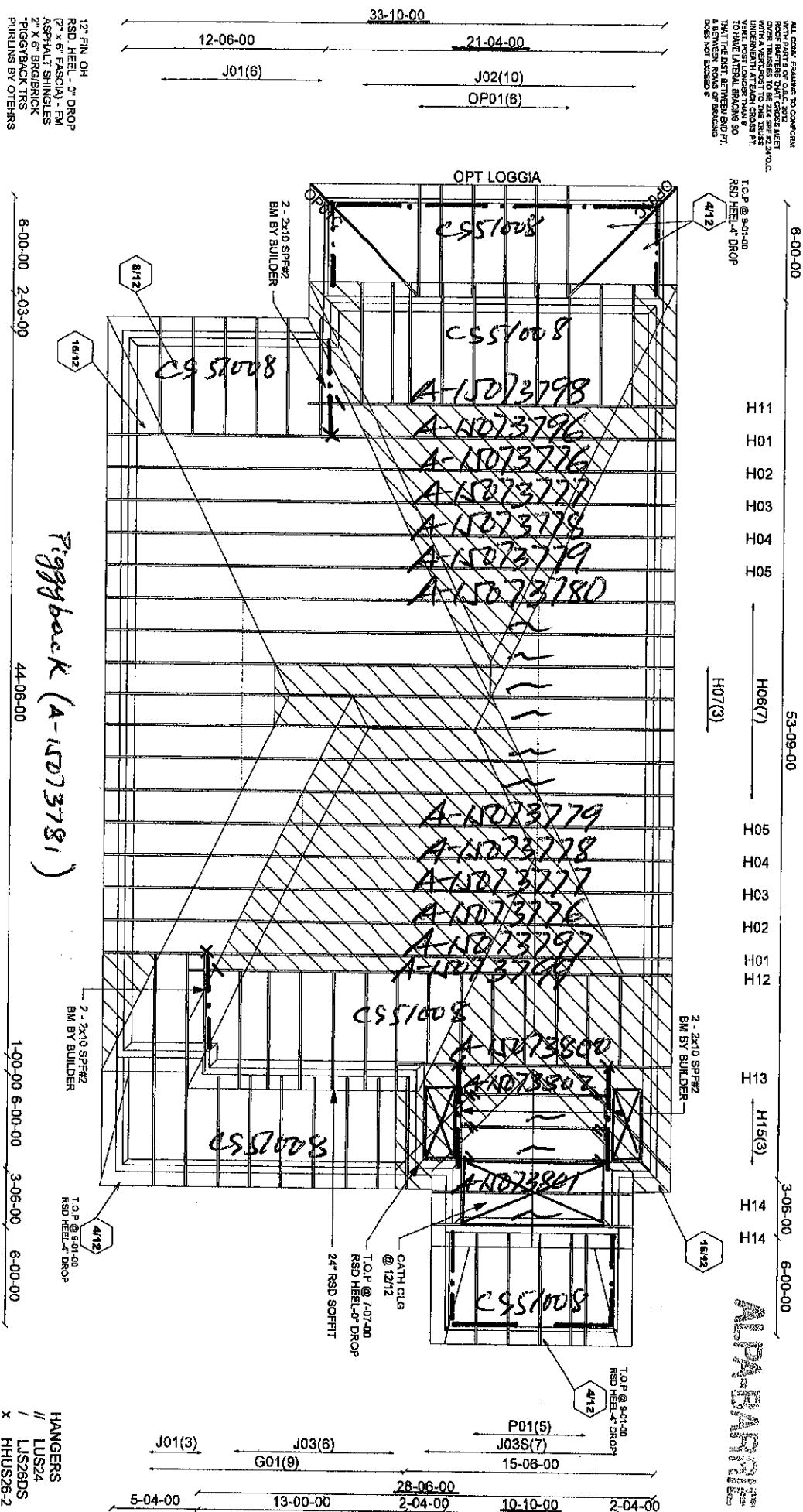




CONVENTIONAL
FRAMING BY
OTHERS

Mikek Ver: 7.5.0





Job Track: 40297
Layout ID: 253627
Plan Log: 79711

Builder / Location: GOLD PARK / KLEINBURG
Project: HUNTINGTON & NASHVILLE
Date: 4/30/2015 Designer: chryle

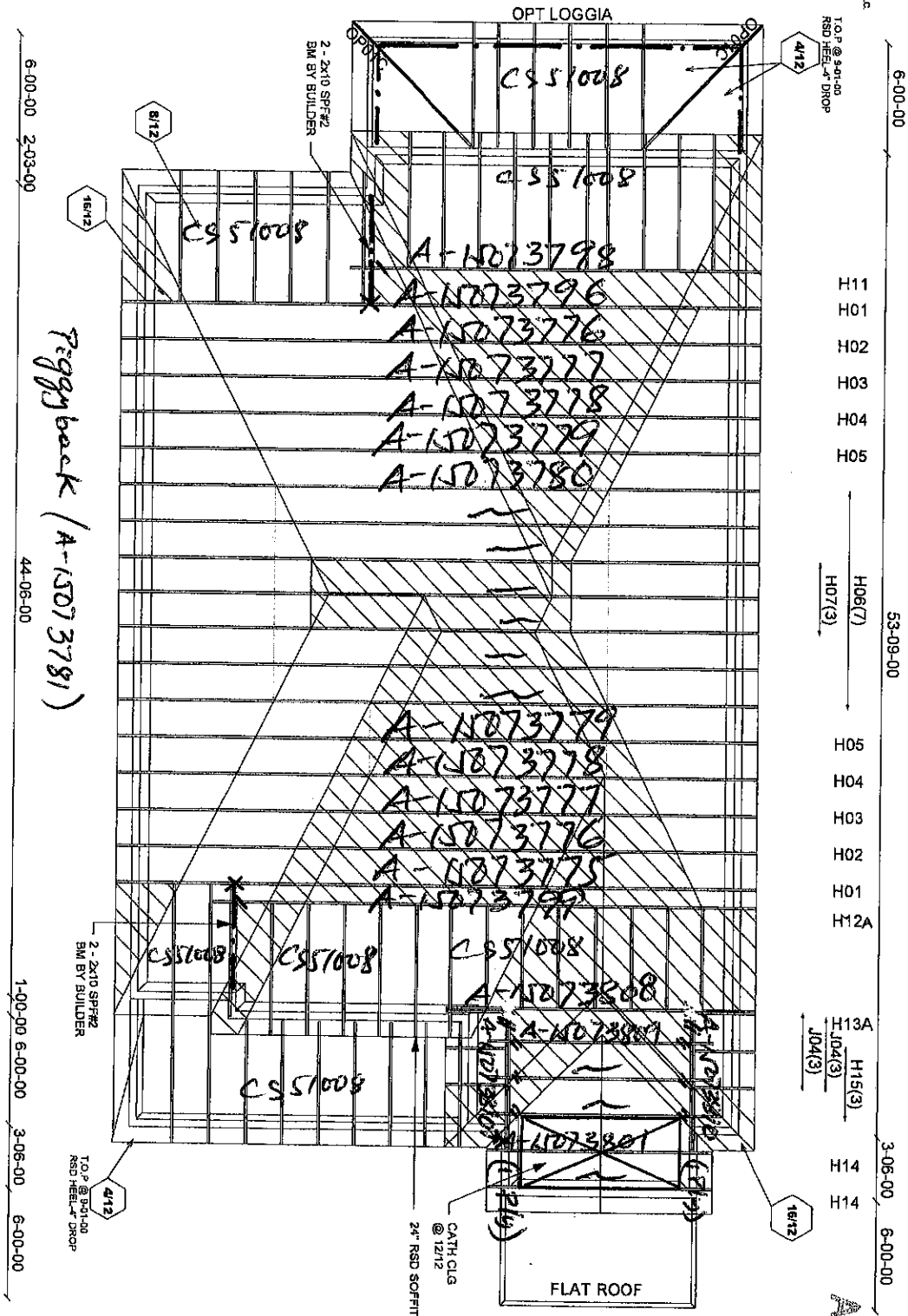
Model / Elevation: 42-2 / B
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC. AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC. IF UTILIZED FOR ANY OTHER PURPOSE.

CONVENTIONAL FRAMING BY OTHERS
Mitek Ver. 7.5.0

12" FIN. OH.
RSD. HEEL - 0" DROP
(2" x 6" P/SCA) - PM
2" x 6" SHINGLES
2" x 6" SHINGLES
P/SCA BACKING
FURLINS BY OTHERS

33-10-00
12-06-00 21-04-00
J01(6) J02(10) OPC1(6)

ALL DIM. FRAMING TO CONCRETE
WITH PART OF 0.62 2013
OVER TRUSSES TO BE 2X4 SFP AT 24" O.C.
WITH A VENT POST TO THE TRUSSES
TO HAVE LATERAL BRACING SO
THEY DO NOT BUCKLE
DOES NOT EXCEED 6'



Piggback (A-15073781)

ALPHA ROOF TRUSSES

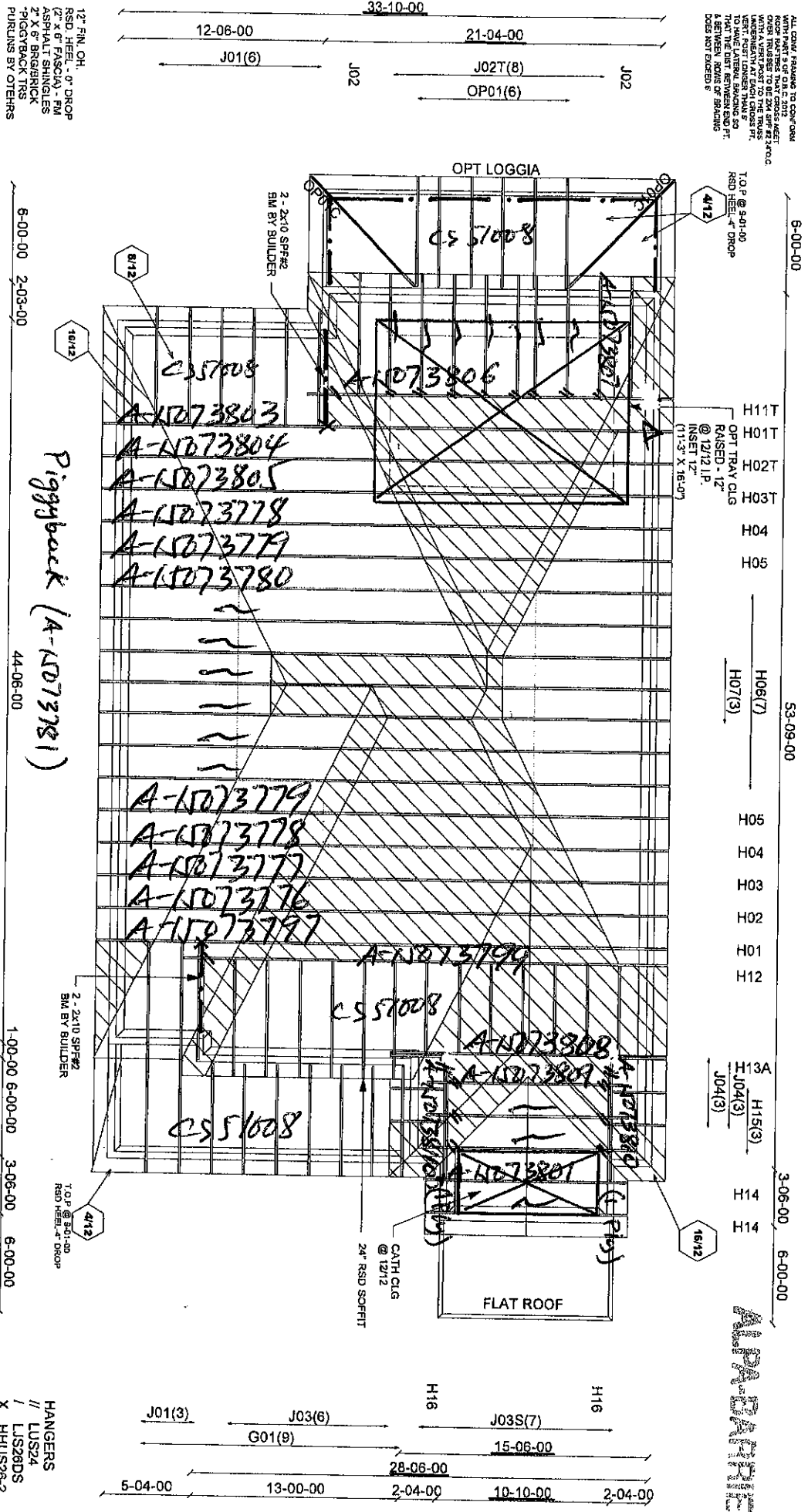


Job Track: 40297
Layout ID: 253628
Plan Log: 79711

Builder / Location:
GOLD PARK / KLEINBURG
Project: **HUNTINGTON & NASHVILLE**
Date: 4/30/2015 Designer: cheryle

Model / Elevation:
42-2 / B OPT TRAY
THESE DRAWINGS CONSTITUTE THE PROPERTY OF ALPHA ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY ALPHA ROOF TRUSSES INC AND WILL BE RETRACTED BY ALPHA ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE.

CONVENTIONAL
FRAMING BY
OTHERS
Mark Ver. 7.5.0



ALL CON. FRAMING TO CONFORM WITH PART 9 OF D.A.C. 2013. ROOF TRUSSES HAVE CROSS MEMBER WITH A VERT POST TO THE TRUSS. UNLESS NOTED OTHERWISE, ALL TRUSSES TO HAVE INTERNAL BRACING SO THAT THE DIST BETWEEN END FT DOES NOT EXCEED 8'

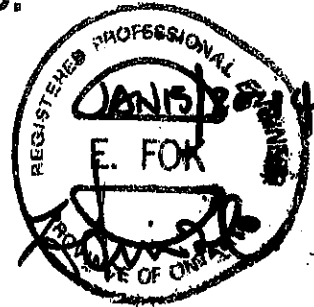
T.O.P @ 5'-0"-00 RSD HEEL - 4" DROP

H11T
H01T
H02T
H03T
H04
H05
H06(7)
H07(3)
H05
H04
H03
H02
H01
H12
H13A
H15(3)
H14
H14
J04(3)

Alpha Roof Trusses

Stracon Engineering Inc.

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



RESPONSIBILITIES

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

SPECIFICATIONS

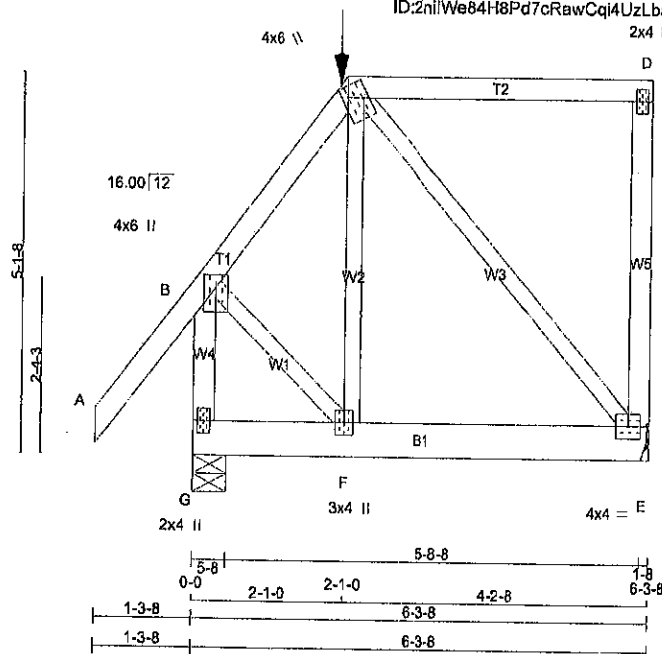
1. Trusses designed by Stracon Engineering Inc. conforms to the relevant section of the Ontario Building Code of Canada (Part 9 or Part 4) or to the Canadian code for farm buildings, whichever applies to the building type indicated on the drawings as well as to the procedures established by the truss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

January 15, 2014

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253627	H16	2	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 M/Tek Industries, Inc. Fri Jul 17 07:31:55 2015 Page 1
ID:2nlW684H8Pd7cRawCq4UzLbaC-aJ3p0OVpmyBJ08Vw_eDMSUOF6MIKs0clF1qSvyxEvl
Scale = 1:31.4



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 17.3 lbs FACTORED DOWN AT 2-1-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	849	0	849	0	5-8	1-8
G	949	0	949	0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	LIVE			
E	598	408 / 0	0 / 0	0 / 0	0 / 0	192 / 0	0 / 0
G	666	465 / 0	0 / 0	0 / 0	0 / 0	201 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	F-C	0 / 519
B-C	-513 / 0	-70.5	-70.5	0.06 (1)	6.25	C-E	-473 / 0
C-D	0 / 0	-74.1	-74.1	0.25 (1)	10.00	B-F	0 / 401
E-D	-156 / 0	0.0	0.0	0.07 (1)	7.81		
G-B	-846 / 0	0.0	0.0	0.11 (1)	7.81		
G-F	0 / 0	-194.3	-194.3	0.18 (1)	10.00		
F-E	0 / 316	-194.3	-194.3	0.26 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-1-0	-17	-17	-	FRONT	VERT	TOTAL

