



Job Track: 40297
Layout ID: 253619
Plan Log: 79711

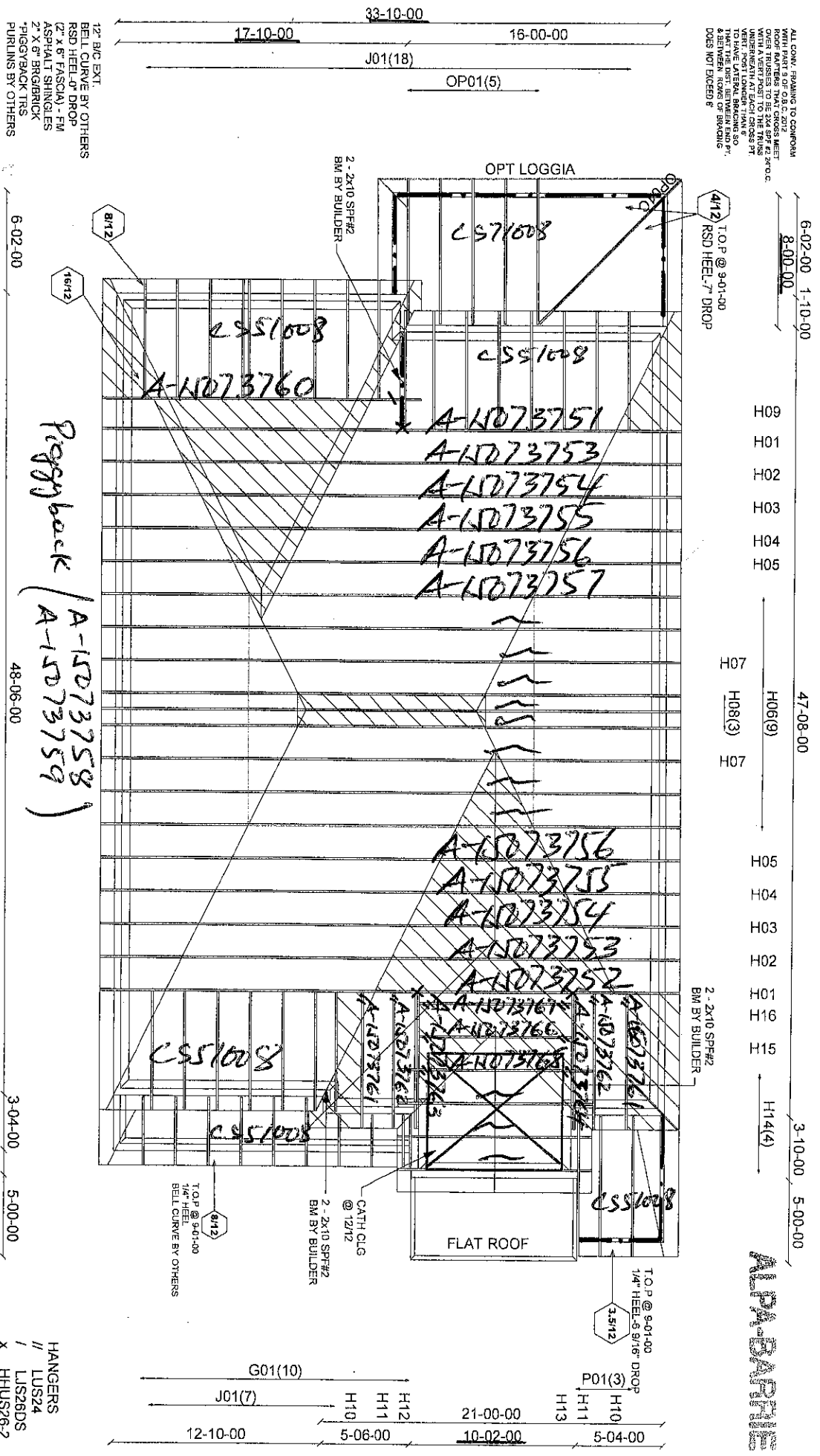
Builder / Location:
GOLD PARK / KLEINBURG
Project: **HUNTINGTON & NASHVILLE**
Date: 4/28/2015 Designer: cheryle

Model / Elevation:
42-1 / A

STD OR OPT 2ND FLR

CONVENTIONAL
FRAMING BY
OTHERS

Mark Ver: 7.5.0



ALL CON. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF RATTERS THAT CROSS WITH A VERTICAL TO THE TRUSS UNDERNEATH AT EACH CROSS PT. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROOF OF BRACING DOES NOT EXCEED 8'

ALPHA-BARTRIE

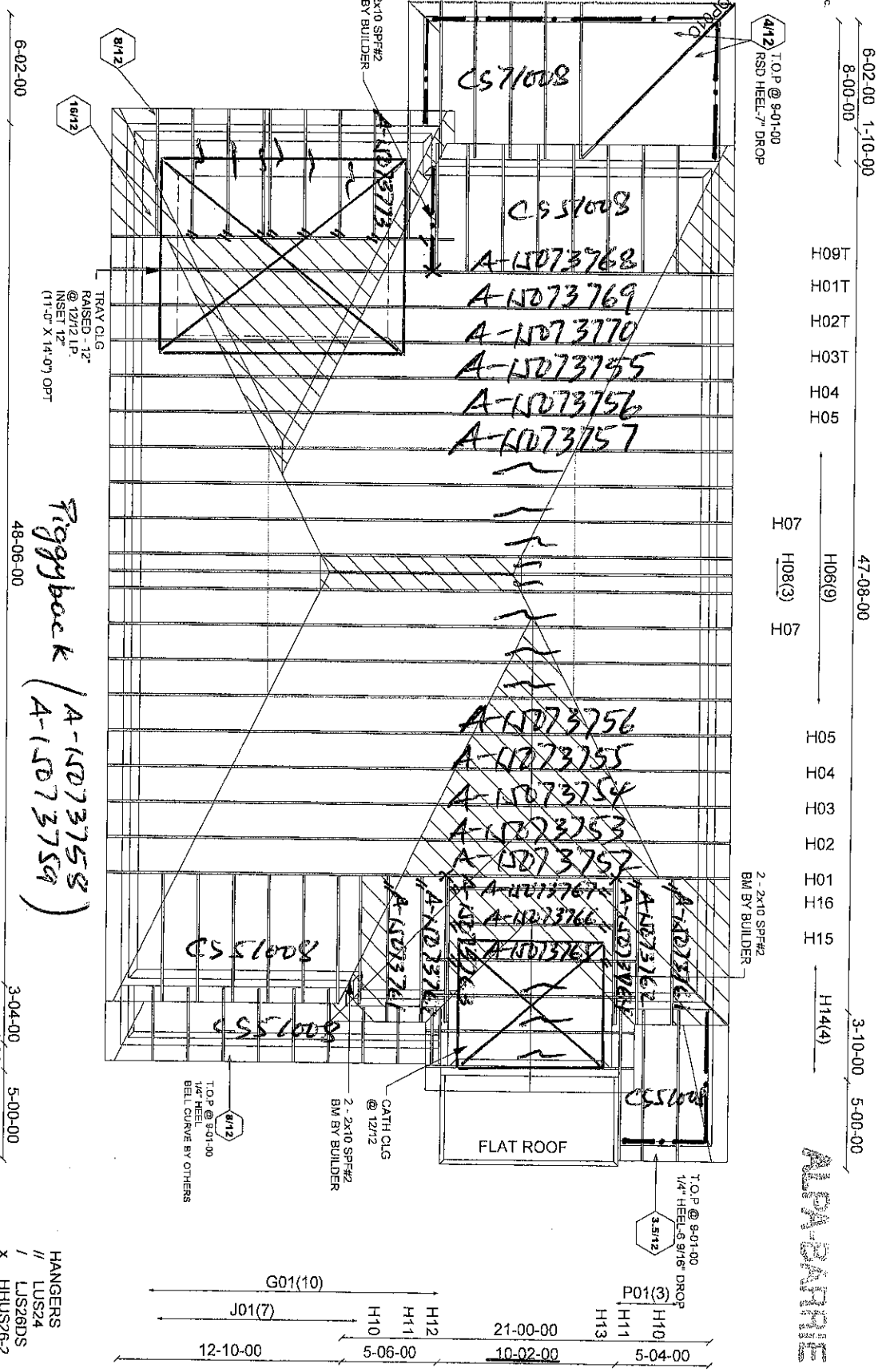


Job Track:	40297	Builder / Location:	GOLD PARK / KLEINBURG	Model / Elevation:	42-1 / A OPT 2ND W/TRAY
Layout ID:	253621	Project:	HUNTINGTON & NASHVILLE	THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.	
Plan Log:	79711	Date:	4/28/2015	Designer:	cheryle

CONVENTIONAL
FRAMING BY
OTHERS

Malek Ver. 7.5.0

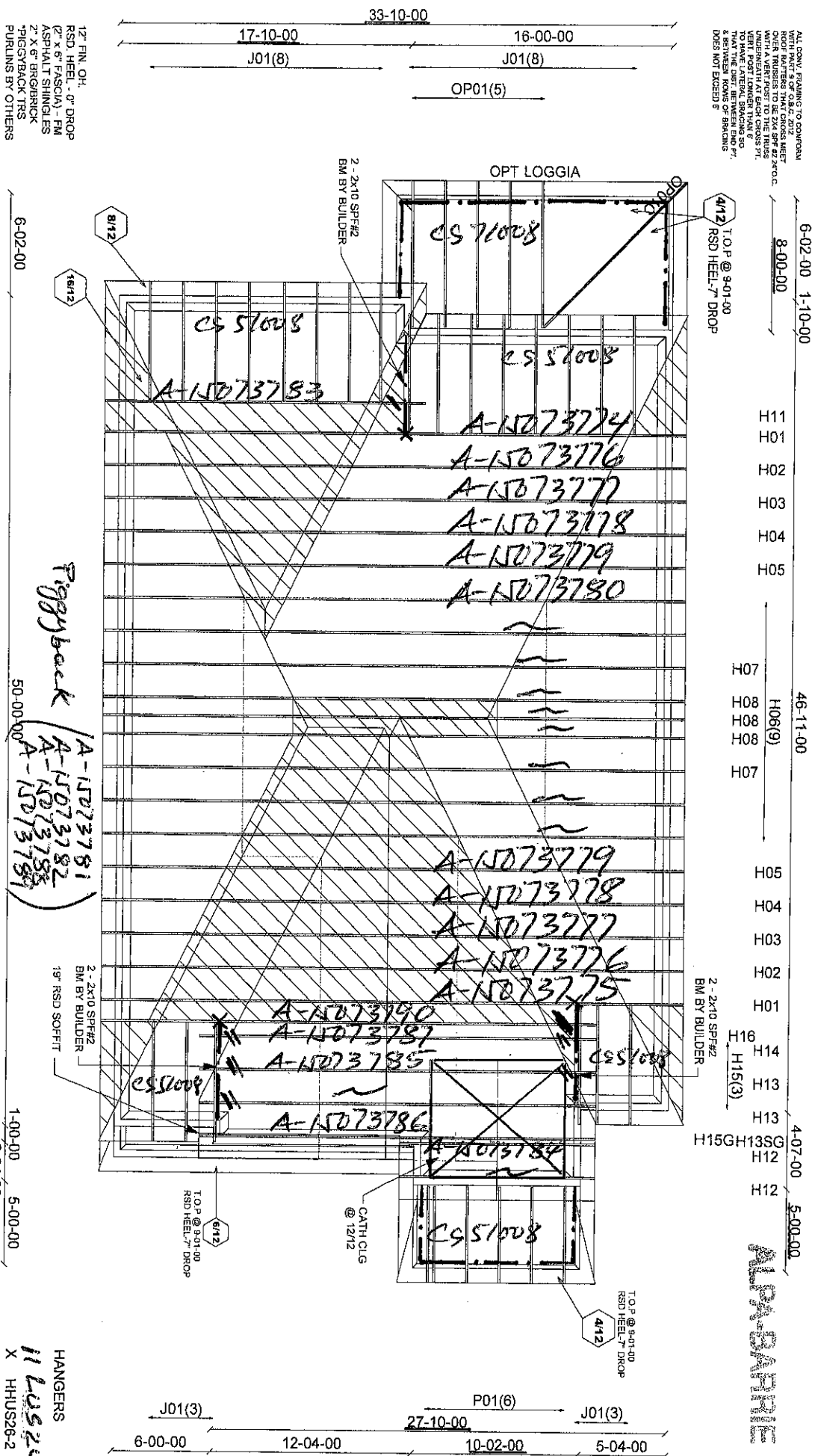
12" B/C EXT.
BELT CURVE BY OTHERS
RSD HEEL OF DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" x 6" BRICK
PIGgyBACK TRS
PURLINS BY OTHERS



ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.S.C. 2012. ROOF PARTIES THAT CROSS MEET SHALL BE SECURED TO THE TRUSS WITH A VERN POST TO THE TRUSS UNDERMINATE AT EACH CROSS PT. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 5'

ALPHA BUILDING

ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.B.C. 2012. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE 2X4 SIPS @ 24" WITH A VERT. POST TO THE TRUSS UNDERMETH 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'



30300000



CONVENTIONAL
FRAMING BY
OTHERS

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1160524
X HHUS26-2
/LTS26DS

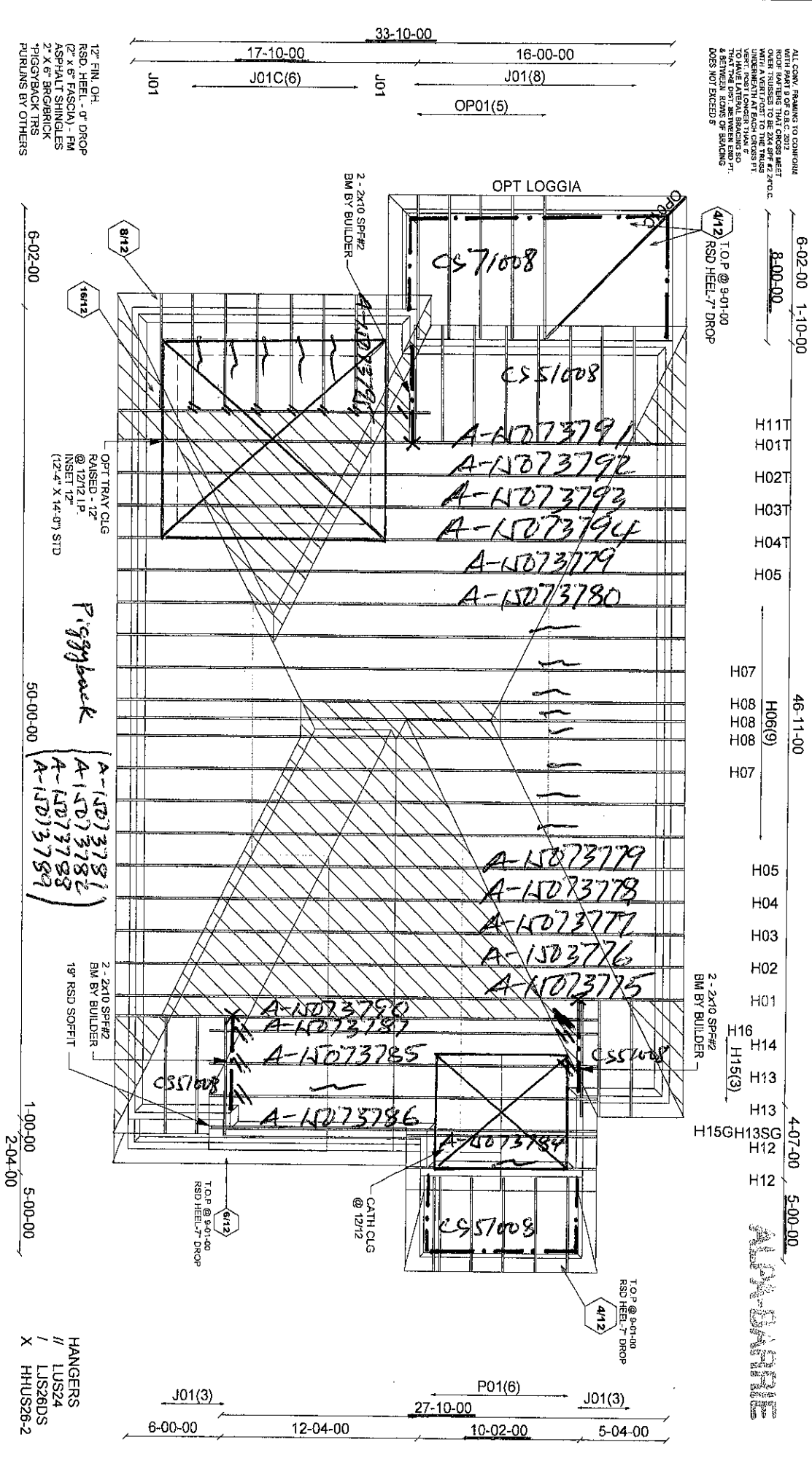


Job Track: 40297
Layout ID: 253623
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/29/2015 Designer: chengle

Model / Elevation: 42-1 / B OPT TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA 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 ALPHA ROOF TRUSSES INC. AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC. IF UTILIZED FOR ANY OTHER PURPOSE.

CONVENTIONAL
FRAMING BY
OTHERS
Mitek Ver 7.5.0



ALPHA ROOF TRUSSES
WITH PART 5 OF O.R.C. 2012
OVER TRUSSES TO BE 2X6 @ 24\"/>

ALPHA ROOF TRUSSES



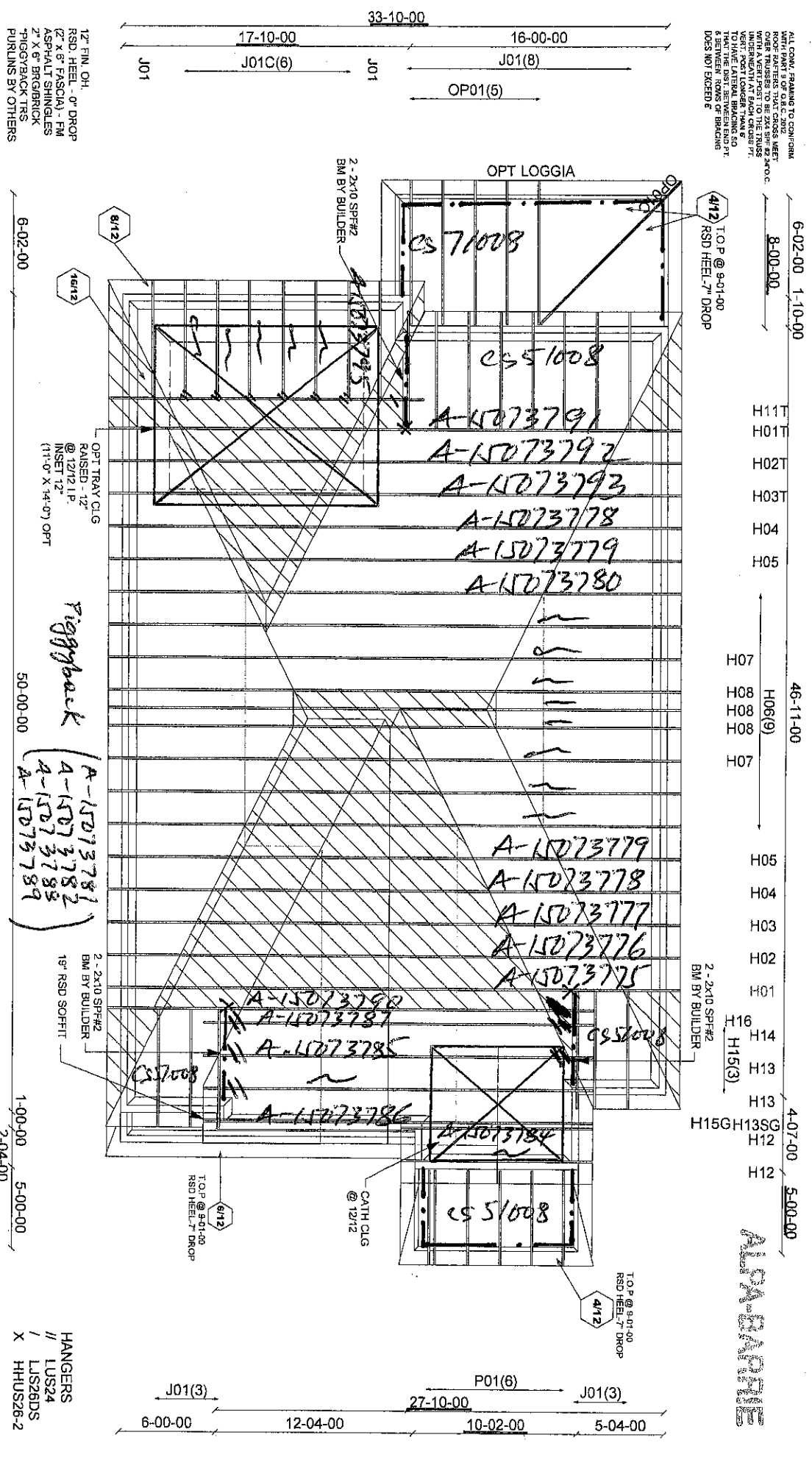
Job Track: 40297
Layout ID: 253624
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/29/2015 Designer: Charlie

Model / Elevation: 42-1 / B OPT 2ND W/TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALFA 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 ALFA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALFA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

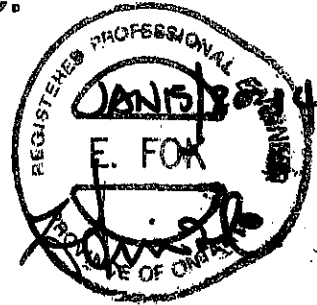


Milltek Ver 7.5.0



Stracon Engineering Inc.

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



RESPONSIBILITIES

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

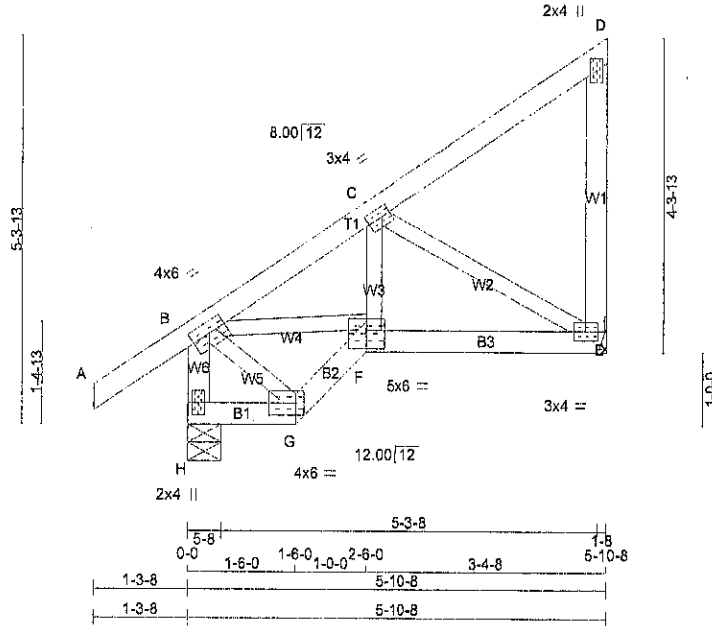
SPECIFICATIONS

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

January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253623	J01C	6	1	TRUSS DESC.	
Alpa Roof Truss, Maple					

Version 7.620 S Apr 15 2015 M/Tek Industries, Inc. Thu Jul 16 15:17:16 2015 Page 1
ID:VysbEZneA3WozYuArGwQlZLtyt-Kw1LYOnafHPokAPkjVWzprRsdM7XrerJ61LPsSxyxTB1
Scale: 3/8"=1'



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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWV-t	MT20	4.0	6.0	1.75	3.00
C	TMVWV-t	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVWV-t	MT20	3.0	4.0		
F	BBWV-t	MT20	5.0	6.0	3.00	3.00
G	BBW-t	MT20	4.0	6.0	2.00	4.50
H	BMV1+p	MT20	2.0	4.0		

NOTES- (1)

1) 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		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	355	0	355	0	0	5-8	1-8
E	258	0	258	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST CASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	248	181/0	0/0	0/0	0/0	67/0	0/0
E	182	123/0	0/0	0/0	0/0	59/0	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 = 6.25FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
H-B	-342/0	0.0	0.0 0.04 (1)	B-G	0/18	0.01 (4)	
A-B	0/27	-70.5	-70.5 0.08 (1)	F-C	0/57	0.02 (4)	
B-C	-287/0	-70.5	-70.5 0.10 (1)	C-E	-284/0	0.07 (1)	
C-D	-12/0	-70.5	-70.5 0.10 (1)	B-F	0/238	0.05 (1)	
E-D	-93/0	0.0	0.0 0.03 (1)				
H-G	0/0	-17.5	-17.5 0.01 (4)				
G-F	0/20	-17.5	-17.5 0.01 (4)				
F-E	0/248	-17.5	-17.5 0.08 (4)				

TOTAL WEIGHT = 6 X 30 = 179 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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=0.10 (B-C:1), BC=0.08 (E-F:4), WB=0.07 (C-E:1), SSI=0.09 (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 = 0.50

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	822	2284

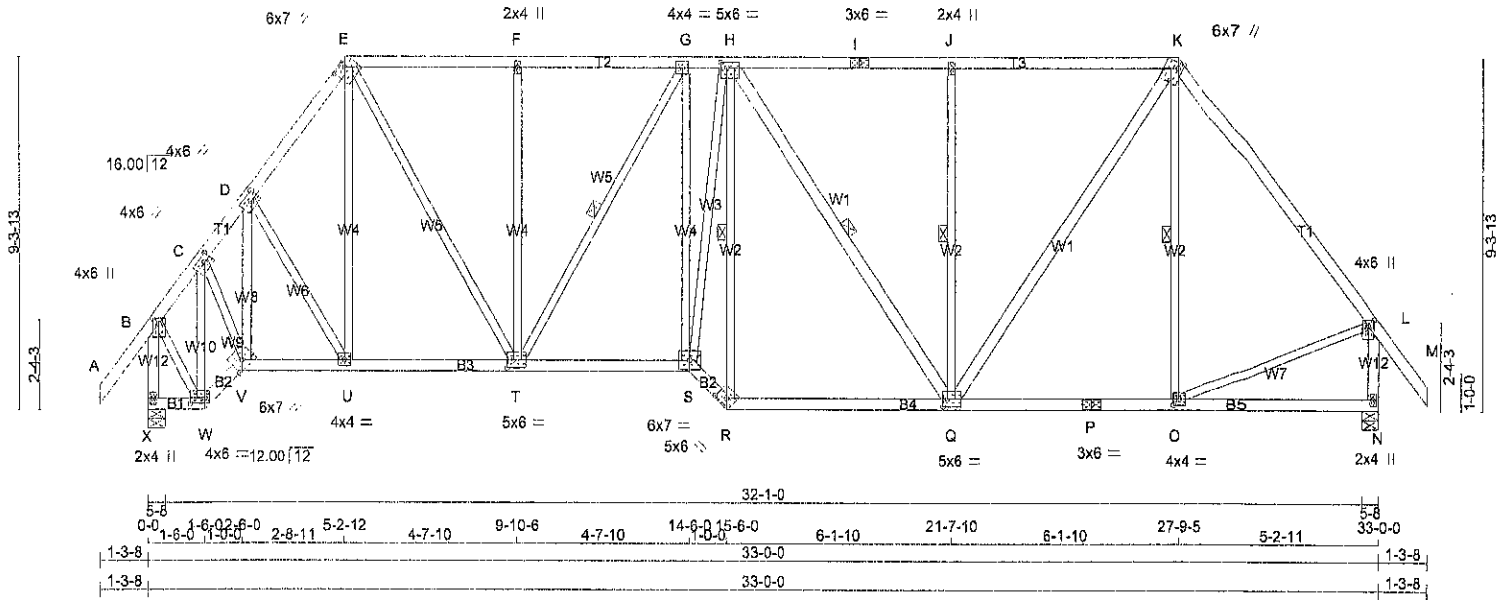
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)



A-14073795



TOTAL WEIGHT = 199 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	1.75	2.00
C	TMVW-t	MT20	4.0	6.0	1.75	2.25
D	TMVW-t	MT20	4.0	6.0	2.00	2.50
E	TTWW-h	MT20	6.0	7.0	1.50	3.75
F	TMW+w	MT20	2.0	4.0		
G	TMW-t	MT20	4.0	4.0		
H	TMVW-t	MT20	6.0	6.0	1.75	2.00
I	TS-t	MT20	3.0	6.0		
J	TMW+w	MT20	2.0	4.0		
K	TTWW+m	MT20	6.0	7.0	Edge	1.50
L	TMVW+p	MT20	4.0	6.0	1.75	2.00
N	BMV1+p	MT20	2.0	4.0		
O	BMVW-t	MT20	4.0	4.0	2.00	1.75
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	5.0	6.0	2.50	1.50
R	BBW-h	MT20	5.0	6.0	2.00	3.25
S	BBW-t	MT20	6.0	7.0		
T	BMVW-t	MT20	5.0	6.0	2.50	2.00
U	BMVW-t	MT20	4.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
X	1553	0	1553	0	5-8
N	1548	0	1548	0	5-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
X	1091	753 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0
N	1089	750 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.10FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF G-T, H-R, H-Q, J-Q, K-O.
 END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	W-C	-1102 / 0	0.29 (1)	
B-C	-896 / 0	-70.5	-70.5 0.10 (1)	C-V	0 / 824	0.19 (1)	
C-D	-1255 / 0	-70.5	-70.5 0.08 (1)	V-D	-259 / 0	0.09 (1)	
D-E	-1349 / 0	-70.5	-70.5 0.09 (1)	D-U	0 / 24	0.01 (1)	
E-F	-1269 / 0	-70.5	-70.5 0.26 (1)	U-E	0 / 63	0.02 (4)	
F-G	-1269 / 0	-70.5	-70.5 0.26 (1)	E-T	0 / 941	0.21 (1)	
G-H	-1475 / 0	-70.5	-70.5 0.25 (1)	T-F	-376 / 0	0.51 (1)	
H-I	-1232 / 0	-70.5	-70.5 0.44 (1)	F-G	-411 / 0	0.24 (1)	
I-J	-1232 / 0	-70.5	-70.5 0.44 (1)	S-G	0 / 296	0.07 (1)	
J-K	-1232 / 0	-70.5	-70.5 0.44 (1)	S-H	0 / 1092	0.25 (1)	
K-L	-1202 / 0	-70.5	-70.5 0.45 (1)	R-H	-1266 / 0	0.72 (1)	
L-M	0 / 40	-70.5	-70.5 0.10 (1)	H-Q	-195 / 0	0.12 (1)	
X-B	-1539 / 0	0.0	0.0 0.20 (1)	Q-J	-483 / 0	0.28 (1)	
N-L	-1512 / 0	0.0	0.0 0.19 (1)	Q-K	0 / 914	0.15 (1)	
				O-K	-155 / 34	0.09 (1)	
X-W	0 / 0	-17.5	-17.5 0.01 (4)	B-W	0 / 822	0.18 (1)	
W-V	0 / 671	-17.5	-17.5 0.11 (1)	O-L	0 / 785	0.17 (1)	
V-U	0 / 783	-17.5	-17.5 0.16 (1)				
U-T	0 / 797	-17.5	-17.5 0.17 (1)				
T-S	0 / 1471	-17.5	-17.5 0.28 (1)				
S-R	0 / 1875	-17.5	-17.5 0.30 (1)				
R-Q	0 / 1340	-17.5	-17.5 0.29 (1)				
Q-P	0 / 716	-17.5	-17.5 0.21 (4)				
P-O	0 / 716	-17.5	-17.5 0.21 (4)				
O-N	0 / 0	-17.5	-17.5 0.12 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

