

ALL CONN. FRAMING TO CONFORM WITH PART 8 OF O.B.C. 2012. ROOF TRUSSES TO MEET OVER TRUSSES TO BE 2X SP# 42 24X0.C UNDERNATH AT EACH CROSS PT. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'

49-02-00

H01
H02
H03
H04
H05

H06(7)
H07(3)

H05
H04
H03
H02
H01

H10(5)

H10G

5-00-00

ALPHA TRUSSES

7-11-00 RSD SOFFIT

8/12

16/12

4/12

T.O.P. @ 9-01-00
RSD HEEL 7" DROP

29-10-00

J01(16)

CS 5/1008

A-N073560

A-N073562

A-N073563

A-N073564

A-N073565

A-N073566

A-N073565

A-N073564

A-N073563

A-N073562

A-N073561

A-N073569

A-N073569

CS 5/1008

CS 5/1008

CS 5/1008

2 - 2x10 SP#2
BM BY BUILDER

T.O.P. @ 9-01-00
RSD HEEL 7" DROP

8/12

G01(10)

J01(10)

18-04-00

P01(5)

11-06-00

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

Piggyback (A-15073567)

43-02-00

6-00-00

5-00-00

HANGERS
// LUS24
X HHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS

Milltek Ver 7.5.0



Job Track: 40297
Layout ID: 253426
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/23/2015 Designer: charyle

Model / Elevation: 38-1 / A

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.

ALL CONN. FRAMING TO CONFORM WITH AISC 88. ALL JOINTS TO BE MADE IN THE FIELD. ROOF TRUSSES THAT CROSS MEET OVER TRUSSES TO BE 2x4 SPF #2 2x6x8 WITH A VERT POST TO THE TRUSS JOINT. VERT POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. & BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'

49-02-00

H01T
H02T
H03T
H04T
H05
H06(7)
H07(3)
H05
H04
H03
H02
H01
H10(5)
H10G

5-00-00

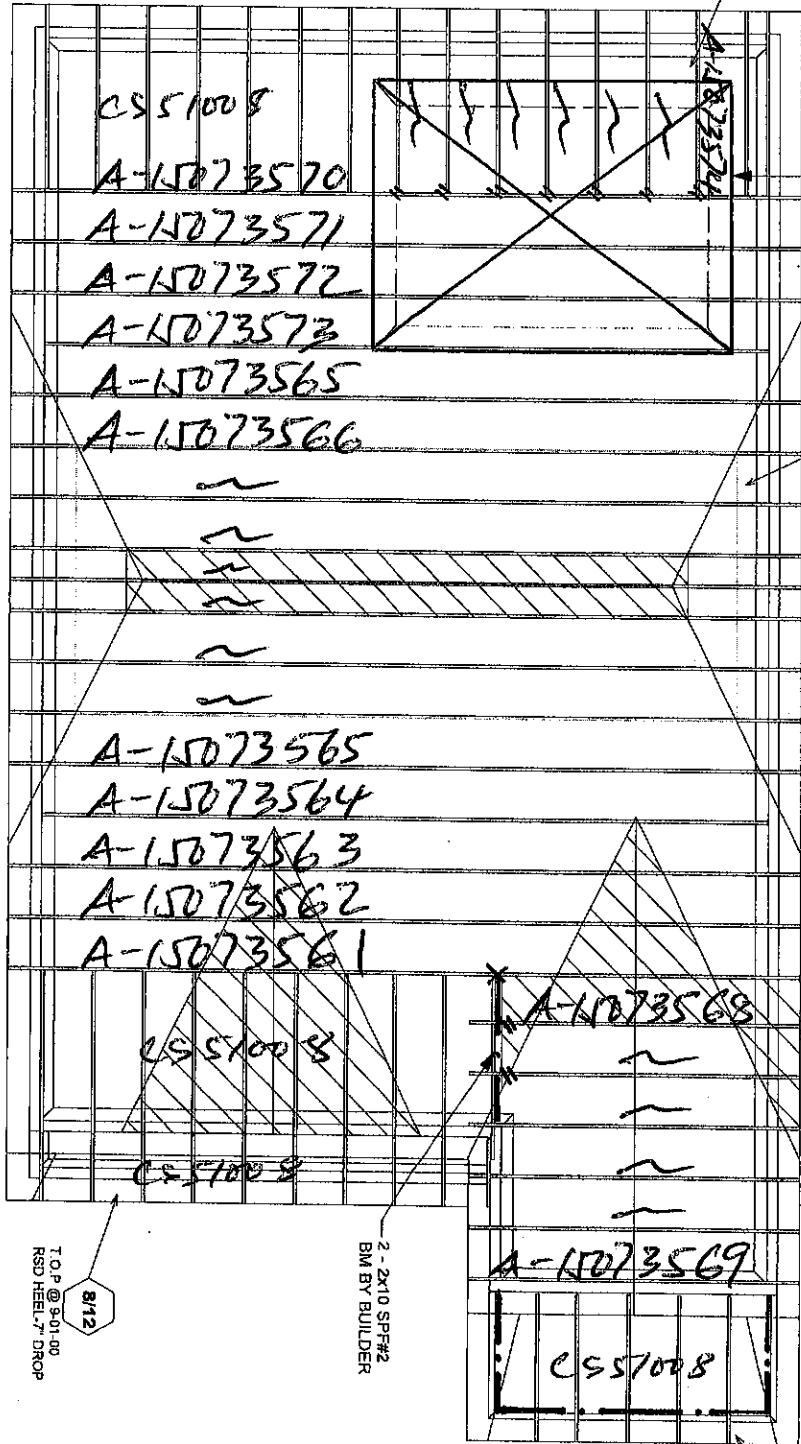
ALPHA BUILDING

OPT TRAY CLG
RAISED - 12"
@ 12/12 I.P.
INSET 12"
(10'-7" X 14'-6")

7-11-00 RSD SOFFIT

4/12
T.O.P @ 9-01-00
RSD HEEL 7" DROP

29-10-00
J01(7)
J01C(7)
J01



G01(10)
J01(10)
18-04-00
P01(5)
11-06-00

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

Piggyback (A-15073567)

43-02-00

6-00-00 5-00-00

HANGERS
// LUS24
X HHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS
Mitek Ver 7.5.0



Job Track	40297	Builder / Location	GOLD PARK / KLEINBURG	Model / Elevation	38-1 / A OPT TRAY
Layout ID	253427	Project	HUNTINGTON & NASHVILLE	THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.	
Plan Log	79711	Date	4/23/2015	Designer	cheryle



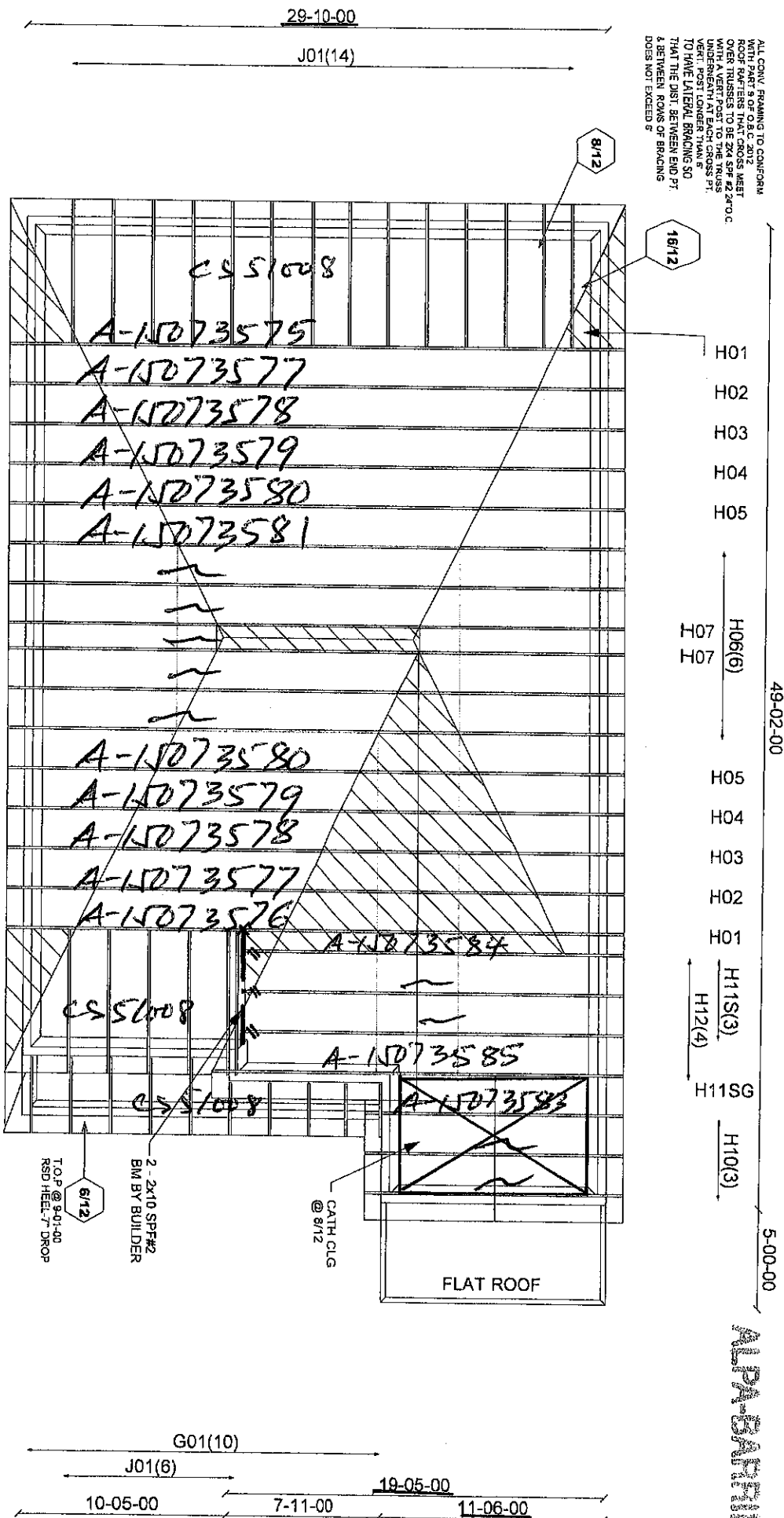
CONVENTIONAL
FRAMING BY
OTHERS

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

42-00-00
Piggback (A-15073582)
A-15073586

HANGERS
// LUS24
X HHUS26-2



ALL CONN. FRAMING TO CONFORM WITH AISC 360. ALL JOINTS TO BE MADE IN THE FIELD OF THE MEMBER. ROOF TRUSSES TO BE 2x4 SP#2 2x6 TO C WITH A VERT POST TO THE TRUSS. VERT POSTS TO BE 2x4 SP#2 2x6 TO C. TO HAVE LATERAL BRACING SO THAT THE DIST. BETWEEN END PT. A BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'

49-02-00

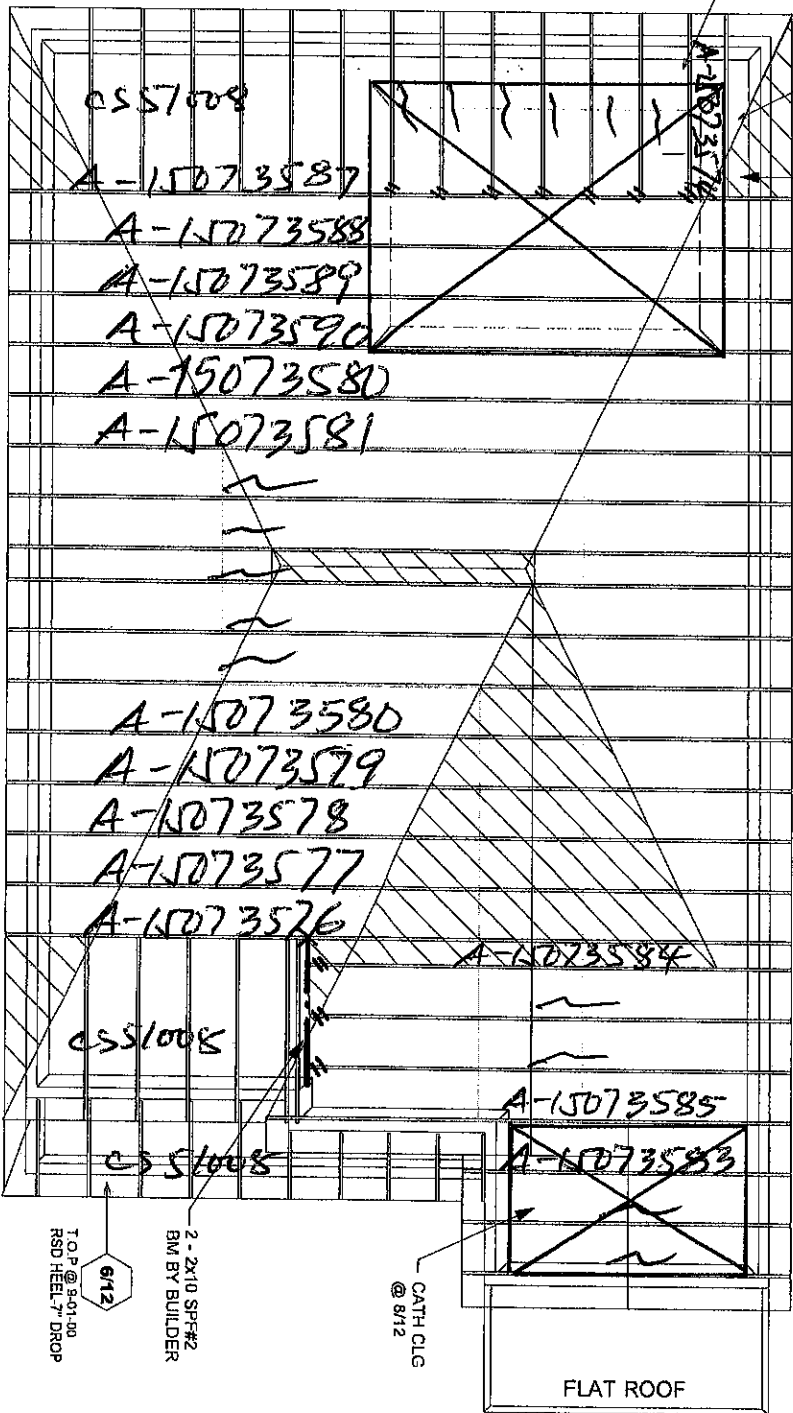
5-00-00

ALPHA-BATTLES

H01T
H02T
H03T
H04T
H05
H06(6)
H07
H07
H05
H04
H03
H02
H01
H11S(3)
H12(4)
H11SG
H10(3)

OPT TRAY CLG
RAISED - 12"
@ 12/12 I.P.
INSET 12"
(10'-7" X 14'-6")

29-10-00
J01
J01C(7)
J01(6)



G01(10)
J01(6)
10-05-00
7-11-00
19-05-00
11-06-00

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

Piggyback (A-15073582)
A-15073586

42-00-00

1-02-00 6-00-00

5-00-00

HANGERS
// LUS24
X HHUS26-2

CONVENTIONAL
FRAMING BY
OTHERS

Mike Ver 7.5.0



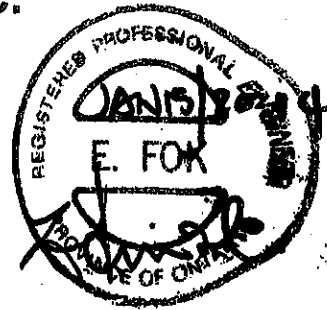
Job Track 40297
Layout ID: 253429
Plan Log 79711

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

Model / Elevation: 38-1 / B OPT TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

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



A-15073590

253429

H03T

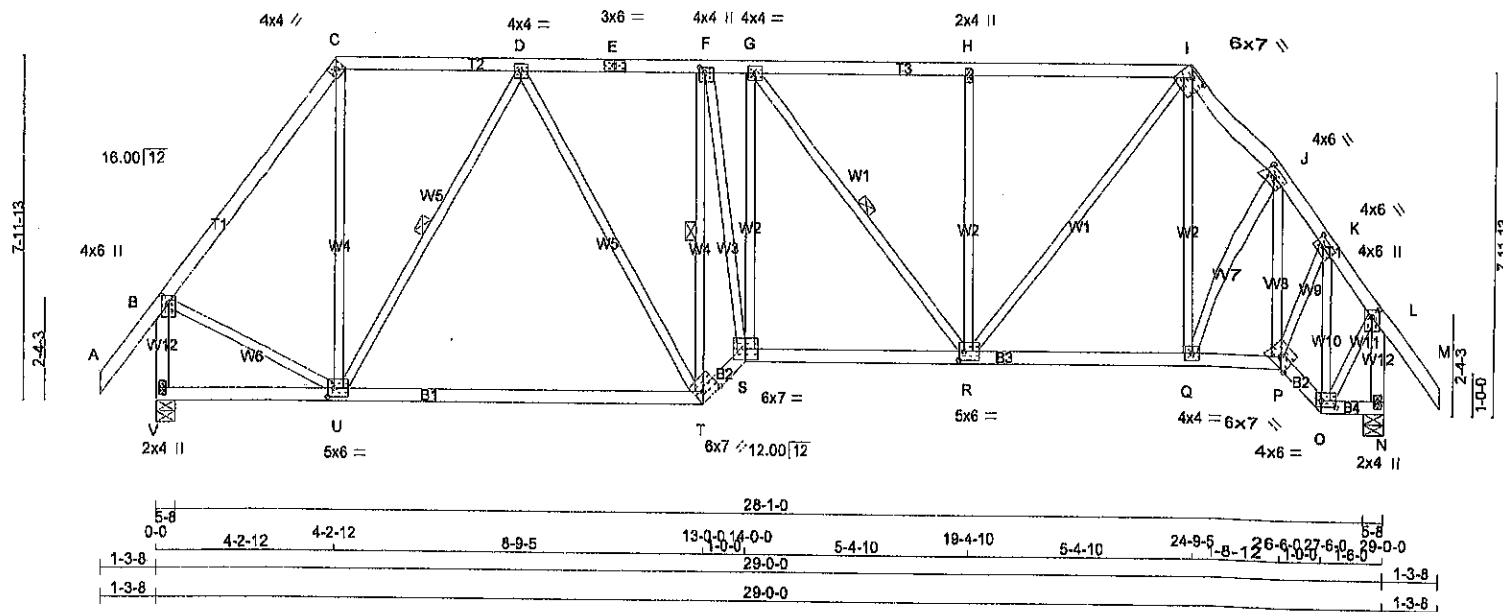
1

1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 Mitek Industries, Inc. Tue Jul 14 16:34:26 2015 Page 1
ID:97W_oc7jcYybVbsU0Ab4z7zOVES-D7Spaw0gze45ifQjf1 OuaP77ABHv4PwLgS74Yyy76y
Scale = 1:54.3

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - I	2x4	DRY	No.2
I - M	2x4	DRY	No.2
V - B	2x4	DRY	No.2
N - L	2x4	DRY	No.2
V - T	2x4	DRY	No.2
T - S	2x4	DRY	No.2
S - P	2x4	DRY	No.2
P - O	2x4	DRY	No.2
O - N	2x4	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	TMW+p	MT20	4.0	6.0	2.00	2.00
C	TTW-h	MT20	4.0	4.0		
D	TMWV-h	MT20	4.0	4.0		
E	TS-l	MT20	3.0	6.0		
F	TMWV+u	MT20	4.0	4.0	1.50	1.50
G	TMWV-l	MT20	4.0	4.0		
H	TMW+w	MT20	2.0	4.0		
I	TTW-h	MT20	6.0	7.0	1.50	3.75
J	TMWV-l	MT20	4.0	6.0	2.00	2.50
K	TMWV-l	MT20	4.0	6.0	2.00	2.50
L	TMWV+p	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	2.0	4.0		
O	BBWV-l	MT20	4.0	6.0	1.75	4.25
P	BBWV-h	MT20	6.0	7.0	Edge	
Q	BMWV-l	MT20	4.0	4.0		
R	BMWVW-l	MT20	5.0	6.0	2.60	1.60
S	BBWV-l	MT20	6.0	7.0		
T	BBWV-h	MT20	6.0	7.0	2.25	4.50
U	BMWVW-l	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	MAXIMUM FACTORED	INPUT	REQD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UP
V	1372	0	1372	0
N	1377	0	1377	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
V	964	666 / 0	0 / 0
N	968	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 = 5.30FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-U, F-T, G-R.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)	UNBRAC	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	CS1 (LC)
		(LBS)	(PLF)					LENGTH			(LBS)				
FR-TO															
A-B	0 / 40		-70.5	-70.5	0.10 (1)	10.00	U-C	0 / 567		0.13 (1)					
B-C	-1038 / 0		-70.5	-70.5	0.26 (1)	5.88	U-D	-785 / 0		0.42 (1)					
C-D	-627 / 0		-70.5	-70.5	0.21 (1)	8.25	D-T	0 / 393		0.09 (1)					
D-E	-1199 / 0		-70.5	-70.5	0.23 (1)	5.56	T-F	-1474 / 0		0.59 (1)					
E-F	-1199 / 0		-70.5	-70.5	0.23 (1)	5.56	F-S	0 / 1282		0.29 (1)					
F-G	-1390 / 0		-70.5	-70.5	0.14 (1)	5.37	S-G	0 / 39		0.01 (4)					
G-H	-1258 / 0		-70.5	-70.5	0.35 (1)	6.30	G-R	-213 / 0		0.10 (1)					
H-I	-1258 / 0		-70.5	-70.5	0.35 (1)	5.30	R-H	-437 / 0		0.36 (1)					
I-J	-1168 / 0		-70.5	-70.5	0.04 (1)	5.87	R-I	0 / 903		0.20 (1)					
J-K	-1097 / 0		-70.5	-70.5	0.04 (1)	6.00	Q-I	0 / 57		0.02 (4)					
K-L	-784 / 0		-70.5	-70.5	0.10 (1)	6.26	Q-J	0 / 42		0.01 (1)					
L-M	0 / 40		-70.5	-70.5	0.10 (1)	10.00	P-J	-213 / 0		0.07 (1)					
V-B	-1362 / 0		0.0	0.0	0.17 (1)	6.96	P-K	0 / 694		0.16 (1)					
N-L	-1364 / 0		0.0	0.0	0.17 (1)	6.95	O-K	-967 / 0		0.26 (1)					
V-U	0 / 0		-17.5	-17.5	0.29 (4)	10.00	B-U	0 / 680		0.15 (1)					
U-T	0 / 1009		-17.5	-17.5	0.38 (4)	10.00	O-L	0 / 716		0.16 (1)					
T-S	0 / 1720		-17.5	-17.5	0.28 (1)	10.00									
S-R	0 / 1390		-17.5	-17.5	0.29 (1)	10.00									
R-Q	0 / 689		-17.5	-17.5	0.18 (4)	10.00									
Q-P	0 / 673		-17.5	-17.5	0.15 (1)	10.00									
P-O	0 / 585		-17.5	-17.5	0.10 (1)	10.00									
O-N	0 / 0		-17.5	-17.5	0.01 (4)	10.00									