TOTAL WEIGHT = 2 X 40 = 81 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0
START SPAN CARRIED = 10-0-0
END DISTANCE = 6-3-8
END SPAN CARRIED = 10-0-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHip

LEFT SETBACK = 2-1-0
RIGHT SETBACK = 0-0
END SETBACK = 2-2-8
END WALL WIDTH = 0-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.21")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL)= L/999 (0.03")

CSI: TC=0.26 (C-D:1), BC=0.26 (E-F:1), WB=0.31 (C-E:1), CSI=0.30 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

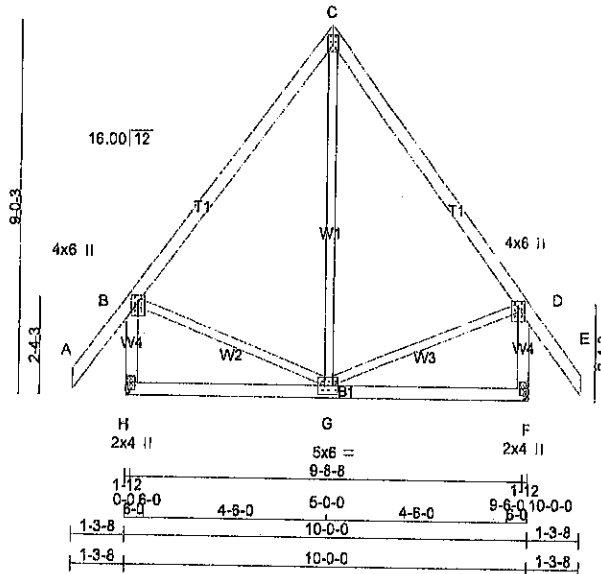
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

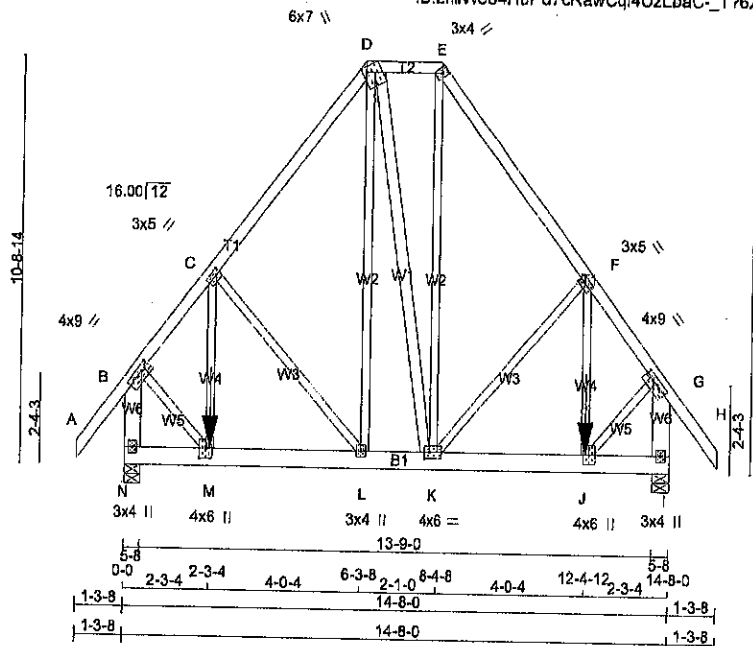
NAIL VALUES

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



A-100157840





LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
N - B	2x6	DRY	No.2	SPF
I - G	2x6	DRY	No.2	SPF
N - I	2x8	DRY	No.2	SPF
ALL WEBS EXCEPT D - K	2x3	DRY	No.2	SPF
D - K	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (Table is in Inches)

JT TYPE	PLATES	W	LEN	Y	X
B - TMVW-I	MT20	4.0	9.0	1.50	3.00
C - TMVW-I	MT20	3.0	5.0	1.50	1.60
D - TTWV+m	MT20	6.0	7.0	Edge	1.50
E - TTWV-h	MT20	3.0	4.0	1.75	1.25
F - TMVW-I	MT20	3.0	5.0	1.50	1.60
G - TMVW-I	MT20	4.0	6.0	1.50	3.00
I - BMV1+p	MT20	3.0	4.0		
J - BMVW+H	MT20	4.0	6.0		
K - BMVW+H	MT20	4.0	6.0	2.00	2.00
L - BMVW+H	MT20	3.0	4.0		
M - BMVW+H	MT20	4.0	6.0	3.25	2.00
N - BMV1+p	MT20	3.0	4.0		

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 848.7 lbs FACTORED DOWN AT 12-4-12, AND 848.7 lbs FACTORED DOWN AT 2-3-4 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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
N	2151	0	2151	0
I	2151	0	2151	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	1513	1038 / 0	0 / 0	0 / 0	0 / 0	0 / 0	475 / 0	0 / 0
I	1513	1038 / 0	0 / 0	0 / 0	0 / 0	0 / 0	475 / 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 = 5.21FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 40	M-C	0 / 428
B-C	-1452 / 0	C-L	-446 / 0
C-D	-1033 / 0	L-D	0 / 550
D-E	-624 / 0	D-K	0 / 73
E-F	-1064 / 0	K-E	0 / 639
F-G	-1438 / 0	K-F	-413 / 0
G-H	0 / 40	J-F	0 / 375
H-B	-2062 / 0	B-M	0 / 1156
I-G	-2044 / 0	J-G	0 / 1146
N-M	0 / 0		
M-L	0 / 891		
L-K	0 / 610		
K-J	0 / 663		
J-I	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
J	12-4-12	-849	-849	-	FRONT	VERT	TOTAL
M	2-3-4	-849	-849	-	FRONT	VERT	TOTAL

TOTAL WEIGHT = 115 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: CSidGirder
START DISTANCE = 0-0
START SPAN CARRIED = 5-5-8
END DISTANCE = 14-8-0
END SPAN CARRIED = 5-5-8
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 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 (0.49")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.19 (E-F:1), BC=0.25 (J-K:1), WB=0.33 (C-L:1), SSI=0.16 (J-K:1)

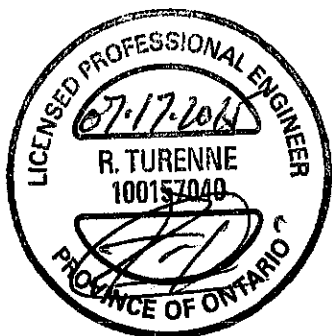
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00
COMP=1.00 SHEAR=1.00 TENS= 1.00

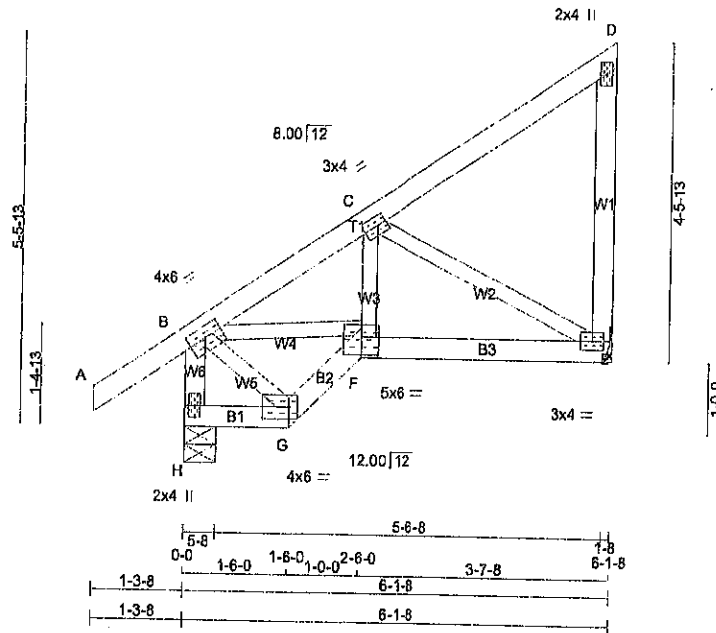
COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

MAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
119 284 162 284 162 119
A-NOV-2015





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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVWW-I	MT20	4.0	6.0	1.75	3.00
C	TMVWW-I	MT20	3.0	4.0	1.50	1.50
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-I	MT20	3.0	4.0		
F	BBWW-I	MT20	5.0	6.0	3.00	3.00
G	BBW-I	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 9.2.3, 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	368	0	368	0	5-8	1-8
E	269	0	269	0	5-8	1-8

HANGER BY OTHERS
 MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERMLIVE	WIND	DEAD	SOIL
H	266	188 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0
E	190	129 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0

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

BRACING

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO
H-B	-353 / 0	0.0	0.0	0.04 (1)
A-B	0 / 27	-70.5	-70.5	0.08 (1)
B-C	-310 / 0	-70.5	-70.5	0.08 (1)
C-D	-13 / 0	-70.5	-70.5	0.08 (1)
E-D	-101 / 0	0.0	0.0	0.03 (1)
H-G	0 / 0	-17.5	-17.5	0.01 (4)
G-F	0 / 20	-17.5	-17.5	0.01 (4)
F-E	0 / 269	-17.5	-17.5	0.09 (4)

TOTAL WEIGHT = 8 X 31 = 248 lb (M/F)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")
 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=0.09 (A-B:1), BC=0.06 (E-F:4), WB=0.08 (C-E:1), SSI=0.10 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

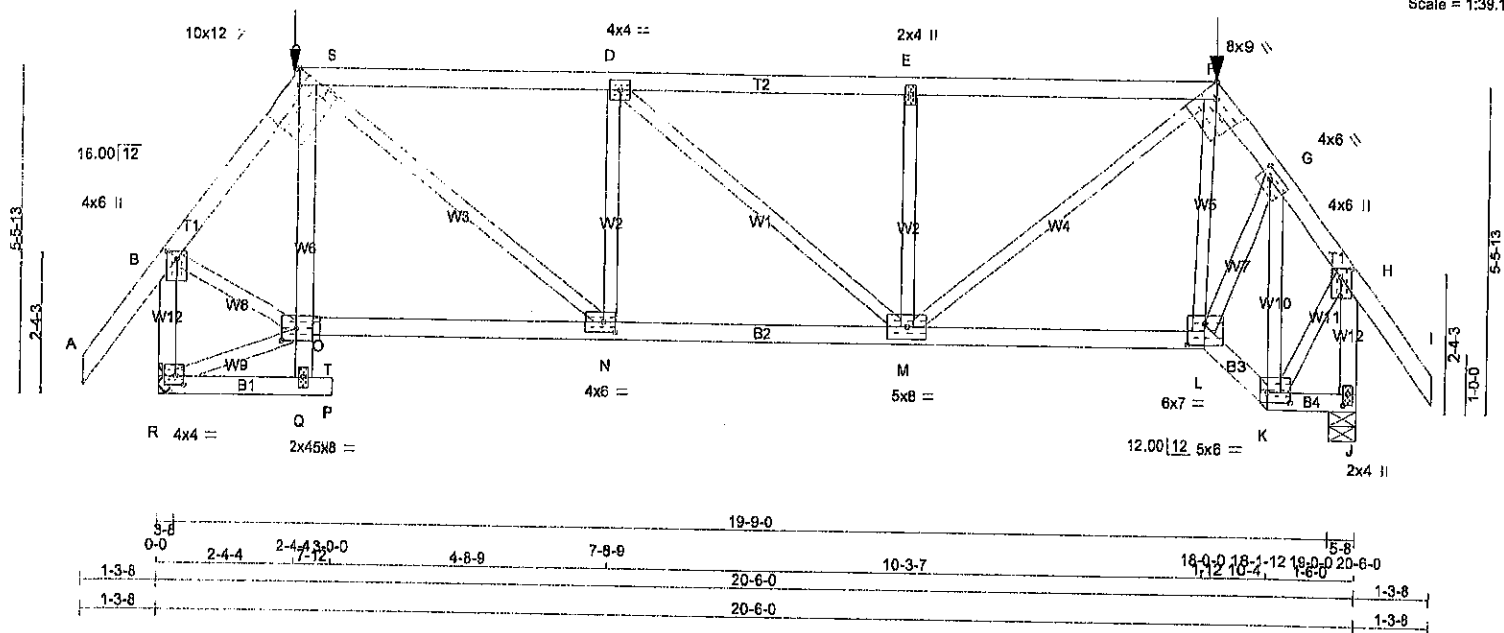
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (B) (INPUT = 0.90)
 JSI METAL= 0.10 (B) (INPUT = 1.00)



A-15073807



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 - I	2x4	DRY	No.2 SPF
R - B	2x4	DRY	No.2 SPF
J - H	2x4	DRY	No.2 SPF
R - P	2x4	DRY	No.2 SPF
O - L	2x4	DRY	No.2 SPF
L - K	2x4	DRY	No.2 SPF
K - J	2x4	DRY	No.2 SPF
ALL WEBS	2x3	DRY	No.2 SPF
EXCEPT			
Q - C	2x4	DRY	No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	1.50	2.00
C	TTWW-h	MT20	10.0	12.0	Edge	2.75
D	TMVW-t	MT20	4.0	4.0		
E	TMVW-w	MT20	2.0	4.0		
F	TTWW-h	MT20	8.0	9.0	Edge	2.75
G	TMVW-t	MT20	4.0	6.0	1.75	2.25
H	TMVW+p	MT20	4.0	8.0	1.75	2.25
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BBVW-t	MT20	5.0	6.0	2.00	4.50
L	BBVW-t	MT20	6.0	7.0	4.25	3.50
M	BMVW-t	MT20	5.0	8.0		
N	BMVW-t	MT20	4.0	6.0	2.00	2.25
O	BMVW-t	MT20	5.0	8.0	2.60	3.00
Q	BMVW-w	MT20	2.0	4.0		
R	BMVW-t	MT20	4.0	4.0	1.75	1.75

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

HANGERS NOTES

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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	1883	0	1883	0	0	5-8	2-10
R	1898	0	1898	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 2-1

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	1326	904 / 0	0 / 0	0 / 0	0 / 0	422 / 0	0 / 0
R	1338	904 / 0	0 / 0	0 / 0	0 / 0	433 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.15FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

MAX. UNBRACED INTERIOR CHORD LENGTH = 7.81FT.

LOADING
 TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)		MAX CS1 (LC)	MAX UNBRAC LENGTH	WEBS MEMB. FORCE (LBS)	MAX CS1 (LC)
		FROM	TO				
A-B	0 / 140	-70.5	-70.5	0.11 (1)	10.00	K-G -1347 / 0	0.37 (1)
B-C	-1577 / 0	-70.5	-70.5	0.11 (1)	6.13	K-H 0 / 1017	0.25 (1)
C-S	-2232 / 0	-143.1	-143.1	0.40 (1)	4.16	Q-O 0 / 70	0.04 (1)
S-D	-2232 / 0	-70.5	-70.5	0.40 (1)	4.15	Q-C -163 / 33	0.03 (1)
D-E	-2214 / 0	-70.5	-70.5	0.39 (1)	4.17	N-D -374 / 0	0.12 (1)
E-F	-2214 / 0	-70.5	-70.5	0.38 (1)	4.19	M-E -378 / 0	0.12 (1)
F-G	-1583 / 0	-70.5	-70.5	0.08 (1)	5.16	C-N 0 / 1638	0.41 (1)
G-H	-1099 / 0	-70.5	-70.5	0.12 (1)	5.67	D-M -23 / 0	0.02 (1)
H-I	0 / 140	-70.5	-70.5	0.11 (1)	10.00	M-F 0 / 1616	0.40 (1)
R-B	-1847 / 0	0.0	0.0	0.25 (1)	6.12	L-F -59 / 42	0.02 (1)
J-H	-1857 / 0	0.0	0.0	0.26 (1)	6.10	L-G 0 / 966	0.24 (1)
R-Q	0 / 20	-35.5	-35.5	0.07 (4)	10.00	R-O -21 / 0	0.00 (1)
Q-P	0 / 0	-35.5	-35.5	0.01 (4)	10.00	B-C 0 / 1017	0.25 (1)
O-T	0 / 937	-35.5	-35.5	0.57 (1)	10.00		
T-N	0 / 937	-108.2	-108.2	0.57 (1)	10.00		
N-M	0 / 2232	-108.2	-108.2	0.80 (1)	10.00		
M-L	0 / 940	-108.2	-108.2	0.57 (1)	10.00		
L-K	0 / 831	-35.5	-35.5	0.16 (1)	10.00		
K-J	0 / 0	-35.5	-35.5	0.03 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-4-4	-128	-128	---	FRONT	VERT	TOTAL
F	18-1-12	-128	-128	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. G/C

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

GIRDER TYPE: CStdGirder
 START DISTANCE = 3-0-0
 START SPAN CARRIED = 6-1-8
 END DISTANCE = 18-0-0
 END SPAN CARRIED = 6-1-8
 END WALL WIDTH = 0-0
 APPLIED TO FRONT SIDE OF BOTTOM CHORD.
 - ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CPrimeHlp
 SIDE SETBACK = 2-4-4
 END SETBACK = 6-1-8
 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 3-0-0 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CPrimeHlp
 SIDE SETBACK = 2-4-4
 END SETBACK = 6-1-8
 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 3-0-0 OF SPAN MEASURED FROM THE RIGHT.