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

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(85 % 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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/899 (0.09")
 ALLOWABLE DEFL.(TL)= L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.45 (K-L:1), BC=0.30 (R-S:1), WB=0.72 (H-R:1), SSI=0.20 (J-K:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

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 822 2284 1656

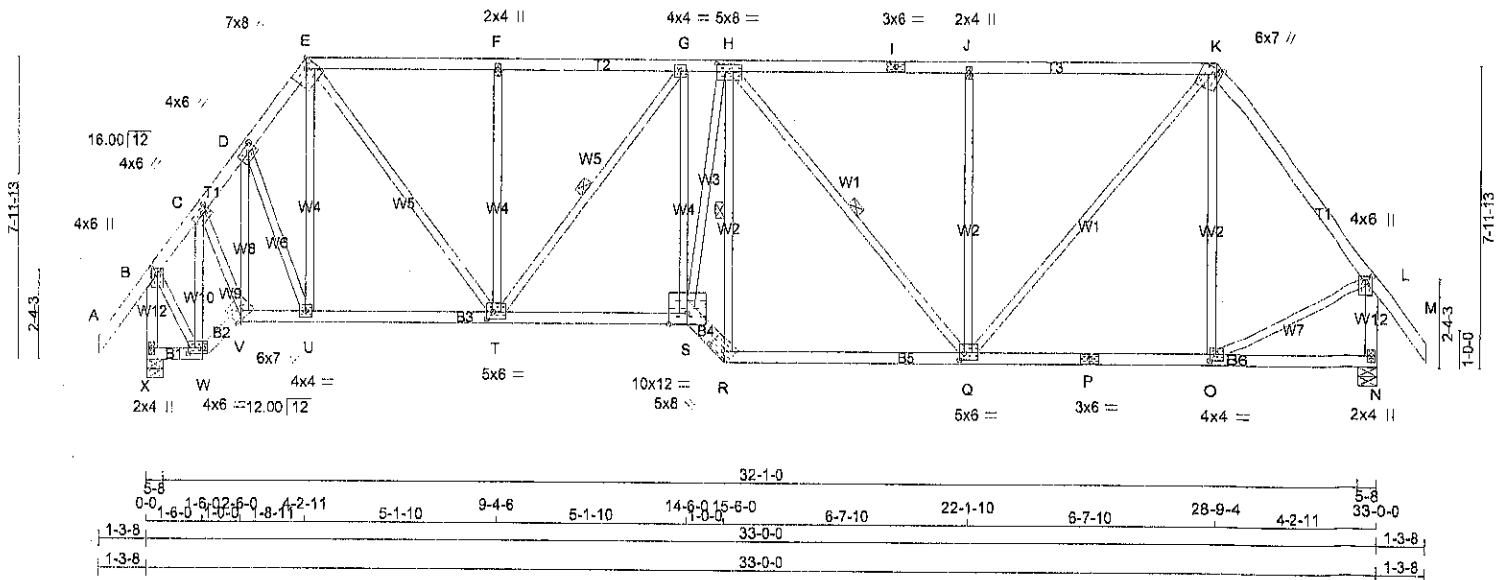
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (X) (INPUT = 0.90)
 JSI METAL= 0.30 (L) (INPUT = 1.00)



A-15073794



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
K - M	2x4	DRY	No.2	SPF
X - B	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
X - W	2x4	DRY	No.2	SPF
W - V	2x4	DRY	No.2	SPF
V - S	2x4	DRY	No.2	SPF
S - R	2x6	DRY	No.2	SPF
R - P	2x4	DRY	No.2	SPF
P - N	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+p	MT20	4.0	6.0	1.75	2.00
C	TMVW-w	MT20	4.0	6.0	1.75	2.25
D	TMVW-l	MT20	4.0	6.0	2.00	2.50
E	TTWV-h	MT20	7.0	8.0	Edge	2.75
F	TMVW-w	MT20	2.0	4.0		
G	TMVW-l	MT20	4.0	4.0		
H	TMVW-w-l	MT20	5.0	8.0	2.25	4.00
I	TS-l	MT20	3.0	6.0		
J	TMVW-w	MT20	2.0	4.0		
K	TTWV+w	MT20	6.0	7.0	Edge	1.50
L	TMVW+p	MT20	4.0	6.0	1.75	2.00
N	BMVW-l	MT20	2.0	4.0		
O	BMVW-l	MT20	4.0	4.0	2.00	1.75
P	BS-l	MT20	3.0	6.0		
Q	BMVW-w-l	MT20	5.0	8.0	2.25	1.50
R	BBW-h	MT20	5.0	8.0	1.75	5.00
S	BBW-w	MT20	10.0	12.0	Edge	
T	BMVW-w-l	MT20	5.0	6.0	2.25	2.00
U	BMVW-l	MT20	4.0	4.0		
V	BBW-w	MT20	6.0	7.0	Edge	
W	BBW-l	MT20	4.0	6.0	1.75	4.50

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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
X	1553	0	1553	0	0	5-8
N	1548	0	1548	0	0	5-8

					</

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MAX. FACTORED MEMB. FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		
A-B	0 / 40	-70.5 -70.5	0.10 (1)	10.00	W-C -1106 / 0	0.29 (1)
B-C	-896 / 0	-70.5 -70.5	0.10 (1)	6.25	C-V 0 / 803	0.18 (1)
C-D	-1268 / 0	-70.5 -70.5	0.05 (1)	5.68	V-D -250 / 0	0.08 (1)
D-E	-1357 / 0	-70.5 -70.5	0.05 (1)	5.54	D-U 0 / 65	0.01 (1)
E-F	-1483 / 0	-70.5 -70.5	0.34 (1)	5.00	U-E 0 / 47	0.02 (4)
F-G	-1484 / 0	-70.5 -70.5	0.33 (1)	5.00	E-T 0 / 1116	0.25 (1)
G-H	-1789 / 0	-70.5 -70.5	0.29 (1)	4.66	T-F -418 / 0	0.35 (1)
H-I	-1423 / 0	-70.5 -70.5	0.54 (1)	4.79	T-G -499 / 0	0.24 (1)
I-J	-1423 / 0	-70.5 -70.5	0.54 (1)	4.79	S-G 0 / 326	0.07 (1)
J-K	-1423 / 0	-70.5 -70.5	0.55 (1)	4.79	S-H 0 / 1337	0.30 (1)
K-L	-1188 / 0	-70.5 -70.5	0.27 (1)	5.57	R-H -1491 / 0	0.60 (1)
L-M	0 / 40	-70.5 -70.5	0.10 (1)	10.00	H-Q -256 / 0	0.19 (1)
X-B	-1539 / 0	0.0 0.0	0.20 (1)	6.63	Q-J -524 / 0	0.64 (1)
N-L	-1522 / 0	0.0 0.0	0.19 (1)	6.66	Q-K 0 / 1094	0.25 (1)
					Q-L -217 / 8	0.28 (1)
X-W	0 / 0	-17.5 -17.5	0.01 (4)	10.00	B-W 0 / 825	0.19 (1)
W-V	0 / 673	-17.5 -17.5	0.11 (1)	10.00	O-L 0 / 778	0.18 (1)
V-U	0 / 777	-17.5 -17.5	0.17 (1)	10.00		
U-T	0 / 801	-17.5 -17.5	0.19 (1)	10.00		
T-S	0 / 1784	-17.5 -17.5	0.34 (1)	10.00		
S-R	0 / 2218	-17.5 -17.5	0.26 (1)	10.00		
R-Q	0 / 1588	-17.5 -17.5	0.35 (1)	10.00		
Q-P	0 / 706	-17.5 -17.5	0.24 (4)	10.00		
P-O	0 / 706	-17.5 -17.5	0.24 (4)	10.00		
O-N	0 / 0	-17.5 -17.5	0.11 (4)	10.00		

TOTAL WEIGHT = 180 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 31.0 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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, CBC 2012, ABC 2014

- CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.10")

ALLOWABLE DEFL.(TL)= L/360 (1.10")

CALCULATED VERT. DEFL.(TL)= L/ 999 (0.19")

CSI: TC=0.55 (J-K:1), BC=0.35 (Q-R:1), WB=0.64 (J-Q:1), SSI=0.22 (J-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 0.50

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 622 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

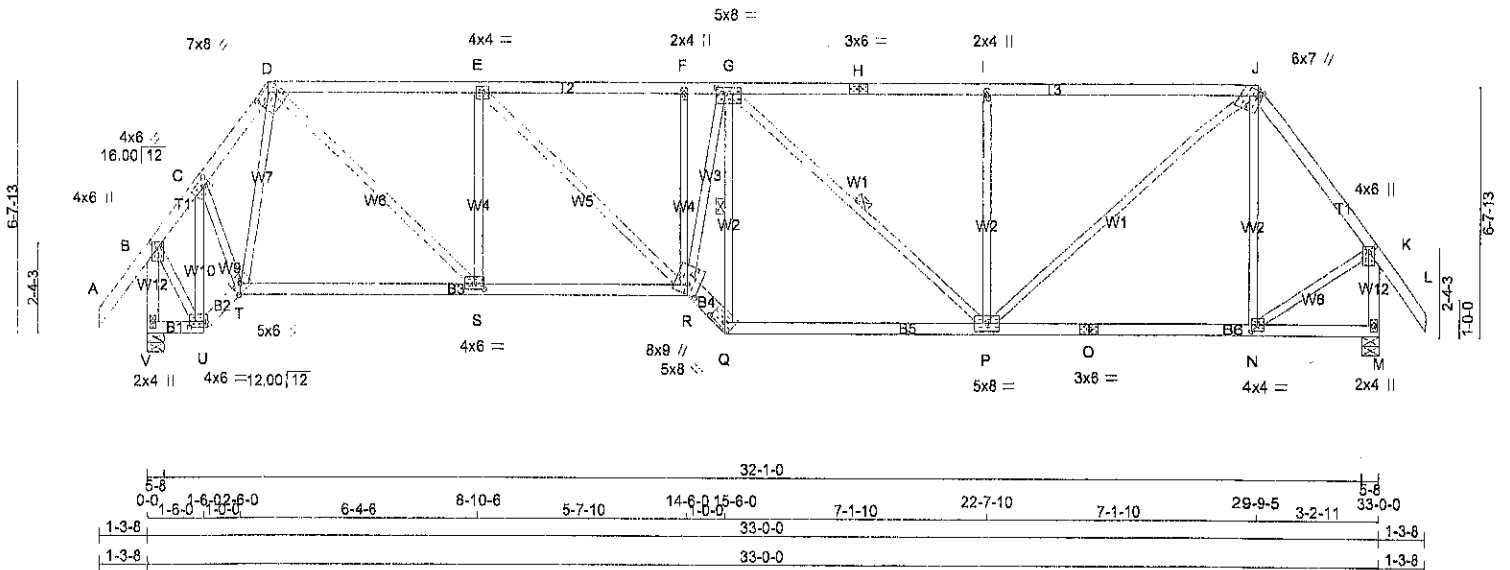
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (X) (INPUT = 0.90)

JSI METAL= 0.30 (S) (INPUT = 1.00)



A-10073793



TOTAL WEIGHT = 162 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - H	2x4	DRY No.2	SPF
H - J	2x4	DRY No.2	SPF
J - L	2x4	DRY No.2	SPF
V - B	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
V - U	2x4	DRY No.2	SPF
U - T	2x4	DRY No.2	SPF
T - R	2x4	DRY No.2	SPF
R - Q	2x6	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - M	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMVW+P	MT20	4.0	6.0	1.75 2.00
C TMVW+L	MT20	4.0	6.0	2.00 2.25
D TTWV+H	MT20	7.0	8.0	3.50 6.25
E TMVW+L	MT20	4.0	4.0	
F TMVW+H	MT20	2.0	4.0	
G TMVWVW+L	MT20	5.0	8.0	2.00 3.00
H TS-L	MT20	3.0	6.0	
I TMVW+H	MT20	2.0	4.0	
J TTWV+H	MT20	6.0	7.0	Edge 1.50
K TMVW+P	MT20	4.0	6.0	1.75 2.00
M BMV1+P	MT20	2.0	4.0	
N BMVW+L	MT20	4.0	4.0	2.00 1.75
O BS-L	MT20	3.0	6.0	
P BMVWVW+L	MT20	5.0	8.0	
Q BSW-H	MT20	5.0	8.0	1.75 5.00
R BSWVW+H	MT20	8.0	9.0	3.00 3.75
S BMVW+L	MT20	4.0	6.0	1.75 3.00
T BSWVW+H	MT20	5.0	6.0	2.25 3.00
U BSWVW+L	MT20	4.0	6.0	1.75 4.50
V 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		REQD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
V	1553	0	1553	0	0	5-8	1-11		
M	1548	0	1548	0	0	5-8	1-11		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
V	1091	753 / 0	0 / 0	0 / 0	0 / 0	339 / 0	0 / 0		
M	1089	750 / 0	0 / 0	0 / 0	0 / 0	336 / 0	0 / 0		

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF G-Q, G-P, END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
 TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 40	U-C	-1112 / 0
B-C	-894 / 0	C-T	0 / 761
C-D	-1276 / 0	T-D	-174 / 0
D-E	-1805 / 0	D-S	0 / 1406
E-F	-2244 / 0	S-E	-867 / 0
F-G	-2243 / 0	E-R	0 / 600
G-H	-1691 / 0	R-F	-65 / 5
H-I	-1691 / 0	R-G	0 / 1665
I-J	-1690 / 0	Q-G	-1818 / 0
J-K	-1146 / 0	G-P	-325 / 0
K-L	0 / 40	P-I	-563 / 0
V-B	-1539 / 0	P-J	0 / 1352
M-K	-1536 / 0	N-J	-299 / 0
		B-U	0 / 829
		N-K	0 / 792
V-U	0 / 0		
U-T	0 / 877		
T-S	0 / 782		
S-R	0 / 1805		
R-Q	0 / 2689		
Q-P	0 / 1931		
P-O	0 / 678		
O-N	0 / 678		
N-M	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. G/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

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

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

(55 % OF 23.0 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.26")

CSI: TC=0.68 (I-J:1), BC=0.42 (P-Q:1), WB=0.52 (G-Q:1), SSI=0.24 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (V) (INPUT = 0.90)
 JSI METAL= 0.34 (G) (INPUT = 1.00)

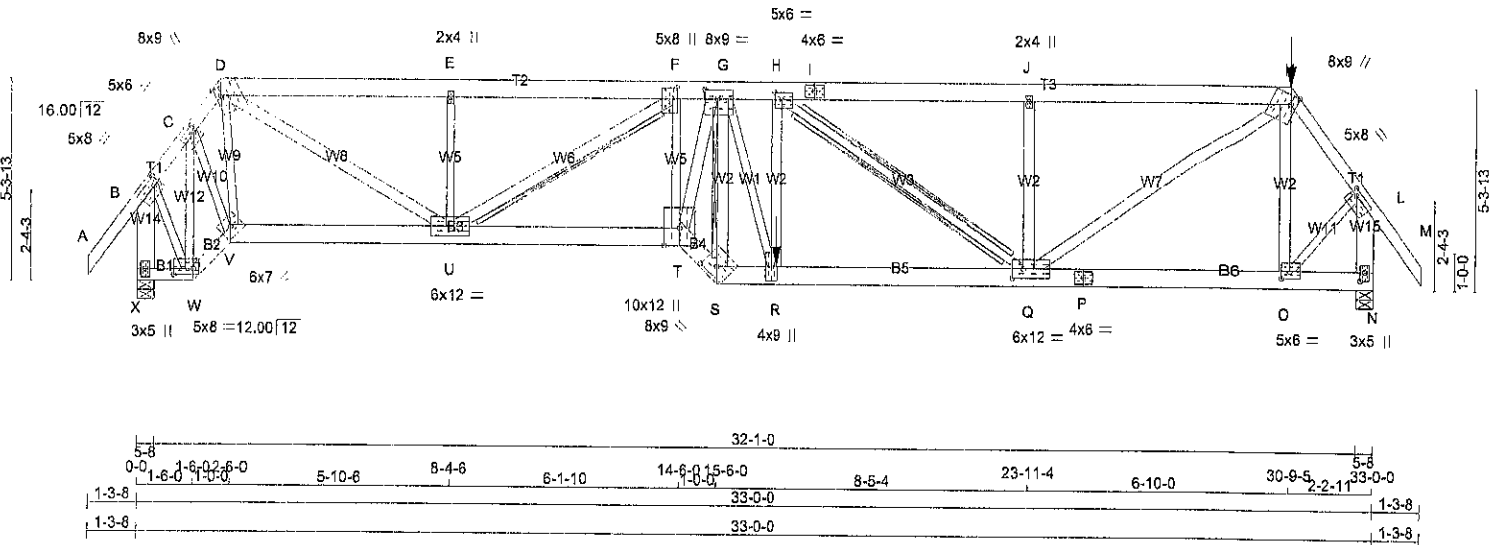
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253623	H01T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MTek Industries, Inc. Thu Jul 16 15:17:12 2015 Page 1
ID:VysbEZneA3WozYuArtGwQlZLtyt-S9nqik4b2vMGZ5zUgVtgbn6V0_lqvW6JrfJAYxTB5
Scale = 1:61.0



TOTAL WEIGHT = 209 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF		
D - I	2x8	DRY	No.2	SPF		
I - K	2x8	DRY	No.2	SPF		
K - M	2x4	DRY	No.2	SPF		
X - B	2x6	DRY	No.2	SPF		
N - L	2x6	DRY	No.2	SPF		
X - W	2x4	DRY	No.2	SPF		
W - V	2x4	DRY	No.2	SPF		
V - T	2x6	DRY	1650F 1.5E	SPF		
T - S	2x6	DRY	1650F 1.5E	SPF		
S - P	2x6	DRY	1650F 1.5E	SPF		
P - N	2x6	DRY	1650F 1.5E	SPF		

ALL WEBS	EXCEPT	U - F	2x4	DRY	No.2	SPF
T - G	2x4	DRY	No.2	SPF		
S - G	2x4	DRY	No.2	SPF		
R - H	2x4	DRY	No.2	SPF		
O - K	2x4	DRY	No.2	SPF		
D - U	2x4	DRY	No.2	SPF		
Q - J	2x4	DRY	No.2	SPF		
Q - K	2x4	DRY	No.2	SPF		

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	5.0	8.0	2.25	2.00
C	TMVW-I	MT20	5.0	6.0	2.25	1.50
D	TTWW+m	MT20	8.0	9.0	2.75	1.75
E	TMW+w	MT20	2.0	4.0		
F	TMVW-I	MT20	5.0	8.0	3.50	1.50
G	TMVW-I	MT20	8.0	9.0	3.00	4.00
H	TMVW-I	MT20	5.0	6.0	2.25	2.50
I	TS-I	MT20	4.0	6.0		
J	TMW+w	MT20	2.0	4.0		
K	TTWW+m	MT20	8.0	9.0	2.75	1.75
L	TMVW-I	MT20	5.0	8.0	1.50	2.00
N	BMV1+p	MT20	3.0	5.0	2.75	1.50
O	BMVW-I	MT20	5.0	6.0	2.25	2.75

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
X	2663	0	2663	0
N	3379	0	3379	0

UNFACTORED REACTIONS	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
	COMBINED	SNOW
JT	1948	910 / 0
X	2460	1216 / 0
N		

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

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

2x4 DRY SPF No.2 T-BRACE REQUIRED AT F-U, G-S
2x4 DRY SPF No.2 I-BRACE REQUIRED AT H-Q
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING	THAT LOAD CASES: (4)
CHORDS	WEBS
MEMB.	MEMB.
MAX. FACTORED	MAX. FACTORED
FORCE	FORCE
(LBS)	(LBS)
FR-TO	FR-TO
A-B	-70.5 -70.5 0.11 (1)
B-C	-1803 / 0
C-D	-2377 / 0
D-E	-4806 / 0
E-F	-4806 / 0
F-G	-7279 / 0
G-H	-6366 / 0
H-I	-4906 / 0
I-J	-4906 / 0
J-K	-4906 / 0
K-L	-2521 / 0
L-M	-70.5 -70.5 0.11 (1)
X-B	-2650 / 0
N-L	-3391 / 0
X-W	0 / 0
W-V	0 / 1257
V-U	0 / 1406
U-T	0 / 7240
T-S	0 / 8351
S-R	0 / 9081
R-Q	0 / 6366
Q-P	0 / 1481
P-O	0 / 1481
O-N	0 / 0

FACTORED CONCENTRATED LOADS (LBS)	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
K	30-9-5	-114	-114	---	---	FRONT	VERT	TOTAL
R	17-1-8	-1626	-1626	---	---	FRONT	VERT	DEAD

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	=	3.0	PSF	
BOT CH.	LL	=	0.0	PSF	
	DL	=	7.0	PSF	
TOTAL LOAD		=	31.0	PSF	

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-2-11
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 16-10-8 OF SPAN
MEASURED FROM THE RIGHT.

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL)= L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL)= L/660 (0.58")

CSI: TC=0.76 (J-K:1), BC=0.71 (Q-R:4), WB=0.93 (G-S:1), SS=0.39 (J-K:1)

DOL LUMBER=0.98 NAIL=0.98 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR CHANGES TO THE TRUSS MANUFACTURING PLANT



NOTED
CONTINUED ON PAGE 2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
P	BS-t	MT20	4.0	6.0		
Q	BMWWW-t	MT20	6.0	12.0	3.00	3.50
R	BMWWW-t	MT20	4.0	8.0		
S	BBW-h	MT20	8.0	9.0	3.00	4.25
T	BBWW+p	MT20	10.0	12.0	Edge	
U	BMWWW-t	MT20	6.0	12.0		
V	BBWW-h	MT20	6.0	7.0		
W	BBWW-t	MT20	5.0	8.0	1.75	6.25
X	BMV1+p	MT20	3.0	5.0		

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) 114.2 lbs FACTORED DOWN AT 30-9-5 ON TOP CHORD, AND 1821.4 lbs FACTORED DOWN AT 17-1-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES: (1)

1) 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.

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX	MIN	MAX MIN
MT20	616 354	1667 822 2284 1666

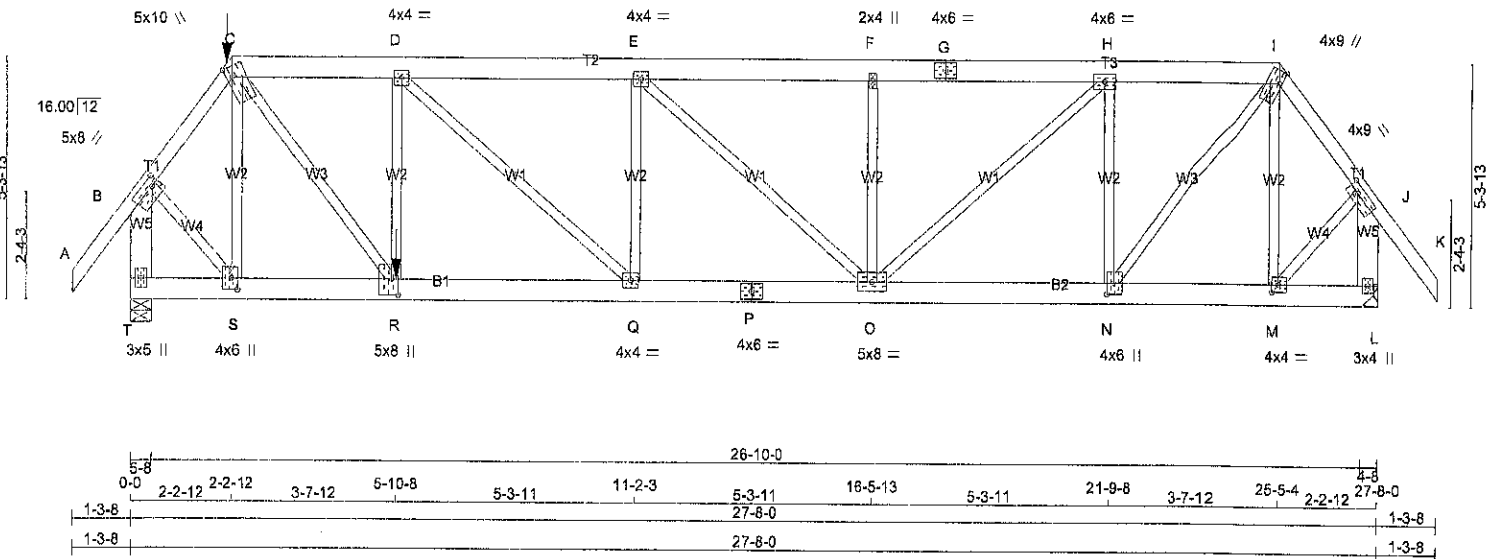
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.85 (T) (INPUT = 1.00)



A-15073791(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
T - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
T - P	2x6	DRY	No.2	SPF
P - L	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
B	TMVW-I	MT20	5.0	8.0	2.00	2.00
C	TTWW+m	MT20	5.0	10.0	2.75	1.50
D	TMWW-I	MT20	4.0	4.0		
E	TMWW-I	MT20	4.0	4.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-I	MT20	4.0	6.0		
H	TMWW-I	MT20	4.0	6.0		
I	TTWW+m	MT20	4.0	9.0	3.25	0.75
J	TMVW-I	MT20	4.0	9.0	1.75	3.00
L	BMV1+p	MT20	3.0	4.0		
M	BMWW-I	MT20	4.0	4.0	2.00	1.75
N	BMWW-I	MT20	4.0	6.0	3.00	1.75
O	BMWWW-I	MT20	5.0	8.0		
P	BS-I	MT20	4.0	6.0		
Q	BMWW-I	MT20	4.0	4.0		
R	BMWW-I	MT20	5.0	8.0	4.25	1.75
S	BMWW-I	MT20	4.0	6.0	3.00	1.50
T	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

1)



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		
T	2783	0	2783	0	5-8	3-9
L	1658	0	1658	0	5-8	3-9

HANGER BY OTHERS
 MIN. SEAT SIZE: 1-13

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
T	2081	829 / 0	0 / 0	0 / 0	0 / 0	1232 / 0	0 / 0
L	1193	667 / 0	0 / 0	0 / 0	0 / 0	526 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.59FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CS1 (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 40	-70.5	-70.5	0.12 (1)	10.00	S-C	-776 / 0 0.30 (1)
B-C	-2040 / 0	-70.5	-70.5	0.13 (1)	4.59	C-R	0 / 2483 0.68 (4)
C-D	-2698 / 0	-138.7	-138.7	0.19 (1)	4.86	R-D	-805 / 134 0.23 (1)
D-E	-2865 / 0	-70.5	-70.5	0.16 (1)	4.78	D-Q	-230 / 226 0.24 (4)
E-F	-2482 / 0	-70.5	-70.5	0.16 (1)	5.07	Q-E	-35 / 283 0.11 (4)
F-G	-2482 / 0	-70.5	-70.5	0.15 (1)	5.08	E-O	-518 / 0 0.53 (4)
G-H	-2482 / 0	-70.5	-70.5	0.15 (1)	5.08	O-F	-376 / 0 0.14 (1)
H-I	-1598 / 0	-70.5	-70.5	0.11 (1)	6.07	O-H	0 / 1199 0.31 (1)
I-J	-1156 / 0	-70.5	-70.5	0.09 (1)	5.80	N-H	-1149 / 0 0.44 (1)
J-K	0 / 40	-70.5	-70.5	0.12 (1)	10.00	N-I	0 / 1524 0.39 (1)
T-B	-2795 / 0	0.0	0.0	0.28 (1)	6.20	M-I	-471 / 0 0.18 (1)
L-J	-1661 / 0	0.0	0.0	0.15 (1)	7.61	B-S	0 / 1569 0.40 (1)
						M-J	0 / 890 0.23 (1)
T-S	0 / 0	-34.5	-34.5	0.12 (4)	10.00		
S-R	0 / 1206	-34.5	-34.5	0.28 (4)	10.00		
R-Q	0 / 2698	-17.5	-17.5	0.46 (4)	10.00		
Q-P	0 / 2865	-17.5	-17.5	0.43 (1)	10.00		
P-O	0 / 2865	-17.5	-17.5	0.43 (1)	10.00		
O-N	0 / 1598	-17.5	-17.5	0.26 (1)	10.00		
N-M	0 / 693	-17.5	-17.5	0.14 (1)	10.00		
M-L	0 / 0	-17.5	-17.5	0.04 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-12	-115	-115	---	FRONT	VERT	TOTAL
R	5-10-8	-1346	-1346	---	FRONT	VERT	DEAD

TOTAL WEIGHT = 164 lb [M]

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 = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHip
 SIDE SETBACK = 2-2-12
 END SETBACK = 5-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADDTL LOADS BASED ON 55 % OF GSL.
 LOADS APPLIED TO FIRST 5-10-8 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

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

(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 (0.92")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
 ALLOWABLE DEFL.(TL)= L/360 (0.92")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.26 (B-T:1), BC=0.46 (Q-R:4),
 WB=0.68 (C-R:4), SSI=0.19 (C-D:1)

DOL LUMBER=0.96 NAIL=0.96 LS BEND=1.00
 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

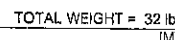
AUTOSOLVE HEELS OFF

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

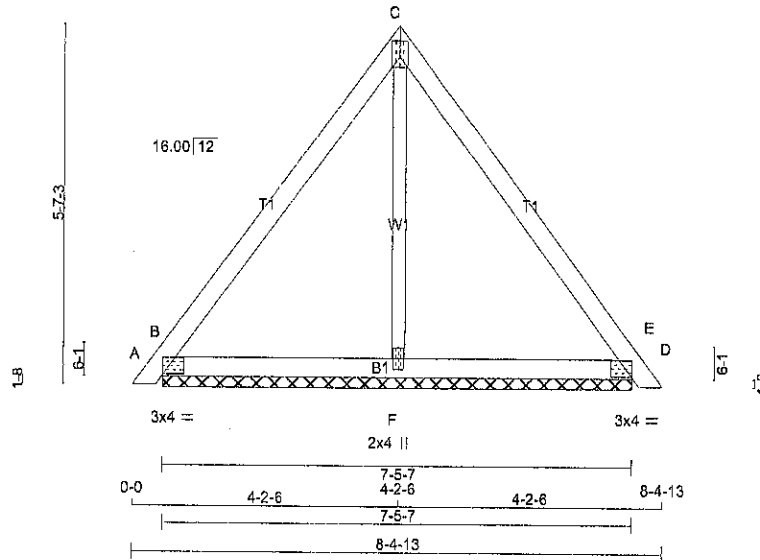
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253622	H16	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

HANGERS NOTES 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.5 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD, AND 1507.8 lbs FACTORED DOWN AT 5-10-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER. NOTES- (1) 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.
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A-15073789



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMB1-I	MT20	3.0	4.0	1.50	2.75
F	BMW1+w	MT20	2.0	4.0		

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
B	253	0	253	0	7-5-7	1-8
D	253	0	253	0	7-5-7	1-8
F	200	0	200	0	7-5-7	1-8

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	175	136 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0
D	175	136 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0
F	146	70 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS	LC
FR-TO		FROM	TO		FR-TO				
A-B	0 / 9	-70.5	-70.5	0.01 (1)	10.00	F-C	-118 / 0		0.05 (1)
B-C	-89 / 0	-70.5	-70.5	0.17 (1)	6.25				
C-D	-89 / 0	-70.5	-70.5	0.17 (1)	6.25				
D-E	0 / 9	-70.5	-70.5	0.01 (1)	10.00				
B-F	0 / 53	-17.5	-17.5	0.07 (4)	10.00				
F-D	0 / 53	-17.5	-17.5	0.07 (4)	10.00				

TOTAL WEIGHT = 3 X 28 = 85 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
 - PART 8 OF OBC 2012, BCBC 2012, ABC 2014
 - CSA 086-09
 - TPIC 2011

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

CSI: TC=0.17 (B-C:1), BC=0.07 (D-F:4), WB=0.05 (C-F:1), SSI=0.06 (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 = 0.50

