

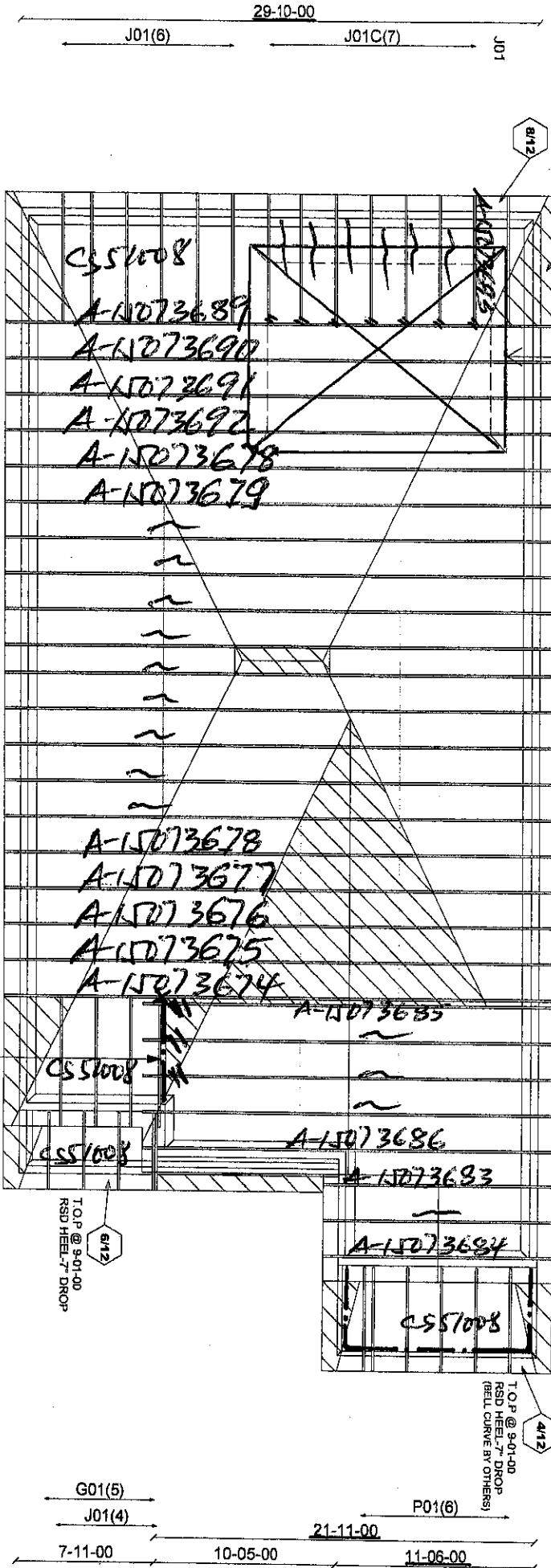
ALL ROOF FRAMING TO COMPLY WITH PART 9 OF I.B.C. 2012. ROOF TRUSSES THAT CROSS MEET WITH A VERT POST TO THE TRUSS UNDERMENT AT EACH CROSS PT. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. DOES NOT EXCEED 8'.

H01T
H02T
H03T
H04T
H05
H07
H08
H09
H08
H07
H05
H04
H03
H02
H01
H11(4)
H12(4)
H12G H11SG
H10
H10
H10G

58-08-00

5-00-00

ALPHA-BARONE



12\"/>

Piggyback

(A-15073680
A-15073681
A-15073682
50-03-00
A-15073687
A-15073688)

2-06-00 5-11-00 5-00-00

HANGERS
// LUS24
X HHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS

Milltek Ver 7.5.0



PL80980

Job Track: 40297
Layout ID: 253443
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 5/27/2015
Designer: chryle

Model / Elevation: 38-5 / A 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.



PL 80980

Job Track 40297
Layout ID: 253459
Plan Log: 79711

Builder / Location:
GOLD PARK / KLEINBURG
Project: **HUNTINGTON & NASHVILLE**
Date: 5/27/2015 Designer: cheryle

Model / Elevation: **38-5** / A OPT 2ND W/TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALFA RAMP 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 RAMP TRUSSES, INC. AND WILL BE RETRACTED BY ALFA RAMP TRUSSES, INC. IF UTILIZED FOR ANY OTHER PURPOSE.

CONVENTIONAL FRAMING BY OTHERS
HANGERS
// LUS24
X HUS26-2
Mark Ver: 7.5.0

12" RC EXT
BELL CURVE BY OTHERS
2" x 6" FASCIA - FM
ASPHALT SHINGLES
2" x 6" BRICK
PIGGYBACK TRS
PURINS BY OTHERS

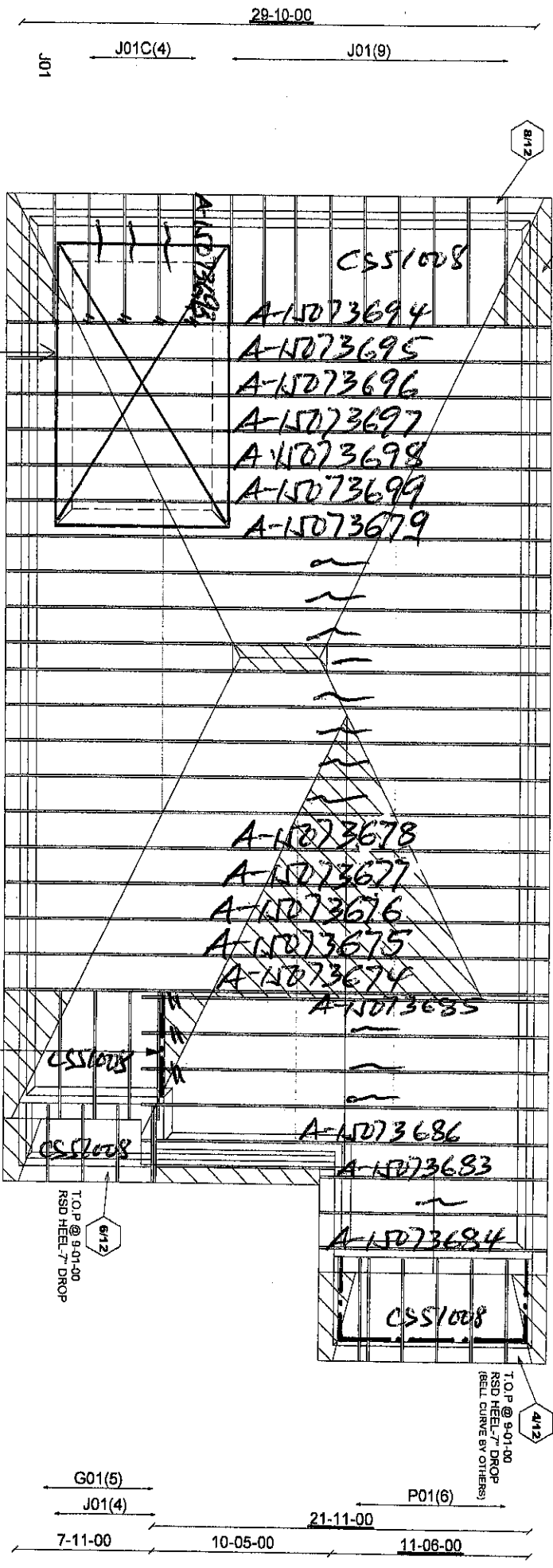
OPT TRAY CLG (6 BED)
RAISED 12"
@ 212.1 P.
INSET 12"
(15-11 X 10-47)

Piggyback

A-15073680
A-15073681
A-15073682
A-15073687
A-15073688
A-15073689

2 - 2x10 SP#2
BM BY BUILDER

2-06-00 5-11-00 5-00-00



ALL CONN. FRAMING TO CONFORM WITH PART 8 OF O.B.C. 2012
ROOF PARTIES THAT CROSS MEET OVER TRUSSES TO BE 2x4 SP#2 270C.
WITH A VERN (PS) TO THE TRUSS
WHICH MUST BE 2x4 SP#2 270C.
WHICH MUST BE 2x4 SP#2 270C.
TO HAVE LATERAL BRACING SO
AS TO PREVENT SWAYING
DOES NOT EXCEED 5"

H01T
H02T
H03T
H04T
H05T
H06T
H07
H08
H09
H09
H08
H07
H06(9)
H05
H04
H03
H02
H01
H11(4)
H12(4)
H12G H11SG
H10
H10
H10G

ALFA-RAMP



PL 80980

Job Track:	40297	Builder / Location:	GOLD PARK / KLEINBURG		Model / Elevation:	38-5	/ B	STD OR OPT 2ND FLR.
Layout ID:	253444	Project:	HUNTINGTON & NASHVILLE		THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.			
Plan Log:	79711	Date:	4/22/2015	Designer:	cheryl			

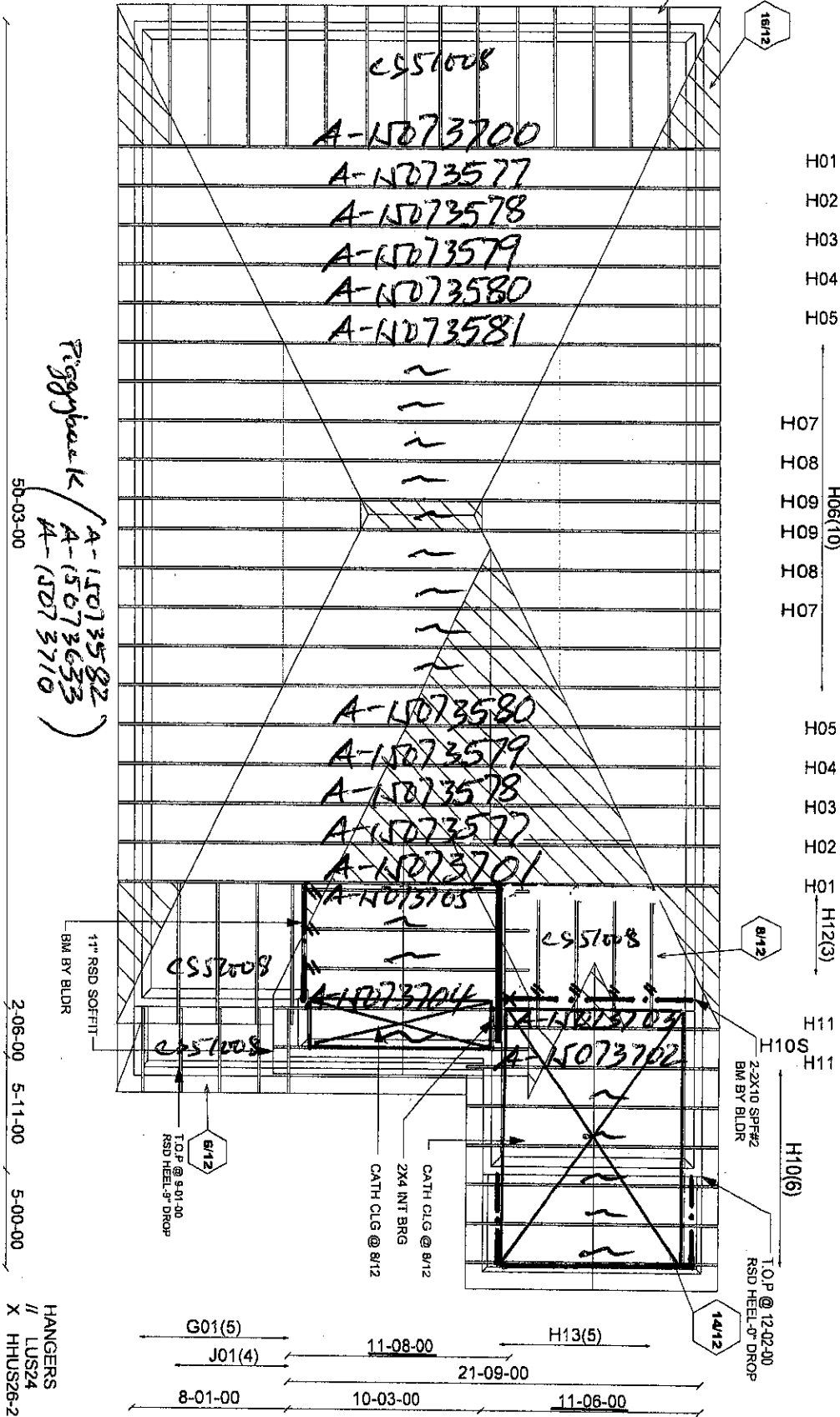
CONVENTIONAL
FRAMING BY
OTHERS

Mike Ver 7.5.0

12" FIN. OH.
RSD HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" x 6" BRICK
PIRGYBACK TRS
PURLINS BY OTHERS

29-10-00
J01(14)

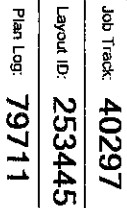
ALL CORN. FRAMING TO CONFORM
WITH PART 9 OF O.B.C. 2012
ROOF RAFTERS SHALL CROSS MEET
UNDER THE TRUSSES AND BE
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING AND
TO HAVE THE POST BETWEEN END PT.
AND CENTER OF BRACING
DOES NOT EXCEED 8'



58-08-00

5-00-00

ALPA-BARRILE



PL 80980

Builder / Location: **GOLD PARK / KLEINBURG**

Project: **HUNTINGTON & NASHVILLE**

Date: 4/22/2015	Designer: chris
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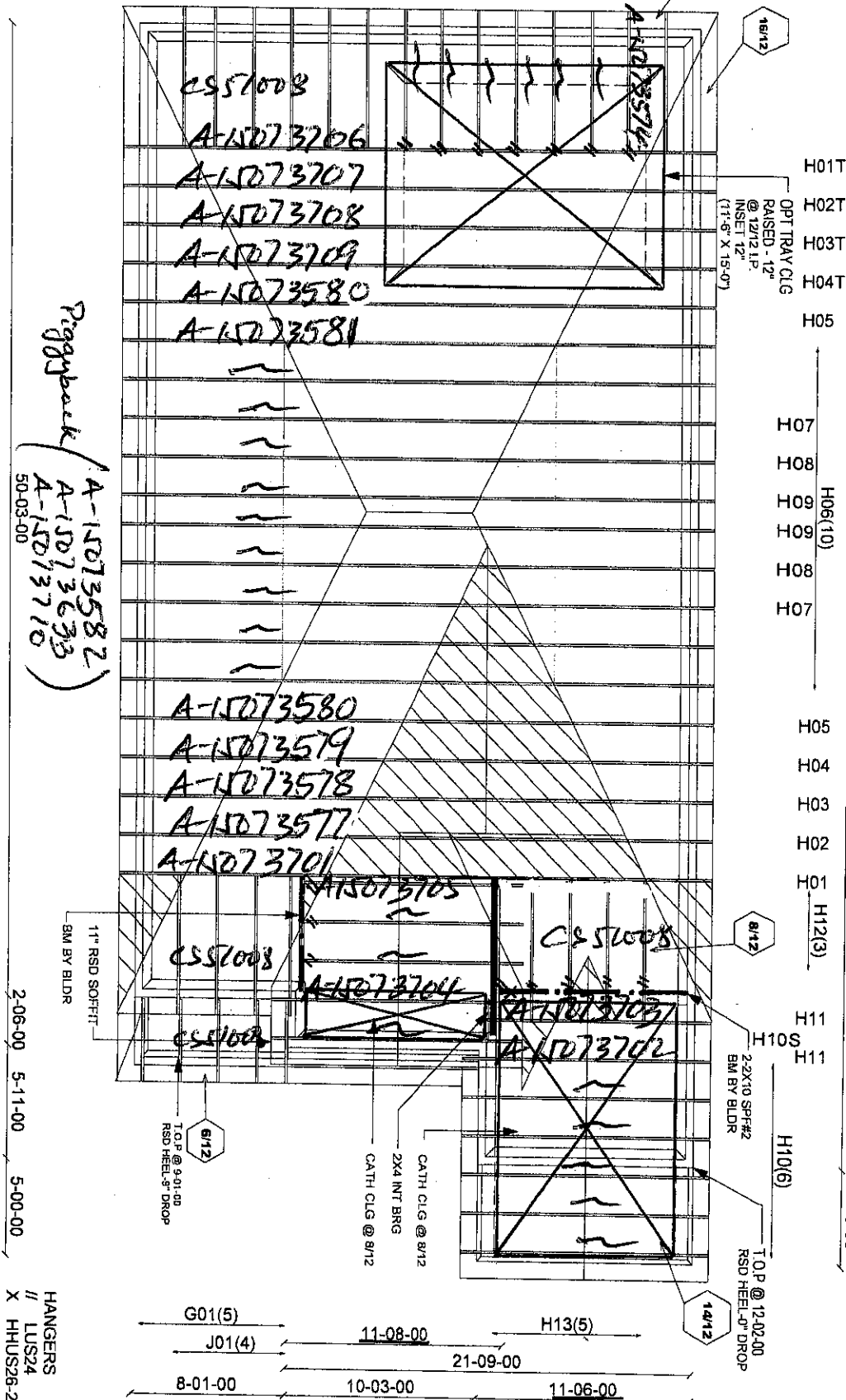
Model / Elevation:
38-5 / B OPT TRAY

 CONVENTIONAL FRAMING BY OTHERS

Mitek Ver: 7.5.0

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG/BRICK
PIGGYBACK TRS
PURLINS BY OTHERS

HANGERS
// LUS24
X HHUS26-2



ALL CONN. FRAMING TO CONFORM WITH PART 9 OF O.G. 2012
ROOF RAFTERS THAT CROSS MEET
OVER TRUSSES TO BE 2X6 SPS @ 24" O.C.
WITH A VERT POST TO THE TRUSS
UNDERNEATH AT EACH CROSS PT.
VERT. POST LONGER THAN 6'
TO HAVE LATERAL BRACING SO
THAT THE DIST. BETWEEN END PT.
& BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'

58-08-00

5-00-00

5:00-00



PL 80980

Job Track: 40297
Layout ID: 253460
Plan Log: 79711

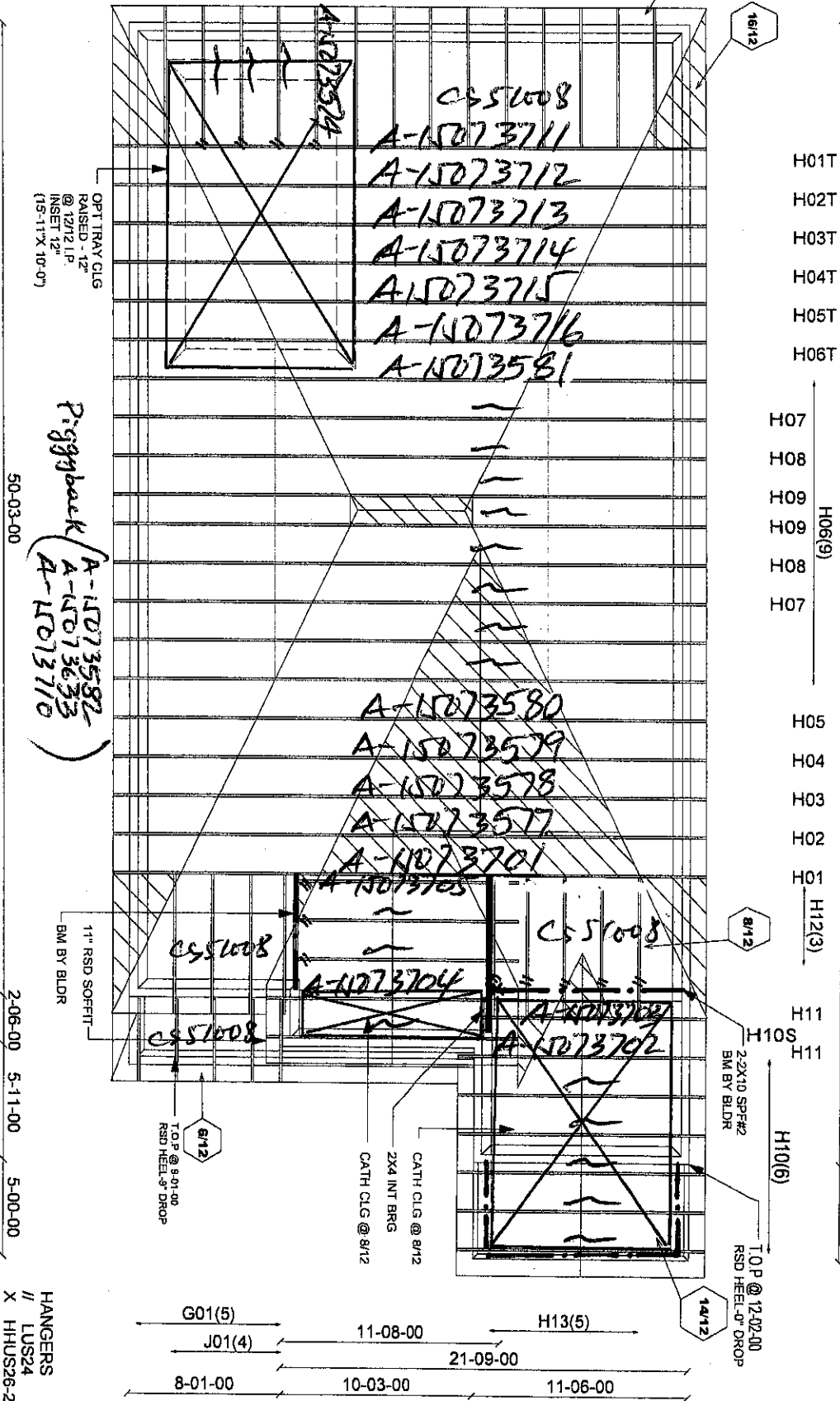
Builder / Location:
GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/22/2015 Designer: cheryle

Model / Elevation:
38-5 / B OPT 2ND W/TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.



Mark Ver 7.5.0

12" FIN. OH.
RSD HEEL - 0" DROP
(2" X 6" FASCIA) - FM
ASPHALT SHINGLES
2" X 6" BRG BRICK
PIGGYBACK TRS
PURLINS BY OTHERS

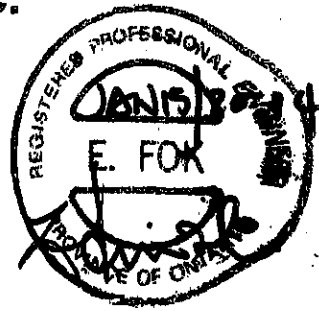


ALL CONV. FRAMING TO CONFORM WITH ALPA ROOF TRUSSES INC. ROOF PARTS THAT CROSS MEET OVER TRUSSES TO BE 2X4 SP#2 2X6 C. WITH A VERT POST TO THE TRUSS UNDERNEATH AT EACH CROSS PT. TO HAVE LATERAL BRACING TO HAVE LATERAL BRACING TO PT. A BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'

ALPHA-BATTELLE

Stracon Engineering Inc.

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



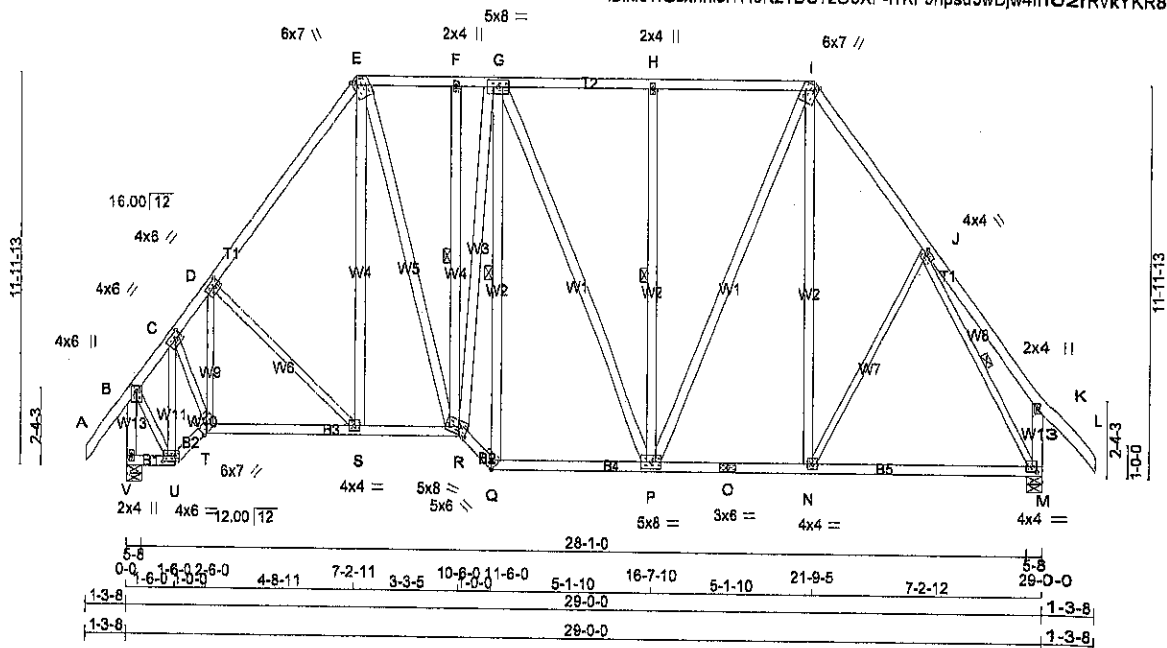
RESPONSIBILITIES

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

SPECIFICATIONS

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

January 15, 2014



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

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	TMVW-l	MT20	4.0	6.0	2.00	2.50
D	TMVW-l	MT20	4.0	6.0	2.00	2.50
E	TTVW+m	MT20	6.0	7.0	Edge	1.50
F	TMVW+w	MT20	2.0	4.0		
G	TMVWVW-l	MT20	6.0	8.0		
H	TMVW+w	MT20	2.0	4.0		
I	TTVW+m	MT20	6.0	7.0	Edge	1.50
J	TMVW-l	MT20	4.0	4.0	1.50	1.00
K	TMV+p	MT20	2.0	4.0		
M	BMVWVW-l	MT20	4.0	4.0	2.00	1.75
N	BMVWVW-l	MT20	4.0	4.0		
O	BS-l	MT20	3.0	6.0		
P	BMVWVW-l	MT20	5.0	8.0		
Q	BBW-h	MT20	5.0	6.0	Edge	2.50

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		RECORD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	DOWN	BRG	IN-SX	BRG	IN-SX
V	1377	0	1377	0	0	5-8	1-8	5-8	1-8
M	1372	0	1372	0	0	5-8	1-8	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	SNOW	LIVE
V	968	669 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0	968	669 / 0	0 / 0	0 / 0	299 / 0	0 / 0	968	669 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0	964	666 / 0	0 / 0	0 / 0	298 / 0	0 / 0	964	666 / 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 = 5.74FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-R, G-Q, H-P, J-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)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 40	U-C	-940 / 0
B-C	-787 / 0	C-T	0 / 793
C-D	-1035 / 0	T-D	-284 / 0
D-E	-1110 / 0	D-S	-78 / 0
E-F	-800 / 0	S-E	0 / 133
F-G	-799 / 0	E-R	0 / 512
G-H	-790 / 0	R-F	-78 / 0
H-I	-789 / 0	R-G	0 / 379
I-J	-1027 / 0	Q-G	-706 / 0
J-K	0 / 23	Q-P	0 / 57
K-L	0 / 40	P-H	-402 / 0
V-B	-1364 / 0	P-I	0 / 469
M-K	-185 / 0	N-I	0 / 125
		N-J	0 / 39
		B-U	0 / 704
		J-M	-1272 / 0
V-U	0 / 0		
U-T	0 / 574		
T-S	0 / 704		
S-R	0 / 649		
R-Q	0 / 1073		
Q-P	0 / 767		
P-O	0 / 601		
O-N	0 / 801		
N-M	0 / 586		

TOTAL WEIGHT = 232 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

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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.28 (H-I:1), BC=0.25 (N-P:4), WB=0.55 (G-Q:1), SSI=0.17 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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 2264 1856

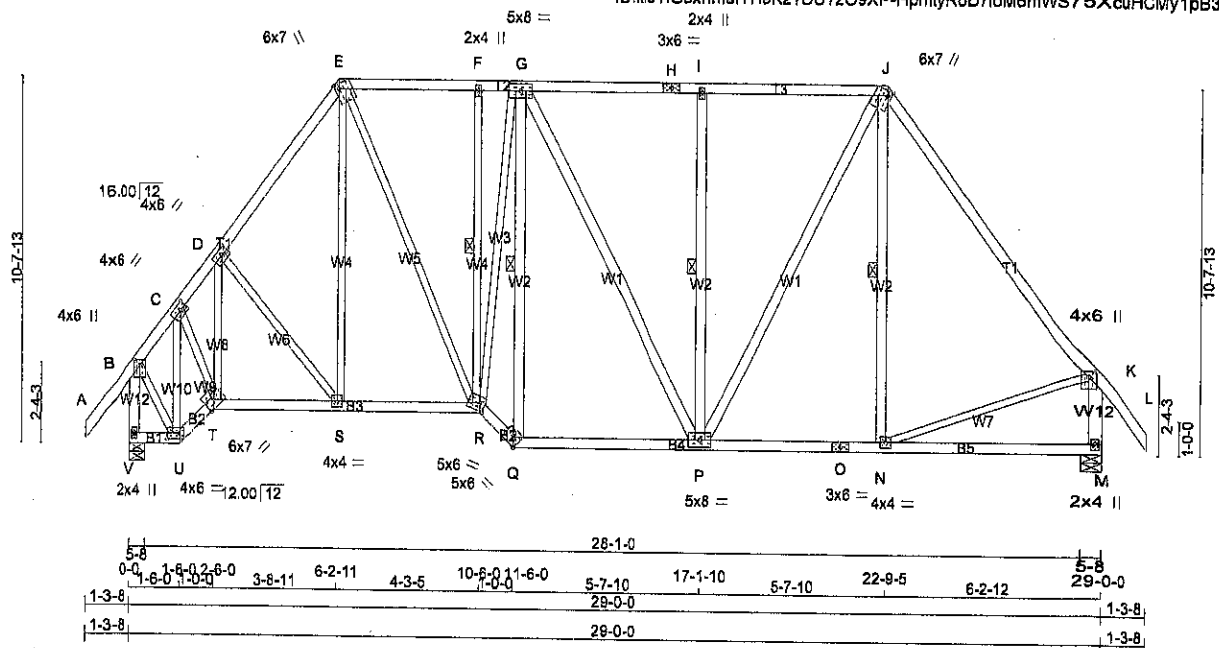
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.80)
JSI METAL= 0.47 (J) (INPUT = 1.00)



A-1507 3716



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	4.0	6.0	2.00	2.00
C TMWW-t	MT20	4.0	6.0	2.00	2.50
D TMWW-t	MT20	4.0	6.0	2.00	2.50
E TTWW+m	MT20	6.0	7.0	Edge	1.50
F TMW+w	MT20	2.0	4.0		
G TMWW-t	MT20	5.0	6.0		
H TS-t	MT20	3.0	6.0		
I TMW+w	MT20	2.0	4.0		
J TTWW+m	MT20	6.0	7.0	Edge	1.50
K TMVW+p	MT20	4.0	6.0	2.00	2.00
M BMV1+p	MT20	2.0	4.0		
N BMWW-t	MT20	4.0	4.0		
O BS-t	MT20	3.0	6.0		
P BMWW-t	MT20	5.0	6.0		
Q BBW-h	MT20	5.0	6.0	Edge	2.50
R BBWW-m	MT20	5.0	6.0	2.75	2.00

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	UPLIFT		
V	1377	0	1377	0	5-8	1-8
M	1372	0	1372	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND PERM.LIVE	DEAD	SOIL
	SNOW	LIVE	SNOW	LIVE			
V	968	669 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	288 / 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 = 6.04FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-R, G-Q, I-P, J-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)	LC1	MAX	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX	
FR-TO		FROM	TO	CSI (LC)		FR-TO		CSI (LC)	
A-B	0 / 40	-70.5	-70.5	0.07 (1)	10.00	U-C	-947 / 0	0.25 (1)	
B-C	-786 / 0	-70.5	-70.5	0.07 (1)	6.25	C-T	0 / 747	0.17 (1)	
C-D	-1064 / 0	-70.5	-70.5	0.08 (1)	6.25	T-D	-247 / 0	0.08 (1)	
D-E	-1136 / 0	-70.5	-70.5	0.08 (1)	6.25	D-S	-35 / 0	0.02 (1)	
E-F	-920 / 0	-70.5	-70.5	0.18 (1)	6.21	S-E	0 / 104	0.03 (4)	
F-G	-918 / 0	-70.5	-70.5	0.19 (1)	6.19	E-R	0 / 602	0.14 (1)	
G-H	-887 / 0	-70.5	-70.5	0.34 (1)	6.04	R-F	-140 / 0	0.09 (1)	
H-I	-887 / 0	-70.5	-70.5	0.34 (1)	6.04	R-G	0 / 497	0.11 (1)	
I-J	-886 / 0	-70.5	-70.5	0.35 (1)	6.04	Q-G	-803 / 0	0.46 (1)	
J-K	-1023 / 0	-70.5	-70.5	0.38 (1)	6.25	G-P	0 / 38	0.01 (1)	
K-L	0 / 40	-70.5	-70.5	0.07 (1)	10.00	P-I	-443 / 0	0.25 (1)	
V-B	-1364 / 0	0.0	0.0	0.17 (1)	6.95	P-J	0 / 576	0.09 (1)	
M-K	-1327 / 0	0.0	0.0	0.17 (1)	7.03	N-J	-70 / 70	0.04 (1)	
						B-U	0 / 709	0.16 (1)	
						N-K	0 / 640	0.14 (1)	
V-U	0 / 0	-17.5	-17.5	0.01 (4)	10.00				
U-T	0 / 579	-17.5	-17.5	0.10 (1)	10.00				
T-S	0 / 690	-17.5	-17.5	0.16 (1)	10.00				
S-R	0 / 868	-17.5	-17.5	0.16 (1)	10.00				
R-Q	0 / 1213	-17.5	-17.5	0.20 (1)	10.00				
Q-P	0 / 869	-17.5	-17.5	0.21 (1)	10.00				
P-O	0 / 611	-17.5	-17.5	0.20 (4)	10.00				
O-N	0 / 611	-17.5	-17.5	0.20 (4)	10.00				
N-M	0 / 0	-17.5	-17.5	0.15 (4)	10.00				

TOTAL WEIGHT = 198 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 MINIMUMTHIS 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 LOADALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")CSI: TC=0.38 (J-K:1), BC=0.21 (P-Q:1), WB=0.46
(G-Q:1), SSI=0.19 (J-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

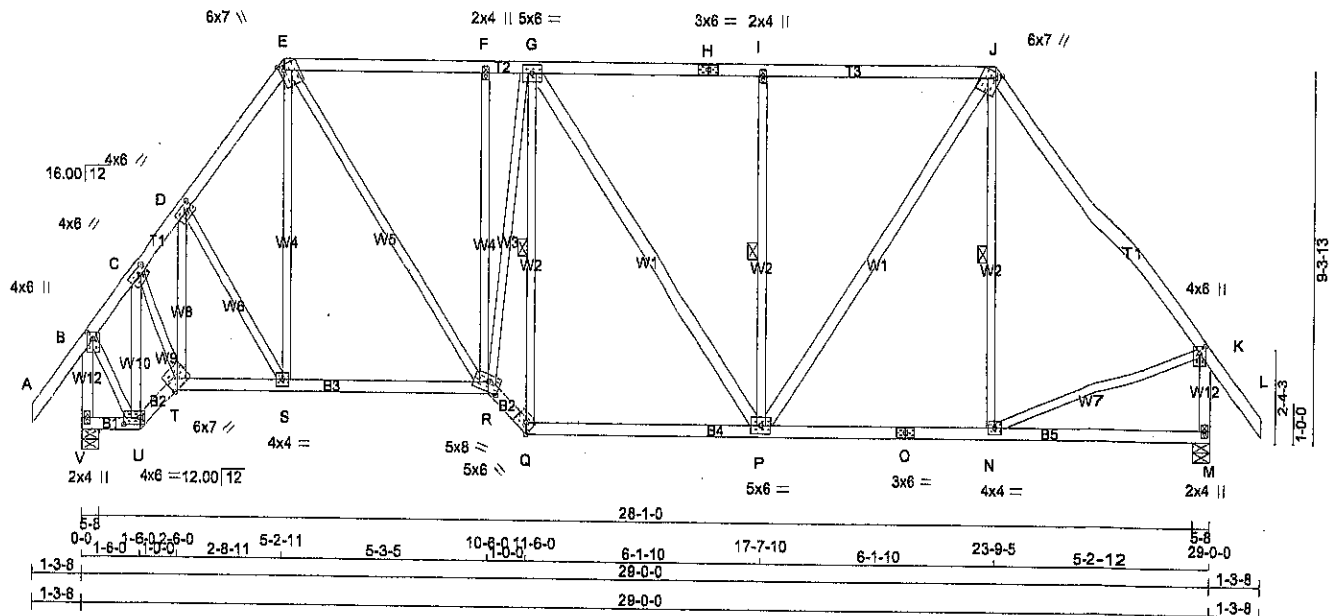
PLATE GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)
MAX	MIN	MAX
MT20	618	354
	1667	822
	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (R) (INPUT = 0.90)
JSI METAL= 0.25 (K) (INPUT = 1.00)