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

THIS DESIGN COMPLIES WITH:
 - PART 9 OF OBC 2012, BCBC 2012, ABC 2014
 - CSA 088-08
 - 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 (0.68")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
 ALLOWABLE DEFL.(TL) = L/360 (0.68")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.40 (C-D:1), BC=0.80 (M-N:1),
 WB=0.41 (C-N:1), SS=0.29 (N-O:1)

A-15213806



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253626	H11T	1	1	TRUSS DESC.	
Alpa Roof Truss, Maple					

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Thu Jul 16 16:55:06 2015 Page 2
ID: AyrJx9Y?fa2EXF7DRQxSq4zMEz1-SDJRXyqdGrzvzG9ubJtMJ hGLnp aC7qcLUTlyxRl

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 127.8 lbs FACTORED DOWN AT 2-4-4, AND 127.8 lbs FACTORED DOWN AT 18-1-12 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.

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-1073806 (2)

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMWV+p	MT20	4.0	8.0	2.00 2.00
C	TTWV+m	MT20	6.3	7.0	Edge 1.50
D	TMW+w	MT20	2.0	4.0	
E	TMWVW-t	MT20	5.0	8.0	2.25 4.00
F	TMWV-l	MT20	4.0	4.0	
G	TS-l	MT20	3.0	6.0	
H	TMW+w	MT20	2.0	4.0	
I	TTWV-h	MT20	7.0	8.0	Edge 2.75
J	TMWV-l	MT20	4.0	6.0	2.00 2.60
K	TMWV-l	MT20	4.0	8.0	2.00 2.50
L	TMWV+p	MT20	4.0	6.0	2.00 2.00
N	BMV-l+p	MT20	2.0	4.0	
O	BBWV-l	MT20	4.0	6.0	1.75 4.25
P	BBWV+p	MT20	6.0	7.0	3.25 2.75
Q	BMWV-l	MT20	4.0	4.0	
R	BMWVW-l	MT20	5.0	6.0	2.50 1.60
S	BBWV-l	MT20	6.0	7.0	
T	8BW-h	MT20	5.0	6.0	2.00 3.25
U	BMWVW-l	MT20	5.0	6.0	2.50 2.00
V	BMWV-l	MT20	4.0	4.0	
W	BMV-l+p	MT20	2.0	4.0	

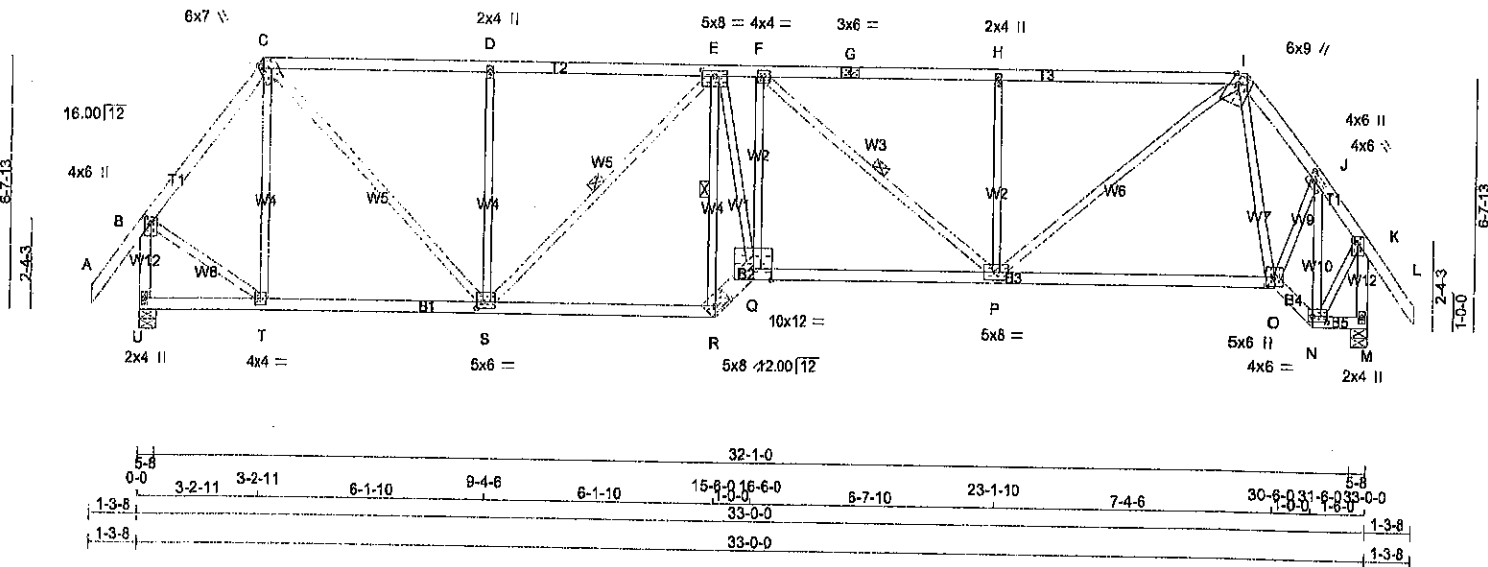
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.65FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

DESIGN CRITERIA		TOTAL WEIGHT = 179 lb	
SPECIFIED LOADS:			
TOP CH.	LL = 21.0 PSF		
	DL = 3.0 PSF		
BOT CH.	LL = 0.0 PSF		
	DL = 7.0 PSF		
TOTAL LOAD	= 31.0 PSF		
SPACING = 24.0 IN./C/C			
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
THIS DESIGN COMPLIES WITH:			
- PART 9 OF CBC 2012, BCBC 2012, ABC 2014			
- CSA C88-09			
- TPIC 2011			
DESIGN ASSUMPTIONS			
- OVERHANG NOT TO BE ALTERED OR CUT OFF.			
(56 % OF 23.0 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD EQUALS 21.0 P.S.F. SPECIFIED ROOF LIVE LOAD			
ALLOWABLE DEFL.(LL)= L/360 (1.10")			
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.11")			
ALLOWABLE DEFL.(TL)= L/360 (1.10")			
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.22")			
CSI: TC=0.50 (H-I:1), BC=0.37 (R-S:1), WB=0.60 (E-T:1), SSI=0.21 (H-I:1)			
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10			
COMPANION LIVE LOAD FACTOR = 0.60			
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.			
NAIL VALUES			
PLATE GRIP(DRY)	SHEAR	SECTION	
(PSI)	(PLI)	(PSI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354 1867 822	2484 1656	745 1656
PLATE PLACEMENT TOL. = 0.260 inches			
PLATE ROTATION TOL. = 5.0 Deg.			
JSI GRIP=0.90 (R) (INPUT = 0.90)			
JSI METAL=0.34 (E) (INPUT = 1.00)			



A-15073805



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - G	2x4	DRY No.2	SPF
G - I	2x4	DRY No.2	SPF
I - L	2x4	DRY No.2	SPF
U - B	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
U - R	2x4	DRY No.2	SPF
R - O	2x6	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 EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+w	MT20	2.0	4.0		
E	TMVWW-i	MT20	6.0	6.0	1.75	4.00
F	TMVWW-i	MT20	4.0	4.0		
G	TS-i	MT20	3.0	6.0		
H	TMVW+w	MT20	2.0	4.0		
I	TTWW+m	MT20	6.0	9.0	Edge	2.00
J	TMVWW-i	MT20	4.0	6.0	2.00	2.50
K	TMVW+p	MT20	4.0	6.0	2.00	2.00
M	BMV1+p	MT20	2.0	4.0		
N	BBWW-i	MT20	4.0	6.0	1.75	4.60
O	BBWW+p	MT20	6.0	6.0	2.75	2.25
P	BMVWW-i	MT20	5.0	8.0		
Q	BBWW-i	MT20	10.0	12.0	Edge	
R	BBWW-h	MT20	5.0	8.0	1.75	5.00
S	BMVWW-i	MT20	5.0	6.0	2.00	2.00
T	BMVWW-i	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 VERT	FACTORED GROSS REACTION SNOW	FACTORED GROSS REACTION DOWN	FACTORED GROSS REACTION HORZ	INPUT BRG UPLIFT	REQRD BRG IN-SX
U	1546	0	1546	0	0	5-8
M	1553	0	1553	0	0	5-8

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
U	1089	760 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
M	1081	753 / 0	0 / 0	0 / 0	0 / 0	339 / 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 = 4.14FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CS (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	T-C	-308 / 0	0.23 (1)
B-C	-1144 / 0	-70.5	-70.5 0.15 (1)	5.78	C-S	0 / 1296	0.29 (1)
C-D	-1579 / 0	-70.5	-70.5 0.47 (1)	4.71	S-D	-481 / 0	0.35 (1)
D-E	-1579 / 0	-70.5	-70.5 0.47 (1)	4.71	S-E	-484 / 0	0.26 (1)
E-F	-2288 / 0	-70.5	-70.5 0.28 (1)	4.26	R-E	-1808 / 0	0.51 (1)
F-G	-1944 / 0	-70.5	-70.5 0.63 (1)	4.14	E-Q	0 / 1843	0.44 (1)
G-H	-1944 / 0	-70.5	-70.5 0.63 (1)	4.14	Q-F	0 / 170	0.02 (4)
H-I	-1944 / 0	-70.5	-70.5 0.63 (1)	4.14	F-P	-442 / 0	0.21 (1)
I-J	-1276 / 0	-70.5	-70.5 0.07 (1)	5.65	P-H	-534 / 0	0.28 (1)
J-K	-894 / 0	-70.5	-70.5 0.10 (1)	8.26	P-I	0 / 1489	0.34 (1)
K-L	0 / 40	-70.5	-70.5 0.10 (1)	10.00	I-O	-168 / 0	0.08 (1)
U-B	-1632 / 0	0.0	0.0 0.20 (1)	6.85	O-J	0 / 782	0.17 (1)
M-K	-1539 / 0	0.0	0.0 0.20 (1)	6.83	N-J	-1112 / 0	0.29 (1)
U-T	0 / 0	-17.5	-17.5 0.09 (4)	10.00	B-T	0 / 790	0.18 (1)
T-S	0 / 876	-17.5	-17.5 0.21 (4)	10.00	N-K	0 / 829	0.19 (1)
S-R	0 / 1919	-17.5	-17.5 0.39 (1)	10.00			
R-Q	0 / 2672	-17.5	-17.5 0.32 (1)	10.00			
Q-P	0 / 2286	-17.5	-17.5 0.50 (1)	10.00			
P-O	0 / 781	-17.5	-17.5 0.31 (4)	10.00			
O-N	0 / 677	-17.5	-17.5 0.11 (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, NBC 2010

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.63 (H-I:1), BC=0.50 (P-Q:1), WB=0.51 (E-R:1), SSI=0.22 (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= 0.90 (I) (INPUT = 0.90)
JSI METAL= 0.42 (E) (INPUT = 1.00)



A-15073804

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
S	BMWW-t	MT20	6.0	6.0		
T	BBVW+p	MT20	10.0	12.0	Edge	
U	BBVW-h	MT20	8.0	9.0	3.00	4.25
V	BMWW-t	MT20	4.0	9.0		
W	BMWWW-t	MT20	6.0	12.0	2.50	4.60
X	BMWW-t	MT20	5.0	6.0	2.00	2.75
Y	BMV1-t	MT20	6.0	9.0	5.50	

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 114.2 lbs FACTORED DOWN AT 2-2-11
ON TOP CHORD, AND 2180.1 lbs FACTORED
DOWN AT 12-4-8 ON BOTTOM CHORD. DESIGN
FOR UNSPECIFIED CONNECTION(S) IS
DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

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

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.260 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL= 0.85 (T) (INPUT = 1.00)

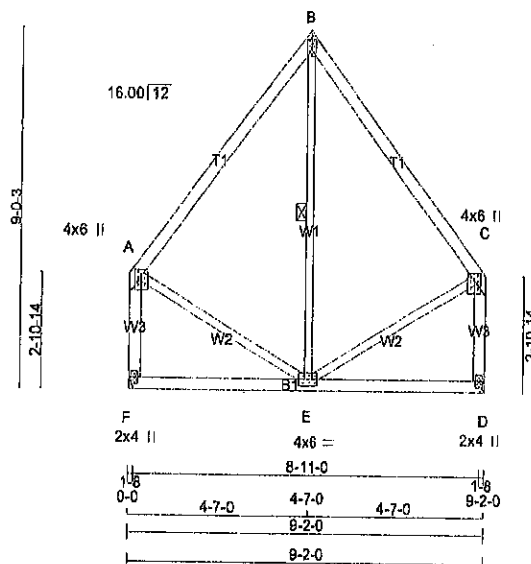


A-11073803(2)

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253625	H15	3	1	TRUSS DESC.	

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 M/Tek Industries, Inc. Thu Jul 16 16:43:38 2015 Page 1
ID: AyrJx9Y7fa2EXF7DRQxSq4zMEz1-cs8L8/V4ISHXQXZgHqXOsDUBD08InWmsdZh4KayxRw
3x5 II
Scale = 1:58.3



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
A	TMVW+p	MT20	4.0	6.0 2.00 2.00
B	TTW+p	MT20	3.0	6.0 2.00 Edge
C	TMVW+p	MT20	4.0	6.0 2.00 2.00
D	BMV1+p	MT20	2.0	4.0
E	BMVWW+I	MT20	4.0	6.0
F	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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
F	403	0	403	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
D	403	0	403	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	284	192 / 0	0 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
D	284	192 / 0	0 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS: (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS: (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	-187 / 0	-70.5 -70.5	0.19 (1)	6.25	E-B	-24 / 88	0.02 (4)
B-C	-187 / 0	-70.5 -70.5	0.19 (1)	6.25	A-E	0 / 128	0.03 (1)
F-A	-372 / 0	0.0 0.0	0.06 (1)	7.81	E-C	0 / 128	0.03 (1)
D-C	-372 / 0	0.0 0.0	0.06 (1)	7.81			
F-E	0 / 0	-17.5 -17.5	0.10 (4)	10.00			
E-D	0 / 0	-17.5 -17.5	0.10 (4)	10.00			

TOTAL WEIGHT = 3 X 49 = 147 lb

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL. (LL) = L/360 (0.31")
CALCULATED VERT. DEFL. (LL) = L/998 (0.00")
ALLOWABLE DEFL. (TL) = L/360 (0.31")
CALCULATED VERT. DEFL. (TL) = L/998 (0.01")

CS: TC=0.19 (A-B:1), BC=0.10 (D-E:4), WB=0.03 (A-E:1), SSI=0.08 (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 618 364 1667 822 2284 1666

PLATE PLACEMENT TOL. = 0.250 inches

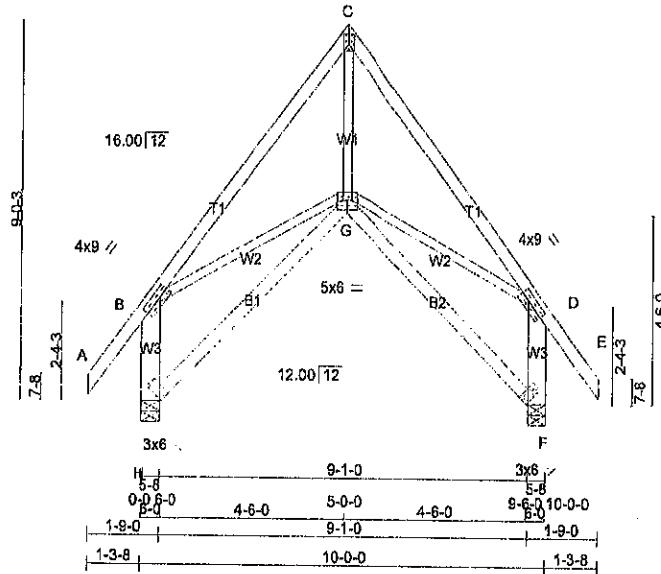
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (A) (INPUT = 0.90)

JSI METAL= 0.07 (F) (INPUT = 1.00)



A-15073802



LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
H - B	2x6	DRY	No.2
F - D	2x6	DRY	No.2
H - G	2x4	DRY	No.2
G - F	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

NOTES- (1)
 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per 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
H	539	0	539	0
F	539	0	539	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	377	269/0	0/0	0/0	0/0	0/0	108/0	0/0	0/0
F	377	269/0	0/0	0/0	0/0	0/0	108/0	0/0	0/0

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0/40	-70.5	-70.5	0.10 (1)	10.00	G-C	0/389
B-C	-451/0	-70.5	-70.5	0.23 (1)	6.25	B-G	0/305
C-D	-451/0	-70.5	-70.5	0.23 (1)	6.25	G-D	0/305
D-E	0/40	-70.5	-70.5	0.10 (1)	10.00		
H-B	-496/0	0.0	0.0	0.05 (1)	7.81		
F-D	-496/0	0.0	0.0	0.05 (1)	7.81		
H-G	0/0	-17.5	-17.5	0.13 (4)	10.00		
G-F	0/0	-17.5	-17.5	0.13 (4)	10.00		