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 822 2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

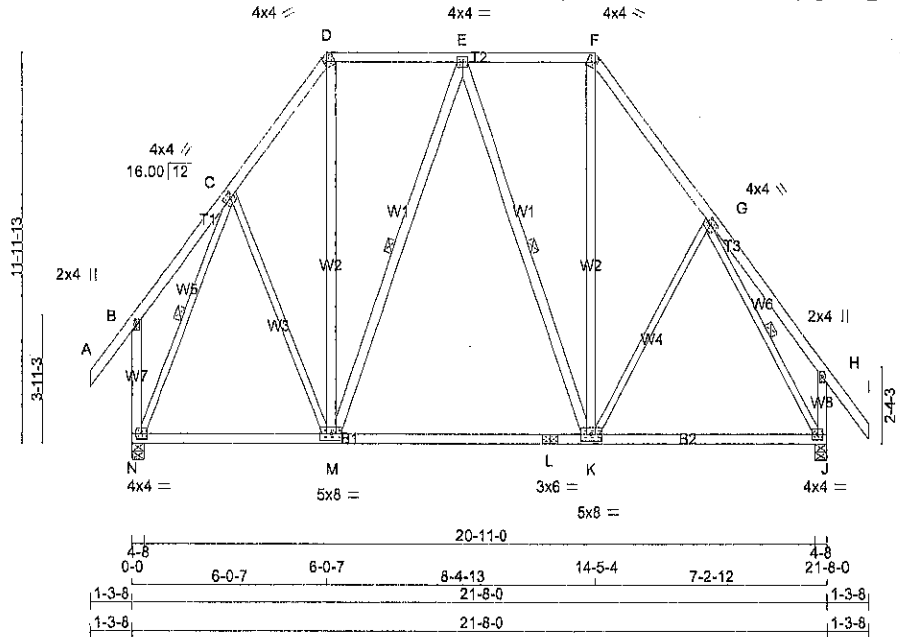
JSI GRIP= 0.42 (B) (INPUT = 0.60)
 JSI METAL= 0.06 (D) (INPUT = 1.00)



A-15073788

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Thu Jul 16 14:32:06 2015 Page 1
ID:VysbEZneA3WozYuArtGwQlZLtyt-gZHml_tezJciEuyMyJ7ydV6iaQg76DslyTK0yxTrh
Scale = 1:70.9



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

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	4.0	2.00	1.25
D	TTW-m	MT20	4.0	4.0	1.75	1.00
E	TMWW-t	MT20	4.0	4.0		
F	TTW-m	MT20	4.0	4.0	1.75	1.00
G	TMWW-t	MT20	4.0	4.0	1.75	1.25
H	TMV+p	MT20	2.0	4.0		
J	BMVW1-t	MT20	4.0	4.0		
K	BMWW-t	MT20	5.0	8.0		
L	BS-t	MT20	3.0	6.0		
M	BMWW-t	MT20	5.0	8.0		
N	BMVW1-t	MT20	4.0	4.0		

NOTES- (1)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
N	1085	0	1085	0	4-8	1-8
J	1082	0	1082	0	4-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE			
N	765	514 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0
J	763	514 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0

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

BRACING

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-M, E-K, C-N, G-J.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-M	0 / 94	0.02 (4)
B-C	0 / 18	-70.5	-70.5 0.10 (1)	10.00	M-D	0 / 303	0.05 (1)
C-D	-659 / 0	-70.5	-70.5 0.08 (1)	6.25	M-E	-270 / 0	0.24 (1)
D-E	-384 / 0	-78.0	-78.0 0.17 (1)	6.25	E-K	-149 / 0	0.14 (1)
E-F	-424 / 0	-78.0	-78.0 0.17 (1)	6.25	K-F	0 / 335	0.05 (1)
F-G	-728 / 0	-70.5	-70.5 0.12 (1)	6.25	K-G	-48 / 27	0.06 (1)
G-H	0 / 24	-70.5	-70.5 0.15 (1)	10.00	N-C	-927 / 0	0.41 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	G-J	-947 / 0	0.37 (1)
N-B	-185 / 0	0.0	0.0 0.05 (1)	7.81			
J-H	-195 / 0	0.0	0.0 0.02 (1)	7.81			
N-M	0 / 345	-17.5	-17.5 0.23 (4)	10.00			
M-L	0 / 473	-17.5	-17.5 0.29 (4)	10.00			
L-K	0 / 473	-17.5	-17.5 0.29 (4)	10.00			
K-J	0 / 444	-17.5	-17.5 0.29 (4)	10.00			

TOTAL WEIGHT = 160 lb

[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	=	21.0 PSF
DL	=	3.0 PSF
BOT CH. LL	=	0.0 PSF
DL	=	7.0 PSF
TOTAL LOAD	=	31.0 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.72")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.72")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

CSI: TC=0.17 (E-F:1), BC=0.29 (K-M:4), WB=0.41 (C-N:1), SSI=0.16 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

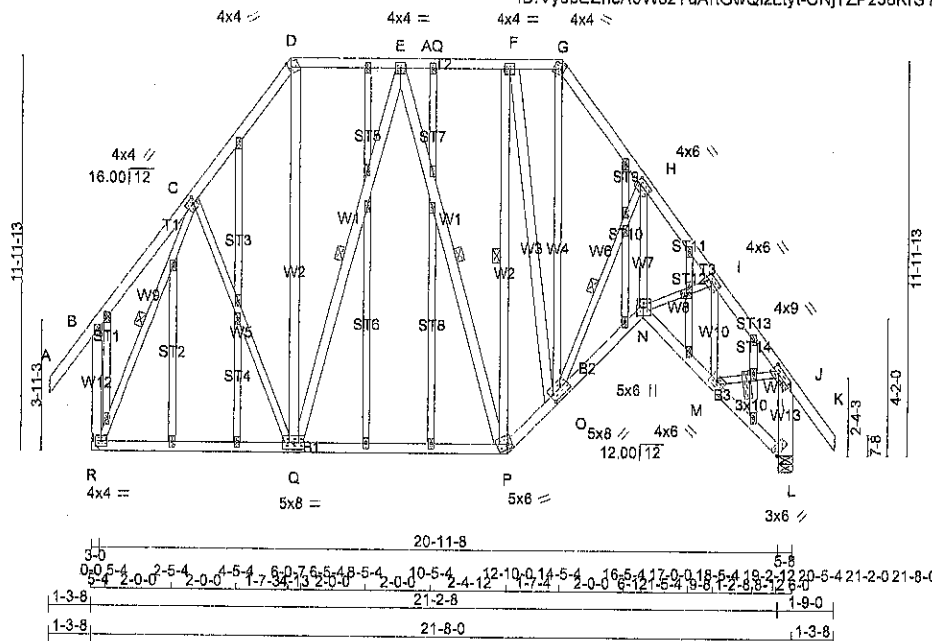
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (C) (INPUT = 0.90)
JSI METAL= 0.36 (G) (INPUT = 1.00)



A-15073787

Alpa Roof Truss, Maple



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - K	2x4	DRY	No.2
R - B	2x4	DRY	No.2
L - J	2x6	DRY	No.2
R - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
Q - D	2x4	DRY	No.2
Q - E	2x4	DRY	No.2
E - P	2x4	DRY	No.2
P - F	2x4	DRY	No.2
F - O	2x4	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			
GABLE STUDS SPACED AT	2-0-0 OC.		

PLATES (table ts in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
C TMWW-t	MT20	4.0	4.0	2.00	1.25
D TTW-m	MT20	4.0	4.0	1.75	1.00
E TMWW-t	MT20	4.0	4.0		
F TMWW-t	MT20	4.0	4.0		
G TTW-m	MT20	4.0	4.0	1.75	1.00
H TMWW-t	MT20	4.0	8.0	2.00	1.50
I TMWW-t	MT20	4.0	8.0	2.00	2.50
J TMVV-t	MT20	4.0	9.0	2.00	3.00
L BVM1-t	MT20	3.0	6.0	Edge	0.25
M BMWW-t	MT20	4.0	6.0		
N BBWW+p	MT20	5.0	6.0	3.00	2.25
O BMWW-t	MT20	5.0	8.0	2.50	1.25
P BBWW-m	MT20	5.0	6.0	1.75	1.75
Q BMWW-t	MT20	5.0	8.0		
R BMVV-t	MT20	4.0	4.0		

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
L	1082	0	1082	0	5-8	1-8	
R	1085	0	1085	0	0		

UNFACTORED REACTIONS

1ST LCASE		MAX /MIN COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	DEAD	SOIL
L	763	514 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0	0 / 0	0 / 0
R	765	514 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.27FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-Q, E-P, F-P, H-O, C-R.
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 / 40	C-Q	0 / 95
B-C	0 / 18	Q-D	0 / 326
C-D	-859 / 0	Q-E	-287 / 0
D-E	-385 / 0	E-P	-41 / 0
E-AQ	-451 / 0	P-F	-374 / 0
AQ-F	-451 / 0	F-O	0 / 186
F-G	-481 / 0	O-G	0 / 504
G-H	-802 / 0	H-I	-1185 / 0
H-I	-1537 / 0	I-J	0 / 1517
I-J	-1114 / 0	J-K	0 / 289
J-K	0 / 40	K-L	-617 / 0
K-L	-185 / 0	L-M	-827 / 0
L-M	-1082 / 0	M-J	0 / 673
R-Q	0 / 345		
Q-P	0 / 482		
P-O	0 / 667		
O-N	0 / 1295		
N-M	0 / 950		
M-L	0 / 3		

TOTAL WEIGHT = 219 lb
[MJF]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON
PIGGYBACK TRUSS WITH SLOPES OF 6.00/12
AND -8.00/12 AND RESPECTIVE WALL
HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL
DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.72")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.72")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.11 (E-F:1), BC=0.25 (P-Q:4), WB=0.41
(C-R:1), SSI=0.13 (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 = 0.50

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(P.S.I) (P.LI) (P.LI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

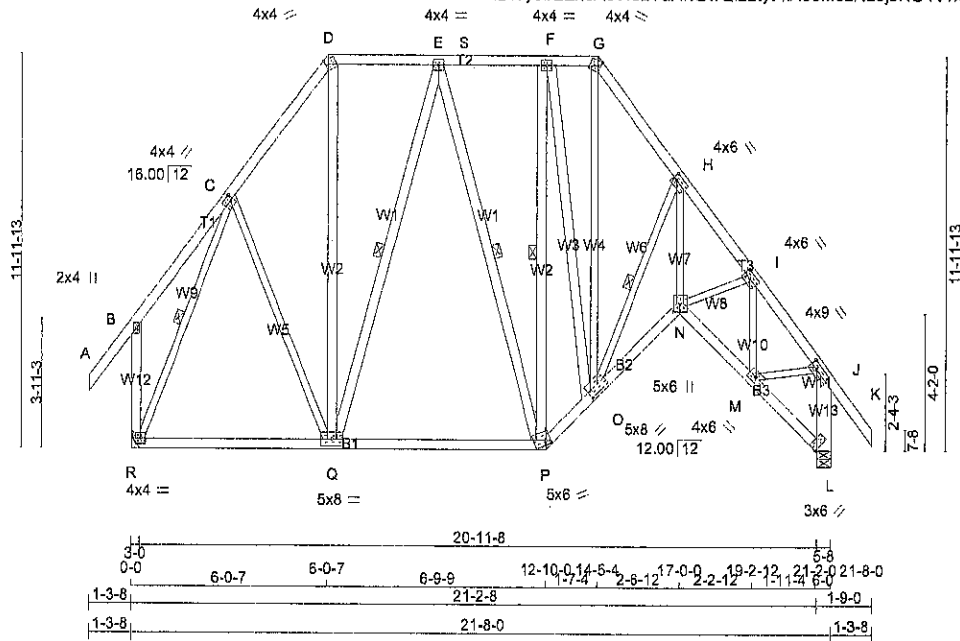
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.32 (C) (INPUT = 1.00)



A-15073786



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - K	2x4	DRY	No.2
R - B	2x4	DRY	No.2
L - J	2x6	DRY	No.2
R - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
Q - D	2x4	DRY	No.2
Q - E	2x4	DRY	No.2
E - F	2x4	DRY	No.2
P - F	2x4	DRY	No.2
F - O	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW-t	MT20	4.0	4.0	2.00	1.25
D	TTW-m	MT20	4.0	4.0	1.75	1.00
E	TMVW-t	MT20	4.0	4.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTW-m	MT20	4.0	4.0	1.75	1.00
H	TMVW-t	MT20	4.0	6.0	2.00	1.60
I	TMVW-t	MT20	4.0	6.0	2.00	2.60
J	TMVW-t	MT20	4.0	9.0	2.00	3.00
L	BVM1-t	MT20	3.0	6.0	Edge	0.25
M	BMVW-t	MT20	4.0	6.0		
N	BBVW+p	MT20	5.0	6.0	3.00	2.25
O	BMVWW-t	MT20	5.0	8.0	2.50	1.25
P	BBVW-m	MT20	5.0	6.0	1.75	1.75
Q	BMVWW-t	MT20	5.0	8.0		
R	BMVW1-t	MT20	4.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
L	1082	0	1082	0	0	5-8	1-8		
R	1085	0	1085	0	0			HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX / MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	COMBINED		514 / 0	0 / 0	0 / 0	0 / 0	249 / 0	0 / 0
R			514 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.27FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-Q, E-P, F-P, H-D, C-R.
 END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		MAX		MAX		WEBS		FACTORED		MAX	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	CS1 (LC)	UNBRAC	LENGTH	FR-TO	TO	MEMB.	FORCE (LBS)	MAX	CS1 (LC)	UNBRAC	LENGTH
FR-TO								FR-TO					
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	C-Q	0 / 95	0.02 (4)					
B-C	0 / 18	-70.5	-70.5	0.10 (1)	10.00	Q-D	0 / 326	0.05 (1)					
C-D	-659 / 0	-70.5	-70.5	0.08 (1)	6.25	Q-E	-287 / 0	0.25 (1)					
D-E	-385 / 0	-78.0	-78.0	0.11 (1)	6.25	E-F	-41 / 0	0.04 (1)					
E-S	-451 / 0	-78.0	-78.0	0.11 (1)	6.25	P-F	-374 / 0	0.29 (1)					
S-F	-451 / 0	-78.0	-78.0	0.11 (1)	6.25	F-O	0 / 196	0.03 (1)					
F-G	-481 / 0	-78.0	-78.0	0.04 (1)	6.25	O-G	0 / 504	0.11 (1)					
G-H	-802 / 0	-70.5	-70.5	0.08 (1)	6.25	O-H	-1185 / 0	0.40 (1)					
H-I	-1537 / 0	-70.5	-70.5	0.07 (1)	5.27	N-H	0 / 1517	0.34 (1)					
I-J	-1114 / 0	-70.5	-70.5	0.07 (1)	5.94	N-I	0 / 269	0.06 (1)					
J-K	0 / 40	-70.5	-70.5	0.10 (1)	10.00	M-I	-617 / 0	0.13 (1)					
R-B	-185 / 0	0.0	0.0	0.05 (1)	7.81	R-C	-927 / 0	0.41 (1)					
L-J	-1062 / 0	0.0	0.0	0.11 (1)	7.81	M-J	0 / 673	0.15 (1)					
R-Q	0 / 345	-17.5	-17.5	0.24 (4)	10.00								
Q-P	0 / 462	-17.5	-17.5	0.25 (4)	10.00								
P-O	0 / 657	-17.5	-17.5	0.13 (1)	10.00								
O-N	0 / 1295	-17.5	-17.5	0.23 (1)	10.00								
N-M	0 / 950	-17.5	-17.5	0.18 (1)	10.00								
M-L	0 / 3	-17.5	-17.5	0.02 (4)	10.00								

TOTAL WEIGHT = 2 X 177 = 355 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 088-09
- TPIC 2011

(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 (0.72")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
 ALLOWABLE DEFL.(TL) = L/360 (0.72")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.11 (E-F:1), BC=0.25 (P-Q:4), WB=0.41 (C-R:1), SSI=0.13 (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 = 0.50

AUTOSOLVE LEFT 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) (FLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 354 1667 822 2284 1656

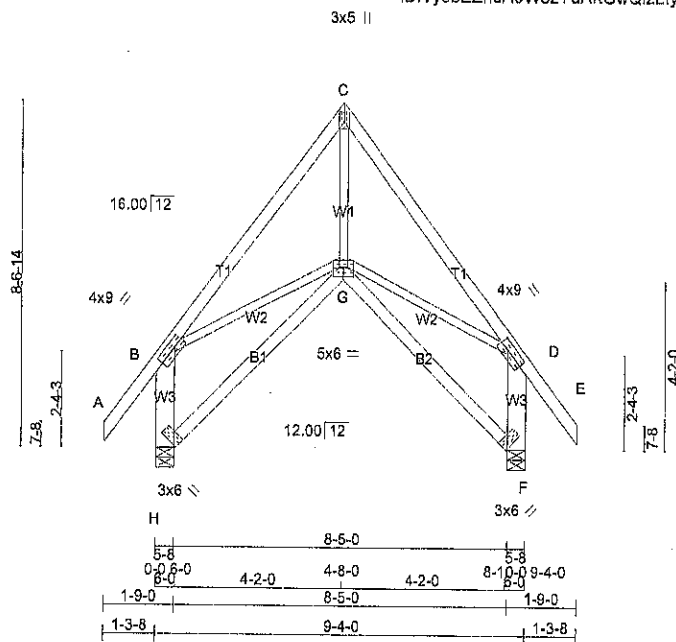
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.90 (G) (INPUT = 0.90)
 JSI METAL=0.32 (C) (INPUT = 1.00)

A-N073785





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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	4.0	9.0	2.00	3.00
C TTW+p	MT20	3.0	5.0	2.00	Edge
D TMVW-t	MT20	4.0	9.0	2.00	3.00
F BVM1+H	MT20	3.0	6.0	Edge	0.25
G BWWWW-p	MT20	5.0	6.0	2.75	3.00
H BVM1+H	MT20	3.0	6.0	Edge	0.25

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per CBC 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	REQD BRG
	VERT	HORZ	DOWN	HORZ		
H	510	0	510	0	5-8	1-8
F	510	0	510	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
H	357	255 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
F	357	255 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0

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

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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	G-C	0 / 317	0.07 (1)
B-C	-404 / 0	-70.5	-70.5 0.20 (1)	6.25	B-G	0 / 269	0.06 (1)
C-D	-404 / 0	-70.5	-70.5 0.20 (1)	6.25	G-D	0 / 269	0.06 (1)
D-E	0 / 40	-70.5	-70.5 0.10 (1)	10.00			
H-B	-469 / 0	0.0	0.0 0.05 (1)	7.81			
F-D	-469 / 0	0.0	0.0 0.05 (1)	7.81			
H-G	0 / 0	-17.5	-17.5 0.11 (4)	10.00			
G-F	0 / 0	-17.5	-17.5 0.11 (4)	10.00			

TOTAL WEIGHT = 2 X 57 = 114 lb

(M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN. C/C

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

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

(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) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(TL) = $L/969$ (0.04")

CSI: TC=0.20 (C-D:1), BC=0.11 (G-H:4),
 WB=0.07 (C-G:1), SS=0.08 (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 = 0.50

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 822 2284 1656

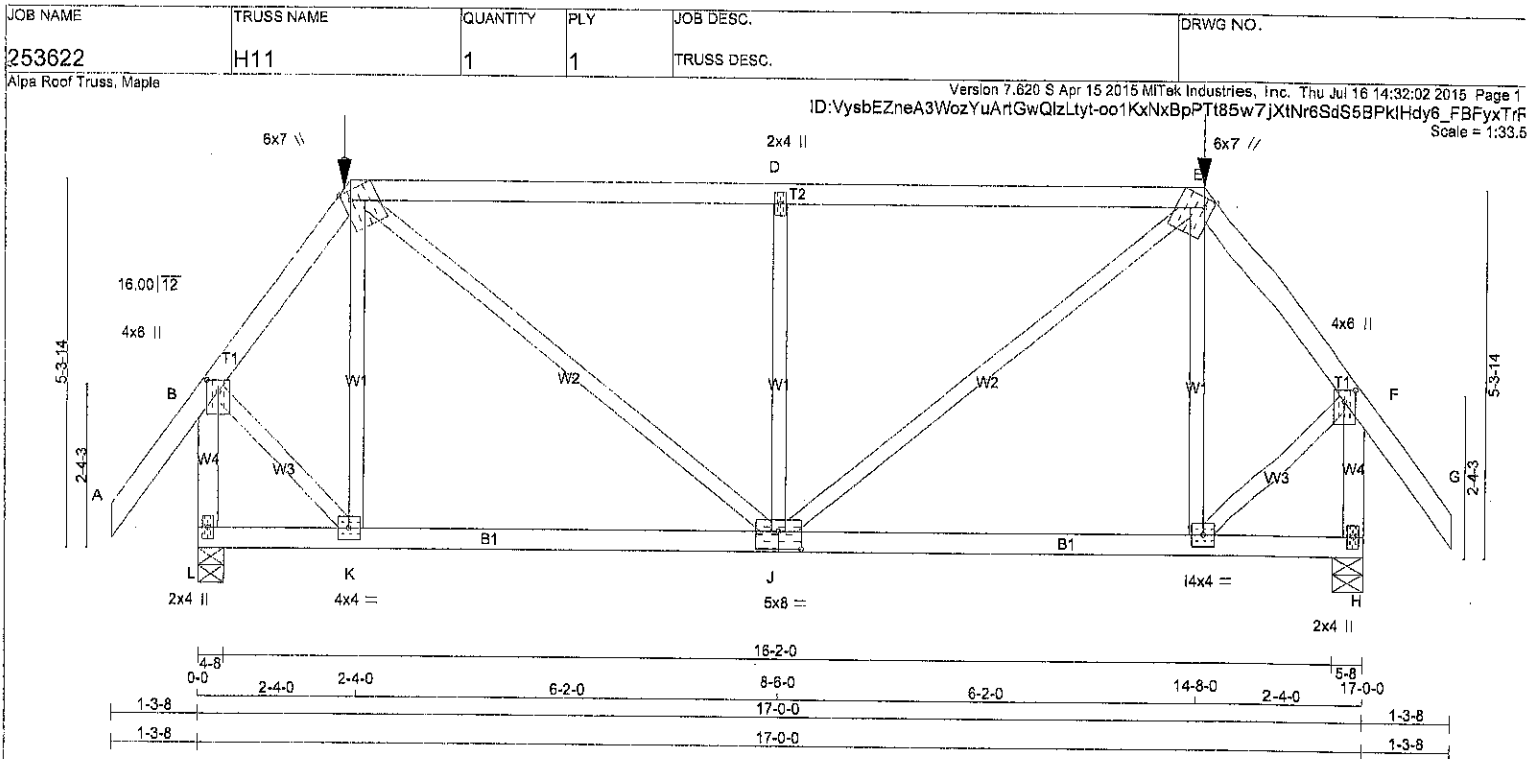
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.49 (C) (INPUT = 0.90)
 JSI METAL= 0.10 (D) (INPUT = 1.00)



A-15073784



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY 1850F 1.5E	SPF
E - G	2x4	DRY No.2	SPF
L - B	2x4	DRY No.2	SPF
H - F	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
J - H	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+p	MT20	4.0	6.0	2.00	2.00
C TTWW+m	MT20	6.0	7.0	Edge	1.50
D TMVW+w	MT20	2.0	4.0		
E TTWW+m	MT20	6.0	7.0	Edge	1.50
F TMVW+p	MT20	4.0	6.0	2.00	2.00
H BMV1+p	MT20	2.0	4.0		
I BMVW+L	MT20	4.0	4.0		
J BSWW+L	MT20	5.0	8.0	3.00	4.00
K BMVW+L	MT20	4.0	4.0		
L 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) 114.5 lbs FACTORED DOWN AT 14-9-4, AND 114.5 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)



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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
L	1533	0	1533	0	4-8	1-11
H	1533	0	1533	0	5-8	1-11

UNFACTORED REACTIONS

JT	MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	1079	739 / 0	0 / 0	0 / 0	0 / 0	340 / 0	0 / 0
H	1079	739 / 0	0 / 0	0 / 0	0 / 0	340 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.05FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	K-C	-336 / 24	0.15 (1)
B-C	-1038 / 0	-70.5	-70.5	0.08 (1)	6.05	I-E	-336 / 24	0.15 (1)
C-D	-1412 / 0	-138.7	-138.7	0.92 (1)	4.05	J-D	-1059 / 0	0.46 (1)
D-E	-1412 / 0	-138.7	-138.7	0.92 (1)	4.05	C-J	0 / 1026	0.25 (1)
E-F	-1038 / 0	-70.5	-70.5	0.08 (1)	6.05	J-E	0 / 1026	0.25 (1)
F-G	0 / 40	-70.5	-70.5	0.11 (1)	10.00	B-K	0 / 805	0.20 (1)
L-B	-1531 / 0	0.0	0.0	0.21 (1)	6.81	I-F	0 / 805	0.20 (1)
H-F	-1531 / 0	0.0	0.0	0.21 (1)	6.81			
L-K	0 / 0	-34.5	-34.5	0.21 (4)	10.00			
K-J	0 / 809	-34.5	-34.5	0.36 (4)	10.00			
J-I	0 / 809	-34.5	-34.5	0.36 (4)	10.00			
I-H	0 / 0	-34.5	-34.5	0.21 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-12	-115	-115	---	FRONT	VERT	TOTAL
E	14-9-4	-115	-115	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 81 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-2-12
END SETBACK = 5-10-5
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

(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 (0.57")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.57")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.92 (C-D:1), BC=0.36 (I-J:4), WB=0.46 (D-J:1), SSI=0.46 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

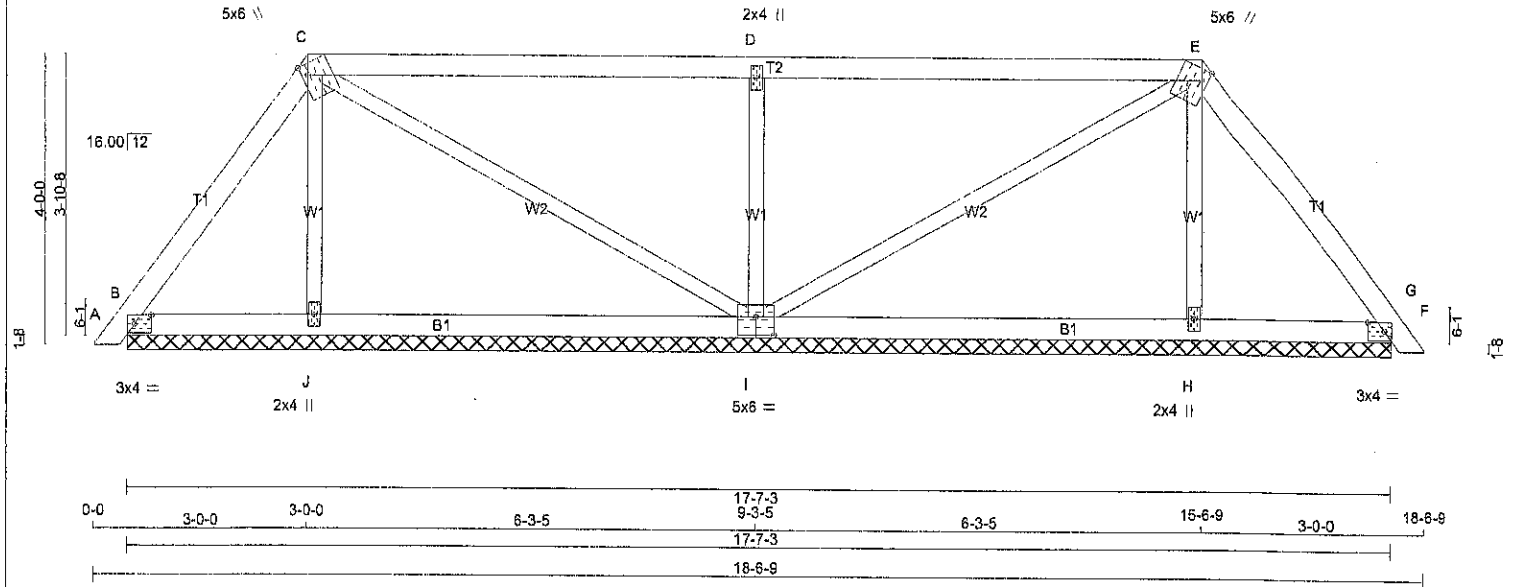
JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.28 (H) (INPUT = 1.00)

A-15073783

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253622	H08	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-KbUyk1wZ25L1WxLwApM8lVwZkhuX?wCUJSfIfoyxTrS
Scale: 3/8"=1'



TOTAL WEIGHT = 3 X 65 = 195 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 - G	2x4	DRY	No.2	SPF	
B - J	2x4	DRY	No.2	SPF	
I - F	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG
B	193	0	193	0	0	0	17-7-3 (8-9-10)8		
J	252	0	252	0	0	0	17-7-3 (8-9-10)8		
I	709	0	709	0	0	0	17-7-3 (8-9-10)8		
H	252	0	252	0	0	0	17-7-3 (8-9-10)8		
F	193	0	193	0	0	0	17-7-3 (8-9-10)8		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
B	132	110 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0	
J	182	97 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0	
I	496	354 / 0	0 / 0	0 / 0	0 / 0	143 / 0	0 / 0	
H	182	97 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0	
F	132	110 / 0	0 / 0	0 / 0	0 / 0	22 / 0	0 / 0	

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 9	-70.5 -70.5	0.01 (1)	10.00	J-C	-163 / 0	0.04 (1)
B-C	-88 / 0	-70.5 -70.5	0.08 (1)	6.25	C-I	-42 / 0	0.04 (1)
C-D	-9 / 0	-70.5 -70.5	0.47 (1)	10.00	I-D	-552 / 0	0.13 (1)
D-E	-9 / 0	-70.5 -70.5	0.47 (1)	10.00	I-E	-42 / 0	0.04 (1)
E-F	-88 / 0	-70.5 -70.5	0.08 (1)	6.25	H-E	-163 / 0	0.04 (1)
F-G	0 / 9	-70.5 -70.5	0.01 (1)	10.00			
B-J	0 / 51	-17.5 -17.5	0.10 (4)	10.00			
J-I	0 / 46	-17.5 -17.5	0.15 (4)	10.00			
I-H	0 / 46	-17.5 -17.5	0.15 (4)	10.00			
H-F	0 / 51	-17.5 -17.5	0.10 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=		31.0	PSF

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

CSI: TC=0.47 (C-D:1), BC=0.15 (I-J:4), WB=0.13 (D-I:1), SSI=0.22 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

