

For conventional framing roof/ceilings
framing shall conform to OBC.9.23

CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
JAN 13 2019
BY
MARK DERKSEN

All work shall conform to the Ontario
Building Code O. Reg. 332/12 as amended



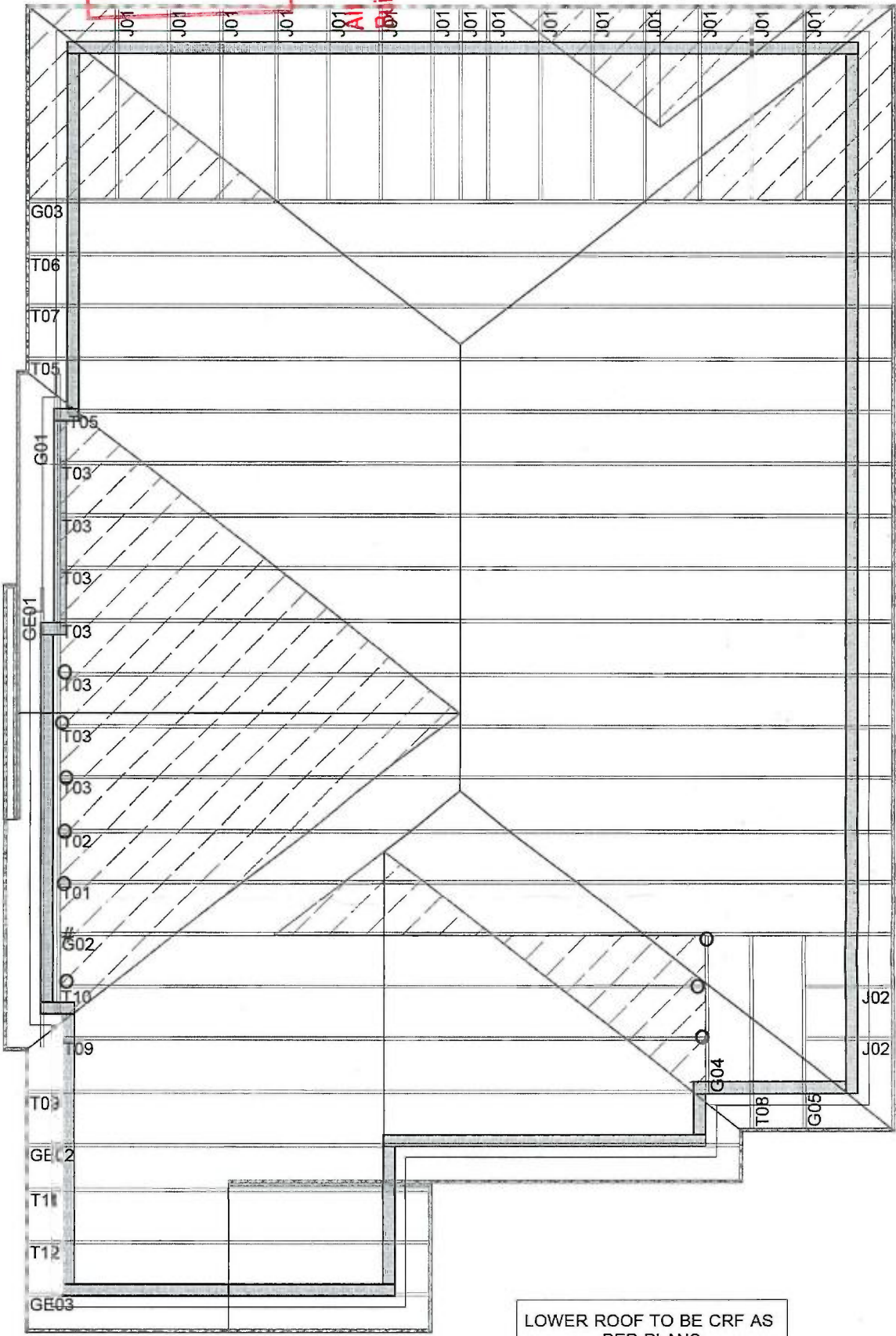
THIS CERTIFICATION IS FOR THE ENGINEERING REVIEW OF
STRUCTURAL COMPONENTS SHOWN ON THIS DRAWING
AND IS LIMITED TO THE COMPONENTS SUPPLIED BY KOTT
LUMBER FOR THE LOADS AND CONDITIONS SHOWN ON
THE CALCULATION PAGE OF EACH COMPONENT. THE
PLACEMENT OF THESE COMPONENTS ON THIS LAYOUT IS
SHOWN FOR REFERENCE ONLY. ROOF TRUSSES MUST BE
INSTALLED ACCORDING TO MANUFACTURER'S GUIDELINES
AT 24" C/C UNLESS NOTED OTHERWISE. CONVENTIONAL
FRAMING SHOWN ON THE LAYOUT MUST BE DESIGNED
AND APPROVED BY THE PROJECT ENGINEER. TEMPORARY
AND PERMANENT BRACINGS OF THE ROOF AND BUILDING
ARE THE RESPONSIBILITY OF THE PROJECT ENGINEER
AND TO CONFORM TO BCSI GUIDELINES.