TOTAL WEIGHT = 2 X 80 = 120 lb [MIF]

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.33")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
 ALLOWABLE DEFL.(TL) = L/360 (0.33")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.23 (C-D:1), BC=0.13 (F-G:4),
 WB=0.08 (C-G:1), SSI=0.08 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 618 364 1687 822 2284 1666

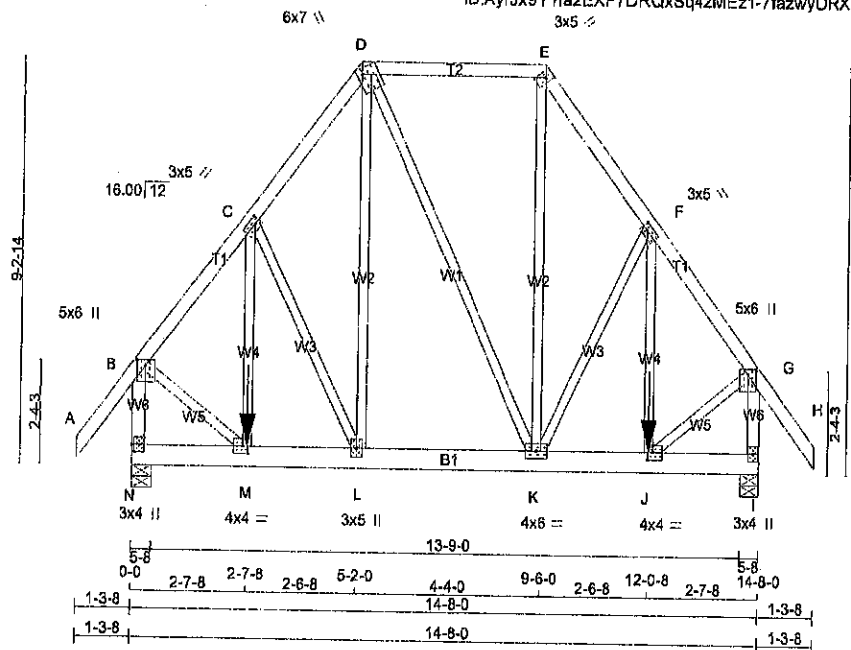
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.57 (C) (INPUT = 0.60)
 JSI METAL= 0.11 (B) (INPUT = 1.00)



A-15073801



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	6.0	6.0	1.50 2.60
C	TMWW-l	MT20	3.0	5.0	1.50 1.50
D	TTWW+m	MT20	6.0	7.0	Edge 1.60
E	TTW+h	MT20	3.0	5.0	2.00 1.25
F	TMWW-l	MT20	3.0	5.0	1.50 1.60
G	TMVW+p	MT20	5.0	6.0	1.50 2.50
I	BMV1+p	MT20	3.0	4.0	
J	BMWW-l	MT20	4.0	4.0	2.00 1.50
K	BMWWW-l	MT20	4.0	6.0	
L	BMWWW-l	MT20	3.0	5.0	
M	BMWW-l	MT20	4.0	4.0	2.00 1.60
N	BMV1+p	MT20	3.0	4.0	2.00 0.60

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 772.1 lbs FACTORED DOWN AT 2-7-8, AND 772.1 lbs FACTORED DOWN AT 12-0-8 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			
JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT REQRD BRG
N	2322 0	2322 0	5-8
I	2322 0	2322 0	5-8

UNFACTORED REACTIONS						
JT	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
N	1833	1120 / 0	0 / 0	0 / 0	0 / 0	514 / 0
I	1833	1120 / 0	0 / 0	0 / 0	0 / 0	514 / 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 = 5.13FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO			
A-B	0 / 40	-70.5 -70.5 0.11 (1)	10.00
B-C	-1515 / 0	-148.0 -148.0 0.18 (1)	5.13
C-D	-1244 / 0	-70.5 -70.5 0.14 (1)	5.59
D-E	-743 / 0	-70.5 -70.5 0.26 (1)	6.25
E-F	-1268 / 0	-70.5 -70.5 0.14 (1)	5.57
F-G	-1511 / 0	-148.0 -148.0 0.18 (1)	5.13
G-H	0 / 40	-70.5 -70.5 0.11 (1)	10.00
H-I	-2152 / 0	0.0 0.0 0.28 (1)	5.73
I-G	-2147 / 0	0.0 0.0 0.28 (1)	5.74
N-M	0 / 0	-112.3 -112.3 0.09 (1)	10.00
M-L	0 / 922	-93.5 -93.5 0.16 (1)	10.00
L-K	0 / 736	-93.5 -93.5 0.21 (1)	10.00
K-J	0 / 919	-93.5 -93.5 0.23 (1)	10.00
J-I	0 / 0	-112.3 -112.3 0.10 (1)	10.00
WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	
FR-TO			
M-C	0 / 310	0.08 (1)	
C-L	-444 / 0	0.28 (1)	
L-D	0 / 750	0.19 (1)	
D-K	0 / 20	0.00 (1)	
K-E	0 / 779	0.19 (1)	
E-F	-420 / 0	0.27 (1)	
F-G	0 / 273	0.07 (1)	
G-H	0 / 1134	0.28 (1)	
H-I	0 / 1130	0.28 (1)	

FACTORED CONCENTRATED LOADS (LBS)			
JT	LOC.	LC1	MAX.
J	12-0-8	-772	-772
M	2-7-8	-772	-772

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
J	12-0-8	-772	-772	FRONT	VERT	TOTAL
M	2-7-8	-772	-772	FRONT	VERT	TOTAL

TOTAL WEIGHT = 104 lb

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 0-0
END SETBACK = 6-3-8
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 2-7-8 OF SPAN MEASURED FROM THE LEFT.

GIRDER TYPE: CPrimeHlp
SIDE SETBACK = 0-0
END SETBACK = 6-3-8
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 2-7-8 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, 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 DEFLECTION (LL) = 1/360 (0.49")
CALCULATED DEFLECTION = 0.399 (0.02")
A-107-38000



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

ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.28 (B-N:1) , BC=0.23 (J-K:1) , WB=0.28 (C-L:1) , SSI=0.14 (K-L:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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 1856

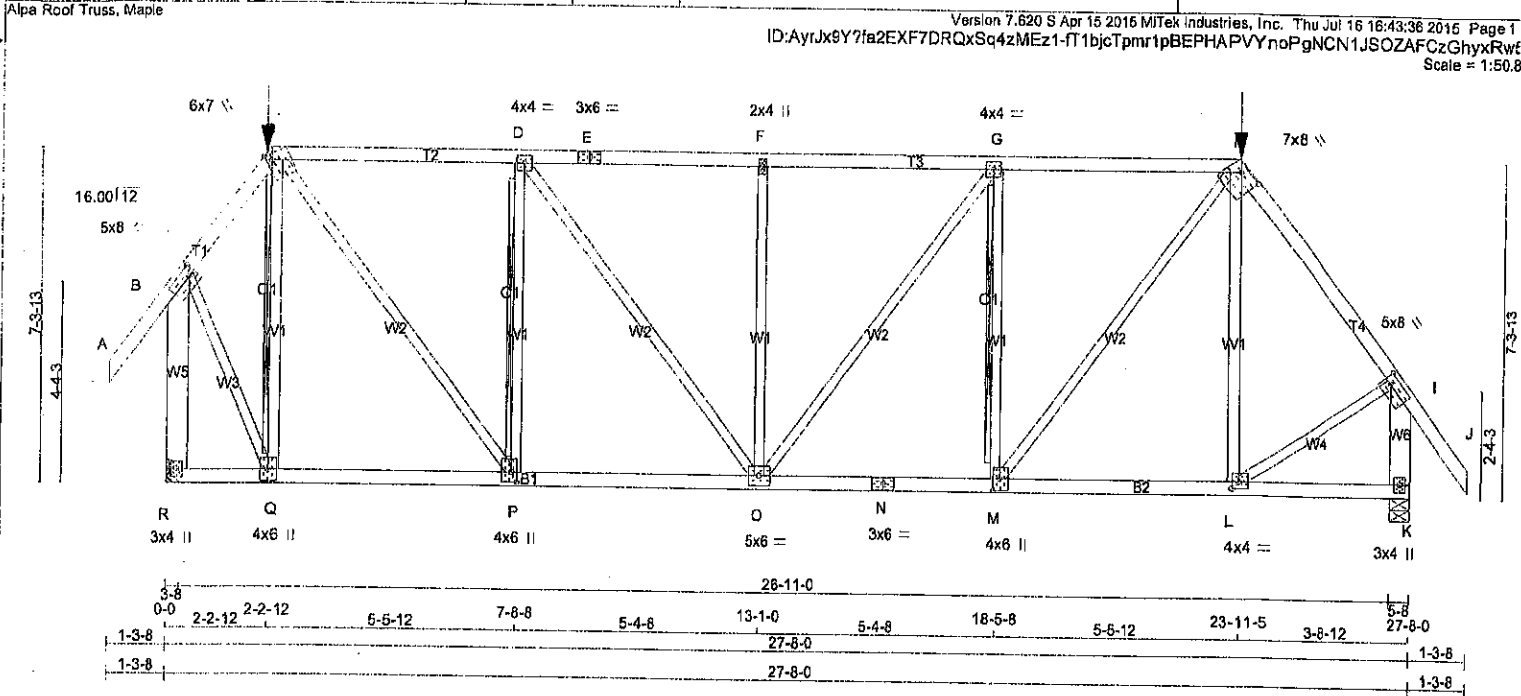
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073800(2)



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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	5.0	8.0	2.25	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW-I	MT20	4.0	4.0		
E	TS-I	MT20	3.0	6.0		
F	TMVW+I	MT20	2.0	4.0		
G	TMVW-I	MT20	4.0	4.0		
H	TTWW-h	MT20	7.0	8.0	1.75	5.00
I	TMVW-I	MT20	5.0	8.0	2.25	2.00
K	BMV1+p	MT20	3.0	4.0		
L	BMVW-I	MT20	4.0	4.0	1.75	1.50
M	BMVW+I	MT20	4.0	6.0	3.00	1.75
N	BS-I	MT20	3.0	6.0		
O	BMVW+I	MT20	5.0	6.0		
P	BMVW+I	MT20	4.0	6.0	2.50	1.50
Q	BMVW+I	MT20	4.0	6.0		
R	BMV1+p	MT20	3.0	4.0		

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

HANGERS NOTES
 1)

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
R	2463	0	2463	0
K	2426	0	2426	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1735	1183 / 0	0 / 0	0 / 0	0 / 0	550 / 0	0 / 0	0 / 0
K	1709	1161 / 0	0 / 0	0 / 0	0 / 0	547 / 0	0 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.21FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

2x4 DRY SPF No.2 T-BRACE REQUIRED AT C-Q, D-P, G-M
 FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" 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)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	Q-C	-1102 / 0
B-C	-1256 / 0	-70.5	-70.5	0.09 (1)	6.63	C-P	0 / 2036
C-D	-1985 / 0	-138.7	-138.7	0.80 (1)	3.60	P-D	-1412 / 0
D-E	-2421 / 0	-138.7	-138.7	0.85 (1)	3.21	D-O	0 / 716
E-F	-2421 / 0	-138.7	-138.7	0.85 (1)	3.21	O-F	-686 / 0
F-G	-2421 / 0	-138.7	-138.7	0.85 (1)	3.21	O-G	0 / 374
G-H	-2193 / 0	-138.7	-138.7	0.83 (1)	3.41	M-G	-1139 / 0
H-I	-1941 / 0	-70.5	-70.5	0.29 (1)	4.57	M-H	0 / 1887
I-J	0 / 40	-70.5	-70.5	0.11 (1)	10.00	L-H	-413 / 8
R-B	-2455 / 0	0.0	0.0	0.69 (1)	6.55	B-Q	0 / 1470
K-I	-2381 / 0	0.0	0.0	0.22 (1)	6.64	L-I	0 / 1300
R-Q	0 / 0	-34.5	-34.5	0.17 (4)	10.00		
Q-P	0 / 729	-34.5	-34.5	0.28 (4)	10.00		
P-O	0 / 1986	-34.5	-34.5	0.47 (1)	10.00		
O-N	0 / 2193	-34.5	-34.5	0.50 (1)	10.00		
N-M	0 / 2193	-34.5	-34.5	0.50 (1)	10.00		
M-L	0 / 1151	-34.5	-34.5	0.32 (1)	10.00		
L-K	0 / 0	-34.5	-34.5	0.19 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	FACE	DIR.	TYPE
C	2-2-12	-115	-115	---	FRONT	VERT
H	23-11-5	-192	-192	---	FRONT	VERT

TOTAL WEIGHT = 147 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: CPrimeHp
 LEFT SETBACK = 2-2-12
 RIGHT SETBACK = 3-8-12
 END SETBACK = 5-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADDTL. LOADS BASED ON 65 % 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 DEF.(LL) = L/360 (0.92")
 CALCULATED VERT. DEF.(LL) = L/699 (0.10")
 ALLOWABLE DEF.(TL) = L/360 (0.92")
 CALCULATED VERT. DEF.(TL) = L/999 (0.19")

CSI: TC=0.85 (F-G:1), BC=0.50 (M-O:1), WB=0.66 (F-O:1), SSI=0.39 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
 JSI METAL= 0.86 (N) (INPUT = 1.00)

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 CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253625	H12	1	1	TRUSS DESC.	

Alpa Roof Truss, Maple

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HANGERS NOTES

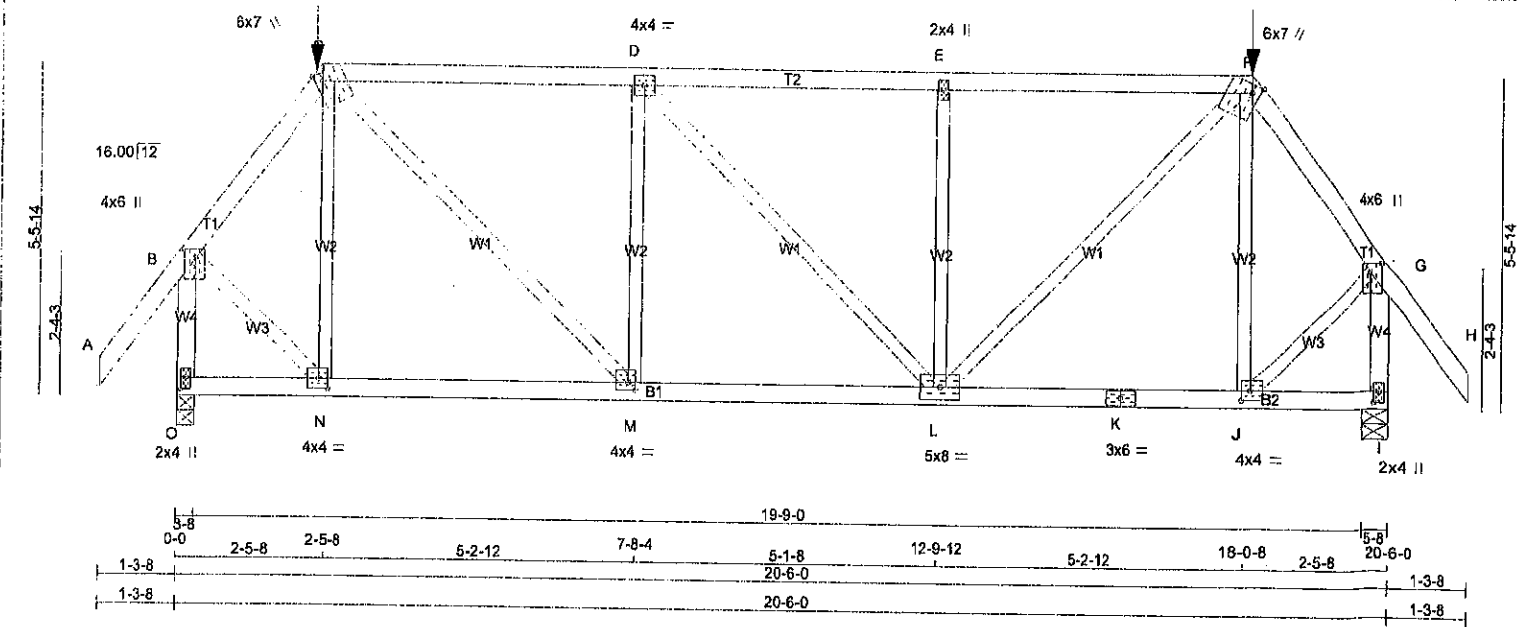
- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 191.6 lbs FACTORED DOWN AT 23-11-5, AND 114.5 lbs FACTORED DOWN AT 2-2-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

- 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-11073799(2)



LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	1.75	2.26
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW-t	MT20	4.0	4.0		
E	TMVW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	6.0	7.0	Edge	1.50
G	TMVW+p	MT20	4.0	6.0	1.75	2.25
I	BMV1+p	MT20	2.0	4.0	2.25	1.00
J	BMVW-t	MT20	4.0	4.0	2.00	1.75
K	BS-t	MT20	3.0	6.0		
L	BMVWW-t	MT20	5.0	8.0		
M	BMVW-t	MT20	4.0	4.0	1.50	1.50
N	BMVW-t	MT20	4.0	4.0	2.00	1.75
O	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 127.8 lbs FACTORED DOWN AT 18-1-12, AND 127.8 lbs FACTORED DOWN AT 2-4-4 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
O	1887	0	1887	0
I	1887	0	1887	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1328	907 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0
I	1328	907 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.98FT.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 40	-70.5	-70.5	0.11 (1)	10.00	N-C	-464 / 0
B-C	-1321 / 0	-70.5	-70.5	0.10 (1)	5.61	J-F	-461 / 0
C-D	-1796 / 0	-143.1	-143.1	0.69 (1)	3.99	M-D	-806 / 0
D-E	-1794 / 0	-143.1	-143.1	0.69 (1)	3.99	L-E	-805 / 0
E-F	-1794 / 0	-143.1	-143.1	0.68 (1)	4.01	C-M	0 / 1424
F-G	-1322 / 0	-70.5	-70.5	0.10 (1)	5.61	D-L	-3 / 0
G-H	0 / 40	-70.5	-70.5	0.11 (1)	10.00	L-F	0 / 1420
O-B	-1671 / 0	0.0	0.0	0.26 (1)	6.09	B-N	0 / 1004
I-G	-1672 / 0	0.0	0.0	0.26 (1)	6.09	J-G	0 / 1004
O-N	0 / 0	-35.5	-35.5	0.16 (4)	10.00		
N-M	0 / 776	-35.5	-35.5	0.28 (4)	10.00		
M-L	0 / 1787	-35.5	-35.5	0.43 (1)	10.00		
L-K	0 / 776	-35.5	-35.5	0.27 (4)	10.00		
K-J	0 / 776	-35.5	-35.5	0.27 (4)	10.00		
J-I	0 / 0	-35.5	-35.5	0.16 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-4-4	-128	-128	---	FRONT	VERT	TOTAL
F	18-1-12	-128	-128	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 86 lb [M]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 21.0 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 31.0 PSF

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 2-4-4

END SETBACK = 6-1-8

END WALL WIDTH = 0-0

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL. LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.68")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.68")

ALLOWABLE DEFL.(TL)= L/380 (0.68")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.69 (C-D:1), BC=0.43 (L-M:1), WB=0.38 (D-M:1), SSI=0.39 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

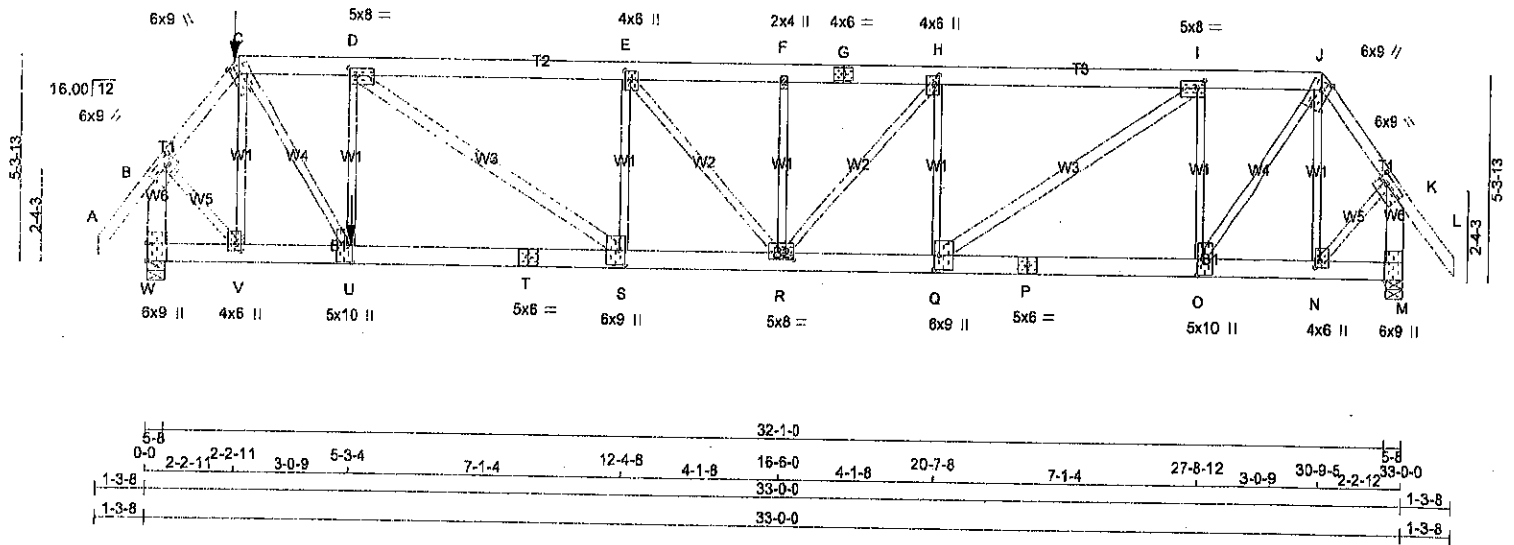
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)

JSI METAL= 0.38 (M) (INPUT = 1.00)



A-1073798



LUMBER			
N.L.G.A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - G	2x6	DRY	No.2
G - J	2x6	DRY	No.2
J - L	2x4	DRY	No.2
W - B	2x6	DRY	No.2
M - K	2x6	DRY	No.2
W - T	2x6	DRY	No.2
T - P	2x6	DRY	No.2
P - M	2x6	DRY	No.2
ALL WEBS 2x3 DRY No.2			
EXCEPT			
D - S	2x4	DRY	No.2
Q - I	2x4	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMWW-I	MT20	6.0	9.0	2.25 3.00
C TTWW+m	MT20	6.0	9.0	2.50 2.25
D TMWW-I	MT20	5.0	8.0	2.25 2.50
E TMWW+H	MT20	4.0	6.0	2.75 1.50
F TMWW+H	MT20	2.0	4.0	
G TS-I	MT20	4.0	6.0	
H TMWW+H	MT20	4.0	6.0	2.75 1.50
I TMWW-I	MT20	5.0	8.0	2.25 2.50
J TTWW+m	MT20	6.0	9.0	2.50 2.25
K TMWW-I	MT20	6.0	9.0	2.25 3.00
M BMV1+H	MT20	6.0	9.0	Edge 0.50
N BMWW+H	MT20	4.0	6.0	2.00 1.50
O BMWW+H	MT20	5.0	10.0	5.00 1.75
P BS-I	MT20	5.0	6.0	
Q BMWW+H	MT20	6.0	9.0	4.50 1.75
R BMWW+H	MT20	5.0	8.0	2.00 4.00
S BMWW+H	MT20	6.0	9.0	4.50 1.75
T BS-I	MT20	5.0	6.0	
U BMWW+H	MT20	6.0	10.0	5.00 1.75
V BMWW+H	MT20	4.0	6.0	2.00 1.50
W BMV1+H	MT20	6.0	9.0	5.50

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	GROSS REACTION	VERT	HORZ	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG
W	3755	0	0	3755	0	0	0	5-8	5-8
M	1937	0	0	1937	0	0	0	5-8	2-2

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS						
W	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
W	2844	1799 / 0	0 / 0	0 / 0	0 / 0	846 / 0	0 / 0		
M	1362	936 / 0	0 / 0	0 / 0	0 / 0	426 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.98FT.
 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 (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.11 (1)	10.00	V-C	-1102 / 0	0.42 (1)
B-C	-2815 / 0	-70.5	-70.5 0.18 (1)	3.98	C-U	0 / 3532	0.87 (1)
C-D	-3540 / 0	-138.7	-138.7 0.19 (1)	4.38	U-D	-912 / 0	0.31 (1)
D-E	-4011 / 0	-70.5	-70.5 0.34 (1)	4.03	D-S	0 / 571	0.10 (1)
E-F	-3762 / 0	-70.5	-70.5 0.27 (1)	4.18	S-E	-176 / 32	0.07 (1)
F-G	-3762 / 0	-70.5	-70.5 0.26 (1)	4.19	E-R	-384 / 0	0.27 (1)
G-H	-3762 / 0	-70.5	-70.5 0.26 (1)	4.19	R-F	-174 / 0	0.07 (1)
H-I	-3346 / 0	-70.5	-70.5 0.28 (1)	4.41	R-H	0 / 844	0.16 (1)
I-J	-1790 / 0	-70.5	-70.5 0.18 (1)	5.74	Q-H	-844 / 0	0.38 (1)
J-K	-1580 / 0	-70.5	-70.5 0.09 (1)	5.43	Q-I	0 / 1884	0.33 (1)
K-L	0 / 40	-70.5	-70.5 0.11 (1)	10.00	O-I	-1484 / 0	0.56 (1)
L-M	-3790 / 0	0.0	0.0 0.34 (1)	5.45	O-J	0 / 1837	0.45 (1)
M-K	-1848 / 0	0.0	0.0 0.17 (1)	7.18	N-J	-573 / 0	0.22 (1)
					B-V	0 / 2165	0.54 (1)
					N-K	0 / 1061	0.26 (1)
W-V	0 / 0	-34.5	-34.5 0.13 (1)	10.00			
V-U	0 / 1663	-34.5	-34.5 0.34 (1)	10.00			
U-T	0 / 3540	-17.5	-17.5 0.68 (1)	10.00			
T-S	0 / 3540	-17.5	-17.5 0.68 (1)	10.00			
S-R	0 / 4011	-17.5	-17.5 0.68 (1)	10.00			
R-Q	0 / 3346	-17.5	-17.5 0.48 (1)	10.00			
Q-P	0 / 1790	-17.5	-17.5 0.29 (1)	10.00			
P-O	0 / 1790	-17.5	-17.5 0.29 (1)	10.00			
O-N	0 / 814	-17.5	-17.5 0.16 (1)	10.00			
N-M	0 / 0	-17.5	-17.5 0.05 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-11	-114	-114	---	FRONT	VERT	TOTAL
U	5-3-4	-2180	-2180	---	FRONT	VERT	TOTAL

TOTAL WEIGHT = 2 X 198 = 396 lb

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHlp
 LEFT SETBACK = 2-2-11
 RIGHT SETBACK = 2-2-12
 END SETBACK = 5-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADDTL LOADS BASED ON 55 % OF GSL.
 LOADS APPLIED TO FIRST 6-3-4 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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.34 (D-E:1), BC=0.58 (R-S:1),
 WB=0.87 (C-U:1), SSI=0.17 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

A-15073797

CONTINUED ON PAGE 2



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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 2-2-11 ON TOP CHORD, AND 2180.1 lbs FACTORED DOWN AT 5-3-4 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
(P.S.I) (P.L.I) (P.L.I)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1666

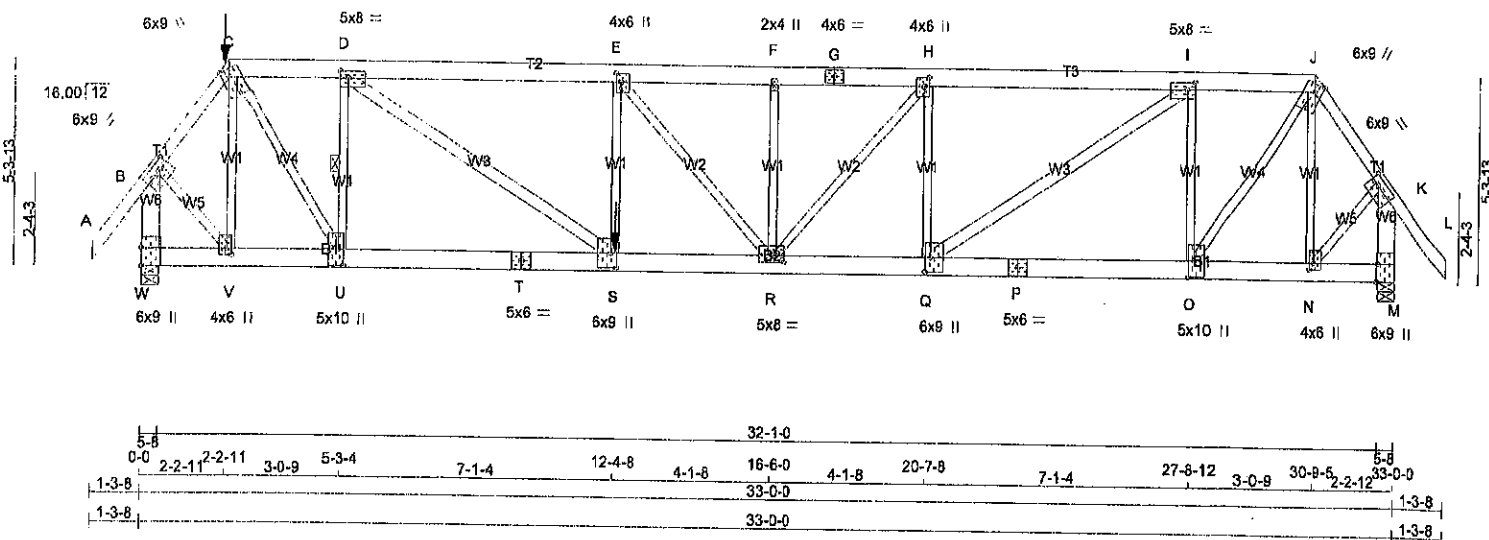
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (N) (INPUT = 0.90)
JSI METAL= 0.60 (T) (INPUT = 1.00)



A-15073797(2)



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 - J	2x6	DRY No.2	SPF
J - L	2x4	DRY No.2	SPF
W - B	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
W - T	2x6	DRY No.2	SPF
T - P	2x6	DRY No.2	SPF
P - M	2x6	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
D - S	2x4	DRY No.2	SPF
Q - I	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-H	MT20	6.0	9.0	2.25	3.00
C TTWW+M	MT20	6.0	9.0	2.50	2.25
D TMVW-H	MT20	5.0	8.0	2.25	2.50
E TMVW-H	MT20	4.0	6.0	2.75	1.50
F TMVW-H	MT20	2.0	4.0		
G TS-H	MT20	4.0	6.0		
H TMVW-H	MT20	4.0	6.0	2.75	1.50
I TMVW-H	MT20	5.0	8.0	2.25	2.50
J TTWW+M	MT20	6.0	9.0	2.50	2.25
K TMVW-H	MT20	6.0	9.0	2.25	3.00
M BMV1-H	MT20	6.0	9.0	Edge	0.50
N BMVW-H	MT20	4.0	6.0	2.00	1.50
O BMVW-H	MT20	5.0	10.0	6.00	1.75
P BS-H	MT20	5.0	6.0		
Q BMVW-H	MT20	6.0	9.0	4.50	1.75
R BMVW-H	MT20	6.0	9.0	2.00	4.00
S BMVW-H	MT20	6.0	9.0	4.50	1.75
T BS-H	MT20	5.0	6.0		
U BMVW-H	MT20	5.0	10.0	5.00	1.75
V BMVW-H	MT20	4.0	6.0	2.00	1.50
W BMV1-H	MT20	6.0	9.0	5.50	

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		
W	3567	0	3567	0	5-8	5-8
M	2471	0	2471	0	5-8	2-11

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
W	2626	1136 / 0	0 / 0	0 / 0	0 / 0	1490 / 0	0 / 0
M	1807	847 / 0	0 / 0	0 / 0	0 / 0	960 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.79FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

1 LATERAL BRACE(S) REQUIRED AT 1/2 LENGTH OF D-U.
 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		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO				
A-B	0 / 40	-70.5 -70.5 0.12 (1)	10.00	V-C -1119 / 0
B-C	-2654 / 0	-70.5 -70.5 0.18 (1)	4.06	C-U 0 / 3508
C-D	-3430 / 0	-138.7 -138.7 0.42 (1)	4.11	U-D -2795 / 0
D-E	-6278 / 0	-138.7 -138.7 0.80 (1)	2.79	D-S 0 / 3452
E-F	-5568 / 0	-70.5 -70.5 0.51 (1)	3.24	S-E 0 / 747
F-G	-5568 / 0	-70.5 -70.5 0.41 (1)	3.38	E-R -1101 / 0
G-H	-5568 / 0	-70.5 -70.5 0.41 (1)	3.38	R-F -129 / 0
H-I	-4700 / 0	-70.5 -70.5 0.41 (1)	3.69	R-H 0 / 1338
I-J	-2367 / 0	-70.5 -70.5 0.20 (1)	5.11	Q-H -1481 / 0
J-K	-1804 / 0	-70.5 -70.5 0.12 (1)	4.84	Q-I 0 / 2828
K-L	0 / 40	-70.5 -70.5 0.12 (1)	10.00	O-I -2013 / 0
W-B	-3583 / 0	0.0 0.0 0.33 (1)	5.55	O-J 0 / 2451
M-K	-2492 / 0	0.0 0.0 0.23 (1)	6.48	N-J -757 / 0
				B-V 0 / 2041
				N-K 0 / 1387
W-V	0 / 0	-34.5 -34.5 0.10 (1)	10.00	
V-U	0 / 1588	-34.5 -34.5 0.35 (4)	10.00	
U-T	0 / 3430	-34.5 -34.5 0.63 (4)	10.00	
T-S	0 / 3430	-34.5 -34.5 0.63 (4)	10.00	
S-R	0 / 6279	-17.5 -17.5 0.84 (4)	10.00	
R-Q	0 / 4700	-17.5 -17.5 0.69 (1)	10.00	
Q-P	0 / 2367	-17.5 -17.5 0.39 (1)	10.00	
P-O	0 / 2367	-17.5 -17.5 0.39 (1)	10.00	
O-N	0 / 1064	-17.5 -17.5 0.22 (1)	10.00	
N-M	0 / 0	-17.5 -17.5 0.08 (1)	10.00	

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-2-11	-114	-114		FRONT	VERT	TOTAL
S	12-4-8	-1920	-1920		FRONT	VERT	DEAD

TOTAL WEIGHT = 2 X 198 = 396 lb

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 2-2-11
 RIGHT SETBACK = 2-2-12
 END SETBACK = 5-10-8
 END WALL WIDTH = 0-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADD'L LOADS BASED ON 55 % OF GSL
 LOADS APPLIED TO FIRST 12-4-8 OF SPAN
 MEASURED FROM THE LEFT.