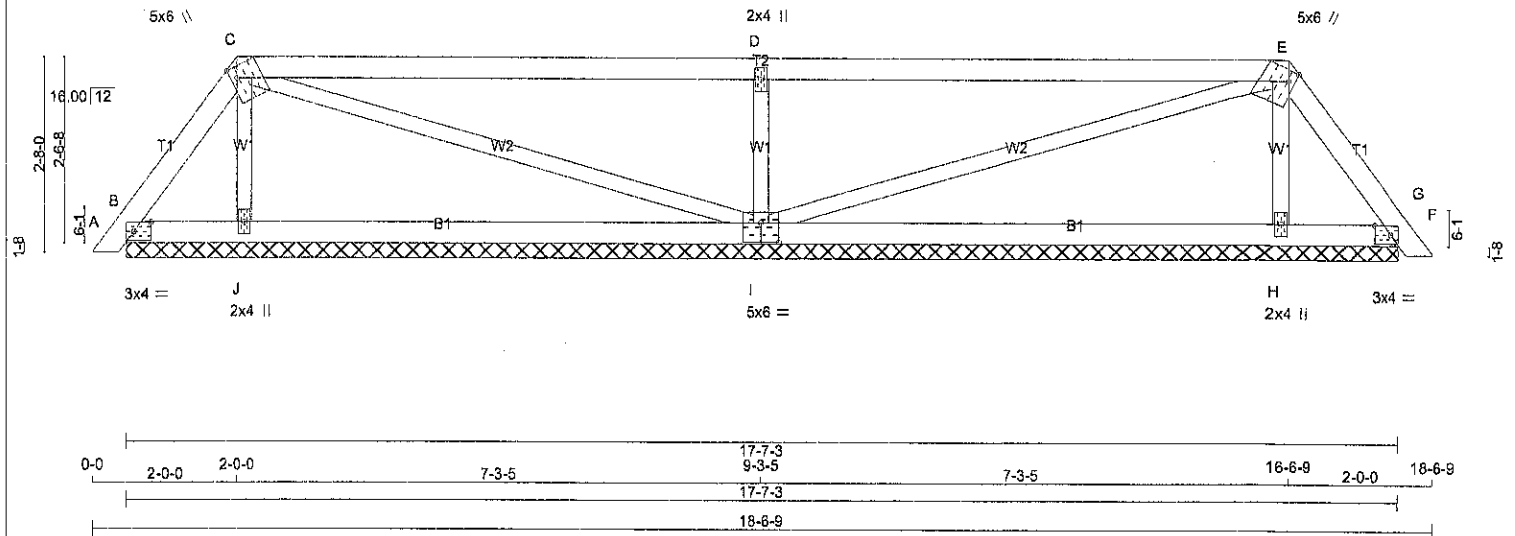
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (B) (INPUT = 0.80)
JSI METAL= 0.23 (I) (INPUT = 1.00)



A-15073782

Alpa Roof Truss, Maple



TOTAL WEIGHT = 2 X 61 = 122 lb
 [M]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
B	TMB1-I	MT20	3.0	4.0	1.50 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TMW+w	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	6.0	1.75 1.00
F	TMB1-I	MT20	3.0	4.0	1.50 2.75
H	BMW1+w	MT20	2.0	4.0	
I	BSWWW1-I	MT20	5.0	6.0	3.25 3.00
J	BMW1+w	MT20	2.0	4.0	

NOTES- (1)
 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OSC 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	
B		119	0	119	0	-8	17-7-3 (8-9-10)38		
J		287	0	287	0	0	17-7-3 (8-9-10)38		
I		785	0	785	0	0	17-7-3 (8-9-10)38		
H		287	0	287	0	0	17-7-3 (8-9-10)38		
F		119	0	119	0	-8	17-7-3 (8-9-10)38		

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS. FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT F FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	79	84/0	0/0	0/0	0/0	0/-5	0/0
J	208	105/0	0/0	0/0	0/0	103/0	0/0
I	550	389/0	0/0	0/0	0/0	161/0	0/0
H	208	105/0	0/0	0/0	0/0	103/0	0/0
F	79	84/0	0/0	0/0	0/0	0/-5	0/0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0/9	-70.5 -70.5	0.01 (1)	J-C	-177/0	0.03 (1)	
B-C	-76/0	-70.5 -70.5	0.03 (1)	C-I	-22/0	0.03 (1)	
C-D	-13/0	-70.5 -70.5	0.63 (1)	I-D	-640/0	0.10 (1)	
D-E	-13/0	-70.5 -70.5	0.63 (1)	I-E	-22/0	0.03 (1)	
E-F	-76/0	-70.5 -70.5	0.03 (1)	H-E	-177/0	0.03 (1)	
F-G	0/9	-70.5 -70.5	0.01 (1)				
B-J	0/43	-17.5 -17.5	0.14 (4)				
J-I	0/35	-17.5 -17.5	0.20 (4)				
I-H	0/35	-17.5 -17.5	0.20 (4)				
H-F	0/43	-17.5 -17.5	0.14 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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

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

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

CSI: TC=0.63 (D-E:1), BC=0.20 (I-J:4), WB=0.10 (D-I:1), SSI=0.25 (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 = 0.50

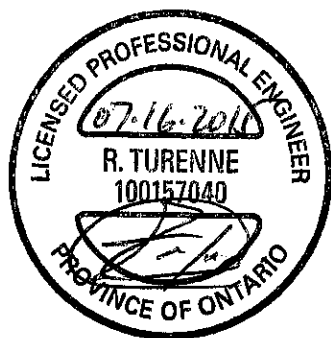
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

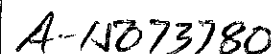
JSI GRIP= 0.88 (I) (INPUT = 0.90)
 JSI METAL= 0.24 (I) (INPUT = 1.00)



A-15073781



JSI GRIP= 0.89 (I) (INPUT = 0.90)
JSI METAL= 0.38 (I) (INPUT = 1.00)



253622

Alpa Roof Truss, Maple

TRUSS NAME

H05

QUANTITY

2

PLY

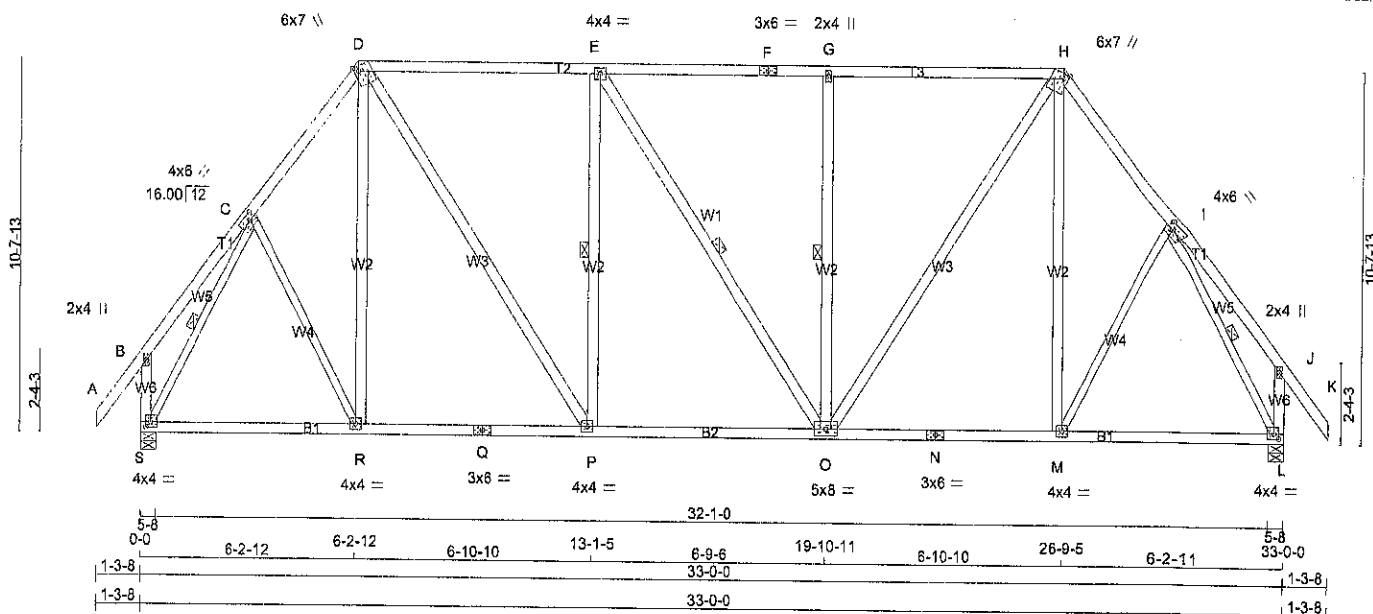
1

JOB DESC.

TRUSS DESC.

DRWG NO.

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 ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-NDMCJLVJWU5JHdBY2OKgDUrCOIBAXxVBF8mbawyxTrL
 Scale = 1:66.1



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
H - K	2x4	DRY	No.2
S - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS EXCEPT	2x4	DRY	No.2
C - R	2x3	DRY	No.2
M - I	2x3	DRY	No.2
S - C	2x3	DRY	No.2
I - L	2x3	DRY	No.2

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	2.00	2.00
D TTWW+m	MT20	6.0	7.0	Edge	1.50
E TMWW+t	MT20	4.0	4.0		
F TS-t	MT20	3.0	6.0		
G TMW+w	MT20	2.0	4.0		
H TTWW+m	MT20	6.0	7.0	Edge	1.50
I TMWW+t	MT20	4.0	6.0	2.00	2.00
J TMV+p	MT20	2.0	4.0		
L BMVW1-t	MT20	4.0	4.0	1.75	1.75
M, P, R					
M BMWW-t	MT20	4.0	4.0		
N BS-t	MT20	3.0	6.0		
O BMWWW-t	MT20	5.0	8.0		
Q BS-t	MT20	3.0	6.0		
S BMVW1-t	MT20	4.0	4.0	1.75	1.75

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
S	1550	0	1550	0
L	1550	0	1550	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	COMBINED	1090	752 / 0	0 / 0	0 / 0	338 / 0	0 / 0
L	COMBINED	1090	752 / 0	0 / 0	0 / 0	338 / 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 = 6.24FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-P, E-O, G-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.	FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSI (LC)	MEMB.	FACTORED FORCE (LBS)	MAX CSI (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-R	0 / 102	0.02 (1)
B-C	0 / 19	-70.5	-70.5 0.10 (1)	10.00	R-D	0 / 88	0.02 (4)
C-D	-1224 / 0	-70.5	-70.5 0.13 (1)	5.67	D-P	0 / 766	0.12 (1)
D-E	-1144 / 0	-70.5	-70.5 0.52 (1)	5.24	P-E	-520 / 0	0.30 (1)
E-F	-1144 / 0	-70.5	-70.5 0.52 (1)	5.24	E-O	-1 / 0	0.00 (1)
F-G	-1144 / 0	-70.5	-70.5 0.52 (1)	5.24	O-G	-520 / 0	0.30 (1)
G-H	-1144 / 0	-70.5	-70.5 0.52 (1)	5.24	O-H	0 / 765	0.12 (1)
H-I	-1224 / 0	-70.5	-70.5 0.13 (1)	5.67	M-H	0 / 88	0.02 (4)
I-J	0 / 19	-70.5	-70.5 0.10 (1)	10.00	M-I	0 / 102	0.02 (1)
J-K	0 / 40	-70.5	-70.5 0.10 (1)	10.00	S-C	-1483 / 0	0.46 (1)
S-B	-183 / 0	0.0	0.0 0.02 (1)	7.81	I-L	-1483 / 0	0.46 (1)
L-J	-183 / 0	0.0	0.0 0.02 (1)	7.81			
S-R	0 / 669	-17.5	-17.5 0.23 (4)	10.00			
R-Q	0 / 719	-17.5	-17.5 0.24 (4)	10.00			
Q-P	0 / 719	-17.5	-17.5 0.24 (4)	10.00			
P-O	0 / 1144	-17.5	-17.5 0.27 (1)	10.00			
O-N	0 / 719	-17.5	-17.5 0.24 (4)	10.00			
N-M	0 / 719	-17.5	-17.5 0.24 (4)	10.00			
M-L	0 / 669	-17.5	-17.5 0.23 (4)	10.00			

TOTAL WEIGHT = 2 X 203 = 406 lb

[M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	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

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

(65 % OF 23.0 P.S.F. G.S.L. PLUS
 8.4 P.S.F. RAIN LOAD EQUALS
 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (1.10")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.05")
 ALLOWABLE DEFL.(TL) = $L/360$ (1.10")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.11")

CSI: TC=0.62 (D-E:1), BC=0.27 (O-P:1),
 WB=0.46 (I-L:1), SSI=0.23 (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 = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN
 MT20 618 354 1667 822 2284 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

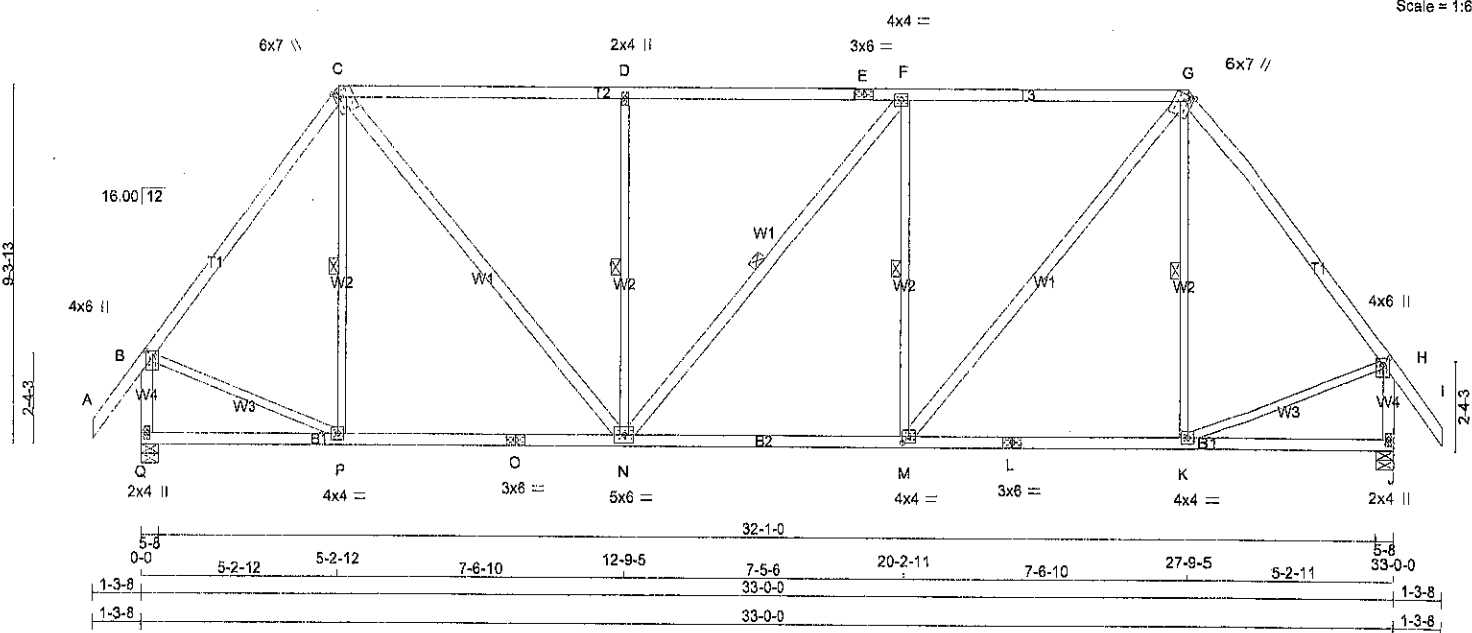
JSI GRIP=0.69 (I) (INPUT = 0.90)
 JSI METAL=0.35 (I) (INPUT = 1.00)



A-15073779

Alpa Roof Truss, Maple

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LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
Q	1550	0	1550	0	5-8	1-11
J	1550	0	1550	0	5-8	1-11

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1090	752 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
J	1090	752 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-P, D-N, F-N, F-M, G-K. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: {4}

CHORDS					WEBS				
MEMB.	MAX. FORCE	VERT. LOAD	LC1	MAX	MEMB.	MAX. FORCE	VERT. LOAD	LC1	MAX
	(LBS)	(PLF)	CS1	(LC)		(LBS)	(PLF)	CS1	(LC)
FR-TO		FROM	TO	LENGTH	FR-TO		FROM	TO	LENGTH
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	P-C	-140 / 52	0.08 (1)	
B-C	-1208 / 0	-70.5	-70.5	0.45 (1)	5.35	C-N	0 / 917	0.15 (1)	
C-D	-1310 / 0	-70.5	-70.5	0.66 (1)	4.76	N-D	-571 / 0	0.33 (1)	
D-E	-1310 / 0	-70.5	-70.5	0.67 (1)	4.75	N-F	-1 / 0	0.00 (1)	
E-F	-1310 / 0	-70.5	-70.5	0.67 (1)	4.75	M-F	-571 / 0	0.33 (1)	
F-G	-1311 / 0	-70.5	-70.5	0.67 (1)	4.75	M-G	0 / 919	0.15 (1)	
G-H	-1208 / 0	-70.5	-70.5	0.45 (1)	5.35	K-G	-141 / 52	0.08 (1)	
H-I	0 / 40	-70.5	-70.5	0.10 (1)	10.00	B-P	0 / 769	0.17 (1)	
Q-B	-1517 / 0	0.0	0.0	0.19 (1)	6.67	K-H	0 / 769	0.17 (1)	
J-H	-1517 / 0	0.0	0.0	0.19 (1)	6.67				
Q-P	0 / 0	-17.5	-17.5	0.17 (4)	10.00				
P-O	0 / 720	-17.5	-17.5	0.25 (4)	10.00				
O-N	0 / 720	-17.5	-17.5	0.25 (4)	10.00				
N-M	0 / 1311	-17.5	-17.5	0.32 (1)	10.00				
M-L	0 / 720	-17.5	-17.5	0.25 (4)	10.00				
L-K	0 / 720	-17.5	-17.5	0.25 (4)	10.00				
K-J	0 / 0	-17.5	-17.5	0.17 (4)	10.00				

TOTAL WEIGHT = 2 X 168 = 339 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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

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

(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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.67 (F-G:1), BC=0.32 (M-N:1), WB=0.33 (F-M:1), SSI=0.25 (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 = 0.50

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 822 2284 1656

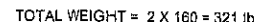
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (P) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)

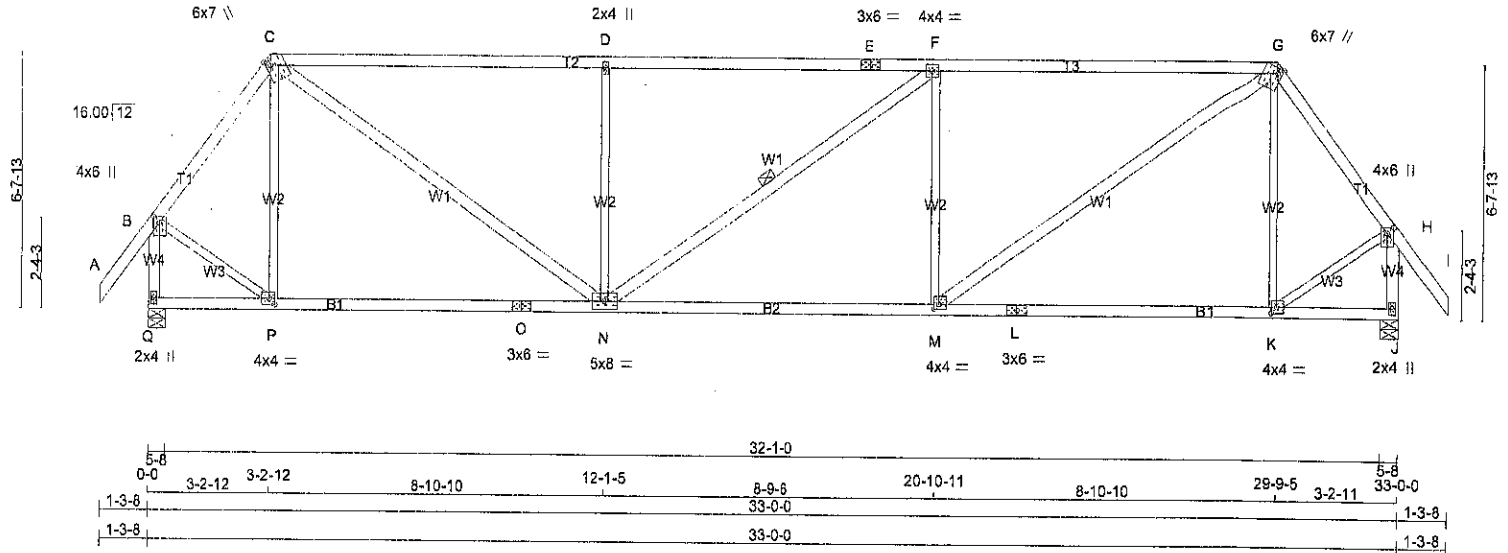


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JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.31 (M) (INPUT = 1.00)





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	1.75	2.00
C	TTWV+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TS-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTWV+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	1.75	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	4.0	4.0	2.00	1.75
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	4.0	4.0	1.50	1.50
N	BMVWV-t	MT20	5.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	2.00	1.75
Q	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
Q	1550	0	1550	0	0
J	1550	0	1550	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1090	752 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
J	1090	752 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.43FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-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.	FACTORED FORCE (LBS)	MEMB.	FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 40	P-C	-275 / 9
B-C	-1157 / 0	C-N	0 / 1431
C-D	-1851 / 0	N-D	-673 / 0
D-E	-1851 / 0	N-F	0 / 0
E-F	-1851 / 0	M-F	-673 / 0
F-G	-1852 / 0	M-G	0 / 1432
G-H	-1157 / 0	K-G	-276 / 9
H-I	0 / 40	B-P	0 / 800
Q-B	-1548 / 0	K-H	0 / 800
J-H	-1548 / 0		
Q-P	0 / 0		
P-O	0 / 685		
O-N	0 / 685		
N-M	0 / 1852		
M-L	0 / 685		
L-K	0 / 685		
K-J	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

(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) = $L/360$ (1.10")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.09")
ALLOWABLE DEFL.(TL) = $L/360$ (1.10")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.20")

CSI: TC=0.86 (F-G:1), BC=0.45 (M-N:1), WB=0.49 (F-M:1), SSI=0.28 (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 = 0.50

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 822 2284 1656

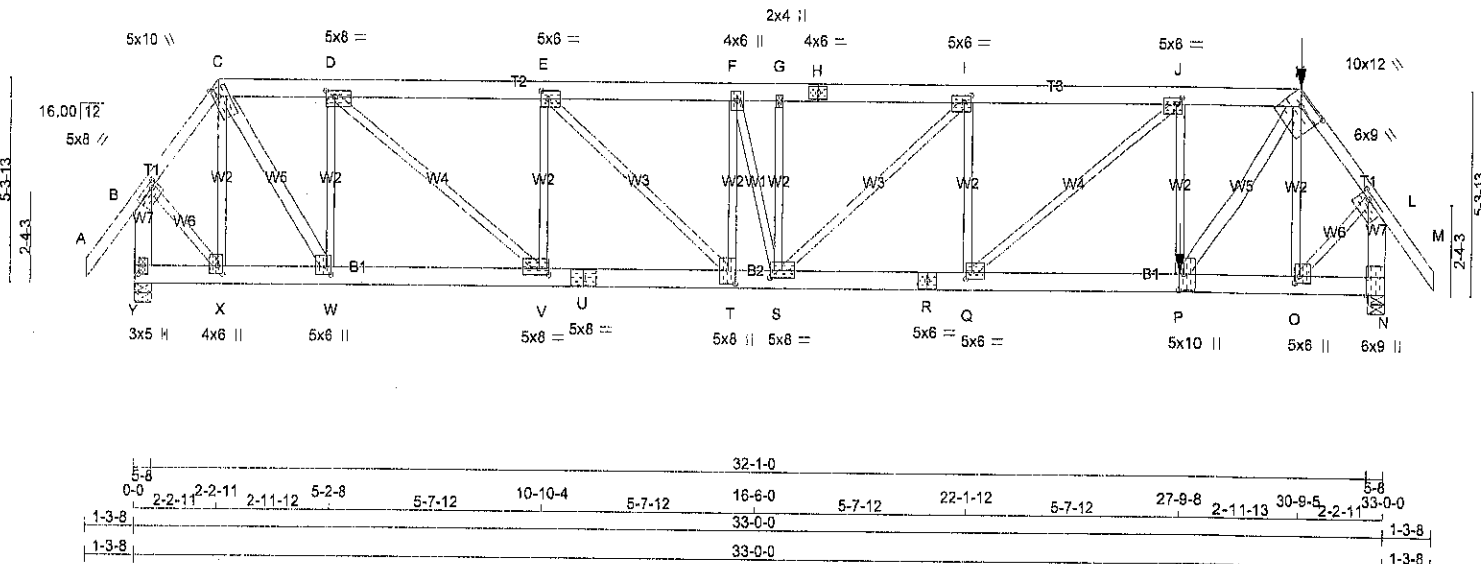
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (Q) (INPUT = 0.90)
JSI METAL= 0.44 (M) (INPUT = 1.00)



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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
A - C	2x4	DRY	No.2	SPF
C - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
K - M	2x4	DRY	No.2	SPF
Y - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
Y - U	2x6	DRY	1650F 1.5E	SPF
U - R	2x6	DRY	1650F 1.5E	SPF
R - N	2x6	DRY	1650F 1.5E	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
C - W	2x4	DRY	No.2	SPF
P - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMVW-h	MT20	5.0	8.0	1.50 2.00
C TMVW-h	MT20	5.0	10.0	2.75 1.75
D TMVW-h	MT20	5.0	8.0	2.00 3.00
E TMVW-h	MT20	5.0	6.0	2.50 2.25
F TMVW-h	MT20	4.0	6.0	
G TMVW-h	MT20	2.0	4.0	
H TS-t	MT20	4.0	6.0	
I TMVW-h	MT20	5.0	6.0	2.25 2.00
J TMVW-h	MT20	5.0	6.0	2.00 1.75
K TMVW-h	MT20	10.0	12.0	2.75 7.25
L TMVW-h	MT20	6.0	9.0	1.50 3.00
N BMV1-t	MT20	6.0	9.0	Edge 0.50
O BMVW-h	MT20	5.0	6.0	2.25 1.50
P BMVW-h	MT20	5.0	10.0	5.00 1.50
Q BMVW-h	MT20	5.0	6.0	2.00 1.75
R BS-t	MT20	5.0	6.0	
S BMVW-h	MT20	5.0	8.0	2.25 1.50
T BMVW-h	MT20	5.0	8.0	4.25 2.25
U BS-t	MT20	5.0	8.0	
V BMVW-h	MT20	5.0	8.0	2.00 3.00
W BMVW-h	MT20	5.0	6.0	2.50 1.50
X BMVW-h	MT20	4.0	6.0	2.50 1.50

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REORD BRG
JT	VERT	VERT	DOWN	UP	IN-SX
Y	2008	0	2008	0	5-8
N	4159	0	4159	0	5-8

UNFACTORED REACTIONS		1ST CASE	MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE
Y	1452	770 / 0	0 / 0	0 / 0
N	3143	923 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.67FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED	FACTORED	MAX	MAX	WEBS		MAX. FACTORED	MAX
MEMB.	FORCE (LBS)	VERT.	LOAD LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	MAX
FR-TO		FROM	TO	LENGTH	FR-TO				
A-B	0 / 40	-70.5	-70.5	0.13 (1)	10.00	X-C	-617 / 0	0.26 (1)	
B-C	-1427 / 0	-70.5	-70.5	0.11 (1)	5.29	C-W	0 / 1898	0.38 (1)	
C-D	-1835 / 0	-70.5	-70.5	0.14 (1)	5.69	W-D	-1537 / 0	0.52 (1)	
D-E	-3225 / 0	-70.5	-70.5	0.23 (1)	4.48	D-V	0 / 1833	0.52 (1)	
E-F	-3973 / 0	-70.5	-70.5	0.27 (1)	4.05	V-E	-1118 / 0	0.45 (1)	
F-G	-4061 / 0	-70.5	-70.5	0.20 (1)	4.08	E-T	0 / 1041	0.31 (4)	
G-H	-4061 / 0	-70.5	-70.5	0.30 (1)	3.99	S-I	-615 / 0	0.60 (4)	
H-I	-4061 / 0	-70.5	-70.5	0.30 (1)	3.99	Q-I	-187 / 353	0.13 (4)	
I-J	-4303 / 0	-70.5	-70.5	0.33 (1)	3.66	Q-J	-288 / 517	0.33 (4)	
J-K	-3911 / 0	-138.7	-138.7	0.26 (4)	4.10	P-J	-734 / 197	0.29 (1)	
K-L	-3123 / 0	-70.5	-70.5	0.25 (1)	3.67	P-K	0 / 3949	0.88 (4)	
L-M	0 / 40	-70.5	-70.5	0.13 (1)	10.00	Q-K	-1253 / 0	0.50 (1)	
Y-B	-2009 / 0	0.0	0.0	0.20 (1)	7.03	B-X	0 / 1098	0.31 (1)	
N-L	-4185 / 0	0.0	0.0	0.41 (1)	5.10	O-L	0 / 2402	0.71 (4)	
Y-X	0 / 0	-17.5	-17.5	0.03 (1)	10.00	T-F	-575 / 0	0.23 (1)	
X-W	0 / 842	-17.5	-17.5	0.11 (1)	10.00	S-G	-188 / 0	0.07 (1)	
W-V	0 / 1836	-17.5	-17.5	0.20 (1)	10.00	F-S	0 / 410	0.16 (4)	
V-U	0 / 3225	-17.5	-17.5	0.33 (1)	10.00				
U-T	0 / 3225	-17.5	-17.5	0.33 (1)	10.00				
T-S	0 / 3973	-17.5	-17.5	0.42 (1)	10.00				
S-R	0 / 4303	-17.5	-17.5	0.45 (1)	10.00				
R-Q	0 / 4303	-17.5	-17.5	0.45 (1)	10.00				
Q-P	0 / 3912	-17.5	-17.5	0.50 (4)	10.00				
P-O	0 / 1844	-34.5	-34.5	0.29 (4)	10.00				
O-N	0 / 0	-34.5	-34.5	0.11 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)				
JT	LOC.	LC1	MAX	FACE
K	30-9-5	-114	-114	FRONT
P	27-9-8	-2660	-2660	FRONT

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	= 3.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.0 PSF
TOTAL LOAD		= 31.0 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 = 2-2-11
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 56 % OF G.S.L.
LOADS APPLIED TO FIRST 5-2-8 OF SPAN
MEASURED FROM THE RIGHT.

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.41 (L-N:1), BC=0.50 (P-Q:4), WB=0.88 (K-P:4), SI=0.17 (J-K:1)

DOL LUMBER=0.88 NAIL=0.88 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

A-1073775



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Y	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) 114.2 lbs FACTORED DOWN AT 30-9-6 ON TOP CHORD, AND 2979.2 lbs FACTORED DOWN AT 27-9-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

1) 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.