PORTICO FLAT ROOF
BY OTHERS

READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.



Layout based on plans provided by
REGION DESIGN INC.
Dated MAY 2018



ROOF TRUSS LAYOUT

CONVENTIONAL
FRAMING BY OTHERS

HANGER LEGEND

X - LUS24
- HGUS26
O - LJS26DS
% - HGUS26-2

DESIGN CRITERIA
SPECIFIED LOADS
TOP CH. LL = 23.3 psf
DL = 3.0 psf
BOT CH. LL = 0.0 psf
DL = 7.0 psf
TOTAL LOAD = 33.3 psf

SPACING @ 24" CENTERS,
THIS TRUSS SYSTEM IS DESIGN FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH PART 9 OF OBC 2012,
BCBC 2012, ABC 2012, CSA 086-09, TPIC 2011
ALLOWABLE DEFLECTION OF EACH COMPONENT = L/360

Model:	MILLWOOD 12 EL 2
Customer:	GREENPARK
Project:	MINNISALE
Location:	BRAMPTON
Drawn By:	DM
Date:	6/28/2018

SIZE AND LOCATION OF CONVENTIONAL FRAMING IS APPROXIMATE. ALL AREAS
MAY NOT BE SHOWN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C RAFTER THAT
CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O/C WITH 2X4 VERT POST TO THE
TRUSS BELOW EA CROSS PT. VERT POS. THAN 6' TO HAVE A LATERAL BRACING SO THAT
THE DISTANCE BETEN PT & VERT ROWS OF BRACING DOES NOT EXCEED 6'

ENGINEERING NOTE PAGE (ENP-1)
PLEASE READ PRIOR TO INSTALLATION

NE0818-081
GREENPARK - MINNISALE HOMES -
MILLWOOD 12 ELE 2

RESPONSIBILITIES

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY THE DESIGN OFFICE OF KOTT LUMBER. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON THIS DRAWING. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.

TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING

IT IS THE RESPONSIBILITY OF KOTT LUMBER TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

- The truss loading intensity and distribution as well as load transfer mechanism is that indicated on the drawing
- No buildings, trees, parapets or other projections higher than the roof for which the trusses are used are located within a distance less than ten (10) times the difference in height, or five metres (16 ft) whichever is greater, unless the drawing indicates that the snow drifting has been taken into account

HANDLING, INSTALLATION AND BRACING

- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- Temporary and permanent bracing must be installed as indicated on the truss drawing and according to the BCSI-B1 and BCSI-B3 Summary Sheets. Bracing for the lateral stability of the truss is to be provided by the building designer
- **It is recommended that a Professional Engineer's advice be obtained for the bracing of trusses spanning more than 12.37m (40'-7")**

SUPPORTS

- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability of the overall building structure
- Elevation of bearings must be carefully checked and shimmed to alignment for solid bearings
- Adequate wood truss bearing is the responsibility of the building designer.

DIMENSIONS

- Geometry of the truss and dimensions indicated on the drawing are identical to those of the installed truss.