A-15073715



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
J - L	2x4	DRY	No.2
V - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
V - U	2x4	DRY	No.2
U - T	2x4	DRY	No.2
T - R	2x4	DRY	No.2
R - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
G - P	2x4	DRY	No.2
P - J	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV+p	MT20	4.0	6.0	2.00	2.00
C	TMWV+L	MT20	4.0	6.0	2.00	2.50
D	TMWV+L	MT20	4.0	6.0	2.00	2.50
E	TTWV+M	MT20	6.0	7.0	Edge	1.50
F	TMW+V	MT20	2.0	4.0		
G	TMWV+L	MT20	5.0	6.0		
H	TS-L	MT20	3.0	6.0		
I	TMW+V	MT20	2.0	4.0		
J	TTWV+M	MT20	6.0	7.0	Edge	1.50
K	TMWV+P	MT20	4.0	6.0	2.00	2.00
M	BMV1+P	MT20	2.0	4.0		
N	BMWV+L	MT20	4.0	4.0		
O	BS-L	MT20	3.0	6.0		
P	BMWV+L	MT20	5.0	6.0		
Q	BBW+H	MT20	5.0	6.0	Edge	2.50
R	BBWV+M	MT20	5.0	8.0	2.75	3.75
S	BMWV+L	MT20	4.0	4.0		
T	BBWV+H	MT20	6.0	7.0	Edge	
U	BBWV+L	MT20	4.0	6.0	2.00	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	DOWN	IN-SX	IN-SX
V	1377	0	5-8	1-8
M	1372	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	968	668 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	298 / 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 = 5.63FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF G-Q, I-P, J-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO							FR-TO			
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	U-C	-954 / 0	0.25 (1)		
B-C	-784 / 0	-70.5	-70.5	0.10 (1)	6.25	C-T	0 / 714	0.16 (1)		
C-D	-1084 / 0	-70.5	-70.5	0.06 (1)	6.01	T-D	-227 / 0	0.08 (1)		
D-E	-1159 / 0	-70.5	-70.5	0.08 (1)	5.84	D-S	0 / 11	0.00 (4)		
E-F	-1082 / 0	-70.5	-70.5	0.26 (1)	5.74	S-E	0 / 92	0.03 (4)		
F-G	-1080 / 0	-70.5	-70.5	0.23 (1)	5.77	E-R	0 / 721	0.16 (1)		
G-H	-1011 / 0	-70.5	-70.5	0.42 (1)	5.63	R-F	-223 / 0	0.30 (1)		
H-I	-1011 / 0	-70.5	-70.5	0.42 (1)	5.63	R-G	0 / 666	0.15 (1)		
I-J	-1010 / 0	-70.5	-70.5	0.43 (1)	5.63	G-Q	-931 / 0	0.53 (1)		
J-K	-1030 / 0	-70.5	-70.5	0.43 (1)	5.69	Q-P	0 / 20	0.00 (1)		
K-L	0 / 40	-70.5	-70.5	0.10 (1)	10.00	P-I	-485 / 0	0.28 (1)		
V-B	-1364 / 0	0.0	0.0	0.17 (1)	6.95	P-J	0 / 703	0.11 (1)		
M-K	-1336 / 0	0.0	0.0	0.17 (1)	7.00	N-J	-118 / 46	0.07 (1)		
						B-U	0 / 714	0.18 (1)		
						N-K	0 / 655	0.15 (1)		
V-U	0 / 0	-17.5	-17.5	0.01 (4)	10.00					
U-T	0 / 582	-17.5	-17.5	0.10 (1)	10.00					
T-S	0 / 880	-17.5	-17.5	0.17 (1)	10.00					
S-R	0 / 684	-17.5	-17.5	0.17 (1)	10.00					
R-Q	0 / 1398	-17.5	-17.5	0.23 (1)	10.00					
Q-P	0 / 999	-17.5	-17.5	0.24 (1)	10.00					
P-O	0 / 614	-17.5	-17.5	0.20 (4)	10.00					
O-N	0 / 614	-17.5	-17.5	0.20 (4)	10.00					
N-M	0 / 0	-17.5	-17.5	0.12 (4)	10.00					

TOTAL WEIGHT = 176 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

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 LOADALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.43 (J-K:1), BC=0.24 (P-Q:1), WB=0.53 (G-Q:1), SS=0.20 (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 = 0.60

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	354	1667
622	2284	1666

PLATE PLACEMENT TOL. = 0.250 inches

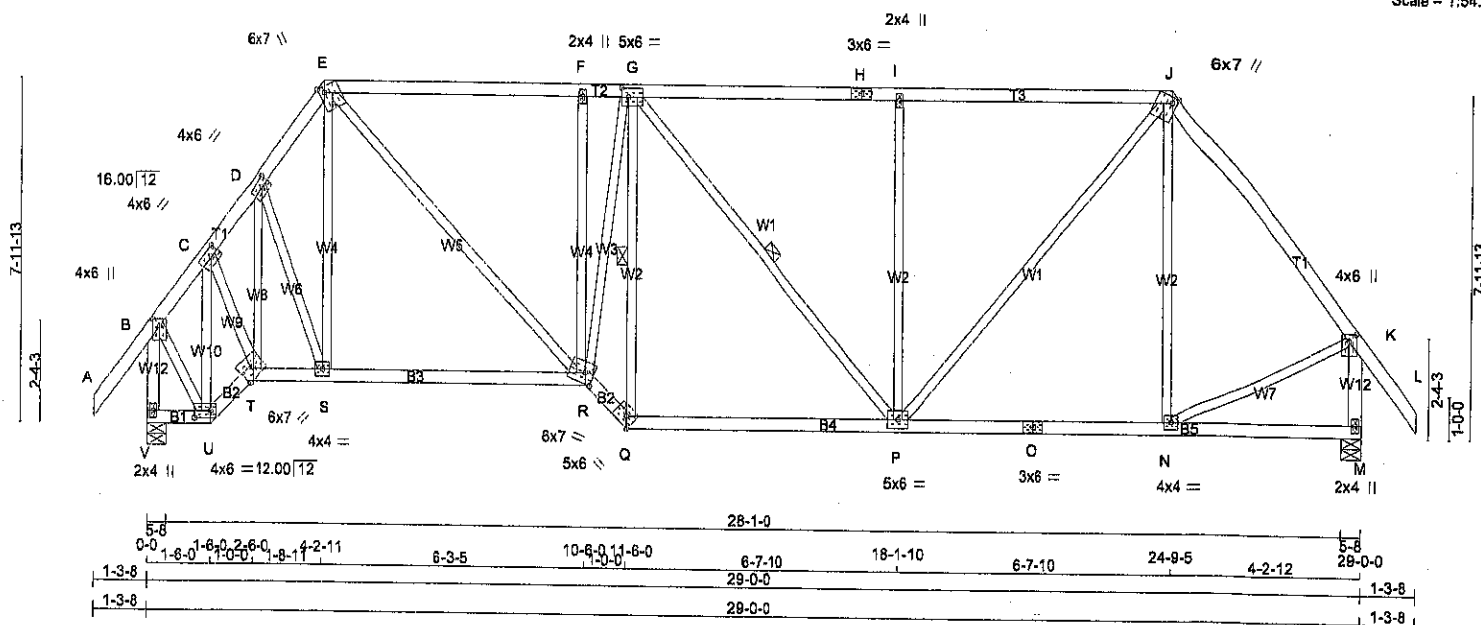
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (R) (INPUT = 0.80)

JSI METAL= 0.25 (V) (INPUT = 1.00)



A-15073714



LUMBER

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR
A - E	2x4	DRY	No.2	SPF
E - 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	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - M	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	TYPE	PLATES	W	LEN	Y	X
B	TMMVW+p	MT20	4.0	6.0	2.00	2.00
C	TMMVW-i	MT20	4.0	6.0	2.00	2.50
D	TMMVW-i	MT20	4.0	6.0	2.00	2.50
E	TMMVW+m	MT20	6.0	7.0	Edge	1.50
F	TMMVW+	MT20	2.0	4.0		
G	TMMVWVW-t	MT20	5.0	6.0	2.50	2.00
H	TS-i	MT20	3.0	6.0		
I	TMMVW+	MT20	2.0	4.0		
J	TTWVW+m	MT20	6.0	7.0	Edge	1.50
K	TMMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BMVWV-i	MT20	4.0	4.0		
O	PS-i	MT20	3.0	6.0		
P	BMVWVW-t	MT20	5.0	6.0		
Q	BBW-h	MT20	5.0	6.0	Edge	2.50
R	BMVWVW-m	MT20	6.0	7.0	3.00	2.50
S	BMVWV-i	MT20	4.0	4.0		
T	BMVWV-h	MT20	6.0	7.0	Edge	
U	BBWV-i	MT20	4.0	6.0	2.00	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	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
V	1377	0	1377	0	0	5-8	1-8
M	1372	0	1372	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
V	868	669 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	298 / 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 = 5.18FT.
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			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	U-C	-958 / 0	0.25 (1)
B-C	-784 / 0	-70.5	-70.5 0.10 (1)	6.25	C-T	0 / 893	0.18 (1)
C-D	-1098 / 0	-70.5	-70.5 0.04 (1)	6.00	T-D	-231 / 0	0.08 (1)
D-E	-1177 / 0	-70.5	-70.5 0.04 (1)	5.86	D-S	0 / 566	0.01 (4)
E-F	-1313 / 0	-70.5	-70.5 0.38 (1)	5.19	S-E	0 / 990	0.03 (4)
F-G	-1308 / 0	-70.5	-70.5 0.33 (1)	5.21	E-R	0 / 899	0.20 (1)
G-H	-1175 / 0	-70.5	-70.5 0.52 (1)	5.18	R-F	-324 / 0	0.27 (1)
H-I	-1175 / 0	-70.5	-70.5 0.52 (1)	5.18	R-G	0 / 901	0.20 (1)
I-J	-1174 / 0	-70.5	-70.5 0.52 (1)	5.18	G-Q	-1100 / 0	0.44 (1)
J-K	-1024 / 0	-70.5	-70.5 0.26 (1)	5.80	G-P	-2 / 6	0.00 (4)
K-L	0 / 40	-70.5	-70.5 0.10 (1)	10.00	P-I	-827 / 0	0.64 (1)
V-B	-1364 / 0	0.0	0.0 0.17 (1)	8.95	P-J	0 / 864	0.19 (1)
M-K	-1346 / 0	0.0	0.0 0.17 (1)	6.99	N-J	-173 / 23	0.21 (1)
					B-U	0 / 717	0.16 (1)
					N-K	0 / 670	0.15 (1)
V-U	0 / 0	-17.5	-17.5 0.01 (4)	10.00			
U-T	0 / 586	-17.5	-17.5 0.10 (1)	10.00			
T-S	0 / 673	-17.5	-17.5 0.21 (4)	10.00			
S-R	0 / 696	-17.5	-17.5 0.21 (4)	10.00			
R-Q	0 / 1642	-17.5	-17.5 0.27 (1)	10.00			
Q-P	0 / 1176	-17.5	-17.5 0.28 (1)	10.00			
P-O	0 / 608	-17.5	-17.5 0.24 (4)	10.00			
O-N	0 / 608	-17.5	-17.5 0.24 (4)	10.00			
N-M	0 / 0	-17.5	-17.5 0.11 (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, 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.52 (I-J:1), BC=0.29 (P-Q:1), WB=0.64 (I-P:1), SSI=0.22 (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)	(PSI)	(PLI)	(PLI)	(PLI)	(PLI)
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1856

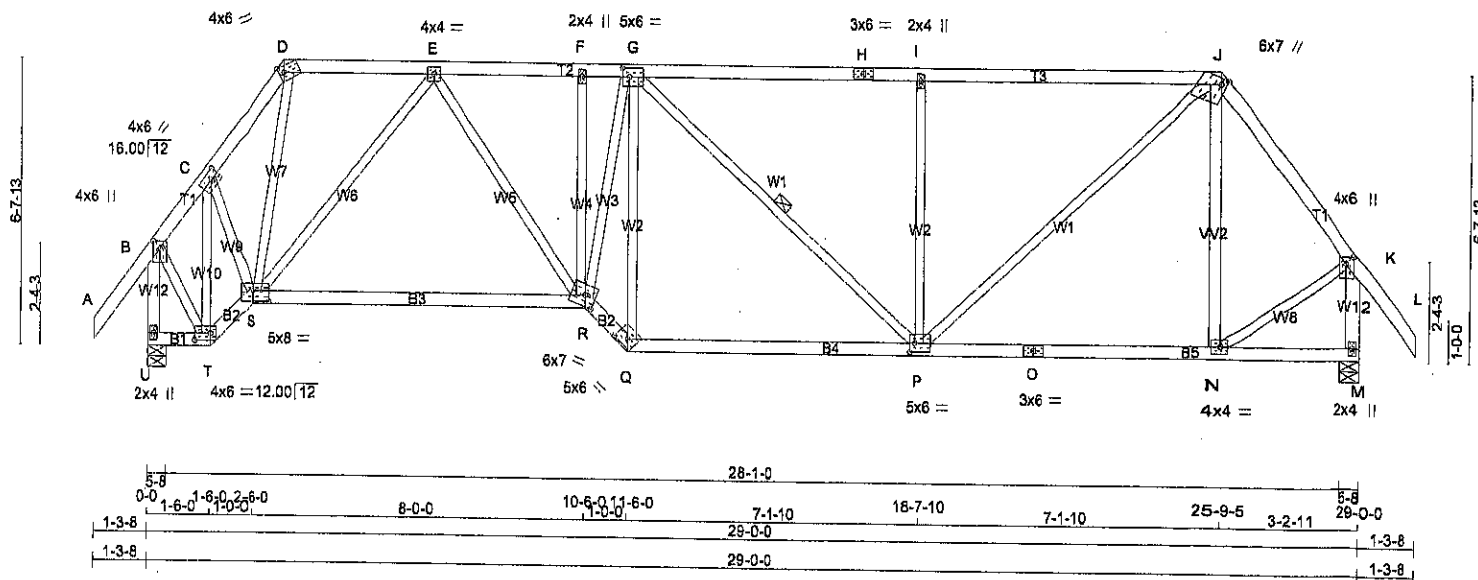
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (G) (INPUT = 0.90)
JSI METAL= 0.25 (V) (INPUT = 1.00)



A-15073713



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
U - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
U - T	2x4	DRY	No.2	SPF
T - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - Q	2x4	DRY	No.2	SPF
Q - O	2x4	DRY	No.2	SPF
O - M	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)

BT	TYPE	PLATES	W	LEN	Y	X
B	TMWw+p	MT20	4.0	6.0	2.00	2.00
C	TMWw-I	MT20	4.0	6.0	2.00	2.50
D	TTW-m	MT20	4.0	6.0	Edge	1.50
E	TMWw-I	MT20	4.0	4.0		
F	TMWw	MT20	2.0	4.0		
G	TMWwW-I	MT20	6.0	6.0	2.50	2.00
H	TS-I	MT20	3.0	8.0		
I	TMWw	MT20	2.0	4.0		
J	TTWw+m	MT20	6.0	7.0	Edge	1.50
K	TMWw+p	MT20	4.0	6.0	2.00	2.00
L	BMV1+o	MT20	2.0	4.0		
M	BMWw-I	MT20	4.0	4.0		
N	BS-I	MT20	3.0	8.0		
O	BMWwW-I	MT20	6.0	6.0	2.50	1.50
P	BSW-h	MT20	5.0	6.0	2.00	3.25
Q	BSWwWw-m	MT20	6.0	7.0	3.00	3.00
R	BSWwWw-p	MT20	5.0	8.0	3.00	4.75
S	BSWw-I	MT20	4.0	6.0	2.00	4.50
T	BMV1+o	MT20	2.0	4.0		



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

BEARINGS							
FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
U	1377	0	1377	0	0	5-8	1-8
M	1372	0	1372	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	968	666 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0
M	964	666 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.66FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF 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				
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	0 / 40	-70.5	-70.5	0.10 (1)	10.00	T-C	-954 / 0	0.25 (1)
B-C	-784 / 0	-70.5	-70.5	0.10 (1)	6.25	C-S	0 / 861	0.15 (1)
C-D	-1096 / 0	-70.5	-70.5	0.07 (1)	5.97	S-D	0 / 712	0.16 (1)
D-E	-558 / 0	-70.5	-70.5	0.15 (1)	6.25	S-E	-1072 / 0	0.85 (1)
E-F	-1593 / 0	-70.5	-70.5	0.18 (1)	6.25	E-R	0 / 631	0.14 (1)
F-G	-1594 / 0	-70.5	-70.5	0.32 (1)	4.83	R-F	0 / 64	0.01 (1)
G-H	-1404 / 0	-70.5	-70.5	0.64 (1)	4.66	R-G	0 / 820	0.21 (1)
H-I	-1404 / 0	-70.5	-70.5	0.84 (1)	4.66	Q-G	-1342 / 0	0.98 (1)
I-J	-1404 / 0	-70.5	-70.5	0.64 (1)	4.66	G-P	-34 / 0	0.02 (1)
J-K	-993 / 0	-70.5	-70.5	0.15 (1)	6.10	P-I	-565 / 0	0.41 (1)
K-L	0 / 40	-70.5	-70.5	0.10 (1)	10.00	P-J	0 / 1090	0.25 (1)
U-B	-1364 / 0	0.0	0.0	0.17 (1)	6.85	N-J	-246 / 0	0.16 (1)
M-K	-1359 / 0	0.0	0.0	0.17 (1)	6.96	B-T	0 / 714	0.16 (1)
						N-K	0 / 687	0.15 (1)
U-T	0 / 0	-17.5	-17.5	0.01 (4)	10.00			
T-S	0 / 582	-17.5	-17.5	0.10 (1)	10.00			
S-R	0 / 1237	-17.5	-17.5	0.42 (4)	10.00			
R-Q	0 / 1990	-17.5	-17.5	0.32 (1)	10.00			
Q-P	0 / 1429	-17.5	-17.5	0.34 (1)	10.00			
P-O	0 / 588	-17.5	-17.5	0.27 (4)	10.00			
O-N	0 / 588	-17.5	-17.5	0.27 (4)	10.00			
N-M	0 / 0	-17.5	-17.5	0.11 (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

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
- TPIG 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.28")

CSI: TC=0.64 (I-J:1), BC=0.42 (R-S:4), WB=0.98 (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 = 0.60

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

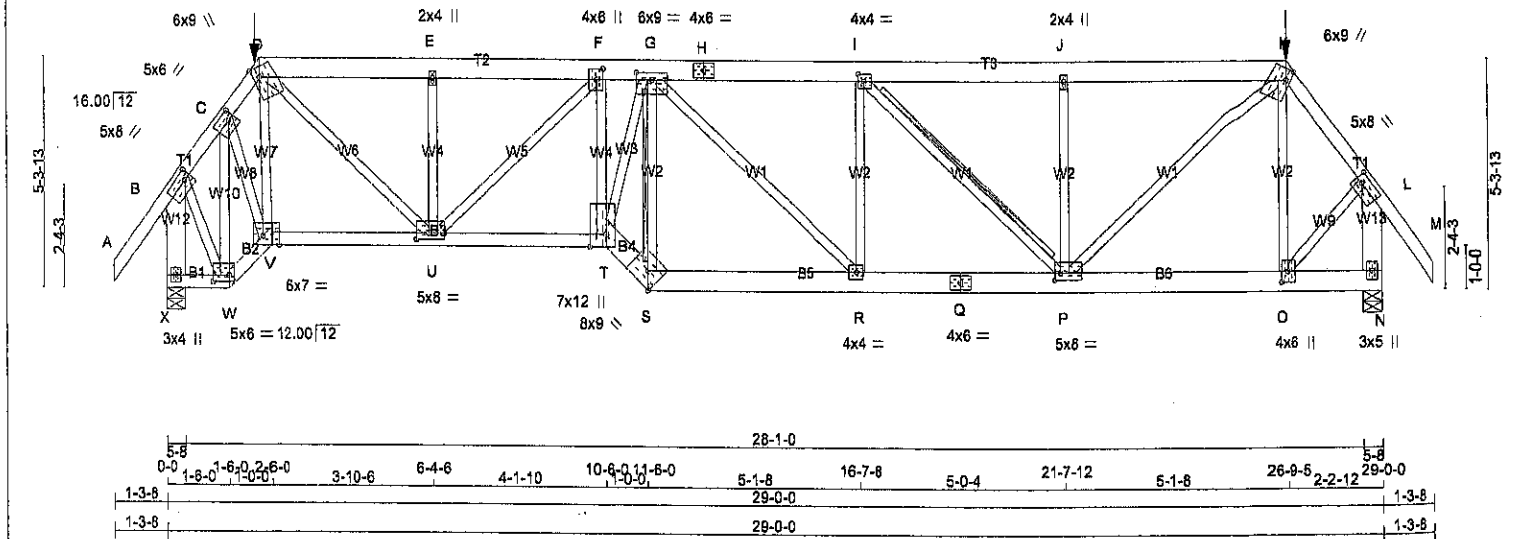
NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1867	822	2284 1856

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL= 0.39 (E) (INPUT = 1.00)

A-15073712

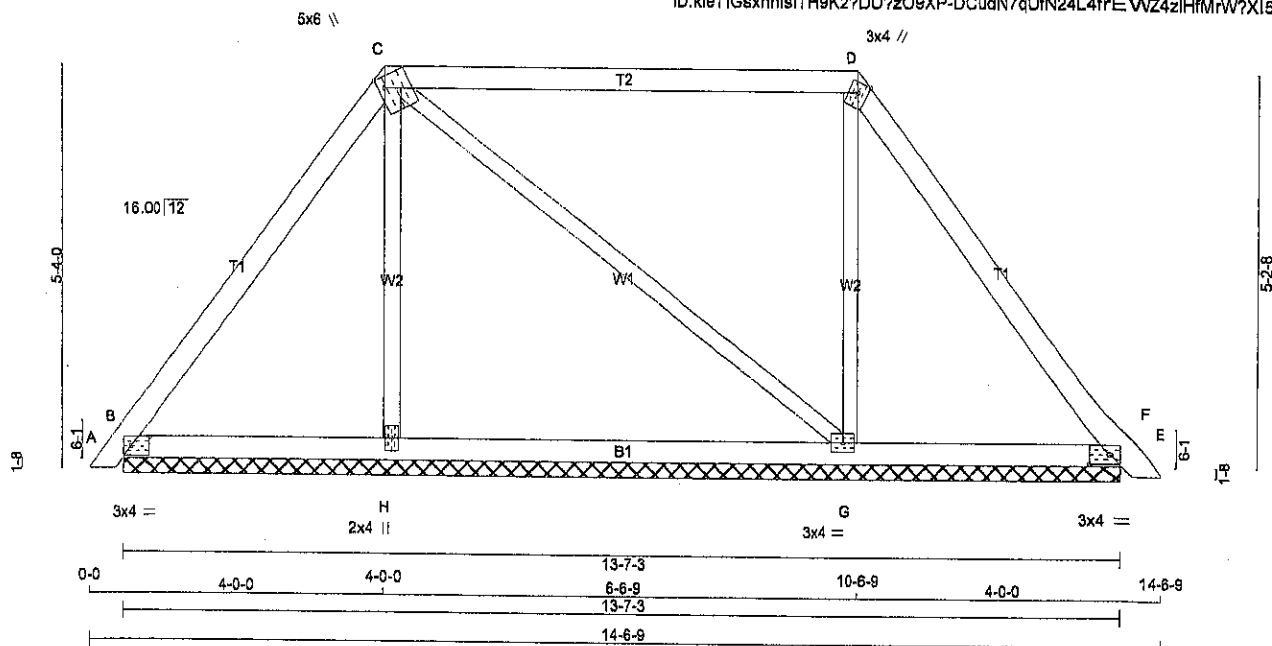


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS				DESIGN CRITERIA							
A - D	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQD	SPECIFIED LOADS:	TOTAL WEIGHT = 173 lb					
D - H	2x6	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 21.0 PSF	[M]					
H - K	2x6	DRY	No.2	SPF	JT VERT	HORZ	DOWN	HORZ	DL = 3.0 PSF						
K - M	2x4	DRY	No.2	SPF	X	2562	0	0	BOT CH. LL = 0.0 PSF						
X - B	2x6	DRY	No.2	SPF	N	2571	0	0	DL = 7.0 PSF						
N - L	2x6	DRY	No.2	SPF	UNFACTORED REACTIONS				TOTAL LOAD = 31.0 PSF						
X - W	2x4	DRY	No.2	SPF	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SPACING = 24.0 IN./C					
W - V	2x4	DRY	No.2	SPF	JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	LOADING IN FLAT SECTION BASED ON A					
V - T	2x4	DRY	1850F 1.5E	SPF	X	1804	1229 / 0	0 / 0	0 / 0	SLOPE OF 2.00/12 MINIMUM					
T - S	2x6	DRY	No.2	SPF	N	1810	1234 / 0	0 / 0	0 / 0	GIRDER TYPE: CPrimeHip					
S - Q	2x6	DRY	No.2	SPF	BRACING				LEFT SETBACK = 2-2-11						
Q - N	2x6	DRY	No.2	SPF	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.81FT.				RIGHT SETBACK = 2-2-12						
ALL WEBS 2x3 DRY No.2 SPF				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.				END SETBACK = 5-10-8							
EXCEPT				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) X, N				END WALL WIDTH = 0-0							
DRY: SEASONED LUMBER.				LOADING				CORNER FRAMING TYPE: CONVENTIONAL							
				TOTAL LOAD CASES: (4)				END JACK TYPE: CONVENTIONAL							
								APPLIED TO FRONT SIDE							
								- ADDTL LOADS BASED ON 55 % OF GSL.							
								LOADS APPLIED TO FIRST 2-6-0 OF SPAN							
								MEASURED FROM THE LEFT.							
								GIRDER TYPE: CStdGirder							
								START DISTANCE = 2-6-0							
								START SPAN CARRIED = 5-10-8							
								END DISTANCE = 10-6-0							
								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.							
								(DEFINED BY USER)							
								GIRDER TYPE: CPrimeHip							
								LEFT SETBACK = 2-2-11							
								RIGHT 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 18-6-0 OF SPAN							
								MEASURED FROM THE RIGHT.							
								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 (0.97")							
								CALCULATED VERT. DEFL.(LL)= L/ 989 (0.19")							
								ALLOWABLE DEFL.(TL)= L/360 (0.97")							
								CALCULATED VERT. DEFL.(TL)= L/ 999 (0.34")							
								A-15073711							
								CONTINUED ON PAGE 2							



Alpe Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 17:48:54 2015 Page 1
ID:k1eTIGsxnnsITh9K2?DU?z09XP-DCudN7qUfN24L4frE VVZ4zIHfMrW?X15G10t13Ryxm4
Scale = 1:30.8



LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
B - 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	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+m	MT20	3.0	4.0	Edge
E	TMB1-I	MT20	3.0	4.0	1.50 2.75
G	BMWW1-I	MT20	3.0	4.0	
H	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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	SNOW	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
B	296	0	296	0	0	13-7-3	1-8		
E	261	0	261	0	0	13-7-3	1-8		
H	307	0	307	0	0	13-7-3	1-8		
G	382	0	382	0	0	13-7-3	1-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND		
B	203	165/0	0/0	0/0	0/0	38/0	0/0
E	180	145/0	0/0	0/0	0/0	35/0	0/0
H	221	123/0	0/0	0/0	0/0	98/0	0/0
G	272	168/0	0/0	0/0	0/0	105/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25FT.
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 LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
A-B	0 / 9	-70.5	-70.5	0.01 (1)	10.00	H-C	-206 / 0	0.08 (1)
B-C	-159 / 0	-70.5	-70.5	0.15 (1)	8.25	C-G	-33 / 0	0.04 (1)
C-D	-62 / 0	-70.5	-70.5	0.52 (1)	6.25	G-D	-261 / 0	0.10 (1)
D-E	-116 / 0	-70.5	-70.5	0.15 (1)	6.25			
E-F	0 / 9	-70.5	-70.5	0.01 (1)	10.00			
B-H	0 / 93	-17.5	-17.5	0.12 (4)	10.00			
H-G	0 / 89	-17.5	-17.5	0.12 (4)	10.00			
G-E	0 / 88	-17.5	-17.5	0.12 (4)	10.00			

TOTAL WEIGHT = 2 X 52 = 104 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, 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

CSI: TC=0.52 (C-D:1), BC=0.12 (B-H:4),
WB=0.10 (D-G:1), SSI=0.18 (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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1687
	822	2284	1656

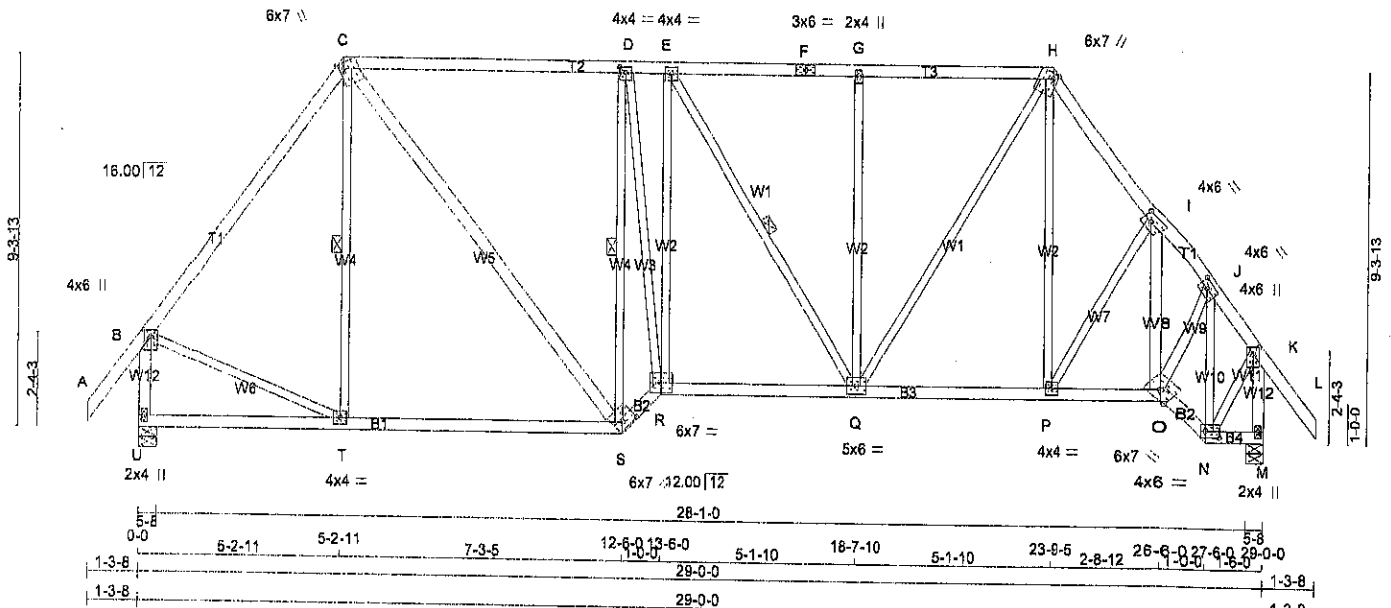
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (D) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)



A-1073710



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - L	2x4	DRY	No.2	SPF
U - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
U - S	2x4	DRY	No.2	SPF
S - R	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
N - M	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
C - S	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	TMVW-i	MT20	4.0	4.0	1.75	2.00
E	TMVW-i	MT20	4.0	4.0		
F	TS-i	MT20	3.0	6.0		
G	TMVW+w	MT20	2.0	4.0		
H	TTWW+m	MT20	6.0	7.0	Edge	1.50
I	TMVW-i	MT20	4.0	6.0	2.00	2.50
J	TMVW-i	MT20	4.0	6.0	2.00	2.50
K	TMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BBWW-i	MT20	4.0	6.0	2.00	4.50
O	BBWW-h	MT20	6.0	7.0	Edge	
P	BMVW-i	MT20	4.0	4.0		
Q	BMVW-i	MT20	6.0	6.0		
R	BBWW-i	MT20	6.0	7.0		
S	BBWW-h	MT20	6.0	7.0	2.00	4.25
T	BMVW-i	MT20	4.0	4.0		
U	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
U	1372	0	1372	0	5-8	1-8
M	1377	0	1377	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX. MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
U	984	886 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
M	988	889 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.94FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-T, D-S, E-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)	FACTORED MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	T-C	-92 / 79 0.05 (1)	
B-C	-1036 / 0	-70.5	-70.5 0.43 (1)	5.68	C-S	0 / 681 0.11 (1)	
C-D	-1047 / 0	-70.5	-70.5 0.66 (1)	5.14	S-D	-1530 / 0 0.87 (1)	
D-E	-1157 / 0	-70.5	-70.5 0.58 (1)	4.94	D-R	0 / 828 0.19 (1)	
E-F	-1084 / 0	-70.5	-70.5 0.31 (1)	5.66	R-E	0 / 292 0.07 (1)	
F-G	-1084 / 0	-70.5	-70.5 0.31 (1)	5.66	E-Q	-130 / 0 0.08 (1)	
G-H	-1084 / 0	-70.5	-70.5 0.31 (1)	5.66	Q-G	-420 / 0 0.57 (1)	
H-I	-1156 / 0	-70.5	-70.5 0.08 (1)	5.65	Q-H	0 / 743 0.17 (1)	
I-J	-1084 / 0	-70.5	-70.5 0.06 (1)	6.01	P-H	0 / 74 0.03 (4)	
J-K	-784 / 0	-70.5	-70.5 0.10 (1)	6.25	P-I	0 / 7 0.00 (4)	
K-L	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-I	-222 / 0 0.07 (1)	
U-B	-1342 / 0	0.0	0.0 0.17 (1)	7.00	O-J	0 / 715 0.16 (1)	
M-K	-1364 / 0	0.0	0.0 0.17 (1)	6.95	N-J	-954 / 0 0.25 (1)	
					B-T	0 / 660 0.15 (1)	
					N-K	0 / 714 0.16 (1)	
U-T	0 / 0	-17.5	-17.5 0.21 (4)	10.00			
T-S	0 / 618	-17.5	-17.5 0.26 (4)	10.00			
S-R	0 / 1603	-17.5	-17.5 0.24 (1)	10.00			
R-Q	0 / 1153	-17.5	-17.5 0.25 (1)	10.00			
Q-P	0 / 682	-17.5	-17.5 0.17 (1)	10.00			
P-O	0 / 660	-17.5	-17.5 0.15 (1)	10.00			
O-N	0 / 582	-17.5	-17.5 0.10 (1)	10.00			
N-M	0 / 0	-17.5	-17.5 0.01 (4)	10.00			

TOTAL WEIGHT = 172 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 088-09
- 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.66 (C-D:1), BC=0.26 (S-T:4), WB=0.87 (D-S:1), SSI=0.31 (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	1687 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

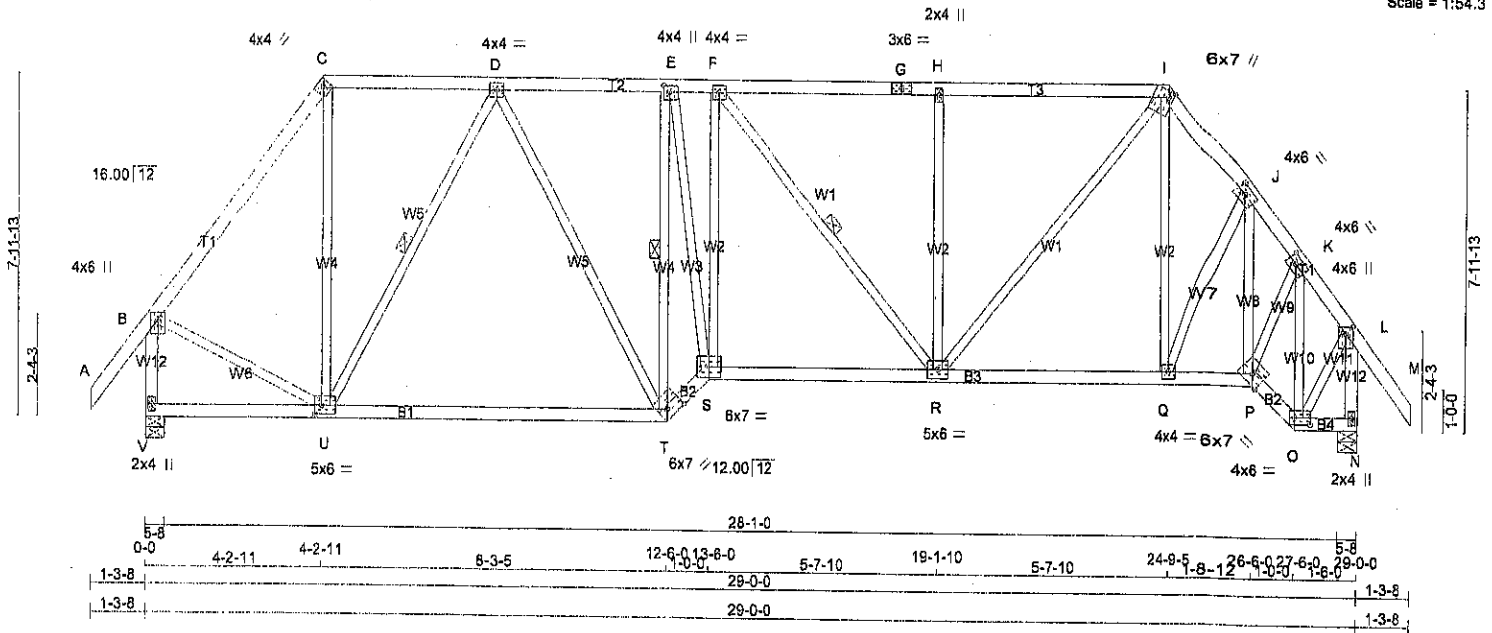
JSI GRIP=0.89 (D) (INPUT = 0.90)
JSI METAL=0.25 (M) (INPUT = 1.00)



A-11073709

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Wed Jul 15 17:08:30 2015 Page 1
ID:kietIGsxnnsI TH9K2?DU?zC9XP-gygdpxGFTm_x?X 1 CdEnbrsxo46ki83Yi7Czyxme
Scale = 1:54.3



TOTAL WEIGHT = 162 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
I - M	2x4	DRY	No.2	SPF
V - B	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
V - T	2x4	DRY	No.2	SPF
T - S	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - O	2x4	DRY	No.2	SPF
O - N	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTW-h	MT20	4.0	4.0		
D	TMWW-i	MT20	4.0	4.0		
E	TMWW-h	MT20	4.0	4.0	1.75	1.60
F	TMWW-i	MT20	4.0	4.0		
G	TS-i	MT20	3.0	6.0		
H	TMW-w	MT20	2.0	4.0		
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMWW-i	MT20	4.0	6.0	2.00	2.50
K	TMWW-i	MT20	4.0	6.0	2.00	2.50
L	TMVW+p	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	2.0	4.0		
O	BBWW-i	MT20	4.0	6.0	2.00	4.50
P	BBWW-h	MT20	6.0	7.0	Edge	
Q	BMWW-i	MT20	4.0	4.0		
R	BMWW-h	MT20	5.0	6.0		
S	BBWW-i	MT20	6.0	7.0		
T	BBWW-h	MT20	6.0	7.0	2.25	4.50
U	BMWW-h	MT20	5.0	6.0	2.50	2.00
V	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
V	1372	0	1372	0
N	1377	0	1377	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
V	964	666 / 0	0 / 0
N	966	669 / 0	0 / 0

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

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-U, E-T, F-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)

FR-TO	CHORDS		WEBS	
	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 MAX (PLF)
A-B	0 / 40	-70.5	0 / 561	0.13 (1)
B-C	-1035 / 0	-70.5	U-D	-788 / 0
C-D	-625 / 0	-70.5	D-T	0 / 415
D-E	-1189 / 0	-70.5	T-E	-1500 / 0
E-F	-1387 / 0	-70.5	E-S	0 / 1335
F-G	-1278 / 0	-70.5	S-F	-61 / 25
G-H	-1278 / 0	-70.5	F-R	-173 / 0
H-I	-1277 / 0	-70.5	R-H	-457 / 0
I-J	-1169 / 0	-70.5	R-I	0 / 909
J-K	-1097 / 0	-70.5	Q-I	0 / 60
K-L	-784 / 0	-70.5	Q-J	0 / 43
L-M	0 / 40	-70.5	P-J	-214 / 0
V-B	-1358 / 0	0.0	P-K	0 / 694
N-L	-1364 / 0	0.0	Q-K	-957 / 0
V-U	0 / 0	-17.5	B-U	0 / 678
U-T	0 / 991	-17.5	Q-L	0 / 716
T-S	0 / 1705	-17.5		
S-R	0 / 1388	-17.5		
R-Q	0 / 690	-17.5		
Q-P	0 / 673	-17.5		
P-O	0 / 585	-17.5		
O-N	0 / 0	-17.5		

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 088-09
- 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.39 (H-I:1), BC=0.33 (T-U:4), WB=0.60 (E-T:1), SSI=0.19 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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=0.90 (E) (INPUT = 0.90)
JSI METAL=0.29 (C) (INPUT = 1.00)



A-1073708

253445

H02T

1

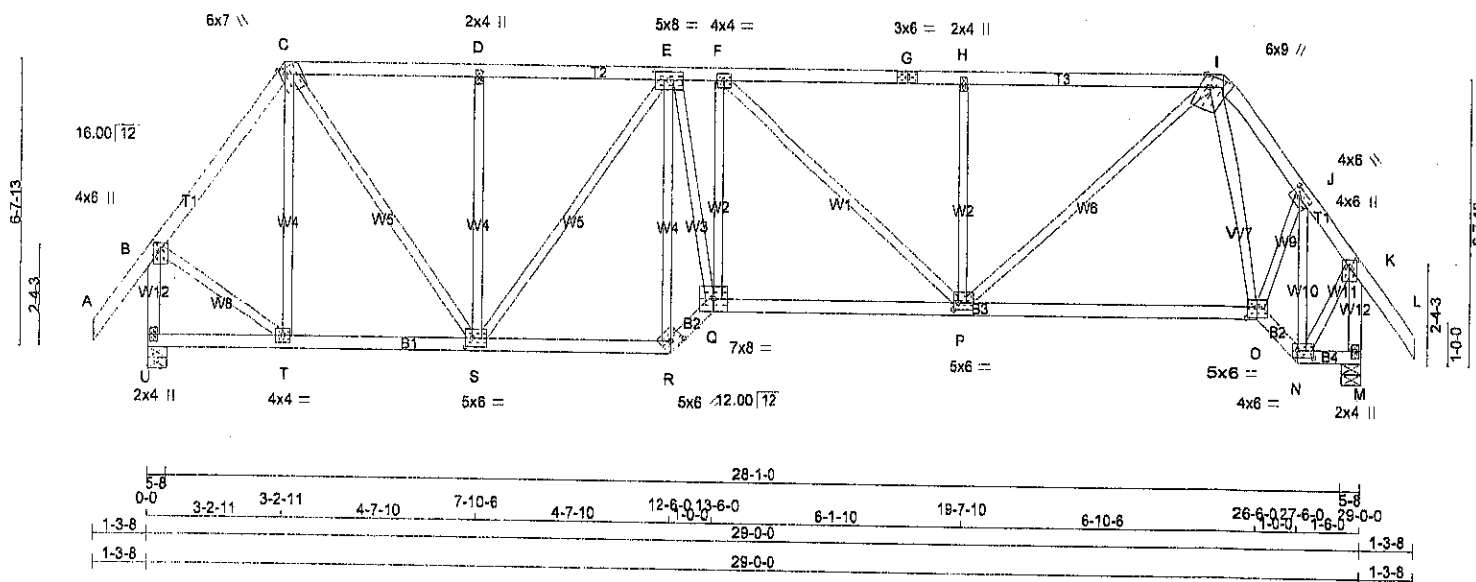
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TRUSS DESC.