TOTAL WEIGHT = 162 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 MINIMUMTHIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010THIS DESIGN COMPLIES WITH:
- PART 9 OF NBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPC 2011DESIGN 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 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")CSI: TC=0.35 (H-I), BC=0.36 (T-U), WS=0.69
(F-T), SSI=0.18 (H-I)DOL LUMBER=1.00 NAIL=1.00 L.S 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

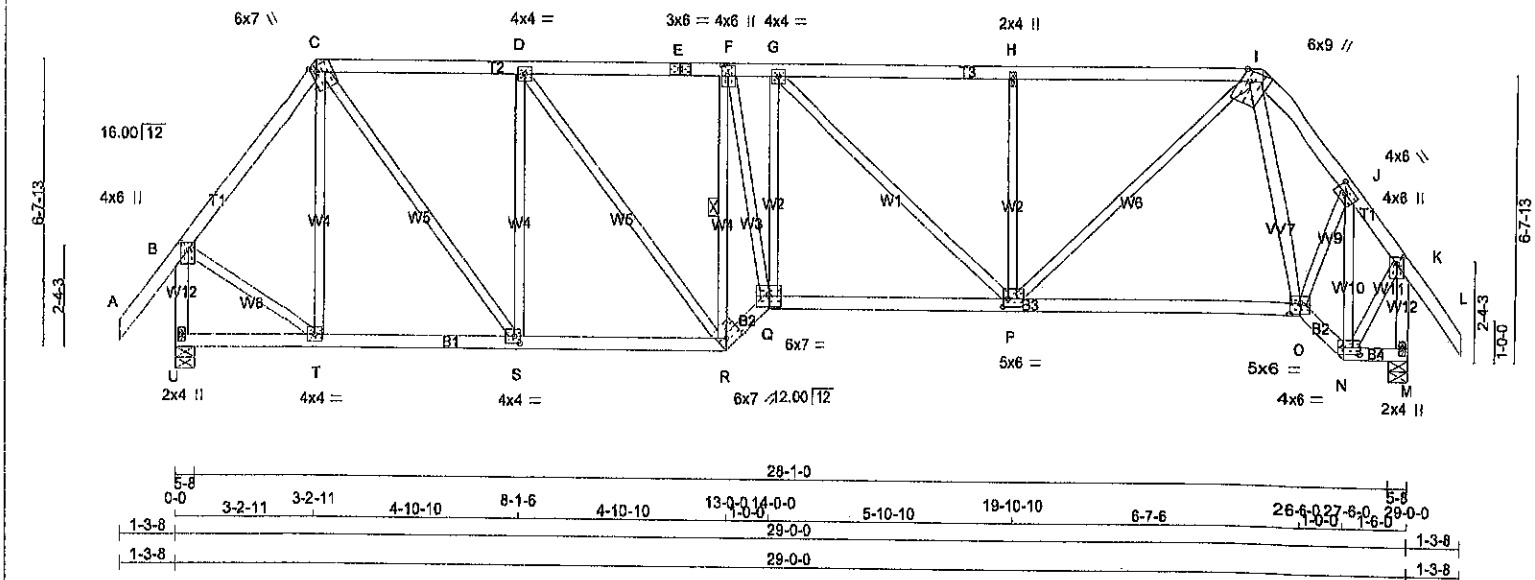
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
618	354	1667	822
2284	1656		

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (L) (INPUT = 0.90)
JSI METAL= 0.29 (C) (INPUT = 1.00)

A-11073589



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 - I	2x4	DRY No.2	SPF
I - L	2x4	DRY No.2	SPF
L - M	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
K - O	2x4	DRY No.2	SPF
O - Q	2x4	DRY No.2	SPF
Q - N	2x4	DRY No.2	SPF
N - M	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMWV+p	MT20	4.0	6.0 2.00 2.00
C	TTWW+m	MT20	6.0	7.0 Edge 1.50
D	TMWV-t	MT20	4.0	4.0
E	TS-t	MT20	3.0	6.0
F	TMWV+t	MT20	4.0	6.0 3.00 1.75
G	TMWV-t	MT20	4.0	4.0
H	TMWV+w	MT20	2.0	4.0
I	TTWW+m	MT20	6.0	9.0 Edge 2.00
J	TMWV-t	MT20	4.0	6.0 2.00 2.50
K	TMWV+p	MT20	4.0	6.0 2.00 2.00
M	BMV1+p	MT20	2.0	4.0
N	BBWW-t	MT20	4.0	6.0 2.00 4.60
O	BBWW-t	MT20	5.0	6.0 3.00 3.00
P	BMWV-t	MT20	5.0	6.0 2.25 1.50
Q	BBWW-t	MT20	6.0	7.0
R	BBWW-t	MT20	6.0	7.0 2.25 4.50
S	BMWV-t	MT20	4.0	4.0 2.00 1.50
T	BMWV-t	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									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG		
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX	
U	1372	0	1372	0	0	5-8	1-8		
M	1377	0	1377	0	0	5-8	1-8		
UNFACTORED REACTIONS									
1ST LCASE MAX. MIN. COMPONENT REACTIONS									
JT	COMBINED		SNOW		LIVE		PERM. LIVE		WIND DEAD SOIL
	U	M	U	M	U	M	U	M	
U	984	866 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0	0 / 0
M	988	869 / 0	0 / 0	0 / 0	0 / 0	0 / 0	299 / 0	0 / 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 = 4.78FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF 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)									
CHORDS									
MEMB.	MAX. FACTORED FORCE		FACTORED VERT. LOAD		MAX. UNBRACED LENGTH		MEMB. MAX. FACTORED FORCE		MAX. CSI (LC)
	(LBS)	(PLF)	(LBS)	(PLF)	FR-TO	FR-TO	(LBS)	(PLF)	
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	T-C	-288 / 0	0.20 (1)	
B-C	-987 / 0	-70.5	-70.5	0.15 (1)	6.11	C-S	0 / 1012	0.23 (1)	
C-D	-1203 / 0	-70.5	-70.5	0.29 (1)	5.48	S-D	-714 / 0	0.52 (1)	
D-E	-1454 / 0	-70.5	-70.5	0.30 (1)	5.08	D-R	0 / 410	0.09 (1)	
E-F	-1454 / 0	-70.5	-70.5	0.30 (1)	5.08	R-F	-1751 / 0	0.50 (1)	
F-G	-1743 / 0	-70.5	-70.5	0.17 (1)	4.88	F-Q	0 / 1563	0.35 (1)	
G-H	-1542 / 0	-70.5	-70.5	0.44 (1)	4.79	Q-G	-7 / 38	0.01 (4)	
H-I	-1542 / 0	-70.5	-70.5	0.45 (1)	4.79	G-P	-274 / 0	0.35 (1)	
I-J	-1105 / 0	-70.5	-70.5	0.06 (1)	5.97	P-H	-474 / 0	0.23 (1)	
J-K	-782 / 0	-70.5	-70.5	0.10 (1)	6.25	H-I	0 / 1168	0.26 (1)	
K-L	0 / 40	-70.5	-70.5	0.10 (1)	10.00	I-O	-135 / 0	0.07 (1)	
L-M	-1352 / 0	0.0	0.0	0.17 (1)	6.97	O-J	0 / 653	0.15 (1)	
M-K	-1384 / 0	0.0	0.0	0.17 (1)	6.95	N-J	-964 / 0	0.25 (1)	
U-T	0 / 0	-17.5	-17.5	0.06 (4)	10.00	B-T	0 / 682	0.15 (1)	
T-S	0 / 584	-17.5	-17.5	0.15 (4)	10.00	N-K	0 / 721	0.16 (1)	
S-R	0 / 1204	-17.5	-17.5	0.24 (1)	10.00				
R-Q	0 / 2089	-17.5	-17.5	0.34 (1)	10.00				
Q-P	0 / 1743	-17.5	-17.5	0.38 (1)	10.00				
P-O	0 / 675	-17.5	-17.5	0.25 (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				

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 (0.87")
CALCULATED VERT. DEFL.(LL) = L/989 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (0.87")
CALCULATED VERT. DEFL.(TL) = L/989 (0.20")

CSI: TC=0.46 (H-I:1), BC=0.38 (P-Q:1), WB=0.52 (D-S:1), SSI=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 618 354 1667 822 2284 1656

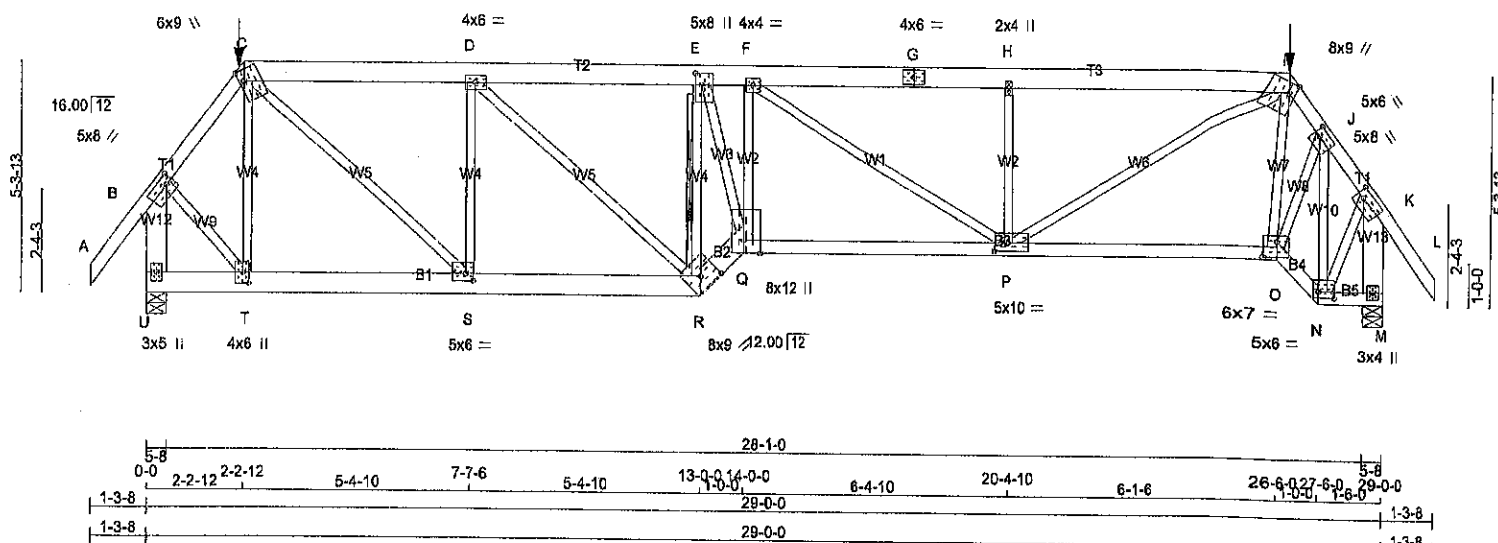
PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (S) (INPUT = 0.90)
JSI METAL= 0.29 (Q) (INPUT = 1.00)



A-1073588



LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMW-I	MT20	5.0	8.0	2.25	2.00
C TTW+m	MT20	6.0	9.0	3.00	1.25
D TMW-I	MT20	4.0	6.0		
E TMW+H	MT20	5.0	8.0	3.25	1.75
F TMW-I	MT20	4.0	4.0		
G TS-I	MT20	4.0	6.0		
H TMW+H	MT20	2.0	4.0		
I TTW+m	MT20	8.0	9.0	2.75	1.75
J TMW-I	MT20	5.0	6.0	2.25	1.75
K TMW-I	MT20	5.0	8.0	2.25	2.00
M BMV1+p	MT20	3.0	4.0		
N BMW-I	MT20	5.0	6.0	1.75	4.50
O BMW-I	MT20	6.0	7.0	4.25	3.50
P BMW+H	MT20	5.0	10.0	2.25	2.75
Q BMW+H	MT20	8.0	12.0	Edge	4.75
R BMW+H	MT20	6.0	9.0	3.50	4.75
S BMW+H	MT20	5.0	6.0	2.00	2.25
T BMW+H	MT20	4.0	6.0	3.00	1.75
U BMV1+p	MT20	3.0	5.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
U	2672	0	0	5-8
M	2661	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERMLIVE	WIND	DEAD	SOIL
U	1811	1235 / 0	0 / 0	0 / 0	0 / 0	576 / 0	0 / 0
M	1803	1228 / 0	0 / 0	0 / 0	0 / 0	576 / 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 = 3.80FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT E-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			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO	FR-TO		
A-B	0 / 40	-70.5 -70.5 0.11 (1)	T-C	-707 / 0	0.27 (1)
B-C	-1874 / 0	-70.5 -70.5 0.12 (1)	C-S	0 / 2561	0.63 (1)
C-D	-3010 / 0	-138.7 -138.7 0.38 (1)	S-D	-1566 / 0	0.59 (1)
D-E	-3800 / 0	-138.7 -138.7 0.42 (1)	D-R	0 / 1059	0.26 (1)
E-F	-4718 / 0	-138.7 -138.7 0.26 (1)	R-E	-4133 / 0	0.90 (1)
F-G	-4051 / 0	-70.5 -70.5 0.35 (1)	E-Q	0 / 3650	0.80 (1)
G-H	-4051 / 0	-70.5 -70.5 0.35 (1)	Q-F	0 / 385	0.10 (1)
H-I	-4051 / 0	-70.5 -70.5 0.34 (1)	F-P	-773 / 0	0.83 (1)
I-J	-2231 / 0	-70.5 -70.5 0.11 (1)	P-H	-543 / 0	0.16 (1)
J-K	-1531 / 0	-70.5 -70.5 0.14 (1)	H-P	0 / 3189	0.79 (1)
K-L	0 / 40	-70.5 -70.5 0.11 (1)	O-I	-231 / 0	0.06 (1)
U-B	-2582 / 0	0.0 0.0 0.23 (1)	O-J	0 / 1421	0.35 (1)
M-K	-2536 / 0	0.0 0.0 0.24 (1)	N-J	-1923 / 0	0.53 (1)
			B-T	0 / 1442	0.38 (1)
U-T	0 / 0	-34.5 -34.5 0.09 (1)	N-K	0 / 1438	0.38 (1)
T-S	0 / 1108	-34.5 -34.5 0.23 (1)			
S-R	0 / 3011	-34.5 -34.5 0.47 (1)			
R-Q	0 / 5140	-34.5 -34.5 0.67 (1)			
Q-P	0 / 4705	-102.7 -102.7 0.85 (1)			
P-O	0 / 1336	-102.7 -102.7 0.67 (1)			
O-N	0 / 1174	-34.5 -34.5 0.21 (1)			
N-M	0 / 0	-34.5 -34.5 0.02 (4)			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
C	2-2-12	-115	-115	FRONT	VERT	TOTAL
I	26-9-5	-115	-115	FRONT	VERT	TOTAL

TOTAL WEIGHT = 164 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
SIDE SETBACK = 2-2-12
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 14-0-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 2-2-12
END SETBACK = 5-10-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 2-6-0 OF SPAN MEASURED FROM THE RIGHT.

GIRDER TYPE: CSStdGlrdr
START DISTANCE = 14-0-0
START SPAN CARRIED = 5-10-8
END DISTANCE = 28-6-0
END SPAN CARRIED = 5-10-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 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/998 (0.30")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/614 (0.67")

CSI: TC=0.42 (D-E:1), BC=0.85 (P-Q:1),
WB=0.80 (E-Q:1), SS=0.34 (P-Q:1)

A-ND73587

CONTINUED ON PAGE 2



HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.5 lbs FACTORED DOWN AT 2-2-12, AND 114.5 lbs FACTORED DOWN AT 26-8-5 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 818 354 1687 822 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

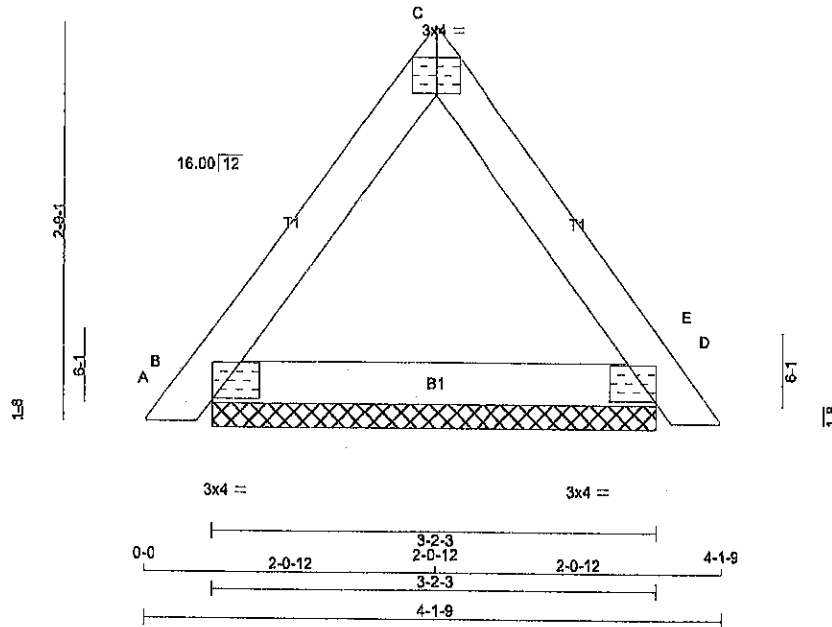
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)
JSI METAL= 0.70 (Q) (INPUT = 1.00)



A-15073587 (2)

Alpa Roof Truss, Maple



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 (tablets in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	1.50 2.75
C	TT-p	MT20	3.0	4.0	3.25 Edge
D	TMB1-I	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		MAXIMUM FACTORED		INPUT		REQD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
B		165	0	165	0	0	3-2-3	1-8	
D		165	0	165	0	0	3-2-3	1-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	115	82 / 0	0 / 0	0 / 0	0 / 0	34 / 0	0 / 0
D	115	82 / 0	0 / 0	0 / 0	0 / 0	34 / 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 = 5.25FT.
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 (PLF)	LC1 MAX (PLF)	LC1 MAX (LC)	MEMB.		FORCE (LBS)	MAX (LC)
FR-TO						FR-TO			
A-B	0 / 8		-70.5	-70.5	0.01 (1)	10.00			
B-C	-68 / 0		-70.5	-70.5	0.03 (1)	6.25			
C-D	-68 / 0		-70.5	-70.5	0.03 (1)	6.25			
D-E	0 / 8		-70.5	-70.5	0.01 (1)	10.00			
B-D	0 / 40		-17.5	-17.5	0.06 (4)	10.00			

TOTAL WEIGHT = 4 X 11 = 46 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, CBC 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=0.03 (C-D:1), BC=0.05 (B-D:4), WB=0.00 (n/a:0), SSI=0.04 (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	SECTION		
(PSI)	(PLI)	(PLI)	(PLI)		
MT20	618	354	1667	822	2284 1656

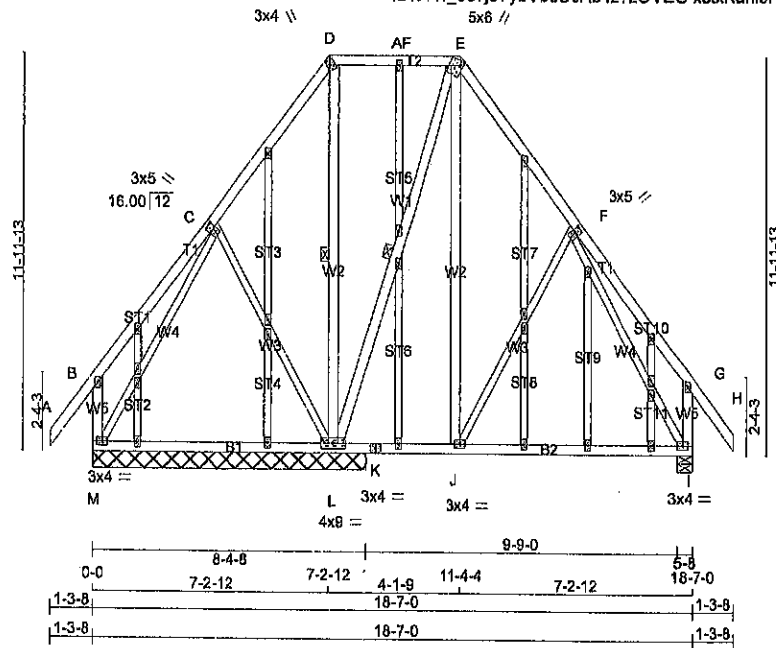
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (D) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)



A-15073586



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
M - B	2x4	DRY	No.2
I - G	2x4	DRY	No.2
M - K	2x4	DRY	No.2
K - I	2x4	DRY	No.2
ALL WEBS EXCEPT	2x4	DRY	No.2
C - L	2x3	DRY	No.2
J - F	2x3	DRY	No.2
M - C	2x3	DRY	No.2
F - I	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			
GABLE STUDS SPACED AT 2'-0" O.C.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMVW+1	MT20	3.0	5.0	2.25 0.75
D	TTW+m	MT20	3.0	4.0	1.75 1.00
E	TTW+m	MT20	5.0	8.0	1.75 1.00
F	TMVW+1	MT20	3.0	5.0	2.25 0.75
G	TMV+p	MT20	2.0	4.0	
I	BMVW1-1	MT20	3.0	4.0	
J	BMVW1-1	MT20	3.0	4.0	
K	BS-1	MT20	3.0	4.0	
L	BMVW1-1	MT20	4.0	9.0	
M	BMVW1-1	MT20	3.0	4.0	
N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AE					
N	NP+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG
L	884	0	884	0	0	0	8-4-8	1-8	
M	383	0	383	0	0	0	8-4-8	1-8	
I	577	0	577	0	0	0	6-8	1-8	