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1887 822 2284 1656

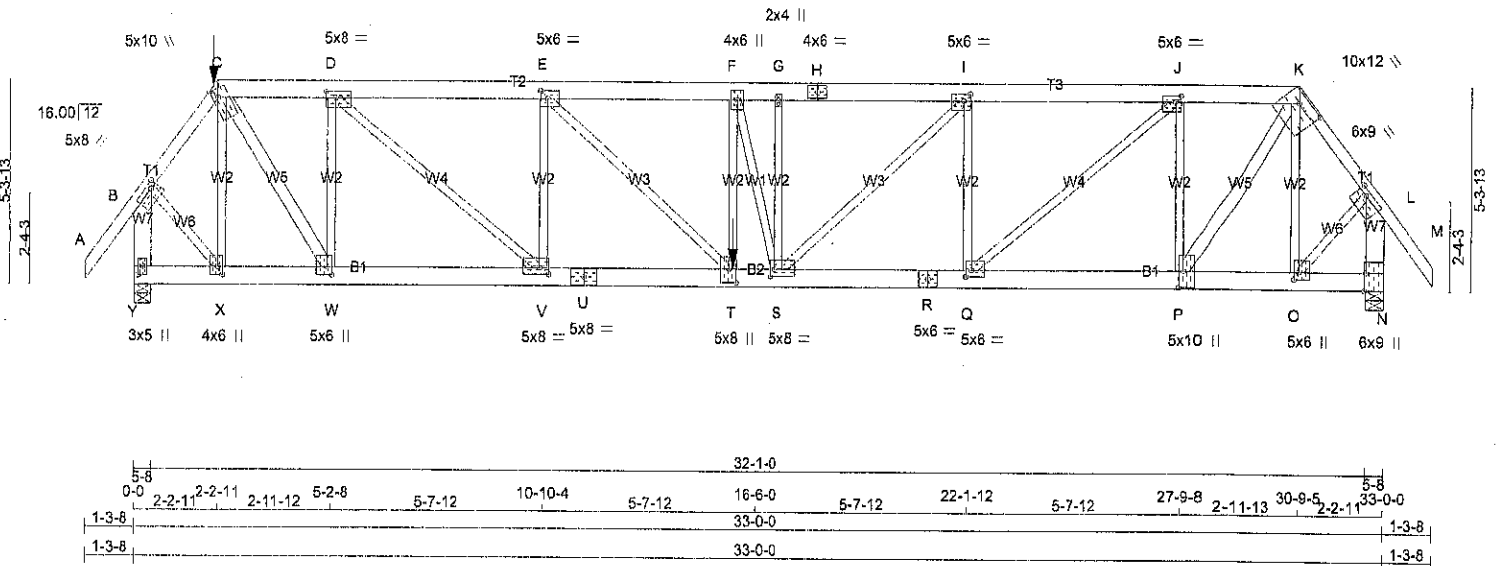
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-N073775(2)



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - H	2x6	DRY	No.2	SPF
H - K	2x6	DRY	No.2	SPF
K - M	2x4	DRY	No.2	SPF
Y - B	2x6	DRY	No.2	SPF
N - L	2x6	DRY	No.2	SPF
Y - U	2x6	DRY	1650F 1.5E	SPF
U - R	2x6	DRY	1650F 1.5E	SPF
R - N	2x6	DRY	1650F 1.5E	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
C - W	2x4	DRY	No.2	SPF
P - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-H	MT20	5.0	9.0	1.50	2.00
C TTWW-H	MT20	5.0	10.0	2.75	1.75
D TMVW-H	MT20	5.0	8.0	2.00	3.00
E TMVW-H	MT20	5.0	6.0	2.50	2.25
F TMVW-H	MT20	4.0	6.0		
G TMVW-H	MT20	2.0	4.0		
H TS-H	MT20	4.0	6.0		
I TMVW-H	MT20	5.0	6.0	2.25	2.00
J TMVW-H	MT20	5.0	6.0	2.00	1.75
K TTWW-H	MT20	10.0	12.0	2.75	7.25
L TMVW-H	MT20	6.0	9.0	1.50	3.00
N BMV1-H	MT20	6.0	9.0	Edge	0.50
O BMVW-H	MT20	5.0	8.0	2.25	1.60
P BMVW-H	MT20	5.0	10.0	5.00	1.50
Q BMVW-H	MT20	5.0	6.0	2.00	1.75
R BS-H	MT20	5.0	6.0		
S BMVW-H	MT20	5.0	8.0	2.25	1.50
T BMVW-H	MT20	5.0	8.0	4.25	2.25
U BS-H	MT20	5.0	8.0		
V BMVW-H	MT20	5.0	8.0	2.00	3.00
W BMVW-H	MT20	5.0	6.0	2.50	1.50
X BMVW-H	MT20	4.0	6.0	2.50	1.50

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	HORIZ	UP/LIFT	IN-SX
Y	3381	0	3381	0
N	2661	0	2661	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM.LIVE	
Y	2481	1218 / 0	0 / 0	0 / 0	1244 / 0
N	1947	908 / 0	0 / 0	0 / 0	1039 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.06FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.11 (1)	10.00	X-C	-1060 / 0	0.41 (1)
B-C	-2497 / 0	-70.5	-70.5 0.16 (1)	4.20	C-W	0 / 3215	0.68 (1)
C-D	-3158 / 0	-138.7	-138.7 0.27 (1)	4.49	W-D	-2607 / 0	1.00 (1)
D-E	-5407 / 0	-138.7	-138.7 0.47 (1)	3.38	D-V	0 / 2969	0.76 (4)
E-F	-6341 / 0	-138.7	-138.7 0.54 (1)	3.06	V-E	-1698 / 0	0.65 (1)
F-G	-6100 / 0	-70.5	-70.5 0.35 (4)	3.36	E-T	0 / 1319	0.50 (4)
G-H	-6100 / 0	-70.5	-70.5 0.39 (1)	3.29	S-I	0 / 1993	0.59 (4)
H-I	-6100 / 0	-70.5	-70.5 0.39 (1)	3.29	Q-I	-1769 / 0	0.68 (1)
I-J	-4675 / 0	-70.5	-70.5 0.29 (1)	3.81	Q-J	0 / 2820	0.71 (1)
J-K	-2538 / 0	-70.5	-70.5 0.15 (1)	5.05	P-J	-2185 / 0	0.84 (1)
K-L	-1943 / 0	-70.5	-70.5 0.12 (1)	4.71	P-K	0 / 2659	0.48 (1)
L-M	0 / 40	-70.5	-70.5 0.11 (1)	10.00	O-K	-854 / 0	0.33 (1)
Y-B	-3381 / 0	0.0	0.0 0.31 (1)	5.72	B-X	0 / 1920	0.49 (1)
N-L	-2670 / 0	0.0	0.0 0.24 (1)	6.32	O-L	0 / 1494	0.38 (1)
Y-X	0 / 0	-34.5	-34.5 0.05 (1)	10.00	T-F	0 / 752	0.29 (4)
X-W	0 / 1473	-34.5	-34.5 0.17 (1)	10.00	S-G	-188 / 0	0.07 (1)
W-V	0 / 3156	-34.5	-34.5 0.31 (1)	10.00	F-S	-968 / 0	0.39 (1)
V-U	0 / 5407	-34.5	-34.5 0.57 (1)	10.00			
U-T	0 / 5407	-34.5	-34.5 0.57 (1)	10.00			
T-S	0 / 6341	-17.5	-17.5 0.67 (4)	10.00			
S-R	0 / 4675	-17.5	-17.5 0.42 (1)	10.00			
R-Q	0 / 4675	-17.5	-17.5 0.42 (1)	10.00			
Q-P	0 / 2538	-17.5	-17.5 0.25 (1)	10.00			
P-O	0 / 1146	-17.5	-17.5 0.13 (1)	10.00			
O-N	0 / 0	-17.5	-17.5 0.04 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
C	2-2-11	-114	-114	---	FRONT	TOTAL
T	15-10-8	-1626	-1626	---	FRONT	DEAD

TOTAL WEIGHT = 2 X 202 = 405 lb [M]

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	PSF
	DL	= 21.0
BOT CH.	LL	PSF
	DL	= 0.0
	DL	= 7.0
	DL	= 31.0

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CP Prime Hip
 SIDE SETBACK = 2-2-11
 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 15-10-8 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

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

(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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/911 (0.43")

CSI: TC=0.64 (E-F:1), BC=0.67 (S-T:4), WB=1.00 (D-W:1), SSI=0.27 (D-E:1)

DOL LUMBER=0.98 NAIL=0.98 LS BEND=1.00
 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

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 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253622	H01-Cond1	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID:VysbEZneA3WozYuArtGwQlZLtyt-lpczbVSfqJgN52g5vCc9G 4Gtx6CTENFnTNGVByxToE

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Y	BMV1+p	MT20	3.0	5.0	2.75	1.50

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 2-2-11 ON TOP CHORD, AND 1821.4 lbs FACTORED DOWN AT 15-10-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

- 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.

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN
MT20	818 354 1667 622 2284 1666	

PLATE PLACEMENT TOL. = 0.250 inches

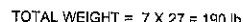
PLATE ROTATION TOL. = 6.0 Deg.

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

JSI METAL= 0.88 (U) (INPUT = 1.00)



A-15073774(2)

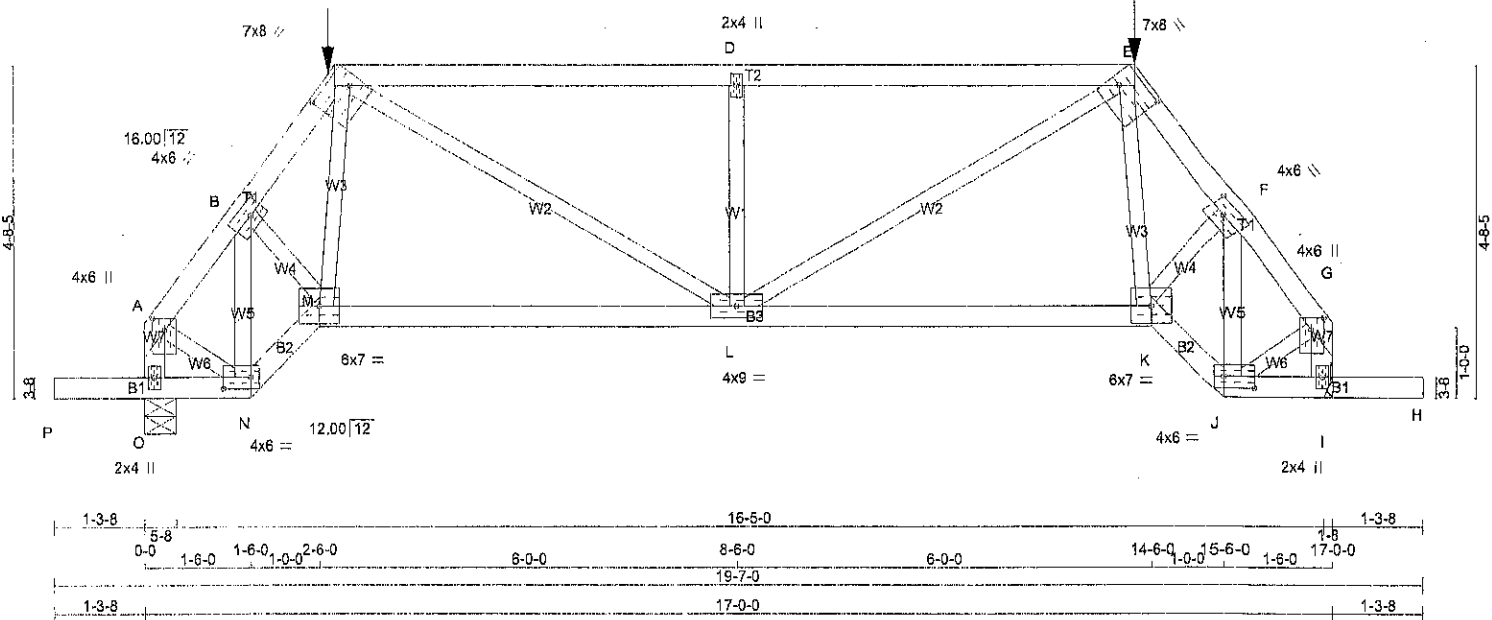


1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

TOTAL LOAD CASES: (4)

JSI GRIP= 0.87 (G) (INPUT = 0.90)
JSI METAL= 0.13 (D) (INPUT = 1.00)

A-15073773



TOTAL WEIGHT = 76 lb

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

ALL WEBS 2x3 DRY No.2 SPF
 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMVW-i	MT20	4.0	6.0	2.00	2.50
C	TTWW-h	MT20	7.0	8.0	3.50	6.25
D	TMVW-w	MT20	2.0	4.0		
E	TTWW-h	MT20	7.0	8.0	3.50	6.25
F	TMVW-i	MT20	4.0	6.0	2.00	2.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BBVW-i	MT20	4.0	6.0	2.00	4.50
K	BBVW-i	MT20	6.0	7.0		
L	BMVWVW-i	MT20	4.0	9.0		
M	BBVW-i	MT20	6.0	7.0		
N	BBVW-i	MT20	4.0	6.0	2.00	4.50
O	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

1)

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	1555	0	1555	0	0	5-8	1-10
I	1555	0	1555	0	0	HANGER BY OTHERS	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1096	738 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
I	1096	738 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.09FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM	TO	FR-TO			
A-B	-1246 / 0	-70.5	-70.5 0.06 (1)	6.68	N-B	-1021 / 0	0.19 (1)
B-C	-1785 / 0	-70.5	-70.5 0.08 (1)	4.92	B-M	0 / 808	0.15 (1)
C-D	-2074 / 0	-70.5	-70.5 0.54 (1)	4.09	M-C	0 / 468	0.12 (1)
D-E	-2074 / 0	-70.5	-70.5 0.54 (1)	4.09	C-L	0 / 1210	0.30 (1)
E-F	-1785 / 0	-70.5	-70.5 0.08 (1)	4.92	L-D	-484 / 0	0.11 (1)
F-G	-1246 / 0	-70.5	-70.5 0.06 (1)	5.68	L-E	0 / 1210	0.30 (1)
O-A	-1366 / 0	0.0	0.0 0.15 (1)	6.91	E-K	0 / 468	0.12 (1)
I-G	-1367 / 0	0.0	0.0 0.15 (1)	6.91	K-F	0 / 808	0.15 (1)
				J-F	-1021 / 0	0.19 (1)	
P-O	0 / 0	-88.0	-88.0 0.11 (1)	10.00	A-N	0 / 805	0.20 (1)
O-N	0 / 0	-34.5	-34.5 0.11 (1)	10.00	J-G	0 / 806	0.20 (1)
N-M	0 / 988	-34.5	-34.5 0.18 (1)	10.00			
M-L	0 / 1027	-102.7	-102.7 0.84 (1)	10.00			
L-K	0 / 1027	-102.7	-102.7 0.84 (1)	10.00			
K-J	0 / 988	-34.5	-34.5 0.18 (1)	10.00			
J-I	0 / 0	-34.5	-34.5 0.11 (1)	10.00			
I-H	0 / 0	-88.0	-88.0 0.11 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-8-12	-140	-140	---	FRONT	VERT	TOTAL
E	14-3-4	-140	-140	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 2-8-11
 RIGHT SETBACK = 2-8-12
 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 2-8-12 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 2-8-11
 RIGHT SETBACK = 2-8-12
 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 2-8-12 OF SPAN MEASURED FROM THE RIGHT.

GIRDER TYPE: CSldGirder
 START DISTANCE = 2-6-0
 START SPAN CARRIED = 5-10-8
 END DISTANCE = 14-6-0
 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.

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

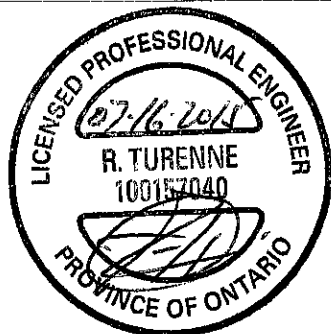
THIS DESIGN COMPLIES WITH:
 - PART 9 OF OBC 2012, BCBC 2012, ABC 2014
 - CSA 086-09
 - TPIC 2011

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 (0.57")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
 ALLOWABLE DEFL.(TL) = L/360 (0.57")
 CALCULATED VERT. DEFL.(TL) = L/908 (0.22")

CANTILEVER DEFLECTION
 A-1073272
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JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253620	H09T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 139.9 lbs FACTORED DOWN AT 2-6-12, AND 140.2 lbs FACTORED DOWN AT 14-3-4 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

1) 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.

ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.64 (D-E:1), BC=0.84 (K-L:1), WB=0.30 (C-L:1), SSI=0.33 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

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

NAIL VALUES

PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX	MIN	MAX MIN
MT20	618 354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

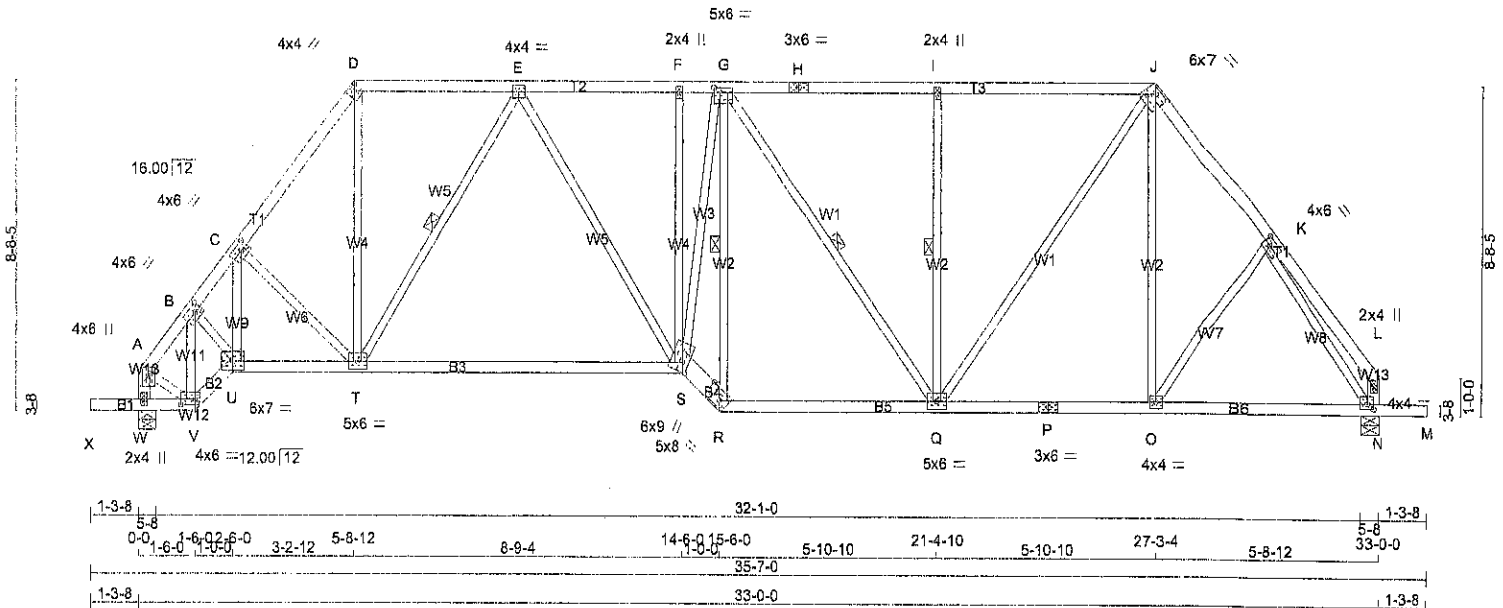
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (J) (INPUT = 0.90)

JSI METAL= 0.35 (E) (INPUT = 1.00)



A-15073772(2)



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
J - L	2x4	DRY	No.2	SPF
W - A	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
X - V	2x4	DRY	No.2	SPF
V - U	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	2x6	DRY	No.2	SPF
R - P	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00 2.25
B	TMVW-h	MT20	4.0	6.0	2.00 2.25
C	TMVW-h	MT20	4.0	6.0	2.00 2.50
D	TTW-h	MT20	4.0	4.0	Edge
E	TMVW-h	MT20	4.0	4.0	
F	TMVW-w	MT20	2.0	4.0	
G	TMVW-w	MT20	5.0	6.0	1.50 2.00
H	TS-t	MT20	3.0	6.0	
I	TMVW-w	MT20	2.0	4.0	
J	TTW-h	MT20	6.0	7.0	1.50 3.75
K	TMVW-t	MT20	4.0	6.0	2.00 2.25
L	TMVW+p	MT20	2.0	4.0	
N	BMVW1-t	MT20	4.0	4.0	1.50 1.75
O	BMVW-t	MT20	4.0	4.0	
P	BS-t	MT20	3.0	6.0	
Q	BMVW-w	MT20	5.0	6.0	
R	BBW-h	MT20	5.0	8.0	Edge 5.25
S	BBVW-w	MT20	6.0	9.0	3.00 2.00
T	BMVW-w	MT20	5.0	6.0	
U	BBW-h	MT20	6.0	7.0	
V	BBW-h	MT20	4.0	6.0	1.75 4.50

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	1567	1567	0	1-11
W	1567	1567	0	5-8
N	1563	1563	0	5-8

UNFACTORED REACTIONS

	1ST CASE	MAX/MIN	COMPONENT REACTIONS
JT COMBINED	1104	748 / 0	0 / 0
W	1101	746 / 0	0 / 0
N	1101	746 / 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 = 4.89FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-T, G-R, G-Q, 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					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			LENGTH	FR-TO				
A-B	-1269 / 0	-70.5	-70.5	0.06 (1)	5.66	V-B	-1057 / 0	0.18 (1)		
B-C	-1815 / 0	-70.5	-70.5	0.10 (1)	4.89	B-U	0 / 690	0.16 (1)		
C-D	-1589 / 0	-70.5	-70.5	0.13 (1)	5.13	U-C	0 / 164	0.04 (1)		
D-E	-954 / 0	-70.5	-70.5	0.23 (1)	6.07	C-T	-242 / 0	0.08 (1)		
E-F	-1609 / 0	-70.5	-70.5	0.25 (1)	4.94	T-D	0 / 1042	0.23 (1)		
F-G	-1609 / 0	-70.5	-70.5	0.25 (1)	4.93	T-E	-857 / 0	0.43 (1)		
G-H	-1333 / 0	-70.5	-70.5	0.40 (1)	5.12	E-S	0 / 440	0.10 (1)		
H-I	-1333 / 0	-70.5	-70.5	0.40 (1)	5.12	S-F	-26 / 12	0.03 (1)		
I-J	-1332 / 0	-70.5	-70.5	0.40 (1)	5.12	S-G	0 / 1180	0.27 (1)		
J-K	-1403 / 0	-70.5	-70.5	0.10 (1)	5.41	R-G	-1359 / 0	0.68 (1)		
K-L	0 / 15	-70.5	-70.5	0.08 (1)	10.00	Q-G	-207 / 0	0.16 (1)		
W-A	-1391 / 0	0.0	0.0	0.14 (1)	6.90	Q-I	-458 / 0	0.22 (1)		
N-L	-80 / 0	0.0	0.0	0.01 (1)	7.81	Q-J	0 / 878	0.20 (1)		
						O-J	0 / 140	0.04 (4)		
X-W	0 / 0	-88.0	-88.0	0.10 (1)	10.00	O-K	-33 / 20	0.02 (1)		
W-V	0 / 0	-17.5	-17.5	0.10 (1)	10.00	A-V	0 / 818	0.18 (1)		
V-U	0 / 1002	-17.5	-17.5	0.16 (1)	10.00	K-N	-1574 / 0	0.71 (1)		
U-T	0 / 1112	-17.5	-17.5	0.38 (4)	10.00					
T-S	0 / 1383	-17.5	-17.5	0.40 (4)	10.00					
S-R	0 / 2027	-17.5	-17.5	0.24 (1)	10.00					
R-Q	0 / 1450	-17.5	-17.5	0.31 (1)	10.00					
Q-P	0 / 828	-17.5	-17.5	0.21 (1)	10.00					
P-O	0 / 828	-17.5	-17.5	0.21 (1)	10.00					
O-N	0 / 845	-17.5	-17.5	0.21 (1)	10.00					
N-M	0 / 0	-88.0	-88.0	0.10 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

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

CSH: TC=0.40 (I-J:1), BC=0.40 (S-T:4), WB=0.71 (K-N:1), SSI=0.19 (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 = 0.50

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 822 2284 1656

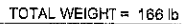
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (Q) (INPUT= 0.90)
 JSI METAL= 0.50 (D) (INPUT= 1.00)

A-15073771





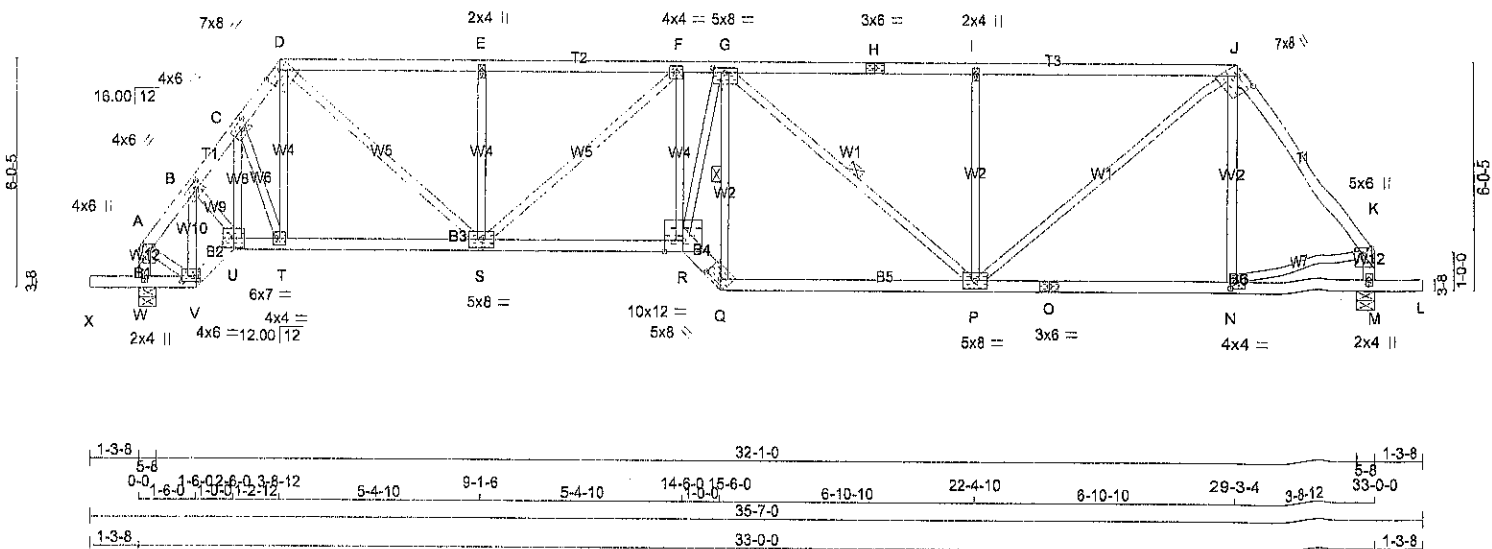
A-1073770



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253620	H02T	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 9 Apr 15 2015 Mitek Industries, Inc. Thu Jul 16 11:27:56 2015 Page 1
ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-DjbUdMGQ9WcBxZUAegi29kz79NAVVeVZlWZEVUyxWY1
Scale = 1:60.9



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - H	2x4	DRY	No.2	SPF	
H - J	2x4	DRY	No.2	SPF	
J - K	2x4	DRY	No.2	SPF	
W - A	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
X - V	2x4	DRY	No.2	SPF	
V - U	2x4	DRY	No.2	SPF	
U - R	2x4	DRY	No.2	SPF	
R - Q	2x6	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
A	TMVW+p	MT20	4.0	6.0	2.00	2.25
B	TMVW-h	MT20	4.0	6.0	2.00	2.25
C	TMVW-h	MT20	4.0	6.0	2.00	2.50
D	TTWW-h	MT20	7.0	8.0	1.75	5.00
E	TMVW-w	MT20	2.0	4.0		
F	TMVW-h	MT20	4.0	4.0		
G	TMVW-w	MT20	5.0	8.0	1.50	4.00
H	TS-h	MT20	3.0	6.0		
I	TMVW-w	MT20	2.0	4.0		
J	TTWW-h	MT20	7.0	8.0	1.75	5.00
K	TMVW+p	MT20	5.0	6.0	2.00	2.50
M	BMV1+p	MT20	2.0	4.0		
N	BMVW-h	MT20	4.0	4.0	2.00	1.50
O	BS-h	MT20	3.0	6.0		
P	BMVW-h	MT20	5.0	8.0		
Q	BBW-h	MT20	5.0	8.0	1.50	4.75
R	BBW-h	MT20	10.0	12.0	Edge	
S	BMVW-h	MT20	5.0	8.0		
T	BMVW-h	MT20	4.0	4.0		
U	BBW-h	MT20	6.0	7.0		
V	BBW-h	MT20	4.0	8.0	1.75	4.50

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
W	1567	0	1567	0
M	1563	0	1563	0

UNFACTORED REACTIONS

1ST CASE	MAX. MIN. COMPONENT REACTIONS	PERMANENT	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERMANENT	WIND
W	1104	748 / 0	0 / 0	0 / 0	356 / 0
M	1101	746 / 0	0 / 0	0 / 0	355 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF G-Q, G-P.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO						FR-TO			
A-B	-1271 / 0	-70.5	-70.5	0.05 (1)	5.68	V-B	-1084 / 0	0.18 (1)	
B-C	-1833 / 0	-70.5	-70.5	0.07 (1)	4.91	B-U	0 / 862	0.16 (1)	
C-D	-1715 / 0	-70.5	-70.5	0.06 (1)	5.05	U-C	0 / 204	0.05 (1)	
D-E	-2066 / 0	-70.5	-70.5	0.42 (1)	4.31	C-T	-219 / 0	0.05 (1)	
E-F	-2066 / 0	-70.5	-70.5	0.41 (1)	4.30	T-D	0 / 267	0.06 (1)	
F-G	-2543 / 0	-70.5	-70.5	0.34 (1)	3.97	D-S	0 / 1368	0.31 (1)	
G-H	-1892 / 0	-70.5	-70.5	0.66 (1)	4.16	S-E	-432 / 0	0.16 (1)	
H-I	-1892 / 0	-70.5	-70.5	0.65 (1)	4.16	E-F	-829 / 0	0.60 (1)	
I-J	-1892 / 0	-70.5	-70.5	0.66 (1)	4.16	F-R	0 / 346	0.08 (1)	
J-K	-1431 / 0	-70.5	-70.5	0.22 (1)	5.24	R-G	0 / 1900	0.43 (1)	
W-A	-1391 / 0	0.0	0.0	0.14 (1)	6.90	G-Q	-2018 / 0	0.49 (1)	
M-K	-1429 / 0	0.0	0.0	0.14 (1)	6.83	Q-P	-326 / 0	0.18 (1)	
						P-I	-542 / 0	0.31 (1)	
X-W	0 / 0	-88.0	-88.0	0.10 (1)	10.00	I-J	0 / 1348	0.30 (1)	
W-V	0 / 0	-17.5	-17.5	0.10 (1)	10.00	J-K	-46 / 83	0.03 (1)	
V-U	0 / 1009	-17.5	-17.5	0.17 (1)	10.00	K-L	0 / 824	0.19 (1)	
U-T	0 / 1093	-17.5	-17.5	0.23 (1)	10.00				
T-S	0 / 1019	-17.5	-17.5	0.22 (1)	10.00				
S-R	0 / 2535	-17.5	-17.5	0.47 (1)	10.00				
R-Q	0 / 2975	-17.5	-17.5	0.35 (1)	10.00				
Q-P	0 / 2141	-17.5	-17.5	0.45 (1)	10.00				
P-O	0 / 852	-17.5	-17.5	0.27 (1)	10.00				
O-N	0 / 852	-17.5	-17.5	0.27 (1)	10.00				
N-M	0 / 0	-17.5	-17.5	0.11 (1)	10.00				
M-L	0 / 0	-88.0	-88.0	0.10 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 21.0	PSF
DL	= 3.0	PSF
BOT CH.	LL = 0.0	PSF
DL	= 7.0	PSF
TOTAL LOAD	= 31.0	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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.29")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/660 (0.02")

CSI: TC=0.66 (I-J:1), BC=0.47 (R-S:1), WB=0.60 (F-S:1), SSI=0.23 (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 = 0.50

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

NAIL VALUES	PLATE GRIP (DRY)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	822	2264	1656

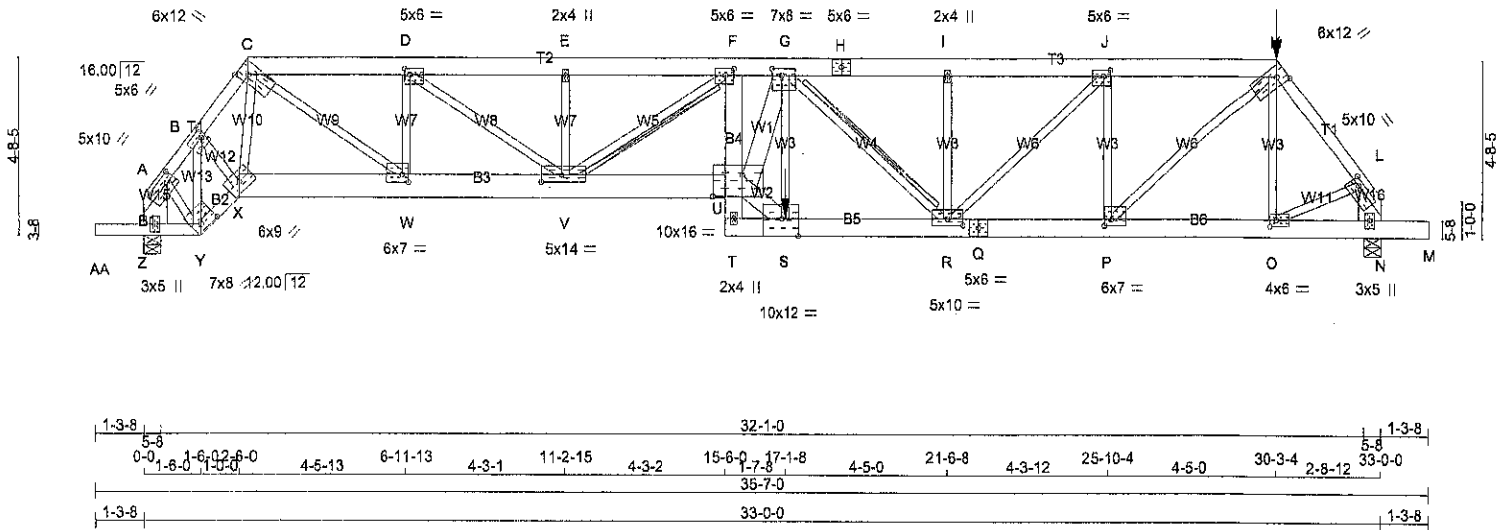
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (G) (INPUT = 0.90)
JSI METAL= 0.41 (R) (INPUT = 1.00)



A-15073769



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
U	8VMWW-h	MT20	10.0	16.0	6.75	9.50
V	8MWWV-t	MT20	5.0	14.0	2.25	8.50
W	8MWW-t	MT20	6.0	7.0	2.50	2.00
X	8BWW-h	MT20	6.0	9.0		
Y	8BWW-h	MT20	7.0	8.0	2.00	5.25
Z	8MV1+p	MT20	3.0	5.0		

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) 140.2 lbs FACTORED DOWN AT 30-3-4 ON TOP CHORD, AND 1888.9 lbs FACTORED DOWN AT 17-1-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

1) 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.