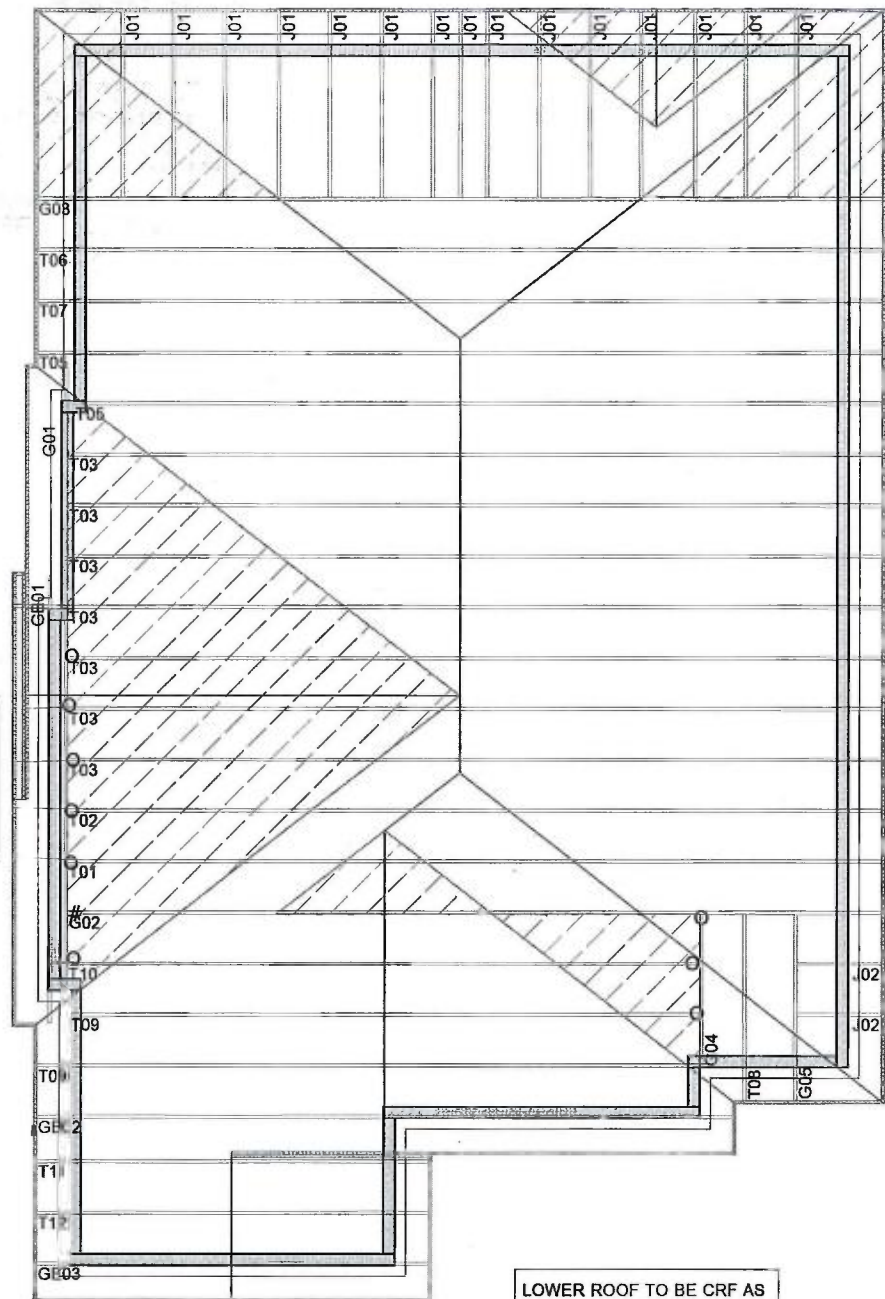
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PORTICO FLAT ROOF
BY OTHERS

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



Layout based on plans provided by
REGION DESIGN INC.
Dated MAY 2018



LOWER ROOF TO BE CRF AS
PER PLANS

ROOF TRUSS LAYOUT



**CONVENTIONAL
FRAMING** BY OTHERS

HANGER LEGEND

X - LUS24
- HGUS26

O - LJS26DS
% - HGUS26-2

SIZE AND LOCATION OF CONVENTIONAL FRAMING IS APPROXIMATE. ALL AREAS MAY NOT BE SHOWN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C RAFTER THAT CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O/C WITH 2X4 VERT POST TO THE TRUSS BELOW EA CROSS PT. VERT POS. THAN 6" TO HAVE A LATERAL BRACING SO THAT THE DISTANCE BETEN PT & VERT ROWS OF BRACING DOES NOT EXCEED 6'

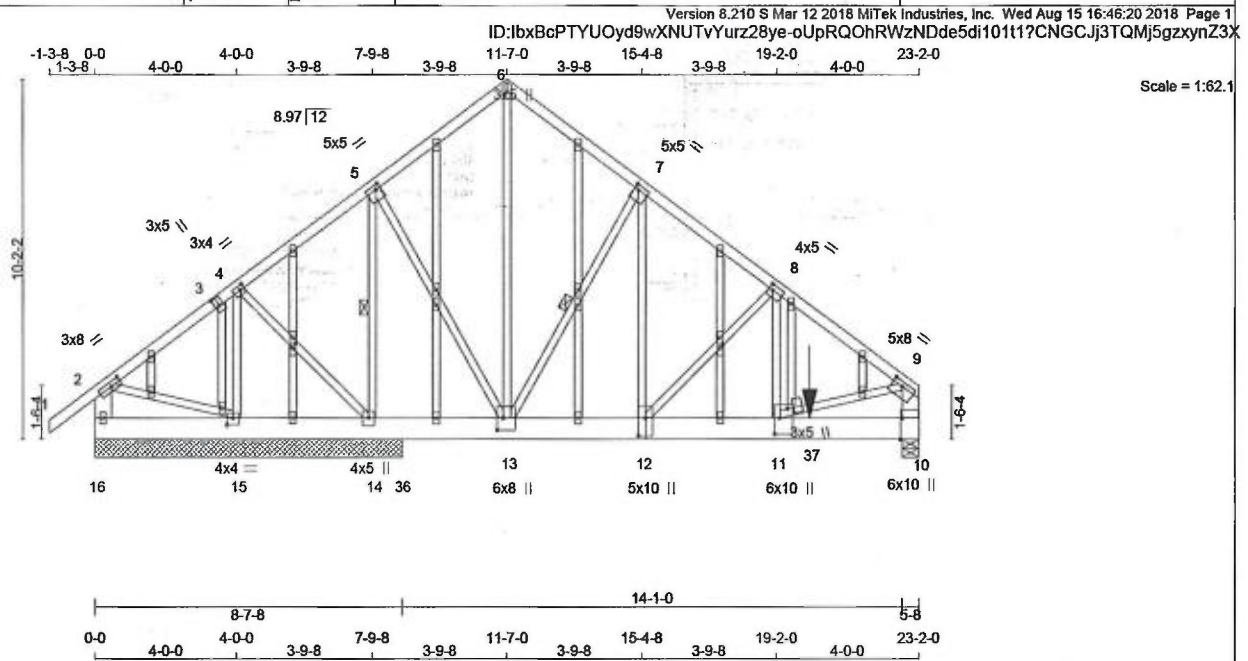
DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH LL = 23.3 psf
DL = 3.0 psf
BOT CH LL = 0.0 psf
DL = 7.0 psf
TOTAL LOAD = 33.3 psf

