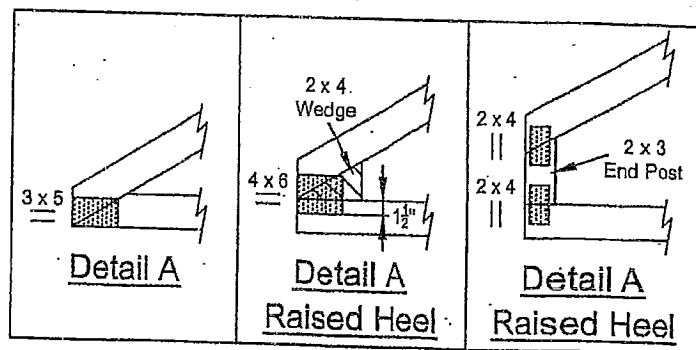
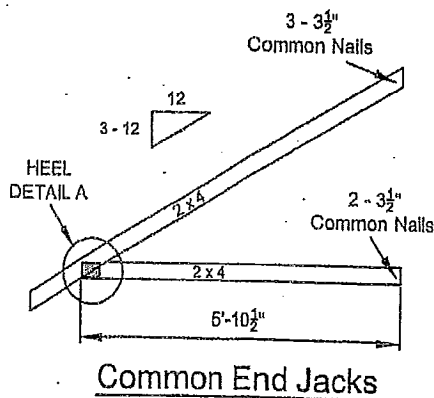
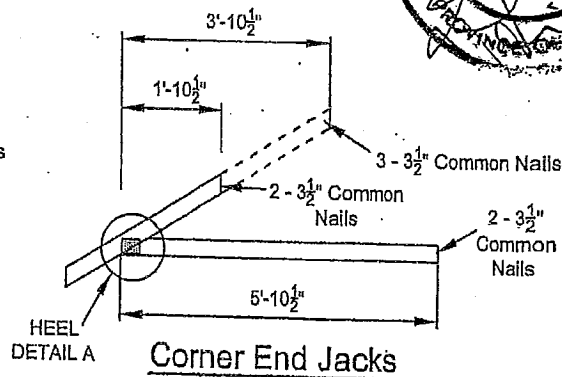
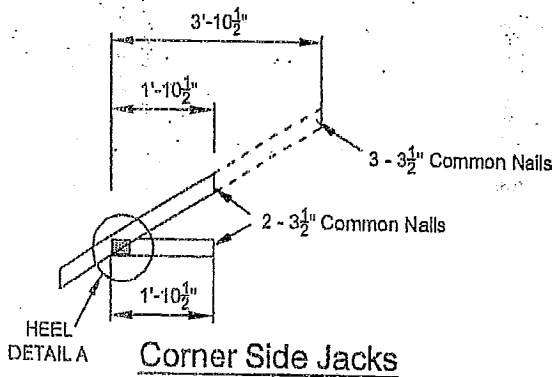
LUMBER SPECIFICATION

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

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:

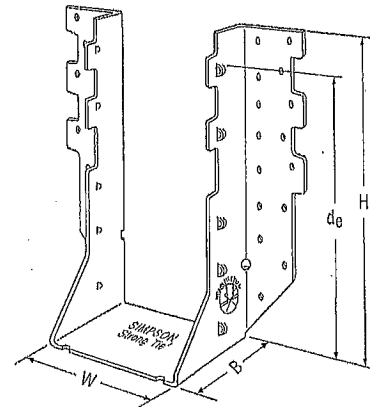
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

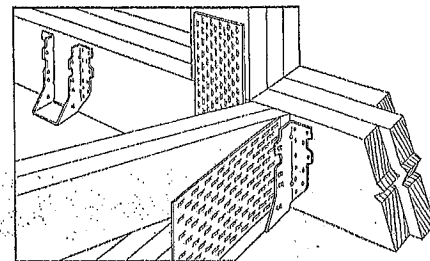
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