UNFACTORED REACTIONS		1ST LOASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	PERM.LIVE	WIND	DEAD	SOIL	PERM.LIVE	WIND
L	832	417 / 0	0 / 0	0 / 0	0 / 0	215 / 0	0 / 0	0 / 0	0 / 0	215 / 0	0 / 0	0 / 0	0 / 0
M	275	198 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0	0 / 0	0 / 0
I	405	284 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0	0 / 0	0 / 0	121 / 0	0 / 0	0 / 0	0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MEMB.		MAX. FACTORED		FACTORED		WEB S		MEMB.		MAX. FACTORED	
FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)	FR-TO	FORCE (LBS)
A-B	0 / 40	FROM	-70.5	TO	-70.5	0.10 (1)	10.00	C-L	-180 / 0	0.22 (1)			
B-C	0 / 26	FROM	-70.5	TO	-70.5	0.16 (1)	10.00	L-D	-274 / 0	0.22 (1)			
C-D	-8 / 0	FROM	-70.5	TO	-70.5	0.12 (1)	10.00	L-E	-372 / 0	0.33 (1)			
D-AF	-2 / 15	FROM	-78.0	TO	-78.0	0.23 (1)	10.00	J-E	0 / 230	0.04 (1)			
AF-E	-2 / 15	FROM	-78.0	TO	-78.0	0.23 (1)	10.00	J-F	-144 / 0	0.18 (1)			
E-F	-187 / 0	FROM	-70.5	TO	-70.5	0.12 (1)	6.25	M-C	-167 / 0	0.19 (1)			
F-G	0 / 25	FROM	-70.5	TO	-70.5	0.15 (1)	10.00	F-I	-372 / 0	0.43 (1)			
G-H	0 / 40	FROM	-70.5	TO	-70.5	0.10 (1)	10.00						
M-B	-192 / 0	FROM	0.0	TO	0.0	0.02 (1)	7.81						
I-G	-193 / 0	FROM	0.0	TO	0.0	0.02 (1)	7.81						
M-L	0 / 78	FROM	-17.5	TO	-17.5	0.20 (4)	10.00						
L-K	0 / 106	FROM	-17.5	TO	-17.5	0.19 (4)	10.00						
K-J	0 / 106	FROM	-17.5	TO	-17.5	0.19 (4)	10.00						
J-I	0 / 174	FROM	-17.5	TO	-17.5	0.21 (4)	10.00						

TOTAL WEIGHT = 160 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 6.00/12 AND -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 (0.37")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.37")
CALCULATED VERT. DEFL.(TL)= L/999 (0.09")

CSI: TC=0.23 (D-E:1), BC=0.21 (J-K:4), WB=0.43 (F-I:1), SSF=0.13 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

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 1067 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (K) (INPUT = 0.80)
JSI METAL= 0.21 (K) (INPUT = 1.00)



A-15073585

253428

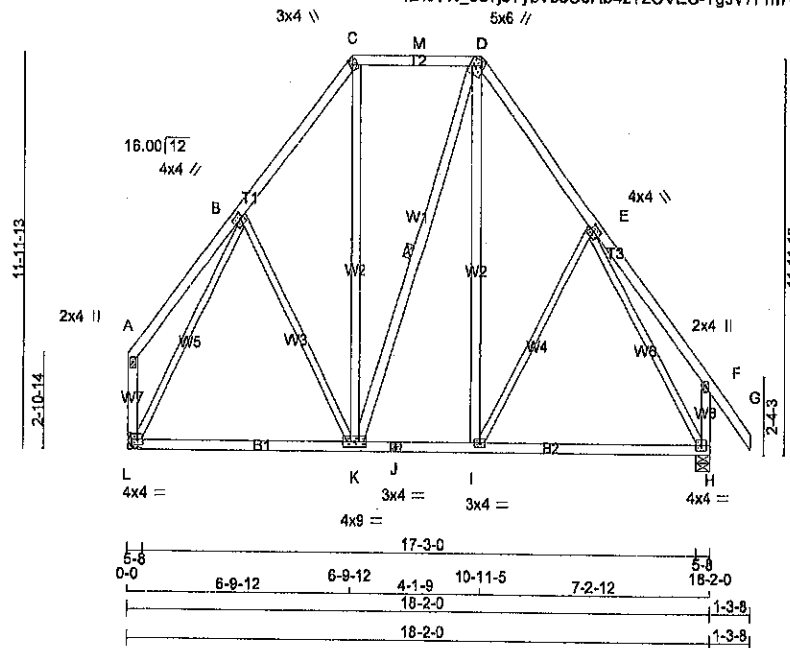
H11S

QUANTITY
3PLY
1JOB DESC.
TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Tue Jul 14 16:28:36 2015 Page 1

ID:97W_oc?jcYybVbeU0Ab4z?zOVES-TgJV7Fm7O5zmldS9X6p0CceLT5sGuisPsDgUoqyy7CQ
Scale = 1:70.8

LUMBER

N. L. G. A. RULES

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

ALL WEBS	SIZE	DRY	LUMBER	DESCR.
EXCEPT				
B - K	2x3	DRY	No.2	SPF
I - E	2x3	DRY	No.2	SPF
L - B	2x3	DRY	No.2	SPF
E - H	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-t	MT20	4.0	4.0	2.00	1.25
C - TTW+m	MT20	3.0	4.0	1.75	1.00
D - TTWW+m	MT20	6.0	6.0	1.75	1.00
E - TMWW-t	MT20	4.0	4.0	2.00	1.50
F - TMV+p	MT20	2.0	4.0		
H - BMVW1-t	MT20	4.0	4.0		
I - BMWW-t	MT20	3.0	4.0		
J - BS-t	MT20	3.0	4.0		
K - BMWW-t	MT20	4.0	9.0		
L - BMVW1-t	MT20	4.0	4.0		

NOTES- (1)

1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.23, 13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED DOWN	MAXIMUM FACTORED HORZ	INPUT BRG	REQD BRG
L	815	0	815	0	IN-SX	IN-SX
H	913	0	913	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
L	576	381 / 0	0 / 0	0 / 0	0 / 0	194 / 0	0 / 0
H	643	440 / 0	0 / 0	0 / 0	0 / 0	202 / 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.

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				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 / 23	-70.5	-70.5 0.13 (1)	10.00	B-K	-37 / 25	0.05 (1)
B-C	-534 / 0	-70.5	-70.5 0.10 (1)	6.25	K-C	0 / 155	0.02 (1)
C-M	-307 / 0	-78.0	-78.0 0.23 (1)	6.25	K-D	-22 / 0	0.02 (1)
M-D	-307 / 0	-78.0	-78.0 0.23 (1)	6.25	D-D	0 / 180	0.03 (1)
D-E	-547 / 0	-70.5	-70.5 0.12 (1)	6.25	I-E	-81 / 13	0.10 (1)
E-F	0 / 24	-70.5	-70.5 0.15 (1)	10.00	L-B	-747 / 0	0.91 (1)
F-G	0 / 40	-70.5	-70.5 0.10 (1)	10.00	E-H	-782 / 0	0.87 (1)
L-A	-89 / 0	0.0	0.0 0.01 (1)	7.81			
H-F	-194 / 0	0.0	0.0 0.02 (1)	7.81			
L-K	0 / 323	-17.5	-17.5 0.20 (4)	10.00			
K-J	0 / 315	-17.5	-17.5 0.21 (4)	10.00			
J-I	0 / 315	-17.5	-17.5 0.21 (4)	10.00			
I-H	0 / 352	-17.5	-17.5 0.22 (4)	10.00			

TOTAL WEIGHT = 3 X 124 = 373 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

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

ALLOWABLE DEFL.(LL) = L/360 (0.61")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL) = L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.23 (C-D:1), BC=0.22 (H-I:4), WB=0.91
(B-L:1), SSI=0.13 (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
MT20	818	354	1667
	822	2284	1856

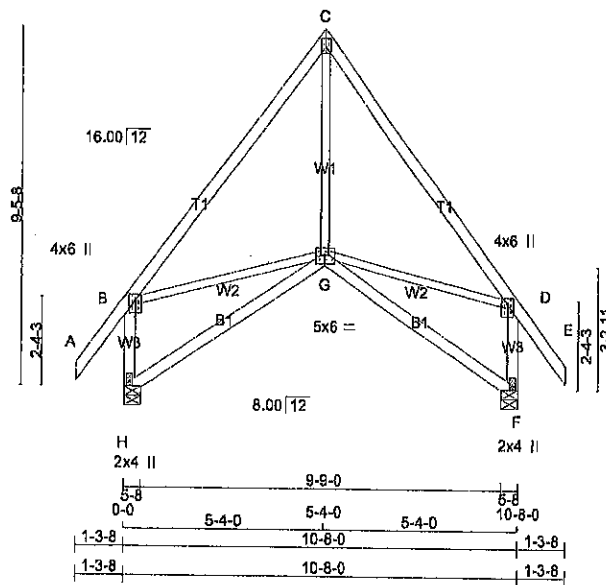
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (E) (INPUT = 0.90)
JSI METAL= 0.29 (E) (INPUT = 1.00)



A-11073584



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 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	8.0	2.00	2.00
C	TTW+p	MT20	3.0	5.0	2.00	Edge
D	TMVW+p	MT20	4.0	8.0	2.00	2.00
F	BMV1+p	MT20	2.0	4.0	Edge	
G	BBWV+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 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 VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG IN-SX	REQD BRG IN-SX
H	588	0	588	0	5-8	1-8
F	588	0	588	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. 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 = 0.25FT.
 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			MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED	
		VERT. LOAD (PLF)	LC1 MAX CSI (LC)	LC2 MAX CSI (LC)			FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO			FR-TO		
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	G-C	0 / 197	0.05 (4)
B-C	-358 / 0	-70.5	-70.5	0.26 (1)	6.25	B-G	0 / 221	0.05 (1)
C-D	-358 / 0	-70.5	-70.5	0.26 (1)	6.25	G-D	0 / 221	0.05 (1)
D-E	0 / 40	-70.5	-70.5	0.10 (1)	10.00			
H-B	-822 / 0	0.0	0.0	0.07 (1)	7.81			
F-D	-822 / 0	0.0	0.0	0.07 (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 = 3 X 58 = 176 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, 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/999 (0.01")
 ALLOWABLE DEFL.(TL) = L/360 (0.36")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.26 (B-C:1), BC=0.15 (G-H:4),
 WB=0.05 (B-G:1), SS=0.09 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

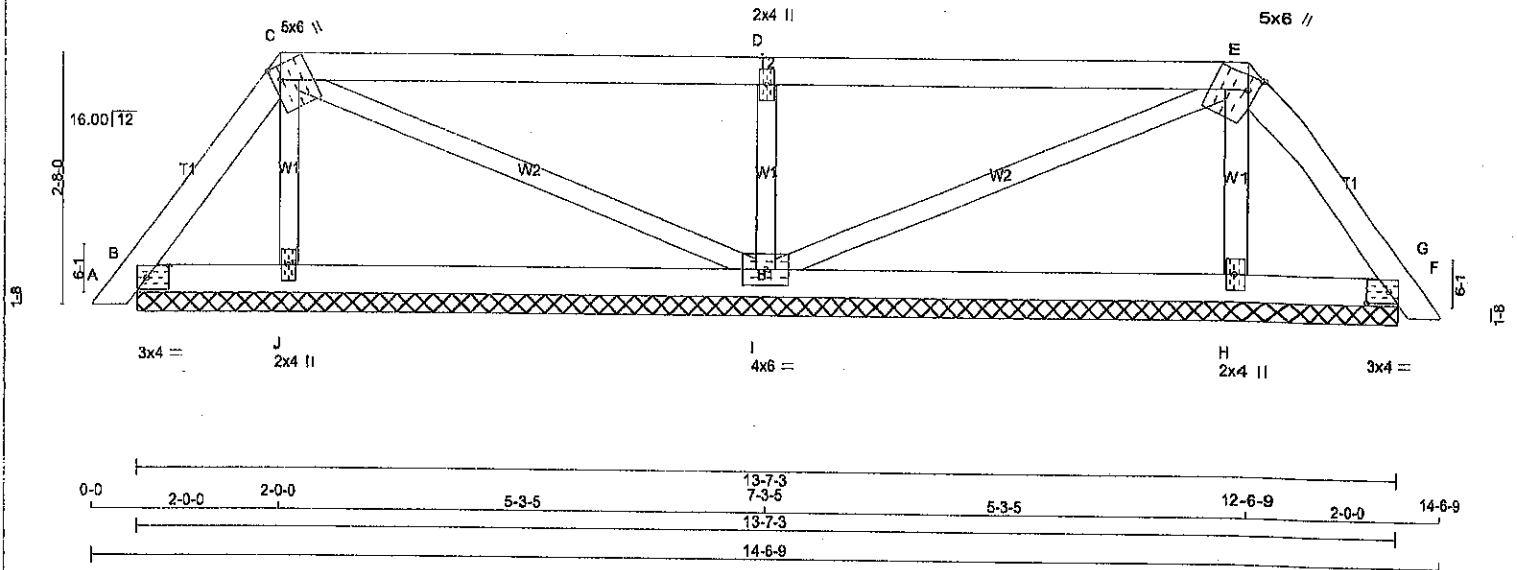
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (H) (INPUT = 0.50)
 JSI METAL= 0.12 (H) (INPUT = 1.00)



A-15073583



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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0	1.50	2.75
C	TTWW+m	MT20	5.0	6.0	1.75	1.00
D	TMW+w	MT20	2.0	4.0		
E	TTWW+m	MT20	5.0	6.0	1.75	1.00
F	TMB1-I	MT20	3.0	4.0	1.50	2.75
H	BMW1+w	MT20	2.0	4.0		
I	BMVWW1-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	REQD BRG
	VERT	HORZ	DOWN	HORZ		
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				
		SNOW	LIVE	PERM.LIVE	WIND	DEAD
B	87	78/0	0/0	0/0	0/0	8/0
F	87	78/0	0/0	0/0	0/0	8/0
J	148	78/0	0/0	0/0	0/0	71/0
I	405	287/0	0/0	0/0	0/0	118/0
H	148	78/0	0/0	0/0	0/0	71/0

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)	LC1 MAX	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX	MAX UNBRAC LENGTH	
FR-TO		FROM TO			FR-TO				
A-B	0/0	-70.5	-70.5	0.01 (1)	10.00	J-C	-131/0	0.02 (1)	
B-C	-66/0	-70.5	-70.5	0.03 (1)	6.26	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	-86/0	-70.5	-70.5	0.03 (1)	8.25	H-E	-131/0	0.02 (1)	
F-G	0/0	-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				

TOTAL WEIGHT = 2 X 49 = 97 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.33 (D-E:1), BC=0.10 (H-I:4), WB=0.07 (D-I:1), SSI=0.1B (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

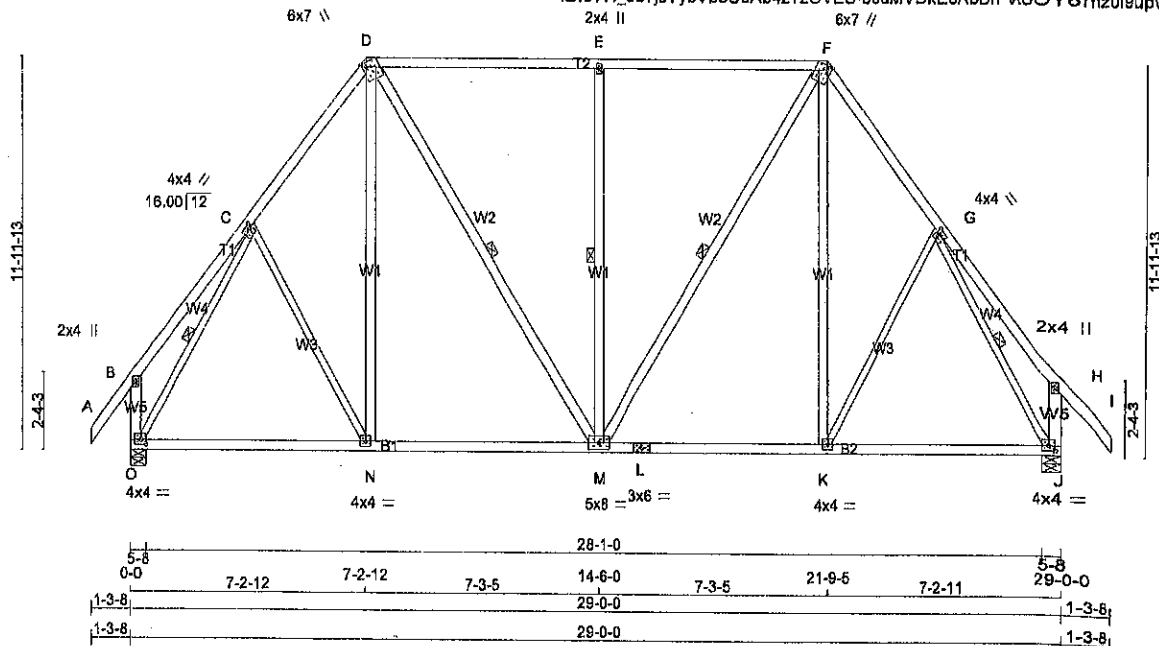
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (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 SPF
D - F	2x4	DRY	No.2 SPF
F - I	2x4	DRY	No.2 SPF
O - B	2x4	DRY	No.2 SPF
J - H	2x4	DRY	No.2 SPF
O - L	2x4	DRY	No.2 SPF
L - J	2x4	DRY	No.2 SPF
ALL WEBS EXCEPT	2x4	DRY	No.2 SPF
C - N	2x3	DRY	No.2 SPF
K - G	2x3	DRY	No.2 SPF
O - C	2x3	DRY	No.2 SPF
G - J	2x3	DRY	No.2 SPF

DRY: SEASONED LUMBER.

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
O	1429 0	1429 0	5-8	1-8
J	1429 0	1429 0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
O	1010	868 / 0	0 / 0	0 / 0	342 / 0	0 / 0
J	1010	868 / 0	0 / 0	0 / 0	342 / 0	0 / 0

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

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

PLATES (tablets in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW-t	MT20	4.0	4.0	1.50	1.00
D	TTVW+m	MT20	6.0	7.0	Edge	1.50
E	TMV+w	MT20	2.0	4.0		
F	TTVW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW-t	MT20	4.0	4.0	1.50	1.00
H	TMV+p	MT20	2.0	4.0		
J	BMVW1-t	MT20	4.0	4.0	1.75	2.00
K	BMVW-t	MT20	4.0	4.0		
L	BS-t	MT20	3.0	6.0		
M	BMVW-t	MT20	6.0	6.0		
N	BMVW-t	MT20	4.0	4.0		
O	BMVW1-t	MT20	4.0	4.0	1.75	2.00

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.67FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. 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)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO					FR-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)	5.67	M-E	-666 / 0	0.54 (1)
E-F	-889 / 0	-78.0	-78.0 0.55 (1)	5.67	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	O-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			

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 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 (0.87")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.87")
CALCULATED VERT. DEFL.(TL)= L/999 (0.08")

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)

DDL 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	364
	1667	822
	2284	1856

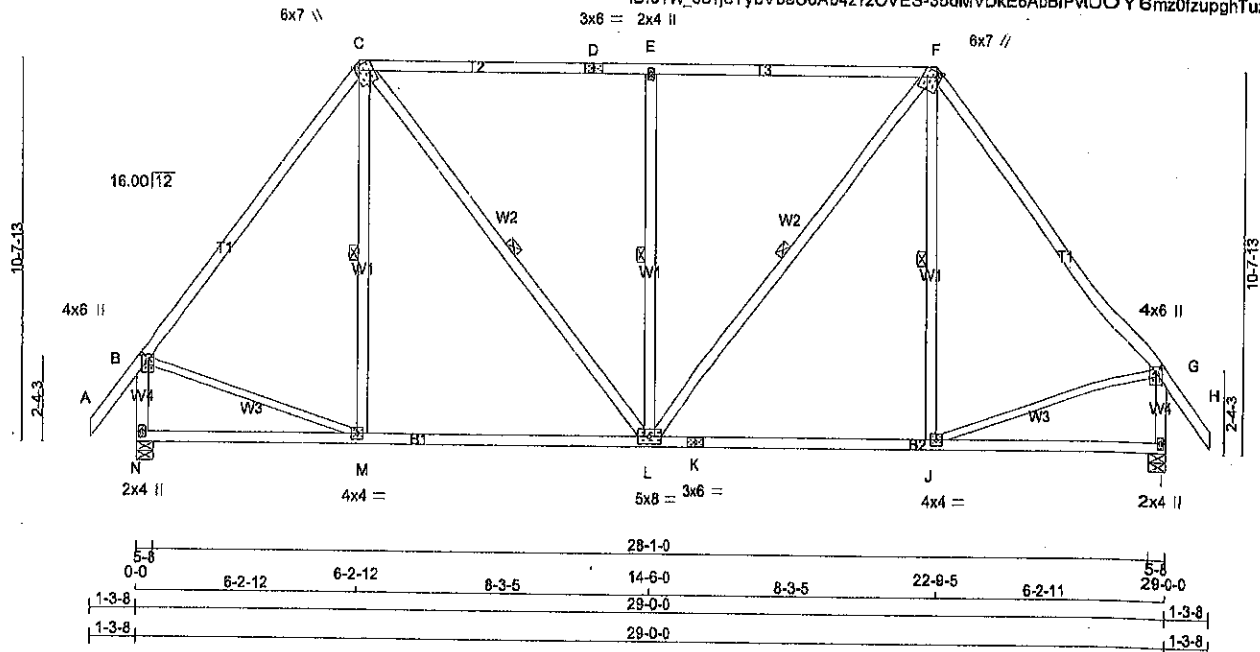
PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-11073581



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	1.50
D	TS-t	MT20	3.0	6.0		
E	TMW+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	BMWW-t	MT20	4.0	4.0		
K	BS-t	MT20	3.0	6.0		
L	BMWW-t	MT20	6.0	8.0		
M	BMWW-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 CBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

JT	FACTORED GROSS REACTION	FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP
N	1375	0	1375	0
I	1375	0	1375	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
I	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) N, I

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.38FT.
 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO			FR-TO				
A-B	0 / 40	-70.5	-70.5	0.07 (1)	10.00	M-C	-48 / 95	0.03 (1)	
B-C	-1028 / 0	-70.5	-70.5	0.38 (1)	6.25	C-L	0 / 550	0.09 (1)	
C-D	-858 / 0	-70.5	-70.5	0.95 (1)	4.38	L-E	-715 / 0	0.41 (1)	
D-E	-858 / 0	-70.5	-70.5	0.95 (1)	4.38	E-F	0 / 550	0.09 (1)	
E-F	-858 / 0	-70.5	-70.5	0.95 (1)	4.38	F-G	-48 / 95	0.03 (1)	
F-G	-1028 / 0	-70.5	-70.5	0.38 (1)	6.25	G-H	0 / 550	0.09 (1)	
G-H	0 / 40	-70.5	-70.5	0.07 (1)	10.00	H-I	-48 / 95	0.03 (1)	
H-I	-1333 / 0	0.0	0.0	0.17 (1)	7.01	I-J	0 / 550	0.09 (1)	
I-J	-1333 / 0	0.0	0.0	0.17 (1)	7.01	J-K	-48 / 95	0.03 (1)	
K-L	0 / 0	-17.5	-17.5	0.21 (4)	10.00	L-M	0 / 550	0.09 (1)	
L-M	0 / 615	-17.5	-17.5	0.28 (4)	10.00	M-N	-48 / 95	0.03 (1)	
M-N	0 / 615	-17.5	-17.5	0.28 (4)	10.00	N-O	0 / 550	0.09 (1)	
N-O	0 / 615	-17.5	-17.5	0.28 (4)	10.00	O-P	-48 / 95	0.03 (1)	
O-P	0 / 0	-17.5	-17.5	0.21 (4)	10.00	P-Q	0 / 550	0.09 (1)	