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
MT20	818	354	1687 822 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (O) (INPUT = 0.90)

JSI METAL= 0.99 (S) (INPUT = 1.00)



A-15073768(2)



DRY; SEASONED LUMBER.

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

NOTES- (1)
1) 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.

BEARINGS			MAXIMUM FACTORED			INPUT	REQRD
JT	GROSS REACTION		GROSS REACTION		UPLIFT	BRG	BRG
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
I	410	0	410	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
F	410	0	410	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	289	196 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
F	289	196 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF B-H, C-H, C-G, D-G, A-I, E-F.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN
THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

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	-67 / 0	-70.5	-70.5	0.01 (1)	6.25	H-B	-74 / 11	0.04 (1)
B-C	-38 / 0	-70.5	-70.5	0.18 (1)	6.25	H-C	-195 / 0	0.13 (1)
C-D	-45 / 0	-70.5	-70.5	0.18 (1)	6.25	C-G	-177 / 0	0.12 (1)
D-E	-79 / 0	-70.5	-70.5	0.01 (1)	6.25	G-D	-70 / 13	0.04 (1)
I-A	-481 / 0	0.0	0.0	0.16 (1)	6.25	A-H	0 / 404	0.09 (1)
F-E	-474 / 0	0.0	0.0	0.15 (1)	6.25	G-E	0 / 384	0.09 (1)
I-H	0 / 0	-17.5	-17.5	0.17 (4)	10.00			
H-G	0 / 114	-17.5	-17.5	0.18 (4)	10.00			
G-F	0 / 0	-17.5	-17.5	0.17 (4)	10.00			

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SPECIFIED LOADS:
TOP  CH.  LL  =  21.0  PSF
        DL  =  3.0  PSF
BOT  CH.  LL  =  0.0  PSF
        DL  =  7.0  PSF
TOTAL LOAD  =  31.0  PSF

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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

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

(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 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.18 (C-D:1), BC=0.18 (G-H:4),
WB=0.13 (C-H:1), SSI=0.13 (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 = 0.50

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	822	2284	1656

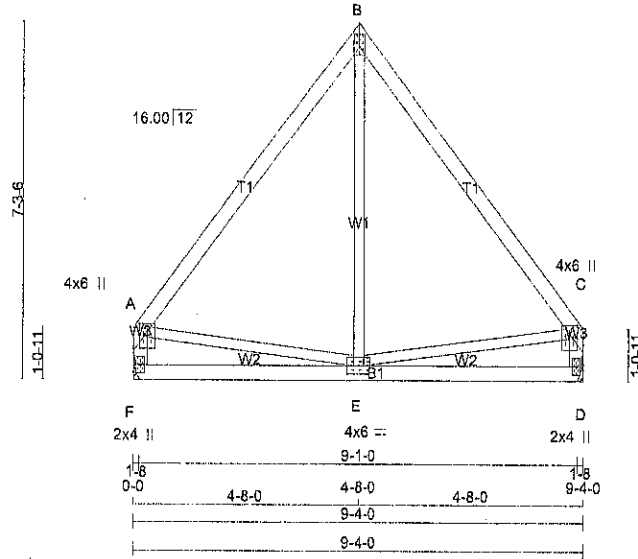
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.59 (H) (INPUT = 0.90)
JSI METAL= 0.12 (H) (INPUT = 1.00)



A-15073767



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

A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
F - A	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - B	MT20	4.0	6.0	2.00	2.00
B - C	MT20	3.0	5.0	2.00	Edge
C - D	MT20	4.0	6.0	2.00	2.00
D - E	MT20	2.0	4.0		
E - F	MT20	4.0	6.0		
F - A	MT20	2.0	4.0		

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
F	410	0	410	0		
D	410	0	410	0		

MIN. SEAT SIZE: 1-8
 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
F	289	196 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0
D	289	196 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX				MEMB.	WEBS MAX. FACTORED FORCE (LBS)
		FROM	TO	CS1 (LC)	UNBRAC LENGTH		
FR-TO							
A-B	-242 / 0	-70.5	-70.5	0.20 (1)	6.25	E-B	0 / 99
B-C	-242 / 0	-70.5	-70.5	0.20 (1)	6.25	A-E	0 / 147
F-A	-379 / 0	0.0	0.0	0.04 (1)	7.81	E-C	0 / 147
D-C	-379 / 0	0.0	0.0	0.04 (1)	7.81		
F-E	0 / 0	-17.5	-17.5	0.11 (4)	10.00		
E-D	0 / 0	-17.5	-17.5	0.11 (4)	10.00		

TOTAL WEIGHT = 43 lb [M/F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0 PSF
DL	= 3.0 PSF
BOT CH. LL	= 0.0 PSF
DL	= 7.0 PSF
TOTAL LOAD	= 31.0 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.20 (B-C:1), BC=0.11 (D-E:4), WB=0.03 (B-E:4), SS=0.08 (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 = 0.50

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 822 2284 1666

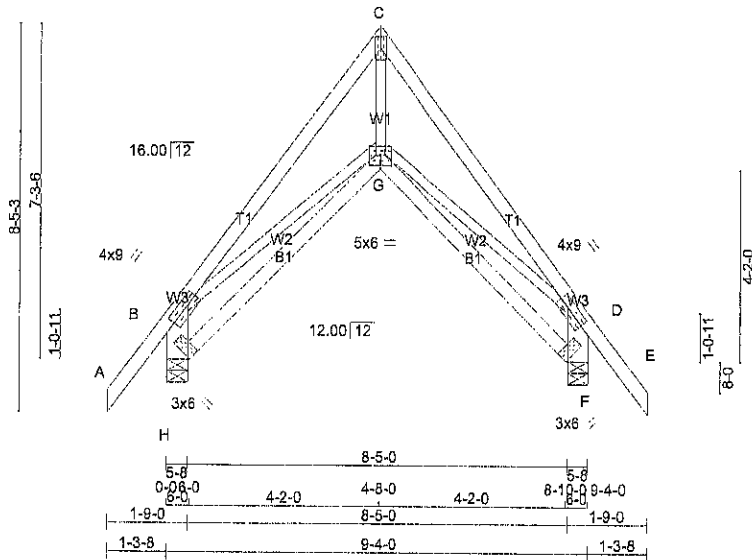
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.80)
 JSI METAL= 0.07 (C) (INPUT = 1.00)



A-1073766



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

ALL WEBS 2x3 DRY No.2 SPF
 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	9.0	2.00	3.00
C	TTW+p	MT20	3.0	6.0		
D	TMVW-I	MT20	4.0	9.0	2.00	3.00
F	BVM1+H	MT20	3.0	6.0	Edge 0.25	
G	BBVWW+p	MT20	5.0	8.0	2.75	3.00
H	BVM1+H	MT20	3.0	6.0	Edge 0.25	

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

NOTES: (1)

1) Lateral brace(s) shown shall be 1x4 for Part 8 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	REQD BRG
	VERT	DOWN	IN-SX	IN-SX
H	510	0	5-8	1-8
F	510	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	357	255 / 0	0 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0	0 / 0
F	357	255 / 0	0 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO						FR-TO			
A-B		0 / 40	-70.5	-70.5	0.10 (1)	G-C		0 / 830	0.14 (1)
B-C		-599 / 0	-70.5	-70.5	0.21 (1)	B-G		0 / 452	0.10 (1)
C-D		-599 / 0	-70.5	-70.5	0.21 (1)	G-D		0 / 452	0.10 (1)
D-E		0 / 40	-70.5	-70.5	0.10 (1)				
H-B		-469 / 0	0.0	0.0	0.03 (1)				
F-D		-469 / 0	0.0	0.0	0.03 (1)				
H-G		0 / 0	-17.5	-17.5	0.11 (4)				
G-F		0 / 0	-17.5	-17.5	0.11 (4)				

TOTAL WEIGHT = 4 X 53 = 211 lb
 [M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	31.0	PSF

SPACING = 24.0 IN./C

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

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

(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) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.31")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

CSI: TC=0.21 (B-C:1), BC=0.11 (G-H:4),
 WB=0.14 (C-G:1), SS=0.08 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.47 (G) (INPUT = 0.90)
 JSI METAL= 0.13 (B) (INPUT = 1.00)

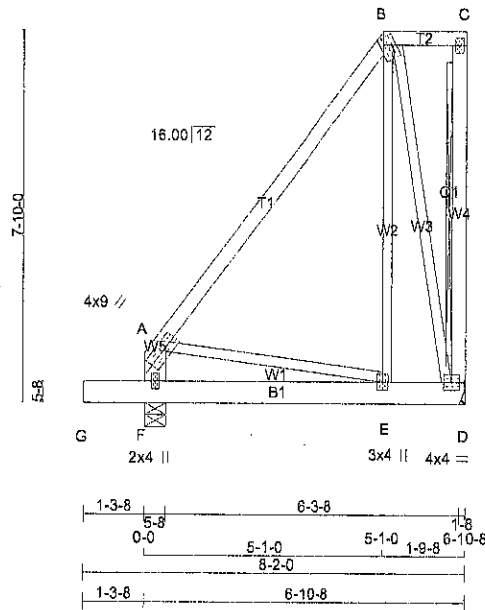


A-15073765

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253619	H13	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

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ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-8Xg_jjGstHxzBbk14nHLVkr1LbO_D7Eh0eDAD_yxWh3
4x6 \\\ 2x4 || Scale = 1:48.6



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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - B	12	TOP
B - C	12	TOP
C - D	12	TOP
F - A	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
G - D	12	SIDE(80.6)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	9.0	2.00 3.00
B	TTWW+m	MT20	4.0	6.0	1.75 1.00

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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
VERT		DOWN	IN-SX	IN-SX
HORZ		HORZ	HANGER BY OTHERS	
D	857	0	0	0
F	970	0	0	0

UNFACTORED REACTIONS

JT	1ST LOASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
COMBINED								
D	604	409 / 0	0 / 0	0 / 0	0 / 0	0 / 0	195 / 0	0 / 0
F	684	463 / 0	0 / 0	0 / 0	0 / 0	0 / 0	221 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT C-D FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	CS (LC)	MAX. UNBRACED LENGTH (FT)	CS (LC)
FR-TO							
A-B	-315 / 0	-70.5	-70.5	0.17 (1)	6.25	E-B	0 / 838
B-C	0 / 0	-70.5	-70.5	0.02 (1)	10.00	B-D	-852 / 0
D-C	-63 / 0	0.0	0.0	0.01 (1)	7.81	A-E	0 / 189
F-A	-453 / 0	0.0	0.0	0.02 (1)	7.81		
G-F	0 / 0	-88.0	-88.0	0.03 (1)	10.00		
F-E	0 / 0	-178.7	-178.7	0.17 (1)	10.00		
E-D	0 / 200	-178.7	-178.7	0.13 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CSIdGlder

START DISTANCE = 0-0
START SPAN CARRIED = 9-4-0
END DISTANCE = 6-10-8
END SPAN CARRIED = 9-4-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

(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 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

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

CSI: TC=0.17 (A-B:1), BC=0.17 (E-F:1), WB=0.49 (B-D:1), SSI=0.17 (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 = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	818	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

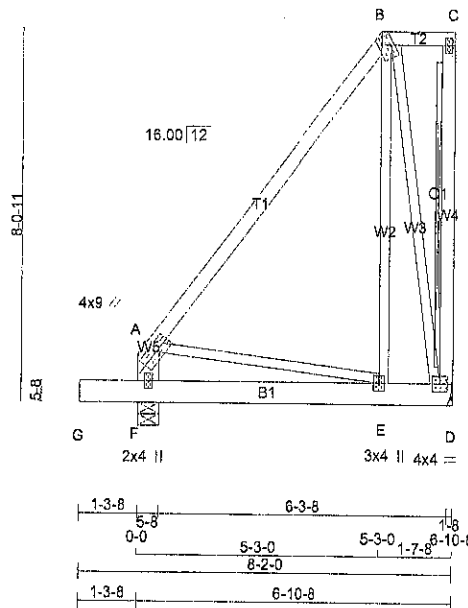
PLATE ROTATION TOL. = 5.70 deg.



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253619	H12	1	2	TRUSS DESC.	

Alpa Roof Truss, Maple

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4x6 \\\ 2x4 \\\
Scale = 1:48.9



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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - B 1	12	TOP
B - C 1	12	TOP
C - D 1	12	TOP
F - A 2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
G - D 2	12	SIDE(80.6)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TM/VW-t	MT20	4.0	9.0	2.00	3.00
B TT/VW+m	MT20	4.0	6.0	1.75	1.00

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
D	857	0	857	0	0	5-8	1-8		
F	970	0	970	0	0	5-8	1-8		

UNFACTORED REACTIONS

JT	COMBINED	1ST LOASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	604	409 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	195 / 0	0 / 0
F	684	463 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	221 / 0	0 / 0

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

BRACING

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

2x4 DRY SPF No.2 T-BRACE REQUIRED AT C-D 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		FACTORED		MAX. FACTORED		WEBS		FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	UNBRAC	MEMB.	FORCE (LBS)
FR-TO		FROM TO			LENGTH	FR-TO					
A-B	-283 / 0	-70.5	-70.5	0.19 (1)	6.25	E-B	0 / 873	0.11 (1)			
B-C	0 / 0	-70.5	-70.5	0.02 (1)	10.00	B-D	-899 / 0	0.55 (1)			
D-C	-57 / 0	0.0	0.0	0.01 (1)	7.81	A-E	0 / 176	0.02 (1)			
F-A	-439 / 0	0.0	0.0	0.02 (1)	7.81						
G-F	0 / 0	-88.0	-88.0	0.03 (1)	10.00						
F-E	0 / 0	-178.7	-178.7	0.18 (1)	10.00						
E-D	0 / 187	-178.7	-178.7	0.13 (1)	10.00						

TOTAL WEIGHT = 2 X 52 = 106 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL	= 21.0	PSF
DL	= 3.0	PSF
BOT CH. LL	= 0.0	PSF
DL	= 7.0	PSF
TOTAL LOAD	= 31.0	PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 9-4-0
END DISTANCE = 6-10-8
END SPAN CARRIED = 9-4-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 55% OF CSI.

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(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 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

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

CSI: TC=0.19 (A-B:1), BC=0.18 (E-F:1), WB=0.55 (B-D:1), SS=0.18 (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 = 0.50

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	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE BOTTOM ONLY 02-50-00-00

A-11073763



253619

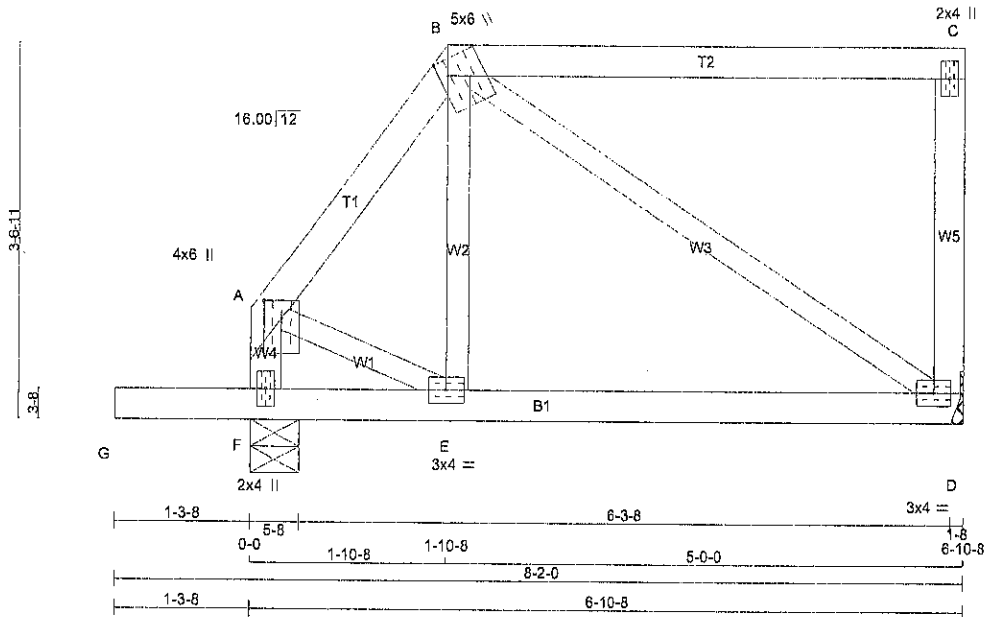
H10

QUANTITY
2PLY
1JOB DESC.
TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-gK6c6OFEVdrKzajuDZpGB8eU9u_fmUm8Xn_TcgYyxWh4
Scale = 1:21.9

TOTAL WEIGHT = 2 X 31 = 63 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTVW+m	MT20	5.0	6.0	1.75	1.00
C	TMV+p	MT20	2.0	4.0		
D	BMVW1-t	MT20	3.0	4.0		
E	BMVW1-t	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		

NOTES- (1)

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

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	HORZ	UPLIFT
D	302	0	0	0
F	416	0	416	0

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM. LIVE	WIND	DEAD	SOIL
D	213	144 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0
F	293	198 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO		FR-TO			
A-B	-235 / 0	-70.5 -70.5	0.04 (1)	6.25	E-B	0 / 79	0.03 (4)
B-C	0 / 0	-70.5 -70.5	0.30 (1)	10.00	B-D	-167 / 0	0.09 (1)
D-C	-176 / 0	0.0 0.0	0.03 (1)	7.81	A-E	0 / 147	0.03 (1)
F-A	-303 / 0	0.0 0.0	0.03 (1)	7.81			
G-F	0 / 0	-88.0 -88.0	0.10 (1)	10.00			
F-E	0 / 0	-17.5 -17.5	0.09 (4)	10.00			
E-D	0 / 141	-17.5 -17.5	0.10 (4)	10.00			

DESIGN CRITERIA**SPECIFIED LOADS:**

TOP CH.	LL =	21.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	31.0	PSF

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 066-09
- TPC 2011

(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 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.30 (B-C:1), BC=0.10 (D-E:4),
WB=0.09 (B-D:1), SSI=0.14 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP (DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1656

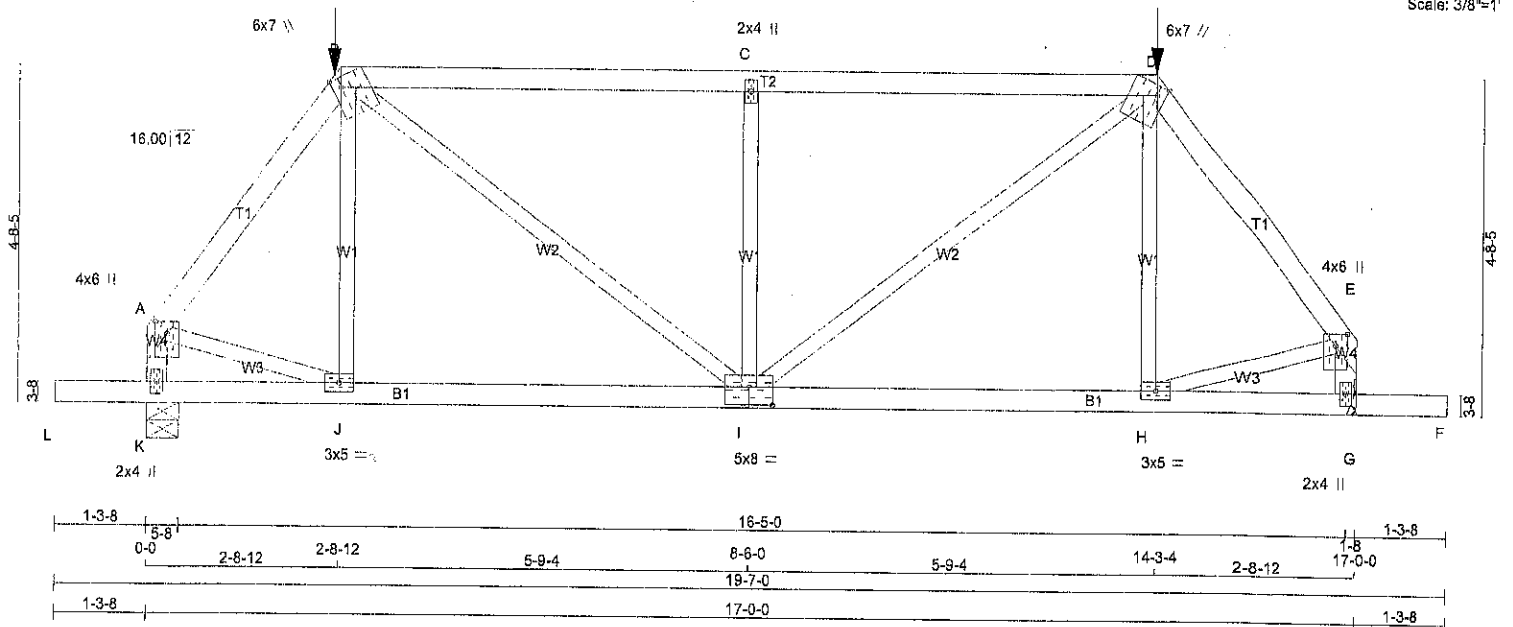
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.24 (E) (INPUT = 0.90)
JSI METAL=0.06 (A) (INPUT = 1.00)



A-15073761



LUMBER

N. L. G. A. RULES

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

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMW+w	MT20	2.0	4.0		
D	TTWW+m	MT20	6.0	7.0	Edge	1.50
E	TMVW+p	MT20	4.0	6.0	2.00	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-L	MT20	3.0	5.0		
I	BSWWH-L	MT20	5.0	8.0	3.00	4.00
J	BMWW-L	MT20	3.0	5.0		
K	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) 140.2 lbs FACTORED DOWN AT 14-3-4, AND 139.9 lbs FACTORED DOWN AT 2-8-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

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		
K	1539	0	1539	0	0	IN-SX
G	1539	0	1539	0	0	IN-SX

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
K	1086	729 / 0	0 / 0	0 / 0	0 / 0	357 / 0	0 / 0
G	1086	729 / 0	0 / 0	0 / 0	0 / 0	357 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.17FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
A-B	-1383 / 0	-70.5 -70.5	0.13 (1)	J-B	-25 / 122	0.05 (4)	5.38
B-C	-1595 / 0	-138.7 -138.7	0.97 (1)	B-I	0 / 969	0.24 (1)	3.17
C-D	-1595 / 0	-138.7 -138.7	0.97 (1)	I-C	-967 / 0	0.33 (1)	3.17
D-E	-1383 / 0	-70.5 -70.5	0.13 (1)	I-D	0 / 969	0.24 (1)	5.38
K-A	-1402 / 0	0.0 0.0	0.16 (1)	H-D	-25 / 122	0.05 (4)	8.84
G-E	-1402 / 0	0.0 0.0	0.16 (1)	A-J	0 / 846	0.21 (1)	8.84
L-K	0 / 0	-88.0 -88.0	0.11 (1)	H-E	0 / 846	0.21 (1)	10.00
K-J	0 / 0	-34.5 -34.5	0.18 (4)				10.00
J-I	0 / 822	-34.5 -34.5	0.33 (4)				10.00
I-H	0 / 822	-34.5 -34.5	0.33 (4)				10.00
H-G	0 / 0	-34.5 -34.5	0.18 (4)				10.00
G-F	0 / 0	-88.0 -88.0	0.11 (1)				10.00

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
B	2-8-12	-140	-140	---	FRONT	VERT	TOTAL
D	14-3-4	-140	-140	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 74 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	= 21.0	PSF
	DL	= 3.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.0	PSF
TOTAL LOAD	=	31.0	PSF

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 2-8-11
RIGHT SETBACK = 2-8-12
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.

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

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

(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 (0.57")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.57")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.97 (B-C:1), BC=0.33 (H-I:4), WB=0.33 (C-I:1), SSI=0.43 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

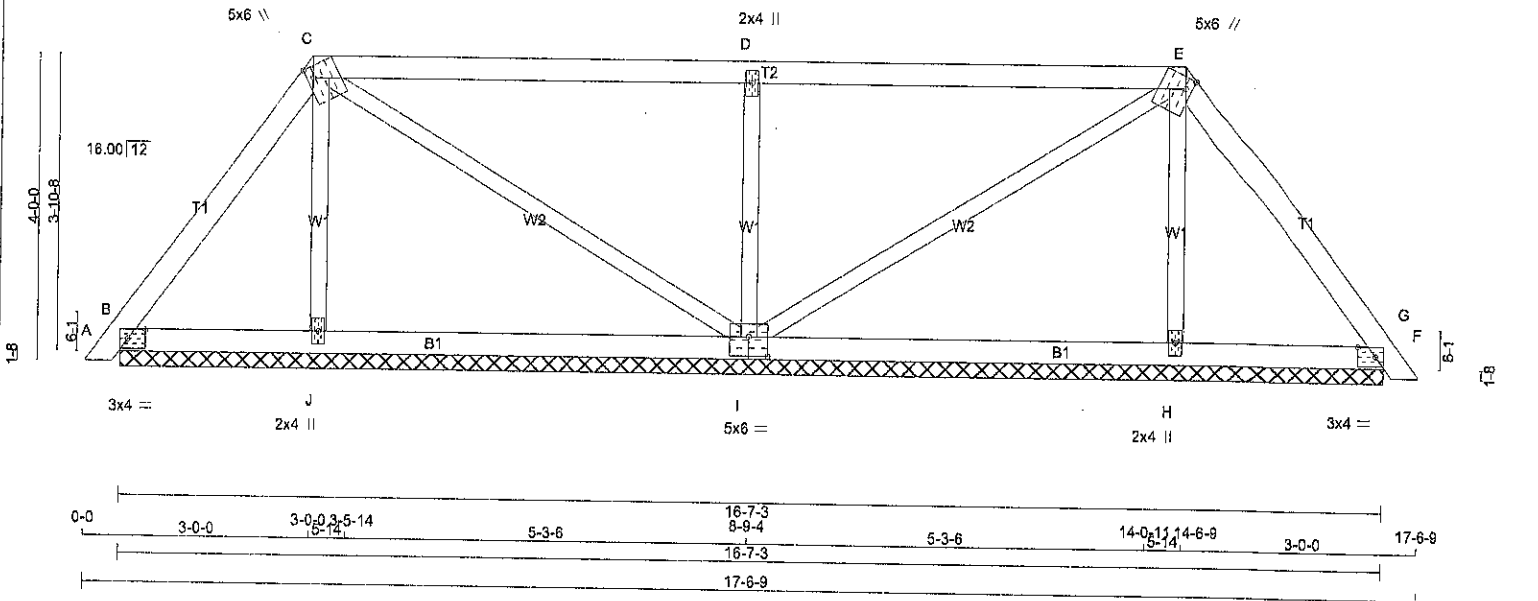
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	822	2254 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 degrees



A-1073760



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	1.50 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TTWW+w	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	6.0	1.75 1.00
F	TMB1-I	MT20	3.0	4.0	1.50 2.75
H	BMW1+w	MT20	2.0	4.0	
I	BSWW1-I	MT20	5.0	6.0	3.00 3.00
J	BMW1+w	MT20	2.0	4.0	

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX	
	VERT	HORZ	DOWN	HORZ		UPLIFT	
B	192	0	192	0	0	16-7-3 (8-3-10)8	
I	659	0	659	0	0	16-7-3 (8-3-10)8	
F	192	0	192	0	0	16-7-3 (8-3-10)8	
J	234	0	234	0	0	16-7-3 (8-3-10)8	
H	234	0	234	0	0	16-7-3 (8-3-10)8	

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
B	132	108 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
I	461	329 / 0	0 / 0	0 / 0	0 / 0	132 / 0	0 / 0
F	132	108 / 0	0 / 0	0 / 0	0 / 0	23 / 0	0 / 0
J	169	90 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
H	169	90 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0

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

LOADING							
TOTAL LOAD CASES: (4)							
MEMB.	CHORDS		FACTORED		WEBS		
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FROM TO	FR-TO		
A-B	0 / 0	-70.5 -70.5	0.01 (1)	10.00	C-I	-43 / 0	0.04 (1)
B-C	-84 / 0	-70.5 -70.5	0.08 (1)	6.25	I-D	-508 / 0	0.12 (1)
C-D	-7 / 0	-70.5 -70.5	0.40 (1)	10.00	I-E	-43 / 0	0.04 (1)
D-E	-7 / 0	-70.5 -70.5	0.40 (1)	10.00	J-C	-151 / 0	0.04 (1)
E-F	-84 / 0	-70.5 -70.5	0.08 (1)	6.25	H-E	-151 / 0	0.04 (1)
F-G	0 / 0	-70.5 -70.5	0.01 (1)	10.00			
B-J	0 / 49	-17.5 -17.5	0.08 (4)	10.00			
J-I	0 / 44	-17.5 -17.5	0.13 (4)	10.00			
I-H	0 / 44	-17.5 -17.5	0.13 (4)	10.00			
H-F	0 / 49	-17.5 -17.5	0.08 (4)	10.00			

TOTAL WEIGHT = 3 X 62 = 186 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 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

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

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

CSI: TC=0.40 (C-D:1), BC=0.13 (H-I:4), WB=0.12 (D-I:1), SSI=0.20 (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 = 0.50