DRWG NO.

Alpha Roof Truss, Maple

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 ID:k1eTIGsxnnis1TH9K2?DU?zO9XP-C18FbyweU9e7JryriwY3dJlWhlVzbX?qv0afXyxmen
 Scale = 1:54.2



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - L	2x4	DRY	No.2
U - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
U - R	2x4	DRY	No.2
R - Q	2x4	DRY	No.2
Q - O	2x4	DRY	No.2
O - N	2x4	DRY	No.2
N - M	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			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	TMVW+w	MT20	2.0	4.0		
E	TMVWWH	MT20	5.0	8.0	2.25	4.00
F	TMVWWH	MT20	4.0	4.0		
G	TS-I	MT20	3.0	8.0		
H	TMVW+w	MT20	2.0	4.0		
I	TTWW+m	MT20	6.0	9.0	Edge	2.00
J	TMVWWH	MT20	4.0	6.0	2.00	2.50
K	TMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BBWWH	MT20	4.0	6.0	2.00	4.50
O	BBWWH	MT20	5.0	6.0	3.00	3.00
P	BMVWWH	MT20	5.0	6.0	2.00	1.50
Q	BBWWH	MT20	7.0	8.0		
R	BBWWH	MT20	5.0	6.0	2.00	3.25
S	BMVWWH	MT20	5.0	8.0	2.50	2.00
T	BMVWWH	MT20	4.0	4.0		
U	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	RECORD
JT	VERT	HORZ	DOWN	HORZ
U	1372	0	1372	0
M	1377	0	1377	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	964	666 / 0	0 / 0	0 / 0	0 / 0	296 / 0	0 / 0
M	968	669 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.69FT.
 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 / 40	-70.5	-70.5 0.10 (1)	10.00	T-C	-266 / 0	0.19 (1)
B-C	-988 / 0	-70.5	-70.5 0.15 (1)	8.11	C-S	0 / 996	0.22 (1)
C-D	-1174 / 0	-70.5	-70.5 0.24 (1)	5.80	S-D	-357 / 0	0.26 (1)
D-E	-1174 / 0	-70.5	-70.5 0.24 (1)	5.80	S-E	-457 / 0	0.56 (1)
E-F	-1739 / 0	-70.5	-70.5 0.18 (1)	4.88	R-E	-1363 / 0	1.00 (1)
F-G	-1569 / 0	-70.5	-70.5 0.49 (1)	4.89	E-Q	0 / 1589	0.36 (1)
G-H	-1569 / 0	-70.5	-70.5 0.49 (1)	4.89	Q-F	-82 / 22	0.04 (1)
H-I	-1569 / 0	-70.5	-70.5 0.49 (1)	4.69	F-P	-230 / 0	0.31 (1)
I-J	-1105 / 0	-70.5	-70.5 0.06 (1)	5.97	P-H	-494 / 0	0.24 (1)
J-K	-782 / 0	-70.5	-70.5 0.10 (1)	6.25	P-I	0 / 1183	0.27 (1)
K-L	0 / 40	-70.5	-70.5 0.10 (1)	10.00	I-O	-133 / 2	0.07 (1)
U-B	-1352 / 0	0.0	0.0 0.17 (1)	6.97	O-J	0 / 654	0.15 (1)
M-K	-1364 / 0	0.0	0.0 0.17 (1)	6.95	N-J	-984 / 0	0.25 (1)
					B-T	0 / 683	0.15 (1)
					N-K	0 / 721	0.16 (1)
U-T	0 / 0	-17.5	-17.5 0.06 (4)	10.00			
T-S	0 / 584	-17.5	-17.5 0.14 (1)	10.00			
S-R	0 / 1439	-17.5	-17.5 0.28 (1)	10.00			
R-Q	0 / 2003	-17.5	-17.5 0.33 (1)	10.00			
Q-P	0 / 1741	-17.5	-17.5 0.39 (1)	10.00			
P-O	0 / 675	-17.5	-17.5 0.26 (4)	10.00			
O-N	0 / 588	-17.5	-17.5 0.10 (1)	10.00			
N-M	0 / 0	-17.5	-17.5 0.01 (4)	10.00			

TOTAL WEIGHT = 148 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. 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, 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.I. PLUS
 6.4 P.S.F. RAIN LOAD EQUALS
 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
 ALLOWABLE DEFL.(TL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.49 (H-I:1), BC=0.39 (P-Q:1), WB=1.00
 (E-R:1), SSI=0.21 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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)
MT20	618	354
	1667	822
	2284	1656

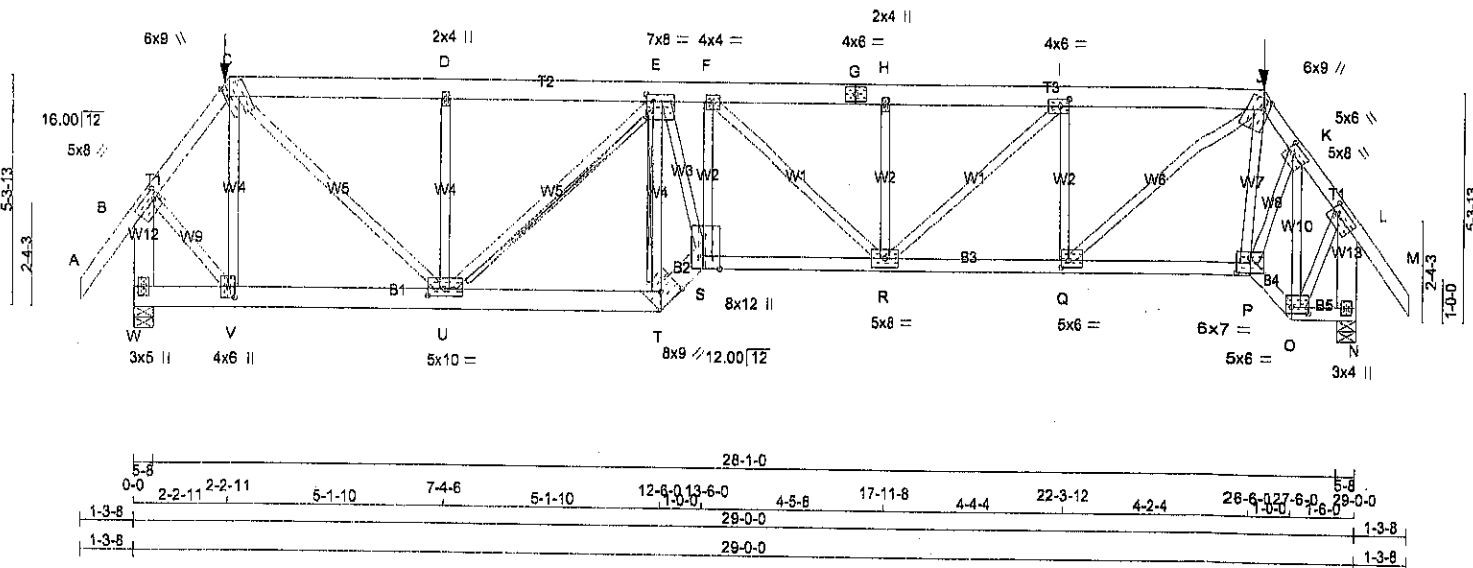
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.88 (P) (INPUT = 0.90)
 JSI METAL=0.34 (E) (INPUT = 1.00)



A-1273707



LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	SPF	FACTORED	MAXIMUM FACTORED	INPUT
A - C	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG
C - G	2x6	DRY	No.2	SPF	JT VERT	DOWN	IN-SX
G - J	2x8	DRY	No.2	SPF	W	2572	0
J - M	2x4	DRY	No.2	SPF	N	2561	0
W - B	2x6	DRY	No.2	SPF			
N - L	2x6	DRY	No.2	SPF			
W - T	2x6	DRY	No.2	SPF			
T - S	2x6	DRY	No.2	SPF			
S - P	2x4	DRY	1660F 1.5E	SPF			
P - O	2x4	DRY	No.2	SPF			
O - N	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWV-t	MT20	5.0	8.0	2.25 2.00
C	TTWW+m	MT20	6.0	9.0	3.00 1.25
D	TMWV-w	MT20	2.0	4.0	
E	TMWVW-t	MT20	7.0	8.0	2.00 2.00
F	TMWVW-t	MT20	4.0	4.0	
G	TS-t	MT20	4.0	6.0	
H	TMWV-w	MT20	2.0	4.0	
I	TMWVW-t	MT20	4.0	6.0	2.00 2.50
J	TTWW+m	MT20	6.0	9.0	2.75 1.75
K	TMWVW-t	MT20	5.0	6.0	2.25 1.75
L	TMWVW-t	MT20	5.0	8.0	2.25 2.00
N	BMV1+p	MT20	3.0	4.0	
O	BBWV-t	MT20	5.0	6.0	1.75 4.50
P	BBWV-t	MT20	6.0	7.0	4.25 3.60
Q	BMWVW-t	MT20	5.0	6.0	2.00 2.00
R	BMWVW-t	MT20	5.0	8.0	
S	BBWVW-p	MT20	6.0	12.0	Edge 4.75
T	BBWV-h	MT20	8.0	9.0	3.75 5.00
U	BMWVW-t	MT20	5.0	10.0	2.00 5.00
V	BMWVW-t	MT20	4.0	6.0	3.00 1.75
W	BMV1+p	MT20	3.0	5.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	JT	GROSS REACTION	W	BRG	W	BRG
W	2572	0	2572	0	0	5-8	2-14
N	2561	0	2561	0	0	5-8	2-13

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS		PERM. LIVE		WIND		DEAD		SOIL	
JT	COMBINED	JT	COMBINED	JT	COMBINED	JT	COMBINED	JT	COMBINED	JT	COMBINED
W	1811	1235 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0	0 / 0	0 / 0
N	1803	1228 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	575 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.73FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-U, E-T
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		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.11 (1)	10.00	V-C	-893 / 0	0.26 (1)
B-C	-1876 / 0	-70.5 -70.5	0.12 (1)	4.79	C-U	0 / 2480	0.61 (1)
C-D	-2913 / 0	-138.7 -138.7	0.30 (1)	4.61	U-D	-769 / 0	0.29 (1)
D-E	-2913 / 0	-138.7 -138.7	0.29 (1)	4.61	U-E	-1194 / 0	0.44 (1)
E-F	-4667 / 0	-138.7 -138.7	0.33 (1)	3.73	T-E	-3400 / 0	0.74 (1)
F-G	-4442 / 0	-70.5 -70.5	0.35 (1)	3.81	E-S	0 / 3516	0.87 (1)
G-H	-4442 / 0	-70.5 -70.5	0.35 (1)	3.81	S-F	0 / 464	0.11 (1)
H-I	-4442 / 0	-70.5 -70.5	0.22 (1)	3.95	F-R	-286 / 0	0.17 (1)
I-J	-3335 / 0	-70.5 -70.5	0.19 (1)	4.49	R-H	-407 / 0	0.11 (1)
J-K	-2232 / 0	-70.5 -70.5	0.11 (1)	4.46	R-I	0 / 1494	0.37 (1)
K-L	-1530 / 0	-70.5 -70.5	0.14 (1)	5.15	Q-I	-1302 / 0	0.36 (1)
L-M	0 / 40	-70.5 -70.5	0.11 (1)	10.00	Q-J	0 / 2671	0.66 (1)
W-B	-2587 / 0	0.0 0.0	0.23 (1)	6.42	P-J	-288 / 0	0.08 (1)
N-L	-2535 / 0	0.0 0.0	0.24 (1)	6.47	O-K	-1924 / 0	0.63 (1)
W-V	0 / 0	-34.5 -34.5	0.09 (1)	10.00	B-V	0 / 1444	0.36 (1)
V-U	0 / 1110	-34.5 -34.5	0.24 (1)	10.00	O-L	0 / 1439	0.36 (1)
U-T	0 / 3773	-34.5 -34.5	0.58 (1)	10.00	P-K	0 / 1418	0.35 (1)
T-S	0 / 5123	-34.5 -34.5	0.67 (1)	10.00			
S-R	0 / 4665	-102.7 -102.7	0.82 (1)	10.00			
R-Q	0 / 3336	-102.7 -102.7	0.85 (1)	10.00			
Q-P	0 / 1332	-102.7 -102.7	0.36 (1)	10.00			
P-O	0 / 1174	-34.5 -34.5	0.21 (1)	10.00			
O-N	0 / 0	-34.5 -34.5	0.02 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
C	2-2-11	-114	-114	FRONT	VERT	TOTAL
J	26-9-5	-115	-115	FRONT	VERT	TOTAL

TOTAL WEIGHT = 169 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: CPrimeHlp
LEFT SETBACK = 2-2-11
RIGHT 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 13-6-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CSldGlder
START DISTANCE = 13-6-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 26-6-0
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.

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 2-2-11
RIGHT 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 2-6-0 OF SPAN MEASURED FROM THE RIGHT.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, 8CBC 2012, ABC 2014
- CSA 686-09
- 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 (0.97")
CALCULATED VERT. DEFL.(LL)= L/999 (0.24")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL)= L/789 (0.44")

A-4273206

CONTINUED ON PAGE 2



253445

H01T

1

1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID:k1eTIGsxnn1sITH9K2?DU?zO9XP-kZYsOcw0jsVGHhNe9CC-JWQndvHJYEAfrFG075yxmen

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 2-2-11,
AND 114.6 lbs FACTORED DOWN AT 26-9-5 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.

CSI: TC=0.35 (F-H:1), BC=0.82 (R-S:1), WB=0.87
(E-S:1), SSI=0.34 (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 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)	(PLI)
MAX	MIN	MAX	MIN
MT20	818	354	1887 822 2284 1858

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.69 (S) (INPUT = 1.00)



A-N27 3706(2)

253444

H12

3

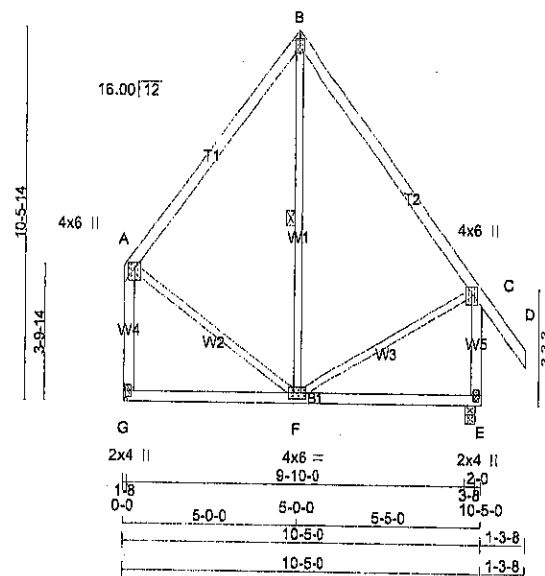
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TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID:k1eTIGsxnrlsITH9K2?DU7zO9XP-8vqt7OyOahX4g4m5KtNtagOYy9ysXQTi5_scyxmm1
Scale = 1:65.3**LUMBER**

N. L. G. A. RULES

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTW+p	MT20	3.0	5.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWWH	MT20	4.0	8.0		
G	BMV1+p	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**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
G	458	0	458	0
E	557	0	557	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	323	219 / 0	0 / 0	0 / 0	0 / 0	0 / 0	104 / 0	0 / 0
E	390	278 / 0	0 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

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

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

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MAX. UNBRACED LENGTH	WEBS MEMB. MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO						
A-B	-208 / 0	-70.5	-70.5 0.23 (1)	6.25	F-B	-37 / 74
B-C	-208 / 0	-70.5	-70.5 0.27 (1)	6.25	A-F	0 / 150
C-D	0 / 40	-70.5	-70.5 0.10 (1)	10.00	F-C	0 / 140
G-A	-426 / 0	0.0	0.0 0.11 (1)	7.81		
E-C	-520 / 0	0.0	0.0 0.10 (1)	7.81		
G-F	0 / 0	-17.5	-17.5 0.14 (4)	10.00		
F-E	0 / 0	-17.5	-17.5 0.14 (4)	10.00		

TOTAL WEIGHT = 3 X 80 = 179 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/CTHIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010THIS 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 LOADALLOWABLE DEFL.(LL) = L/360 (0.35")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.35")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")CSI: TC=0.27 (B-C:1), BC=0.14 (F-G:4),
WB=0.03 (A-F:1), SSI=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**

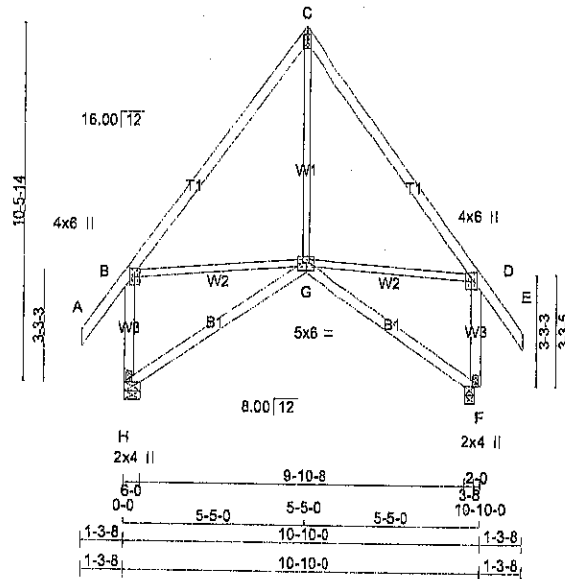
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (C) (INPUT = 0.80)
JSI METAL= 0.10 (E) (INPUT = 1.00)

A-15073705



LUMBER				
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	
CHORDS				
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - 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+p	MT20	4.0	6.0	2.00	2.00
C - TTW+p	MT20	3.0	5.0	2.00	Edge
D - TMVW+p	MT20	4.0	6.0	2.00	2.00
F - BMV1+p	MT20	2.0	4.0	Edge	
G - BBWWV+p	MT20	5.0	6.0	2.75	3.00
H - BMV1+p	MT20	2.0	4.0	Edge	

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
H	576	0	576	0	6-0	1-8
F	576	0	576	0	3-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS					
H	403	286 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0
F	403	286 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. LOAD (LC1)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FORCE (LBS)	MAX. LOAD (LC)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO			FR-TO			
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	G-C	0 / 125	0.04 (4)
B-C	-317 / 0	-70.5	-70.5	0.27 (1)	8.25	B-G	0 / 191	0.04 (1)
C-D	-317 / 0	-70.5	-70.5	0.27 (1)	8.25	G-D	0 / 191	0.04 (1)
D-E	0 / 40	-70.5	-70.5	0.10 (1)	10.00			
H-B	-528 / 0	0.0	0.0	0.11 (1)	7.81			
F-D	-528 / 0	0.0	0.0	0.11 (1)	7.81			
H-G	0 / 0	-17.5	-17.5	0.15 (4)	10.00			
G-F	0 / 0	-17.5	-17.5	0.15 (4)	10.00			

TOTAL WEIGHT = 2 X 82 = 124 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, 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) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(LL) = $L/899$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(TL) = $L/899$ (0.05")

CSI: TC=0.27 (C-D:1), BC=0.15 (F-G:4),
WB=0.04 (B-G:1), SS=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 (PSI)	SECTION (PLI)
MAX	MIN	MAX
MT20	618	354
	1667	822
	2254	1666

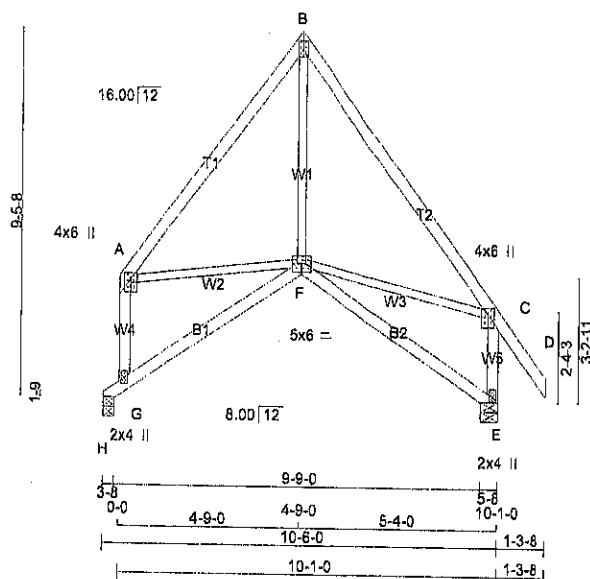
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.67 (H) (INPUT = 0.90)
JSI METAL= 0.13 (H) (INPUT = 1.00)



A-15073704



LUMBER

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTW+p	MT20	3.0	5.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0	Edge	
F	BBWVW+p	MT20	5.0	6.0	2.75	3.00
G	BMV+p	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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	RECORD BRG
JT	VERT	HORZ	DOWN	HORZ
H	433	0	433	0
E	559	0	559	0

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	306	204 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
E	392	279 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX UNBRACED LENGTH	MEMB. FORCE (LBS)	MAX	LC1 MAX	MAX UNBRACED LENGTH
FR-TO		FROM TO			FR-TO			
A-B	-345 / 0	-70.5	-70.5	0.29 (1)	6.25	F-B	0 / 198	0.05 (4)
B-C	-345 / 0	-70.5	-70.5	0.36 (1)	6.25	A-F	0 / 208	0.05 (1)
C-D	0 / 40	-70.5	-70.5	0.10 (1)	10.00	F-C	0 / 213	0.05 (1)
G-A	-421 / 0	0.0	0.0	0.07 (1)	7.81			
E-C	-513 / 0	0.0	0.0	0.07 (1)	7.81			
H-G	-239 / 0	-17.5	-17.5	0.23 (1)	6.25			
G-F	0 / 20	-17.5	-17.5	0.24 (1)	10.00			
F-E	0 / 0	-17.5	-17.5	0.15 (4)	10.00			

TOTAL WEIGHT = 55 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

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 (0.35")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.35")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.36 (B-C:1), BC=0.24 (F-G:1),
WB=0.05 (C-F:1), SSI=0.28 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 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
MT20	616	354 1867 822 2284 1656

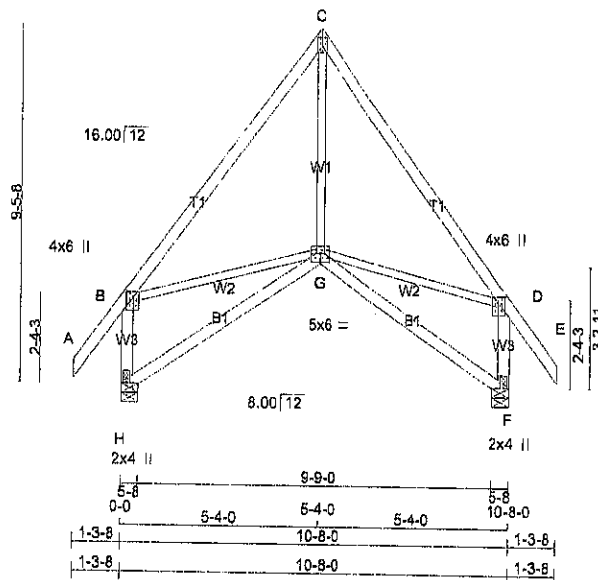
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (E) (INPUT = 0.90)
JSI METAL = 0.12 (E) (INPUT = 1.00)



A-15073703

**LUMBER**

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - 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+p	MT20	4.0	6.0	2.00	2.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW+p	MT20	4.0	6.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0	Edge	Edge
G	BBVWW+p	MT20	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	Edge

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

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG IN-SX	REQRD BRG IN-SX
JT VERT	DOWN	UPLIFT	
H 568	0	5.8	1-8
F 568	0	5.8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
H 398	283 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0	
F 398	283 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0	

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD LC1 MAX (PLF) CSI (LC)	MEMB.	FORCE (LBS) MAX CSI (LC)
FR-TO		FROM TO	FR-TO	
A-B	0 / 40	-70.5 -70.5 0.10 (1)	G-C	0 / 197 0.05 (4)
B-C	-358 / 0	-70.5 -70.5 0.26 (1)	B-G	0 / 221 0.05 (1)
C-D	-358 / 0	-70.5 -70.5 0.26 (1)	G-D	0 / 221 0.05 (1)
D-E	0 / 40	-70.5 -70.5 0.10 (1)		
H-B	-522 / 0	0.0 0.0 0.07 (1)		
F-D	-522 / 0	0.0 0.0 0.07 (1)		
H-G	0 / 0	-17.5 -17.5 0.15 (4)		
G-F	0 / 0	-17.5 -17.5 0.15 (4)		

TOTAL WEIGHT = 6 X 58 = 351 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.I. PLUS
8.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
ALLOWABLE DEFL.(TL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.05")

CSI: TC=0.26 (C-D:1), BC=0.15 (G-H:4),
WB=0.05 (D-G: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 622	2284 1856

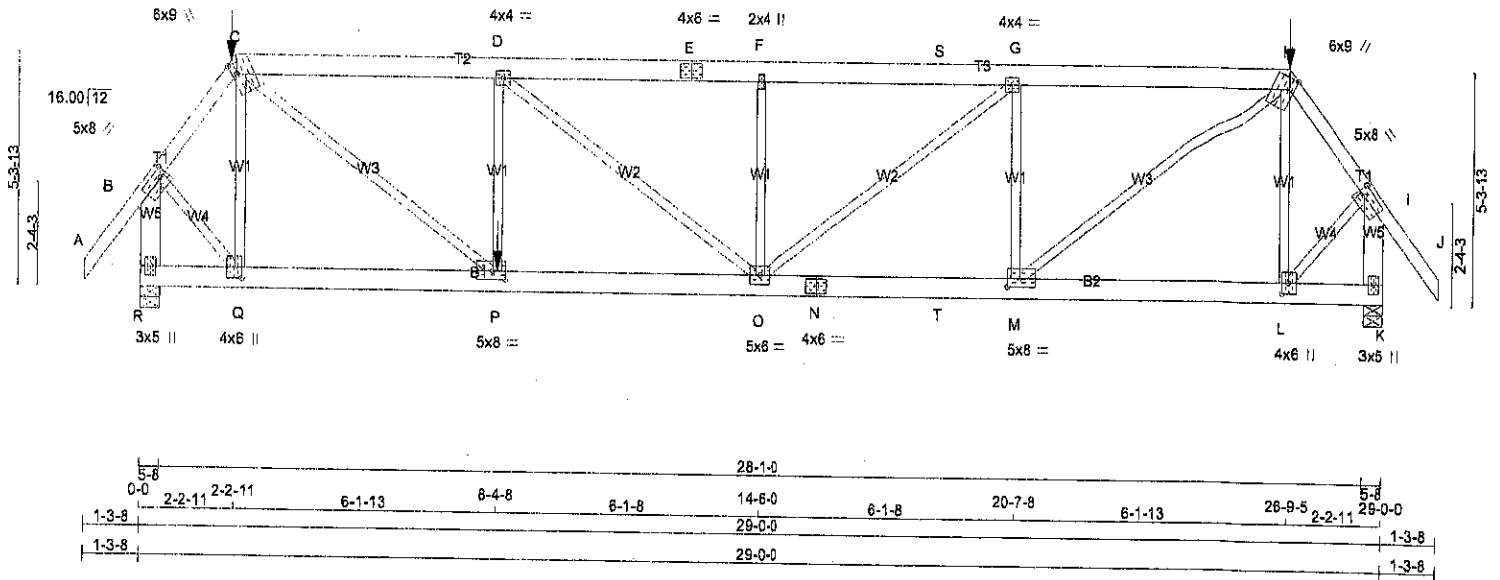
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (H) (INPUT = 0.90)
JSI METAL= 0.12 (H) (INPUT = 1.00)



A-15073702



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x6	DRY	No.2
E - H	2x6	DRY	No.2
H - J	2x4	DRY	No.2
K - B	2x6	DRY	No.2
R - I	2x6	DRY	No.2
R - N	2x6	DRY	No.2
N - K	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-H	MT20	5.0	8.0	2.25 2.00
C	TTWW+m	MT20	6.0	9.0	3.00 1.25
D	TMWW-t	MT20	4.0	4.0	
E	TS-t	MT20	4.0	6.0	
F	TMW+w	MT20	2.0	4.0	
G	TMWW-t	MT20	4.0	4.0	
H	TTWW+m	MT20	6.0	9.0	3.00 1.25
I	TMVW-t	MT20	5.0	8.0	2.25 2.00
K	BMV1+p	MT20	3.0	5.0	
L	BMWW-H	MT20	4.0	6.0	3.00 1.75
M	BMWW-t	MT20	5.0	8.0	2.25 3.50
N	BS-t	MT20	4.0	6.0	
O	BMWW-H	MT20	5.0	6.0	
P	BMWW-t	MT20	5.0	8.0	2.25 3.50
Q	BMWW-t	MT20	4.0	6.0	3.00 1.75
R	BMV1+p	MT20	3.0	5.0	

HANGERS 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	REQD BRG	
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
R	2670	0	2670	0	0	5-8	3-3
K	2386	0	2386	0	0	5-8	2-9

UNFACTORED REACTIONS

1ST CASE		MAX. MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE
R	1879	1281 / 0	0 / 0
K	1680	1146 / 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 = 4.16FT.
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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5	0.11 (1)	Q-C	-705 / 0	0.27 (1)	10.00
B-C	-1965 / 0	-70.5 -70.5	0.12 (1)	C-P	0 / 2771	0.69 (1)	10.00
C-D	-3337 / 0	-138.7 -138.7	0.46 (1)	P-D	-792 / 0	0.30 (1)	10.00
D-E	-3395 / 0	-70.5 -70.5	0.36 (1)	D-O	0 / 74	0.02 (1)	10.00
E-F	-3395 / 0	-70.5 -70.5	0.36 (1)	O-F	-348 / 0	0.13 (1)	10.00
F-S	-3395 / 0	-70.5 -70.5	0.43 (1)	F-O	0 / 670	0.17 (1)	10.00
S-G	-3395 / 0	-138.7 -138.7	0.43 (1)	M-G	-1287 / 0	0.49 (1)	10.00
G-H	-2870 / 0	-138.7 -138.7	0.41 (1)	H-H	0 / 2348	0.58 (1)	10.00
H-I	-1736 / 0	-70.5 -70.5	0.11 (1)	L-H	-616 / 0	0.23 (1)	10.00
I-J	0 / 40	-70.5 -70.5	0.11 (1)	B-Q	0 / 1512	0.37 (1)	10.00
R-B	-2699 / 0	0.0 0.0	0.24 (1)	L-I	0 / 1335	0.33 (1)	10.00
K-I	-2405 / 0	0.0 0.0	0.21 (1)				
R-Q	0 / 0	-34.5 -34.5	0.13 (4)				
Q-P	0 / 1162	-34.5 -34.5	0.27 (1)				
P-O	0 / 3337	-17.5 -17.5	0.49 (1)				
O-N	0 / 2870	-17.5 -17.5	0.43 (1)				
N-T	0 / 2870	-17.5 -17.5	0.43 (1)				
T-M	0 / 2870	-34.5 -34.5	0.43 (1)				
M-L	0 / 1027	-34.5 -34.5	0.24 (1)				
L-K	0 / 0	-34.5 -34.5	0.12 (4)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	2-2-11	-114	-114	-	FRONT	VERT	TOTAL
H	26-9-6	-114	-114	-	FRONT	VERT	TOTAL
P	8-4-8	-802	-802	-	FRONT	VERT	TOTAL

TOTAL WEIGHT = 2 X 164 = 327 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

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
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 10-2 OF SPAN MEASURED FROM THE RIGHT.

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
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-4-8 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, 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.46 (C-D-1), BC=0.49 (O-P-1),
WB=0.69 (C-P-1), SSI=0.33 (G-H-1)

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

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CONTINUED ON PAGE 2



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H01-Cond2

2

1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 28-9-6, AND 114.2 lbs FACTORED DOWN AT 2-2-11 ON TOP CHORD, AND 801.9 lbs FACTORED DOWN AT 8-4-8 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.