SPACING @ 24" CENTERS.
THIS TRUSS SYSTEM IS DESIGN FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010

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

ALLOWABLE DEFLECTION OF EACH COMPONENT = L/360

Model:	MILLWOOD 12 EL 2
Customer:	GREENPARK
Project:	MINNISALE
Location:	BRAMPTON
Drawn By:	DM
Date:	6/28/2018



LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 3 2x4 DRY No.2 SPF
3 - 6 2x4 DRY No.2 SPF
6 - 9 2x4 DRY No.2 SPF
16 - 2 2x6 DRY No.2 SPF
10 - 9 2x6 DRY No.2 SPF
16 - 12 2x8 DRY No.2 SPF
12 - 10 2x8 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
ALL GABLE WEBS 2x3 DRY No.2 SPF
DRY: SEASONED LUMBER.
GABLE STUDS SPACED AT 2'-0" OC.
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:
CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS
1-3 1 12 TOP
3-6 1 12 TOP
6-9 1 12 TOP
16-2 2 12 TOP
10-9 2 12 TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS
16-12 2 8 SIDE(335.0)
12-10 2 8 SIDE(335.0)
WEBS : (0.122"x3") SPIRAL NAILS
2x3 1 6
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQD
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
16 460 0 460 0 0 8-7-8 8-7-8
14 6289 0 6289 0 0 8-7-8 8-7-8
15 -129 0 0 0 -129 8-7-8 8-7-8
10 7319 0 7319 0 0 5-8 5-8
PROVIDE ANCHORAGE AT BEARING JOINT 15 FOR 150 LBS. FACTORED UPLIFT
UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
16 318 250 / 0 0 / 0 0 / 0 68 / 0 0 / 0
14 4414 3086 / 0 0 / 0 0 / 0 1329 / 0 0 / 0
15 -88 0 / -77 0 / 0 0 / 0 0 / -11 0 / 0
10 5136 3597 / 0 0 / 0 0 / 0 1540 / 0 0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 14, 15, 10
BEARING SIZE FACTOR = 1.15 AT JNT(S) 10 (BASED ON SUPPORT DEPTH = 1'-8)
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-13. DBS = 8'-0". CBF = 188 LBS.
1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14. DBS = 6'-0". CBF = 182 LBS.
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) TO EACH PLY USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.
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)

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 = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN. C/C
GIRDER TYPE: CStdGirder
START DISTANCE = 8'-7-0
START SPAN CARRIED = 30'-8-8
END DISTANCE = 23'-2-0
END SPAN CARRIED = 30'-8-8
END WALL WIDTH = 5'-8
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
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (0.51")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.51")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")
CSI: TC=0.32/1.00 (8-9:1), BC=0.53/1.00 (11-12:1), WB=0.79/1.00 (5-14:1), SSI=0.89/1.00 (10-11:1)
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.