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 822 2284 1856

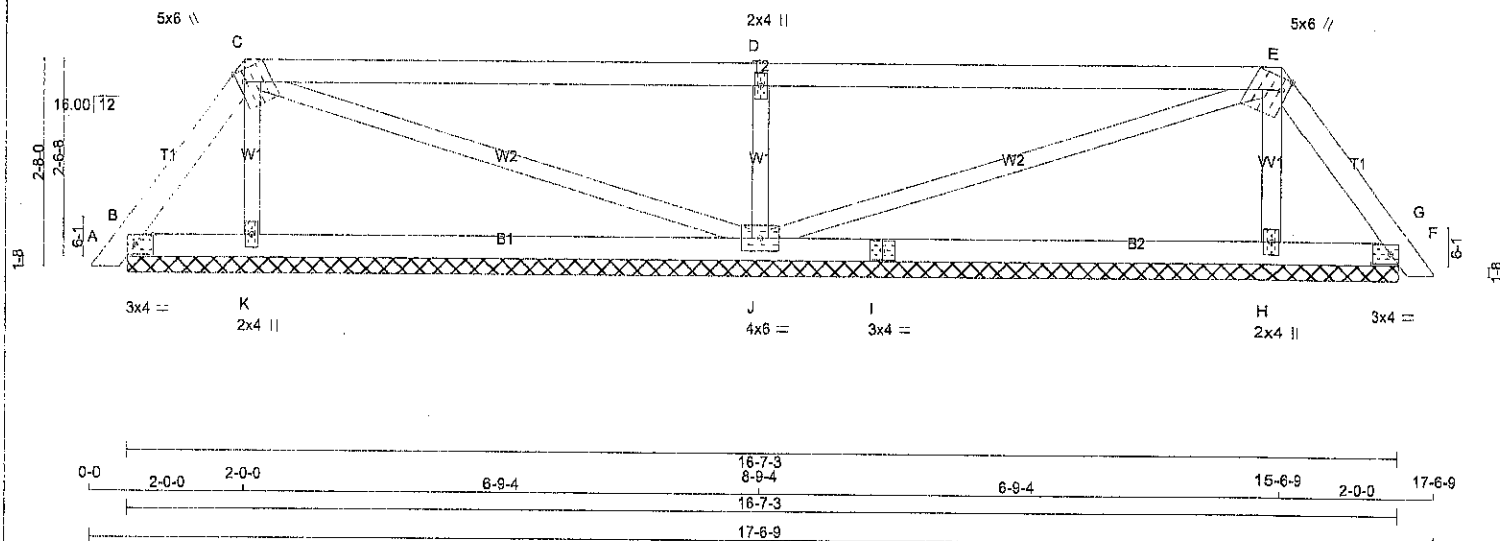
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (F) (INPUT = 0.80)
JSI METAL = 0.21 (I) (INPUT = 1.00)



A-1073759



TOTAL WEIGHT = 2 X 58 = 115 lb

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
B	122	0	122	0	-2	16-7-3 (6-8-3)-8			
K	266	0	266	0	0	16-7-3 (6-8-3)-8			
J	733	0	733	0	0	16-7-3 (6-8-3)-8			
H	266	0	266	0	0	16-7-3 (6-8-3)-8			
F	123	0	123	0	-2	16-7-3 (6-8-3)-8			

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 150 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT F FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

1ST CASE		MAX. MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
B	81	83 / 0	0 / 0	0 / 0	0 / 0	0 / -1	0 / 0		
K	193	99 / 0	0 / 0	0 / 0	0 / 0	94 / 0	0 / 0		
J	514	363 / 0	0 / 0	0 / 0	0 / 0	161 / 0	0 / 0		
H	193	99 / 0	0 / 0	0 / 0	0 / 0	94 / 0	0 / 0		
F	81	83 / 0	0 / 0	0 / 0	0 / 0	0 / -1	0 / 0		

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 9	K-C	-166 / 0
B-C	-74 / 0	C-J	-22 / 0
C-D	-12 / 0	J-D	-596 / 0
D-E	-12 / 0	J-E	-22 / 0
E-F	-74 / 0	H-E	-166 / 0
F-G	0 / 9		
VERT. LOAD (LBS)		VERT. LOAD (LBS)	
FROM TO		FROM TO	
-70.5	-70.5	-70.5	-70.5
0.01 (1)	10.00	0.01 (1)	10.00
0.03 (1)	6.25	0.03 (1)	6.25
0.55 (1)	6.25	0.55 (1)	6.25
0.03 (1)	6.25	0.03 (1)	6.25
0.01 (1)	10.00	0.01 (1)	10.00
-17.5	-17.5	-17.5	-17.5
0.12 (4)	10.00	0.12 (4)	10.00
-17.5	-17.5	-17.5	-17.5
0.17 (4)	10.00	0.17 (4)	10.00
-17.5	-17.5	-17.5	-17.5
0.17 (4)	10.00	0.17 (4)	10.00
-17.5	-17.5	-17.5	-17.5
0.12 (4)	10.00	0.12 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.55 (C-D:1), BC=0.17 (J-K:4), WB=0.10 (D-J:1), SSI=0.23 (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 = 0.50

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

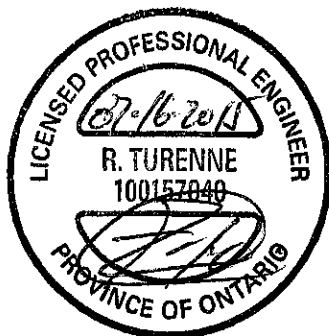
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1867 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (J) (INPUT = 0.80)
JSI METAL= 0.11 (D) (INPUT = 1.00)

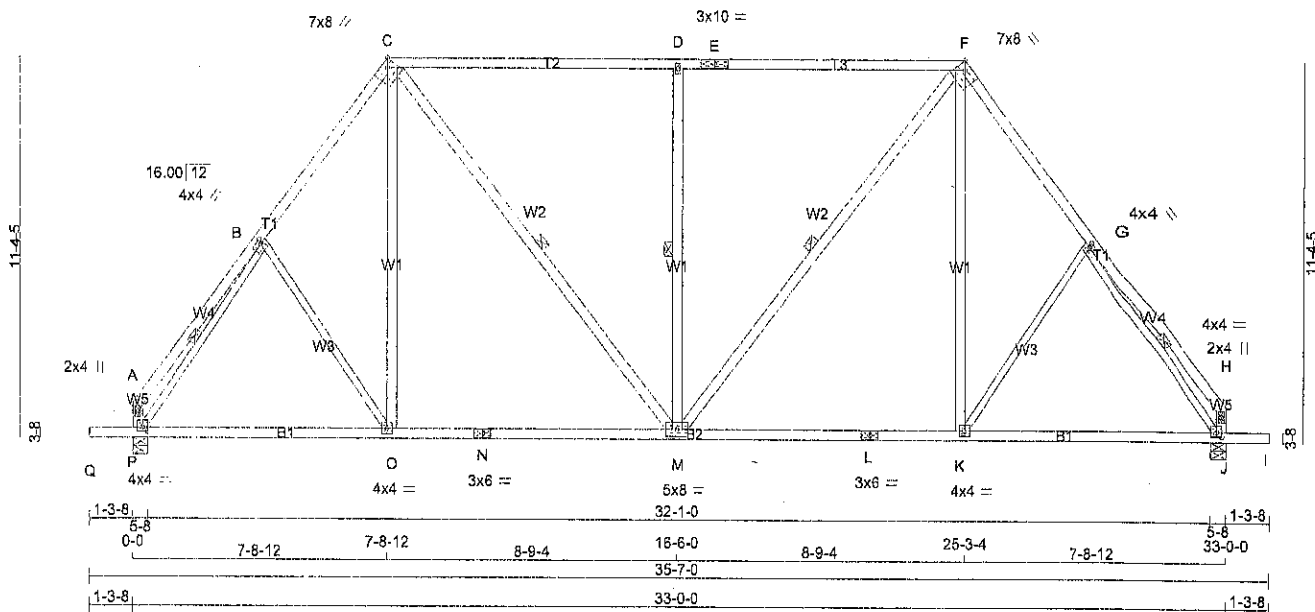
NOTES- (1)
1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23.13.11, and no less than 2x4 for Part 4 design.



A-15073758

Alpa Roof Truss, Maple

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 ID: AyrJx9Y?fa2EXF7DRQxSq4zMEz1-GlQTUMDLDTm66_JYRGZZ?eVrma?Hly550Fy4DyxWh7
 Scale = 1:69.2



TOTAL WEIGHT = 9 X 182 = 1638 lb [M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMV+p	MT20	2.0	4.0
B	TMVW-t	MT20	4.0	4.0 1.50 1.00
C	TTWW-h	MT20	7.0	8.0 Edge 2.75
D	TMVW-w	MT20	2.0	4.0
E	TS-t	MT20	3.0	10.0
F	TTWW-h	MT20	7.0	8.0 Edge 2.75
G	TMVW-t	MT20	4.0	4.0 1.50 1.00
H	TMV+p	MT20	2.0	4.0
J	BMVW1-t	MT20	4.0	4.0 1.50 2.00
K	BMVW-t	MT20	4.0	4.0
L	BS-t	MT20	3.0	6.0
M	BMVW-t	MT20	5.0	8.0
N	BS-t	MT20	3.0	6.0
O	BMVW-t	MT20	4.0	4.0
P	BMVW1-t	MT20	4.0	4.0 1.50 2.00

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQ'D	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
P	1831	0	1631	0	0	5-8	1-12		
J	1831	0	1631	0	0	5-8	1-12		

UNFACTORED REACTIONS		1ST CASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
P	1155	747 / 0	0 / 0	0 / 0	0 / 0
J	1155	747 / 0	0 / 0	0 / 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 = 4.17FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-M, D-M, F-M, B-P, G-J.
 END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING		TOTAL LOAD CASES: (4)	
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 24	B-O	-116 / 8
B-C	-1422 / 0	C-O	0 / 257
C-D	-1229 / 0	C-M	0 / 630
D-E	-1230 / 0	M-D	-839 / 0
E-F	-1230 / 0	M-F	0 / 630
F-G	-1422 / 0	K-F	0 / 257
G-H	0 / 24	K-G	-116 / 8
P-A	-103 / 0	P-B	-1631 / 0
J-H	-103 / 0	G-J	-1631 / 0
Q-P	0 / 0		
P-O	0 / 801		
O-N	0 / 837		
N-M	0 / 837		
M-L	0 / 837		
L-K	0 / 837		
K-J	0 / 801		
J-I	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

(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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL) = L/120 (0.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
 ALLOWABLE DEFL.(TL) = L/120 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.86 (C-D:1), BC=0.36 (K-M:4),
 WB=0.57 (D-M:1), SSI=0.33 (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 = 0.50

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 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

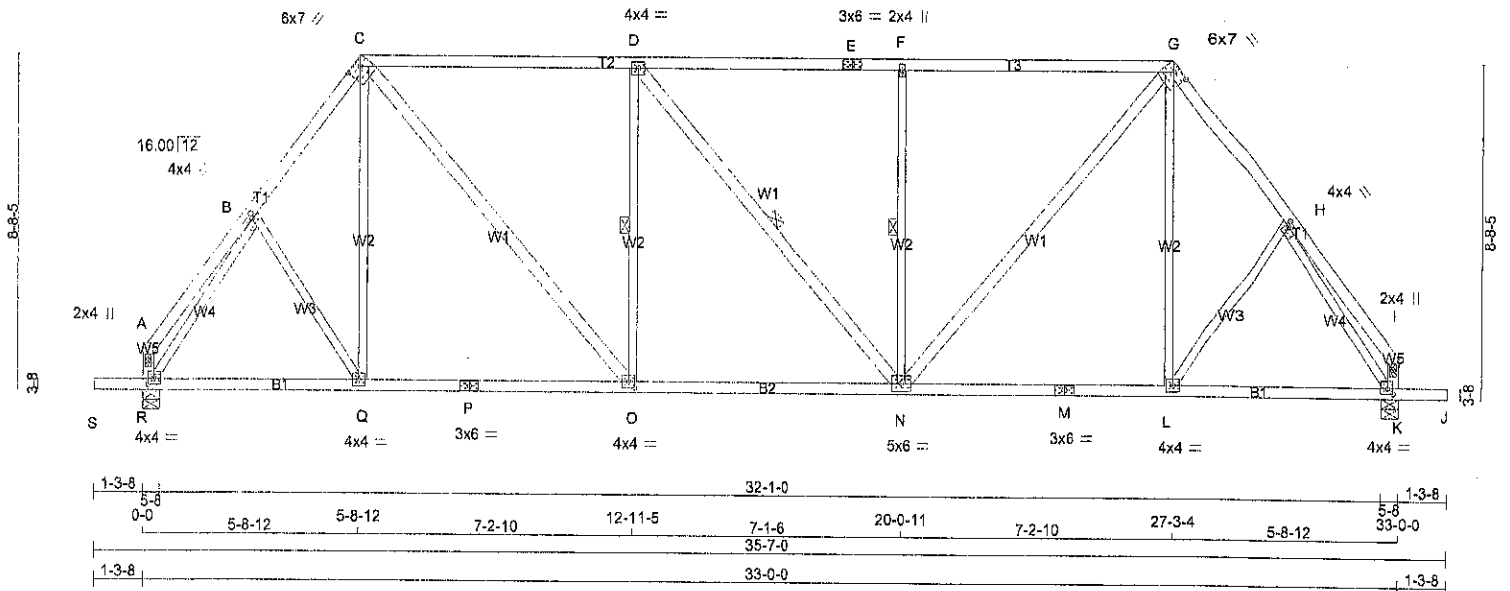
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (P) (INPUT = 0.90)
 JSI METAL= 0.62 (G) (INPUT = 1.00)



A-1073757





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMVW-t	MT20	4.0	4.0	1.50	1.00
C	TTVW-h	MT20	6.0	7.0	1.75	4.00
D	TMVW-t	MT20	4.0	4.0		
E	TS-t	MT20	3.0	8.0		
F	TMVW-w	MT20	2.0	4.0		
G	TTVW-h	MT20	6.0	7.0	1.75	4.00
H	TMVW-t	MT20	4.0	4.0	1.50	1.00
I	TMV+p	MT20	2.0	4.0		
K	BMVW1-t	MT20	4.0	4.0	1.75	1.75
L	BMVW-t	MT20	4.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	5.0	6.0		
O	BMVW-t	MT20	4.0	4.0	2.00	1.75
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	4.0	4.0		
R	BMVW1-t	MT20	4.0	4.0	1.75	1.75

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
R	1565	0	1565	0	5-8	1-10		
K	1565	0	1565	0	5-8	1-10		

UNFACTORED REACTIONS

JT	1ST CASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1102	747 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0
K	1102	747 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.71FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-O, D-N, F-N.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 15	-70.5 -70.5	0.08 (1)	10.00	B-Q	-32 / 20	0.02 (1)
B-C	-1408 / 0	-70.5 -70.5	0.10 (1)	5.40	Q-C	0 / 161	0.04 (4)
C-D	-1410 / 0	-70.5 -70.5	0.62 (1)	4.71	C-O	0 / 885	0.14 (1)
D-E	-1409 / 0	-70.5 -70.5	0.61 (1)	4.71	O-D	-544 / 0	0.26 (1)
E-F	-1409 / 0	-70.5 -70.5	0.61 (1)	4.71	D-N	-1 / 0	0.00 (1)
F-G	-1409 / 0	-70.5 -70.5	0.61 (1)	4.72	N-F	-544 / 0	0.26 (1)
G-H	-1408 / 0	-70.5 -70.5	0.10 (1)	5.40	H-G	0 / 884	0.14 (1)
H-I	0 / 15	-70.5 -70.5	0.07 (1)	10.00	L-G	0 / 152	0.04 (4)
R-A	-80 / 0	0.0 0.0	0.01 (1)	7.81	L-H	-32 / 20	0.02 (1)
K-I	-80 / 0	0.0 0.0	0.01 (1)	7.81	R-B	-1579 / 0	0.71 (1)
					H-K	-1579 / 0	0.71 (1)
S-R	0 / 0	-88.0 -88.0	0.10 (1)	10.00			
R-Q	0 / 848	-17.5 -17.5	0.23 (4)	10.00			
Q-P	0 / 831	-17.5 -17.5	0.24 (4)	10.00			
P-O	0 / 831	-17.5 -17.5	0.24 (4)	10.00			
O-N	0 / 1410	-17.5 -17.5	0.32 (1)	10.00			
N-M	0 / 831	-17.5 -17.5	0.24 (4)	10.00			
M-L	0 / 831	-17.5 -17.5	0.24 (4)	10.00			
L-K	0 / 848	-17.5 -17.5	0.23 (4)	10.00			
K-J	0 / 0	-88.0 -88.0	0.10 (1)	10.00			

TOTAL WEIGHT = 2 X 168 = 337 lb

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	31.0	PSF	

SPACING = 24.0 IN./C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 088-09
- TPIC 2011

(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 (1.10")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL)= L/999 (0.13")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.16")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/120 (0.16")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.62 (C-D:1), BC=0.32 (N-O:1),
WB=0.71 (H-K:1), SSI=0.24 (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 = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	818	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.59 (H) (INPUT = 1.00)



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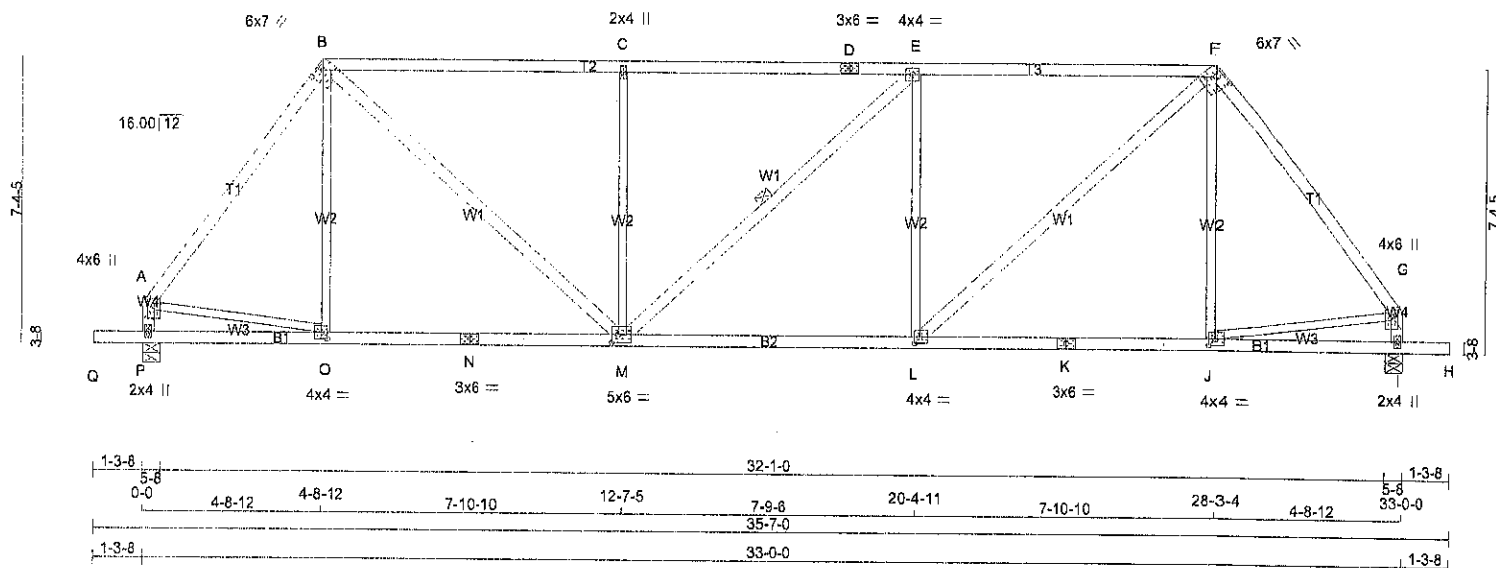
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H03

QUANTITY
2PLY
1JOB DESC.
TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-JNJ3gB5h5D2ipwQ0E5UanAAZ9pO0odimr7KyxWh9
Scale = 1:60.0

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
P	1565	0	1565	0	5-8	1-10
I	1565	0	1565	0	5-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM	LIVE			
P	1102	747 / 0	0 / 0	0 / 0	0 / 0	366 / 0	0 / 0
I	1102	747 / 0	0 / 0	0 / 0	0 / 0	366 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.16FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-M.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX UNBRACED LENGTH	WEBS MAX. FACTORED FORCE (LBS)	
	FR-TO	FROM	TO	LC1		FR-TO	FROM
A-B	-1421 / 0	-70.5	-70.5	0.38 (1)	5.11	O-B	0 / 99
B-C	-1671 / 0	-70.5	-70.5	0.80 (1)	4.17	B-M	0 / 1102
C-D	-1672 / 0	-70.5	-70.5	0.80 (1)	4.16	M-C	-595 / 0
D-E	-1672 / 0	-70.5	-70.5	0.80 (1)	4.16	M-E	-1 / 0
E-F	-1672 / 0	-70.5	-70.5	0.81 (1)	4.16	L-E	-595 / 0
F-G	-1421 / 0	-70.5	-70.5	0.38 (1)	5.11	L-F	0 / 1104
P-A	-1424 / 0	0.0	0.0	0.14 (1)	6.84	J-F	0 / 99
I-G	-1423 / 0	0.0	0.0	0.14 (1)	6.84	A-O	0 / 856
Q-P	0 / 0	-88.0	-88.0	0.10 (1)	10.00	J-G	0 / 856
P-O	0 / 0	-17.5	-17.5	0.17 (4)	10.00		
O-N	0 / 848	-17.5	-17.5	0.28 (4)	10.00		
N-M	0 / 848	-17.5	-17.5	0.28 (4)	10.00		
M-L	0 / 1672	-17.5	-17.5	0.39 (1)	10.00		
L-K	0 / 848	-17.5	-17.5	0.28 (4)	10.00		
K-J	0 / 848	-17.5	-17.5	0.28 (4)	10.00		
J-I	0 / 0	-17.5	-17.5	0.17 (4)	10.00		
I-H	0 / 0	-88.0	-88.0	0.10 (1)	10.00		

TOTAL WEIGHT = 2 X 152 = 304 lb [M]

DESIGN CRITERIA:

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

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

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

(65 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/380$ (1.10")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
ALLOWABLE DEFL.(TL) = $L/380$ (1.10")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.16")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/120$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.81 (E-F:1), BC=0.39 (L-M:1), WB=0.57 (E-L:1), SSI=0.26 (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 = 0.50

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

NAIL VALUES

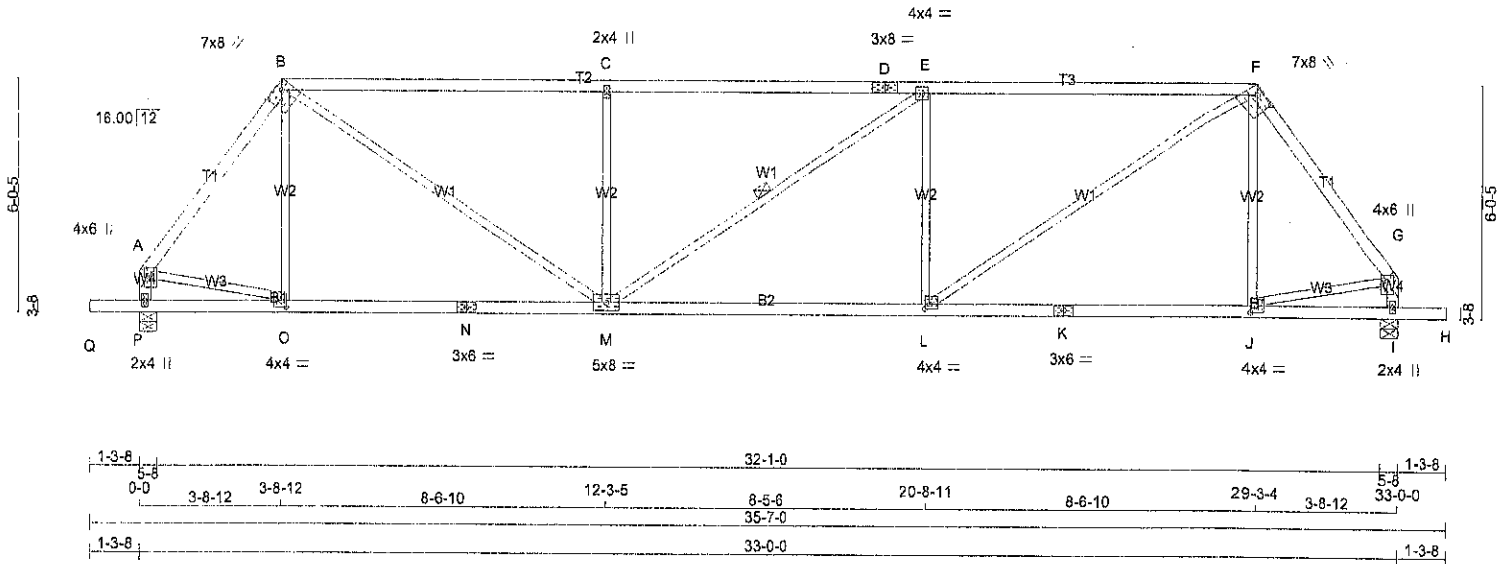
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX	MIN	MAX
618	364	1867
822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (A) (INPUT = 0.90)
JSI METAL= 0.34 (N) (INPUT = 1.00)

A-15073754



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2 SPF
B - D	2x4	DRY	1650F 1.5E SPF
D - F	2x4	DRY	1650F 1.5E SPF
F - G	2x4	DRY	No.2 SPF
P - A	2x4	DRY	No.2 SPF
I - G	2x4	DRY	No.2 SPF
Q - N	2x4	DRY	No.2 SPF
N - K	2x4	DRY	No.2 SPF
K - 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
A	TMVW+p	MT20	4.0	8.0	2.00	2.00
B	TTWW-h	MT20	7.0	8.0	1.75	5.00
C	TMW-w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	8.0		
E	TMWW-t	MT20	4.0	4.0		
F	TTWW-h	MT20	7.0	8.0	1.75	5.00
G	TMVW+p	MT20	4.0	8.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	8.0		
L	BMWW-t	MT20	4.0	4.0	1.50	1.50
M	BMWW-t	MT20	5.0	8.0		
N	BS-t	MT20	3.0	8.0		
O	BMWW-t	MT20	4.0	4.0	2.00	1.75
P	BMV1+p	MT20	2.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
P	1565	0	1565	0	0	5-8	1-10	
I	1565	0	1565	0	0	5-8	1-10	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
P	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
P	1102	747 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0	
I	1102	747 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-M.
 END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX
FR-TO		FROM TO	CS (LC) UNBRAC LENGTH	FR-TO		FROM TO	CS (LC) UNBRAC LENGTH
A-B	-1442 / 0	-70.5 -70.5	0.22 (1)	5.22	O-B	-23 / 91	0.03 (4)
B-C	-2054 / 0	-70.5 -70.5	0.80 (1)	4.38	B-M	0 / 1435	0.32 (1)
C-D	-2055 / 0	-70.5 -70.5	0.80 (1)	4.37	M-C	-645 / 0	0.37 (1)
D-E	-2055 / 0	-70.5 -70.5	0.80 (1)	4.37	M-E	0 / 0	0.00 (1)
E-F	-2055 / 0	-70.5 -70.5	0.81 (1)	4.37	L-E	-645 / 0	0.37 (1)
F-G	-1442 / 0	-70.5 -70.5	0.22 (1)	5.22	L-F	0 / 1436	0.32 (1)
P-A	-1439 / 0	0.0 0.0	0.15 (1)	6.81	J-F	-23 / 91	0.03 (4)
I-G	-1439 / 0	0.0 0.0	0.15 (1)	6.81	A-O	0 / 873	0.20 (1)
Q-P	0 / 0	-88.0 -88.0	0.10 (1)	10.00	J-G	0 / 873	0.20 (1)
P-O	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
O-N	0 / 860	-17.5 -17.5	0.32 (4)	10.00			
N-M	0 / 860	-17.5 -17.5	0.32 (4)	10.00			
M-L	0 / 2055	-17.5 -17.5	0.47 (1)	10.00			
L-K	0 / 860	-17.5 -17.5	0.32 (4)	10.00			
K-J	0 / 860	-17.5 -17.5	0.32 (4)	10.00			
J-I	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
I-H	0 / 0	-88.0 -88.0	0.10 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 21.0 PSF
 DL = 3.0 PSF
 BOT CH. LL = 0.0 PSF
 DL = 7.0 PSF
 TOTAL LOAD = 31.0 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

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

(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 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL) = L/120 (0.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
 ALLOWABLE DEFL.(TL) = L/120 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.81 (E-F:1), BC=0.47 (L-M:1), WB=0.37 (E-L:1), SSI=0.28 (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 = 0.50

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 615 354 1667 822 2284 1656

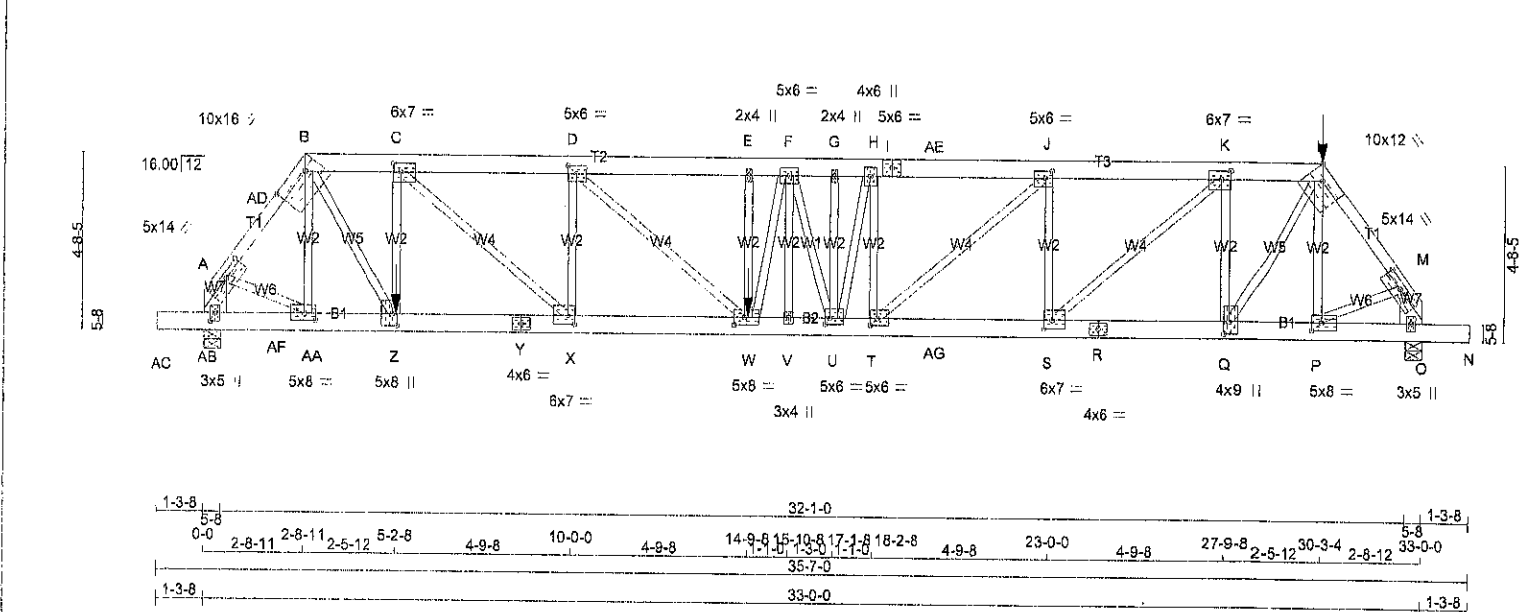
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (L) (INPUT = 0.90)
 JSI METAL= 0.45 (L) (INPUT = 1.00)