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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 622 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

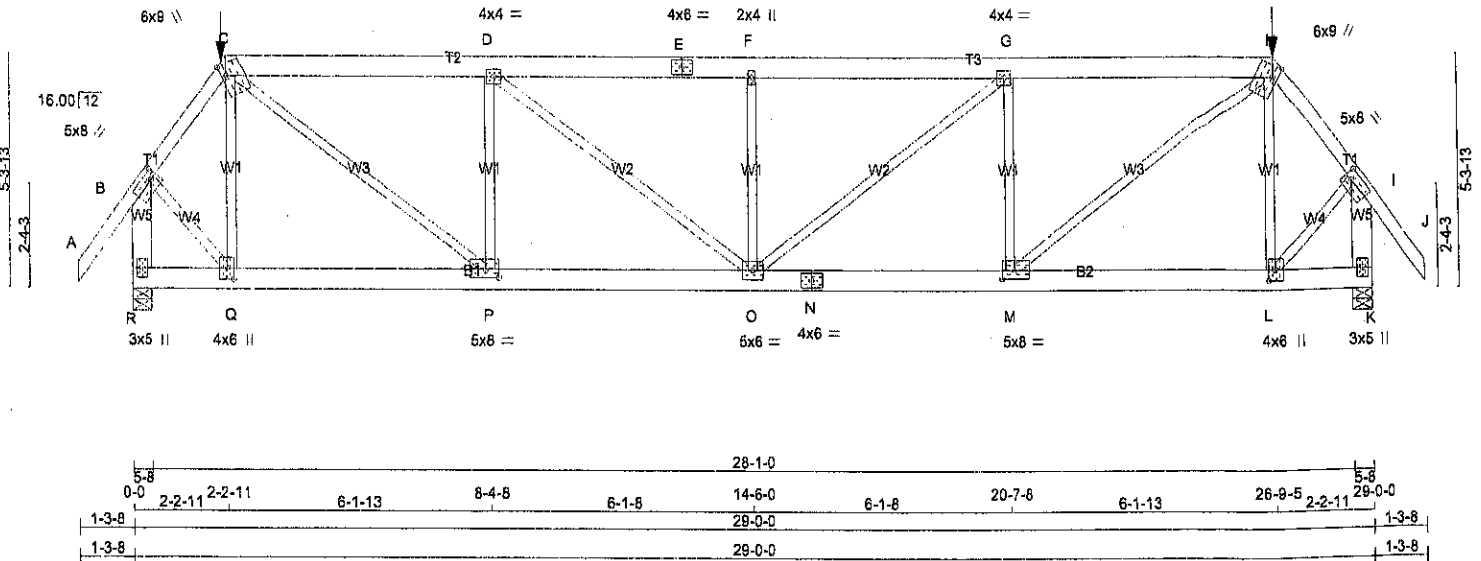
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.80)

JSI METAL= 0.68 (N) (INPUT = 1.00)



A-15073701(2)



TOTAL WEIGHT = 2 X 164 = 327 lb
(M)

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x6	DRY	No.2
E - H	2x6	DRY	No.2
H - J	2x4	DRY	No.2
R - B	2x6	DRY	No.2
K - I	2x6	DRY	No.2
R - N	2x6	DRY	No.2
N - K	2x6	DRY	No.2

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

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-I	MT20	5.0	8.0 2.25 2.00
C	TTWW+m	MT20	6.0	9.0 3.00 1.25
D	TMVW-I	MT20	4.0	4.0
E	TS-t	MT20	4.0	6.0
F	TMVW-w	MT20	2.0	4.0
G	TMVW-I	MT20	4.0	4.0
H	TTWW+m	MT20	6.0	9.0 3.00 1.25
I	TMVW-I	MT20	5.0	8.0 2.25 2.00
K	BMV1+p	MT20	3.0	5.0
L	BMVW+I	MT20	4.0	6.0 3.00 1.75
M	BMVW-I	MT20	5.0	8.0 2.25 3.50
N	BS-t	MT20	4.0	6.0
O	BMVW+I	MT20	5.0	6.0
P	BMVW-I	MT20	5.0	8.0 2.25 3.50
Q	BMVW+I	MT20	4.0	6.0 3.00 1.75
R	BMV1+p	MT20	3.0	5.0

HANGERS NOTES

1)

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	IN-SX
R	2572	0	0	2572	0	0	5-8	2-14	2-14
K	2572	0	0	2572	0	0	5-8	2-14	2-14

UNFACTORED REACTIONS

1ST CASE		MAX MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
R	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0
K	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.87FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (PLF)	MAX	CS1 (LC)	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO						FR-TO			
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	Q-C	-689 / 0	0.26 (1)	
B-C	-1882 / 0	-70.5	-70.5	0.12 (1)	4.78	C-P	0 / 2689	0.66 (1)	
C-D	-3207 / 0	-138.7	-138.7	0.46 (1)	4.22	P-D	-1458 / 0	0.55 (1)	
D-E	-3638 / 0	-138.7	-138.7	0.50 (1)	3.87	D-O	0 / 804	0.20 (1)	
E-F	-3638 / 0	-138.7	-138.7	0.50 (1)	3.87	O-F	-790 / 0	0.30 (1)	
F-G	-3638 / 0	-138.7	-138.7	0.50 (1)	3.87	G-G	0 / 804	0.20 (1)	
G-H	-3207 / 0	-138.7	-138.7	0.46 (1)	4.22	M-G	-1458 / 0	0.55 (1)	
H-I	-1882 / 0	-70.5	-70.5	0.12 (1)	4.78	M-H	0 / 2689	0.66 (1)	
I-J	0 / 40	-70.5	-70.5	0.11 (1)	10.00	L-H	-689 / 0	0.26 (1)	
R-B	-2592 / 0	0.0	0.0	0.23 (1)	6.41	B-Q	0 / 1447	0.36 (1)	
K-I	-2592 / 0	0.0	0.0	0.23 (1)	6.41	L-I	0 / 1447	0.36 (1)	
R-Q	0 / 0	-34.5	-34.5	0.12 (4)	10.00				
Q-P	0 / 1113	-34.5	-34.5	0.25 (1)	10.00				
P-O	0 / 3207	-34.5	-34.5	0.50 (1)	10.00				
O-N	0 / 3207	-34.5	-34.5	0.50 (1)	10.00				
N-M	0 / 3207	-34.5	-34.5	0.50 (1)	10.00				
M-L	0 / 1113	-34.5	-34.5	0.25 (1)	10.00				
L-K	0 / 0	-34.5	-34.5	0.12 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-11	-114	-114	---	FRONT	VERT	TOTAL
H	26-9-5	-114	-114	---	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
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.

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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/899 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/899 (0.25")

CSI: TC=0.50 (D-F:1), BC=0.50 (M-O:1),
WB=0.66 (H-M:1), SSI=0.34 (G-H: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) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

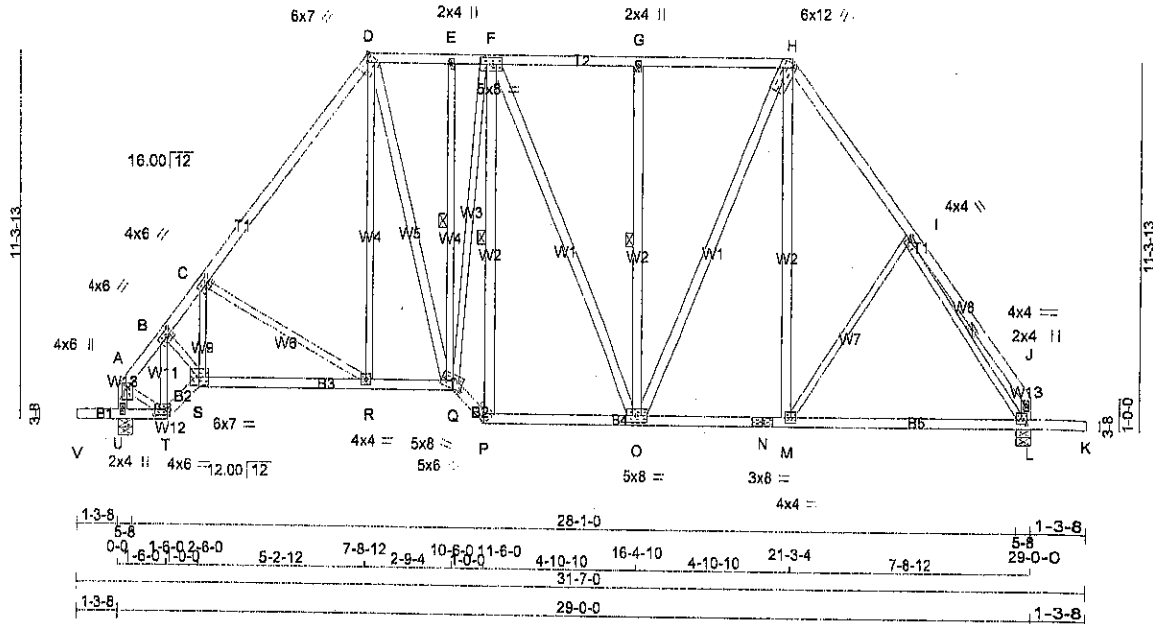
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (D) (INPUT = 0.90)
JSI METAL= 0.68 (N) (INPUT = 1.00)

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CONTINUED ON PAGE 2





LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
U - A	2x4	DRY	No.2
L - J	2x4	DRY	No.2
V - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
D - Q	2x4	DRY	No.2
P - F	2x4	DRY	No.2
F - O	2x4	DRY	No.2
O - G	2x4	DRY	No.2
O - H	2x4	DRY	No.2
M - H	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW+P	MT20	4.0	6.0	2.00 2.00
B	TMVW+T	MT20	4.0	6.0	2.00 2.50
C	TMVW+T	MT20	4.0	6.0	2.00 2.50
D	TTWW+H	MT20	6.0	7.0	Edge 2.75
E	TMVW+T	MT20	2.0	4.0	
F	TMVW+T	MT20	5.0	8.0	
G	TMVW+T	MT20	2.0	4.0	
H	TTWW+M	MT20	6.0	12.0	Edge 1.50
I	TMVW+T	MT20	4.0	4.0	1.50 1.00
J	TMVW+P	MT20	2.0	4.0	
L	BMVW+T	MT20	4.0	4.0	1.50 2.00
M	BMVW+T	MT20	4.0	4.0	
N	BS-T	MT20	3.0	8.0	
O	BMVW+T	MT20	5.0	8.0	
P	BBW+H	MT20	5.0	6.0	Edge 2.50
Q	BBW+H	MT20	5.0	8.0	2.75 4.00

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

BEARINGS	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	1391	0	1391	0	5-8	1-8
U	1391	0	1391	0	5-8	1-8
L	1386	0	1386	0	5-8	1-8

UNFACTORED REACTIONS

1ST CASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	980	664 / 0	0 / 0	0 / 0	0 / 0	316 / 0
U	977	662 / 0	0 / 0	0 / 0	0 / 0	315 / 0
L	977	662 / 0	0 / 0	0 / 0	0 / 0	315 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.07FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1117 / 0	-70.5	-70.5 0.08 (1)	5.82	T-B	-801 / 0	0.15 (1)
B-C	-1554 / 0	-70.5	-70.5 0.22 (1)	5.07	B-S	0 / 682	0.15 (1)
C-D	-1236 / 0	-70.5	-70.5 0.28 (1)	5.51	S-C	0 / 124	0.03 (4)
D-E	-860 / 0	-70.5	-70.5 0.09 (1)	6.25	C-R	-350 / 0	0.23 (1)
E-F	-860 / 0	-70.5	-70.5 0.12 (1)	6.25	R-D	0 / 258	0.06 (1)
F-G	-839 / 0	-70.5	-70.5 0.18 (1)	6.25	D-Q	0 / 470	0.08 (1)
G-H	-838 / 0	-70.5	-70.5 0.19 (1)	6.25	Q-E	-25 / 11	0.02 (1)
H-I	-1135 / 0	-70.5	-70.5 0.15 (1)	5.81	Q-F	0 / 404	0.08 (1)
I-J	0 / 25	-70.5	-70.5 0.17 (1)	10.00	P-F	-751 / 0	0.50 (1)
U-A	-1216 / 0	0.0	0.0 0.12 (1)	7.26	F-O	0 / 64	0.01 (1)
L-J	-103 / 0	0.0	0.0 0.01 (1)	7.81	O-G	-378 / 0	0.25 (1)
V-U	0 / 0	-88.0	-88.0 0.10 (1)	10.00	O-H	0 / 425	0.07 (1)
U-T	0 / 0	-17.5	-17.5 0.08 (1)	10.00	M-H	0 / 250	0.04 (1)
T-S	0 / 669	-17.5	-17.5 0.14 (1)	10.00	M-I	-138 / 0	0.13 (1)
S-R	0 / 1022	-17.5	-17.5 0.22 (1)	10.00	A-T	0 / 702	0.16 (1)
R-Q	0 / 724	-17.5	-17.5 0.17 (1)	10.00	I-L	-1338 / 0	0.43 (1)
Q-P	0 / 1136	-17.5	-17.5 0.19 (1)	10.00			
P-O	0 / 814	-17.5	-17.5 0.19 (1)	10.00			
O-N	0 / 666	-17.5	-17.5 0.28 (4)	10.00			
N-M	0 / 666	-17.5	-17.5 0.28 (4)	10.00			
M-L	0 / 743	-17.5	-17.5 0.28 (4)	10.00			
L-K	0 / 0	-88.0	-88.0 0.10 (1)	10.00			

TOTAL WEIGHT = 205 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 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.

(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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
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=0.28 (C-D:1), BC=0.28 (M-O:4),
WB=0.50 (F-P:1), SSI=0.16 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 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
618	354	1867 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (H) (INPUT = 0.80)
JSI METAL= 0.52 (I) (INPUT = 1.00)



A-15073699

253459

H05T

1

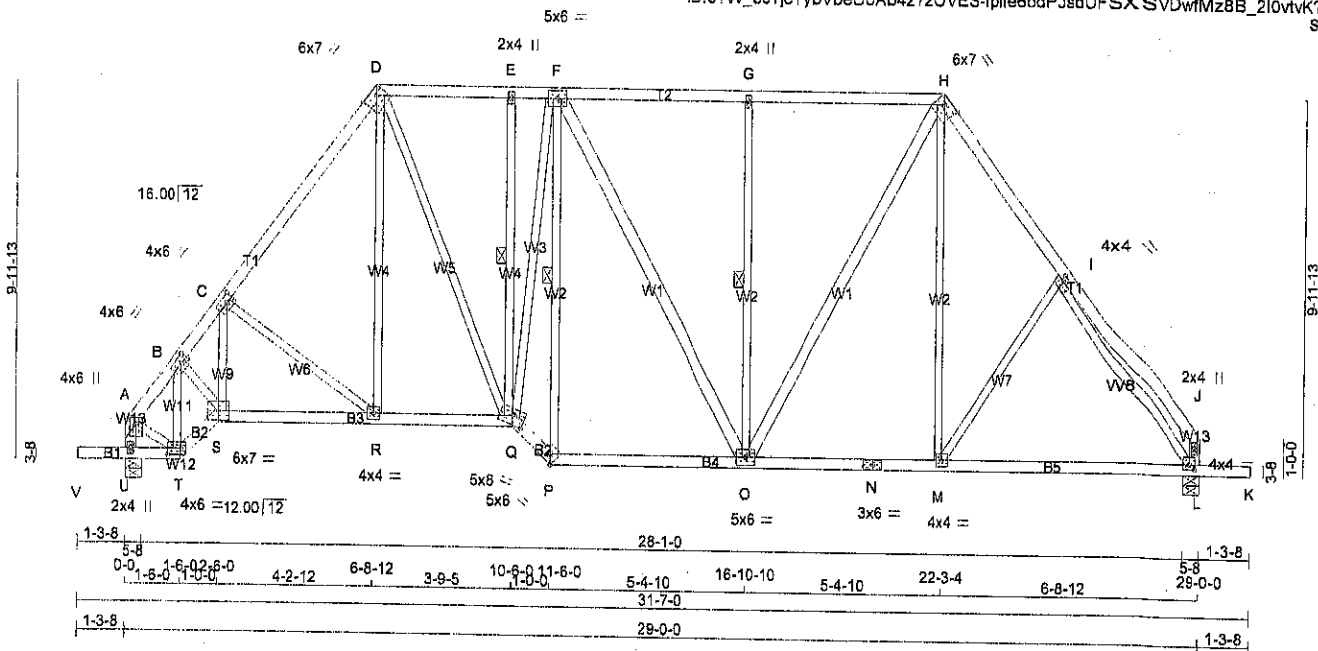
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TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.820 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 16:13:13 2015 Page 1
 ID:97W_0c7jcybVbeU0Ab4z?zOVES-lpfe8odPjEdUFSX SVDwfMz8B_210vtvK716Hkxnsa
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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	
U - A	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
V - T	2x4	DRY	No.2	SPF	
T - S	2x4	DRY	No.2	SPF	
S - Q	2x4	DRY	No.2	SPF	
Q - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
F - O	2x4	DRY	No.2	SPF	
O - H	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 - TMVW-h	MT20	4.0	6.0	2.00	2.50
C - TMVW-t	MT20	4.0	6.0	2.00	2.50
D - TTWW-h	MT20	6.0	7.0	2.00	4.25
E - TMVW-w	MT20	2.0	4.0		
F - TMVWV-t	MT20	5.0	6.0		
G - TMVW-w	MT20	2.0	4.0		
H - TTWW-h	MT20	6.0	7.0	2.00	4.25
I - TMVW-t	MT20	4.0	4.0	1.50	1.00
J - TMV+p	MT20	2.0	4.0		
L - BMVW-t	MT20	4.0	4.0	1.50	2.00
M - BMVW-t	MT20	4.0	4.0		
N - BS-t	MT20	3.0	6.0		
O - BMVWV-t	MT20	5.0	6.0		
P - BWV-h	MT20	5.0	6.0	Edge	2.50
Q - BWVWV-m	MT20	5.0	6.0	2.75	4.00
R - BMVW-t	MT20	4.0	4.0		
S - BWVW-t	MT20	6.0	7.0		
T - BWVW-t	MT20	4.0	6.0	2.00	4.50
U - BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
U	1391	0	1391	0	5-8	1-8
L	1386	0	1386	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	980	664 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
L	977	662 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.13FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF E-Q, F-P, G-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)

MEMB.	MAX. FACTORED FORCE (LBS)	CHORDS		WEBS	
		VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-TO					
A-B	-1118 / 0	-70.5	-70.5 0.07 (1)	5.93	T-B -910 / 0
B-C	-1575 / 0	-70.5	-70.5 0.14 (1)	5.13	B-S 0 / 635
C-D	-1291 / 0	-70.5	-70.5 0.17 (1)	5.52	S-C 0 / 160
D-E	-986 / 0	-70.5	-70.5 0.14 (1)	6.13	C-R -299 / 0
E-F	-985 / 0	-70.5	-70.5 0.15 (1)	6.12	R-D 0 / 251
F-G	-950 / 0	-70.5	-70.5 0.23 (1)	6.09	D-Q 0 / 564
G-H	-950 / 0	-70.5	-70.5 0.24 (1)	6.08	Q-E -90 / 2
H-I	-1173 / 0	-70.5	-70.5 0.12 (1)	5.79	Q-F 0 / 534
I-J	0 / 21	-70.5	-70.5 0.12 (1)	10.00	P-F -984 / 0
U-A	-1216 / 0	0.0	0.0 0.12 (1)	7.26	F-O 0 / 48
L-J	-91 / 0	0.0	0.0 0.01 (1)	7.81	O-G -421 / 0
V-U	0 / 0	-88.0	-88.0 0.10 (1)	10.00	O-H 0 / 535
U-T	0 / 0	-17.5	-17.5 0.08 (1)	10.00	M-H 0 / 203
T-S	0 / 877	-17.5	-17.5 0.14 (1)	10.00	M-I -99 / 4
S-R	0 / 998	-17.5	-17.5 0.21 (1)	10.00	A-T 0 / 709
R-Q	0 / 760	-17.5	-17.5 0.17 (1)	10.00	I-L -1355 / 0
Q-P	0 / 1298	-17.5	-17.5 0.21 (1)	10.00	
P-O	0 / 927	-17.5	-17.5 0.21 (1)	10.00	
O-N	0 / 889	-17.5	-17.5 0.23 (4)	10.00	
N-M	0 / 888	-17.5	-17.5 0.23 (4)	10.00	
M-L	0 / 744	-17.5	-17.5 0.23 (4)	10.00	
L-K	0 / 0	-88.0	-88.0 0.10 (1)	10.00	

TOTAL WEIGHT = 178 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

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 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
 ALLOWABLE DEFL.(TL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

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=0.24 (G-H-I), BC=0.23 (M-O-A),
 WB=0.86 (I-L-1), SSI=0.18 (G-H-1)

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

COMPANION LIVE LOAD FACTOR = 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	1867 822 2284 1656

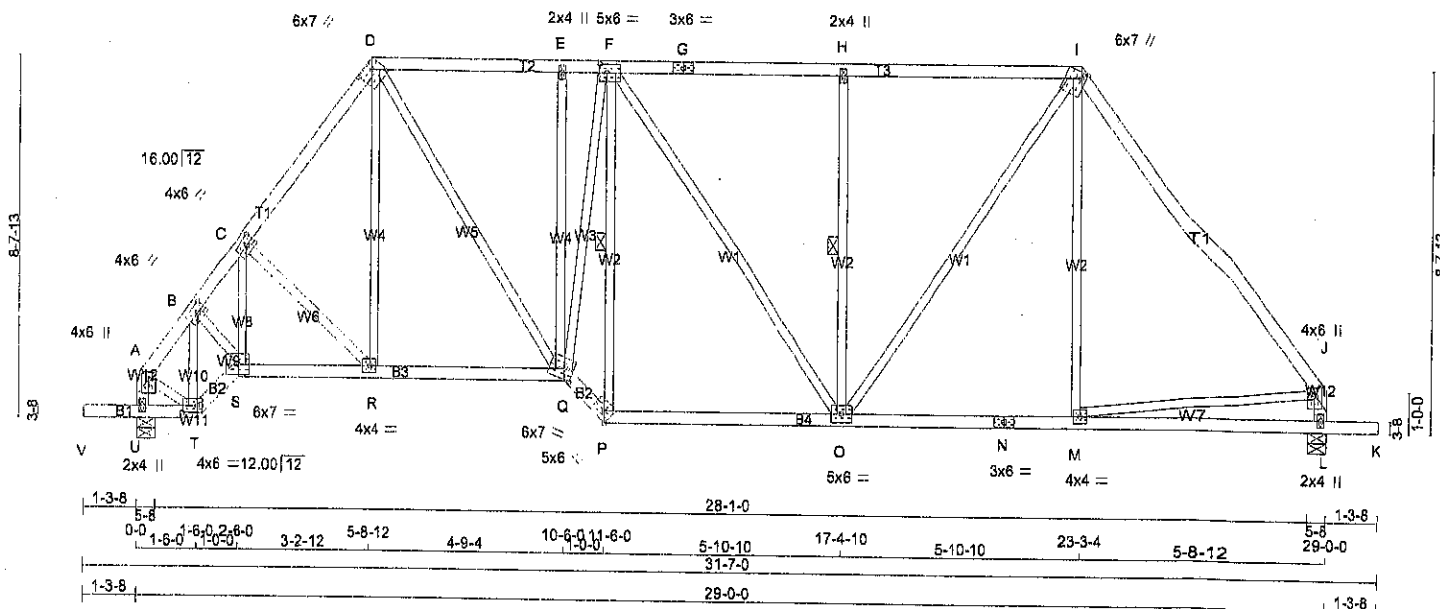
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (D) (INPUT = 0.90)
 JSI METAL= 0.52 (I) (INPUT = 1.00)

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - J	2x4	DRY	No.2
U - A	2x4	DRY	No.2
L - J	2x4	DRY	No.2
V - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMVW-I	MT20	4.0	6.0	2.00	2.50
C	TMVW-I	MT20	4.0	6.0	2.00	2.50
D	TTWW-h	MT20	6.0	7.0	1.75	4.00
E	TMVW-h	MT20	2.0	4.0		
F	TMVW-I	MT20	6.0	6.0	2.50	2.00
G	TS-t	MT20	3.0	6.0		
H	TMVW-h	MT20	2.0	4.0		
I	TTWW+m	MT20	6.0	7.0	Edge	1.50
J	TMVW+p	MT20	4.0	6.0	2.00	2.00
L	BMV1+p	MT20	2.0	4.0		
M	BMVW-I	MT20	4.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMVW-I	MT20	5.0	6.0		
P	BBW-h	MT20	5.0	6.0	Edge	2.50
Q	BBVW-m	MT20	6.0	7.0	3.00	2.75
R	BMVW-I	MT20	4.0	4.0		
S	BBW-I	MT20	6.0	7.0		
T	BBW-I	MT20	4.0	6.0	2.00	4.50
U	BMV1+p	MT20	2.0	4.0		

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

BEARINGS							
JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG			
	VERT	HORZ	DOWN	UPLIFT	IN-SX	IN-SX	
U	1391	0	1391	0	5-8	1-8	
L	1386	0	1386	0	5-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
U	980	664 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
L	977	662 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.15FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-P, H-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		FROM TO		FR-TO			
A-B	-1120 / 0	-70.5 -70.5	0.06 (1)	5.94	T-B	-917 / 0	0.16 (1)
B-C	-1591 / 0	-70.5 -70.5	0.10 (1)	5.15	B-S	0 / 600	0.13 (1)
C-D	-1350 / 0	-70.5 -70.5	0.11 (1)	5.48	S-C	0 / 183	0.04 (1)
D-E	-1175 / 0	-70.5 -70.5	0.23 (1)	5.62	C-R	-257 / 0	0.08 (1)
E-F	-1173 / 0	-70.5 -70.5	0.22 (1)	5.62	R-D	0 / 252	0.06 (1)
F-G	-1096 / 0	-70.5 -70.5	0.39 (1)	5.62	D-Q	0 / 686	0.15 (1)
G-H	-1095 / 0	-70.5 -70.5	0.39 (1)	5.62	Q-E	-175 / 0	0.19 (1)
H-I	-1095 / 0	-70.5 -70.5	0.39 (1)	5.62	E-F	0 / 722	0.16 (1)
I-J	-1189 / 0	-70.5 -70.5	0.57 (1)	5.26	F-P	-1006 / 0	0.48 (1)
U-A	-1216 / 0	0.0 0.0	0.12 (1)	7.26	P-O	0 / 30	0.01 (1)
L-J	-1232 / 0	0.0 0.0	0.12 (1)	7.23	O-H	-463 / 0	0.22 (1)
V-U	0 / 0	-88.0 -88.0	0.10 (1)	10.00	H-I	0 / 664	0.15 (1)
U-T	0 / 0	-17.5 -17.5	0.10 (1)	10.00	M-I	0 / 100	0.03 (4)
T-S	0 / 884	-17.5 -17.5	0.15 (1)	10.00	A-T	0 / 714	0.16 (1)
S-R	0 / 981	-17.5 -17.5	0.21 (1)	10.00	M-J	0 / 715	0.16 (1)
R-Q	0 / 799	-17.5 -17.5	0.18 (1)	10.00			
Q-P	0 / 1506	-17.5 -17.5	0.25 (1)	10.00			
P-O	0 / 1078	-17.5 -17.5	0.25 (1)	10.00			
O-N	0 / 711	-17.5 -17.5	0.19 (1)	10.00			
N-M	0 / 711	-17.5 -17.5	0.19 (1)	10.00			
M-L	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
L-K	0 / 0	-88.0 -88.0	0.10 (1)	10.00			

TOTAL WEIGHT = 156 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

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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/899 (0.00")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.57 (I-J:1), BC=0.25 (O-P:1), WB=0.46 (F-P:1), SS=0.20 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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 618 364 1667 822 2264 1666

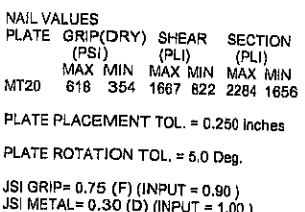
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

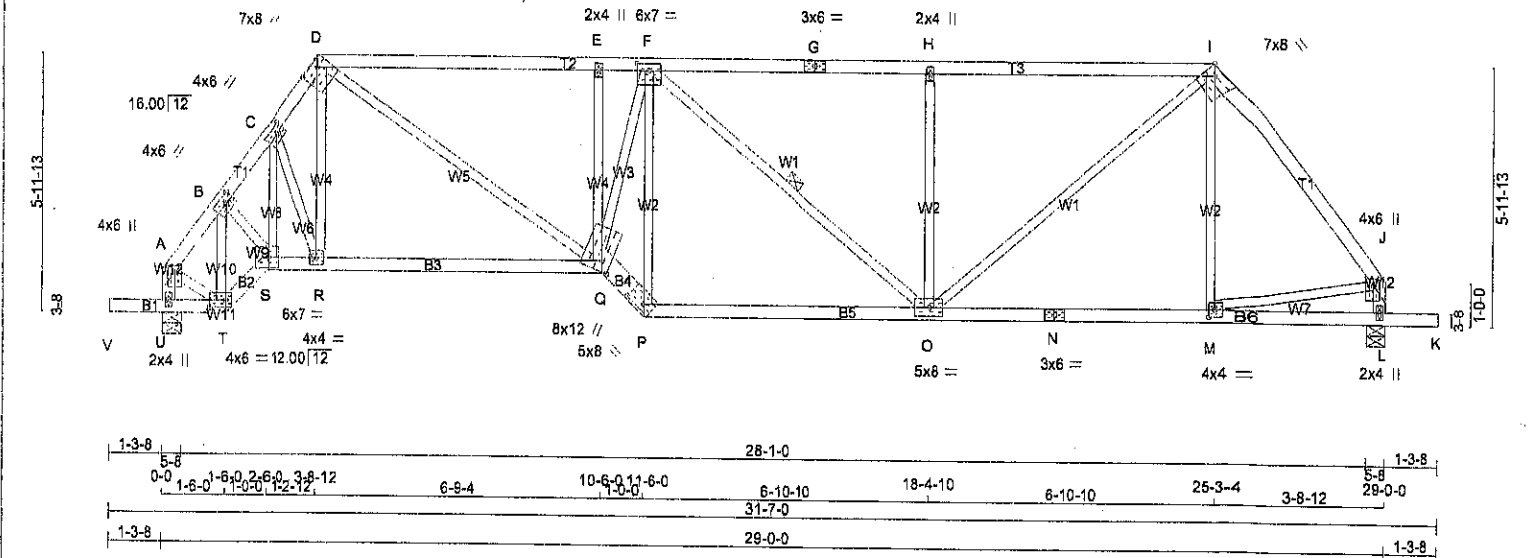
JSI GRIP=0.75 (M) (INPUT=0.90)
JSI METAL=0.27 (J) (INPUT=1.00)



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A-15073696



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - J	2x4	DRY	No.2
J - A	2x4	DRY	No.2
L - J	2x4	DRY	No.2
V - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - Q	2x4	DRY	No.2
Q - P	2x6	DRY	No.2
P - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY, SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TMVW-t	MT20	4.0	6.0	2.00	2.50
C	TMVW-t	MT20	4.0	6.0	2.00	2.50
D	TTVW-h	MT20	7.0	8.0	1.75	5.00
E	TMVW-w	MT20	2.0	4.0		
F	TMVWW-t	MT20	6.0	7.0	2.00	3.50
G	TS-t	MT20	3.0	6.0		
H	TMVW-w	MT20	2.0	4.0		
I	TTVW-h	MT20	7.0	8.0	Edge	2.75
J	TMVW+p	MT20	4.0	6.0	1.75	1.75
L	BMV1+p	MT20	2.0	4.0		
M	BMVW-t	MT20	4.0	4.0	2.00	1.75
N	BS-t	MT20	3.0	6.0		
O	BMVWW-t	MT20	6.0	8.0		
P	BBW-h	MT20	6.0	8.0	1.75	5.00
Q	BBVWVW+m	MT20	8.0	12.0	3.00	2.50
R	BMVW-t	MT20	4.0	4.0		
S	BBVW-t	MT20	6.0	7.0		
T	BBVW-t	MT20	4.0	6.0	2.00	4.50
U	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	UP		
U	1391	0	1391	0	5-8	1-8
L	1386	0	1386	0	5-8	1-8

UNFACTORED REACTIONS							
1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
U	980	864 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0
L	977	862 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.35FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX	MIN	MAX	MIN	MAX	MIN
FR-TO								
A-B	-1122 / 0	-70.5	-70.5	0.04 (1)	5.95			
B-C	-1612 / 0	-70.5	-70.5	0.06 (1)	5.17			
C-D	-1508 / 0	-70.5	-70.5	0.05 (1)	5.32			
D-E	-1910 / 0	-70.5	-70.5	0.52 (1)	4.35			
E-F	-1902 / 0	-70.5	-70.5	0.41 (1)	4.35			
F-G	-1578 / 0	-70.5	-70.5	0.61 (1)	4.50			
G-H	-1578 / 0	-70.5	-70.5	0.61 (1)	4.50			
H-I	-1578 / 0	-70.5	-70.5	0.62 (1)	4.50			
I-J	-1245 / 0	-70.5	-70.5	0.21 (1)	5.54			
U-A	-1216 / 0	0.0	0.0	0.12 (1)	7.26			
L-J	-1252 / 0	0.0	0.0	0.13 (1)	7.19			
V-U	0 / 0	-88.0	-88.0	0.10 (1)	10.00			
U-T	0 / 0	-17.5	-17.5	0.10 (1)	10.00			
T-S	0 / 892	-17.5	-17.5	0.15 (1)	10.00			
S-R	0 / 959	-17.5	-17.5	0.27 (1)	10.00			
R-Q	0 / 898	-17.5	-17.5	0.27 (4)	10.00			
Q-P	0 / 2235	-17.5	-17.5	0.27 (1)	10.00			
P-O	0 / 1608	-17.5	-17.5	0.36 (1)	10.00			
O-N	0 / 742	-17.5	-17.5	0.28 (4)	10.00			
N-M	0 / 742	-17.5	-17.5	0.28 (4)	10.00			
M-L	0 / 0	-17.5	-17.5	0.11 (4)	10.00			
L-K	0 / 0	-88.0	-88.0	0.10 (1)	10.00			
T-B	-925 / 0				0.16 (1)			
B-S	0 / 555				0.12 (1)			
S-C	0 / 168				0.04 (1)			
C-R	-188 / 0				0.04 (1)			
R-D	0 / 288				0.06 (1)			
D-Q	0 / 1221				0.27 (1)			
Q-E	-376 / 0				0.14 (1)			
E-F	-1502 / 0				0.31 (1)			
F-O	-39 / 0				0.84 (1)			
O-H	-546 / 0				0.02 (1)			
H-I	0 / 1081				0.30 (1)			
I-J	-20 / 72				0.24 (1)			
A-T	0 / 721				0.02 (4)			
M-J	0 / 752				0.16 (1)			

TOTAL WEIGHT = 136 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, 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

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

CSI: TC=0.82 (H-I:1), BC=0.36 (O-P:1), WB=0.84 (F-P:1), SSI=0.23 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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

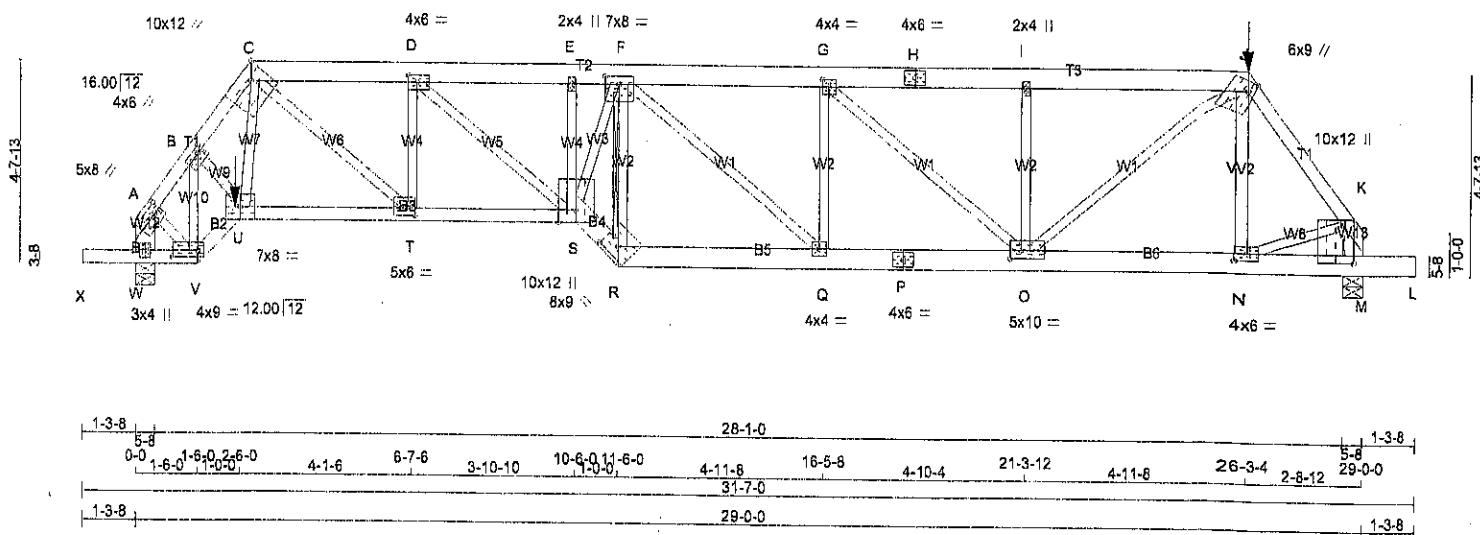
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (J) (INPUT = 0.90)
JSI METAL= 0.38 (Q) (INPUT = 1.00)

A-15073695





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-I	MT20	5.0	8.0	2.25	2.00
B	TMVW-I	MT20	4.0	6.0	1.50	1.75
C	TTWW-h	MT20	10.0	12.0	Edge	4.50
D	TMVW-I	MT20	4.0	6.0	2.00	2.50
E	TMVW-w	MT20	2.0	4.0		
F	TMVWV-I	MT20	7.0	8.0	2.25	4.00
G	TMVW-I	MT20	4.0	4.0	2.00	1.75
H	TS-I	MT20	4.0	6.0		
I	TMVW-w	MT20	2.0	4.0		
J	TTWW+M	MT20	6.0	9.0	2.75	1.75
K	TMBVW+P	MT20	10.0	12.0	10.25	3.00
N	BMVW-I	MT20	4.0	6.0	2.00	2.75
O	BMVWV-I	MT20	5.0	10.0	2.25	3.25
P	BS-I	MT20	4.0	6.0		
Q	BMVW-I	MT20	4.0	4.0		
R	BBW-h	MT20	8.0	9.0	3.00	4.50
S	BBVWV+P	MT20	10.0	12.0	Edge	
T	BMVW-I	MT20	5.0	6.0	2.00	2.00
U	BBVW-I	MT20	7.0	8.0		
V	BBVW-I	MT20	4.0	9.0	1.75	7.25
W	BMV1+P	MT20	3.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	UPLIFT	IN-SX	BRG	IN-SX
W	2676	0	0	2676	0	0	5-8	3-0	
M	2582	0	0	2582	0	0	5-8	2-12	

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
W	1862	1298 / 0	0 / 0	0 / 0	0 / 0	584 / 0	0 / 0		
M	1820	1228 / 0	0 / 0	0 / 0	0 / 0	592 / 0	0 / 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 = 3.44FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT F-R

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		MAX. FACTORED		FACTORED		WEB S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT.	LOAD LC1	MAX (PLF)	MAX (LC)	MEMB.	FORCE (LBS)	MAX (LBS)	MAX (LC)
FR-TO						FR-TO			
A-B	-2320 / 0	-70.5	-70.5	0.14 (1)	4.35	V-B	-1814 / 0	0.33 (1)	
B-C	-3324 / 0	-70.5	-70.5	0.21 (1)	3.65	B-U	0 / 1170	0.29 (1)	
C-D	-4045 / 0	-70.5	-70.5	0.18 (1)	4.15	U-C	0 / 721	0.18 (1)	
D-E	-5237 / 0	-70.5	-70.5	0.43 (1)	3.44	C-T	0 / 2731	0.68 (1)	
E-F	-5249 / 0	-138.7	-138.7	0.42 (1)	3.65	D-S	0 / 1542	0.38 (1)	
F-G	-4348 / 0	-138.7	-138.7	0.32 (1)	4.12	S-E	0 / 367	0.09 (1)	
G-H	-3488 / 0	-138.7	-138.7	0.29 (1)	4.28	S-F	0 / 3510	0.87 (1)	
H-I	-3488 / 0	-138.7	-138.7	0.31 (1)	4.27	R-F	-4295 / 0	0.83 (1)	
I-J	-3488 / 0	-70.5	-70.5	0.21 (1)	4.12	F-Q	0 / 99	0.02 (1)	
J-K	-2568 / 0	0.0	0.0	0.18 (1)	6.56	Q-G	0 / 167	0.06 (4)	
W-A	-2464 / 0	0.0	0.0	0.18 (1)	6.56	G-O	-1134 / 0	0.81 (1)	
M-K	-2447 / 0	0.0	0.0	0.17 (1)	6.56	O-I	-747 / 0	0.22 (1)	
X-W	0 / 0	-88.0	-88.0	0.11 (1)	10.00	O-J	0 / 2554	0.63 (1)	
W-V	0 / 0	-66.7	-66.7	0.11 (1)	10.00	N-J	-121 / 77	0.04 (1)	
V-U	0 / 1837	-66.7	-66.7	0.34 (1)	10.00	A-V	0 / 1481	0.37 (1)	
U-T	0 / 1955	-102.7	-102.7	0.62 (1)	10.00	N-K	0 / 1567	0.39 (1)	
T-S	0 / 4045	-102.7	-102.7	0.99 (1)	10.00				
S-R	0 / 6014	-34.5	-34.5	0.78 (1)	10.00				
R-Q	0 / 4271	-34.5	-34.5	0.64 (1)	10.00				
Q-P	0 / 4346	-34.5	-34.5	0.66 (1)	10.00				
P-O	0 / 4346	-34.5	-34.5	0.65 (1)	10.00				
O-N	0 / 1538	-34.5	-34.5	0.28 (1)	10.00				
N-M	0 / 0	-34.5	-34.5	0.07 (4)	10.00				
M-L	0 / 0	-88.0	-88.0	0.06 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
J	26-3-4	-140	-140	---	FRONT	VERT	TOTAL
U	2-8-0	-139	-139	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 157 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/C

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

GIRDER TYPE: CPrimeHip
SIDE 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 18-6-0 OF SPAN MEASURED FROM THE RIGHT.