TOTAL WEIGHT = 2 X 180 = 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 068-09
 - TPIC 2011

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

ALLOWABLE DEFL.(LL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(LL) = L/899 (0.03")
 ALLOWABLE DEFL.(TL) = L/360 (0.97")
 CALCULATED VERT. DEFL.(TL) = L/899 (0.03")
 CSI: TC=0.96 (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)
 MAX MIN MAX MIN MAX MIN
 MT20 818 354 1687 822 2284 1656

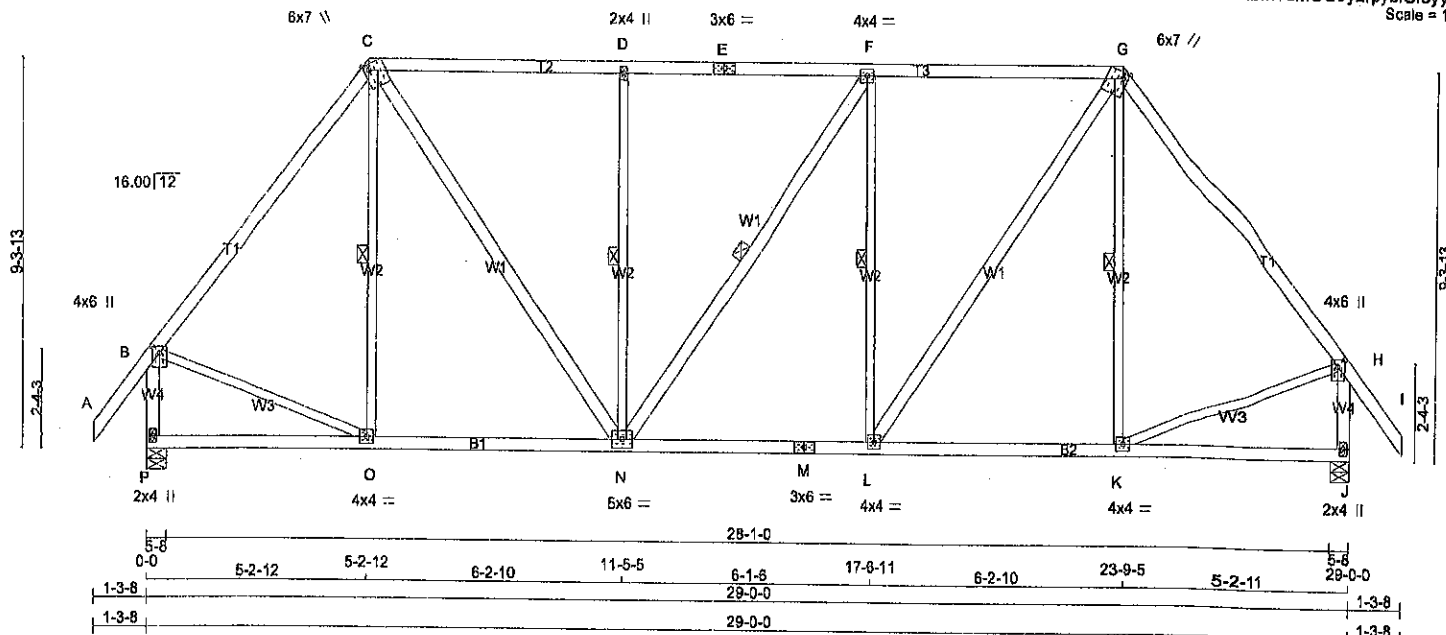
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP = 0.81 (M) (INPUT = 0.80)
 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
I - K	2x4	DRY	No.2
K - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2
J - H	2x4	DRY	No.2
H - F	2x4	DRY	No.2
F - D	2x4	DRY	No.2
D - B	2x4	DRY	No.2
B - A	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-t	MT20	3.0	6.0		
F TMVW-t	MT20	4.0	4.0		
G TTWW+m	MT20	6.0	7.0	Edge	1.50
H TMVW+p	MT20	4.0	6.0	2.00	2.00
J BMV1+p	MT20	2.0	4.0		
K, L, O					
K BMVW-t	MT20	4.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMVW-t	MT20	5.0	8.0		
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	IN-SX	IN-SX
P	1375	0	0	5-8
J	1375	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX. MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
P	986	868 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	986	868 / 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

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.68FT.
MAX. 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	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	0 / 40	-70.5	-70.5	0.10 (1)	10.00	O-C	-114 / 51	0.07 (1)
B-C	-1033 / 0	-70.5	-70.5	0.43 (1)	5.88	C-N	0 / 698	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)	5.86	N-F	-2 / 0	0.00 (1)
E-F	-1013 / 0	-70.5	-70.5	0.41 (1)	5.86	L-F	-468 / 0	0.27 (1)
F-G	-1014 / 0	-70.5	-70.5	0.41 (1)	5.86	L-G	0 / 700	0.11 (1)
G-H	-1033 / 0	-70.5	-70.5	0.43 (1)	5.88	K-G	-115 / 61	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	-1338 / 0	0.0	0.0	0.17 (1)	7.00	K-H	0 / 657	0.15 (1)
J-H	-1338 / 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

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 LOADALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/899 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/699 (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

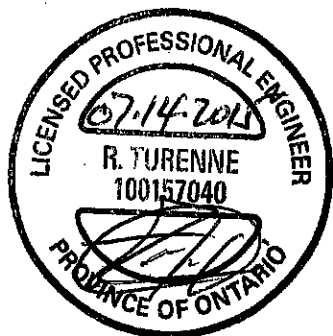
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

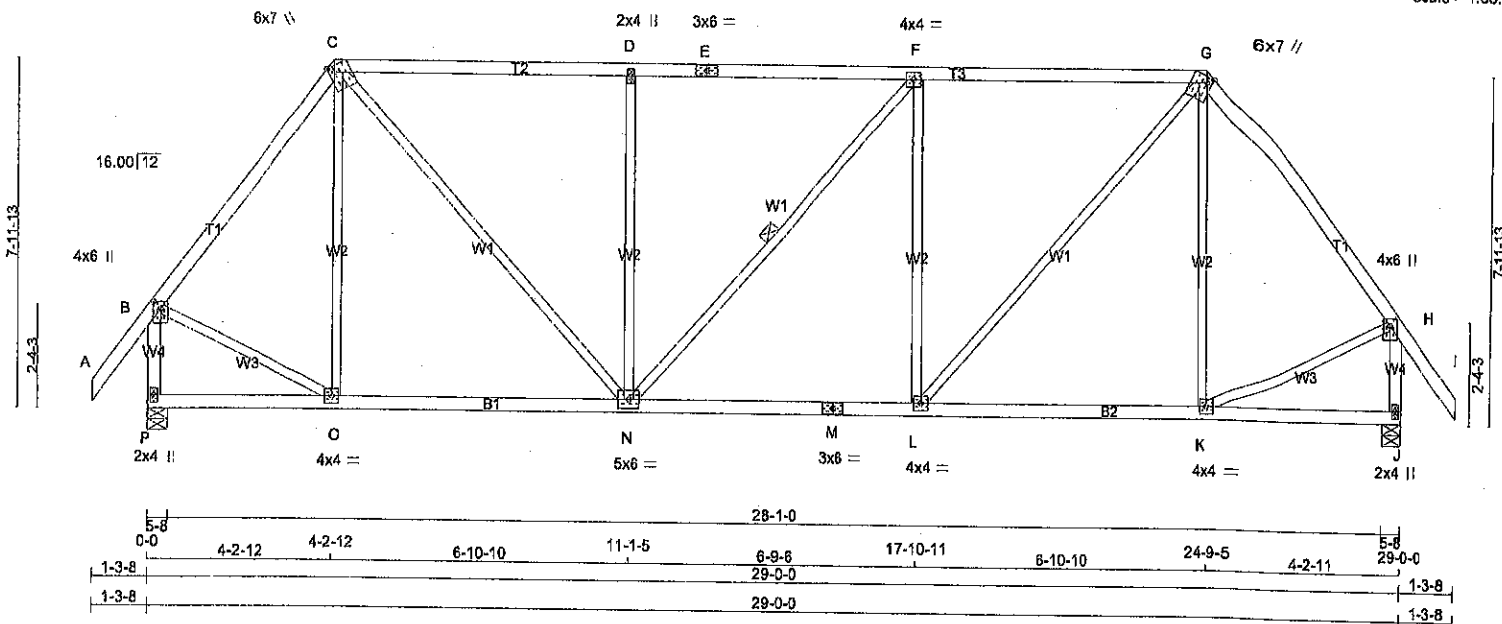
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

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

A-15073579



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 - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
J - M	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+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-l	MT20	3.0	6.0		
F	TMVW+l	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-l	MT20	4.0	4.0		
M	BS-l	MT20	3.0	6.0		
N	BMVW+l	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 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	UP/LIFT	IN-SX
JT	1375	0	1375	0
P	1375	0	1375	0
J	1375	0	1375	0

UNFACTORED REACTIONS

	1ST CASE	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 = 5.16FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSF (LC)	MAX. UNBRACED LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSF (LC)
MEMB.		FROM TO			MEMB.		
FR-TO					FR-TO		
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-167 / 31	0.20 (1)
B-C	-1027 / 0	-70.5	-70.5 0.26 (1)	5.88	C-N	0 / 859	0.19 (1)
C-D	-1186 / 0	-70.5	-70.5 0.62 (1)	5.16	N-D	-519 / 0	0.63 (1)
D-E	-1186 / 0	-70.5	-70.5 0.62 (1)	5.16	N-F	-1 / 0	0.00 (1)
E-F	-1186 / 0	-70.5	-70.5 0.62 (1)	5.16	L-F	-519 / 0	0.63 (1)
F-G	-1186 / 0	-70.5	-70.5 0.63 (1)	5.16	L-G	0 / 861	0.19 (1)
G-H	-1027 / 0	-70.5	-70.5 0.26 (1)	5.88	K-G	-168 / 31	0.20 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-O	0 / 673	0.16 (1)
P-B	-1360 / 0	0.0	0.0 0.17 (1)	6.98	K-H	0 / 673	0.15 (1)
J-H	-1360 / 0	0.0	0.0 0.17 (1)	6.98			
P-O	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
O-N	0 / 611	-17.5	-17.5 0.21 (4)	10.00			
N-M	0 / 1187	-17.5	-17.5 0.28 (1)	10.00			
M-L	0 / 1187	-17.5	-17.5 0.28 (1)	10.00			
L-K	0 / 611	-17.5	-17.5 0.21 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.13 (4)	10.00			

TOTAL WEIGHT = 2 X 138 = 277 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, NBC 2010

THIS DESIGN COMPLIES WITH:

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

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

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")

CSF: TC=0.53 (F-G:1), BC=0.28 (L-N:1), WB=0.63 (F-L:1), SI=0.23 (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 = 0.60

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
	822	2284	1666

PLATE PLACEMENT TOL. = 0.250 inches

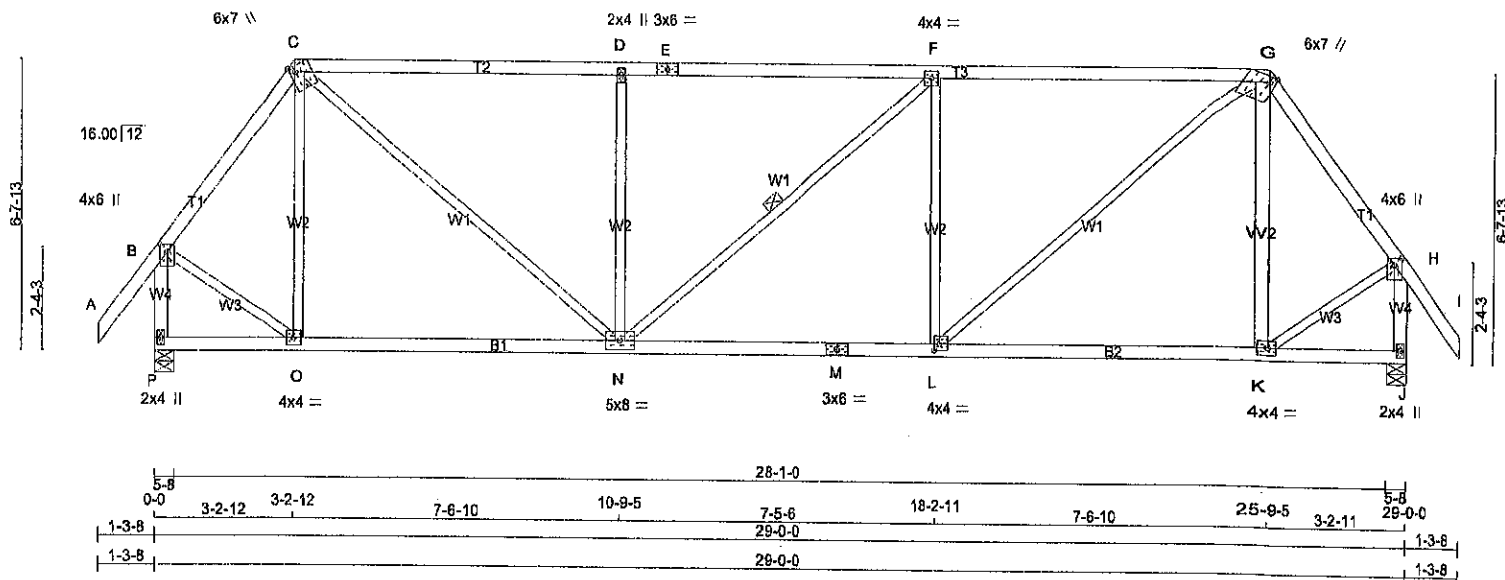
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (L) (INPUT = 0.80)

JSI METAL= 0.34 (M) (INPUT = 1.00)



A-11073578



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
F - B	2x4	DRY	No.2 SPF
J - H	2x4	DRY	No.2 SPF
P - M	2x4	DRY	No.2 SPF
M - J	2x4	DRY	No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

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-t	MT20	3.0	6.0		
F	TMVW-t	MT20	4.0	4.0		
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	2.00	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-I	MT20	4.0	4.0		
L	BMVW-I	MT20	4.0	4.0	1.75	1.50
M	BS-t	MT20	3.0	6.0		
N	BMVWW-I	MT20	6.0	8.0		
O	BMVW-I	MT20	4.0	4.0		
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 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
P	1375 0	1375 0	5-8	1-8
J	1375 0	1375 0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	966	668 / 0	0 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	966	668 / 0	0 / 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 = 4.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF F-N.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO					FR-TO		
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	O-C	-237 / 8	0.17 (1)
B-C	-999 / 0	-70.5	-70.5 0.15 (1)	6.09	C-N	0 / 1094	0.25 (1)
C-D	-1430 / 0	-70.5	-70.5 0.66 (1)	4.60	N-D	-570 / 0	0.42 (1)
D-E	-1431 / 0	-70.5	-70.5 0.66 (1)	4.59	N-F	-1 / 0	0.00 (1)
E-F	-1431 / 0	-70.5	-70.5 0.66 (1)	4.59	L-F	-570 / 0	0.42 (1)
F-G	-1431 / 0	-70.5	-70.5 0.66 (1)	4.58	L-G	0 / 1096	0.25 (1)
G-H	-998 / 0	-70.5	-70.5 0.15 (1)	6.09	K-G	-238 / 8	0.17 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-C	0 / 690	0.16 (1)
P-B	-1365 / 0	0.0	0.0 0.17 (1)	6.95	K-H	0 / 690	0.16 (1)
J-H	-1365 / 0	0.0	0.0 0.17 (1)	6.95			
P-C	0 / 0	-17.5	-17.5 0.15 (4)	10.00			
O-N	0 / 591	-17.5	-17.5 0.24 (4)	10.00			
N-M	0 / 1432	-17.5	-17.5 0.34 (1)	10.00			
M-L	0 / 1432	-17.5	-17.5 0.34 (1)	10.00			
L-K	0 / 591	-17.5	-17.5 0.24 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

TOTAL WEIGHT = 2 X 130 = 260 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 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/969 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/969 (0.14")

CSI: TC=0.68 (F-G:1), BC=0.34 (L-N:1), WB=0.42 (F-L:1), SSI=0.25 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

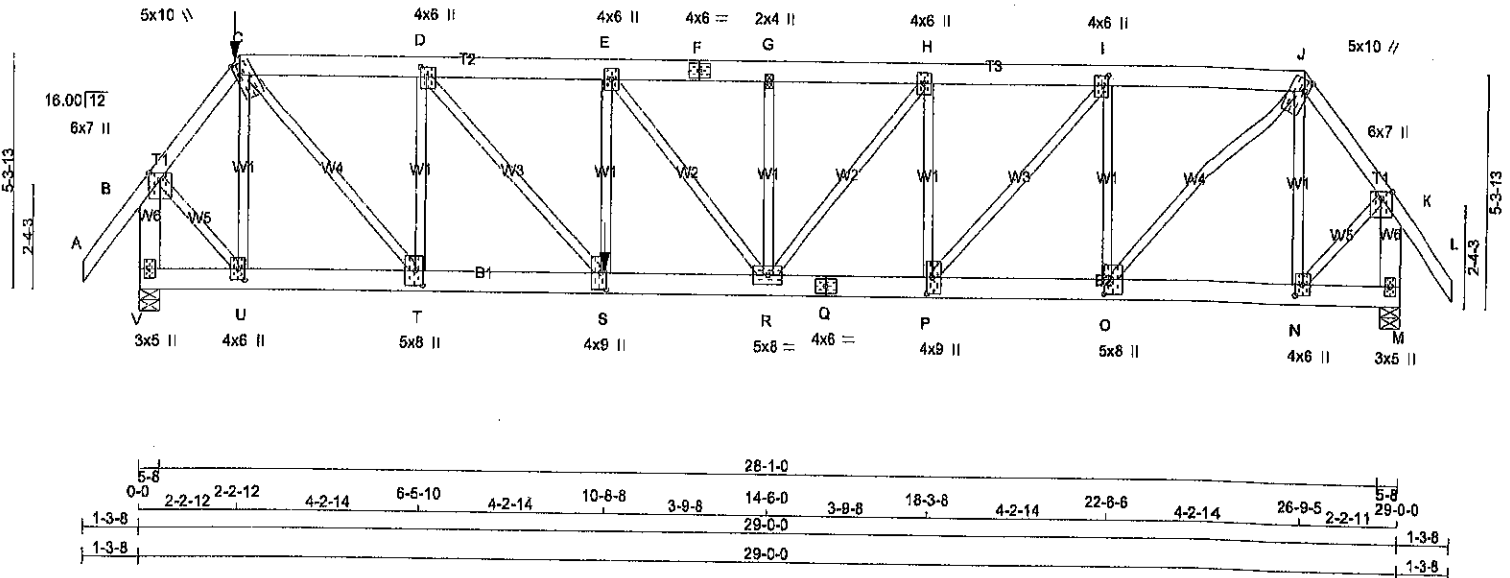
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	619	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (E) (INPUT = 0.80)
JSI METAL= 0.42 (M) (INPUT = 1.00)

A-10073577



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - F	2x6	DRY No.2	SPF
F - J	2x6	DRY No.2	SPF
J - L	2x4	DRY No.2	SPF
V - B	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
V - Q	2x6	DRY No.2	SPF
Q - M	2x6	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	7.0	1.75	3.00
C	TTWW+m	MT20	5.0	10.0	3.00	1.25
D	TMVW+H	MT20	4.0	6.0	2.75	1.50
E	TMVW+H	MT20	4.0	6.0		
F	TS-L	MT20	4.0	6.0		
G	TMVW+H	MT20	2.0	4.0		
H	TMVW+H	MT20	4.0	6.0		
I	TMVW+H	MT20	4.0	6.0	2.75	1.50
J	TTWW+m	MT20	5.0	10.0	3.00	1.25
K	TMVW+p	MT20	6.0	7.0	1.75	3.00
M	BMV1+p	MT20	3.0	6.0		
N	BMVW+H	MT20	4.0	6.0	3.00	1.75
O	BMVW+H	MT20	5.0	6.0	4.00	2.00
P	BMVW+H	MT20	4.0	9.0	4.50	1.50
Q	BS-L	MT20	4.0	6.0		
R	BMVW+H	MT20	5.0	6.0		
S	BMVW+H	MT20	4.0	9.0	4.50	1.50
T	BMVW+H	MT20	5.0	6.0	4.00	2.00
U	BMVW+H	MT20	4.0	6.0	3.00	1.75
V	BMV1+p	MT20	3.0	6.0		

HANGERS NOTES

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	UP
JT	2803	0	2803	0
V	1970	0	1970	0
M	1970	0	1970	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	2042	999 / 0	0 / 0	0 / 0	0 / 0	1044 / 0	0 / 0
V	1426	760 / 0	0 / 0	0 / 0	0 / 0	876 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5 -70.5 0.11 (1)	10.00	U-C	-814 / 0	0.31 (1)	
B-C	-2049 / 0	-70.5 -70.5 0.13 (1)	4.61	C-T	0 / 2071	0.66 (1)	
C-D	-2887 / 0	-138.7 -138.7 0.22 (1)	4.68	T-D	-1861 / 0	0.71 (1)	
D-E	-4010 / 0	-138.7 -138.7 0.26 (1)	4.08	D-S	0 / 1596	0.48 (4)	
E-F	-3683 / 0	-70.5 -70.5 0.15 (1)	4.35	S-E	0 / 415	0.16 (4)	
F-G	-3683 / 0	-70.5 -70.5 0.15 (1)	4.35	E-R	-563 / 0	0.41 (4)	
G-H	-3683 / 0	-70.5 -70.5 0.15 (1)	4.35	R-G	-257 / 0	0.10 (1)	
H-I	-3093 / 0	-70.5 -70.5 0.14 (1)	4.68	R-H	0 / 961	0.28 (4)	
I-J	-2132 / 0	-70.5 -70.5 0.11 (1)	5.45	P-H	-1031 / 0	0.39 (1)	
J-K	-1405 / 0	-70.5 -70.5 0.09 (1)	5.39	P-I	0 / 1461	0.36 (1)	
K-L	0 / 40	-70.5 -70.5 0.11 (1)	10.00	O-I	-1433 / 0	0.64 (1)	
V-B	-2806 / 0	0.0 0.0 0.26 (1)	6.20	O-J	0 / 1980	0.49 (1)	
M-K	-1980 / 0	0.0 0.0 0.18 (1)	7.13	N-J	-573 / 0	0.22 (1)	
				B-U	0 / 1676	0.39 (1)	
				N-K	0 / 1081	0.27 (1)	
V-U	0 / 0	-34.5 -34.5 0.08 (4)	10.00				
U-T	0 / 1210	-34.5 -34.5 0.23 (1)	10.00				
T-S	0 / 2967	-34.5 -34.5 0.47 (1)	10.00				
S-R	0 / 4010	-17.5 -17.5 0.59 (1)	10.00				
R-Q	0 / 3093	-17.5 -17.5 0.44 (1)	10.00				
Q-P	0 / 3093	-17.5 -17.5 0.44 (1)	10.00				
P-O	0 / 2132	-17.5 -17.5 0.31 (1)	10.00				
O-N	0 / 829	-17.5 -17.5 0.18 (1)	10.00				
N-M	0 / 0	-17.5 -17.5 0.05 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
C	2-2-12	-115	-115	--	FRONT	VERT	TOTAL
S	10-8-4	-1149	-1149	--	FRONT	VERT	DEAD

TOTAL WEIGHT = 2 X 176 = 351 lb [M]

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHlp
LEFT SETBACK = 2-2-12
RIGHT 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 10-8-4 OF SPAN
MEASURED FROM THE LEFT.