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CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM		FR-TO			
1-2	0 / 32	-77.4 -77.4 0.06 (1)	10.00	13-6	0 / 2557	0.32 (1)	
2-3	-147 / 0	-77.4 -77.4 0.11 (1)	6.25	13-7	-3765 / 0	0.78 (1)	
3-4	-147 / 0	-77.4 -77.4 0.11 (1)	6.25	12-7	0 / 4323	0.54 (1)	
4-5	-130 / 0	-77.4 -77.4 0.11 (1)	6.25	12-8	-2716 / 0	0.68 (1)	
5-6	-2354 / 0	-77.4 -77.4 0.10 (1)	5.76	11-8	0 / 3072	0.38 (1)	
6-7	-2355 / 0	-77.4 -77.4 0.10 (1)	5.76	5-13	0 / 3675	0.45 (1)	
7-8	-4605 / 0	-77.4 -77.4 0.16 (1)	4.36	14-5	-4846 / 0	0.79 (1)	
8-9	-6932 / 0	-77.4 -77.4 0.32 (1)	3.53	4-14	-58 / 0	0.01 (1)	
16-2	-361 / 0	0.0 0.0 0.01 (1)	7.81	15-4	-284 / 0	0.04 (1)	
10-9	-5739 / 0	0.0 0.0 0.21 (1)	6.15	2-15	0 / 140	0.02 (1)	
				11-9	0 / 5741	0.71 (1)	
16-15	0 / 0	-17.5 -17.5 0.06 (1)	10.00				
15-14	0 / 136	-17.5 -17.5 0.30 (1)	10.00				
14-16	0 / 96	-17.5 -17.5 0.30 (1)	10.00				
36-13	0 / 96	-687.5 -687.5 0.30 (1)	10.00				
13-12	0 / 3695	-687.5 -687.5 0.40 (1)	10.00				
12-11	0 / 5557	-687.5 -687.5 0.53 (1)	10.00				
11-37	0 / 0	-687.5 -687.5 0.45 (1)	10.00				
37-10	0 / 0	-687.5 -687.5 0.45 (1)	10.00				

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREENPARK - MINNISALE HOMES	DRWG NO.
NE0818-081	G01	1	2	TRUSS DESC.	MILLWOOD 12 ELE 2	PAGE 4 OF 30

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 16:46:20 2018 Page 2
ID:lbxBcPTYUOyd9wXNUTvYurz28ye-oUpRQOhRWZNdDe5di10t1t?CNGCJj3tQMj5gzxynZ3X

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-I	MT20	3.0	8.0	1.50	3.50
3	TSW+I	MT20	3.0	5.0	1.00	1.50
4	TMVW-I	MT20	3.0	4.0	1.50	1.50
5	TMVW-I	MT20	5.0	5.0	1.50	1.50
6	TTW+p	MT20	3.0	5.0		
7	TMVW-I	MT20	5.0	5.0	1.50	1.25
8	TMVW-I	MT20	4.0	5.0	1.75	1.25
9	TMVW-I	MT20	5.0	8.0	1.50	3.50
10	BMVW-I+t	MT20	6.0	10.0	Edge	0.50
11	BMVW-I+t	MT20	6.0	10.0	5.50	1.75
12	BSW+I	MT20	5.0	10.0	6.00	2.00
13	BMVWVW+I	MT20	6.0	8.0	4.00	2.00
14	BMVW-I	MT20	4.0	5.0		
15	BMVW-I	MT20	4.0	4.0	2.25	2.00
16	BMV-I+p	MT20	2.0	4.0		
17, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 28, 29, 30, 31, 33, 34, 35						
17	NP+W	MT20	2.0	4.0		
20	NP+W	MT20	2.0	4.0	1.50	1.00
31	NP+W	MT20	2.0	4.0	1.50	1.00
32	NP+I	MT20	3.0	5.0	2.00	2.00

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) 1865.2 lbs FACTORED DOWN AT 20-1-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