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

*** 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 088-09
- 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/814 (0.43")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/505 (0.03")
ALLOWABLE DEFL.(TL) = L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/505 (0.03")



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H01T

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TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID:gUzNWMpyWh_3Mf ncsznAqzVRmF-dBT?MR8JwJ6m3HppFIQWGOFFB4mTetTxAIN5UyxnP

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 2B-3-4
ON TOP CHORD, AND 138.7 lbs FACTORED
DOWN AT 2-6-0 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.

CALCULATED VERT. DEFL.(TL) = $L/280$ (0.06")CSI: TC=0.43 (D-E:1), BC=0.99 (S-T:1), WB=0.87
(F-S:1), SSI=0.37 (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 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)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN	
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

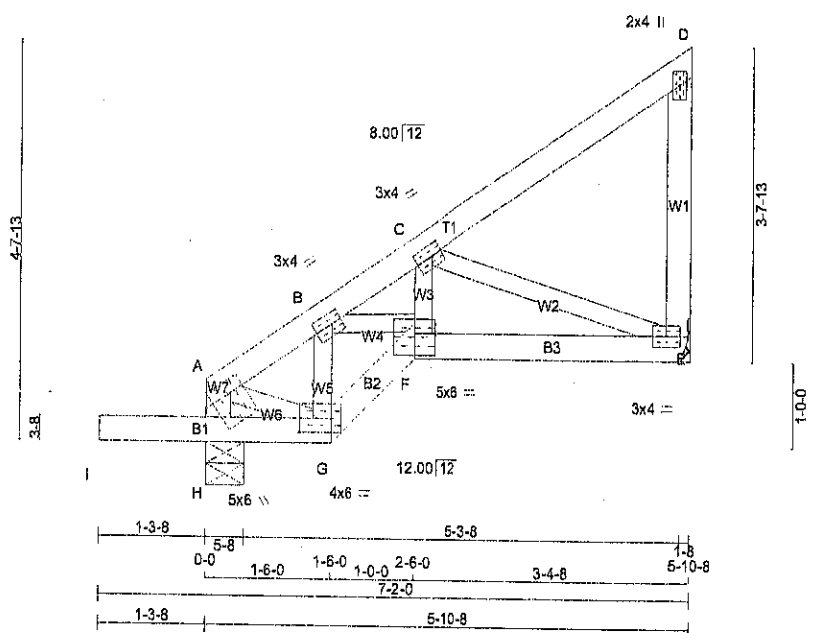
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (F) (INPUT = 0.90)

JSI METAL= 0.94 (P) (INPUT = 1.00)



A-15073694(2)



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

H - A

2x4

DRY

No.2

SPF

A - D

2x4

DRY

No.2

SPF

E - F

2x4

DRY

No.2

SPF

I - G

2x4

DRY

No.2

SPF

G - F

2x4

DRY

No.2

SPF

F - E

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

B

TMWW-t

MT20

3.0

4.0

1.50

1.50

C

TMWW-t

MT20

3.0

4.0

1.50

1.50

D

TMV+p

MT20

2.0

4.0

E

BMVW1-t

MT20

3.0

4.0

F

BBWW-t

MT20

5.0

6.0

3.00

3.00

G

BBWW-t

MT20

4.0

6.0

2.00

4.50

H

TMBMVW1*+hMT20

5.0

6.0

1.75

Edge

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		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
H	384	0	384	0	0	5-8	1-8	
E	246	0	246	0	0			

UNFACTORED REACTIONS

1ST CASE

MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	271	183 / 0	0 / 0	0 / 0	0 / 0	87 / 0	0 / 0
E	173	117 / 0	0 / 0	0 / 0	0 / 0	56 / 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)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 MAX (PLF)		MAX UNBRACED LENGTH FR-TO		WEBS MAX. FACTORED FORCE (LBS)		MAX CS (LC)	
	FR-TO	TO	FR-TO	TO	FR-TO	TO	FR-TO	TO	FR-TO	TO
H-A	-209 / 0		0.0	0.0	0.02 (1)	7.81	A-G	0 / 172	0.04 (1)	
A-B	-203 / 0		-70.5	-70.5	0.02 (1)	6.25	G-B	-219 / 0	0.03 (1)	
B-C	-403 / 0		-70.5	-70.5	0.08 (1)	6.25	B-F	0 / 221	0.05 (1)	
C-D	-10 / 0		-70.5	-70.5	0.08 (1)	6.25	F-C	0 / 131	0.03 (1)	
E-D	-97 / 0		0.0	0.0	0.02 (1)	7.81	C-E	-370 / 0	0.08 (1)	
I-H	0 / 0		-88.0	-88.0	0.10 (1)	10.00				
H-G	0 / 0		-17.5	-17.5	0.08 (1)	10.00				
G-F	0 / 211		-17.5	-17.5	0.04 (1)	10.00				
F-E	0 / 349		-17.5	-17.5	0.08 (1)	10.00				

TOTAL WEIGHT = 4 X 27 = 107 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

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

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

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

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL) = L/120 (0.18")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/120 (0.18")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.08 (C-D:1), BC=0.10 (H-I:1), WB=0.08 (C-E:1), SSI=0.09 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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 616 354 1867 822 2264 1656

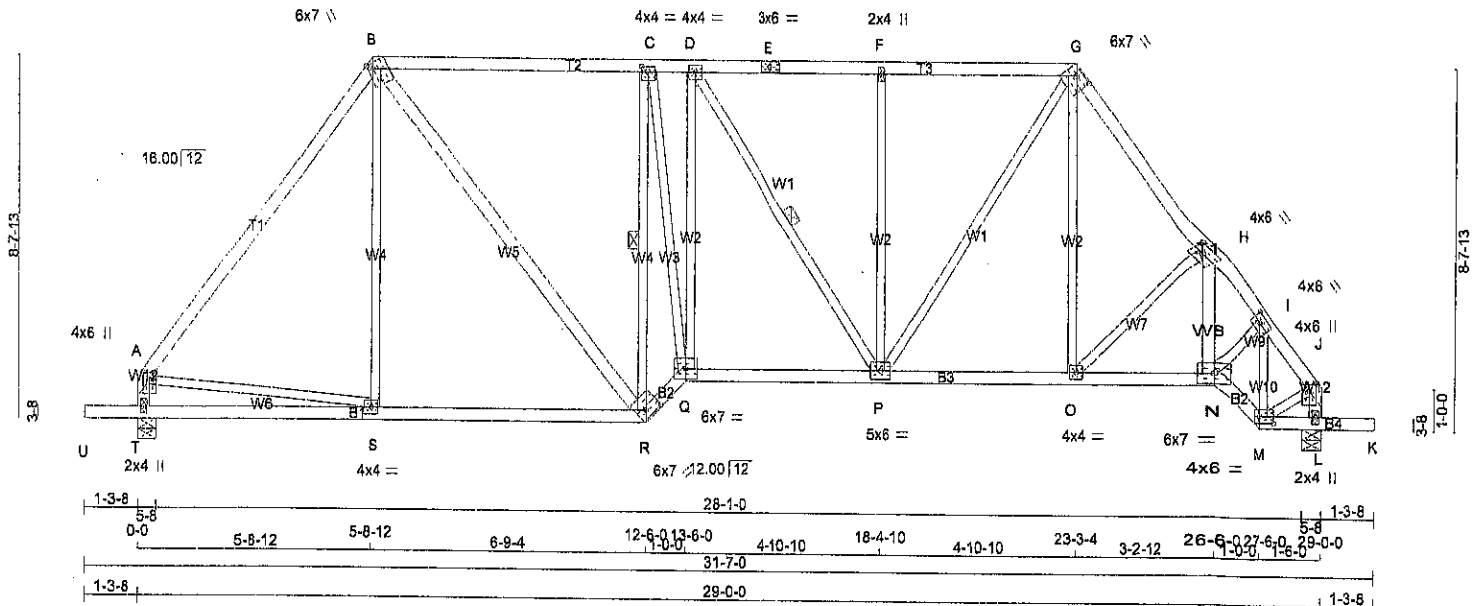
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (E) (INPUT= 0.90)
JSI METAL= 0.13 (E) (INPUT= 1.00)



A-15073693



LUMBER			
N.L.G.A. RULES	CHORDS	SIZE	LUMBER
A - B	2x4	DRY	No.2
B - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
G - J	2x4	DRY	No.2
T - A	2x4	DRY	No.2
L - J	2x4	DRY	No.2
U - R	2x4	DRY	No.2
R - Q	2x4	DRY	No.2
Q - N	2x4	DRY	No.2
N - M	2x4	DRY	No.2
M - K	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
B - R	2x4	DRY	No.2

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	TMVW-i	MT20	4.0	4.0	1.50 1.75
D	TMVW-i	MT20	4.0	4.0	
E	TS-i	MT20	3.0	6.0	
F	TMVW+w	MT20	2.0	4.0	
G	TTWW-h	MT20	6.0	7.0	1.75 4.00
H	TMVW-i	MT20	4.0	6.0	2.00 2.50
I	TMVW-i	MT20	4.0	6.0	2.00 2.50
J	TMVW+p	MT20	4.0	6.0	2.00 2.00
L	BMV1+p	MT20	2.0	4.0	
M	BBWW-i	MT20	4.0	6.0	2.00 4.50
N	BBWW-i	MT20	6.0	7.0	
O	BMWW-i	MT20	4.0	4.0	
P	BMWW-i	MT20	5.0	6.0	
Q	BBWW-i	MT20	6.0	7.0	
R	BBWW-h	MT20	6.0	7.0	2.00 4.25
S	BMWW-i	MT20	4.0	4.0	
T	BMV1+p	MT20	2.0	4.0	

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

BEARINGS			
JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG
T	1386 0	1386 0	5-8
L	1391 0	1391 0	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS				
T	COMBINED	SNOW	LIVE	PERMILIVE	WIND	DEAD	SOIL
L	977	862 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
L	980	864 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.94FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-R, D-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 UNBRACED LENGTH (LC)
FR-TO		FROM TO	
A-B	-1194 / 0	-70.5 -70.5 0.57 (1)	6.25
B-C	-1125 / 0	-70.5 -70.5 0.57 (1)	5.18
C-D	-1259 / 0	-70.5 -70.5 0.50 (1)	4.94
D-E	-1191 / 0	-70.5 -70.5 0.29 (1)	5.50
E-F	-1191 / 0	-70.5 -70.5 0.29 (1)	5.50
F-G	-1190 / 0	-70.5 -70.5 0.29 (1)	5.48
G-H	-1348 / 0	-70.5 -70.5 0.11 (1)	5.48
H-I	-1591 / 0	-70.5 -70.5 0.10 (1)	5.15
I-J	-1120 / 0	-70.5 -70.5 0.06 (1)	5.94
T-A	-1236 / 0	0.0 0.0 0.12 (1)	7.22
L-J	-1216 / 0	0.0 0.0 0.12 (1)	7.26
U-T	0 / 0	-88.0 -88.0 0.10 (1)	10.00
T-S	0 / 0	-17.5 -17.5 0.20 (4)	10.00
S-R	0 / 714	-17.5 -17.5 0.26 (4)	10.00
R-Q	0 / 1615	-17.5 -17.5 0.26 (1)	10.00
Q-P	0 / 1256	-17.5 -17.5 0.26 (1)	10.00
P-O	0 / 798	-17.5 -17.5 0.18 (1)	10.00
O-N	0 / 981	-17.5 -17.5 0.19 (1)	10.00
N-M	0 / 894	-17.5 -17.5 0.16 (1)	10.00
M-L	0 / 0	-17.5 -17.5 0.10 (1)	10.00
L-K	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

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 088-09
 - TPIC 2011

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

(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 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
 ALLOWABLE DEFL.(TL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CANTILEVER DEFLECTION:
 ALLOWABLE DEFL.(LL) = L/120 (0.18")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
 ALLOWABLE DEFL.(TL) = L/120 (0.18")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.57 (A-B:1), BC=0.26 (Q-R:1), WB=0.76 (C-R:1), SSI=0.28 (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 2264 1656

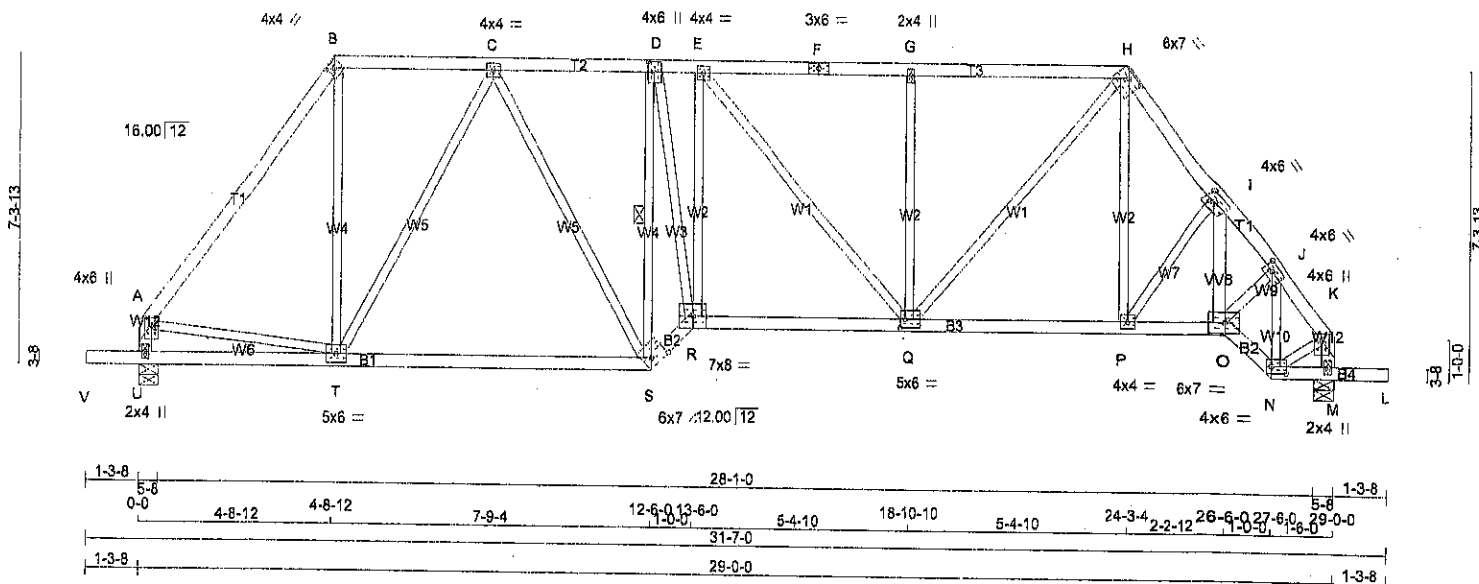
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.81 (C) (INPUT = 0.90)
 JSI METAL=0.27 (A) (INPUT = 1.00)

A-11073692





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
B - F	2x4	DRY No.2	SPF
F - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
U - A	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
V - S	2x4	DRY No.2	SPF
S - R	2x4	DRY No.2	SPF
R - O	2x4	DRY No.2	SPF
O - N	2x4	DRY No.2	SPF
N - L	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TTW-h	MT20	4.0	4.0	1.75	2.00
C	TMWW-h	MT20	4.0	4.0		
D	TMWW-h	MT20	4.0	6.0	3.00	1.75
E	TMWW-h	MT20	4.0	4.0		
F	TS-l	MT20	3.0	6.0		
G	TMW-w	MT20	2.0	4.0		
H	TTWW-h	MT20	6.0	7.0	1.50	3.75
I	TMWW-h	MT20	4.0	6.0	2.00	2.50
J	TMWW-h	MT20	4.0	6.0	2.00	2.50
K	TMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BBWW-h	MT20	4.0	6.0	2.00	4.50
O	BBWW-h	MT20	6.0	7.0		
P	BMWW-h	MT20	4.0	4.0		
Q	BMWWW-h	MT20	6.0	6.0	2.50	1.50
R	BBWW-h	MT20	7.0	8.0		
S	BBWW-h	MT20	6.0	7.0	2.25	4.50
T	BMWWW-h	MT20	5.0	6.0		
U	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UP	IN-SX
U	1386	0	0	5-8
M	1391	0	0	6-8

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
JT	977	662 / 0	0 / 0	0 / 0	0 / 0	315 / 0	0 / 0
U	980	664 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.03FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO						FR-TO			
A-B	-1232 / 0	-70.5	-70.5	0.36 (1)	5.41	T-B	0 / 706	0.16 (1)	
B-C	-752 / 0	-70.5	-70.5	0.17 (1)	6.25	T-C	-752 / 0	1.00 (1)	
C-D	-1300 / 0	-70.5	-70.5	0.19 (1)	5.46	C-S	0 / 404	0.09 (1)	
D-E	-1539 / 0	-70.5	-70.5	0.12 (1)	5.19	S-D	-1806 / 0	0.54 (1)	
E-F	-1431 / 0	-70.5	-70.5	0.36 (1)	5.03	D-R	0 / 1452	0.33 (1)	
F-G	-1431 / 0	-70.5	-70.5	0.36 (1)	5.03	R-E	-59 / 24	0.04 (1)	
G-H	-1430 / 0	-70.5	-70.5	0.36 (1)	5.04	E-Q	-165 / 0	0.22 (1)	
H-I	-1414 / 0	-70.5	-70.5	0.07 (1)	5.43	Q-G	-435 / 0	0.28 (1)	
I-J	-1603 / 0	-70.5	-70.5	0.05 (1)	5.19	G-H	0 / 883	0.20 (1)	
J-K	-1121 / 0	-70.5	-70.5	0.05 (1)	5.84	P-H	0 / 249	0.08 (1)	
U-A	-1249 / 0	0.0	0.0	0.13 (1)	7.19	P-I	-228 / 0	0.08 (1)	
M-K	-1216 / 0	0.0	0.0	0.12 (1)	7.26	O-I	0 / 199	0.04 (1)	
V-U	0 / 0	-88.0	-88.0	0.10 (1)	10.00	O-J	0 / 574	0.13 (1)	
U-T	0 / 0	-17.5	-17.5	0.22 (4)	10.00	N-J	-921 / 0	0.16 (1)	
T-S	0 / 1104	-17.5	-17.5	0.31 (4)	10.00	A-T	0 / 741	0.17 (1)	
S-R	0 / 1868	-17.5	-17.5	0.30 (1)	10.00	N-K	0 / 718	0.16 (1)	
R-Q	0 / 1540	-17.5	-17.5	0.31 (1)	10.00				
Q-P	0 / 840	-17.5	-17.5	0.20 (1)	10.00				
P-O	0 / 968	-17.5	-17.5	0.20 (1)	10.00				
O-N	0 / 888	-17.5	-17.5	0.15 (1)	10.00				
N-M	0 / 0	-17.5	-17.5	0.10 (1)	10.00				
M-L	0 / 0	-88.0	-88.0	0.10 (1)	10.00				

TOTAL WEIGHT = 148 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

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 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
 ALLOWABLE DEFL.(TL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

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

CSI: TC=0.36 (G-H:1), BC=0.31 (Q-R:1),
 WB=1.00 (C-T:1), SSI=0.18 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 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

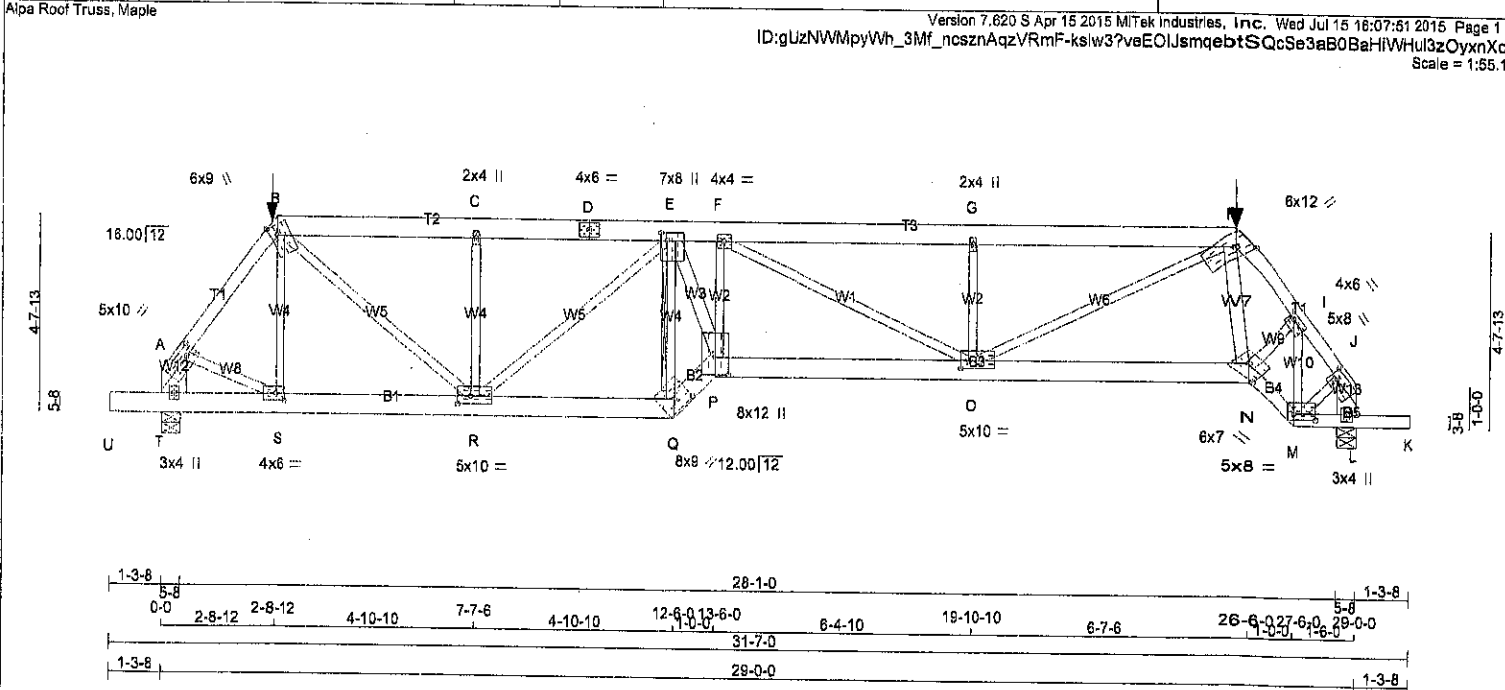
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.78 (D) (INPUT = 0.90)
 JSI METAL=0.35 (B) (INPUT = 1.00)

A-N073691



A-15073690



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY No.2	SPF
B - D	2x6	DRY No.2	SPF
D - H	2x6	DRY No.2	SPF
H - J	2x4	DRY No.2	SPF
T - A	2x8	DRY No.2	SPF
L - J	2x6	DRY No.2	SPF
U - Q	2x6	DRY No.2	SPF
Q - P	2x6	DRY No.2	SPF
P - N	2x6	DRY 1650F 1.5E	SPF
N - M	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
ALL WEBS EXCEPT E - P	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	10.0	2.25	2.75
B	TTWW+m	MT20	6.0	9.0	2.75	1.75
C	TMW+w	MT20	2.0	4.0		
D	TS-t	MT20	4.0	6.0		
E	TMVW+t	MT20	7.0	8.0	2.25	2.00
F	TMVW-t	MT20	4.0	4.0		
G	TMW+w	MT20	2.0	4.0		
H	TTWW+h	MT20	6.0	12.0	3.25	2.50
I	TMVW-t	MT20	4.0	6.0	1.50	1.75
J	TMVW-t	MT20	5.0	8.0	2.25	2.00
L	BMV1+p	MT20	3.0	4.0		
M	BBWW-t	MT20	5.0	8.0	1.75	6.25
N	BBWW-h	MT20	6.0	7.0	3.25	4.25
O	BMVW-t	MT20	5.0	10.0	2.25	2.25
P	BBWW+p	MT20	8.0	12.0	5.00	4.00
Q	BBWW-h	MT20	8.0	9.0	3.25	4.50
R	BMVW-t	MT20	5.0	10.0	2.25	4.00
S	BMVW-t	MT20	4.0	6.0	2.00	2.75
T	BMV1+p	MT20	3.0	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
T	2563	0	2563	0	0	5-8	2-12
L	2739	0	2739	0	0	5-8	3-3

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1821	1228 / 0	0 / 0	0 / 0	0 / 0	592 / 0	0 / 0
L	1925	1332 / 0	0 / 0	0 / 0	0 / 0	593 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.40FT.

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

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-Q

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				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	-2574 / 0	-70.5 -70.5	0.21 (1)	4.11	S-B	-105 / 74	0.03 (1)
B-C	-3457 / 0	-138.7 -138.7	0.30 (1)	4.30	B-R	0 / 2525	0.62 (1)
C-D	-3457 / 0	-138.7 -138.7	0.29 (1)	4.30	R-C	-748 / 0	0.22 (1)
D-E	-3457 / 0	-138.7 -138.7	0.29 (1)	4.30	R-E	-1223 / 0	0.86 (1)
E-F	-5605 / 0	-138.7 -138.7	0.33 (1)	3.40	Q-E	-4123 / 0	0.80 (1)
F-G	-6158 / 0	-70.5 -70.5	0.43 (1)	3.52	E-P	0 / 4622	0.62 (1)
G-H	-6158 / 0	-70.5 -70.5	0.41 (1)	3.54	P-F	0 / 240	0.06 (1)
H-I	-3347 / 0	-70.5 -70.5	0.21 (1)	3.64	F-O	-716 / 0	0.87 (1)
I-J	-2292 / 0	-70.5 -70.5	0.14 (1)	4.36	O-G	-518 / 0	0.11 (1)
T-A	-2453 / 0	0.0 0.0	0.13 (1)	7.31	O-H	0 / 3562	0.88 (1)
L-J	-2436 / 0	0.0 0.0	0.17 (1)	6.58	H-N	0 / 698	0.17 (1)
					N-I	0 / 1203	0.30 (1)
U-T	0 / 0	-88.0 -88.0	0.05 (1)	10.00	M-I	-1669 / 0	0.34 (1)
T-S	0 / 0	-34.5 -34.5	0.07 (1)	10.00	A-S	0 / 1571	0.39 (1)
S-R	0 / 1540	-34.5 -34.5	0.27 (1)	10.00	M-J	0 / 1463	0.36 (1)
R-Q	0 / 4378	-34.5 -34.5	0.66 (1)	10.00			
Q-P	0 / 6044	-34.5 -34.5	0.79 (1)	10.00			
P-O	0 / 5796	-102.7 -102.7	0.87 (1)	10.00			
O-N	0 / 1871	-102.7 -102.7	0.36 (1)	10.00			
N-M	0 / 1849	-66.7 -66.7	0.34 (1)	10.00			
M-L	-2 / 0	-66.7 -66.7	0.17 (1)	10.00			
L-K	0 / 0	-137.2 -137.2	0.17 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
B	2-8-12	-140	-140	FRONT	VERT	TOTAL
H	26-3-4	-139	-139	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

SIDE 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 13-6-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CSldGirder

START DISTANCE = 13-6-0

START SPAN CARRIED = 5-10-8

END DISTANCE = 26-6-0

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.

*** 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 066-09

- 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 (0.97")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.28")

ALLOWABLE DEFL.(TL)= L/360 (0.97")

CALCULATED VERT. DEFL.(TL)= L/ 673 (0.52")

CANTILEVER DEFLECTION:

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

CALCULATED VERT. DEFL.(LL)= L/ 742 (0.02")

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

CALCULATED VERT. DEFL.(TL)= L/ 742 (0.02")

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CONTINUED ON PAGE 2



HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 140.2 lbs FACTORED DOWN AT 2-8-12, AND 138.7 lbs FACTORED DOWN AT 26-3-4 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.

CALCULATED VERT. DEFL.(TL) = L/397 (0.04")

CSI: TC=0.43 (F-G:1), BC=0.79 (P-Q:1),
WB=0.88 (H-O:1), SSI=0.26 (N-O: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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.90 (E) (INPUT = 0.90)

JSI METAL= 0.72 (P) (INPUT = 1.00)



A-15073689(2)

253442

H12G

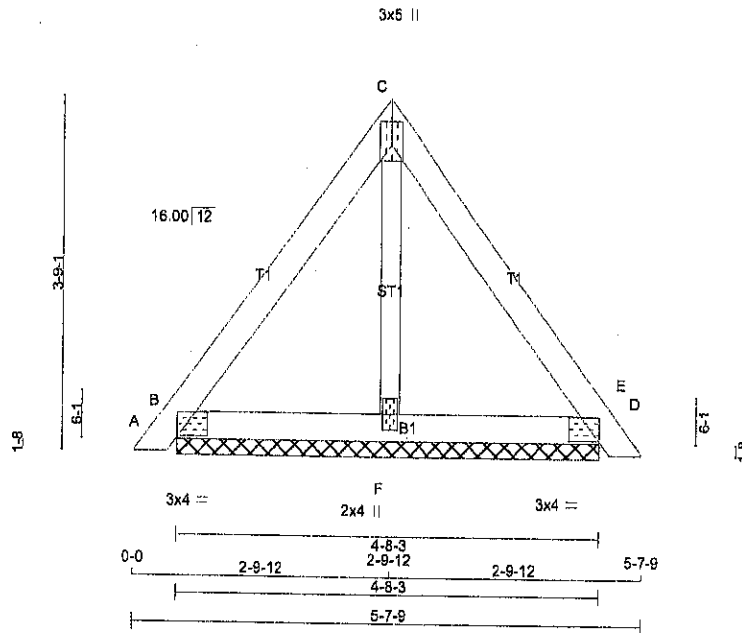
QUANTITY

PLY

JOB DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 15:04:52 2015 Page 1
ID: gUzNWmPyWh_3Mf_ncsznAqzVRmF-trSJxqADBHBW_ORLj9EyXdLurRxfMjHISqbrxyxoSi
Scale = 1:24.7**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
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2'-0" O.C.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-l	MT20	3.0	4.0	1.50	2.75
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMB1-l	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 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**

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.26FT.