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.26 (D-E:1), BC=0.59 (R-S:1),
WB=0.71 (D-T:1), SSI=0.23 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

AUTOSOLVE HEELS OFF

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

A-15073576
CONTINUED ON PAGE 2



HANGERS NOTES

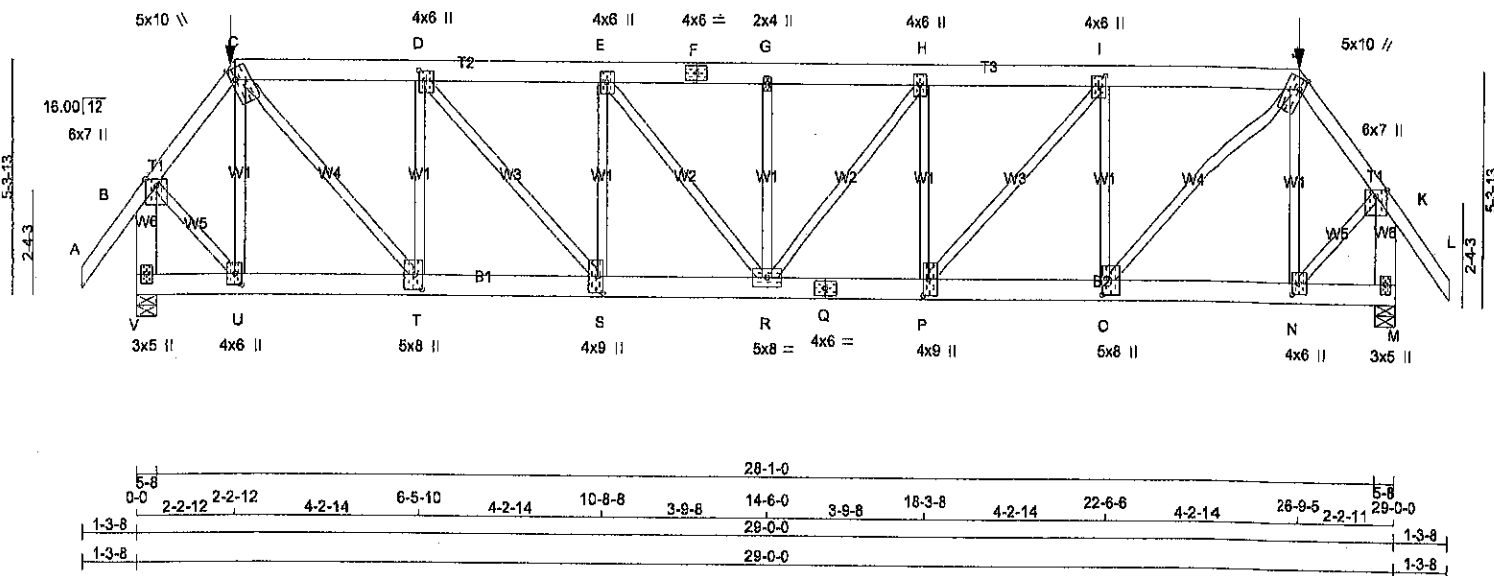
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.5 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD, AND 1286.6 lbs FACTORED DOWN AT 10-8-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656
PLATE PLACEMENT TOL. = 0.250 Inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.80 (I) (INPUT = 0.90)
JSI METAL= 0.83 (Q) (INPUT = 1.00)



A-15073576(2)

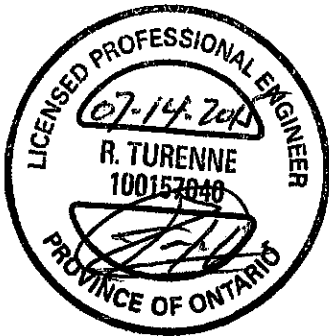


JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253428	H01-Cond1	2	1	TRUSS DESC.	

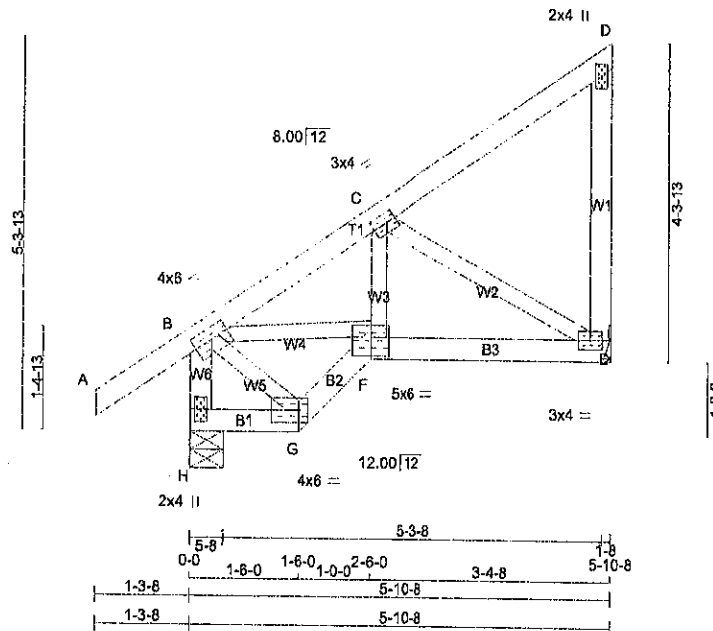
Alpa Roof Truss, Maple

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 26-9-6, AND 114.6 lbs FACTORED DOWN AT 2-2-12 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.



A-11073575(2)



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
H - B	2x4	DRY	No.2
A - D	2x4	DRY	No.2
E - D	2x4	DRY	No.2
H - G	2x4	DRY	No.2
G - F	2x4	DRY	No.2
F - 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	TMVWW-1	MT20	4.0	6.0	1.75	3.00
C	TMVWW-1	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVWW-1	MT20	3.0	4.0		
F	BBWW-1	MT20	5.0	6.0	3.00	3.00
G	BBW-1	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	HORZ	DOWN	HORZ
H	355	0	355	0
E	258	0	258	0

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

1ST LOASE	MAX. MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
H	248	181 / 0	0 / 0	0 / 0	0 / 0	67 / 0
E	182	123 / 0	0 / 0	0 / 0	0 / 0	58 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (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 0.09 (1)	10.00	B-F	0 / 238	0.05 (1)
B-C	-287 / 0	-70.5	-70.5 0.10 (1)	6.25	F-C	0 / 57	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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 616 354 1667 822 2264 1656

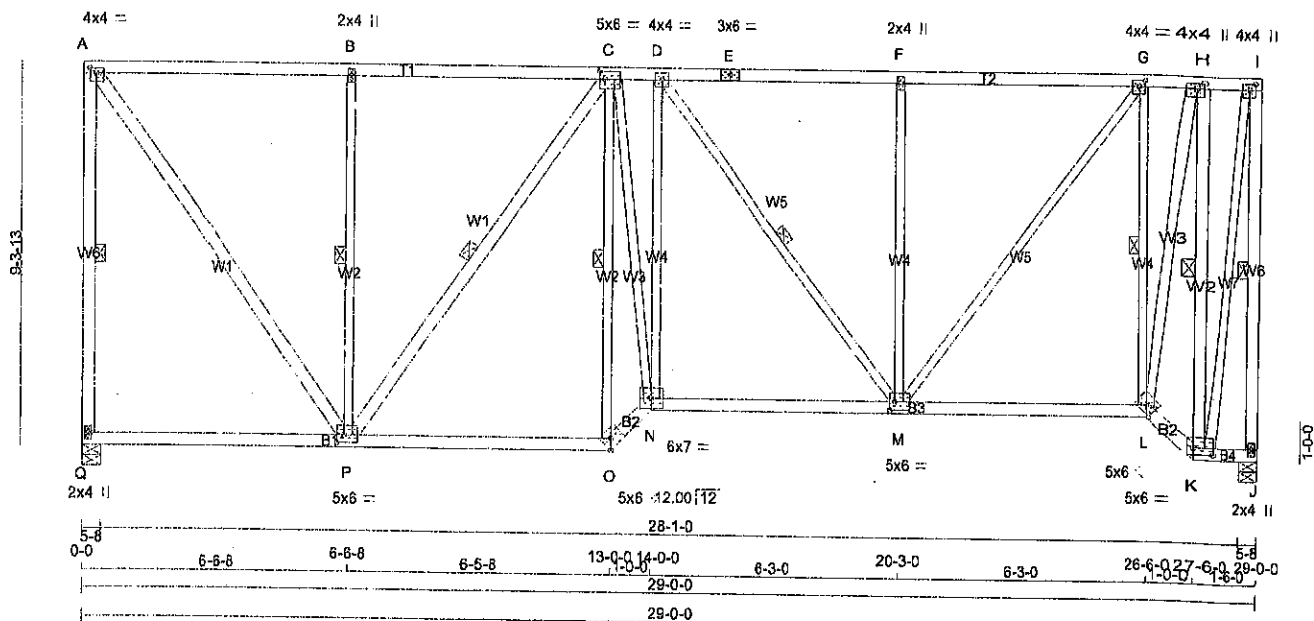
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073574



LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-h	MT20	4.0	4.0	1.50	1.75
B	TMVW-w	MT20	2.0	4.0		
C	TMVWW-h	MT20	5.0	6.0	2.25	1.50
D	TMVWW-l	MT20	4.0	4.0		
E	TS-l	MT20	3.0	6.0		
F	TMVW-w	MT20	2.0	4.0		
G	TMVWW-l	MT20	4.0	4.0	1.75	1.75
H	TMVWW-h	MT20	4.0	4.0	1.50	1.50
I	TMVW+P	MT20	4.0	4.0	1.75	1.75
J	BMV1+P	MT20	2.0	4.0		
K	BBVW-h	MT20	5.0	6.0	2.00	4.50
L	BBVW-h	MT20	5.0	6.0	2.00	3.00
M	BMVWW-h	MT20	5.0	6.0	2.50	1.50
N	BBVW-h	MT20	6.0	7.0		
O	BBVW-h	MT20	5.0	6.0	Edge	2.50
P	BMVWW-h	MT20	5.0	6.0	2.25	2.00
Q	BMV1+P	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
JT	1275	0	1275	0
Q	1275	0	1275	0
J	1275	0	1275	0

UNFACTORED REACTIONS

	1ST CASE	MAX. MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
JT	899	808 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0
Q	899	808 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0
J	899	808 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.56 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF A-Q, I-J, C-O, G-L, H-K, B-P, C-P, D-M.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CS1 (LC)	UNBRACED LENGTH FR-TO	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
Q-A	-1231 / 0	0.0	0.0	0.50 (1)	5.79	Q-C	-986 / 0
A-B	-760 / 0	-70.5	-70.5	0.47 (1)	6.16	C-N	0 / 1077
B-C	-760 / 0	-70.5	-70.5	0.47 (1)	6.16	N-D	0 / 44
C-D	-1170 / 0	-70.5	-70.5	0.26 (1)	5.56	L-G	-1168 / 0
D-E	-1013 / 0	-70.5	-70.5	0.41 (1)	5.66	L-H	0 / 1417
E-F	-1013 / 0	-70.5	-70.5	0.41 (1)	5.66	K-H	-1348 / 0
F-G	-1013 / 0	-70.5	-70.5	0.41 (1)	5.66	K-I	0 / 1205
G-H	-378 / 0	-70.5	-70.5	0.18 (1)	6.25	A-P	0 / 1285
H-I	-198 / 0	-70.5	-70.5	0.05 (1)	6.25	P-B	-524 / 0
J-I	-1262 / 0	0.0	0.0	0.51 (1)	5.73	P-C	-477 / 0
Q-P	0 / 0	-17.5	-17.5	0.21 (4)	10.00	D-M	-258 / 0
P-O	0 / 1034	-17.5	-17.5	0.29 (4)	10.00	M-F	-480 / 0
O-N	0 / 1447	-17.5	-17.5	0.24 (1)	10.00	M-G	0 / 1022
N-M	0 / 1170	-17.5	-17.5	0.29 (1)	10.00		
M-L	0 / 392	-17.5	-17.5	0.22 (4)	10.00		
L-K	0 / 258	-17.5	-17.5	0.04 (1)	10.00		
K-J	0 / 0	-17.5	-17.5	0.01 (4)	10.00		

TOTAL WEIGHT = 188 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 (0.08")
ALLOWABLE DEFL. (TL) = L/360 (0.97")
CALCULATED VERT. DEFL. (TL) = L/999 (0.20")

CSI: TC=0.51 (I-J:1), BC=0.29 (M-N:1), WB=0.77 (H-K:1), SSI=0.22 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 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
	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

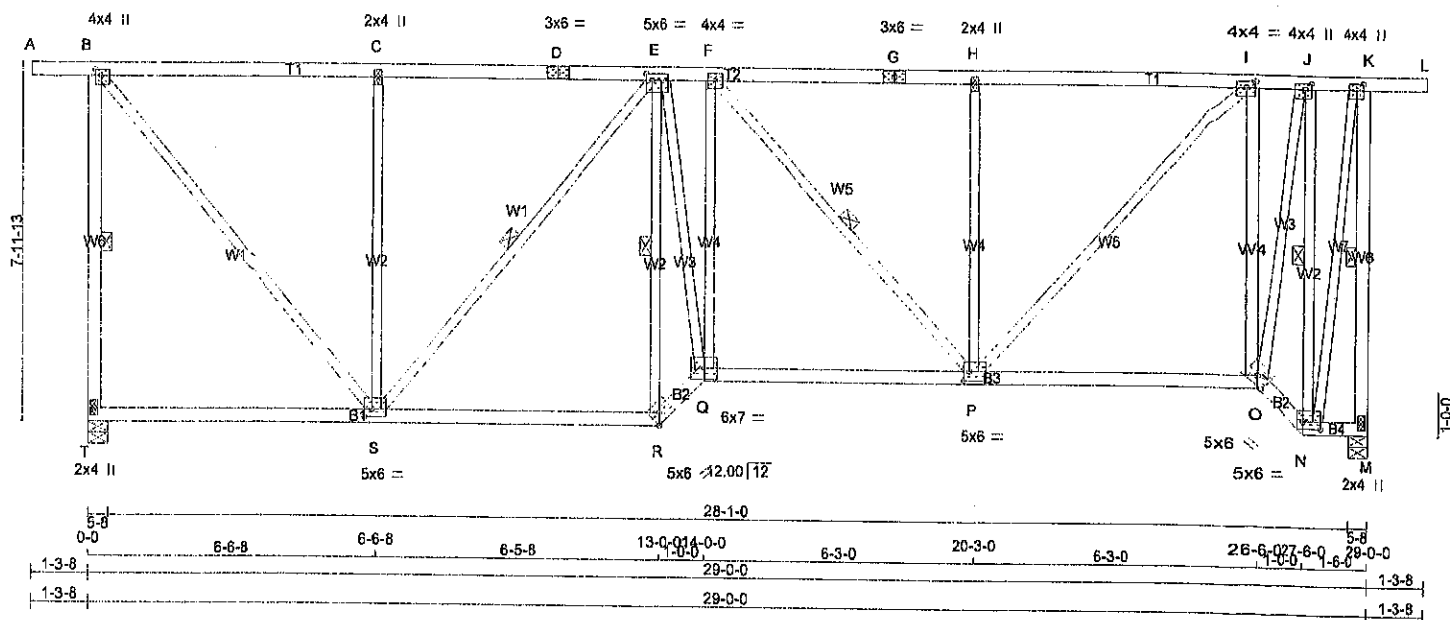
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (I) (INPUT = 0.60)

JSI METAL = 0.36 (L) (INPUT = 1.00)



A-15073573



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
T - B	2x4	DRY	No.2 SPF
A - D	2x4	DRY	No.2 SPF
D - G	2x4	DRY	No.2 SPF
G - L	2x4	DRY	No.2 SPF
M - K	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 - N	2x4	DRY	No.2 SPF
N - M	2x4	DRY	No.2 SPF
ALL WEBS	2x3	DRY	No.2 SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	4.0	4.0	1.50 1.75
C	TMVW+w	MT20	2.0	4.0	
D	TS-t	MT20	3.0	6.0	
E	TMVWW-t	MT20	5.0	6.0	1.75 1.50
F	TMVWW-t	MT20	4.0	4.0	
G	TS-t	MT20	3.0	6.0	
H	TMVW+w	MT20	2.0	4.0	
I	TMVWW-t	MT20	4.0	4.0	1.75 1.75
J	TMVWW-t	MT20	4.0	4.0	1.50 1.50
K	TMVW+p	MT20	4.0	4.0	1.75 1.75
M	BMV1+p	MT20	2.0	4.0	
N	BBVW-t	MT20	5.0	6.0	2.00 4.50
O	BBVW-t	MT20	5.0	6.0	2.00 3.00
P	BMVWW-t	MT20	5.0	6.0	2.50 1.50
Q	BBVW-t	MT20	6.0	7.0	
R	BBW-t	MT20	5.0	6.0	Edge 2.50
S	BMVWW-t	MT20	5.0	6.0	2.00 2.00
T	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	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	GROSS REACTION	DOWN	BRG	BRG
T	1364	0	1364	0	5-8
M	1368	0	1368	0	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	859	662 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
M	962	664 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF B-T, K-M, E-R, F-P, J-N, E-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)

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			
T-B	-1319 / 0	0.0	0.0 0.38 (1)	R-E	-1136 / 0	0.46 (1)	
A-B	0 / 0	-70.5	-70.5 0.08 (1)	E-Q	0 / 1258	0.28 (1)	
B-C	-889 / 0	-70.5	-70.5 0.48 (1)	Q-F	0 / 44	0.02 (4)	
C-D	-889 / 0	-70.5	-70.5 0.48 (1)	F-P	-284 / 0	0.16 (1)	
D-E	-889 / 0	-70.5	-70.5 0.48 (1)	P-H	-477 / 0	0.40 (1)	
E-F	-1400 / 0	-70.5	-70.5 0.26 (1)	H-I	0 / 1101	0.25 (1)	
F-G	-1208 / 0	-70.5	-70.5 0.42 (1)	I-J	-1191 / 0	0.99 (1)	
G-H	-1208 / 0	-70.5	-70.5 0.42 (1)	J-K	0 / 1469	0.33 (1)	
H-I	-1208 / 0	-70.5	-70.5 0.42 (1)	K-L	-1321 / 0	0.53 (1)	
I-J	-445 / 0	-70.5	-70.5 0.17 (1)	L-M	0 / 1160	0.26 (1)	
J-K	-223 / 0	-70.5	-70.5 0.08 (1)	M-K	0 / 1373	0.31 (1)	
K-L	0 / 0	-70.5	-70.5 0.08 (1)	S-C	-525 / 0	0.64 (1)	
M-K	-1355 / 0	0.0	0.0 0.38 (1)	S-E	-504 / 0	0.36 (1)	
T-S	0 / 0	-17.5	-17.5 0.21 (4)				
S-R	0 / 1210	-17.5	-17.5 0.30 (1)				
R-Q	0 / 1690	-17.5	-17.5 0.27 (1)				
Q-P	0 / 1400	-17.5	-17.5 0.35 (1)				
P-O	0 / 464	-17.5	-17.5 0.23 (4)				
O-N	0 / 290	-17.5	-17.5 0.05 (1)				
N-M	0 / 0	-17.5	-17.5 0.01 (4)				

TOTAL WEIGHT = 188 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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(66 % 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 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.48 (B-C:1), BC=0.33 (P-Q:1), WB=0.99 (I-O:1), SSI=0.22 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

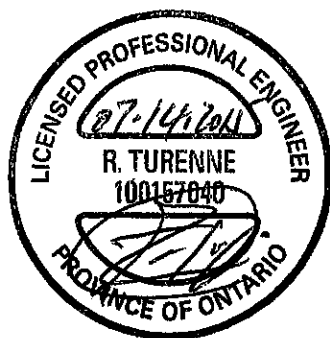
NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 616 354 1667 822 2284 1856

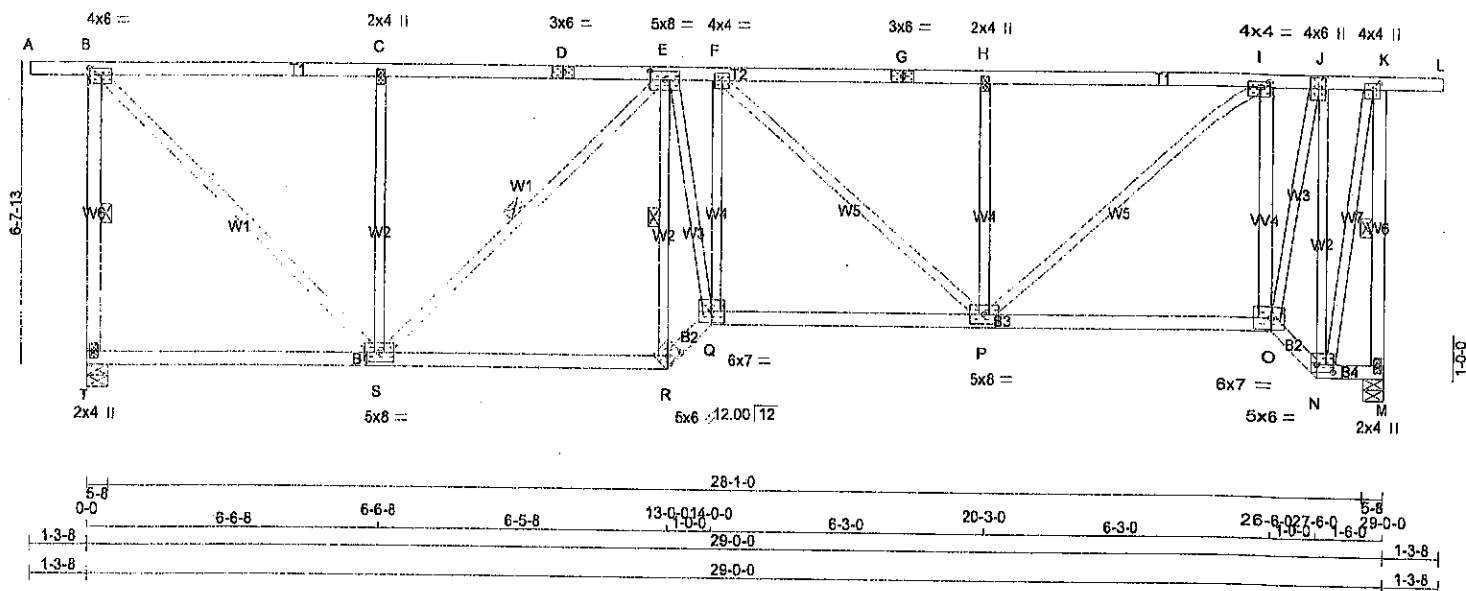
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.90 (B)(INPUT = 0.90)
JSI METAL=0.37 (O)(INPUT = 1.00)