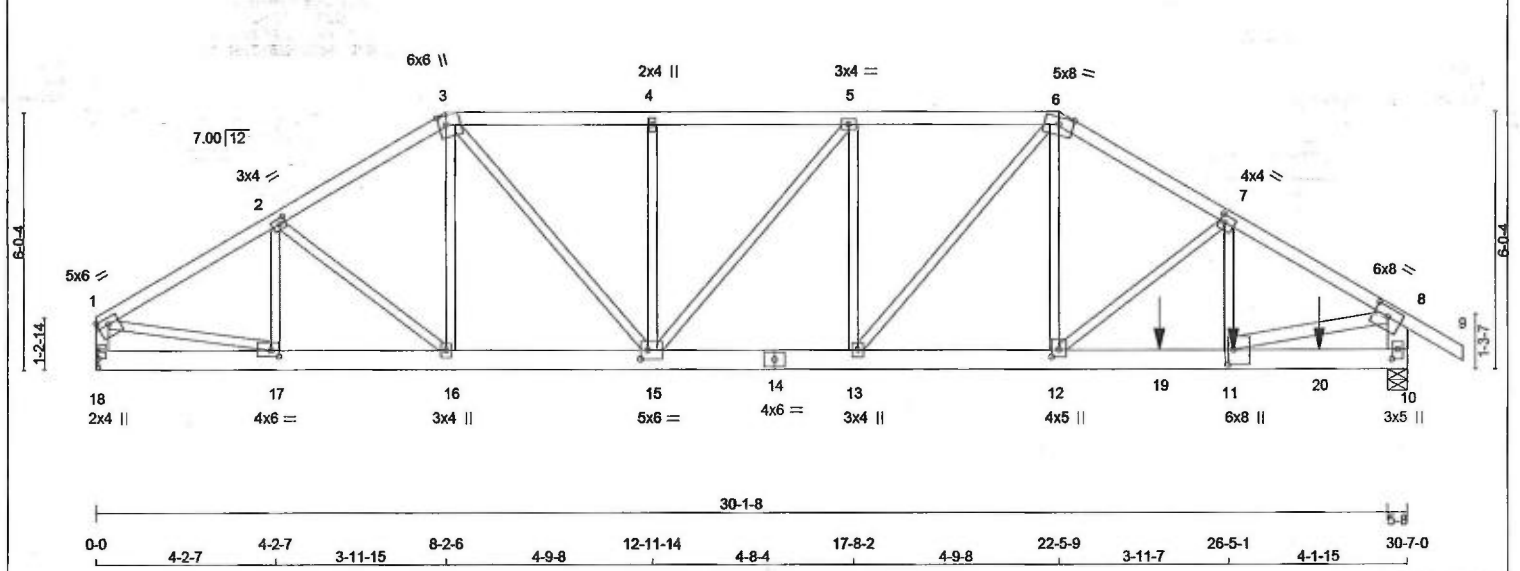
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (13) (INPUT = 0.90)
JSI METAL= 0.66 (9) (INPUT = 1.00)

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				TOTAL WEIGHT = 151 lb										[M]		
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER											DESIGN CRITERIA	
N. L. G. A. RULES															*** SPECIAL LOADS ANALYSIS ***	
CHORDS SIZE															GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.	
1 - 3 2x4 DRY No.2 SPF															LOADS WERE DERIVED FROM USER INPUT	
3 - 6 2x4 DRY No.2 SPF															NO FURTHER MODIFICATIONS WERE MADE	
6 - 9 2x4 DRY No.2 SPF																
18 - 1 2x4 DRY No.2 SPF																
10 - 8 2x6 DRY No.2 SPF																
18 - 14 2x6 DRY No.2 SPF																
14 - 10 2x6 DRY 2100F 1.8E SPF																
ALL WEBS 2x3 DRY No.2 SPF																
EXCEPT																
11 - 8 2x4 DRY No.2 SPF																
DRY: SEASONED LUMBER.																

PLATES (table is in inches)					UNFACTORED REACTIONS								DESIGN CRITERIA	
JT	TYPE	PLATES	W	LEN	Y	X	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	18	10	18	10	*** NON STANDARD GIRDER ***	
1	TMVW-t	MT20	5.0	6.0	1.75	Edge	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.	
2	TMVW-t	MT20	3.0	4.0	1.50	1.75	1309	916 / 0	0 / 0	0 / 0	0 / 0	393 / 0	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010	
3	TTWW+m	MT20	6.0	6.0	2.50	2.00	2505	1766 / 0	0 / 0	0 / 0	0 / 0	739 / 0	THIS DESIGN COMPLIES WITH:	
4	TMW+w	MT20	2.0	4.0									- PART 9 OF OBC 2012, BCBC 2012, ABC 2014	
5	TMVW-t	MT20	3.0	4.0									- CSA 086-09	
6	TTWW-m	MT20	5.0	8.0	2.00	4.00							- TPIC 2011	
7	TMVW-t	MT20	4.0	4.0	2.00	1.25							(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD	
8	TMVW-t	MT20	6.0	8.0	2.50	4.00							ALLOWABLE DEFL.(LL)= L/360 (1.02")	
10	BMV1+p	MT20	3.0	5.0	2.75	1.50							CALCULATED VERT. DEFL.(LL)= L/999 (0.15")	
11	BMVW+t	MT20	6.0	8.0	4.25	1.50							ALLOWABLE DEFL.(TL)= L/360 (1.02")	
12	BMVW+t	MT20	4.0	5.0	2.00	2.00							CALCULATED VERT. DEFL.(TL)= L/999 (0.26")	
13	BS-t	MT20	3.0	4.0									CSI: TC=0.58/1.00 (7-8:1), BC=0.78/1.00 (11-12:1)	
14	BS-t	MT20	4.0	6.0									, WB=0.75/1.00 (8-11:1), SSI=0.78/1.00 (11-12:1)	
15	BMVW+t	MT20	5.0	6.0	2.50	2.00							DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00	
16	BMVW+t	MT20	3.0	4.0									COMP=1.00 SHEAR=1.00 TENS=1.00	
17	BMVW-t	MT20	4.0	6.0	1.75	2.25							COMPANION LIVE LOAD FACTOR = 0.50	
18	BMV1+p	MT20	2.0	4.0	2.25	1.00							AUTOSOLVE LEFT HEEL ONLY	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					LOADING								TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.	
HANGERS NOTES					TOTAL LOAD CASES: (4)								NAIL VALUES	
1)													PLATE GRIP(DRY) SHEAR SECTION	
													(PSI) (PLI) (PLI)	
													MAX MIN MAX MIN MAX MIN	
													MT20 618 354 1667 822 2284 1656	