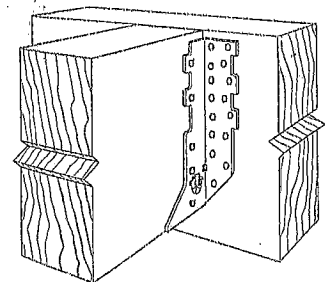
- See current catalogue for options



HHUS410



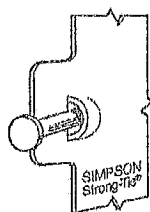
Typical HHUS Installation
(Truss Designer to provide fastener quantity for connecting multiple members together)



Typical HHUS Installation

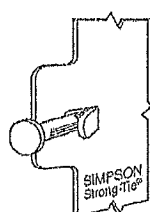
Model No.	Ga.	Dimensions (in.)				Fasteners		Factored Resistance (lb.)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
HHUS26-2	14	3 1/16	5 13/16	3	3 15/16	(14) 16d	(6) 16d	2850	7335	2065	5205
HHUS28-2	14	3 3/16	7 1/2	3	6 3/32	(22) 16d	(8) 16d	3765	8940	2675	6345
HHUS210-2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

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

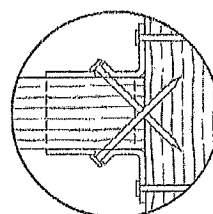


Double Shear Nailing prevents tabs breaking off (available on some models).

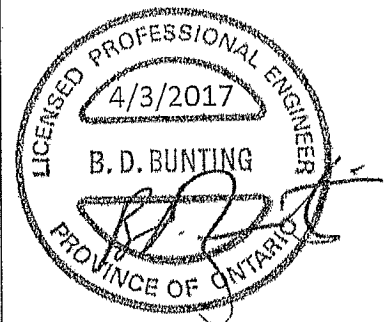
U.S. Patent
5,603,680



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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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:

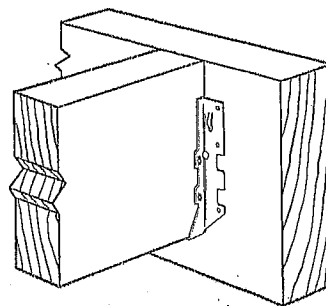
- Factored resistances are in accordance with CSA O86-14.
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

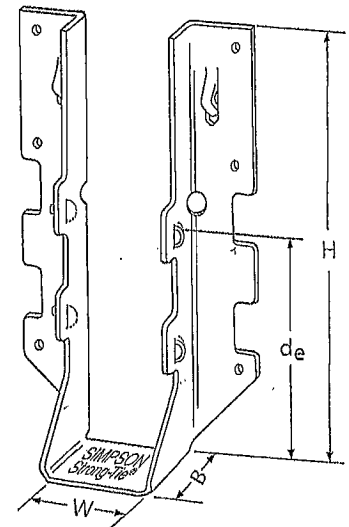
- Use all specified fasteners.
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire, 10d = 0.148" x 3" long common wire.
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads.
- Not designed for welded or nailer applications.

Options:

- These hangers cannot be modified



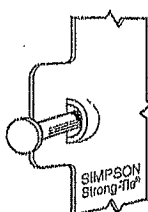
Typical LUS Installation



LUS28

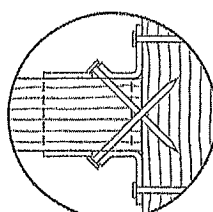
Model No.	Ga.	Dimensions (in.)					Fasteners		Factored Resistance (lb.)			
		W	H	B	d _g ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift (K _p =1.15)	Normal (K _p =1.00)	Uplift (K _p =1.15)	Normal (K _p =1.00)
LUS24	18	1 1/8	3 1/8	1 3/4	1 1/8	(4) 10d	(2) 10d		710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 1/8	(4) 16d	(2) 16d		835	2020	590	1435
LUS26	18	1 1/8	4 1/8	1 3/4	3/8	(4) 10d	(4) 10d		1420	2170	1290	1630
LUS26-2	18	3 1/8	4 1/8	2	4	(4) 16d	(4) 16d		1720	2595	1545	1920
LUS26-3	18	4 1/8	4 1/8	2	3 1/4	(4) 16d	(4) 16d		1720	2595	1545	2340
LUS28	18	1 1/8	6 1/8	1 3/4	3/8	(6) 10d	(6) 10d		1420	2520	1290	1790
LUS28-2	18	3 1/8	7	2	4	(6) 16d	(4) 16d		1720	3325	1545	2575
LUS28-3	18	4 1/8	6 1/4	2	3 1/4	(6) 16d	(4) 16d		1720	3325	1545	2375
LUS210	18	1 1/8	7 1/8	1 3/4	3/8	(8) 10d	(4) 10d		1420	2785	1290	2210
LUS210-2	18	3 1/8	9	2	6	(8) 16d	(6) 16d		2580	4500	2320	3195
LUS210-3	18	4 1/8	8 3/8	2	5 1/4	(8) 16d	(6) 16d		2580	3345	2320	2375

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

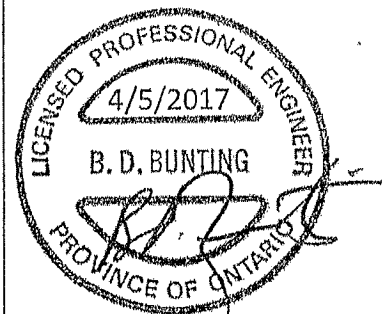


Dome Double Shear Nailing prevents tabs breaking off (available on some models).

U.S. Patent 5,603,580



Double Shear Nailing Top View.



LIMIT
STATES
DESIGN

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

(800) 999-5099
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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

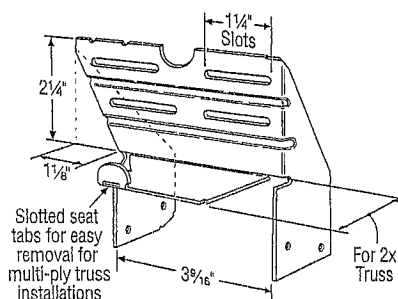
Design: Factored resistances are in accordance with CSA 086-14

Installation:

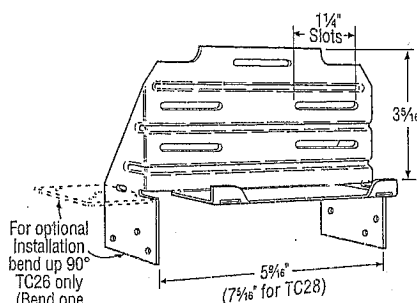
- Use all specified fasteners.
- Nails: 10d = 0.148" dia. x 3" long common wire, 10d x 1½" = 0.148" dia. x 1½" long.
- Drive 10d nails into the truss at the inside end of the slotted holes (inside end is towards the centre of the truss) and clinch on the back side. Do not seat these nails into the truss—allow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

Optional TC Installation:

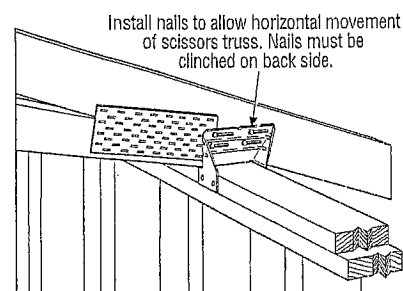
- Bend one flange up 90°. Drive specified nails into the top and face of the top plates or install Titen® screws into the top and face of masonry wall. See optional load tables and installation details.