A-15073572



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR
T - B	2x4	DRY	No.2 SPF
A - D	2x4	DRY	No.2 SPF
D - G	2x4	DRY	No.2 SPF
G - L	2x4	DRY	No.2 SPF
M - K	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 - N	2x4	DRY	No.2 SPF
N - M	2x4	DRY	No.2 SPF
ALL WEBS	2x3	DRY	No.2 SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
	TYPE	PLATES	W	LEN	Y X
B	TMWV-I	MT20	4.0	6.0	1.75 3.00
C	TMWV+	MT20	2.0	4.0	
D	TS-I	MT20	3.0	6.0	
E	TMWVW-I	MT20	5.0	8.0	2.25 4.00
F	TMWV-I	MT20	4.0	4.0	
G	TS-I	MT20	3.0	8.0	
H	TMWV+	MT20	2.0	4.0	
I	TMWV-I	MT20	4.0	4.0	1.50 1.75
J	TMWV-I	MT20	4.0	6.0	3.00 1.75
K	TMVW+p	MT20	4.0	4.0	1.75 1.75
M	BMV1+p	MT20	2.0	4.0	
N	BBWV-I	MT20	5.0	6.0	
O	BBWV-I	MT20	6.0	7.0	2.00 4.50
P	BMWVW-I	MT20	5.0	8.0	
Q	BBWV-I	MT20	6.0	7.0	
R	BBW-I	MT20	5.0	6.0	2.00 3.25
S	BMWVW-I	MT20	5.0	8.0	
T	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
JT	1364	0	1364	0	0	5-8	1-6
T	1368	0	1388	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX. MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
T	959	662 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
M	962	664 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.74FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF B-T, K-M, E-R, E-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)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX	CS1 (LC)	
FR-TO		FROM TO	CS1 (LC)	LENGTH	FR-TO				
T-B	-1319 / 0	0.0	0.0	0.27 (1)	5.63	R-E	-1382 / 0		0.39 (1)
A-B	0 / 0	-70.5	-70.5	0.08 (1)	10.00	E-Q	0 / 1523		0.34 (1)
B-C	-1076 / 0	-70.5	-70.5	0.49 (1)	5.40	Q-F	0 / 43		0.02 (4)
C-D	-1076 / 0	-70.5	-70.5	0.49 (1)	5.40	D-I	-1208 / 0		0.58 (3)
D-E	-1076 / 0	-70.5	-70.5	0.49 (1)	5.40	O-J	0 / 1540		0.35 (4)
E-F	-1751 / 0	-70.5	-70.5	0.27 (1)	4.74	N-J	-1357 / 0		0.99 (1)
F-G	-1507 / 0	-70.5	-70.5	0.44 (1)	4.85	N-K	0 / 1184		0.26 (1)
G-H	-1507 / 0	-70.5	-70.5	0.44 (1)	4.85	B-S	0 / 1500		0.34 (1)
H-I	-1507 / 0	-70.5	-70.5	0.44 (1)	4.85	S-C	-526 / 0		0.38 (1)
I-J	-658 / 0	-70.5	-70.5	0.19 (1)	6.25	E-E	-650 / 0		0.31 (1)
J-K	-268 / 0	-70.5	-70.6	0.08 (4)	6.25	F-P	-323 / 0		0.45 (1)
K-L	0 / 0	-70.5	-70.5	0.08 (1)	10.00	P-H	-473 / 0		0.23 (1)
M-K	-1355 / 0	0.0	0.0	0.28 (1)	5.58	P-I	0 / 1228		0.28 (1)
T-S	0 / 0	-17.5	-17.5	0.21 (4)	10.00				
S-R	0 / 1464	-17.5	-17.5	0.34 (1)	10.00				
R-Q	0 / 2039	-17.5	-17.5	0.33 (1)	10.00				
Q-P	0 / 1750	-17.5	-17.5	0.38 (1)	10.00				
P-O	0 / 692	-17.5	-17.5	0.24 (4)	10.00				
O-N	0 / 348	-17.5	-17.5	0.08 (1)	10.00				
N-M	0 / 0	-17.5	-17.5	0.01 (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 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.49 (B-C:1), BC=0.38 (P-Q:1),
WB=0.99 (J-N:1), SSI=0.22 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

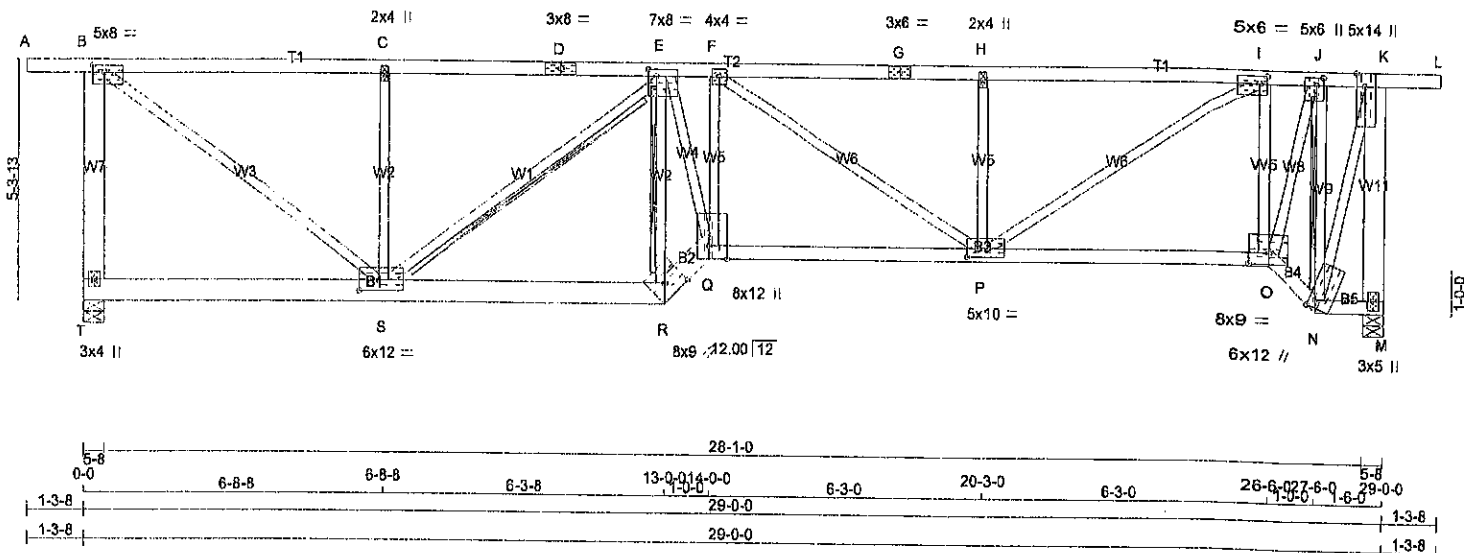
NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1867	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.36 (I) (INPUT = 1.00)

A-1073571



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1

TRUSS DESC.

DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Tue Jul 14 14:50:22 2015 Page 2
ID:97W. oc?icYybVbeU0Ab4z?zOVES-6XFRB1oPa468UrkST5y3ALnn6A8fKubz/pEyy7mF

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.

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

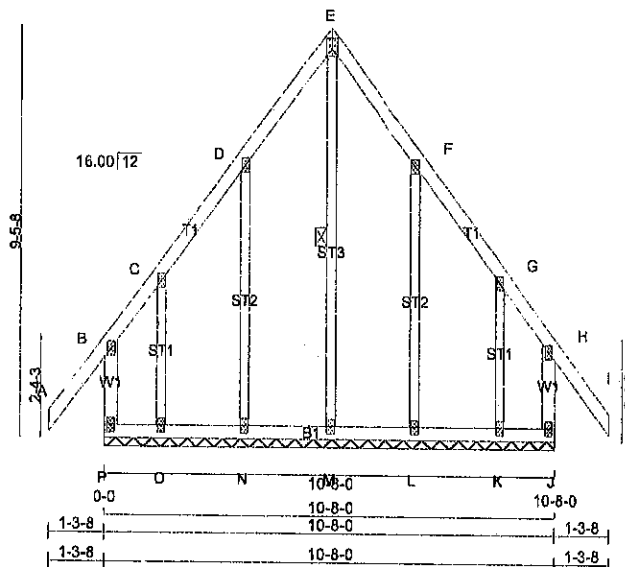
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL= 0.69 (Q) (INPUT = 1.00)



A-15073570(2)



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	DRY	LUMBER	DESCR.
P - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
E - I	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
P - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C, D, F, G						
C	TMW+w	MT20	2.0	4.0		
E	TTW+p	MT20	3.0	5.0	2.00	Edge
H	TMV+p	MT20	2.0	4.0		
J	BMV1+p	MT20	2.0	4.0		
K, L, M, N, O						
K	BMW1+w	MT20	2.0	4.0		
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 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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 8.25 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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
P-B	-161 / 0	0.0	0.0 0.03 (1)	M-E	-161 / 0	0.10 (1)	
A-B	0 / 40	-70.5	-70.5 0.10 (1)	N-D	-154 / 0	0.12 (1)	
B-C	-9 / 0	-70.5	-70.5 0.07 (1)	O-C	-70 / 0	0.02 (1)	
C-D	0 / 27	-70.5	-70.5 0.04 (1)	L-F	-154 / 0	0.12 (1)	
D-E	0 / 21	-70.5	-70.5 0.04 (1)	K-G	-70 / 0	0.02 (1)	
E-F	0 / 21	-70.5	-70.5 0.04 (1)				
F-G	0 / 27	-70.5	-70.5 0.04 (1)				
G-H	-9 / 0	-70.5	-70.5 0.07 (1)				
H-I	0 / 40	-70.5	-70.5 0.10 (1)				
J-H	-161 / 0	0.0	0.0 0.03 (1)				
P-O	-9 / 0	-17.5	-17.5 0.01 (4)				
O-N	-12 / 0	-17.5	-17.5 0.01 (4)				
N-M	-14 / 0	-17.5	-17.5 0.01 (4)				
M-L	-14 / 0	-17.5	-17.5 0.01 (4)				
L-K	-12 / 0	-17.5	-17.5 0.01 (4)				
K-J	-9 / 0	-17.5	-17.5 0.01 (4)				

TOTAL WEIGHT = 65 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

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=0.10 (A-B:1), BC=0.01 (L-M:4), WB=0.12 (F-L:1), SSI=0.05 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 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

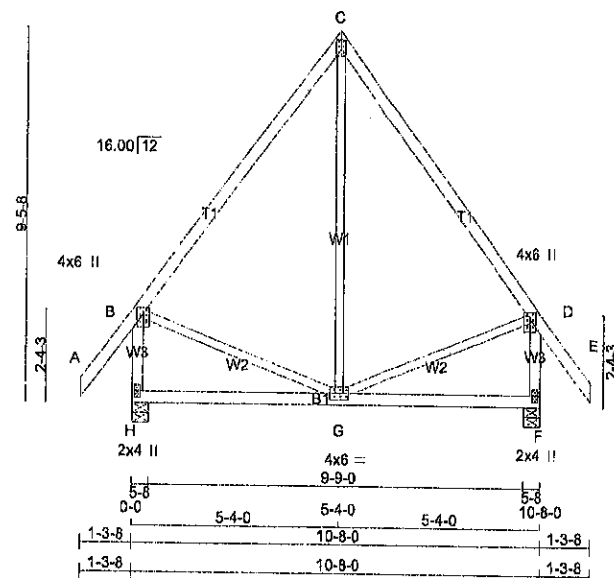
PLATE ROTATION TOL. = 5.0 Deg.

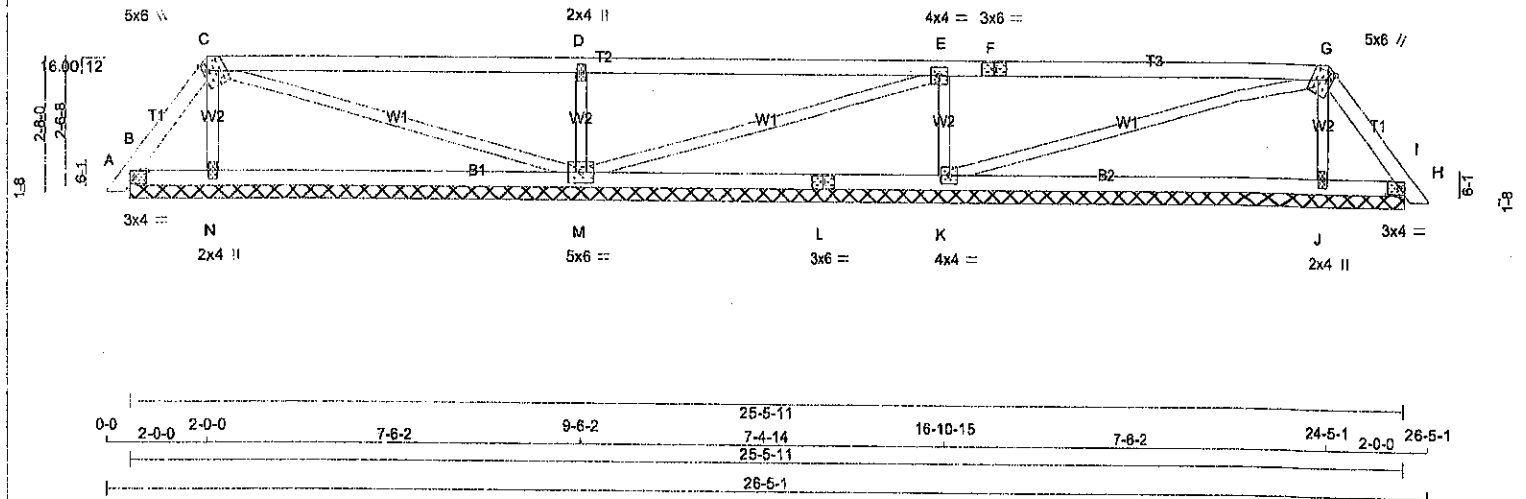
JSI GRIP= 0.18 (E) (INPUT = 0.80)

JSI METAL= 0.05 (D) (INPUT = 1.00)



A-10073569





TOTAL WEIGHT = 3 X 87 = 261 lb

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 - G	2x4	DRY No.2	SPF
G - I	2x4	DRY No.2	SPF
B - L	2x4	DRY No.2	SPF
L - H	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	TMWW-I	MT20	4.0	4.0		
F	TS-I	MT20	3.0	6.0		
G	TTWW+m	MT20	5.0	6.0	1.75	1.00
H	TMB1-J	MT20	3.0	4.0	1.50	2.75
J	BMW1+w	MT20	2.0	4.0		
K	BMWW1-I	MT20	4.0	4.0		
L	BS-I	MT20	3.0	6.0		
M	BMWW1-I	MT20	5.0	6.0		
N	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**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ
JT				
B	114	0	114	0
N	313	0	313	0
M	728	0	728	0
K	702	0	702	0
J	303	0	303	0
H	130	0	130	0

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

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

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	74	83/0	0/0	0/0	0/0	0/9	0/0
N	227	117/0	0/0	0/0	0/0	110/0	0/0
M	512	356/0	0/0	0/0	0/0	156/0	0/0
K	494	340/0	0/0	0/0	0/0	154/0	0/0
J	220	111/0	0/0	0/0	0/0	109/0	0/0
H	88	93/0	0/0	0/0	0/0	0/7	0/0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

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	LENGTH	FR-TO			
A-B	0/9	-70.5	-70.5 0.01 (1)	10.00	N-C	-197/0	0.03 (1)
B-C	-74/0	-70.5	-70.5 0.03 (1)	8.25	C-M	-31/0	0.04 (1)
C-D	-3/0	-70.5	-70.5 0.53 (1)	10.00	M-D	-578/0	0.08 (1)
D-E	-3/0	-70.5	-70.5 0.53 (1)	10.00	M-E	-35/0	0.04 (1)
E-F	-37/0	-70.5	-70.5 0.54 (1)	6.25	K-E	-587/0	0.08 (1)
F-G	-37/0	-70.5	-70.5 0.54 (1)	6.25	K-G	-10/0	0.01 (1)
G-H	-95/0	-70.5	-70.5 0.03 (1)	6.25	J-G	-188/0	0.03 (1)
H-I	0/9	-70.5	-70.5 0.01 (1)	10.00			
B-N	0/42	-17.5	-17.5 0.15 (4)	10.00			
N-M	0/33	-17.5	-17.5 0.20 (4)	10.00			
M-L	0/36	-17.5	-17.5 0.20 (4)	10.00			
L-K	0/36	-17.5	-17.5 0.20 (4)	10.00			
K-J	0/45	-17.5	-17.5 0.20 (4)	10.00			
J-H	0/54	-17.5	-17.5 0.15 (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

(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

CSI: TC=0.54 (E-G:1), BC=0.20 (J-K:4), WB=0.08 (D-M:1), SSI=0.25 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

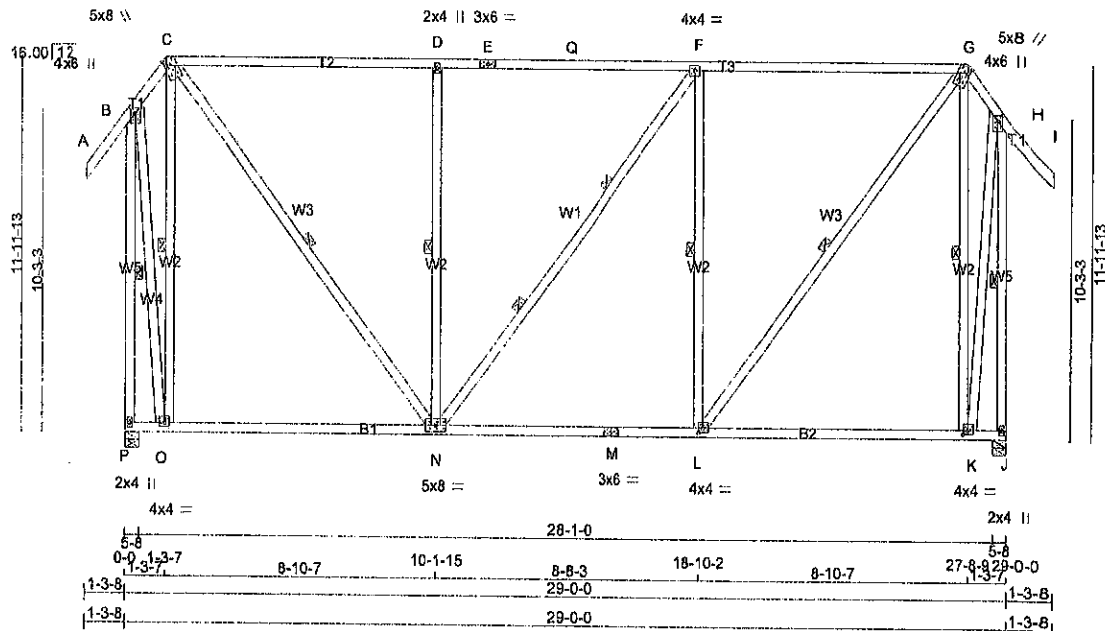
PLATE PLACEMENT TOL. = 0.280 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.26 (F) (INPUT = 1.00)

A-K073567





TOTAL WEIGHT = 7 X 220 = 1542 lb

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

ALL WEBS 2x4 DRY
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TTWW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	5.0	8.0	Edge	1.00
D	TTWW+h	MT20	2.0	4.0		
E	TS-I	MT20	3.0	6.0		
F	TTWW-I	MT20	4.0	4.0		
G	TTWW+m	MT20	5.0	8.0	Edge	1.00
H	TTWW+p	MT20	4.0	6.0	2.00	2.00
I	BMV1+p	MT20	2.0	4.0		
K	BMWW-I	MT20	4.0	4.0	1.50	1.75
L	BMWW-I	MT20	4.0	4.0	1.75	1.75
M	BS-I	MT20	3.0	8.0		
N	BMWWWW-I	MT20	5.0	8.0		
O	BMWW-I	MT20	4.0	4.0	1.50	1.75
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 OBC 9.23.13.11, and no less than 2x4 for Part 4 design.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
P	1474	0	1474	0	0	5-8	1-10
J	1474	0	1474	0	0	5-8	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
P	1045	668 / 0	0 / 0	0 / 0	0 / 0	378 / 0	0 / 0
J	1045	668 / 0	0 / 0	0 / 0	0 / 0	378 / 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 = 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-O, G-K, B-P, H-J, C-N, D-N, F-L, G-L.
2 LATERAL BRACE(S) REQUIRED AT 1/3 LENGTH OF F-N.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
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	C-C	-998 / 0	0.78 (1)
B-C	-270 / 0	-70.5	-70.5	0.07 (1)	8.25	K-B	-999 / 0	0.78 (1)
C-D	-835 / 0	-78.0	-78.0	0.49 (1)	8.25	B-O	0 / 1151	0.18 (1)
D-E	-836 / 0	-78.0	-78.0	0.43 (1)	6.26	K-H	0 / 1149	0.18 (1)
E-Q	-836 / 0	-78.0	-78.0	0.43 (1)	6.26	C-N	0 / 1140	0.18 (1)
Q-F	-836 / 0	-78.0	-78.0	0.43 (1)	6.26	N-D	-746 / 0	0.58 (1)
F-G	-836 / 0	-78.0	-78.0	0.49 (1)	6.26	N-F	-1 / 0	0.00 (1)
G-H	-270 / 0	-70.5	-70.5	0.07 (1)	6.25	L-F	-747 / 0	0.58 (1)
H-I	0 / 40	-70.5	-70.5	0.10 (1)	10.00	L-G	0 / 1141	0.18 (1)
P-B	-1525 / 0	0.0	0.0	0.83 (1)	5.32			
J-H	-1523 / 0	0.0	0.0	0.83 (1)	5.33			
P-O	0 / 0	-17.5	-17.5	0.22 (4)	10.00			
O-N	0 / 145	-17.5	-17.5	0.26 (4)	10.00			
N-M	0 / 836	-17.5	-17.5	0.35 (4)	10.00			
M-L	0 / 836	-17.5	-17.5	0.35 (4)	10.00			
L-K	0 / 145	-17.5	-17.5	0.29 (4)	10.00			
K-J	0 / 0	-17.5	-17.5	0.22 (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
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 , 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 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.83 (B-P:1), BC=0.35 (L-N:4), WB=0.78 (G-K:1), SSI=0.32 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	616	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.29 (O) (INPUT = 1.00)

A-15073566



253426

H05

QUANTITY

PLY

JOB DESC.