*** NON STANDARD GIRDER ***

ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
 ALLOWABLE DEFL.(TL) = L/360 (1.10")
 CALCULATED VERT. DEFL.(TL) = L/971 (0.41")

CSI: TC=0.80 (D-E:1), BC=0.94 (R-S:4),
 WB=0.91 (C-U:1), SS=0.35 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

AUTOSOLVE HEELS OFF

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

A-1507396

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
253625	H01-Cond1	2	1	TRUSS DESC.	
Alpa Roof Truss, Maple					
Version 7.620 S Apr 15 2016 MITek Industries, Inc. Thu Jul 16 16:43:34 2016 Page 2					
ID:AyrJx9Y7fa2EXF7DRQxSq4zMEz1-j4vrlwSZE Dn5ywFv2_T4INKLfPajrUxGlxjsBpyxRw7					

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 114.2 lbs FACTORED DOWN AT 2-2-11 ON TOP CHORD, AND 2160.4 lbs FACTORED DOWN AT 12-4-8 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

NOTES- (1)

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

NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 818 354 1667 822 2284 1666

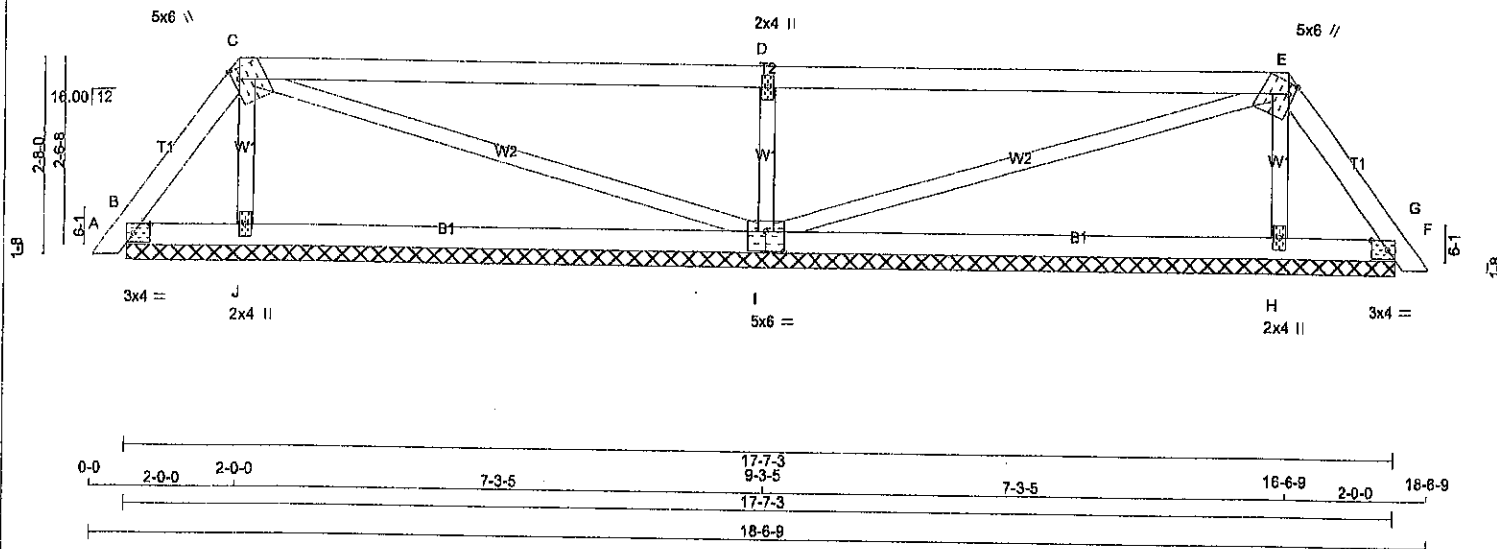
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (I) (INPUT = 0.90)
 JSI METAL= 0.76 (S) (INPUT = 1.00)



A-15073796(2)



LUMBER
 N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

NOTES- (1)
 1) Lateral brace(s) shown shall be 1x4 for Part 9 design as per OBC 9.2.3, 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	119	0	119	0	-8	17-7-3 (8-9-10) 8
J	287	0	287	0	0	17-7-3 (8-9-10) 8
I	785	0	785	0	0	17-7-3 (8-9-10) 8
H	287	0	287	0	0	17-7-3 (8-9-10) 8
F	119	0	119	0	-8	17-7-3 (8-9-10) 8

VALUE IN PARENTHESIS INDICATES EFFECTIVE BEARING LENGTH

PROVIDE ANCHORAGE AT BEARING JOINT B FOR 160 LBS. FACTORED UPLIFT
 PROVIDE ANCHORAGE AT BEARING JOINT F FOR 160 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	79	84 / 0	0 / 0	0 / 0	0 / 0	0 / -5	0 / 0
J	208	105 / 0	0 / 0	0 / 0	0 / 0	103 / 0	0 / 0
I	550	389 / 0	0 / 0	0 / 0	0 / 0	161 / 0	0 / 0
H	208	105 / 0	0 / 0	0 / 0	0 / 0	103 / 0	0 / 0
F	79	84 / 0	0 / 0	0 / 0	0 / 0	0 / -5	0 / 0

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)	MAX. UNBRACED LENGTH FR-TO	MAX. FACTORED FORCE (LBS)
FR-TO				
A-B	0 / 9	-70.5 -70.5 0.01 (1)	10.00	J-C -177 / 0
B-C	-76 / 0	-70.5 -70.5 0.03 (1)	8.25	C-I -22 / 0
C-D	-13 / 0	-70.5 -70.5 0.83 (1)	6.25	I-D -640 / 0
D-E	-13 / 0	-70.5 -70.5 0.83 (1)	6.25	E-I -22 / 0
E-F	-76 / 0	-70.5 -70.5 0.03 (1)	6.25	H-E -177 / 0
F-G	0 / 9	-70.5 -70.5 0.01 (1)	10.00	
B-J	0 / 43	-17.5 -17.5 0.14 (4)	10.00	
J-I	0 / 35	-17.5 -17.5 0.20 (4)	10.00	
I-H	0 / 35	-17.5 -17.5 0.20 (4)	10.00	
H-F	0 / 43	-17.5 -17.5 0.14 (4)	10.00	

TOTAL WEIGHT = 2 X 61 = 122 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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

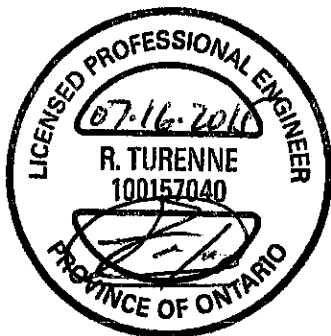
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

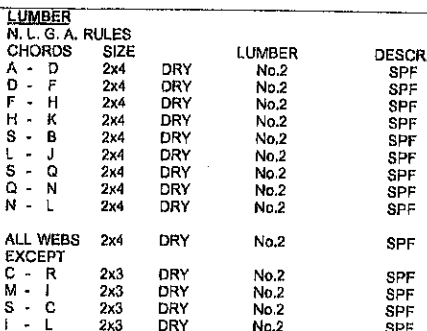
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



A-15073781



DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMVW-i	MT20	4.0	6.0	2.00 2.00
D	TTWW+m	MT20	6.0	7.0	Edge 1.50
E	TMVW-t	MT20	4.0	4.0	
F	TS-i	MT20	3.0	6.0	
G	TMW+w	MT20	2.0	4.0	
H	TTWW+m	MT20	6.0	7.0	Edge 1.50
I	TMVW-i	MT20	4.0	6.0	2.00 2.00
J	TMV+p	MT20	2.0	4.0	
L	BMVW-i	MT20	4.0	4.0	1.75 1.75
M, P, R					
M	BMVW-i	MT20	4.0	4.0	
N	BS-i	MT20	3.0	6.0	
O	BMVWVW-i	MT20	5.0	8.0	
Q	BS-i	MT20	3.0	6.0	
S	BMVW-i	MT20	4.0	4.0	1.75 1.75

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



TOTAL LOAD CASES: (4)

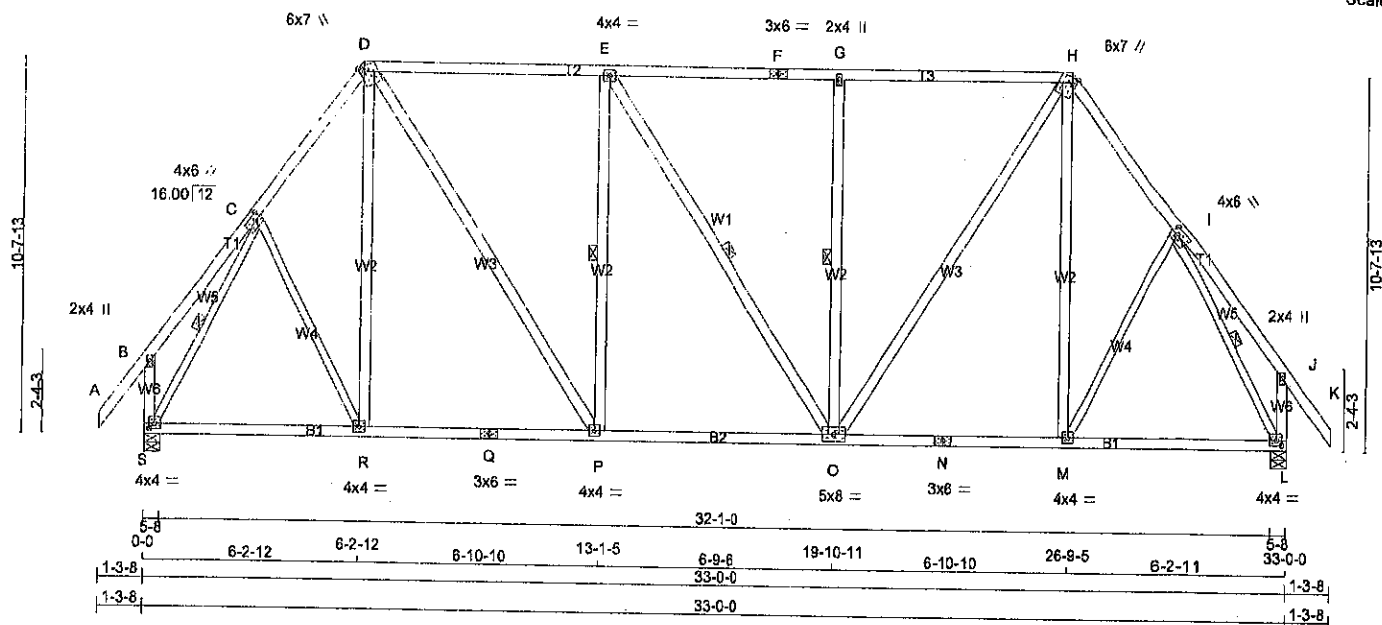
CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MAX CS1 (LC)	MAX UNBRAC	MEMB.	FORCE (LBS)	MAX CS1 (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	C-R	0 / 64	0.02 (4)	
B-C	0 / 23	-70.5	-70.5	0.14 (1)	10.00	R-D	0 / 87	0.02 (4)	
C-D	-1286 / 0	-70.6	-70.5	0.14 (1)	5.67	D-P	0 / 702	0.11 (1)	
D-E	-1085 / 0	-78.0	-78.0	0.36 (1)	5.62	E-O	-519 / 0	0.41 (1)	
E-T	-1085 / 0	-78.0	-78.0	0.33 (1)	5.66	E-O	-2 / 0	0.00 (1)	
T-F	-1085 / 0	-78.0	-78.0	0.33 (1)	5.66	O-G	-518 / 0	0.41 (1)	
F-G	-1085 / 0	-78.0	-78.0	0.33 (1)	5.66	O-H	0 / 700	0.11 (1)	
G-H	-1084 / 0	-78.0	-78.0	0.38 (1)	5.62	H-I	0 / 98	0.02 (4)	
H-I	-1286 / 0	-70.5	-70.5	0.14 (1)	5.67	M-I	0 / 64	0.02 (4)	
I-J	0 / 23	-70.5	-70.5	0.14 (1)	10.00	S-C	-1552 / 0	0.60 (1)	
J-K	0 / 40	-70.5	-70.5	0.10 (1)	10.00	I-L	-1553 / 0	0.60 (1)	
S-B	-196 / 0	0.0	0.0	0.02 (1)	7.81				
L-J	-196 / 0	0.0	0.0	0.02 (1)	7.81				
S-R	0 / 727	-17.5	-17.5	0.27 (4)	10.00				
R-Q	0 / 755	-17.5	-17.5	0.28 (4)	10.00				
Q-P	0 / 755	-17.5	-17.5	0.28 (4)	10.00				
P-O	0 / 1085	-17.5	-17.5	0.24 (1)	10.00				
O-N	0 / 755	-17.5	-17.5	0.28 (4)	10.00				
N-M	0 / 755	-17.5	-17.5	0.28 (4)	10.00				
M-L	0 / 727	-17.5	-17.5	0.27 (4)	10.00				

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

A-15073780

Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MITek Industries, Inc. Thu Jul 16 14:31:59 2015 Page 1
ID:AyrJx9Y?fa2EXF7DRQxSq4zMeZ1-NDMGJLvwJWU5JHdBY2OKGDURCOtBAXxVBF8mbawyxTrL
Scale = 1:66.1



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 - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
I - J	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - N	2x4	DRY	No.2	SPF
N - L	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
C - R	2x3	DRY	No.2	SPF
M - J	2x3	DRY	No.2	SPF
S - C	2x3	DRY	No.2	SPF
I - L	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMVW-t	MT20	4.0	6.0	2.00	2.00
D	TTWW+m	MT20	6.0	7.0	Edge	1.50
E	TMVW-t	MT20	4.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW+w	MT20	2.0	4.0		
H	TTWW+m	MT20	6.0	7.0	Edge	1.50
I	TMVW-t	MT20	4.0	6.0	2.00	2.00
J	TMV+p	MT20	2.0	4.0		
L	BMVW-t	MT20	4.0	4.0	1.75	1.75
M, P, R						
N	BS-t	MT20	4.0	4.0		
O	BMVW-t	MT20	3.0	6.0		
Q	BS-t	MT20	6.0	8.0		
S	BMVW-t	MT20	3.0	6.0		
			4.0	4.0	1.75	1.75

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	BRG	BRG
S	1550	0	0	5-8
L	1550	0	0	5-8

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.24FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORIZ. LOAD (PLF)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORIZ. LOAD (PLF)	MAX. UNBRACED LENGTH
FR-TO						FR-TO					
A-B	0 / 40	-70.5	-70.5	0.10 (1)	10.00	C-R	0 / 102	0.02 (1)			
B-C	0 / 19	-70.5	-70.5	0.10 (1)	10.00	R-D	0 / 88	0.02 (4)			
C-D	-1224 / 0	-70.5	-70.5	0.13 (1)	6.67	D-P	0 / 786	0.12 (1)			
D-E	-1144 / 0	-70.5	-70.5	0.52 (1)	6.24	P-E	-520 / 0	0.30 (1)			
E-F	-1144 / 0	-70.5	-70.5	0.52 (1)	6.24	E-O	-1 / 0	0.00 (1)			
F-G	-1144 / 0	-70.5	-70.5	0.52 (1)	6.24	O-G	-520 / 0	0.30 (1)			
G-H	-1144 / 0	-70.5	-70.5	0.52 (1)	6.24	O-H	0 / 765	0.12 (1)			
H-I	-1224 / 0	-70.5	-70.5	0.13 (1)	6.67	M-H	0 / 88	0.02 (4)			
I-J	0 / 19	-70.5	-70.5	0.10 (1)	10.00	M-I	0 / 102	0.02 (1)			
J-K	0 / 40	-70.5	-70.5	0.10 (1)	10.00	S-C	-1483 / 0	0.46 (1)			
S-B	-183 / 0	0.0	0.0	0.02 (1)	7.81	I-L	-1483 / 0	0.46 (1)			
L-J	-183 / 0	0.0	0.0	0.02 (1)	7.81						
S-R	0 / 689	-17.5	-17.5	0.23 (4)	10.00						
R-Q	0 / 719	-17.5	-17.5	0.24 (4)	10.00						
Q-P	0 / 719	-17.5	-17.5	0.24 (4)	10.00						
P-O	0 / 1144	-17.5	-17.5	0.27 (1)	10.00						
O-N	0 / 719	-17.5	-17.5	0.24 (4)	10.00						
N-M	0 / 719	-17.5	-17.5	0.24 (4)	10.00						
M-L	0 / 669	-17.5	-17.5	0.23 (4)	10.00						