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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRACED LENGTH (LC)	MAX (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0/9	-70.5	-70.5	0.01 (1)	10.00	F-C	-74/0
B-C	-58/0	-70.5	-70.5	0.07 (1)	6.25		
C-D	-58/0	-70.5	-70.5	0.07 (1)	6.25		
D-E	0/9	-70.5	-70.5	0.01 (1)	10.00		
B-F	0/33	-17.5	-17.5	0.03 (4)	10.00		
F-D	0/33	-17.5	-17.5	0.03 (4)	10.00		

TOTAL WEIGHT = 16 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 9 OF OBC 2012, BCBC 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

CSI: TC=0.07 (C-D:1), BC=0.03 (B-F:4), WB=0.01
(C-F:1), SSI=0.04 (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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

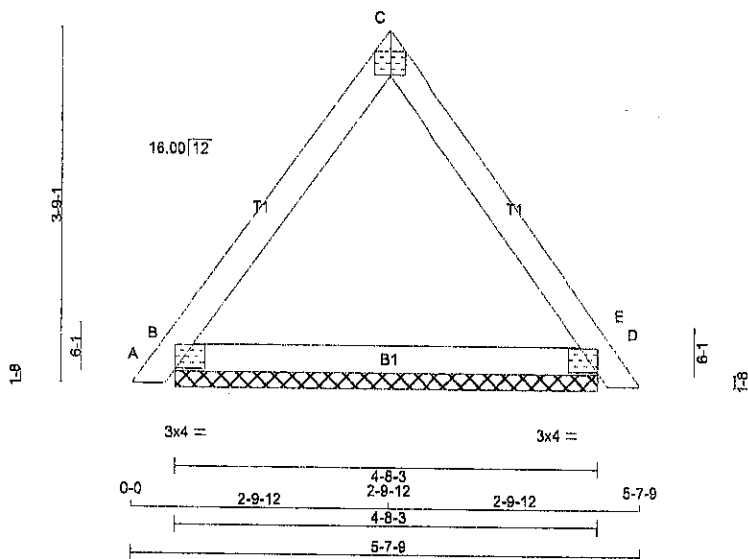
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.28 (D) (INPUT = 0.90)

JSI METAL= 0.04 (D) (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 - E	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB-1	MT20	3.0	4.0	1.50	2.75
C	TT-p	MT20	3.0	4.0	3.25	Edge
D	TMB-1	MT20	3.0	4.0	1.50	2.75

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		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
B	231	0	231	0	0	4-8-3	1-8	1-8	1-8
D	231	0	231	0	0	4-8-3	1-8	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	162	113/0	0/0	0/0	0/0	49/0	0/0
D	162	113/0	0/0	0/0	0/0	49/0	0/0

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

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)	FACTORED LC1 MAX (LC)	MAX UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRAC LENGTH FR-TO
A-B	0 / 9	-70.5	-70.5 0.01 (1)	10.00	A-B	0 / 9	-70.5
B-C	-102 / 0	-70.5	-70.5 0.07 (1)	6.25	B-C	-102 / 0	-70.5
C-D	-102 / 0	-70.5	-70.5 0.07 (1)	6.25	C-D	-102 / 0	-70.5
D-E	0 / 9	-70.5	-70.5 0.01 (1)	10.00	D-E	0 / 9	-70.5
B-D	0 / 60	-17.5	-17.5 0.11 (4)	10.00	B-D	0 / 60	-17.5

TOTAL WEIGHT = 4 X 16 = 64 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	21.0	PSF
	OL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	OL	=	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

CSI: TC=0.07 (C-D:1), BC=0.11 (B-D:4), WB=0.00 (n/a:0), SSI=0.06 (B-D:4)

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 MIN
MT20	618	354	1667 822 2284 1656

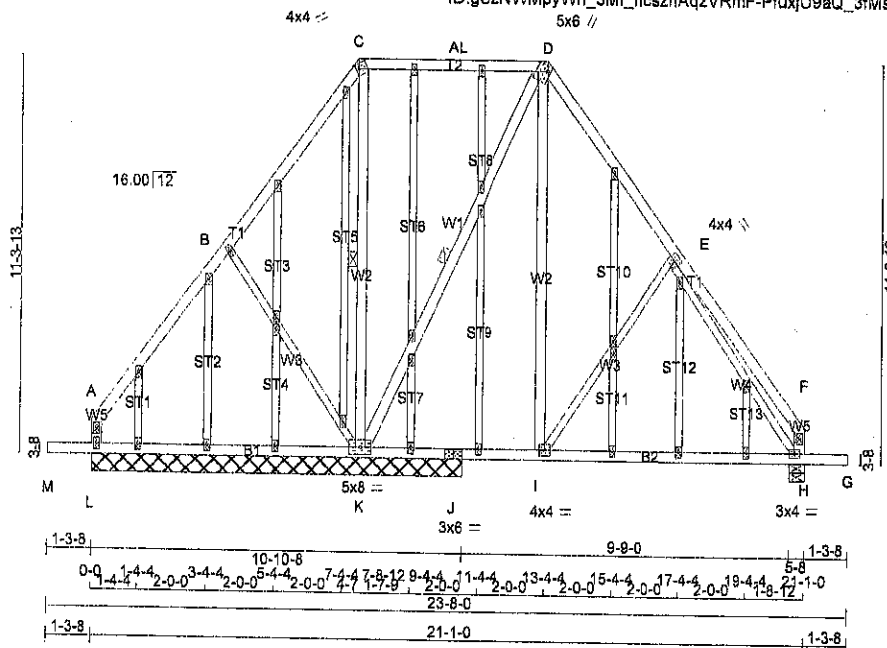
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.36 (D) (INPUT = 0.90)
JSI METAL= 0.05 (D) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	No.2
A - C	2x4	DRY	No.2	
C - D	2x4	DRY	No.2	
D - F	2x4	DRY	No.2	
H - F	2x4	DRY	No.2	
L - A	2x4	DRY	No.2	
M - J	2x4	DRY	No.2	
J - G	2x4	DRY	No.2	

ALL WEBS	2x4	DRY	No.2	SPF
EXCEPT				
B - K	2x3	DRY	No.2	SPF
I - E	2x3	DRY	No.2	SPF
E - H	2x3	DRY	No.2	SPF

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

GABLE STUDS SPACED AT 2'-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMW+w	MT20	2.0	4.0		
C	TTW-m	MT20	4.0	4.0	1.75	1.00
D	TTWW+m	MT20	5.0	6.0	1.75	1.00
E	TMWW-l	MT20	4.0	4.0		
F	TMV+p	MT20	2.0	4.0		
H	BMVW-l	MT20	3.0	4.0		
I	BMWW-l	MT20	4.0	4.0		
J	BS-l	MT20	3.0	6.0		
K	BMVW-l	MT20	5.0	8.0		
L	BMV-l+p	MT20	2.0	4.0		
N	O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK					
N	NP+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT 8RG	REQD 8RG
K	1260 0	1260 0	10-10-8 (10-7-8)	1-8
H	592 0	592 0	10-10-8 (10-7-8)	1-8
L	273 0	273 0	10-10-8 (10-7-8)	1-8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
K	896	610 / 0	0 / 0	276 / 0	0 / 0
H	419	289 / 0	0 / 0	160 / 0	0 / 0
L	195	115 / 0	0 / 0	80 / 0	0 / 0

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

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.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-K, D-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (CSI (LC))	UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (CSI (LC))
FR-TO						FR-TO			
A-B	0 / 27	-70.5	-70.5	0.18 (1)	10.00	B-K	-213 / 0	0.20 (1)	
B-C	0 / 178	-70.5	-70.5	0.21 (1)	10.00	K-C	-487 / 0	0.33 (1)	
C-AL	0 / 129	-78.0	-78.0	0.44 (1)	10.00	K-D	-524 / 0	0.46 (1)	
AL-D	0 / 129	-78.0	-78.0	0.44 (1)	10.00	D-E	0 / 280	0.04 (1)	
D-E	-196 / 0	-70.5	-70.5	0.18 (1)	6.25	E-F	-191 / 0	0.18 (1)	
E-F	0 / 27	-70.5	-70.5	0.18 (1)	10.00	F-G	-383 / 0	0.34 (1)	
F-G	-101 / 0	0.0	0.0	0.01 (1)	7.81				
G-H	-102 / 0	0.0	0.0	0.01 (1)	7.81				
M-L	0 / 0	-88.0	-88.0	0.10 (1)	10.00				
L-K	0 / 0	-17.5	-17.5	0.22 (4)	10.00				
K-J	0 / 105	-17.5	-17.5	0.22 (4)	10.00				
J-I	0 / 105	-17.5	-17.5	0.22 (4)	10.00				
I-H	0 / 213	-17.5	-17.5	0.24 (4)	10.00				
H-G	0 / 0	-88.0	-88.0	0.10 (1)	10.00				

TOTAL WEIGHT = 168 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. G/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.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.44")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.44")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")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=0.44 (C-D:1), BC=0.24 (H-I:4), WB=0.46 (D-K:1), SSI=0.17 (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 922 2294 1656

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.75 (H) (INPUT = 0.90)
JSI METAL= 0.17 (E) (INPUT = 1.00)

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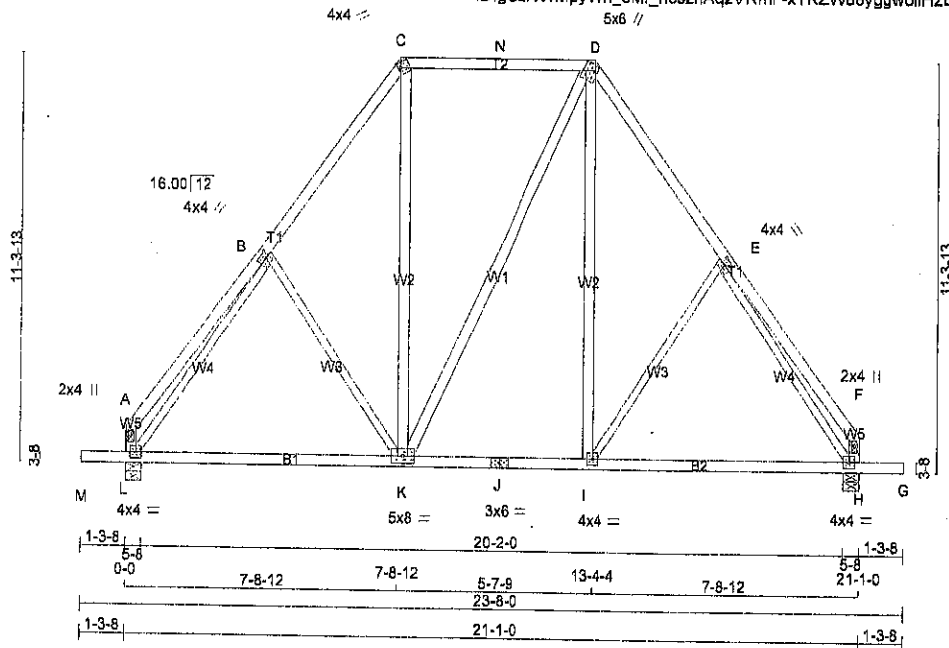


Alpa Roof Truss, Maple

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Scale: 3/16"=1'



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
D - F	2x4	DRY	No.2
L - A	2x4	DRY	No.2
H - F	2x4	DRY	No.2
M - J	2x4	DRY	No.2
J - G	2x4	DRY	No.2
ALL WEBS	2x4	DRY	No.2
EXCEPT			
B - K	2x3	DRY	No.2
I - E	2x3	DRY	No.2
L - B	2x3	DRY	No.2
E - H	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	TMWW-I	MT20	4.0	4.0	2.00	1.25
C	TTW-m	MT20	4.0	4.0	1.75	1.00
D	TTWW+m	MT20	5.0	6.0	1.75	1.00
E	TMWW-I	MT20	4.0	4.0	2.00	1.25
F	TMV+p	MT20	2.0	4.0		
H	BMVW-I	MT20	4.0	4.0		
I	BMWW-I	MT20	4.0	4.0		
J	BS-I	MT20	3.0	6.0		
K	BMWW-I	MT20	5.0	8.0		
L	BMVW-I	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		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
L	1062	0	1062	0	0	5-8	1-8	
H	1062	0	1062	0	0	5-8	1-8	

UNFACTORED REACTIONS

JT	1ST LC CASE COMBINED		MAX / MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
L	750	497 / 0	0 / 0	0 / 0	0 / 0	254 / 0	0 / 0
H	750	497 / 0	0 / 0	0 / 0	0 / 0	254 / 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 = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.0 FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 26	-70.5	-70.5 0.17 (1)	10.00	B-K	-160 / 0	0.15 (1)
B-C	-751 / 0	-70.5	-70.5 0.14 (1)	6.25	K-C	0 / 257	0.04 (1)
C-N	-437 / 0	-78.0	-78.0 0.42 (1)	6.25	K-D	0 / 0	0.00 (1)
N-D	-437 / 0	-78.0	-78.0 0.42 (1)	6.25	D-E	0 / 258	0.04 (1)
D-E	-751 / 0	-70.5	-70.5 0.14 (1)	6.25	E-F	-160 / 0	0.15 (1)
E-F	0 / 26	-70.5	-70.5 0.17 (1)	10.00	L-B	-948 / 0	0.83 (1)
L-A	-102 / 0	0.0	0.0 0.01 (1)	7.81	E-H	-947 / 0	0.83 (1)
H-F	-102 / 0	0.0	0.0 0.01 (1)	7.81			
M-L	0 / 0	-88.0	-88.0 0.10 (1)	10.00			
L-K	0 / 526	-17.5	-17.5 0.26 (4)	10.00			
K-J	0 / 436	-17.5	-17.5 0.24 (4)	10.00			
J-I	0 / 436	-17.5	-17.5 0.24 (4)	10.00			
I-H	0 / 526	-17.5	-17.5 0.26 (4)	10.00			
H-G	0 / 0	-88.0	-88.0 0.10 (1)	10.00			

TOTAL WEIGHT = 4 X 125 = 499 lb (MIF)

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 (0.70")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.70")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

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=0.42 (C-D:1), BC=0.26 (H-I:4), WB=0.83 (B-L:1), SSI=0.17 (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 = 0.60

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	MAX MIN
MT20	618	354	1667 822 2284 1856

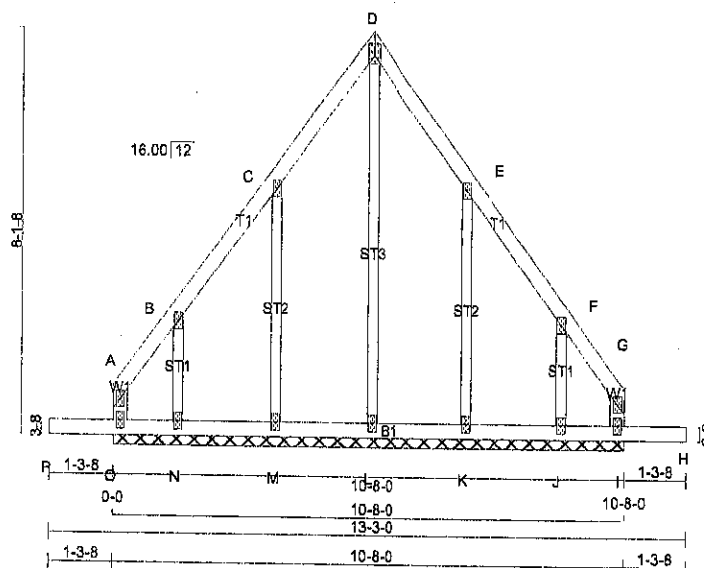
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (D) (INPUT = 0.80)
JSI METAL= 0.37 (B) (INPUT = 1.00)



A-11073685



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

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

GABLE STUDS SPACED AT 2'-0" OC.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TWV+p	MT20	2.0	4.0	
B, C, E, F					
B	TWV+w	MT20	2.0	4.0	
D	TTW+p	MT20	3.0	5.0	2.00 Edge
G	TWV+p	MT20	2.0	4.0	
I	BWV1+p	MT20	2.0	4.0	
J, K, L, M, N					
J	BWV1+w	MT20	2.0	4.0	
O	BWV1+p	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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25FT.
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	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO			
O-A	-71/0	0.0	0.0	0.03 (1)	7.91	L-D	-129/0	0.15 (1)
A-B	-31/0	-70.5	-70.5	0.03 (1)	6.25	M-C	-148/0	0.06 (1)
B-C	-12/4	-70.5	-70.5	0.04 (1)	6.25	N-B	-93/0	0.02 (1)
C-D	-12/4	-70.5	-70.5	0.04 (1)	6.25	K-E	-148/0	0.06 (1)
D-E	-12/4	-70.5	-70.5	0.04 (1)	6.25	J-F	-93/0	0.02 (1)
E-F	-12/4	-70.5	-70.5	0.04 (1)	6.25			
F-G	-31/0	-70.5	-70.5	0.03 (1)	6.25			
I-G	-71/0	0.0	0.0	0.03 (1)	7.91			
P-O	0/0	-88.0	-88.0	0.10 (1)	10.00			
O-N	-1/15	-17.5	-17.5	0.08 (1)	10.00			
N-M	-2/10	-17.5	-17.5	0.02 (4)	10.00			
M-L	-2/7	-17.5	-17.5	0.02 (4)	10.00			
L-K	-2/7	-17.5	-17.5	0.02 (4)	10.00			
K-J	-2/10	-17.5	-17.5	0.02 (4)	10.00			
J-I	-1/15	-17.5	-17.5	0.08 (1)	10.00			
I-H	0/0	-88.0	-88.0	0.10 (1)	10.00			

TOTAL WEIGHT = 55 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

DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.04 (C-D:1), BC=0.10 (O-P:1),
WB=0.15 (D-L:1), SSI=0.09 (O-P: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)	(PSI)	(PLI)	(PSI)	(PLI)
MT20	618	354	1667	822	2284	1656

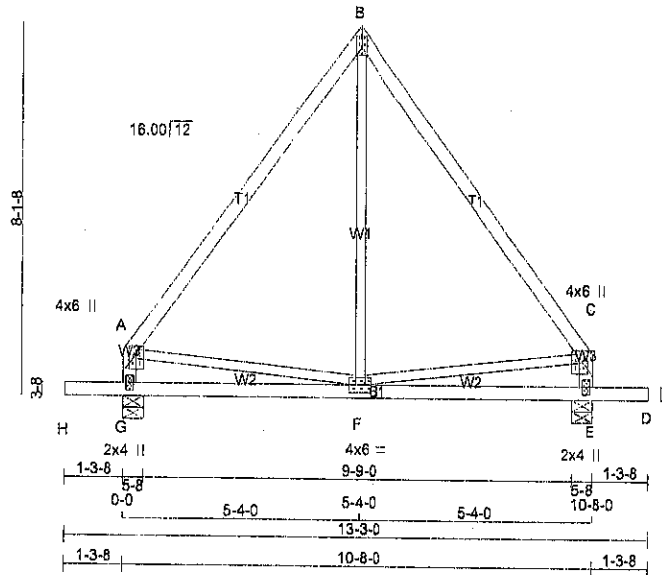
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (C) (INPUT = 0.90)
JSI METAL= 0.04 (C) (INPUT = 1.00)



A-15073684



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

DRY; SEASONED LUMBER.

PLATES (tablets in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW+p	MT20	4.0	6.0	2.00	2.00
B	TIW+p	MT20	3.0	5.0	2.00	Edge
C	TMVW+p	MT20	4.0	6.0	2.00	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	583	0	583	0	0	5-8	1-8
E	583	0	583	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	411	278 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0
E	411	278 / 0	0 / 0	0 / 0	0 / 0	133 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 CSI (LC)	MAX UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
A-B	-282 / 0	-70.5	-70.5	0.26 (1)	6.25	F-B	0 / 116	0.04 (4)	
B-C	-282 / 0	-70.5	-70.5	0.26 (1)	6.25	A-F	0 / 170	0.04 (1)	
G-A	-433 / 0	0.0	0.0	0.04 (1)	7.81	F-C	0 / 170	0.04 (1)	
E-C	-433 / 0	0.0	0.0	0.04 (1)	7.81				
H-G	0 / 0	-88.0	-88.0	0.10 (1)	10.00				
G-F	0 / 0	-17.5	-17.5	0.14 (4)	10.00				
F-E	0 / 0	-17.5	-17.5	0.14 (4)	10.00				
E-D	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

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)= $L/360$ (0.36")

CALCULATED VERT. DEFL.(LL) = $L/989$ (0.00")

ALLOWABLE DEFL.(TL) = $L/360$ (0.36")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL) = $L/120$ (0.19")
 CALCULATED VERT. DEFL.(LL) = $L/998$ (0.00")
 ALLOWABLE DEFL.(TL) = $L/120$ (0.19")
 CALCULATED VERT. DEFL.(TL) = $L/998$ (0.01")

CSI: TC=0.26 (B-C:1), BC=0.14 (F-G:4),
WB=0.04 (B-F:4), SSI=0.09 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)	(PSI)	(PLI)	(PLI)	(PLI)	(PLI)
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1856

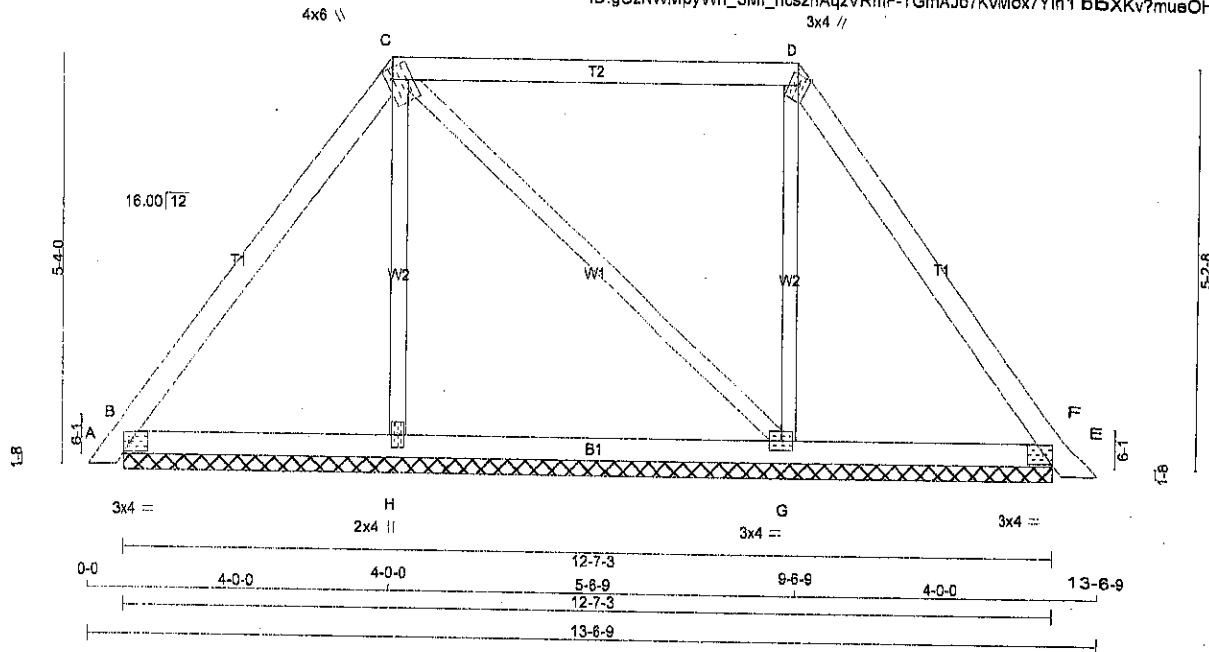
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.09 (C) (INPUT = 1.00)



A-ND73683

**LUMBER**

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
B - 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	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTWW+m	MT20	4.0	6.0	1.75	1.00
D	TTW+m	MT20	3.0	4.0	Edge	
E	TMB1-I	MT20	3.0	4.0	1.50	2.75
G	BMWW1-t	MT20	3.0	4.0		
H	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	REQD BRG
	VERT	DOWN	IN-SX	IN-SX
B	290	0	12-7-3	1-8
E	255	0	12-7-3	1-8
H	286	0	12-7-3	1-8
G	348	0	12-7-3	1-8

UNFACTORED REACTIONS

JT	1ST CASE COMBINED	MAX MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	200	160 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0	0 / 0
E	176	139 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0	0 / 0
H	191	105 / 0	0 / 0	0 / 0	0 / 0	86 / 0	0 / 0	0 / 0
G	247	154 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1	MAX UNBRACED LENGTH	
FR-TO					FR-TO				
A-B	0 / 9	-70.5	-70.5	0.01 (1)	10.00	H-C	-177 / 0	0.07 (1)	
B-C	-147 / 0	-70.5	-70.5	0.15 (1)	6.25	C-G	-36 / 0	0.04 (1)	
C-D	-56 / 0	-70.5	-70.5	0.37 (1)	6.25	G-D	-235 / 0	0.09 (1)	
D-E	-104 / 0	-70.5	-70.5	0.15 (1)	6.25				
E-F	0 / 9	-70.5	-70.5	0.01 (1)	10.00				
B-H	0 / 86	-17.5	-17.5	0.09 (4)	10.00				
H-G	0 / 83	-17.5	-17.5	0.09 (4)	10.00				
G-E	0 / 61	-17.5	-17.5	0.09 (4)	10.00				

TOTAL WEIGHT = 2 X 49 = 98 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, CBC 2012, ABC 2014
- CSA 088-09
- 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

CSI: TC=0.37 (C-D:1), BC=0.09 (B-H:4), WB=0.09 (D-G:1), SSI=0.15 (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 1666

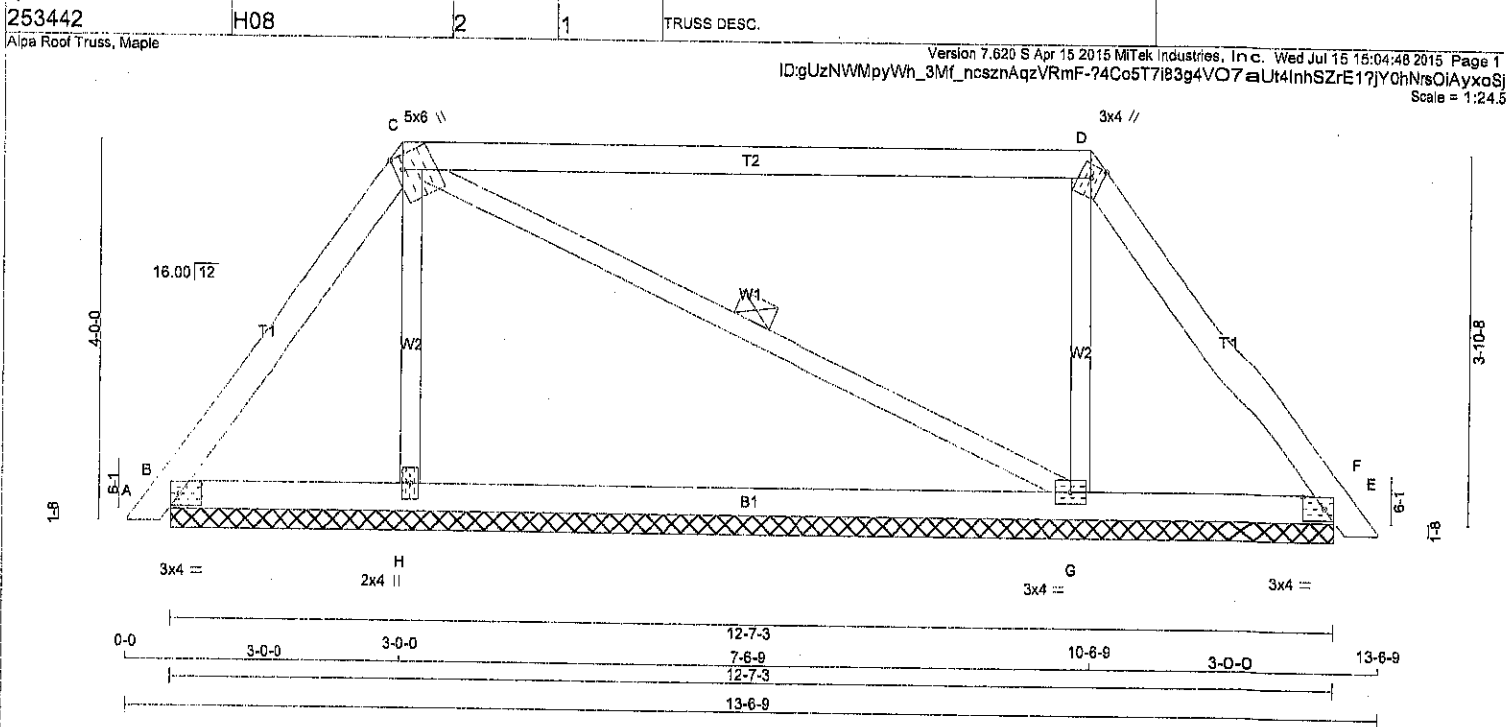
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.51 (B) (INPUT = 0.90)
JSI METAL= 0.08 (B) (INPUT = 1.00)



A-ND73682



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	2100F 1.8E
D - F	2x4	DRY	No.2
B - E	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMB1-I	MT20	3.0	4.0	1.50	2.75
C TTWW+m	MT20	5.0	6.0	1.75	1.00
D TTWW+m	MT20	3.0	4.0	Edge	
E TMB1-I	MT20	3.0	4.0	1.50	2.75
G BMWW1-I	MT20	3.0	4.0		
H 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	REORD BRG
	VERT	HORZ	DOWN	HORZ		
B	230	0	230	0	12-7-3	1-8
E	209	0	209	0	12-7-3	1-8
H	341	0	341	0	12-7-3	1-8
G	377	0	377	0	12-7-3	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	157	138 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
E	142	126 / 0	0 / 0	0 / 0	0 / 0	16 / 0	0 / 0
H	246	136 / 0	0 / 0	0 / 0	0 / 0	109 / 0	0 / 0
G	270	168 / 0	0 / 0	0 / 0	0 / 0	112 / 0	0 / 0

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

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-G.

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)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 8	-70.5 -70.5	0.01 (1)	H-C	-228 / 0	0.05 (1)	
B-C	-146 / 0	-70.5 -70.5	0.08 (1)	C-G	-17 / 0	0.01 (1)	
C-D	-82 / 0	-70.5 -70.5	0.46 (1)	G-D	-257 / 0	0.06 (1)	
D-E	-120 / 0	-70.5 -70.5	0.08 (1)				
E-F	0 / 8	-70.5 -70.5	0.01 (1)				
B-H	0 / 85	-17.5 -17.5	0.16 (4)				
H-G	0 / 78	-17.5 -17.5	0.16 (4)				
G-E	0 / 70	-17.5 -17.5	0.16 (4)				

TOTAL WEIGHT = 2 X 46 = 92 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

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 6.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.45 (C-D:1), BC=0.16 (B-H:4), WB=0.06 (D-G:1), SSI=0.21 (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 (PSI)	SECTION (PLI)
MT20	618	354
	1667	822
	2284	1656

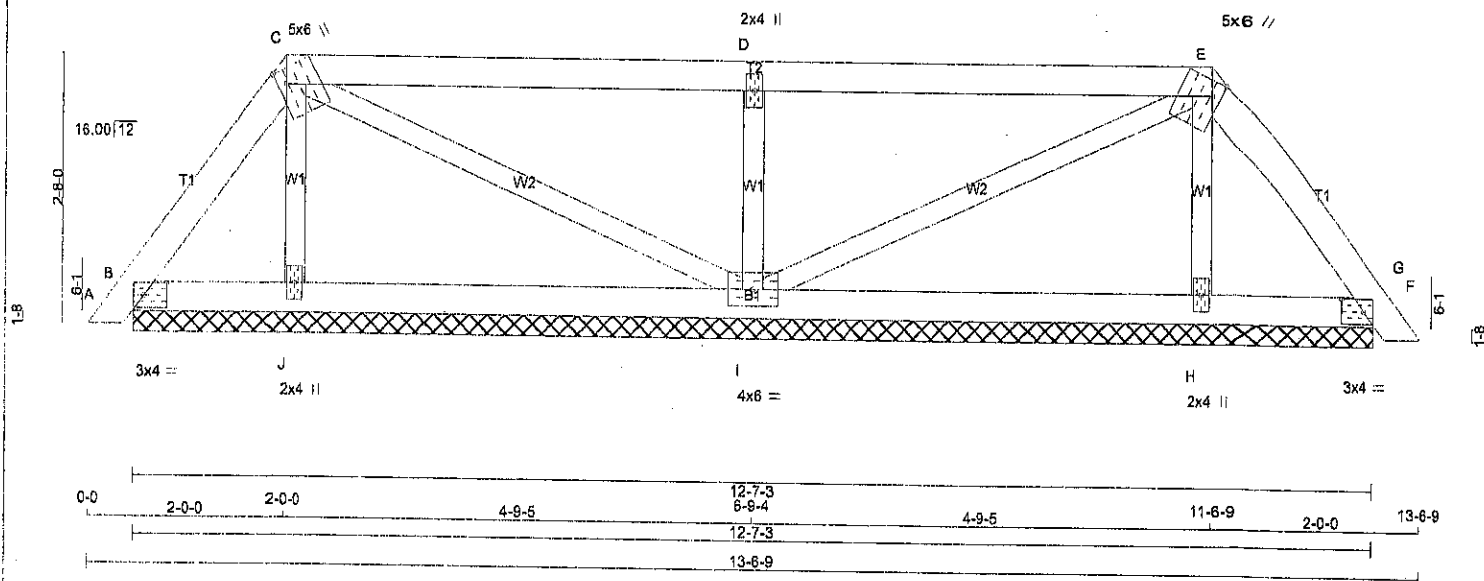
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.64 (D) (INPUT = 0.90)
JSI METAL=0.07 (B) (INPUT = 1.00)



A-H073681



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	SPF
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
B - 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	BMWW1-I	MT20	4.0	6.0	
J	BMW1+w	MT20	2.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
B	130	0	130	0	12-7-3	1-8
F	130	0	130	0	12-7-3	1-8
J	186	0	186	0	12-7-3	1-8
I	527	0	527	0	12-7-3	1-8
H	186	0	186	0	12-7-3	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
B	88	77/0	0/0	0/0	11/0	0/0	
F	88	77/0	0/0	0/0	11/0	0/0	
J	134	71/0	0/0	0/0	64/0	0/0	
I	369	262/0	0/0	0/0	107/0	0/0	
H	134	71/0	0/0	0/0	64/0	0/0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, F, J, I, 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. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0/0	-70.5 -70.5	0.01 (1)	J-C	-119/0	0.02 (1)	
B-C	-62/0	-70.5 -70.5	0.03 (1)	C-I	-24/0	0.01 (1)	
C-D	-8/0	-70.5 -70.5	0.27 (1)	I-D	-420/0	0.07 (1)	
D-E	-8/0	-70.5 -70.5	0.27 (1)	I-E	-24/0	0.01 (1)	
E-F	-62/0	-70.5 -70.5	0.03 (1)	H-E	-119/0	0.02 (1)	
F-G	0/0	-70.5 -70.5	0.01 (1)				
B-J	0/36	-17.5 -17.5	0.08 (4)				
J-I	0/30	-17.5 -17.5	0.09 (4)				
I-H	0/30	-17.5 -17.5	0.09 (4)				
H-F	0/36	-17.5 -17.5	0.06 (4)				

TOTAL WEIGHT = 2 X 46 = 91 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

(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

CSI: TC=0.27 (C-D:1), BC=0.09 (I-J:4), WB=0.07 (D-I:1), SSI=0.16 (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 2264 1666

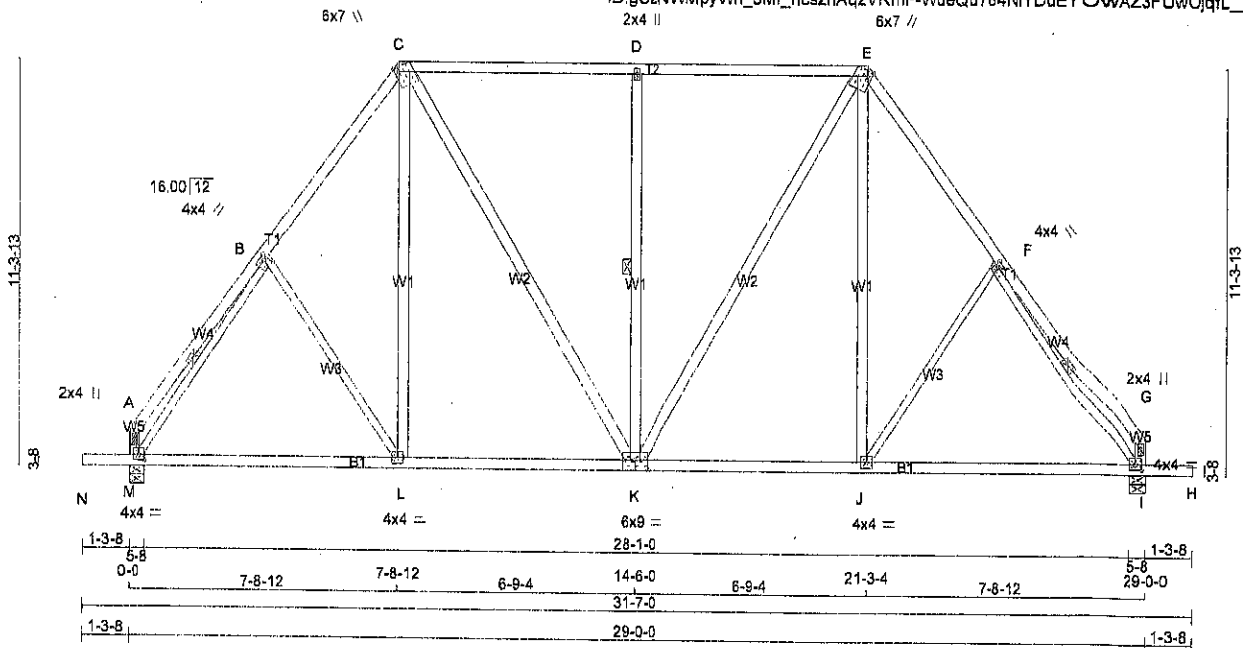
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.24 (B) (INPUT = 0.80)
JSI METAL = 0.08 (D) (INPUT = 1.00)



A-N07 3680



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
M - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - H	2x4	DRY	No.2	SPF
ALL WEBS	2x4	DRY	No.2	SPF
EXCEPT				
B - L	2x3	DRY	No.2	SPF
J - F	2x3	DRY	No.2	SPF
M - B	2x3	DRY	No.2	SPF
F - I	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-I	MT20	4.0	4.0	1.50	1.25
C	TTWW+m	MT20	8.0	7.0	Edge	1.50
D	TMV+w	MT20	2.0	4.0		
E	TTWW+m	MT20	6.0	7.0	Edge	1.50
F	TMWW-I	MT20	4.0	4.0	1.50	1.25
G	TMV+p	MT20	2.0	4.0		
I	BMVW-I	MT20	4.0	4.0	1.75	2.00
J	BMVW-I	MT20	4.0	4.0		
K	BSVWW-I	MT20	6.0	9.0	Edge	4.50
L	BMVW-I	MT20	4.0	4.0		
M	BMVW-I	MT20	4.0	4.0	1.75	2.00

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		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
M	1440	0	1440	0	0	5-8	1-8	
I	1440	0	1440	0	0	5-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
M	1019	863 / 0	0 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
I	1019	863 / 0	0 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.69FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				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	0 / 25	-70.5	-70.5 0.16 (1)	10.00	B-L	-135 / 0	0.13 (1)
B-C	-1200 / 0	-70.5	-70.5 0.16 (1)	5.69	L-C	0 / 259	0.04 (1)
C-D	-933 / 0	-78.0	-78.0 0.48 (1)	5.73	C-K	0 / 436	0.07 (1)
D-E	-933 / 0	-78.0	-78.0 0.48 (1)	5.73	K-D	-644 / 0	0.43 (1)
E-F	-1200 / 0	-70.5	-70.5 0.16 (1)	5.69	K-E	0 / 436	0.07 (1)
F-G	0 / 25	-70.5	-70.5 0.16 (1)	10.00	J-E	0 / 259	0.04 (1)
M-A	-103 / 0	0.0	0.0 0.01 (1)	7.81	J-F	-135 / 0	0.13 (1)
I-G	-103 / 0	0.0	0.0 0.01 (1)	7.81	M-B	-1403 / 0	0.45 (1)
					F-I	-1403 / 0	0.45 (1)
N-M	0 / 0	-88.0	-88.0 0.10 (1)	10.00			
M-L	0 / 779	-17.5	-17.5 0.31 (4)	10.00			
L-K	0 / 704	-17.5	-17.5 0.31 (4)	10.00			
K-J	0 / 704	-17.5	-17.5 0.31 (4)	10.00			
J-I	0 / 779	-17.5	-17.5 0.31 (4)	10.00			
I-H	0 / 0	-88.0	-88.0 0.10 (1)	10.00			

TOTAL WEIGHT = 10 X 170 = 1699 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

(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) = $L/360$ (0.97")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.04")
ALLOWABLE DEFL.(TL) = $L/360$ (0.97")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.12")

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=0.48 (C-D:1), BC=0.31 (J-K:4), WB=0.45 (F-I:1), SSI=0.26 (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 (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	822	2284	1666

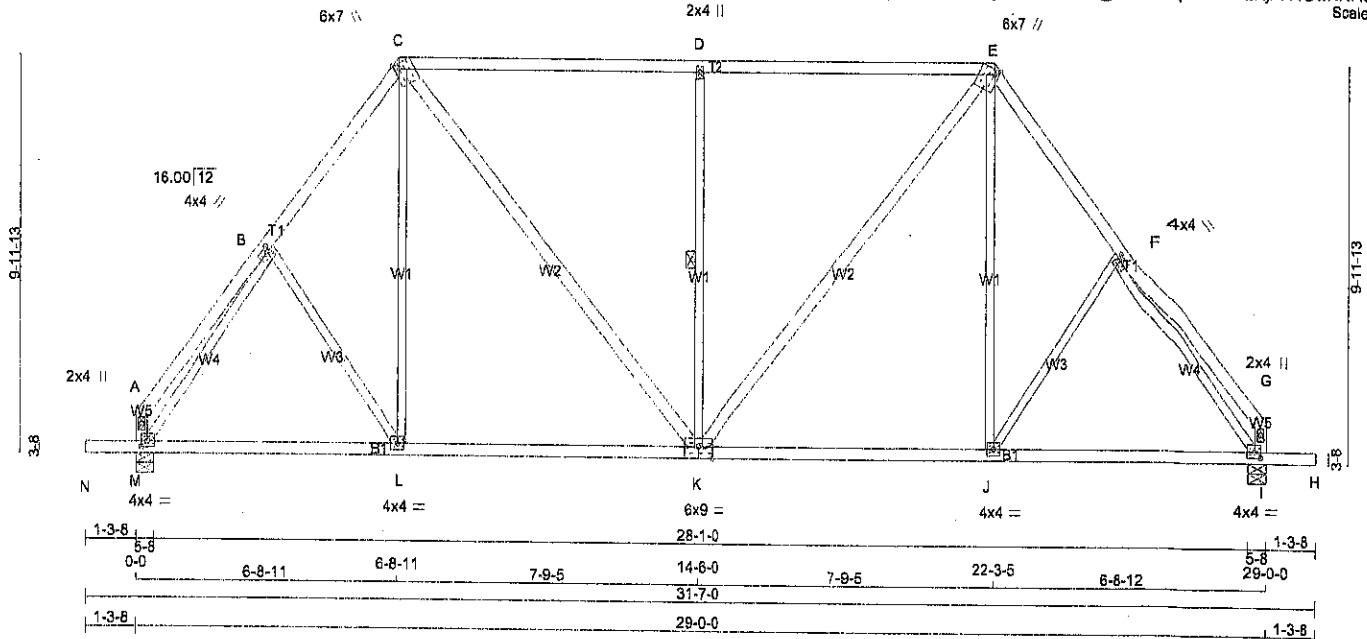
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.89 (1) (INPUT = 0.90)
JSI METAL=0.54 (B) (INPUT = 1.00)



A-15073679

TOTAL WEIGHT = 2 X 151 = 302 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 - G	2x4	DRY	No.2
M - A	2x4	DRY	No.2
I - G	2x4	DRY	No.2
N - K	2x4	DRY	No.2
K - H	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
C - K	2x4	DRY	No.2
K - E	2x4	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	TMWW-I	MT20	4.0	4.0	1.50	1.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	6.0	7.0	Edge	1.50
F	TMWW-I	MT20	4.0	4.0	1.50	1.00
G	TMV+p	MT20	2.0	4.0		
I	BMVW-I	MT20	4.0	4.0	1.75	1.75
J	BMWW-I	MT20	4.0	4.0		
K	BSWWW-I	MT20	6.0	9.0	Edge	4.50
L	BMWW-I	MT20	4.0	4.0		
M	BMVW-I	MT20	4.0	4.0	1.75	1.75

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**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT
M	1389	0	1389	0
I	1389	0	1389	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
M	979	663 / 0	0 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
I	979	663 / 0	0 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		
A-B	0 / 21	-70.5 -70.5	0.12 (1)	10.00	B-L	-98 / 4
B-C	-1179 / 0	-70.5 -70.5	0.12 (1)	5.77	L-C	0 / 222
C-D	-1016 / 0	-70.5 -70.5	0.59 (1)	5.33	C-K	0 / 516
D-E	-1016 / 0	-70.5 -70.5	0.59 (1)	5.33	K-D	-670 / 0
E-F	-1179 / 0	-70.5 -70.5	0.12 (1)	5.77	K-E	0 / 516
F-G	0 / 21	-70.5 -70.5	0.12 (1)	10.00	J-E	0 / 222
M-A	-91 / 0	0.0 0.0	0.01 (1)	7.81	J-F	-98 / 4
I-G	-91 / 0	0.0 0.0	0.01 (1)	7.81	M-B	-1361 / 0
					F-I	-1361 / 0
N-M	0 / 0	-88.0 -88.0	0.10 (1)	10.00		
M-L	0 / 747	-17.5 -17.5	0.27 (4)	10.00		
L-K	0 / 693	-17.5 -17.5	0.27 (4)	10.00		
K-J	0 / 693	-17.5 -17.5	0.27 (4)	10.00		
J-I	0 / 747	-17.5 -17.5	0.27 (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 D86-09
- TPIC 2011(66 % 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

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=0.59 (C-D:1), BC=0.27 (J-K:4), WB=0.86 (B-M:1), SSI=0.27 (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 613 354 1667 622 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (C) (INPUT = 0.90)
JSI METAL= 0.52 (F) (INPUT = 1.00)

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H04

QUANTITY
2PLY
1JOB DESC.
TRUSS DESC.