A-15073753



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
B - I	2x6	DRY No.2	SPF
I - L	2x6	DRY No.2	SPF
L - M	2x4	DRY No.2	SPF
AB - A	2x8	DRY No.2	SPF
O - M	2x8	DRY No.2	SPF
AC - Y	2x6	DRY 1650F 1.5E	SPF
Y - R	2x6	DRY 1650F 1.5E	SPF
R - N	2x6	DRY 1650F 1.5E	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	5.0	14.0	1.50	6.75
B	TTWW-h	MT20	10.0	16.0	3.00	11.50
C	TMVW-t	MT20	6.0	7.0	2.75	2.25
D	TMVW-t	MT20	5.0	6.0	2.50	2.75
E	TMVW-t	MT20	2.0	4.0		
F	TMVW-t	MT20	5.0	6.0		
G	TMVW-t	MT20	2.0	4.0		
H	TMVW-t	MT20	4.0	6.0		
I	TS-t	MT20	5.0	6.0		
J	TMVW-t	MT20	5.0	6.0	2.25	2.25
K	TMVW-t	MT20	6.0	7.0	2.75	2.75
L	TTWW-h	MT20	10.0	12.0	Edge	4.50
M	TMVW-t	MT20	5.0	14.0	1.75	6.75
O	BMV1+p	MT20	3.0	5.0		
P	BMVW-t	MT20	5.0	8.0	2.50	3.00
Q	BMVW-t	MT20	4.0	9.0	4.00	1.50
R	BS-t	MT20	4.0	6.0		
S	BMVW-t	MT20	6.0	7.0	2.75	2.75
T	BMVW-t	MT20	5.0	6.0	2.25	2.25
U	BMVW-t	MT20	5.0	6.0	2.00	1.50
V	BMVW-t	MT20	3.0	4.0		
W	BMVW-t	MT20	5.0	8.0	2.50	3.25
X	BMVW-t	MT20	6.0	7.0	2.75	2.25
Y	BS-t	MT20	4.0	6.0		

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
AB	3785	0	0	5-8
O	3271	0	0	5-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS
AB	2648	1903 / 0	0 / 0
O	2297	1597 / 0	0 / 0

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO						FR-TO			
A-AD	-3741 / 0	-156.3	-156.3	0.44 (1)	3.25	AA-B	-92 / 32	0.03 (1)	
AD-B	-3741 / 0	-70.5	-70.5	0.44 (1)	3.25	B-Z	0 / 3272	0.81 (1)	
B-C	-3884 / 0	-70.5	-70.5	0.14 (1)	4.27	Z-C	-1816 / 0	0.54 (1)	
C-D	-6890 / 0	-70.5	-70.5	0.34 (1)	3.44	C-X	0 / 2410	0.60 (1)	
D-E	-6922 / 0	-70.5	-70.5	0.48 (1)	3.02	X-D	-1484 / 0	0.44 (1)	
E-F	-6922 / 0	-70.5	-70.5	0.38 (1)	3.12	D-W	0 / 1645	0.41 (1)	
F-G	-6824 / 0	-70.5	-70.5	0.36 (1)	3.14	W-E	-181 / 0	0.05 (1)	
G-H	-6824 / 0	-70.5	-70.5	0.35 (1)	3.16	E-F	-36 / 49	0.01 (4)	
H-I	-6764 / 0	-70.5	-70.5	0.50 (1)	3.03	F-V	0 / 169	0.04 (1)	
I-AE	-6764 / 0	-70.5	-70.5	0.50 (1)	3.03	V-U	-304 / 0	0.10 (1)	
AE-J	-6764 / 0	-138.7	-138.7	0.50 (1)	3.03	U-G	0 / 24	0.01 (1)	
J-K	-5601 / 0	-138.7	-138.7	0.40 (1)	3.41	G-H	0 / 240	0.06 (1)	
K-L	-3453 / 0	-138.7	-138.7	0.17 (1)	4.44	H-T	-586 / 0	0.17 (1)	
L-M	-3284 / 0	-70.5	-70.5	0.28 (1)	3.64	T-J	0 / 1563	0.38 (1)	
AB-A	-3642 / 0	0.0	0.0	0.20 (1)	6.24	S-J	-1729 / 0	0.51 (1)	
O-M	-3132 / 0	0.0	0.0	0.17 (1)	6.64	J-K	0 / 2886	0.71 (1)	
AC-AB	0 / 0	-88.0	-88.0	0.04 (1)	10.00	K-L	-2425 / 0	0.72 (1)	
AB-AF	0 / 0	-38.8	-38.8	0.06 (1)	10.00	L-P	0 / 2947	0.73 (1)	
AF-AA	0 / 0	-124.7	-124.7	0.06 (1)	10.00	P-L	-278 / 0	0.08 (1)	
AA-Z	0 / 2228	-124.7	-124.7	0.24 (1)	10.00	A-AA	0 / 2227	0.58 (1)	
Z-Y	0 / 3884	-17.5	-17.5	0.35 (1)	10.00	P-M	0 / 2010	0.50 (1)	
Y-X	0 / 3884	-17.5	-17.5	0.35 (1)	10.00				
X-W	0 / 5690	-17.5	-17.5	0.53 (1)	10.00				
W-V	0 / 6910	-124.7	-124.7	0.63 (1)	10.00				
V-U	0 / 6910	-124.7	-124.7	0.64 (1)	10.00				
U-T	0 / 6764	-124.7	-124.7	0.62 (1)	10.00				
T-AG	0 / 5601	-124.7	-124.7	0.53 (1)	10.00				
AG-S	0 / 5601	-34.5	-34.5	0.53 (1)	10.00				
S-R	0 / 3453	-34.5	-34.5	0.33 (1)	10.00				
R-Q	0 / 3453	-34.5	-34.5	0.33 (1)	10.00				
Q-P	0 / 1961	-34.5	-34.5	0.19 (1)	10.00				
P-O	0 / 0	-34.5	-34.5	0.03 (1)	10.00				
O-N	0 / 0	-88.0	-88.0	0.04 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
L	30-3-4	-140	-140		FRONT	VERT	TOTAL
W	14-8-8	-877	-877		FRONT	VERT	TOTAL
Z	5-2-8	-877	-877		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 = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-9-11
RIGHT SETBACK = 2-8-12
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 13-3-0 OF SPAN MEASURED FROM THE RIGHT.

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 0-0
END SETBACK = 6-10-8
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 1-10-8 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CSldGlder
START DISTANCE = 1-10-8
START SPAN CARRIED = 6-10-8
END DISTANCE = 5-2-8
END SPAN CARRIED = 6-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CSldGlder
START DISTANCE = 14-9-8
START SPAN CARRIED = 6-10-8
END DISTANCE = 19-9-0
END SPAN CARRIED = 6-10-8
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

THIS DESIGN COMPLETES VERIFICATION
A-10073252
CONTINUED ON PAGE 2



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Z	BMWw+t	MT20	5.0	8.0	3.75	1.50
AA	BMWw-t	MT20	5.0	8.0	2.25	3.75
AB	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) 140.2 lbs FACTORED DOWN AT 30-3-4 ON TOP CHORD, AND 876.9 lbs FACTORED DOWN AT 14-9-8, AND 876.9 lbs FACTORED DOWN AT 5-2-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

1) 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.

- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- TPIC 2011

(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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.30")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 770 (0.51")

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

CSI: TC=0.50 (H-J:1) , BC=0.64 (U-V:1) , WB=0.81 (B-Z:1) , SSI=0.23 (J-K: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 = 0.50

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 822 2284 1856

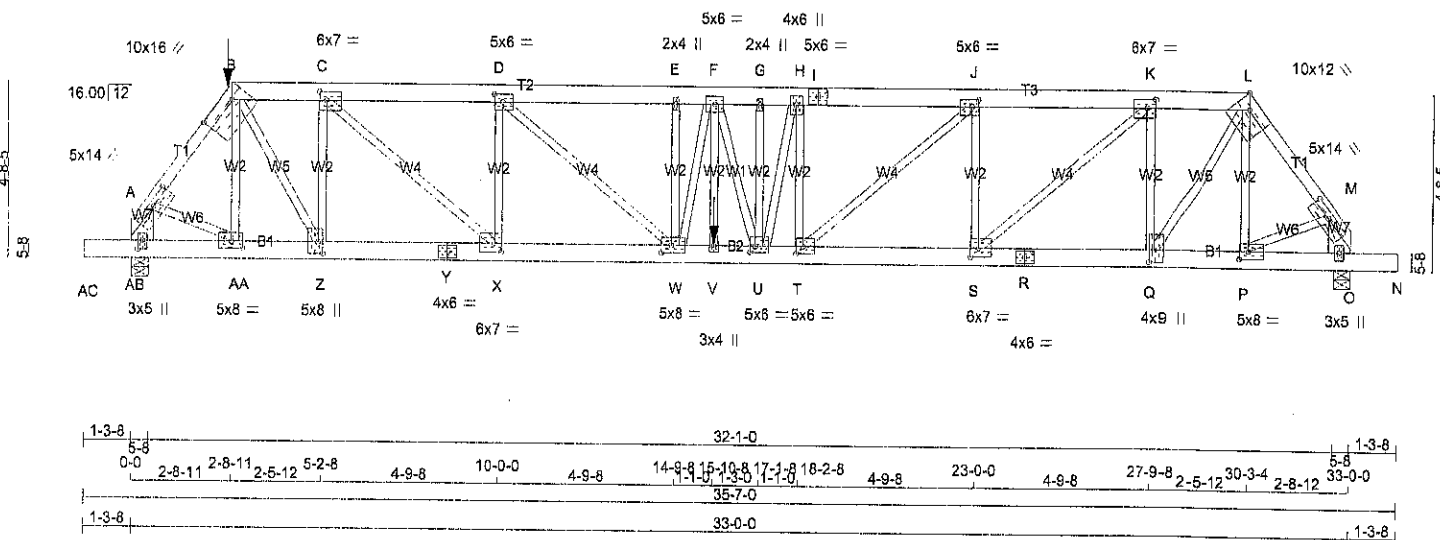
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (A) (INPUT = 0.90)
JSI METAL= 0.79 (Y) (INPUT = 1.00)



A-HD73752(z)



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

DRY: SEASONED LUMBER.

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

FACTORED		MAXIMUM FACTORED		INPUT	REQRD
GROSS REACTION		GROSS REACTION		BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT	IN-SX
AB	3522 0	3522 0	0	5-8	3-15
O	2803 0	2803 0	0	5-8	2-15

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
AB	2467	1752 / 0	0 / 0	0 / 0	0 / 0	715 / 0	0 / 0
O	1960	1410 / 0	0 / 0	0 / 0	0 / 0	551 / 0	0 / 0

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

BRACING

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.72FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MAX. FACTORED		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	-3558 / 0	-70.5	-70.5	0.31 (1)	3.49	AA-B	-312 / 0	0.09 (1)
B-C	-3762 / 0	-138.7	-138.7	0.18 (1)	4.28	B-Z	0 / 3234	0.80 (1)
C-D	-6192 / 0	-138.7	-138.7	0.46 (1)	3.19	Z-C	-2664 / 0	0.79 (1)
D-E	-7636 / 0	-138.7	-138.7	0.63 (1)	2.72	C-X	0 / 3244	0.80 (1)
E-F	-7636 / 0	-138.7	-138.7	0.48 (1)	2.86	X-D	-2009 / 0	0.60 (1)
F-G	-7408 / 0	-70.5	-70.5	0.46 (1)	2.92	D-W	0 / 1926	0.48 (1)
G-H	-7408 / 0	-70.5	-70.5	0.44 (1)	2.94	W-E	-508 / 0	0.15 (1)
H-I	-7137 / 0	-70.5	-70.5	0.47 (1)	2.98	W-F	-73 / 37	0.02 (2)
I-J	-7137 / 0	-70.5	-70.5	0.47 (1)	2.98	V-F	0 / 944	0.23 (1)
J-K	-5322 / 0	-70.5	-70.5	0.30 (1)	3.68	F-U	-869 / 0	0.27 (1)
K-L	-3044 / 0	-70.5	-70.5	0.10 (1)	4.76	U-G	-2 / 19	0.00 (1)
L-M	-2801 / 0	-70.5	-70.5	0.23 (1)	3.95	U-H	0 / 1091	0.27 (1)
AB-A	-3386 / 0	0.0	0.0	0.18 (1)	6.04	T-H	-1362 / 0	0.40 (1)
O-M	-2885 / 0	0.0	0.0	0.15 (1)	7.45	T-J	0 / 2473	0.60 (1)

AC-AB	0/0	-88.0	-88.0	0.04 (†)	10.00	S-J	-19/1/0	0.58 (†)
AB-AB	0/0	-34.5	-34.5	0.04 (†)	10.00	S-K	0/3040	0.75 (†)
AA-Z	0/2124	-34.5	-34.5	0.21 (†)	10.00	Q-K	-2269/0	0.67 (†)
Z-Y	0/3762	-34.5	-34.5	0.36 (†)	10.00	Q-L	0/2711	0.67 (†)
Y-X	0/3762	-34.5	-34.5	0.36 (†)	10.00	P-L	-269/0	0.08 (†)
X-W	0/6192	-34.5	-34.5	0.56 (†)	10.00	A-AA	0/2177	0.54 (†)
W-V	0/7654	-34.5	-34.5	0.94 (†)	10.00	P-M	0/1714	0.42 (†)
V-U	0/7654	-17.5	-17.5	0.94 (†)	10.00			
U-T	0/7137	-17.5	-17.5	0.85 (†)	10.00			
T-S	0/5322	-17.5	-17.5	0.47 (†)	10.00			
S-R	0/3044	-17.5	-17.5	0.29 (†)	10.00			
R-Q	0/3044	-17.5	-17.5	0.29 (†)	10.00			
Q-P	0/1672	-17.5	-17.5	0.17 (†)	10.00			
P-O	0/0	-17.5	-17.5	0.03 (†)	10.00			
O-N	0/0	-86.0	-86.0	0.04 (†)	10.00			

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
B	2-8-11	-140	-140	---	FRONT	VERT	TOTAL
V	15-10-8	-1889	-1889	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = $2 \times 199 = 398 \text{ lb}$

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 =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	31.0	PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-8-11
RIGHT SETBACK = 2-8-12
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 15-10-8 OF SPAN
MEASURED FROM THE LEFT.

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- TPIQ 2011

(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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.34")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 694 (0.57")

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

CSI: TC=0.63 (D-E:1), BC=0.94 (V-W:1)
WB=0.80 (C-X:1), SSI=0.40 (V-W: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 = 0.50

AUTOSOLVE HEELS OFF

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253619	H01-Cond1	2	1	TRUSS DESC.	

Alps Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Thu Jul 16 11:18:10 2015 Page 2

ID:AyrJx9Y?fa2EXF7DRQxSq4zMEz1-N Bye Ar9TzKeVhYJbBdP9iY935LQJVAOHixSyxVWh

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
Z	BMWW+I	MT20	5.0	8.0	3.75	1.50
AA	BMWW-I	MT20	5.0	8.0	2.25	3.75
AB	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) 139.9 lbs FACTORED DOWN AT 2-8-11 ON TOP CHORD, AND 1888.9 lbs FACTORED DOWN AT 15-10-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

- 1) 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.

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL = 0.82 (Y) (INPUT = 1.00)



A-15073751(2)

LUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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.

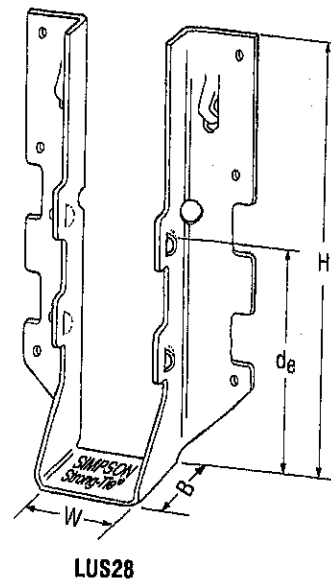
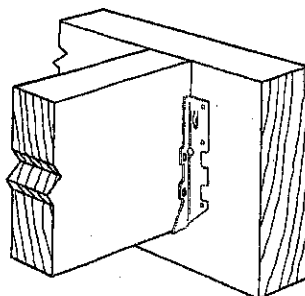
INSTALLATION:

- 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:

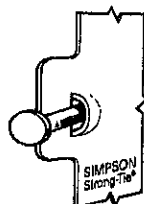
- These hangers cannot be modified.

Typical LUS
Installation



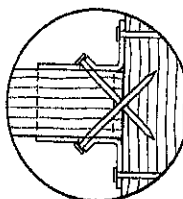
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift	Normal	Uplift	Normal
								(K _D =1.15)	(K _D =1.00)	(K _D =1.15)	(K _D =1.00)
LUS24	18	1 1/16	3 1/8	1 3/4	1 15/16	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/8	2	1 13/16	4-16d	2-16d	835	2020	590	1435
LUS26	18	1 1/16	4 3/4	1 3/4	3 3/8	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3 1/8	4 7/8	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4 5/8	4 1/16	2	3 3/4	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1 1/16	6 3/8	1 3/4	3 3/4	6-10d	4-10d	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 5/8	6 1/4	2	3 3/4	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1 1/16	7 1/16	1 3/4	3 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 5/8	8 3/16	2	5 1/4	8-16d	6-16d	2580	3345	2320	2375

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

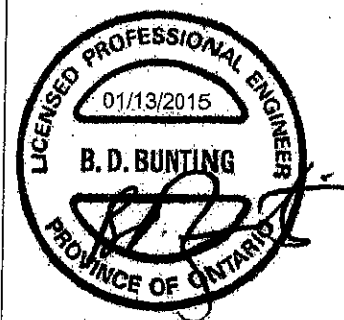


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

HUS/LJS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: See table

FINISH: G90 galvanized

DESIGN:

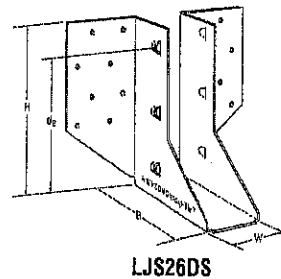
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

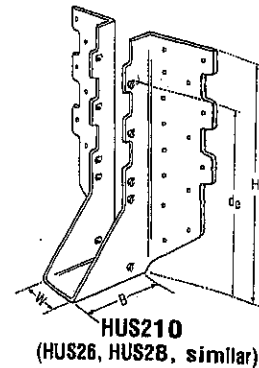
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3½" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

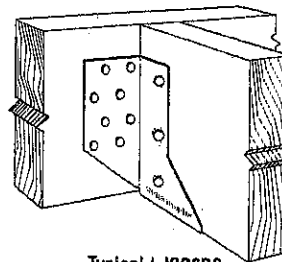
- See current catalogue for options



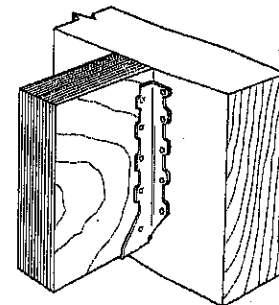
LJS26DS



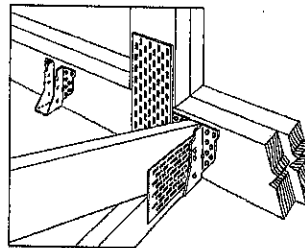
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



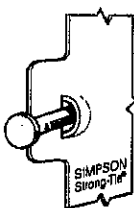
Typical HUS
Installation



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

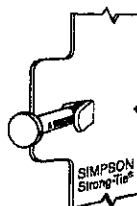
Model No.	Ga	Dimensions (in)			Fasteners			Factored Resistance (lbs)			
								D.Fir-L		S-P-F	
		W	H	B	d _g ¹	Face	Joist	Uplift	Normal	Uplift	Normal
								(K _p =1.15)	(K _p =1.00)	(K _p =1.15)	(K _p =1.00)
LJS26DS	18	1 ¹¹ / ₁₆	5	3 ¹ / ₂	4 ⁵ / ₁₆	16-16d	6-16d	2055	4265	1460	4115
HUS26	16	1 ¹¹ / ₁₆	5 ³ / ₈	3	3 ¹⁵ / ₁₆	14-16d	6-16d	2705	4940	2065	3875
HUS28	16	1 ¹¹ / ₁₆	7 ¹ / ₃₂	3	6 ³ / ₃₂	22-16d	8-16d	3605	5365	2675	4345
HUS210	16	1 ¹¹ / ₁₆	9 ³ / ₃₂	3	7 ³¹ / ₃₂	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1 ¹¹ / ₁₆	9	3	8	30-16d	10-16d	4505	6450	4010	5200

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

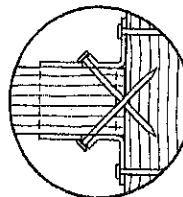


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

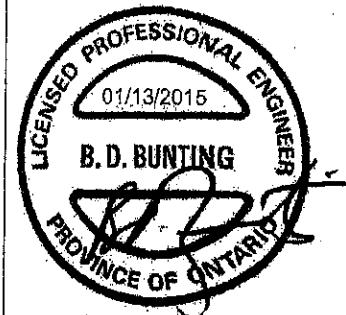
U.S. Patent
5,603,580



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



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

HHUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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:

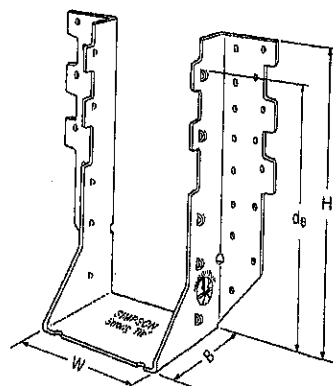
- Factored resistances are in accordance with CSA 086-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

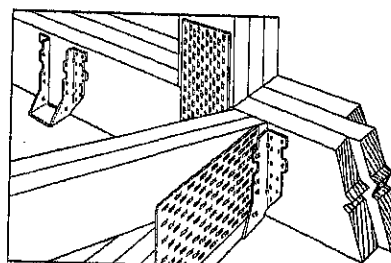
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



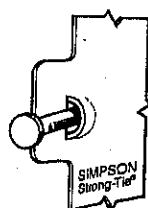
HHUS410



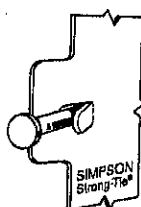
Typical HHUS Installation
(Truss Designer to provide
fastener quantity for connecting
multiple members together)

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

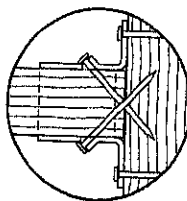
1. d_g is the distance from the seat of the hanger to the highest joist nail.



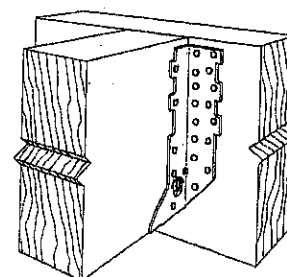
Double
Shear
Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



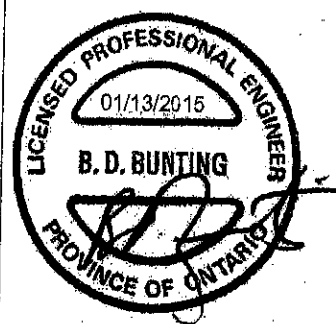
Double
Shear
Nailing
Side
View. Do
not bend
tab back.



Double
Shear
Nailing
Top View.

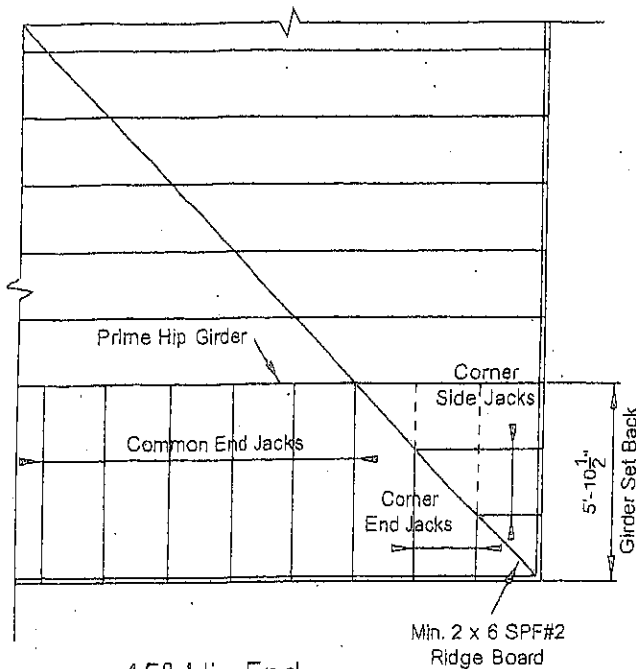


Typical HHUS
Installation



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STRACON ENGINEERING INC.



45° Hip End

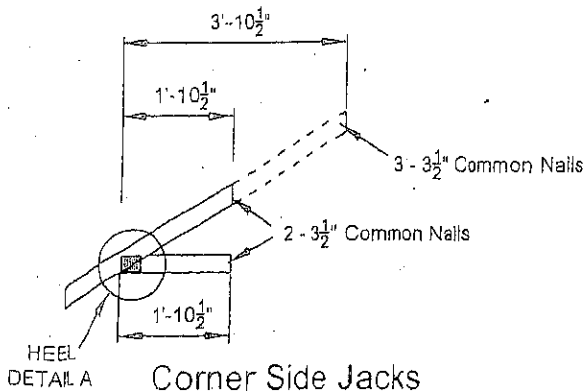
LUMBER SPECIFICATION

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

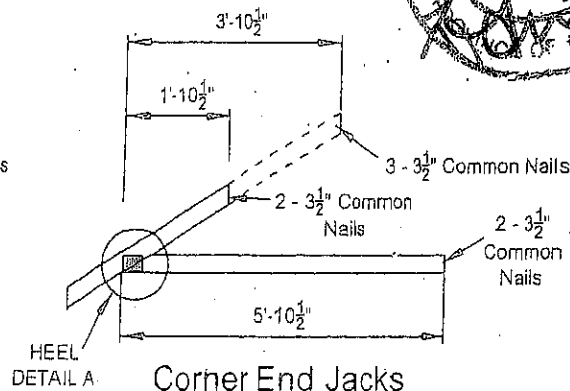
DESIGN LOAD

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

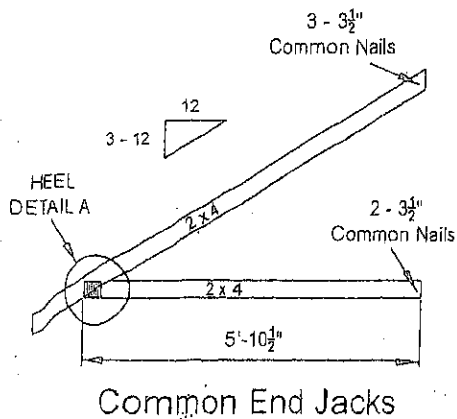
TOTAL LOAD : 50.5 P.S.F.



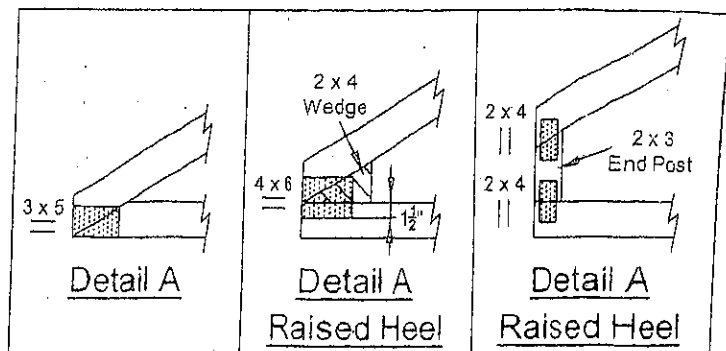
Corner Side Jacks



Corner End Jacks



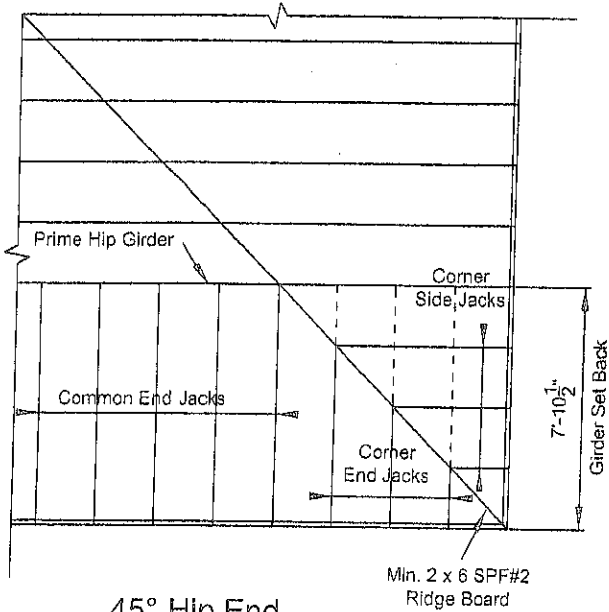
Common End Jacks



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

CS-51008

STRACON ENGINEERING INC.

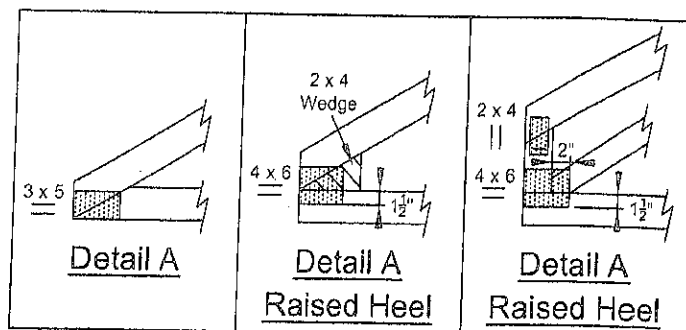
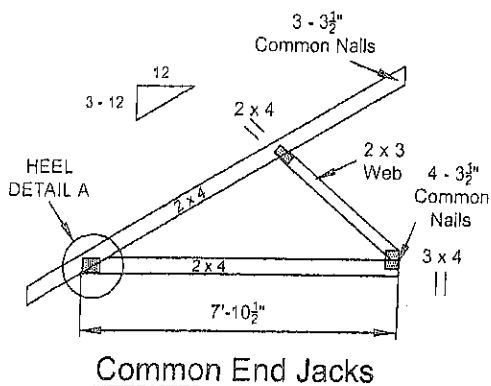
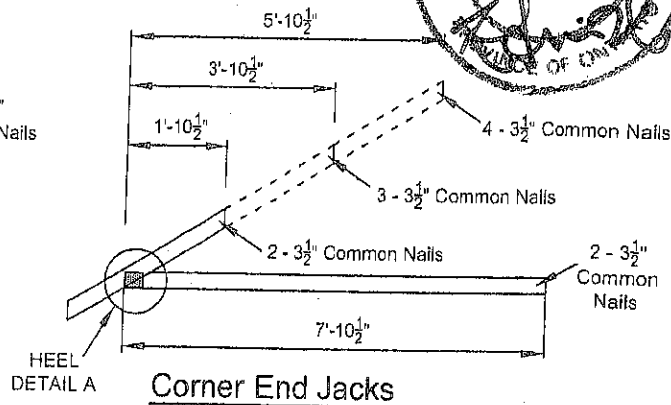
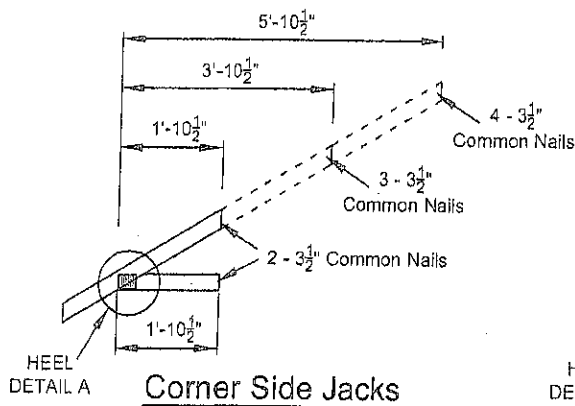
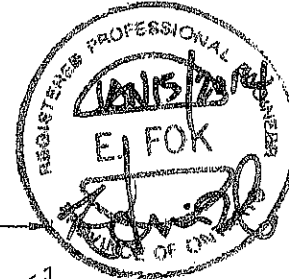


LUMBER SPECIFICATION

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

DESIGN LOAD

TOP CHORD SNOW LOAD : 34.8 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 44.8 P.S.F.



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

CS-71008N