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0818-081	G02	1	1	GREENPARK - MINNISALE HOMES MILLWOOD 12 ELE 2	PAGE 6 OF 30

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 16:46:21 2018 Page 2
ID:lbxBcPTYUOyd9wXNUTvYurz28ye-GgNpeki3HHV4FogpGIXGQFXIOgUZSXTZbNqDVNynZ3W

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1903.7 lbs FACTORED DOWN AT 24-9-12, AND 285.0 lbs FACTORED DOWN AT 26-6-4, AND 242.2 lbs FACTORED DOWN AT 28-6-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (17) (INPUT = 0.90)

JSI METAL= 0.92 (8) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.



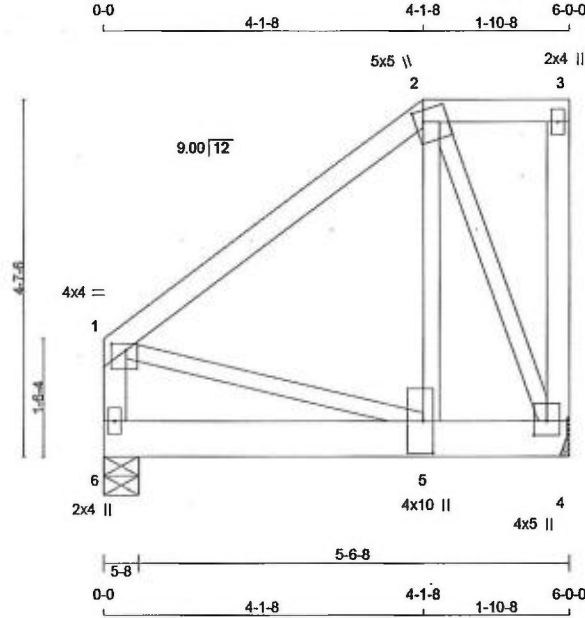


PLATE PLACEMENT TOL. = 0.250 inches
 PLATE ROTATION TOL. = 5.0 Deg.
 JSI GRIP= 0.89 (7) (INPUT = 0.90)
 JSI METAL= 0.77 (15) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
 ENGINEERING NOTE PAGE ENP-1. THIS
 NOTE PAGE IS AN INTEGRAL PART OF
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 THE DESIGN OF THIS COMPONENT.



Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 16:46:22 2018 Page 1
ID:lbxBcPTYUOyd9wXNUTvYurz28ye-ktXBr4jh2bextyF0qS2VyS4Yd4sIB0Tjq1am2pynZ3V



Scale = 1:28.5

TOTAL WEIGHT = 34 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 2	2x4	DRY	No.2	SPF	
2 - 3	2x4	DRY	No.2	SPF	
4 - 3	2x4	DRY	No.2	SPF	
6 - 1	2x4	DRY	No.2	SPF	
6 - 4	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
1	TMVW-p	MT20	4.0	4.0	1.00	2.25
2	TTWW+m	MT20	5.0	5.0	1.75	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1+p	MT20	4.0	5.0	2.25	2.00
5	BMWW+t	MT20	4.0	10.0	5.00	1.50
6	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
JT	VERT	GROSS REACTION	GROSS REACTION	BRG	BRG
4	1903	0	1903	0	0
6	1903	0	1903	0	0

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 4 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
4	1336	934 / 0	0 / 0	0 / 0	0 / 0	401 / 0	0 / 0	
6	1336	934 / 0	0 / 0	0 / 0	0 / 0	401 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED	MAX.	MEMB.	FORCE (LBS)	FACTORED	MAX.
FR-TO		VERT. LOAD (PLF)	LC1 MAX	FR-TO		VERT. LOAD (PLF)	LC1 MAX
1-2	-894 / 0	-77.4	-77.4 0.27 (1)	5-2	0 / 2027	0.50 (1)	
2-3	0 / 0	-77.4	-77.4 0.05 (1)	10.00	2-4	-1882 / 0	0.63 (1)
4-3	-73 / 0	0.0	0.0 0.02 (1)	7.81	1-5	0 / 738	0.18 (1)
6-1	-885 / 0	0.0	0.0 0.10 (1)	7.81			
6-5	0 / 0	-557.0	-557.0 0.68 (1)	10.00			
5-4	0 / 764	-557.0	-557.0 0.60 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	33.3	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 = 24-9-0