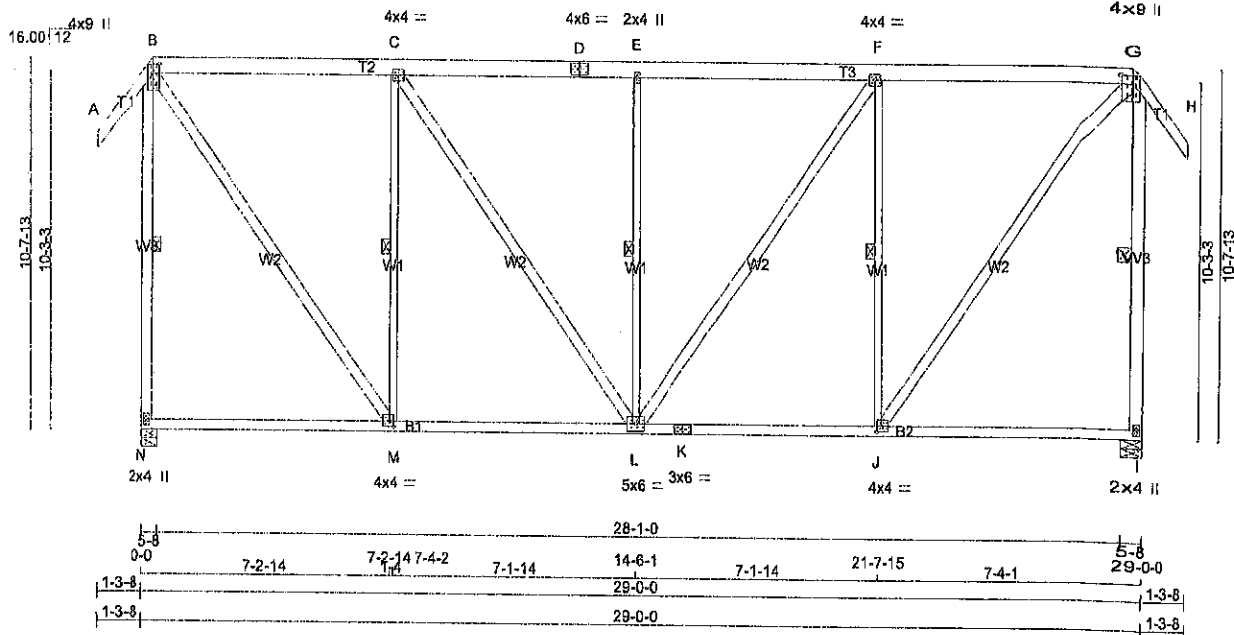
DRWG NO.

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Tue Jul 14 14:40:48 2015 Page 1

ID:9?W_oc7jYybVbeU0Ab4z7zOVES-w6afPw4laDmZFgyRivAUh0OGHOLUf6xPbggGgVyy7vD

Scale = 1:66.9



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TTVW+w	MT20	4.0	9.0	3.00	2.25
C	TMWW-1	MT20	4.0	4.0		
D	TS+	MT20	4.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TMWW-1	MT20	4.0	4.0		
G	TTVW+w	MT20	4.0	9.0	3.00	2.25
I	BMV1+p	MT20	2.0	4.0		
J	BMWW-1	MT20	4.0	4.0	1.75	1.50
K	BS+	MT20	3.0	6.0		
L	BMWW-1	MT20	5.0	6.0		
M	BMWW-1	MT20	4.0	4.0	1.75	1.50
N	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
N	1375	0	1375	0	0	5-8	1-8	
I	1375	0	1375	0	0	5-8	1-8	

UNFACTORED REACTIONS

SN/ AUTOCAL REACTIONS							
	1ST CASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
JT		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	966	668 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
I	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) N, I

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO	
A-B	0 / 48	-70.5	-70.5 0.15 (1)	B-M	0 / 1221
B-C	-729 / 0	-70.5	-70.5 0.25 (1)	M-C	-860 / 0
C-D	-932 / 0	-70.5	-70.5 0.25 (1)	C-L	0 / 358
D-E	-932 / 0	-70.5	-70.5 0.25 (1)	L-E	-472 / 0
E-F	-932 / 0	-70.5	-70.5 0.25 (1)	L-F	0 / 357
F-G	-728 / 0	-70.5	-70.5 0.25 (1)	J-F	-860 / 0
G-H	0 / 48	-70.5	-70.5 0.15 (1)	J-G	0 / 1221
H-B	-1324 / 0	0.0	0.0 0.72 (1)		
I-G	-1324 / 0	0.0	0.0 0.72 (1)		
N-M	0 / 38	-17.5	-17.5 0.23 (4)		
M-L	0 / 729	-17.5	-17.5 0.29 (4)		
L-K	0 / 728	-17.5	-17.5 0.29 (4)		
K-J	0 / 728	-17.5	-17.5 0.29 (4)		
J-I	0 / 38	-17.5	-17.5 0.23 (4)		

TOTAL WEIGHT = 2 X 193 = 386 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

(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) = $L/360$ (0.87")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.06")
ALLOWABLE DEFL.(TL) = $L/360$ (0.87")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.10")

CSI: TC=0.72 (G-I:1), BC=0.29 (L-M:4), WB=0.86 (F-J:1), SSI=0.18 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

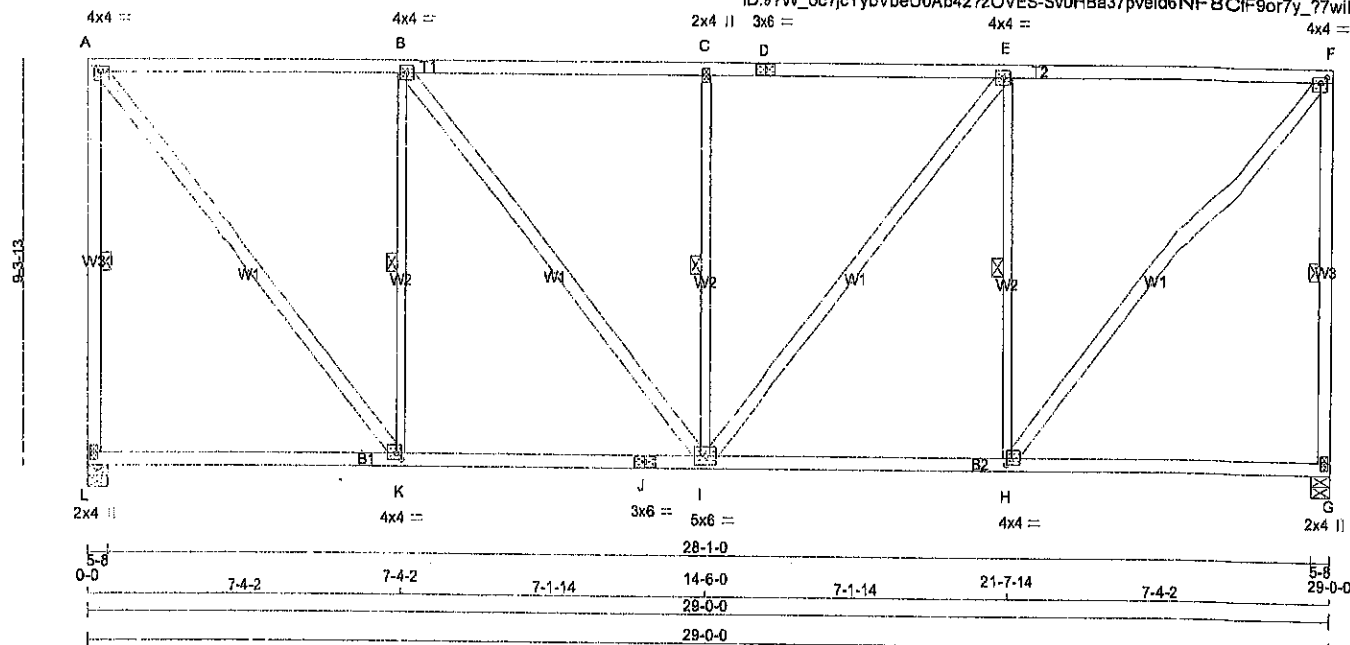
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (J) (INPUT = 0.80)
JSI METAL= 0.26 (M) (INPUT = 1.00)



A-15073565



LUMBER

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

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWV-t	MT20	4.0	4.0	1.60	1.75
B	TMWV-t	MT20	4.0	4.0		
C	TMWVw	MT20	2.0	4.0		
D	TS-t	MT20	3.0	6.0		
E	TMWV-t	MT20	4.0	4.0		
F	TMWV-t	MT20	4.0	4.0	1.50	1.75
G	BMV1+P	MT20	2.0	4.0		
H	BMWV-t	MT20	4.0	4.0	1.75	1.60
I	BMWVW-t	MT20	5.0	6.0		
J	BS-t	MT20	3.0	6.0		
K	BMWV-t	MT20	4.0	4.0	1.75	1.60
L	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 IN-SX	REQRD BRG IN-SX
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	
L	1275	0	1275	0	0	5-8
G	1275	0	1275	0	0	5-8

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
L	889	809 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0
G	889	809 / 0	0 / 0	0 / 0	0 / 0	290 / 0	0 / 0

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

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 A-L, F-G, B-K, C-I, E-H.
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	VERT. LOAD	LC1 MAX	MAX UNBRAC	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)			(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
L-A	-1224 / 0	0.0	0.0	0.50 (1)	5.80	A-K	0 / 1314
A-B	-830 / 0	-70.5	-70.5	0.61 (1)	5.70	K-B	-874 / 0
B-C	-1058 / 0	-70.5	-70.5	0.63 (1)	5.18	B-I	0 / 367
C-D	-1058 / 0	-70.5	-70.5	0.83 (1)	5.18	I-C	-462 / 0
D-E	-1058 / 0	-70.5	-70.5	0.63 (1)	5.18	I-E	0 / 367
E-F	-830 / 0	-70.5	-70.5	0.61 (1)	5.70	H-E	-874 / 0
G-F	-1224 / 0	0.0	0.0	0.50 (1)	5.80	H-F	0 / 1314
L-K	0 / 0	-17.5	-17.5	0.23 (4)	10.00		
K-J	0 / 830	-17.5	-17.5	0.30 (4)	10.00		
J-I	0 / 830	-17.5	-17.5	0.30 (4)	10.00		
I-H	0 / 830	-17.5	-17.5	0.30 (4)	10.00		
H-G	0 / 0	-17.5	-17.5	0.23 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.63 (B-C:1), BC=0.30 (I-K:4), WB=0.50 (E-H:1), SSI=0.24 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

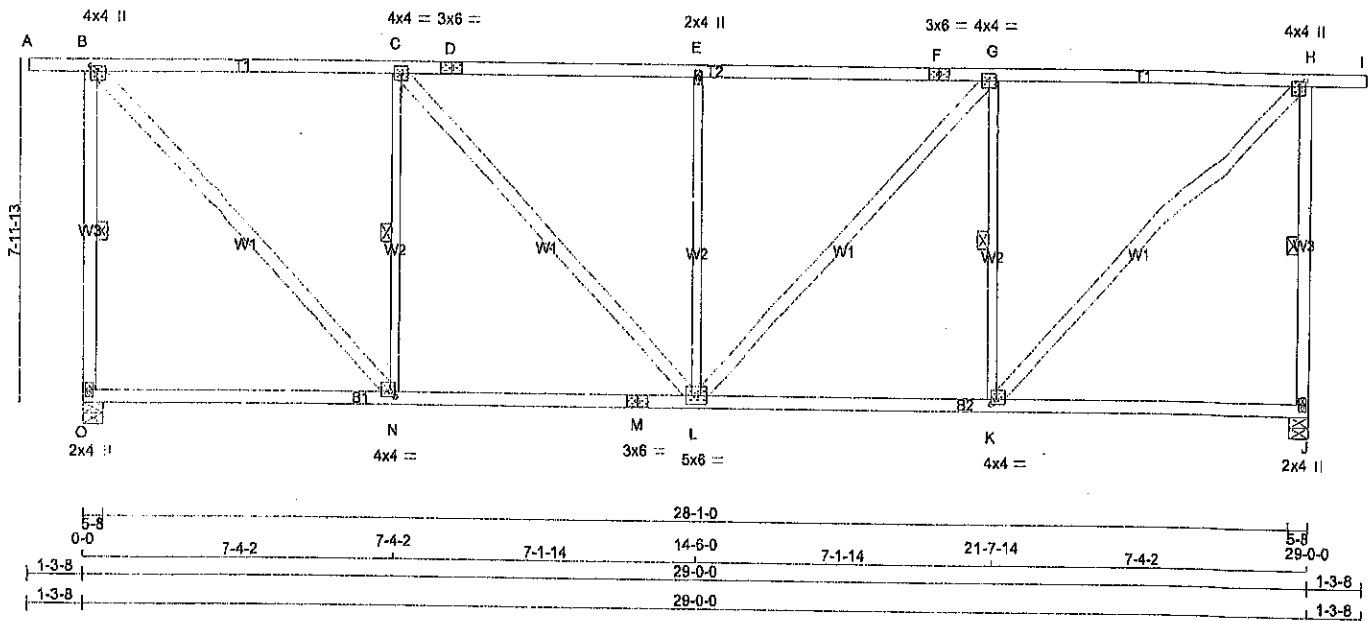
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (H) (INPUT = 0.90)
JSI METAL= 0.31 (A) (INPUT = 1.00)



A-15073564



LUMBER

N.L.G.A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMW+p	MT20	4.0	4.0	1.50	1.75
C	TMWW-I	MT20	4.0	4.0		
D	TS-I	MT20	3.0	6.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-I	MT20	3.0	6.0		
G	TMWW-I	MT20	4.0	4.0		
H	TMW+p	MT20	4.0	4.0	1.50	1.75
J	BMV1+p	MT20	2.0	4.0		
K	BMWW-I	MT20	4.0	4.0	1.50	1.50
L	BMWWW-I	MT20	5.0	6.0		
M	BS-I	MT20	3.0	6.0		
N	BMWW-I	MT20	4.0	4.0	1.50	1.50
O	BMV1+p	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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
O	1366	0	1366	0
J	1366	0	1366	0

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	980	863 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	980	863 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.86FT.

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

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF B-O, H-J, C-N, 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)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
O-B	-1315 / 0	0.0	0.0 0.38 (1)	B-N	0 / 1409	0.23 (1)	
A-B	0 / 0	-70.5	-70.5 0.08 (1)	N-C	-874 / 0	0.35 (1)	
B-C	-873 / 0	-70.5	-70.5 0.62 (1)	C-L	0 / 393	0.06 (1)	
C-D	-1241 / 0	-70.5	-70.5 0.65 (1)	L-E	-462 / 0	0.56 (1)	
D-E	-1241 / 0	-70.5	-70.5 0.65 (1)	E-G	0 / 393	0.06 (1)	
E-F	-1241 / 0	-70.5	-70.5 0.65 (1)	G-K	-874 / 0	0.35 (1)	
F-G	-1241 / 0	-70.5	-70.5 0.65 (1)	K-H	0 / 1409	0.23 (1)	
G-H	-873 / 0	-70.5	-70.5 0.62 (1)				
H-I	0 / 0	-70.5	-70.5 0.06 (1)				
J-H	-1315 / 0	0.0	0.0 0.38 (1)				
O-N	0 / 0	-17.5	-17.5 0.23 (4)				
N-M	0 / 973	-17.5	-17.5 0.31 (4)				
M-L	0 / 973	-17.5	-17.5 0.31 (4)				
L-K	0 / 973	-17.5	-17.5 0.31 (4)				
K-J	0 / 0	-17.5	-17.5 0.23 (4)				

TOTAL WEIGHT = 2 X 150 = 301 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

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

ALLOWABLE DEFL.(LL) = L/360 (0.97")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.85 (E-G:1), BC=0.31 (L-N:4), WB=0.56 (E-L:1), SSI=0.24 (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

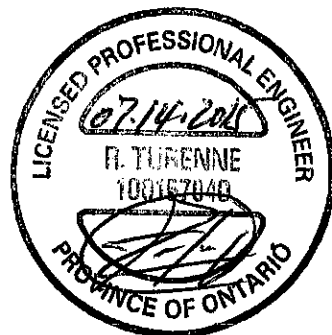
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

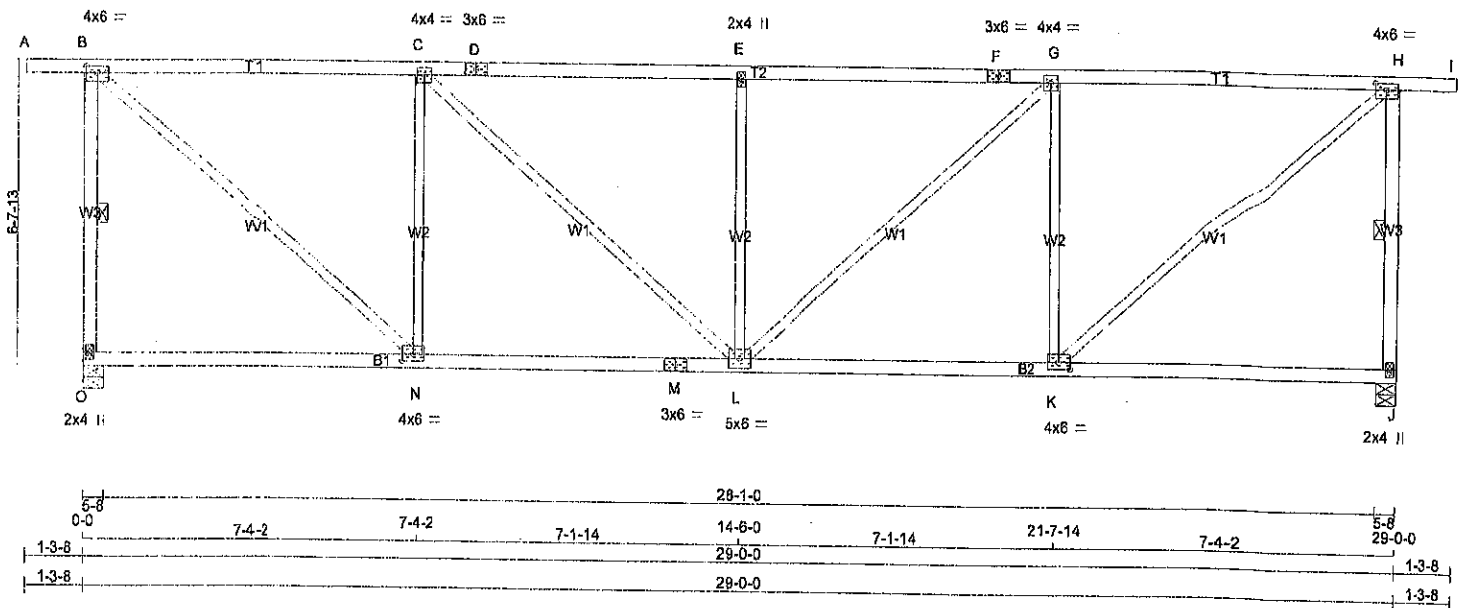
PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	518	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.36 (K) (INPUT = 1.00)

A-14073563



LUMBER

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

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

PLATES (table ls in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMWw-I	MT20	4.0	6.0	1.75	3.00
B	TMWw-I	MT20	4.0	6.0		
D	TS-I	MT20	3.0	6.0		
E	TMWw-w	MT20	2.0	4.0		
F	TS-I	MT20	3.0	6.0		
G	TMWw-I	MT20	4.0	4.0		
H	TMWw-I	MT20	4.0	6.0	1.75	3.00
J	BMV1+p	MT20	2.0	4.0		
K	BMWw-I	MT20	4.0	6.0	1.75	3.00
L	BMWw-w-I	MT20	5.0	6.0		
M	BS-I	MT20	3.0	6.0		
N	BMWw-I	MT20	4.0	6.0	1.75	3.00
O	BAV1+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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
G	1366	0	1366	0	0	5-8	1-8
J	1366	0	1366	0	0	5-8	1-8

UNFACTORED REACTIONS

1ST CASE		MAX./MIN. COMPONENT REACTIONS					
COMBINED		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	960	663 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0
J	960	663 / 0	0 / 0	0 / 0	0 / 0	298 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.48FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF B-O, H-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)

C H O R D S				W E B S			
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		
C-B	-1315 / 0	0.0	0.0	0.27 (1)	5.64	B-N	0 / 1556
A-B	0 / 0	-70.5	-70.5	0.08 (1)	10.00	N-C	-874 / 0
B-C	-1176 / 0	-70.5	-70.5	0.65 (1)	4.97	C-L	0 / 434
C-D	-1501 / 0	-70.5	-70.5	0.89 (1)	4.48	L-E	-462 / 0
D-E	-1501 / 0	-70.5	-70.5	0.89 (1)	4.48	L-G	0 / 434
E-F	-1501 / 0	-70.5	-70.5	0.69 (1)	4.48	K-G	-874 / 0
F-G	-1501 / 0	-70.5	-70.5	0.69 (1)	4.48	K-H	0 / 1556
G-H	-1176 / 0	-70.5	-70.5	0.85 (1)	4.97		
H-I	0 / 0	-70.5	-70.5	0.08 (1)	10.00		
J-H	-1315 / 0	0.0	0.0	0.27 (1)	5.64		
O-N	0 / 0	-17.5	-17.5	0.23 (4)	10.00		
N-M	0 / 1176	-17.5	-17.5	0.32 (4)	10.00		
M-L	0 / 1176	-17.5	-17.5	0.32 (4)	10.00		
L-K	0 / 1176	-17.5	-17.5	0.32 (4)	10.00		
K-J	0 / 0	-17.5	-17.5	0.23 (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

(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")

CSI: TC=0.69 (E-G:1), BC=0.32 (L-N:4), WB=0.64 (G-K:1), SSI=0.24 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES						
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1666

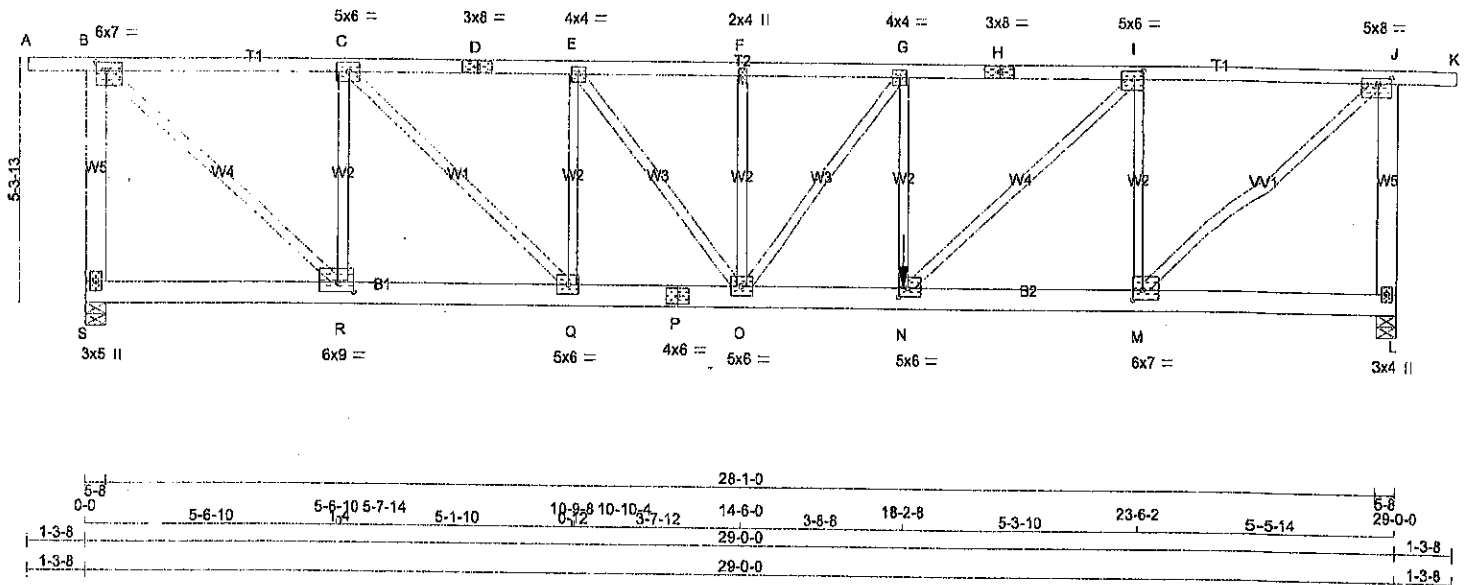
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. ≈ 5.0 Deg.