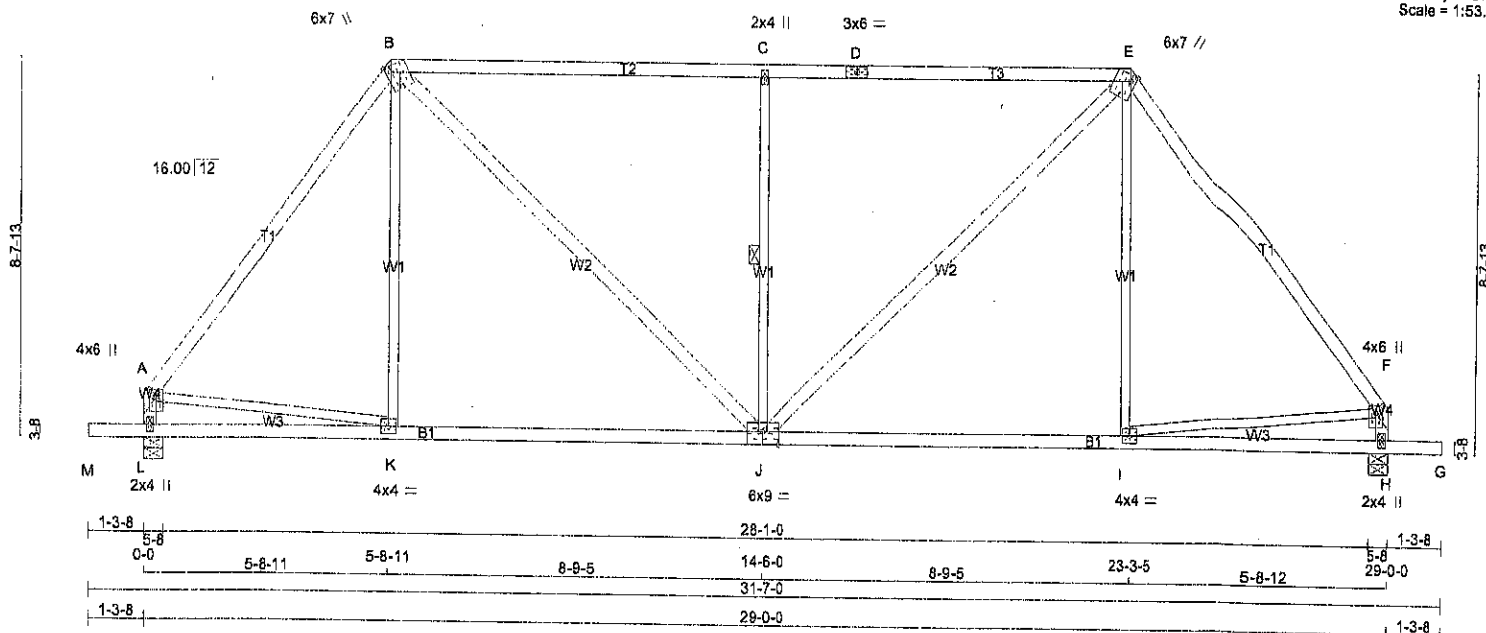
DRWG NO.

Alpa Roof Truss, Maple

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ID:GuzNWMpyWh_3Mf_ncsznAqzVRmF-aVXgTR4qR8WaxP?oIXba3qxc0zXW6YFhtek5ryxoSr

Scale = 1:53.0



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	1650F 1.5E	SPF
D - E	2x4	DRY	1650F 1.5E	SPF
E - F	2x4	DRY	No.2	SPF
L - A	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - G	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
B - J	2x4	DRY	No.2	SPF
J - E	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+m	MT20	6.0	7.0	Edge	1.50
C	TMVW+w	MT20	2.0	4.0		
D	TS4	MT20	3.0	6.0		
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-I	MT20	4.0	4.0		
J	BSWWW-I	MT20	6.0	9.0	Edge	4.50
K	BSWWW-I	MT20	4.0	4.0		
L	BMV1+p	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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	RECORD
JT	VERT	HORZ	DOWN	HORZ
L	1389	0	1389	0
H	1389	0	1389	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
L	879	863 / 0	0 / 0
H	879	863 / 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 = 4.79FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO					FR-TO			
A-B	-1199 / 0	-70.5	-70.5	0.57 (1)	5.24	K-B	0 / 131	0.05 (4)
B-C	-1199 / 0	-70.5	-70.5	0.90 (1)	4.78	B-J	0 / 664	0.11 (1)
C-D	-1200 / 0	-70.5	-70.5	0.90 (1)	4.78	J-C	-756 / 0	0.36 (1)
D-E	-1200 / 0	-70.5	-70.5	0.90 (1)	4.78	J-E	0 / 664	0.11 (1)
E-F	-1199 / 0	-70.5	-70.5	0.57 (1)	5.24	I-E	0 / 131	0.05 (4)
L-A	-1240 / 0	0.0	0.0	0.12 (1)	7.21	A-K	0 / 720	0.16 (1)
H-F	-1240 / 0	0.0	0.0	0.12 (1)	7.21	I-F	0 / 720	0.16 (1)
M-L	0 / 0	-88.0	-88.0	0.10 (1)	10.00			
L-K	0 / 0	-17.5	-17.5	0.21 (4)	10.00			
K-J	0 / 717	-17.5	-17.5	0.33 (4)	10.00			
J-I	0 / 717	-17.5	-17.5	0.33 (4)	10.00			
I-H	0 / 0	-17.5	-17.5	0.21 (4)	10.00			
H-G	0 / 0	-88.0	-88.0	0.10 (1)	10.00			

TOTAL WEIGHT = 2 X 135 = 271 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, 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

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=0.90 (C-E:1), BC=0.33 (I-J:4), WB=0.36 (C-J:1), SSI=0.30 (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 = 0.60

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (I) (INPUT = 0.90)
JSI METAL = 0.27 (F) (INPUT = 1.00)

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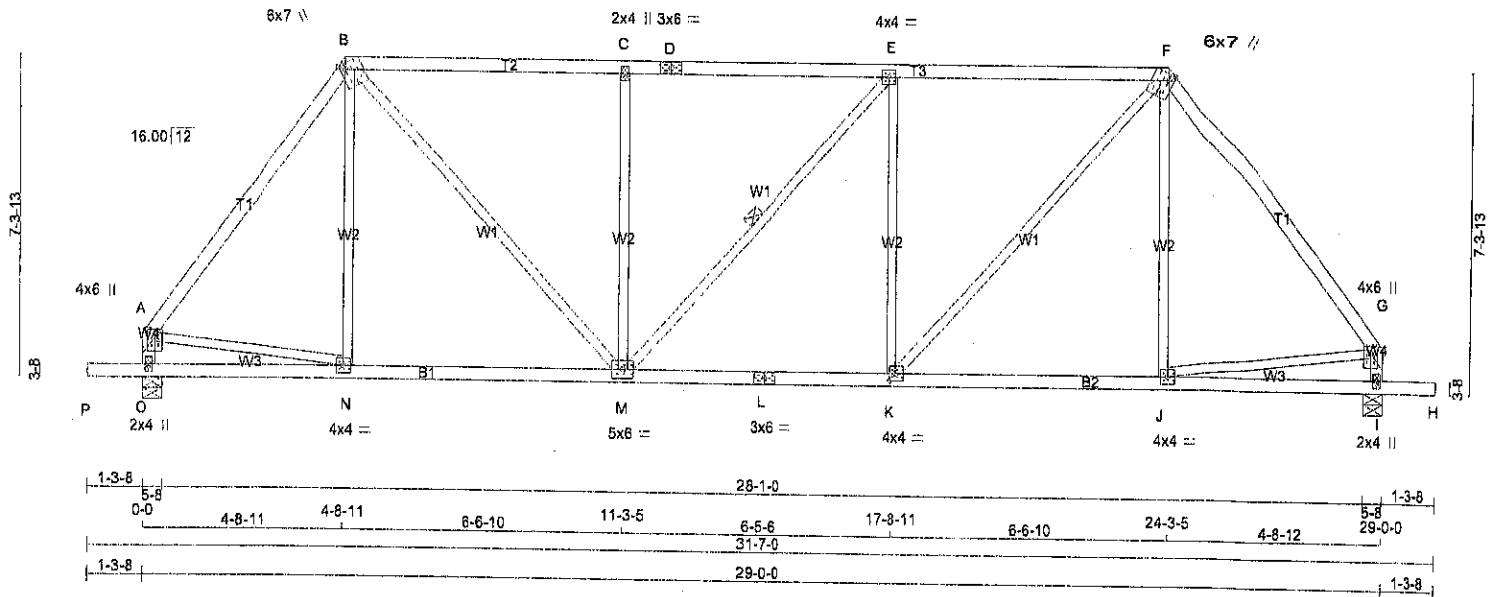
H03

QUANTITY
2PLY
1JOB DESC.
TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID: gUzNWMpyWh_3Mf_ncsznAqzVRmF-aVXgTR4qr8lVwexP7ciXbA3q2B0_GW4wFhtek5ryxoSm
Scale = 1:53.0

LUMBER	SIZE	DRY	LUMBER	DESCR.
N. L. G. A. RULES				
CHORDS				
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - F	2x4	DRY	No.2	SPF
F - G	2x4	DRY	No.2	SPF
O - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
P - L	2x4	DRY	No.2	SPF
L - 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	8.0	2.00	2.00
B	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMVW+w	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMVW-t	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-t	MT20	4.0	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	5.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMV1+p	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	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
O	1389	0	0	5-B
I	1389	0	0	5-B

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	COMBINED		863 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
I			863 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.06FT.
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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)
FR-TO			FROM TO			FR-TO			
A-B	-1225 / 0	-70.5	-70.5	0.36 (1)	5.41	N-B	0 / 92	0.03 (4)	
B-C	-1289 / 0	-70.5	-70.5	0.47 (1)	5.07	B-M	0 / 830	0.19 (1)	
C-D	-1300 / 0	-70.5	-70.5	0.48 (1)	5.08	M-C	-492 / 0	0.47 (1)	
D-E	-1300 / 0	-70.5	-70.5	0.48 (1)	5.06	M-E	-1 / 0	0.00 (1)	
E-F	-1300 / 0	-70.5	-70.5	0.48 (1)	5.06	K-E	-482 / 0	0.47 (1)	
F-G	-1225 / 0	-70.5	-70.5	0.36 (1)	5.41	K-F	0 / 831	0.19 (1)	
O-A	-1245 / 0	0.0	0.0	0.13 (1)	7.20	J-F	0 / 91	0.03 (4)	
I-G	-1244 / 0	0.0	0.0	0.13 (1)	7.20	A-N	0 / 738	0.17 (1)	
						J-G	0 / 738	0.17 (1)	
P-O	0 / 0	-88.0	-88.0	0.10 (1)	10.00				
O-N	0 / 0	-17.5	-17.5	0.13 (4)	10.00				
N-M	0 / 732	-17.5	-17.5	0.20 (4)	10.00				
M-L	0 / 1301	-17.5	-17.5	0.29 (1)	10.00				
L-K	0 / 1301	-17.5	-17.5	0.29 (1)	10.00				
K-J	0 / 732	-17.5	-17.5	0.20 (4)	10.00				
J-I	0 / 0	-17.5	-17.5	0.13 (4)	10.00				
I-H	0 / 0	-88.0	-88.0	0.10 (1)	10.00				

TOTAL WEIGHT = 2 X 130 = 261 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, BCBC 2012, ABC 2014
- CSA C86-09
- 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

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=0.48 (E-F:1), BC=0.29 (K-M:1), WB=0.47 (E-K:1), SSI=0.21 (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	618	354	1667 622 2284 1656

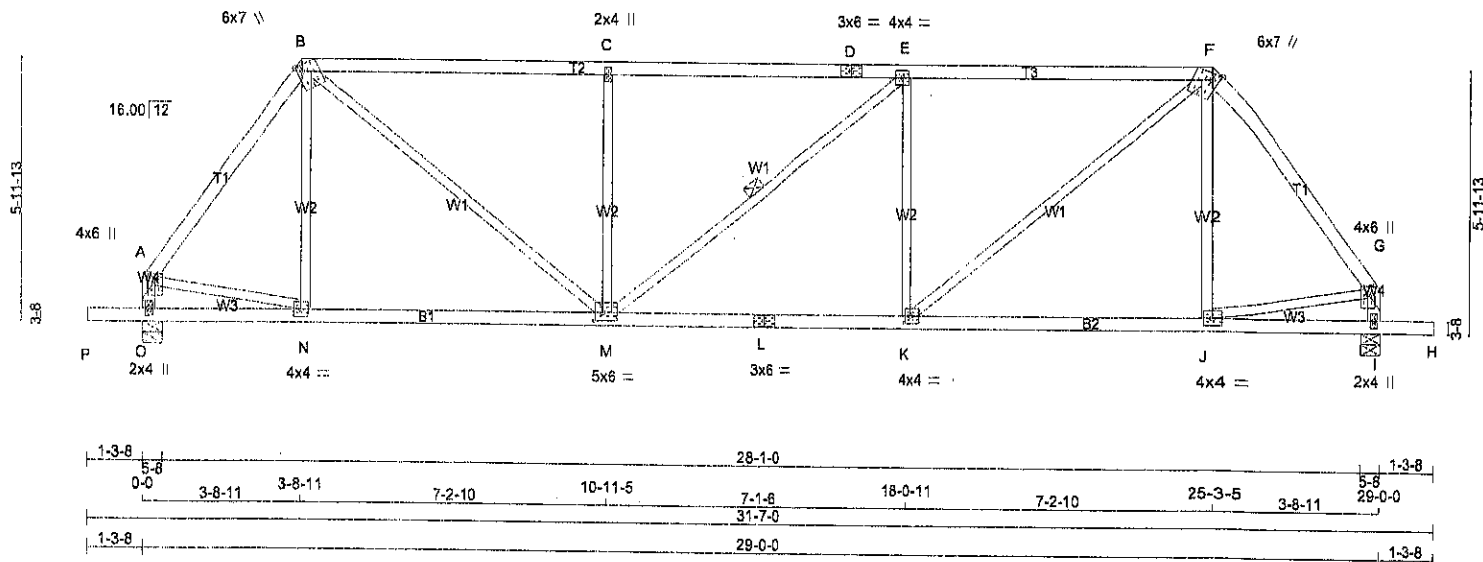
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (M) (INPUT = 0.80)
JSI METAL= 0.40 (L) (INPUT = 1.00)



A-11073676



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
O - A	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
P - L	2x4	DRY	No.2	SPF
L - 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	TTWW+m	MT20	6.0	7.0	Edge	1.50
C	TMVW+w	MT20	2.0	4.0		
D	TS-I	MT20	3.0	8.0		
E	TMVW-I	MT20	4.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMVW-I	MT20	4.0	4.0		
K	BMVW-I	MT20	4.0	4.0	2.00	1.50
L	BS-I	MT20	3.0	8.0		
M	BMVWVW-I	MT20	5.0	6.0	2.25	2.00
N	BMVW-I	MT20	4.0	4.0		
O	BMV1+p	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 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
O	1389	0	1389	0	5-8	1-8		
I	1389	0	1389	0	5-8	1-8		

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
O	979	863 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0
I	979	863 / 0	0 / 0	0 / 0	0 / 0	316 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.47 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. 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)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	
FR-TO				FR-TO			
A-B	-1251 / 0	-70.5	-70.5 0.21 (1)	5.53	N-B	-12 / 81	0.03 (4)
B-C	-1600 / 0	-70.5	-70.5 0.63 (1)	4.48	B-M	0 / 1085	0.24 (1)
C-D	-1600 / 0	-70.5	-70.5 0.63 (1)	4.47	M-C	-542 / 0	0.30 (1)
D-E	-1600 / 0	-70.5	-70.5 0.63 (1)	4.47	M-E	-1 / 0	0.00 (1)
E-F	-1601 / 0	-70.5	-70.5 0.64 (1)	4.47	K-E	-543 / 0	0.30 (1)
F-G	-1250 / 0	-70.5	-70.5 0.21 (1)	5.53	K-F	0 / 1086	0.24 (1)
O-A	-1257 / 0	0.0	0.0 0.13 (1)	7.17	J-F	-12 / 81	0.03 (4)
I-G	-1257 / 0	0.0	0.0 0.13 (1)	7.17	A-N	0 / 756	0.17 (1)
				J-G	0 / 756	0.17 (1)	
P-O	0 / 0	-88.0	-88.0 0.10 (1)	10.00			
O-N	0 / 0	-17.5	-17.5 0.14 (4)	10.00			
N-M	0 / 746	-17.5	-17.5 0.24 (4)	10.00			
M-L	0 / 1601	-17.5	-17.5 0.35 (1)	10.00			
L-K	0 / 1601	-17.5	-17.5 0.35 (1)	10.00			
K-J	0 / 745	-17.5	-17.5 0.24 (4)	10.00			
J-I	0 / 0	-17.5	-17.5 0.14 (4)	10.00			
I-H	0 / 0	-88.0	-88.0 0.10 (1)	10.00			

TOTAL WEIGHT = 2 X 122 = 244 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) = $L/360 (0.97")$
CALCULATED VERT. DEFL.(LL) = $L/999 (0.07")$
ALLOWABLE DEFL.(TL) = $L/360 (0.97")$
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=0.64 (E-F:1), BC=0.35 (K-M:1), WB=0.30 (E-K:1), SSI=0.24 (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 618 354 1667 622 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

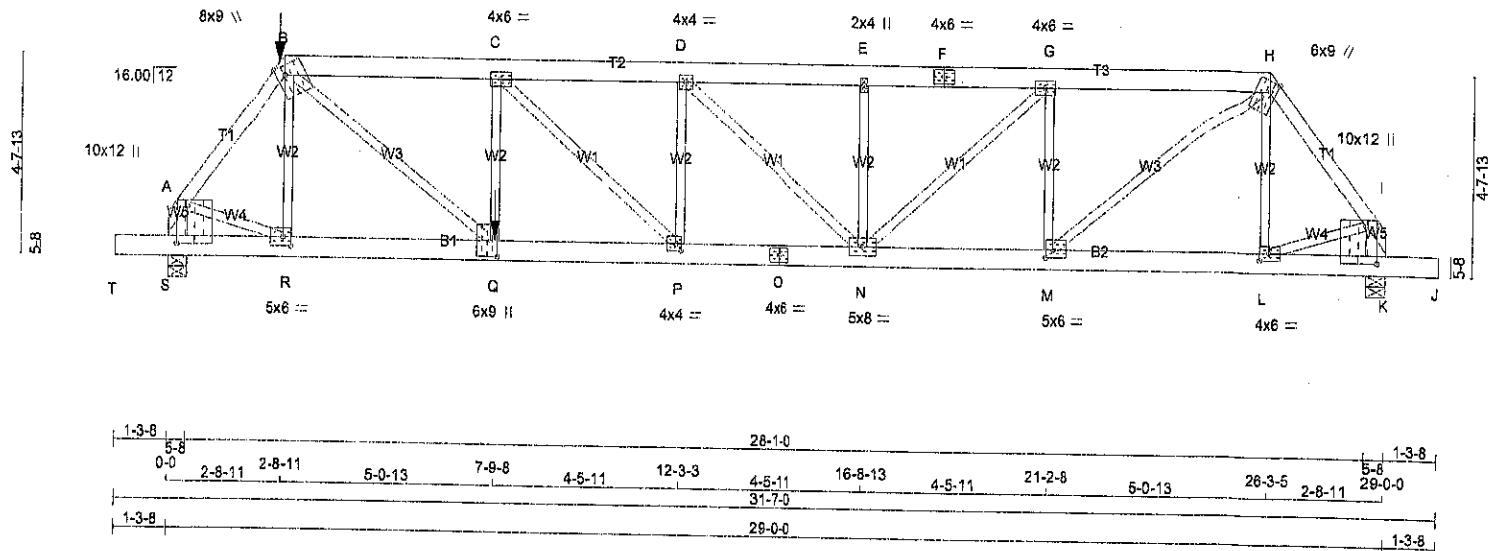
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.87 (M) (INPUT = 0.80)

JSI METAL=0.49 (L) (INPUT = 1.00)



A-14073675



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2
B - F	2x6	DRY	No.2
F - H	2x6	DRY	No.2
H - I	2x4	DRY	No.2
S - A	2x6	DRY	No.2
K - I	2x6	DRY	No.2
T - O	2x6	DRY	No.2
O - J	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMW+P	MT20	10.0	12.0	10.25	3.00
B	TTWW+m	MT20	8.0	9.0	2.50	2.25
C	TMWW-I	MT20	4.0	6.0		
D	TMWW-I	MT20	4.0	4.0		
E	TMWW+w	MT20	2.0	4.0		
F	TS-I	MT20	4.0	6.0		
G	TMWW-I	MT20	4.0	6.0		
H	TTWW+m	MT20	6.0	9.0	2.75	1.75
I	TMBMW+P	MT20	10.0	12.0	10.25	3.00
L	BMWW-I	MT20	4.0	6.0	2.00	2.75
M	BMWW-I	MT20	6.0	6.0	2.25	2.00
N	BMWW-I	MT20	6.0	6.0		
O	BS-I	MT20	4.0	6.0		
P	BMWW-I	MT20	4.0	4.0	2.00	1.50
Q	BMWW-I	MT20	6.0	9.0	4.50	2.00
R	BMWW-I	MT20	6.0	6.0	2.50	2.25

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	REQD BRG
	VERT	HORZ	DOWN	HORZ		
S	3028	0	3028	0	5-8	4-2
K	1892	0	1892	0	5-8	2-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM. LIVE	WIND			
S	2117	1527 / 0	0 / 0	0 / 0	0 / 0	590 / 0	0 / 0
K	1327	936 / 0	0 / 0	0 / 0	0 / 0	391 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.77FT.
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 CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-3070 / 0	-70.5 -70.5	0.26 (1)	3.77	R-B	-136 / 92	0.04 (1)
B-C	-4296 / 0	-138.7 -138.7	0.41 (1)	3.79	B-Q	0 / 3191	0.79 (1)
C-D	-4175 / 0	-70.5 -70.5	0.24 (1)	4.04	Q-C	-444 / 0	0.13 (1)
D-E	-3633 / 0	-70.5 -70.5	0.18 (1)	4.35	C-P	-166 / 25	0.11 (1)
E-F	-3633 / 0	-70.5 -70.5	0.18 (1)	4.35	P-D	0 / 217	0.05 (1)
F-G	-3633 / 0	-70.5 -70.5	0.18 (1)	4.35	D-N	-743 / 0	0.47 (1)
G-H	-2698 / 0	-70.5 -70.5	0.18 (1)	4.90	N-E	-302 / 0	0.09 (1)
H-I	-1831 / 0	-70.5 -70.5	0.16 (1)	4.79	N-G	0 / 1282	0.32 (1)
S-A	-2907 / 0	0.0 0.0	0.21 (1)	6.12	M-G	-1247 / 0	0.36 (1)
K-I	-1772 / 0	0.0 0.0	0.13 (1)	7.45	M-H	0 / 2061	0.52 (1)
T-S	0 / 0	-88.0 -88.0	0.05 (1)	10.00	L-H	-114 / 30	0.03 (1)
S-R	0 / 0	-34.5 -34.5	0.09 (1)	10.00	A-R	0 / 1873	0.46 (1)
R-Q	0 / 1836	-34.5 -34.5	0.32 (1)	10.00	L-I	0 / 1117	0.28 (1)
Q-P	0 / 4296	-17.5 -17.5	0.63 (1)	10.00			
P-O	0 / 4175	-17.5 -17.5	0.59 (1)	10.00			
O-N	0 / 4175	-17.5 -17.5	0.59 (1)	10.00			
N-M	0 / 2698	-17.5 -17.5	0.39 (1)	10.00			
M-L	0 / 1094	-17.5 -17.5	0.18 (1)	10.00			
L-K	0 / 0	-17.5 -17.5	0.04 (4)	10.00			
K-J	0 / 0	-88.0 -88.0	0.05 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
B	2-8-11	-140	-140		FRONT	VERT.	TOTAL
Q	7-9-8	-1524	-1524		FRONT	VERT.	TOTAL

TOTAL WEIGHT = 2 X 158 = 317 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/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-8-11
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 7-9-8 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, 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
6.4 P.S.F. RAIN LOAD EQUALS
21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

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=0.41 (B-C:1), BC=0.63 (P-Q:1),
WB=0.79 (B-Q:1), SSI=0.25 (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 = 0.60

AUTOSOLVE HEELS OFF

A-1073674

CONTINUED ON PAGE 2



253442

H01-Cond2

2

1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Wed Jul 15 15:04:43 2015 Page 2

ID:gUzNWMpyWh 3Mf ncsznAgzVRmF-e6Pv2I3ZJW2oPdFdhKLU74eIjDDQ26OyEZ9d0yyxcSo

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 1524.6 lbs FACTORED DOWN AT 7-9-8 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.

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 = 0.87 (Q) (INPUT = 0.90)

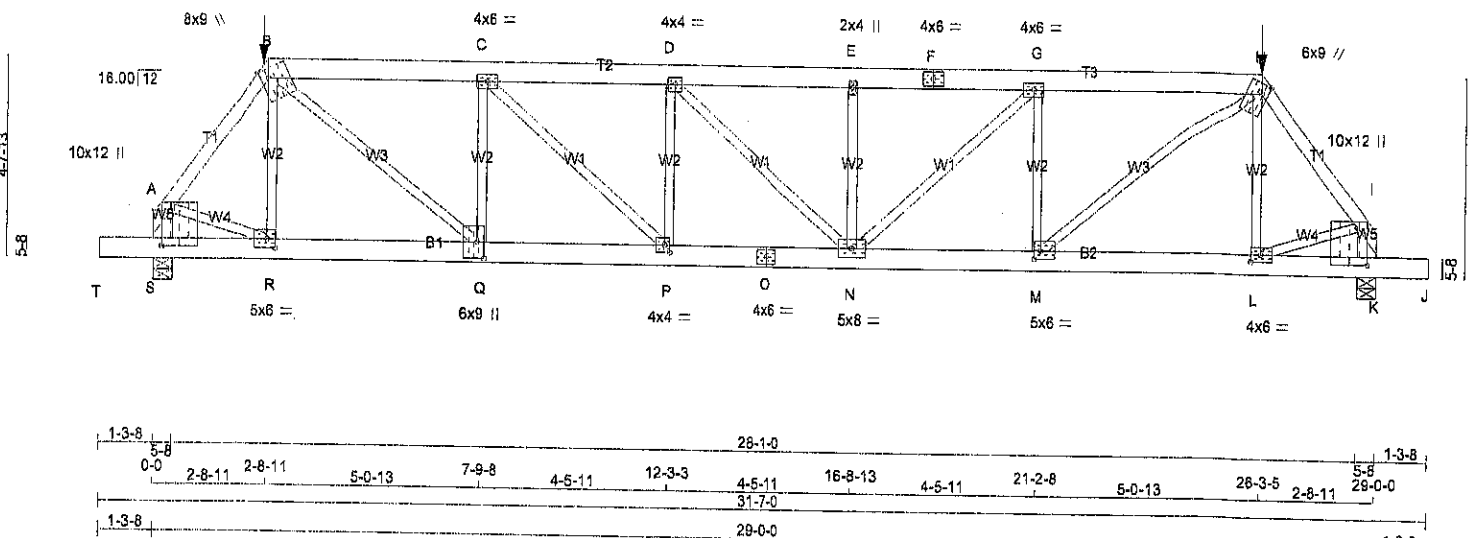
JSI METAL = 0.85 (Q) (INPUT = 1.00)



A-15073674(2)

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2016 MiTek Industries, Inc. Wed Jul 15 15:04:43 2015 Page 1

ID: gUzNWMpyWh_3Mf_ncsznAqzVRmF-e6Pv2I3JW2oPdFdhKU74eikxDDP28oyEZ9d0yyxoSo
Scale = 1:54.1

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - F	2x6	DRY	No.2	SPF
F - H	2x6	DRY	No.2	SPF
H - I	2x4	DRY	No.2	SPF
S - A	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
T - O	2x6	DRY	No.2	SPF
O - J	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBM/VW**p	MT20	10.0	12.0	10.25	3.00
B	TTWW/m	MT20	8.0	9.0	2.50	2.25
C	TMWW-t	MT20	4.0	6.0		
D	TMWW-t	MT20	4.0	4.0		
E	TMWW-w	MT20	2.0	4.0		
F	TS-t	MT20	4.0	6.0		
G	TMWW-t	MT20	4.0	6.0		
H	TTWW/m	MT20	6.0	9.0	2.75	1.75
I	TMBM/VW**p	MT20	10.0	12.0	10.25	3.00
L	BMWW-t	MT20	4.0	6.0	2.00	2.75
M	BMWW-t	MT20	5.0	6.0	2.25	2.00
N	BMWWV-t	MT20	5.0	8.0		
O	BS-t	MT20	4.0	6.0		
P	BMWW-t	MT20	4.0	4.0	2.00	1.50
Q	BMWW-t	MT20	8.0	9.0	4.50	2.00
R	BMWW-t	MT20	5.0	8.0	2.50	2.25

HANGERS 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	REQD BRG
	VERT	HORZ	DOWN	HORZ		
S	2578	0	2578	0	5-8	2-12
K	2578	0	2578	0	5-8	2-12

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
S	1818	1225/0	0/0	0/0	0/0	593/0	0/0
K	1818	1225/0	0/0	0/0	0/0	593/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88FT.
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)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-2565/0	-70.5 -70.5	0.21 (1)	4.12	R-B	-118/81	0.03 (1)
B-C	-3510/0	-138.7 -138.7	0.33 (1)	4.24	B-Q	0/2563	0.63 (1)
C-D	-4306/0	-138.7 -138.7	0.33 (1)	3.88	Q-C	-1482/0	0.43 (1)
D-E	-4297/0	-138.7 -138.7	0.27 (1)	3.86	C-P	0/1091	0.27 (1)
E-F	-4297/0	-138.7 -138.7	0.34 (1)	3.88	P-D	-591/0	0.17 (1)
F-G	-4297/0	-138.7 -138.7	0.34 (1)	3.88	D-N	-12/0	0.01 (1)
G-H	-3512/0	-138.7 -138.7	0.33 (1)	4.24	N-E	-586/0	0.17 (1)
H-I	-2564/0	-70.5 -70.5	0.21 (1)	4.12	N-G	0/1076	0.27 (1)
S-A	-2444/0	0.0 0.0	0.17 (1)	6.56	M-G	-1477/0	0.43 (1)
K-I	-2444/0	0.0 0.0	0.17 (1)	6.56	M-H	0/2566	0.64 (1)
T-S	0/0	-88.0 -88.0	0.05 (1)	10.00	L-H	-118/81	0.03 (1)
S-R	0/0	-34.5 -34.5	0.08 (4)	10.00	A-R	0/1565	0.39 (1)
R-Q	0/1534	-34.5 -34.5	0.26 (1)	10.00	L-I	0/1565	0.39 (1)
Q-P	0/3510	-34.5 -34.5	0.52 (1)	10.00			
P-O	0/4306	-34.5 -34.5	0.63 (1)	10.00			
O-N	0/4306	-34.5 -34.5	0.63 (1)	10.00			
N-M	0/3512	-34.5 -34.5	0.52 (1)	10.00			
M-L	0/1534	-34.5 -34.5	0.26 (1)	10.00			
L-K	0/0	-34.5 -34.5	0.08 (4)	10.00			
K-J	0/0	-88.0 -88.0	0.05 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
B	2-8-11	-140	-140	---	FRONT	VERT	TOTAL
H	26-3-6	-140	-140	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 2 X 158 = 317 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: CPrimeHip
SIDE SETBACK = 2-8-11
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 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) = $L/360$ (0.97")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.16")
ALLOWABLE DEFL.(TL) = $L/360$ (0.97")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.29")

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=0.34 (E-G:1), BC=0.63 (N-P:1),
WB=0.64 (H-M:1), SS=0.27 (G-H: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)	(PLI)
MAX	MIN	MAX	MIN
MT20	619	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 D.D.
A-15073673
CONTINUED ON PAGE 2



253442

H01-Cond1

2

1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

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ID:gUzNWMyVWh 3Mf_ncsznAgzVRmF-a6Pv2i3ZJW2oPdFdhKU74elkxDDP28oyEZ9d0yyxoSo

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 139.9 lbs FACTORED DOWN AT 28-3-5, AND 139.9 lbs FACTORED DOWN AT 2-8-11 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.

JSI GRIP= 0.90 (L) (INPUT = 0.80)
JSI METAL= 0.93 (C) (INPUT = 1.00)



A-N073673(2)

253436

H08

QUANTITY

2

PLY

1

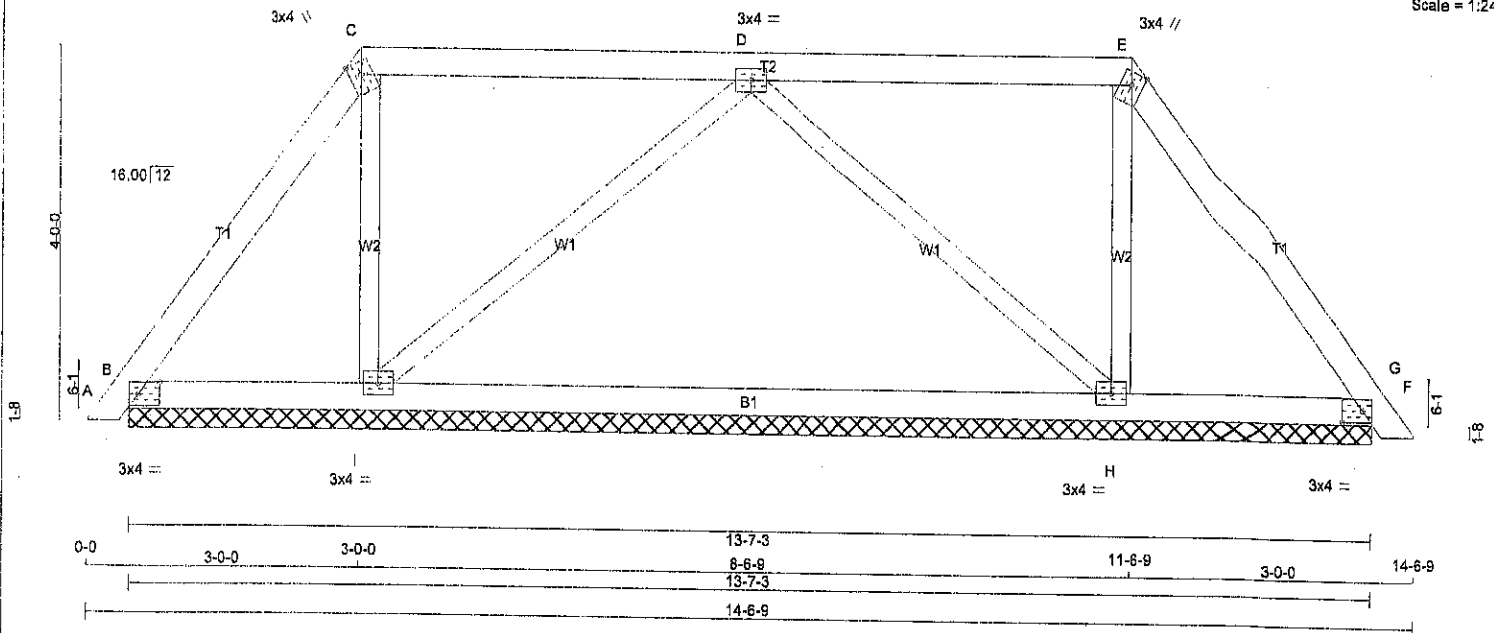
JOB DESC.