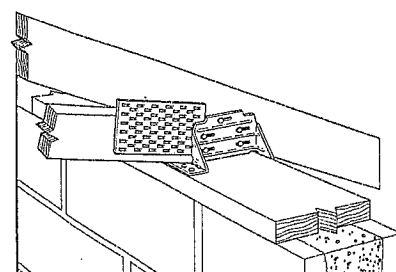
TC24
U.S. Patent 4,932,173



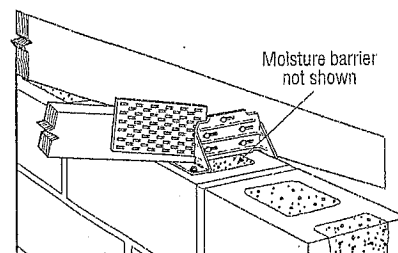
TC26
(TC28 Similar)



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)
TC24	(4) 10d	(4) 10d	lb.	lb.
TC26	(5) 10d	(6) 10d	605	430
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)
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) – ⅝" x 2¼" Titen screws has a factored uplift resistance of 275 lb.



LIMIT
STATES
DESIGN

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T-SPECTC17 3/17 exp. 6/19

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HUS/LJS – Double Shear Joist Hangers



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

Material: See table

Finish: G90 galvanized

Design:

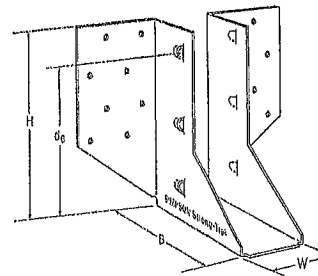
- Factored resistances are in accordance with CSA O86 -14.
- Uplift resistances have been Increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these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

Installation:

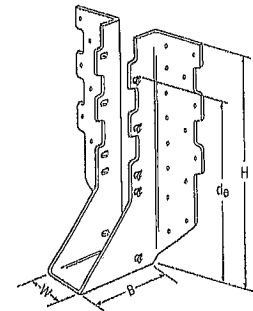
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

Options:

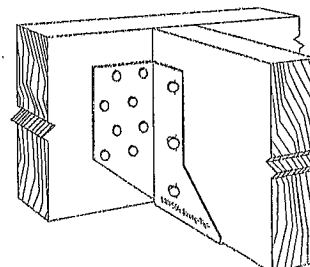
- See current catalogue for options



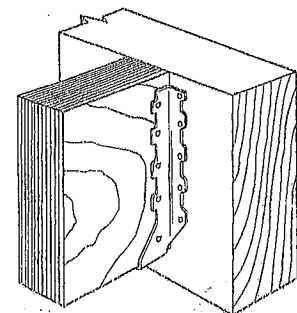
LJS26DS



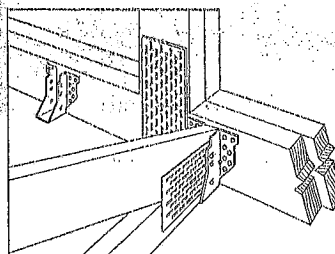
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



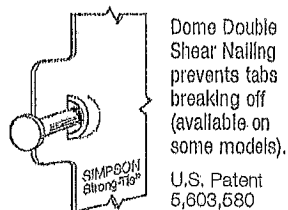
Typical HUS
Installation



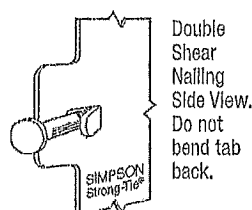
Typical HUS Installation
(Truss Designer to provide fastener
quantity for connecting multiple
members together)

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

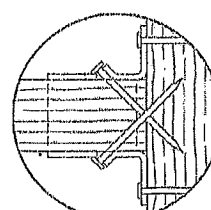
1. d₀ is the distance from the seat of the hanger to the highest joist nail.



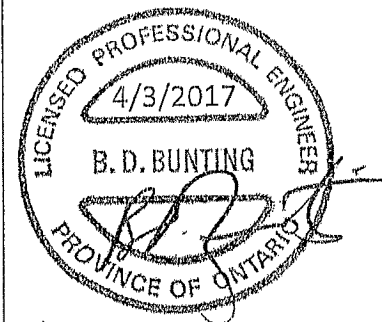
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



LIMIT
STATES
DESIGN

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