TOTAL WEIGHT = 2 X 203 = 406 lb [M]

DESIGN CRITERIA

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

SPACING = 24.0 IN. O/C

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

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

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

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

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

CSI: TC=0.52 (D-E:1), BC=0.27 (O-P:1), WB=0.46 (I-L:1), SSI=0.23 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.60

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

NAIL VALUES

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

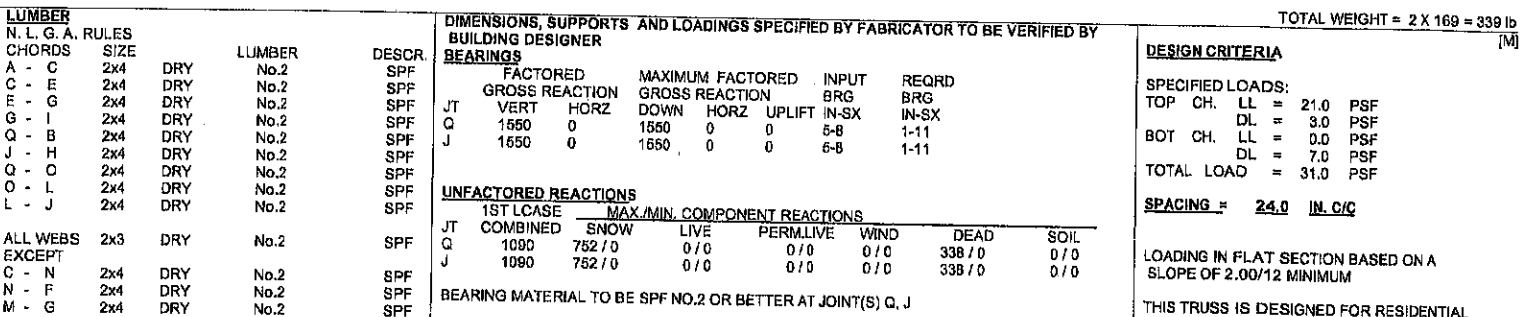
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (1) (INPUT = 0.60)
JSI METAL= 0.35 (1) (INPUT = 1.00)



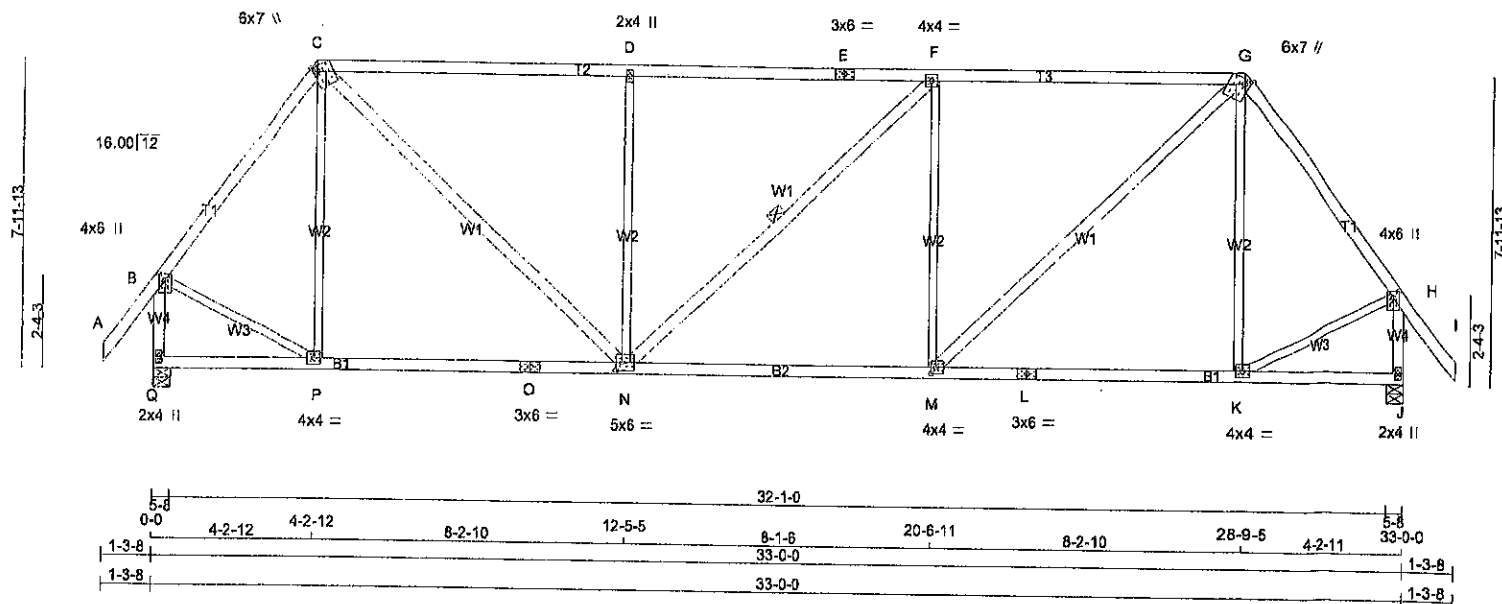
A-15073779



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Alpa Roof Truss, Maple

Version 7.620 S Apr 15 2015 MiTek Industries, Inc. Thu Jul 16 14:31:58 2015 Page 1
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Scale = 1:60.3



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	8.0	2.00	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMW+w	MT20	2.0	4.0		
E	TS-i	MT20	3.0	6.0		
F	TMWW-i	MT20	4.0	4.0		
G	TTWW+m	MT20	6.0	7.0	Edge	1.50
H	TMVW+p	MT20	4.0	6.0	2.00	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMWW-i	MT20	4.0	4.0		
L	BS-i	MT20	3.0	6.0		
M	BMWW-i	MT20	4.0	4.0	2.00	1.50
N	BMWWW-i	MT20	5.0	8.0	2.50	2.00
O	BS-i	MT20	3.0	6.0		
P	BMWW-i	MT20	4.0	4.0		
Q	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17FT.
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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	P-C	-198 / 32	0.24 (1)
B-C	-1195 / 0	-70.5	-70.5 0.27 (1)	5.55	C-N	0 / 1125	0.18 (1)
C-D	-1534 / 0	-70.5	-70.5 0.86 (1)	4.19	N-D	-822 / 0	0.75 (1)
D-E	-1534 / 0	-70.5	-70.5 0.86 (1)	4.17	N-F	-1 / 0	0.00 (1)
E-F	-1534 / 0	-70.5	-70.5 0.86 (1)	4.17	M-F	-622 / 0	0.76 (1)
F-G	-1535 / 0	-70.5	-70.5 0.87 (1)	4.17	M-G	0 / 1126	0.18 (1)
G-H	-1195 / 0	-70.5	-70.5 0.27 (1)	5.55	K-G	-199 / 32	0.24 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-P	0 / 783	0.18 (1)
Q-B	-1530 / 0	0.0	0.0 0.20 (1)	6.65	K-H	0 / 783	0.18 (1)
J-H	-1530 / 0	0.0	0.0 0.20 (1)	6.65			
Q-P	0 / 0	-17.5	-17.5 0.18 (4)	10.00			
P-O	0 / 711	-17.5	-17.5 0.29 (4)	10.00			
O-N	0 / 711	-17.5	-17.5 0.29 (4)	10.00			
N-M	0 / 1536	-17.5	-17.5 0.38 (1)	10.00			
M-L	0 / 710	-17.5	-17.5 0.29 (4)	10.00			
L-K	0 / 710	-17.5	-17.5 0.29 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.18 (4)	10.00			

TOTAL WEIGHT = 2 X 160 = 321 lb

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. G/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.87 (F-G:1), BC=0.38 (M-N:1), WB=0.76 (F-M:1), SSI=0.27 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

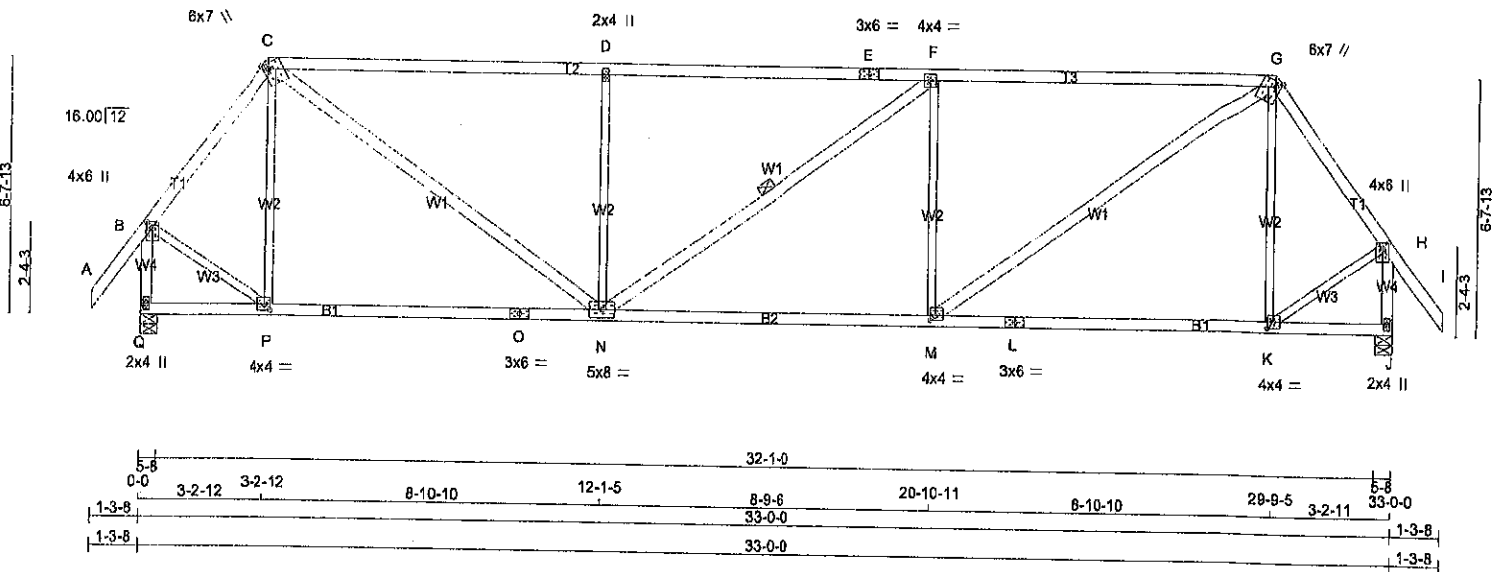
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.80)
JSI METAL= 0.31 (M) (INPUT = 1.00)



A-15073777



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY 1650F 1.5E	SPF
E - G	2x4	DRY 1650F 1.5E	SPF
G - I	2x4	DRY No.2	SPF
I - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF
C - N	2x4	DRY No.2	SPF
N - F	2x4	DRY No.2	SPF
M - G	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	6.0	1.75	2.00
C	TTWW+m	MT20	6.0	7.0	Edge	1.50
D	TMVW+m	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	1.75	2.00
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-l	MT20	4.0	4.0	2.00	1.75
L	BS-l	MT20	3.0	6.0		
M	BMVW-l	MT20	4.0	4.0	1.50	1.50
N	BMVW-l	MT20	5.0	8.0		
O	BS-l	MT20	3.0	6.0		
P	BMVW-l	MT20	4.0	4.0	2.00	1.75
Q	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	1-11	1-11
Q	1550	0	1550	0	0	6-8	1-11		
J	1550	0	1550	0	0	6-8	1-11		

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1090	762 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
J	1090	762 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 40	-70.5	-70.5 0.10 (1)	10.00	P-C	-276 / 9	0.20 (1)
B-C	-1157 / 0	-70.5	-70.5 0.15 (1)	5.76	C-N	0 / 1431	0.23 (1)
C-D	-1851 / 0	-70.5	-70.5 0.88 (1)	4.44	N-D	-673 / 0	0.49 (1)
D-E	-1851 / 0	-70.5	-70.5 0.85 (1)	4.44	N-F	0 / 0	0.00 (1)
E-F	-1851 / 0	-70.5	-70.5 0.85 (1)	4.44	M-F	-673 / 0	0.49 (1)
F-G	-1852 / 0	-70.5	-70.5 0.88 (1)	4.43	M-G	0 / 1432	0.23 (1)
G-H	-1157 / 0	-70.5	-70.5 0.15 (1)	5.76	K-G	-276 / 9	0.20 (1)
H-I	0 / 40	-70.5	-70.5 0.10 (1)	10.00	B-P	0 / 800	0.18 (1)
Q-B	-1548 / 0	0.0	0.0 0.20 (1)	6.61	K-H	0 / 800	0.18 (1)
J-H	-1548 / 0	0.0	0.0 0.20 (1)	6.62			
Q-P	0 / 0	-17.5	-17.5 0.20 (4)	10.00			
P-O	0 / 685	-17.5	-17.5 0.33 (4)	10.00			
O-N	0 / 685	-17.5	-17.5 0.33 (4)	10.00			
N-M	0 / 1852	-17.5	-17.5 0.45 (1)	10.00			
M-L	0 / 685	-17.5	-17.5 0.33 (4)	10.00			
L-K	0 / 686	-17.5	-17.5 0.33 (4)	10.00			
K-J	0 / 0	-17.5	-17.5 0.20 (4)	10.00			

TOTAL WEIGHT = 2 X 152 = 304 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 8 OF OBC 2012, CBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

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

CSI: TC=0.86 (F-G:1), BC=0.45 (M-N:1), WB=0.49 (F-M:1), SS=0.29 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 6.0 Deg.

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

JSI METAL= 0.44 (M) (INPUT = 1.00)



A-15073776

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

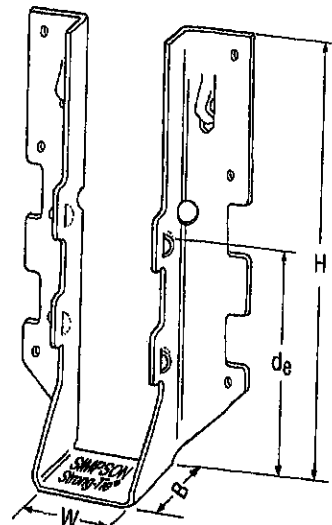
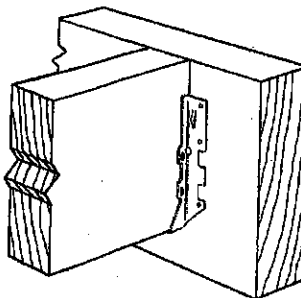
INSTALLATION:

- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 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.

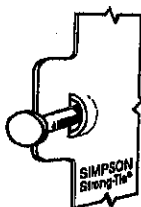
Typical LUS
Installation



LUS28

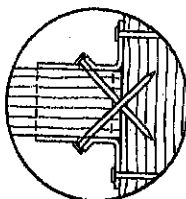
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _g ¹	Face	Joist	D-Fir-L		S-P-F	
								Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
LUS24	18	1½	3½	1½	1½	4-10d	2-10d	710	1630	645	1155
LUS24-2	18	3½	3½	2	1½	4-16d	2-16d	835	2020	590	1435
LUS26	18	1½	4¾	1¾	3¾	4-10d	4-10d	1420	2170	1290	1630
LUS26-2	18	3½	4¾	2	4	4-16d	4-16d	1720	2595	1545	1920
LUS26-3	18	4¾	4¾	2	3¼	4-16d	4-16d	1720	2595	1545	2340
LUS28	18	1½	6¾	1¾	3¾	6-10d	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	8¾	2	5¼	8-16d	6-16d	2580	3345	2320	2375

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

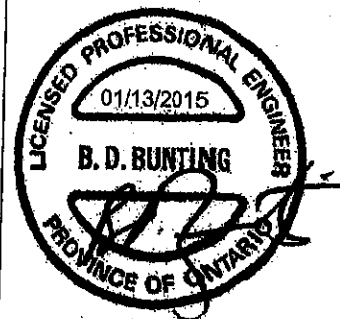


Double
Shear
Nailing
prevents tabs
breaking off
(available on
some models).

U.S. Patent
5,603,580



Double
Shear
Nailing
Top View.