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Wed Jul 15 08:13:33 2015 Page 1

ID:9?W_oc?jYybVbeU0Ab4z7zOVES-ZbGawB35KmSncdV8NFU77P539m9ciyldBUCHWCyxtcd0
Scale = 1:24.8

LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY No.2

C - E 2x4 DRY No.2

E - G 2x4 DRY No.2

B - F 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

PLATES (Table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTW+m	MT20	3.0	4.0	Edge	
D	TMWW-I	MT20	3.0	4.0		
E	TTW+m	MT20	3.0	4.0	Edge	
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H	BMWW-I	MT20	3.0	4.0		
I	BMWW-I	MT20	3.0	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	REQD BRG
	VERT	HORZ	DOWN	HORZ
B	127	0	127	0
F	127	0	127	0
I	496	0	496	0
H	496	0	496	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE			
B	85	81/0	0/0	0/0	0/0	0/0
F	85	81/0	0/0	0/0	0/0	0/0
I	353	219/0	0/0	0/0	0/0	0/0
H	353	219/0	0/0	0/0	0/0	0/0

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

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO								
A-B	0/9	-70.5	-70.5	0.01 (1)	10.00	I-C	-180/0	0.04 (1)
B-C	-28/0	-70.5	-70.5	0.08 (1)	6.25	I-D	-287/0	0.15 (1)
C-D	-11/0	-70.5	-70.5	0.21 (1)	6.25	D-H	-287/0	0.15 (1)
D-E	-11/0	-70.5	-70.5	0.21 (1)	6.25	H-E	-180/0	0.04 (1)
E-F	-28/0	-70.5	-70.5	0.08 (1)	6.25			
F-G	0/8	-70.5	-70.5	0.01 (1)	10.00			
B-I	0/16	-17.5	-17.5	0.20 (4)	10.00			
I-H	0/229	-17.5	-17.5	0.21 (4)	10.00			
H-F	0/16	-17.5	-17.5	0.20 (4)	10.00			

TOTAL WEIGHT = 2 X 51 = 101 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, BCBC 2012, ABC 2014
- CSA 086-08
- 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=0.21 (D-E:1), BC=0.21 (H-I:4), WB=0.15 (D-I:1), SSI=0.15 (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

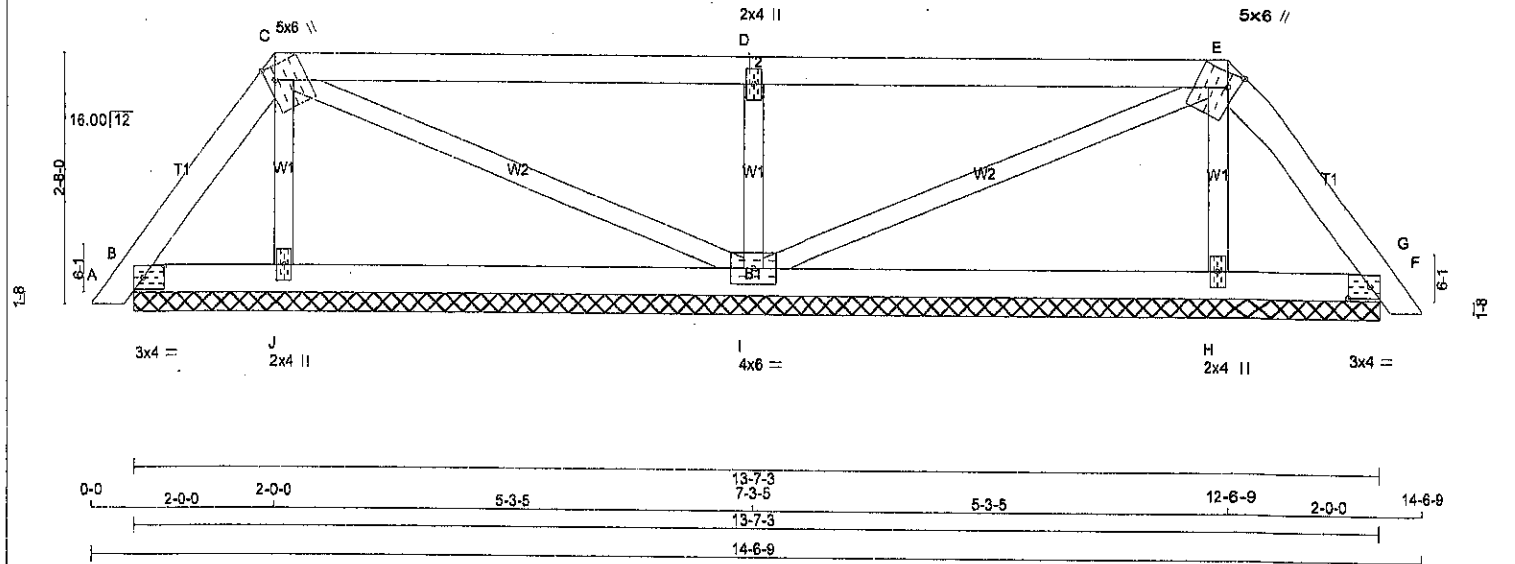
PLATE	GRIP (DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MT20	618	354	1687
	618	354	1687

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (I) (INPUT = 0.90)
JSI METAL= 0.08 (H) (INPUT = 1.00)

A-15073633



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 - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	1.50 2.75
C	TTWW+m	MT20	5.0	6.0	1.75 1.00
D	TMW+w	MT20	2.0	4.0	
E	TTWW+m	MT20	5.0	6.0	1.75 1.00
F	TMB1-I	MT20	3.0	4.0	1.50 2.75
H	BMW1+w	MT20	2.0	4.0	
I	BMWW1-I	MT20	4.0	6.0	
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	REQRD BRG	
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
B	129	0	129	0	13-7-3	1-8	
F	129	0	129	0	13-7-3	1-8	
J	205	0	205	0	13-7-3	1-8	
I	578	0	578	0	13-7-3	1-8	
H	205	0	205	0	13-7-3	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD
	SNOW	LIVE	SNOW	LIVE			
B	87	79 / 0	0 / 0	0 / 0	0 / 0	8 / 0	0 / 0
F	87	79 / 0	0 / 0	0 / 0	0 / 0	8 / 0	0 / 0
J	148	78 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0
I	405	287 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
H	148	78 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0

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

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

LOADING							
TOTAL LOAD CASES: (4)							
MEMB.	CHORDS		FACTORED		WEBS		
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	MAX	MEMB.	MAX. FACTORED
FR-TO	(LBS)	(PLF)	CS1 (LC)	UNBRAC	LENGTH	FR-TO	(LBS)
A-B	0 / 8	-70.5	-70.5 0.01 (1)	10.00	J-C	-131 / 0	0.02 (1)
B-C	-88 / 0	-70.5	-70.5 0.03 (1)	6.25	C-I	-23 / 0	0.01 (1)
C-D	-9 / 0	-70.5	-70.5 0.33 (1)	10.00	I-D	-464 / 0	0.07 (1)
D-E	-9 / 0	-70.5	-70.5 0.33 (1)	10.00	I-E	-23 / 0	0.01 (1)
E-F	-88 / 0	-70.5	-70.5 0.03 (1)	6.25	H-E	-131 / 0	0.02 (1)
F-G	0 / 8	-70.5	-70.5 0.01 (1)	10.00			
B-J	0 / 37	-17.5	-17.5 0.07 (4)	10.00			
J-I	0 / 31	-17.5	-17.5 0.10 (4)	10.00			
I-H	0 / 31	-17.5	-17.5 0.10 (4)	10.00			
H-F	0 / 37	-17.5	-17.5 0.07 (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=0.33 (D-E:1), BC=0.10 (H-I:4), WB=0.07 (D-I:1), SSI=0.18 (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 1687 822 2284 1658

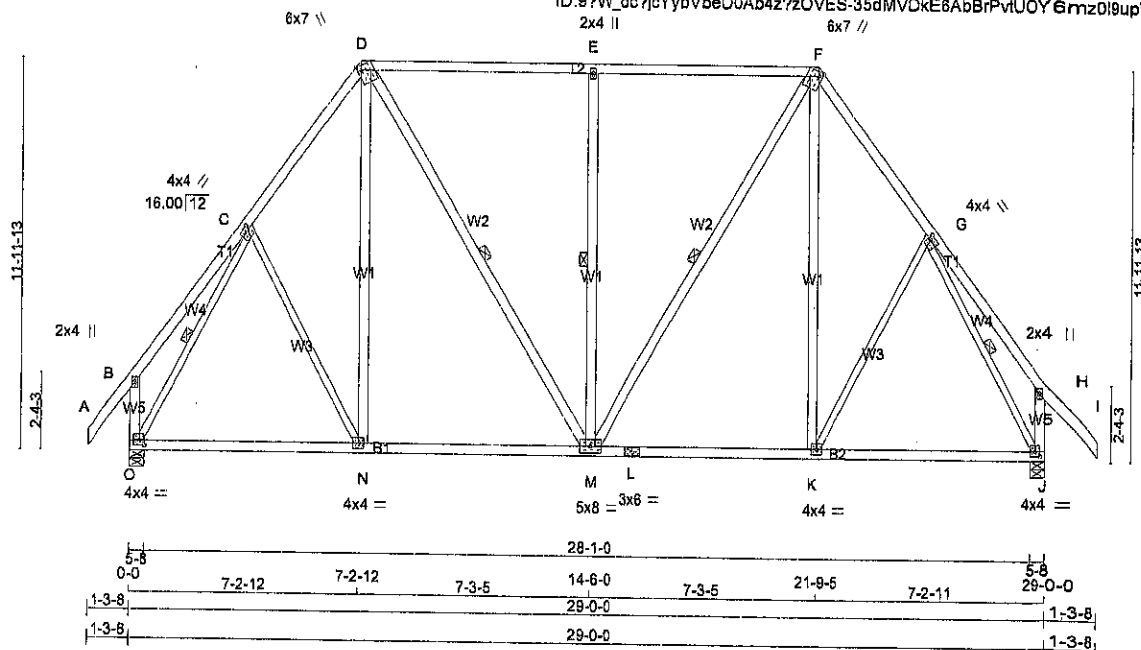
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (F) (INPUT = 0.90)
 JSI METAL= 0.09 (D) (INPUT = 1.00)



A-15073582

**LUMBER****N. L. G. A. RULES**

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
O - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
O - L	2x4	DRY	No.2
L - J	2x4	DRY	No.2
ALL WEBS	2x4	DRY	No.2
EXCEPT			
C - N	2x3	DRY	No.2
K - G	2x3	DRY	No.2
O - 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-I	MT20	4.0	4.0	1.50	1.00
D	TTWW+m	MT20	6.0	7.0	Edge	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMWW-I	MT20	4.0	4.0	1.50	1.00
H	TMV+p	MT20	2.0	4.0		
J	BMVW-I	MT20	4.0	4.0	1.75	2.00
K	BMWW-I	MT20	4.0	4.0		
L	BS-I	MT20	3.0	6.0		
M	BMWW-I	MT20	6.0	8.0		
N	BMWW-I	MT20	4.0	4.0		
O	BMVW-I	MT20	4.0	4.0	1.75	2.00

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

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	UPLIFT
O	1428	0	1428	0
J	1428	0	1428	0

UNFACTORED REACTIONS

JT	1ST LC CASE	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	COMBINED		868 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0
J	COMBINED		868 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-M, E-M, F-M, C-O, 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)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-N	0 / 51	0.02 (4)
B-C	0 / 23	-70.5	-70.5 0.14 (1)	10.00	N-D	0 / 130	0.03 (4)
C-D	-1088 / 0	-70.5	-70.5 0.13 (1)	5.93	D-M	0 / 477	0.08 (1)
D-E	-889 / 0	-78.0	-78.0 0.55 (1)	5.87	M-E	-895 / 0	0.54 (1)
E-F	-889 / 0	-78.0	-78.0 0.55 (1)	5.87	M-F	0 / 477	0.08 (1)
F-G	-1088 / 0	-70.5	-70.5 0.13 (1)	5.93	K-F	0 / 130	0.03 (4)
G-H	0 / 23	-70.5	-70.5 0.14 (1)	10.00	K-G	0 / 51	0.02 (4)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-C	-1338 / 0	0.52 (1)
O-B	-195 / 0	0.0	0.0 0.02 (1)	7.81	G-J	-1338 / 0	0.52 (1)
J-H	-195 / 0	0.0	0.0 0.02 (1)	7.81			
O-N	0 / 627	-17.5	-17.5 0.28 (4)	10.00			
N-M	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
M-L	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
L-K	0 / 637	-17.5	-17.5 0.29 (4)	10.00			
K-J	0 / 627	-17.5	-17.5 0.28 (4)	10.00			

TOTAL WEIGHT = 6 X 181 = 1084 lb

[M][P]

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.I. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")CSI: TC=0.55 (D-E:1), BC=0.29 (M-N:4),
WB=0.54 (E-M:1), SSI=0.28 (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)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

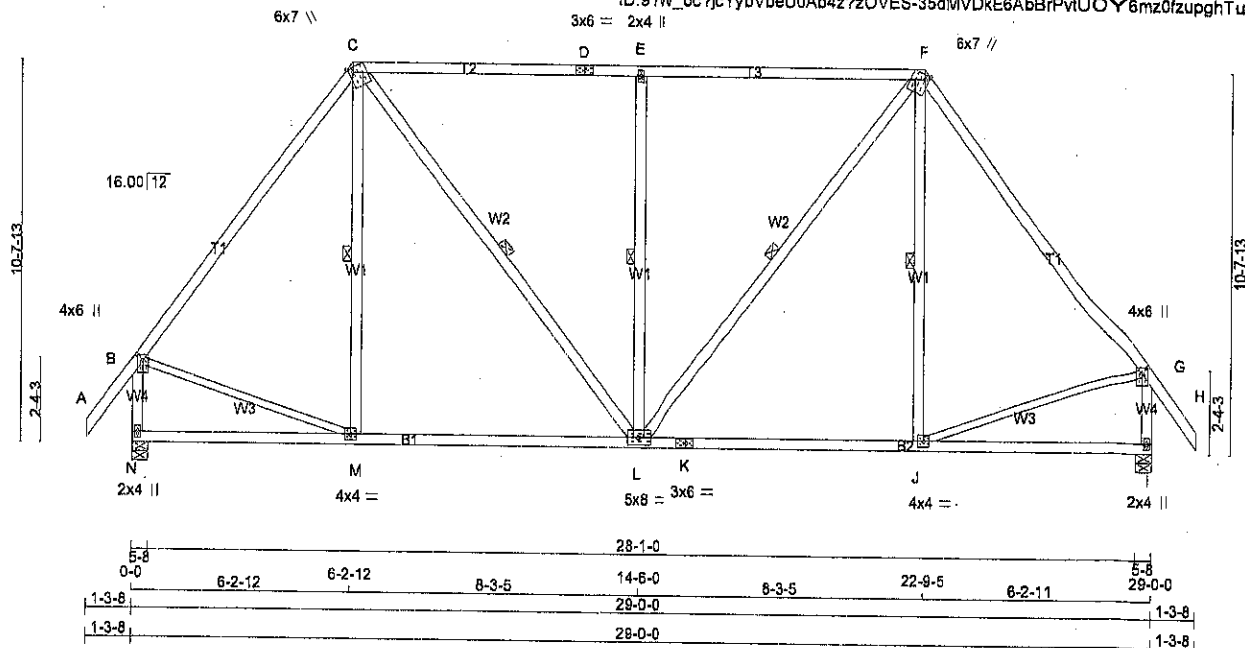
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.85 (G) (INPUT = 0.90)
JSI METAL=0.49 (G) (INPUT = 1.00)

A-11073581

Alpa Roof Truss, Maple

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ID:97W_oc?jYybVbeU0Ab4z?zOVES-35dMVDkE6AbBrPvtUOY6mz0fzupghTuzAFRpBVyy7CT
Scale = 1:64.7**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	2100F 1.8E	SPF
N - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
ALL WEBS	2x4	DRY	No.2	SPF
EXCEPT				
B - M	2x3	DRY	No.2	SPF
J - 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	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.60
D	TS-t	MT20	3.0	6.0		
E	TMVW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
J	BMVW+t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMVW+t	MT20	6.0	8.0		
M	BMVW+t	MT20	4.0	4.0		
N	BMV1+p	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**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	UPLIFT
JT	1375	0	1375	0
N	1375	0	1375	0
I	1375	0	1375	0

UNFACTORED REACTIONS

	1ST CASE	MAX/MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
JT	966	668 / 0	0 / 0
N	966	668 / 0	0 / 0
I	966	668 / 0	0 / 0

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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.39FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-M, C-L, E-L, F-L, F-J.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW**LOADING**

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)	UNBRAC	MEMB.	MAX. FACTORED	MAX	CS1 (LC)
MEMB.	FORCE (LBS)	VERT. LOAD	FROM	TO	CS1 (LC)	UNBRAC	LENGTH	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO											
A-B	0 / 40	-70.5	-70.5	0.07 (1)	10.00	M-C	-48 / 95	0.03 (1)			
B-C	-1029 / 0	-70.5	-70.5	0.38 (1)	6.25	C-L	0 / 550	0.09 (1)			
C-D	-658 / 0	-70.5	-70.5	0.95 (1)	4.39	L-E	-715 / 0	0.41 (1)			
D-E	-658 / 0	-70.5	-70.5	0.95 (1)	4.39	L-F	0 / 550	0.06 (1)			
E-F	-658 / 0	-70.5	-70.5	0.95 (1)	4.39	J-F	-48 / 95	0.03 (1)			
F-G	-1029 / 0	-70.5	-70.5	0.38 (1)	6.25	B-M	0 / 644	0.14 (1)			
G-H	0 / 40	-70.5	-70.5	0.07 (1)	10.00	J-G	0 / 644	0.14 (1)			
N-B	-1333 / 0	0.0	0.0	0.17 (1)	7.01						
I-G	-1333 / 0	0.0	0.0	0.17 (1)	7.01						
N-M	0 / 0	-17.5	-17.5	0.21 (4)	10.00						
M-L	0 / 615	-17.5	-17.5	0.28 (4)	10.00						
L-K	0 / 615	-17.5	-17.5	0.28 (4)	10.00						
K-J	0 / 615	-17.5	-17.5	0.28 (4)	10.00						
J-I	0 / 0	-17.5	-17.5	0.21 (4)	10.00						

TOTAL WEIGHT = 2 X 160 = 319 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 LOADALLOWABLE DEFL. (LL) = L/360 (0.97")
CALCULATED VERT. DEFL. (LL) = L/999 (0.03")
ALLOWABLE DEFL. (TL) = L/360 (0.97")
CALCULATED VERT. DEFL. (TL) = L/999 (0.08")

CSI: TC=0.95 (C-E:1), BC=0.28 (L-M:4), WB=0.41 (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

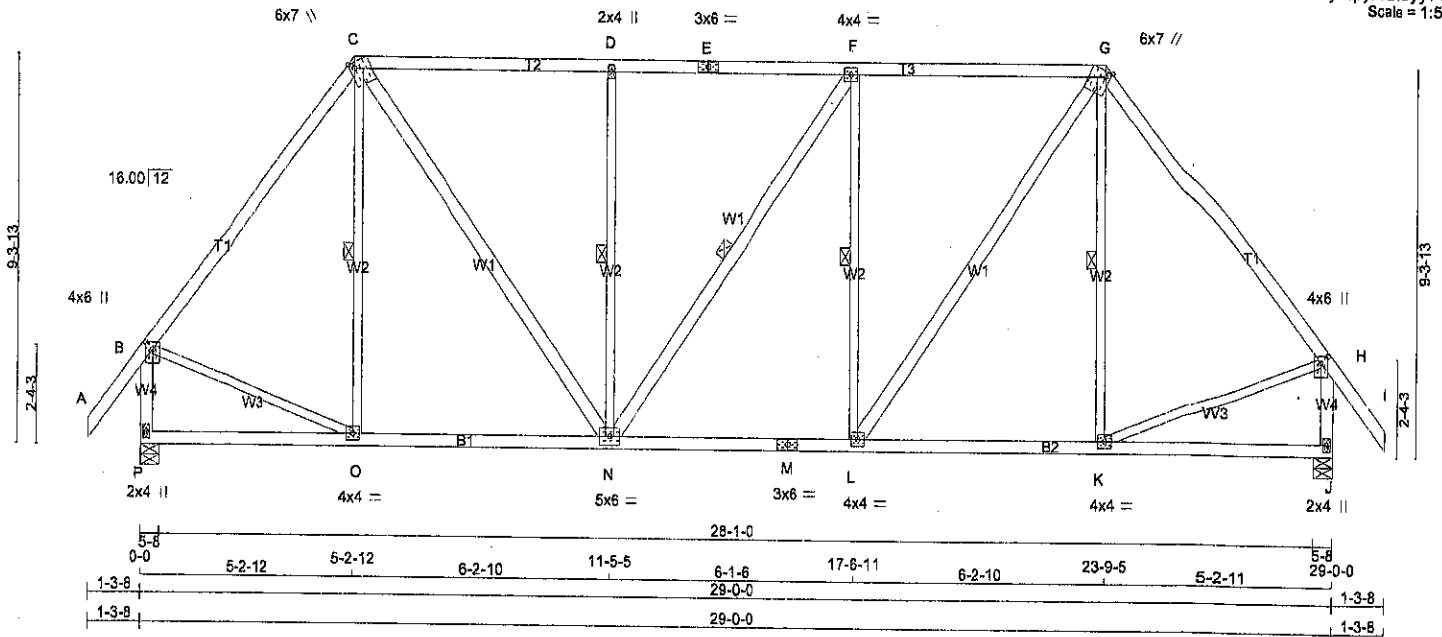
PLATE	GRIP (DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (M) (INPUT = 0.90)
JSI METAL= 0.26 (B) (INPUT = 1.00)

A-15073580



LUMBER

N. L. G. A. RULES

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

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	TS-i	MT20	3.0	8.0		
F	TMVW+i	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, L, O						
K	BMVW-i	MT20	4.0	4.0		
M	BS-i	MT20	3.0	6.0		
N	BMVW+i	MT20	5.0	6.0		
P	BMV1+p	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

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
P	1375	0	0	5-8
J	1375	0	0	6-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
P	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0	
J	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 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 = 5.86FT. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF C-O, D-N, F-N, F-L, 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. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	C-N	-114 / 51	0.07 (1)
B-C	-1033 / 0	-70.5	-70.5 0.43 (1)	5.88	C-N	0 / 896	0.11 (1)
C-D	-1013 / 0	-70.5	-70.5 0.40 (1)	5.88	N-D	-468 / 0	0.27 (1)
D-E	-1013 / 0	-70.5	-70.5 0.41 (1)	5.88	N-F	-2 / 0	0.00 (1)
E-F	-1013 / 0	-70.5	-70.5 0.41 (1)	5.88	L-F	-468 / 0	0.27 (1)
F-G	-1014 / 0	-70.5	-70.5 0.41 (1)	5.88	L-G	0 / 700	0.11 (1)
G-H	-1033 / 0	-70.5	-70.5 0.43 (1)	5.88	K-G	-115 / 51	0.07 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-O	0 / 657	0.15 (1)
P-B	-1339 / 0	0.0	0.0 0.17 (1)	7.00	K-H	0 / 657	0.15 (1)
J-H	-1339 / 0	0.0	0.0 0.17 (1)	7.00			
P-O	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
O-N	0 / 616	-17.5	-17.5 0.18 (4)	10.00			
N-M	0 / 1014	-17.5	-17.5 0.23 (1)	10.00			
M-L	0 / 1014	-17.5	-17.5 0.23 (1)	10.00			
L-K	0 / 616	-17.5	-17.5 0.18 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.13 (4)	10.00			

TOTAL WEIGHT = 2 X 158 = 315 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 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 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.43 (B-C:1), BC=0.23 (L-N:1), WB=0.27 (F-L:1), SSI=0.20 (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

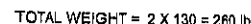
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1867 822 2284 1868

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.78 (B) (INPUT = 0.90)
JSI METAL= 0.28 (M) (INPUT = 1.00)

A-15073579



A-1073577

253427

J01C

QUANTITY

PLY

JUS DESC.

DRWG NO.

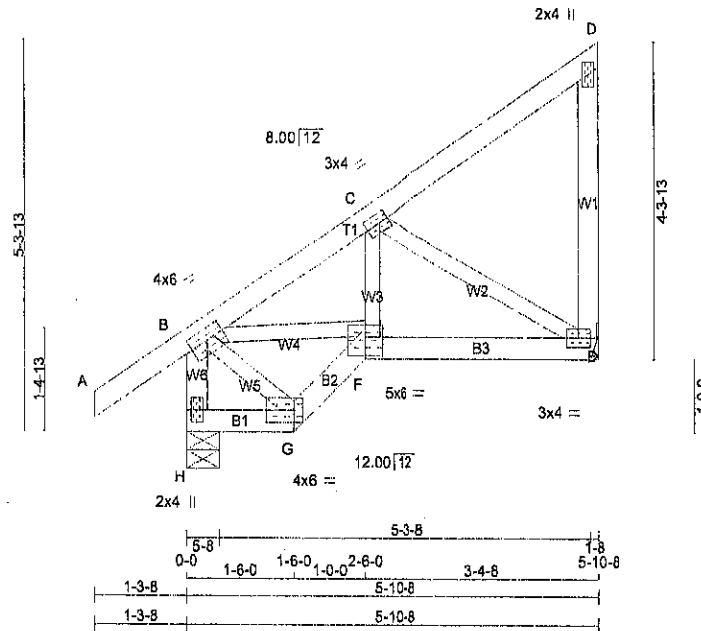
Alpa Roof Truss, Maple

TRUSS DESC.

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Tue Jul 14 14:50:26 2015 Page 1

ID:9?W_oe?jYybVbeU0Ab4z?zOVES-W6xnVD3hhVShzxZK?bOoahofO_JoLC3LHxyJQZyy7mC

Scale: 3/8"=1'



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	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	TMVWW-4	MT20	4.0	8.0	1.75	3.00
C	TMWW-4	MT20	3.0	4.0	1.50	1.50
D	TMV-p	MT20	2.0	4.0		
E	BMVWW-4	MT20	3.0	4.0		
F	BSWW-4	MT20	5.0	6.0	3.00	3.00
G	BSW-4	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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UP	DOWN
H	355	0	0	0
E	258	0	0	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED
H	248
E	182

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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	UNBRAC LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
FR-TO		FROM	TO			FR-TO		
H-B	-342 / 0	0.0	0.0	0.04 (1)	7.81	B-G	0 / 18	0.01 (4)
A-B	0 / 27	-70.5	-70.5	0.08 (1)	10.00	B-F	0 / 238	0.05 (1)
B-C	-267 / 0	-70.5	-70.5	0.10 (1)	6.25	F-C	0 / 67	0.02 (4)
C-D	-12 / 0	-70.5	-70.5	0.10 (1)	6.25	C-E	-284 / 0	0.07 (1)
E-D	-93 / 0	0.0	0.0	0.03 (1)	7.81			
H-G	0 / 0	-17.5	-17.5	0.01 (4)	10.00			
G-F	0 / 20	-17.5	-17.5	0.01 (4)	10.00			
F-E	0 / 248	-17.5	-17.5	0.08 (4)	10.00			

TOTAL WEIGHT = 7 X 30 = 208 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 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/899 (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 2254 1856

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-15073574

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.

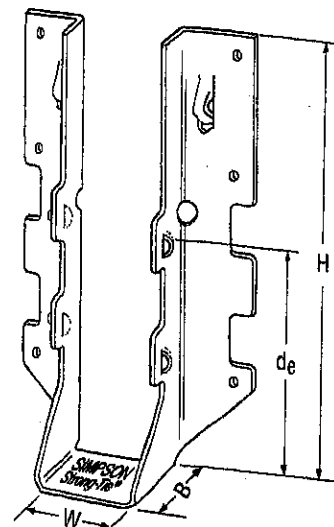
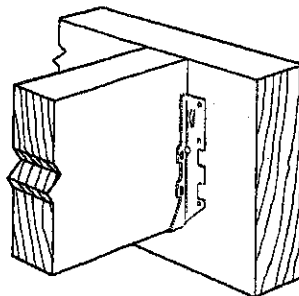
INSTALLATION:

- 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.

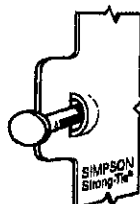
Typical LUS
Installation



LUS28

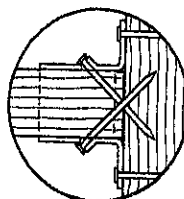
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1 1/16	3 1/2	1 3/4	1 15/16	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3 1/8	3 1/2	2	1 13/16	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 3/4	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4 3/8	4 3/8	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 3/8	6 1/4	2	3 3/4	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1 1/16	7 13/16	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 3/8	8 9/16	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.

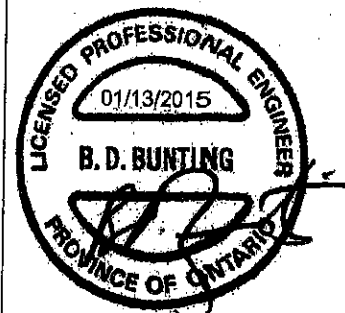


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



800-999-5099
www.strongtie.com

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:

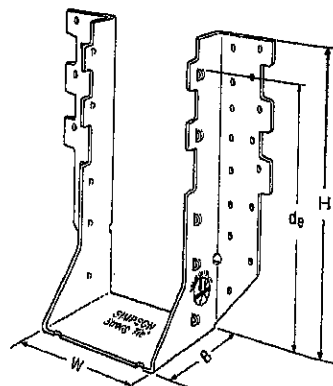
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

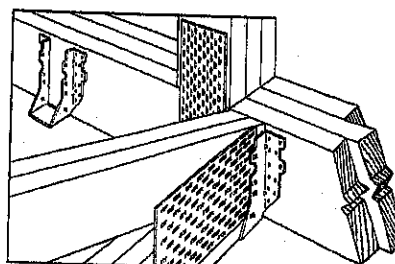
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



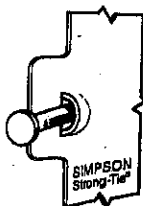
HHUS410



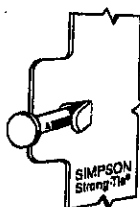
Typical HHUS Installation
(Truss Designer to provide
fastener quantity for connecting
multiple members together)

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 1/16	5 1/16	3	3 1/16	14-16d	6-16d	2850	7335	2065	5205
HHUS28-2	14	3 1/16	7 1/32	3	6 1/32	22-16d	8-16d	3765	8940	2675	6345
HHUS210-2	14	3 1/16	9 1/32	3	8	30-16d	10-16d	4745	9660	4310	7000
HHUS210-3	14	4 1/16	9	3	7 1/16	30-16d	10-16d	4745	10545	4310	7485
HHUS210-4	14	6 1/16	8 29/32	3	7 27/32	30-16d	10-16d	4745	10545	4310	7485
HHUS46	14	3 3/16	5 1/32	3	3 1/16	14-16d	6-16d	2540	7335	2065	5205
HHUS48	14	3 3/16	7 1/8	3	6 1/8	22-16d	8-16d	3765	8945	2675	6345
HHUS410	14	3 3/16	9	3	8	30-16d	10-16d	4745	9855	4310	7000
HHUS5.50/10	14	5 1/2	9	3	8	30-16d	10-16d	4745	10545	4310	7485
HHUS7.25/10	14	7 1/4	9	3 3/16	7 29/32	30-16d	10-16d	4745	10770	4310	7650

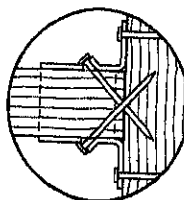
1. d_g is the distance from the seat of the hanger to the highest joist nail.



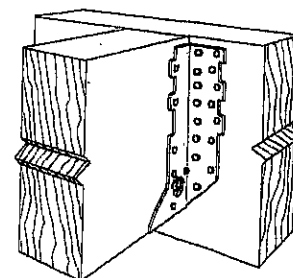
Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).
U.S. Patent
5,603,580



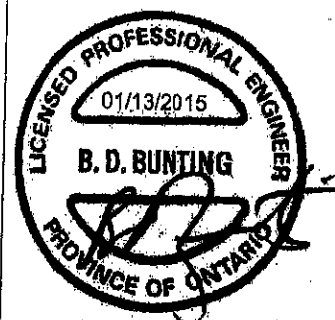
Double
Shear
Nailing
Side
View. Do
not bend
tab back.



Double
Shear
Nailing
Top View.

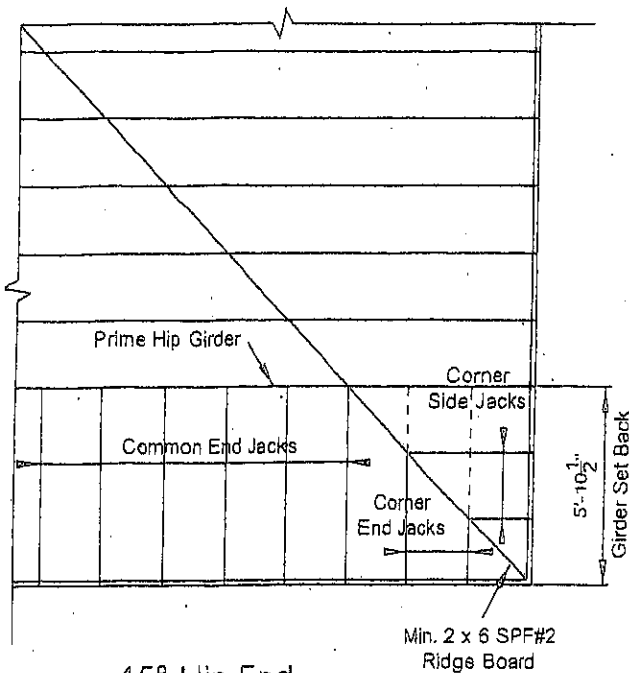


Typical HHUS
Installation



800-999-5099
www.strongtie.com

STRACON ENGINEERING INC.



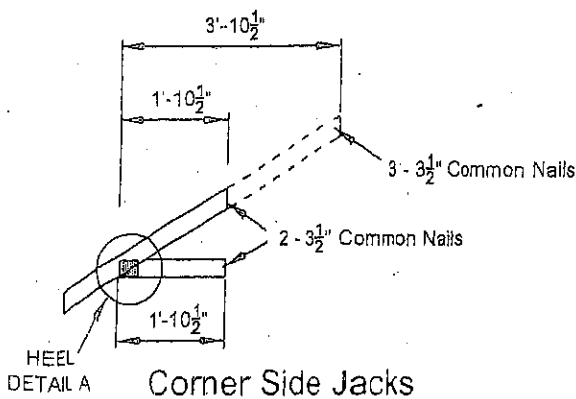
45° Hip End

LUMBER SPECIFICATION

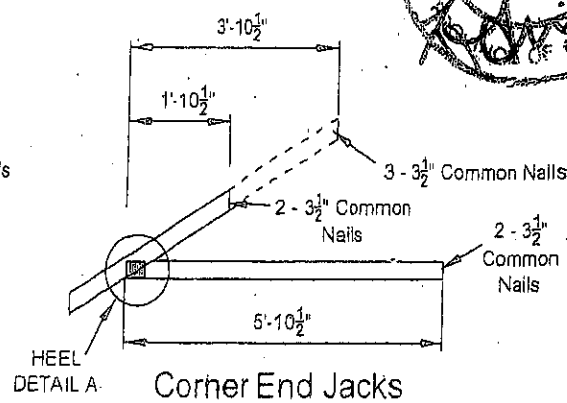
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

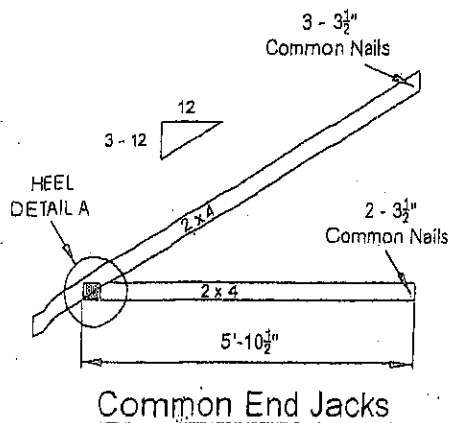
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F



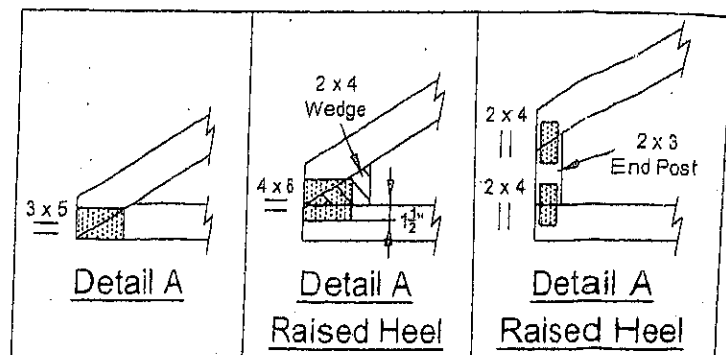
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008