JSI GRIP= 0.86 (K) (INPUT = 0.90)
JSI METAL= 0.31 (M) (INPUT = 1.00)



A-15073562



LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS		No.2	SPF
S - B	2x6	DRY	1650F 1.5E
A - D	2x4	DRY	1650F 1.5E
D - H	2x4	DRY	1650F 1.5E
H - K	2x4	DRY	1650F 1.5E
L - J	2x6	DRY	No.2
S - P	2x6	DRY	No.2
P - L	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	6.0	7.0	2.25	2.75
C	TMVW-I	MT20	5.0	6.0		
D	TS-I	MT20	3.0	8.0		
E	TMVW-I	MT20	4.0	4.0		
F	TMVW-I	MT20	2.0	4.0		
G	TMVW-I	MT20	4.0	4.0		
H	TS-I	MT20	3.0	8.0		
I	TMVW-I	MT20	5.0	8.0	2.25	2.50
J	TMVW-I	MT20	5.0	8.0	1.50	3.75
L	BMV1+p	MT20	3.0	4.0		
M	BMVW-I	MT20	6.0	7.0	2.50	2.75
N	BMVW-I	MT20	5.0	6.0	2.25	2.50
O	BMVW-I	MT20	5.0	6.0		
P	BS-I	MT20	4.0	6.0		
Q	BMVW-I	MT20	5.0	6.0		
R	BMVW-I	MT20	6.0	9.0	2.50	4.25
S	BMV1+p	MT20	3.0	5.0		

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 817.5 lbs FACTORED DOWN AT 18-2-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
S	2735	0	2735	0
L	2367	0	2367	0

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1825	1316 / 0	0 / 0	0 / 0	0 / 0	609 / 0	0 / 0
L	1666	1140 / 0	0 / 0	0 / 0	0 / 0	625 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.25FT.
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 LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	
FR-TO		FROM TO		FR-TO			
S-B	-2649 / 0	0.0	0.0 0.78 (1)	Q-E	-1007 / 0	6.36	0.41 (1)
A-B	0 / 0	-70.5	-70.5 0.07 (1)	E-O	0 / 635	10.00	0.13 (1)
B-C	-2566 / 0	-138.7	-138.7 0.89 (1)	O-F	-500 / 0	3.98	0.20 (1)
C-D	-3769 / 0	-138.7	-138.7 0.77 (1)	F-G	0 / 240	3.25	0.06 (1)
D-E	-3769 / 0	-138.7	-138.7 0.77 (1)	G-H	-820 / 0	3.25	0.25 (1)
E-F	-4090 / 0	-138.7	-138.7 0.37 (1)	H-I	0 / 3410	3.67	0.84 (1)
F-G	-4090 / 0	-138.7	-138.7 0.29 (1)	I-J	-2032 / 0	3.77	0.83 (1)
G-H	-3946 / 0	-70.5	-70.5 0.45 (1)	J-K	0 / 1867	3.70	0.41 (1)
H-I	-3946 / 0	-70.5	-70.5 0.45 (1)	K-L	0 / 2238	3.70	0.55 (1)
I-J	-2309 / 0	-70.5	-70.5 0.34 (1)	L-M	-1960 / 0	4.70	0.80 (1)
J-K	0 / 0	-70.5	-70.5 0.07 (1)	M-N	0 / 3107	10.00	0.77 (1)
L-M	-2326 / 0	0.0	0.0 0.68 (1)	N-O		6.70	
S-R	0 / 0	-34.5	-34.5 0.13 (4)				
R-Q	0 / 2568	-34.5	-34.5 0.40 (1)				
Q-P	0 / 3769	-34.5	-34.5 0.55 (1)				
P-O	0 / 3769	-34.5	-34.5 0.55 (1)				
O-N	0 / 3946	-34.5	-34.5 0.59 (1)				
N-M	0 / 2309	-17.5	-17.5 0.36 (1)				
M-L	0 / 0	-17.5	-17.5 0.06 (4)				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
N	18-2-8	-818	-818	---	FRONT	VERT

TOTAL WEIGHT = 2 X 154 = 308 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: CP primeHip
SIDE SETBACK = 0-0
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 85 % OF GSL.
LOADS APPLIED TO FIRST 18-2-8 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 8, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA C86-09
- TRC 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 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.97")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

CSI: TC=0.78 (B-S:1), BC=0.69 (N-O:1),
WB=0.84 (B-R:1), SS=0.40 (B-C:1)

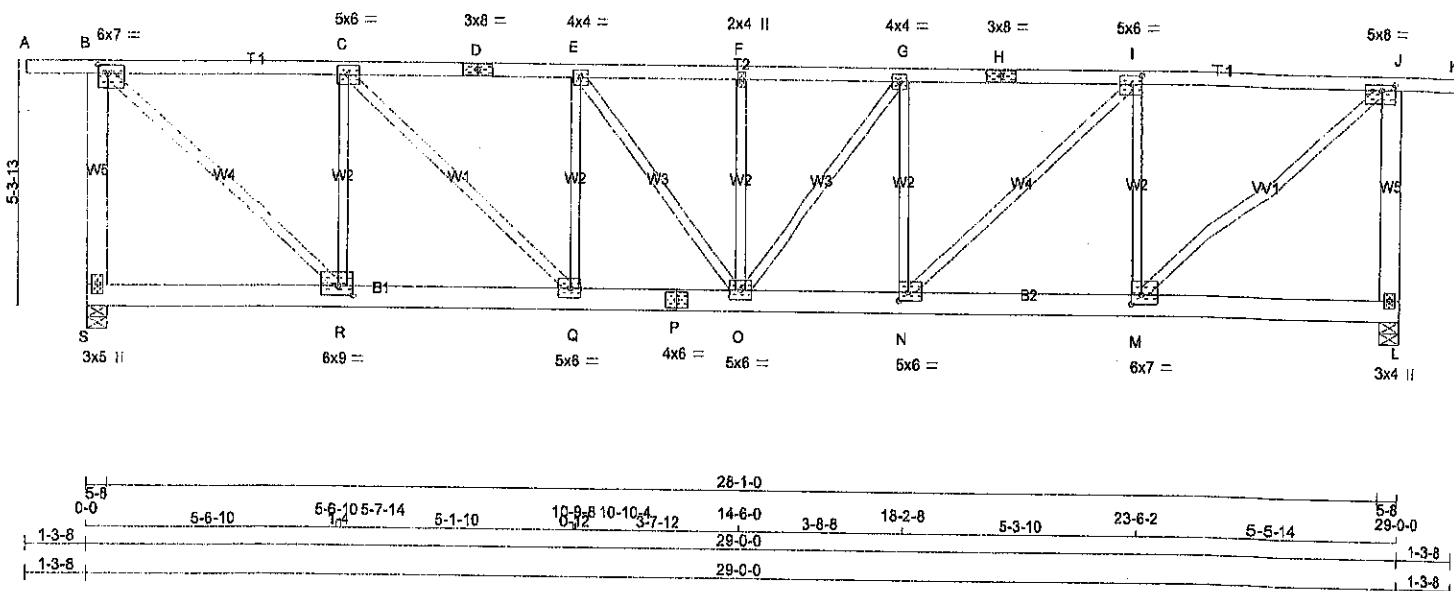
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

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



A-15073561



LUMBER

N. L. G. A. RULES

CHORDS SIZE

S - B 2x6 DRY No.2 SPF

A - D 2x4 DRY 1650F 1.5E SPF

O - H 2x4 DRY 1650F 1.5E SPF

H - K 2x4 DRY 1650F 1.5E SPF

L - J 2x6 DRY No.2 SPF

S - P 2x6 DRY No.2 SPF

P - L 2x6 DRY No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	6.0	7.0	2.25	2.75
C	TMVW-I	MT20	5.0	6.0		
D	TS-I	MT20	3.0	8.0		
E	TMVW-I	MT20	4.0	4.0		
F	TMVW-I	MT20	2.0	4.0		
G	TMVW-I	MT20	4.0	4.0		
H	TS-I	MT20	3.0	8.0		
I	TMVW-I	MT20	6.0	6.0	2.25	2.50
J	TMVW-I	MT20	5.0	8.0	1.50	3.75
L	BMV1+P	MT20	3.0	4.0		
M	BMVW-I	MT20	6.0	7.0	2.50	2.75
N	BMVW-I	MT20	5.0	6.0	2.25	2.50
O	BMVW-I	MT20	5.0	6.0		
P	BS-I	MT20	4.0	6.0		
Q	BMVW-I	MT20	5.0	6.0		
R	BMVW-I	MT20	6.0	9.0	2.50	4.25
S	BMV1+P	MT20	3.0	5.0		

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	HORZ	DOWN	HORZ
S	2802	0	2602	0
L	2802	0	2602	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN SNOW	MAX/MIN LIVE	MAX/MIN PERM.LIVE	WIND	DEAD	SOIL
S	1831	1252 / 0	0 / 0	0 / 0	0 / 0	579 / 0	0 / 0
L	1831	1252 / 0	0 / 0	0 / 0	0 / 0	579 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.40FT.
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			
S-B	-2516 / 0	0.0	0.0 0.74 (1)	Q-E	-871 / 0	0.35 (1)	
A-B	0 / 0	-70.5	-70.5 0.07 (1)	E-O	0 / 354	0.09 (1)	
B-C	-2415 / 0	-138.7	-138.7 0.68 (1)	O-F	-464 / 0	0.19 (1)	
C-D	-3481 / 0	-138.7	-138.7 0.74 (1)	C-G	0 / 346	0.09 (1)	
D-E	-3481 / 0	-138.7	-138.7 0.74 (1)	N-G	-888 / 0	0.36 (1)	
E-F	-3693 / 0	-138.7	-138.7 0.36 (1)	B-R	0 / 3208	0.79 (1)	
F-G	-3693 / 0	-138.7	-138.7 0.38 (1)	R-C	-1900 / 0	0.77 (1)	
G-H	-3486 / 0	-138.7	-138.7 0.74 (1)	C-Q	0 / 1479	0.37 (1)	
H-I	-3486 / 0	-138.7	-138.7 0.74 (1)	N-I	0 / 1537	0.38 (1)	
I-J	-2381 / 0	-138.7	-138.7 0.65 (1)	M-I	-1916 / 0	0.78 (1)	
J-K	0 / 0	-70.5	-70.5 0.07 (1)	M-J	0 / 3178	0.79 (1)	
L-J	-2519 / 0	0.0	0.0 0.74 (1)				
S-R	0 / 0	-34.5	-34.5 0.13 (4)				
R-Q	0 / 2415	-34.5	-34.5 0.38 (1)				
Q-P	0 / 3481	-34.5	-34.5 0.62 (1)				
P-O	0 / 3481	-34.5	-34.5 0.62 (1)				
O-N	0 / 3486	-34.5	-34.5 0.62 (1)				
N-M	0 / 2381	-34.5	-34.5 0.37 (1)				
M-L	0 / 0	-34.5	-34.5 0.12 (4)				

TOTAL WEIGHT = 2 X 154 = 308 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

SIDE SETBACK = 0-0

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 5% 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

(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) = $L/999$ (0.17")
ALLOWABLE DEFL.(TL) = $L/360$ (0.97")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.31")

CSI: TC=0.74 (J-L:1), BC=0.52 (O-Q:1), WB=0.79 (B-R:1), SSI=0.40 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1666

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (M) (INPUT = 0.90)
JSI METAL= 0.76 (P) (INPUT = 1.00)



A-11073560

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.

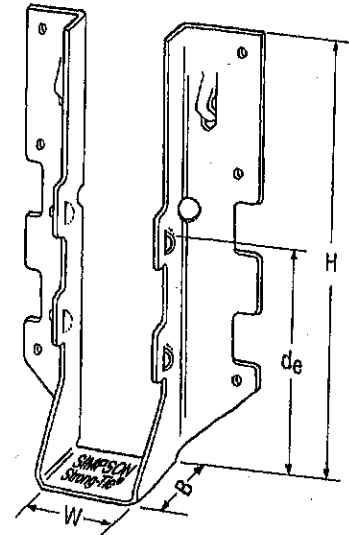
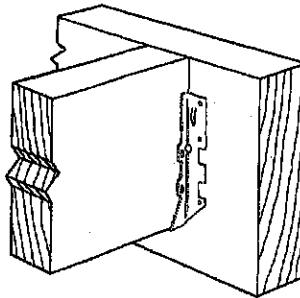
INSTALLATION:

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

OPTIONS:

- These hangers cannot be modified.

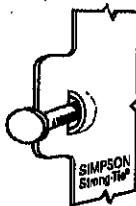
Typical LUS
Installation



LUS28

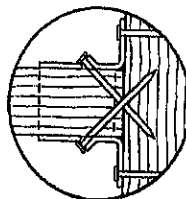
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1¾	1½	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	4-16d	2-16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3¾	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	6-10d	4-10d	1420	2520	1290	1790
LUS28-2	18	3½	7	2	4	6-16d	4-16d	1720	3325	1545	2575
LUS28-3	18	4¾	6¼	2	3¼	6-16d	4-16d	1720	3325	1545	2375
LUS210	18	1½	7½	1¾	3¾	8-10d	4-10d	1420	2785	1290	2210
LUS210-2	18	3½	9	2	6	8-16d	6-16d	2580	4500	2320	3195
LUS210-3	18	4¾	8½	2	5¼	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.

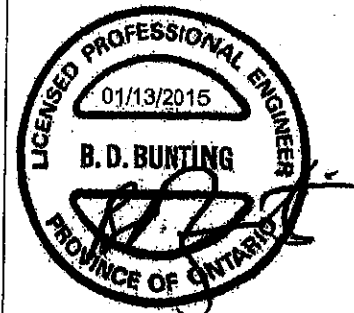


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

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:

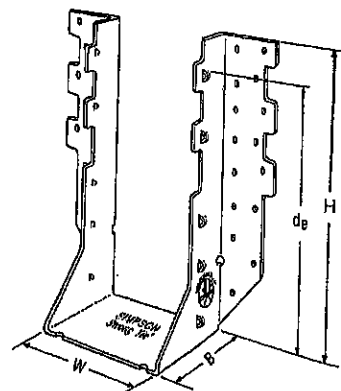
- Factored resistances are in accordance with CSA O86-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

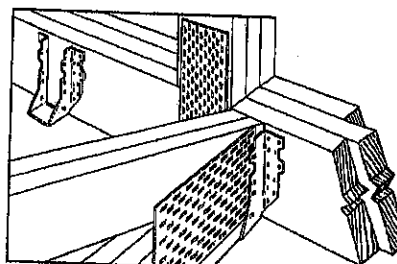
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



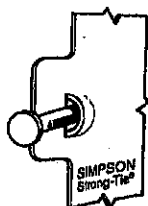
HHUS410



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

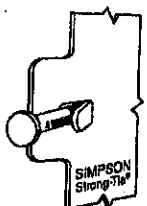
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D.Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
HHUS26-2	14	3 1/8	5 1/8	3	3 1/8	14-16d	6-16d	2850	7335	2065	5205
HHUS28-2	14	3 1/8	7 1/2	3	6 3/32	22-16d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

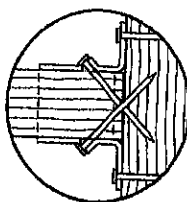


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

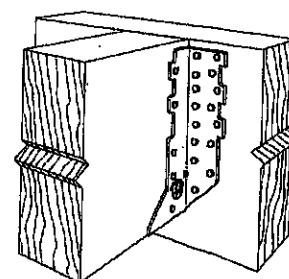
U.S. Patent
5,603,580



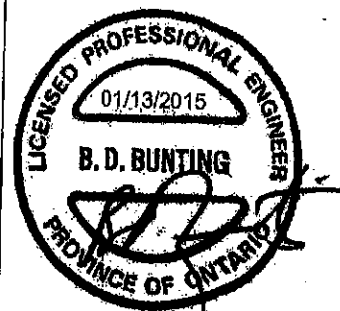
Double
Shear
Nailing
Side
View. Do
not bend
tab back.



Double
Shear
Nailing
Top View.

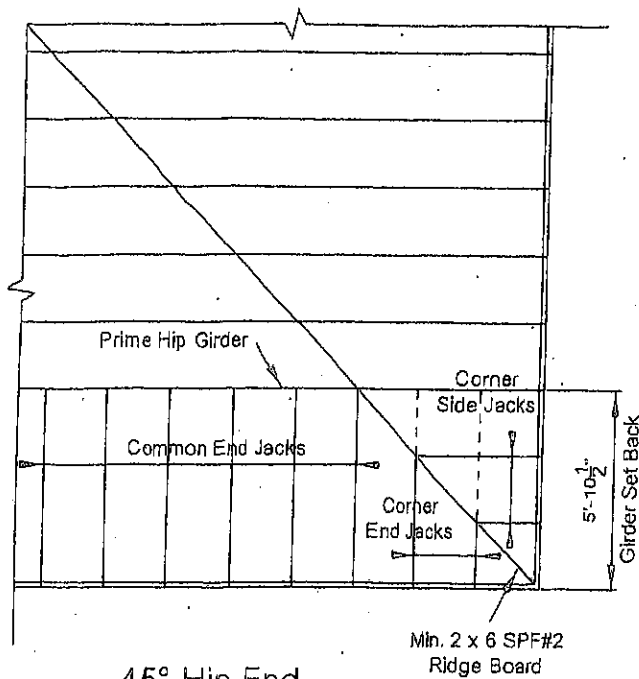


Typical HHUS
Installation



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STRACON ENGINEERING INC.



45° Hip End

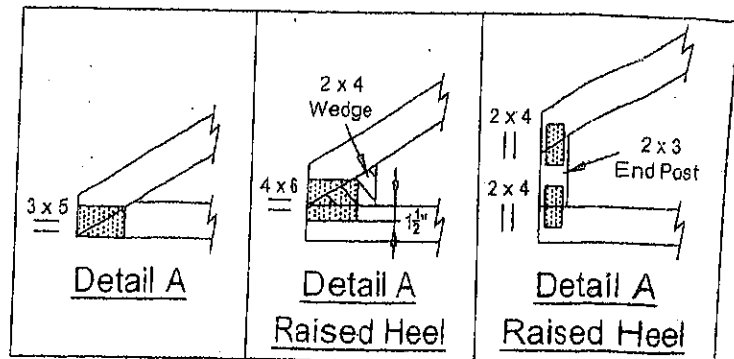
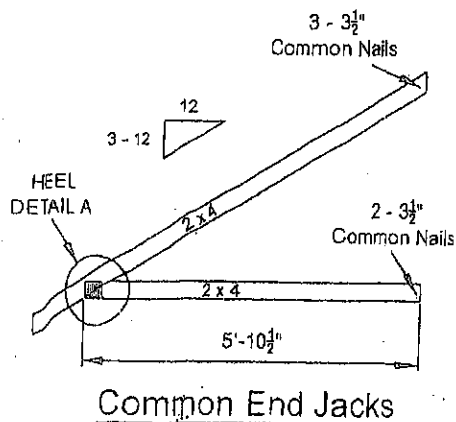
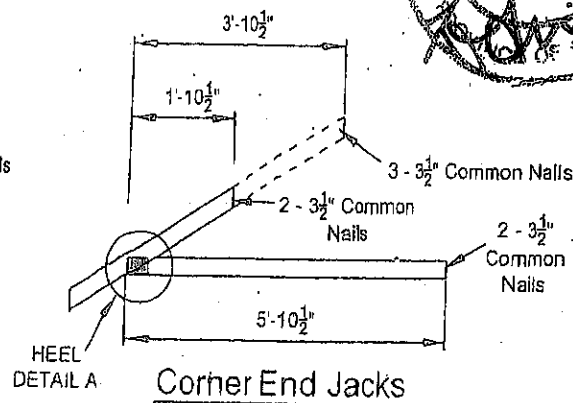
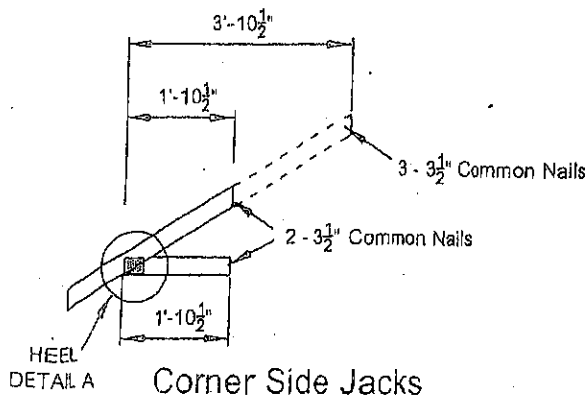
LUMBER SPECIFICATION

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

DESIGN LOAD

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

TOTAL LOAD : 50.5 P.S.F.



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

CS-51008