800-999-5099
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HUS/LJS - Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: See table

FINISH: G90 galvanized

DESIGN:

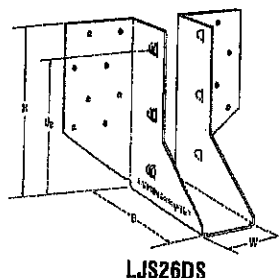
- Factored resistances are in accordance with CSA 086-14
- Uplift resistances have been increased 15%. No further increase is permitted
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

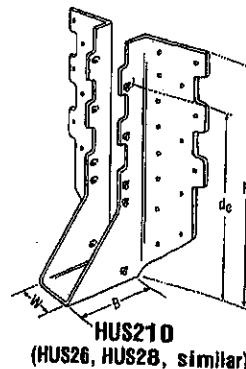
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

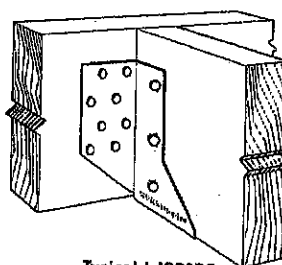
- See current catalogue for options



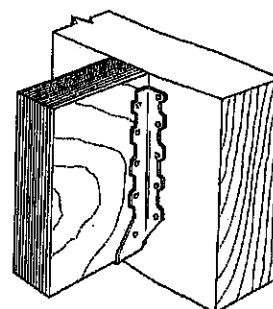
LJS26DS



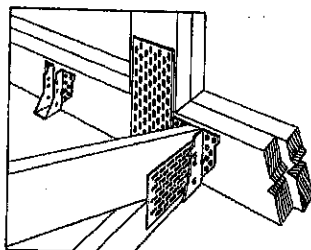
HUS210
(HUS26, HUS28, similar)



Typical LJS26DS
Installation



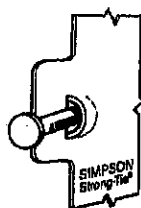
Typical HUS
Installation



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

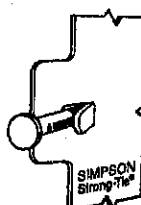
Model No.	Ga	Dimensions (in)				Fasteners		Factored Resistance (lbs)			
		W	H	B	d _e ¹	Face	Joist	D, Fir-L		S-P-F	
								Uplift (K _u =1.15)	Normal (K _n =1.00)	Uplift (K _u =1.15)	Normal (K _n =1.00)
LJS26DS	18	1 1/16	5	3 1/2	4 1/4	16-16d	6-16d	2055	4265	1480	4115
HUS26	16	1 1/8	5 1/2	3	3 15/16	14-16d	6-16d	2705	4940	2085	3875
HUS28	16	1 1/8	7 3/8	3	6 3/8	22-16d	8-16d	3605	5365	2875	4345
HUS210	16	1 1/8	9 3/8	3	7 3/8	30-16d	10-16d	4505	5795	4010	4740
HUS1.81/10	16	1 13/16	9	3	8	30-16d	10-16d	4505	6450	4010	5200

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

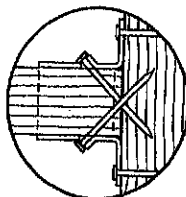


Double
Shear
Nailing
prevents tabs
breaking off
(available on
some models).

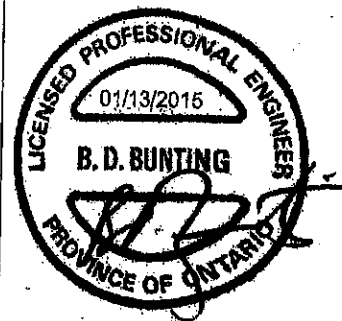
U.S. Patent
5,603,560



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



Double
Shear
Nailing
Top View.



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HHUS – Double Shear Joist Hangers

SIMPSON
Strong-Tie

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

MATERIAL: 14 gauge

FINISH: G90 galvanized

DESIGN:

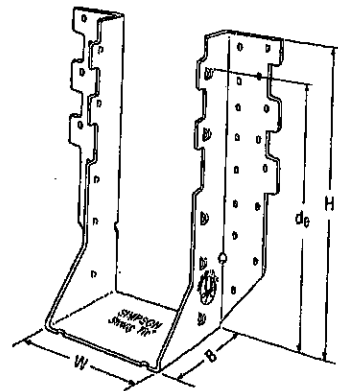
- Factored resistances are in accordance with CSA 086-14
- Uplift resistances have been increased 15%. No further increase is permitted.
- Wood shear is not considered in the factored resistances given. The specifier must ensure that the joist and header capacities are capable of withstanding these loads.

INSTALLATION:

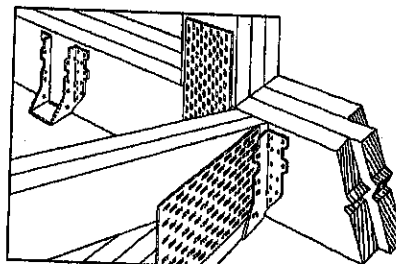
- Use all specified fasteners
- Nails: 16d = 0.162" dia. x 3 1/2" long common wire
- Double shear nails must be driven at an angle through the joist or truss into the header to achieve the table loads
- Not designed for welded or nailer applications

OPTIONS:

- See current catalogue for options



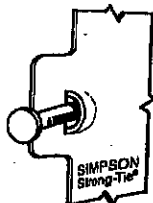
HHUS410



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

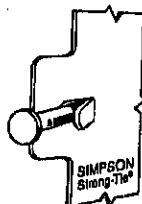
Model No.	G _a	Dimensions (in)					Fasteners		Factored Resistance (lbs)			
		W	H	B	d ₆ ¹	Face	Joist		D.Fir-L		S-P-F	
									Uplift (K _D =1.15)	Normal (K _D =1.00)	Uplift (K _D =1.15)	Normal (K _D =1.00)
HHUS26-2	14	3 1/16	5 1/16	3	3 15/16	14-16d	6-16d		2850	7335	2065	5205
HHUS28-2	14	3 3/16	7 1/32	3	6 5/32	22-16d	8-16d		3765	8940	2675	6345
HHUS210-2	14	3 3/16	9 3/32	3	8	30-16d	10-16d		4745	9860	4310	7000
HHUS210-3	14	4 11/16	9	3	7 1/16	30-16d	10-16d		4745	10545	4310	7485
HHUS210-4	14	6 1/8	8 29/32	3	7 7/32	30-16d	10-16d		4745	10545	4310	7485
HHUS46	14	3 3/8	5 9/32	3	3 1/16	14-16d	6-16d		2540	7335	2065	5205
HHUS48	14	3 3/8	7 1/8	3	6 1/8	22-16d	8-16d		3765	8945	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 1/16	7 29/32	30-16d	10-16d		4745	10770	4310	7650

1. d₆ is the distance from the seat of the hanger to the highest joist nail.

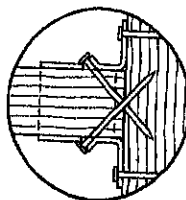


Dome Double
Shear Nailing
prevents tabs
breaking off
(available on
some models).

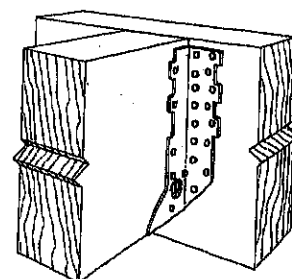
U.S. Patent
5,603,580



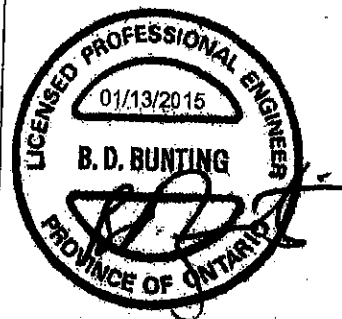
Double
Shear
Nailing
Side
View. Do
not bend
tab back.



Double
Shear
Nailing
Top View.



Typical HHUS
Installation



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TC – Truss Connectors

SIMPSON
Strong-Tie

The TC truss connector is an ideal connector for scissor trusses and can allow horizontal movement up to 1¼". The TC also attaches plated trusses to top plates or sill plates to resist uplift forces. Typically used on one or both ends of truss as determined by the building designer.

MATERIAL: 16 gauge

FINISH: G90 galvanized

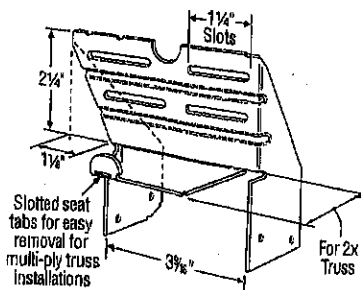
DESIGN: Factored resistances are in accordance with CSA 086-14

INSTALLATION:

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

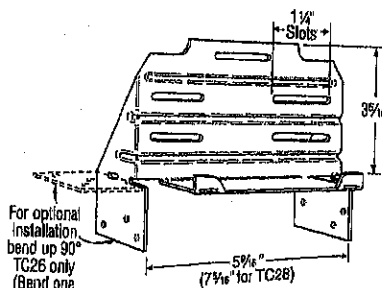
Optional TC Installation

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



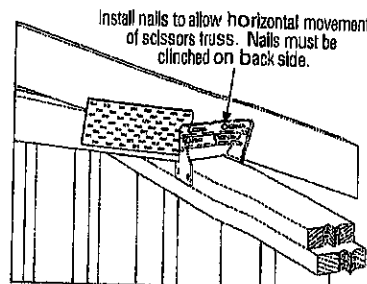
TC24

U.S. Patent 4,932,173

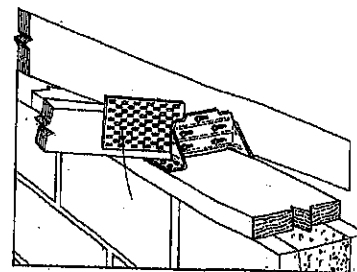


TC26

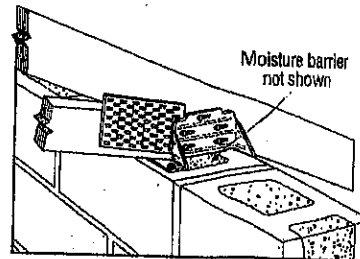
(TC28 Similar)



Typical TC24 Installation



Optional TC26 Installation for Grouted Concrete Block using a Wood Nailer (8", 10", 12" Wall Installation Similar)



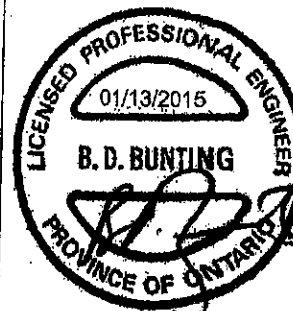
Optional TC26 Installation for Grouted Concrete Block using Titen Screws

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K _D = 1.15)
			lbs	lbs
TC24	4-10d	4-10d	605	430
TC26	5-10d	6-10d	1015	720
TC28	5-10d	6-10d	1015	720

OPTIONAL TC INSTALLATION TABLE

Model No.	Fasteners		Factored Resistance	
	Truss	Wall Plates	D.Fir-L	S-P-F
			Uplift (K _D = 1.15)	Uplift (K _D = 1.15)
			lbs	lbs
TC26	5-10d	6-10dx1½	810	660
	5-10d	6-10d	930	660

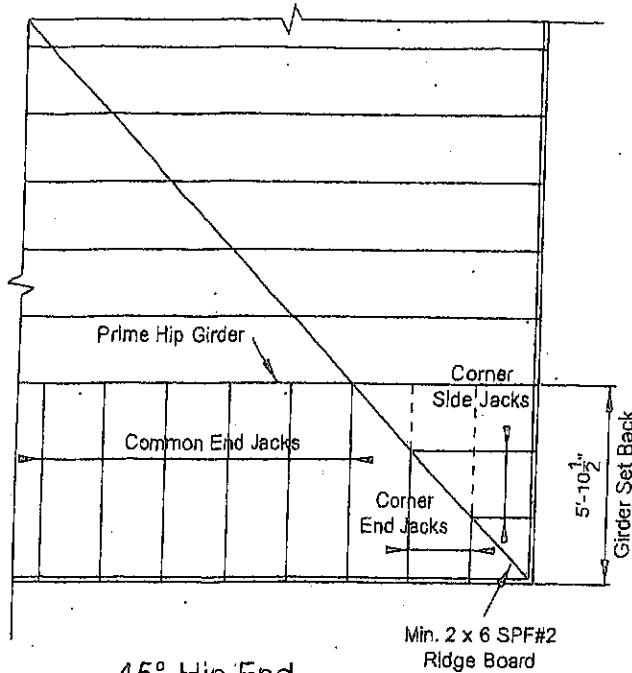
1. Factored resistances have been increased 15% for earthquake or wind loading; no further increase allowed; reduce where other loads govern.
2. Grout strength is 15 MPa minimum.
3. Optional TC26 installation with 10d nails requires minimum 3" top plate thickness.
4. TC26 fastened to grouted concrete block with (6) - ¾" x 2¼" Titen screws has a factored uplift resistance of 275 lbs.



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STRACON ENGINEERING INC.



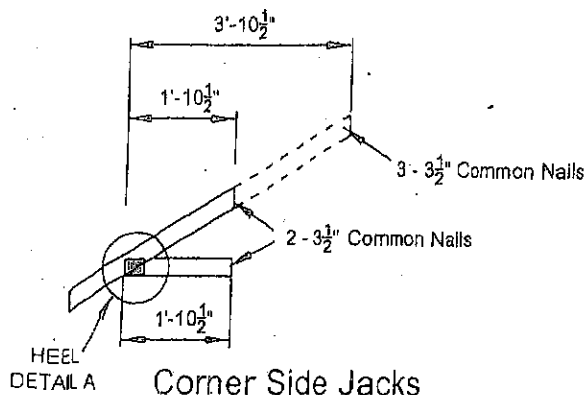
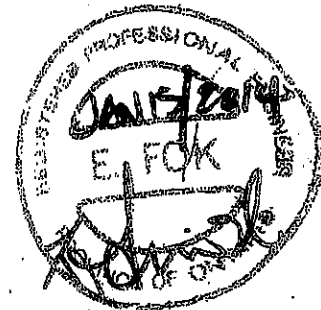
45° Hip End

LUMBER SPECIFICATION

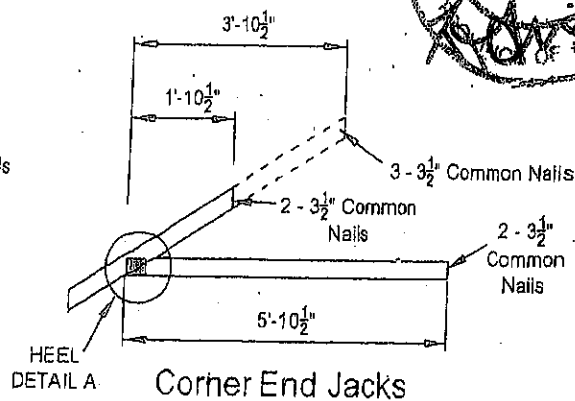
TOP CHORD : 2 x 4 SPF#2
 BOTTOM CHORD : 2 x 4 SPF#2
 WEBS : 2 x 3 SPF#2
 UNLESS OTHERWISE SHOWN

DESIGN LOAD

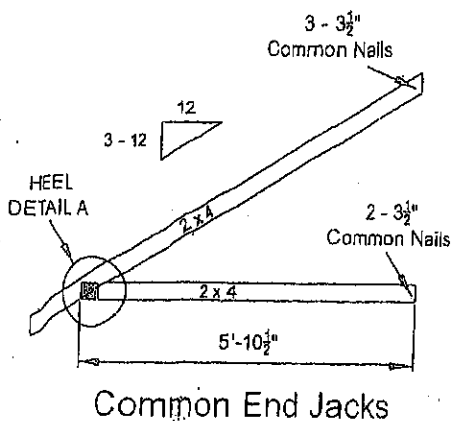
TOP CHORD SNOW LOAD : 40.5 P.S.F.
 TOP CHORD DEAD LOAD : 3.0 P.S.F.
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.
 TOTAL LOAD : 50.5 P.S.F.



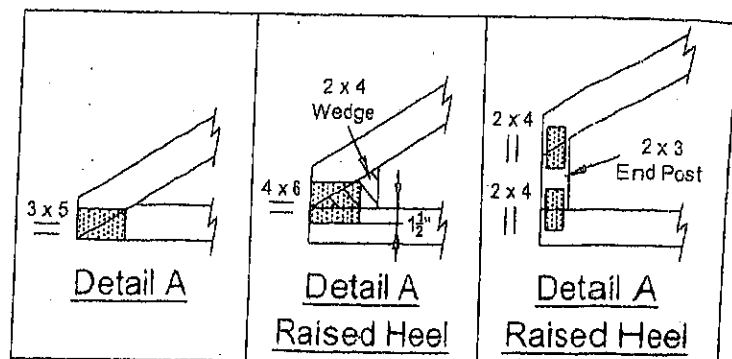
Corner Side Jacks



Corner End Jacks



Common End Jacks



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

CS-51008