END DISTANCE = 6-0-0

END SPAN CARRIED = 24-9-0

END WALL WIDTH = 0-0

APPLIED TO BACK SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.20")

CALCULATED VERT. DEFL.(LL) = L/999 (0.05")

ALLOWABLE DEFL.(TL) = L/360 (0.20")

CALCULATED VERT. DEFL.(TL) = L/730 (0.10")

CSI: TC=0.27/1.00 (1-2:1), BC=0.68/1.00 (5-6:1),

WB=0.63/1.00 (2-4:1), SSI=0.89/1.00 (5-6:1)

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
(FSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		822	2284
			1656

CONTINUED ON PAGE 2



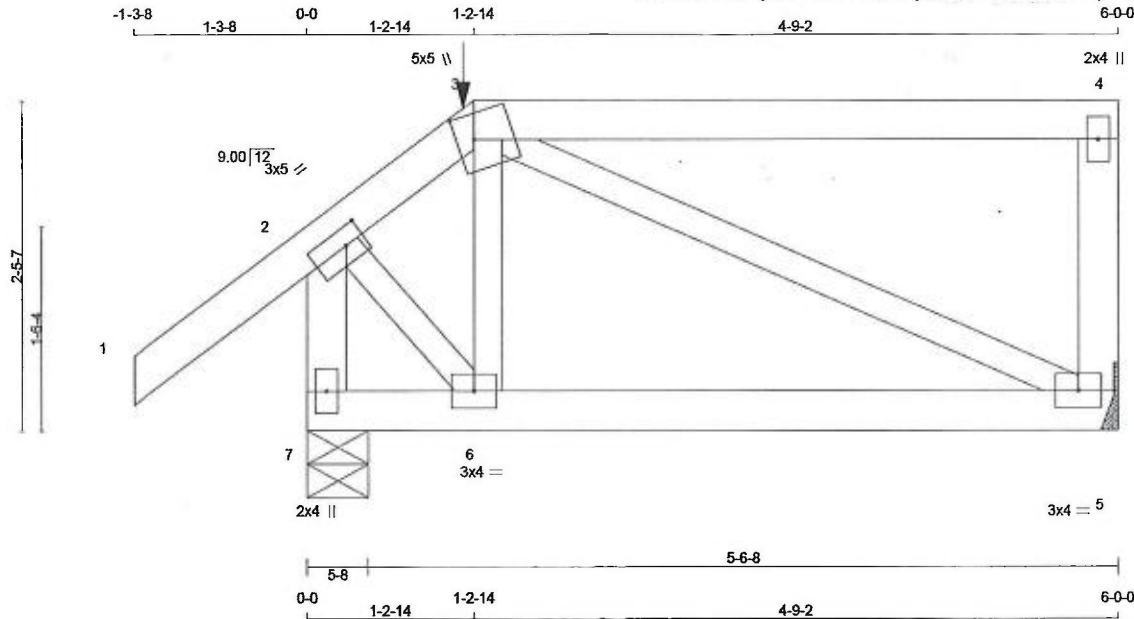
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



PLATE PLACEMENT TOL. = 0.250 inches
 PLATE ROTATION TOL. = 5.0 Deg.
 JSI GRIP= 0.89 (2) (INPUT = 0.90)
 JSI METAL= 0.52 (2) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
 ENGINEERING NOTE PAGE ENP-1. THIS
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TOTAL WEIGHT = 26 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
5 - 4	2x4	DRY	No.2
7 - 2	2x4	DRY	No.2
7 - 5	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
2	TMVW-t	MT20	3.0	5.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMV+p	MT20	2.0	4.0		
5	BMVW1-t	MT20	3.0	4.0		
6	BMWW-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 8.0 lbs FACTORED DOWN AT 1-2-14 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	MAXIMUM FACTORED	INPUT	REQRD
	GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	UP
5	243	0	243	0
7	387	0	387	0

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	170	118 / 0	0 / 0	0 / 0	0 / 0	52 / 0	0 / 0
7	269	205 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 32	-77.4	-77.4 0.12 (1)	10.00	6-3	-25 / 43	0.02 (4)
2-3	-176 / 0	-77.4	-77.4 0.11 (1)	6.25	3-5	-121 / 0	0.05 (1)
3-4	0 / 0	-68.5	-68.5 0.29 (1)	10.00	2-6	0 / 149	0.04 (1)
5-4	-163 / 0	0.0	0.0 0.02 (1)	7.81			
7-2	-398 / 0	0.0	0.0 0.05 (1)	7.81			
7-6	0 / 0	-15.5	-15.5 0.08 (4)	10.00			
6-5	0 / 110	-15.5	-15.5 0.09 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	1-2-14	-8	-8	-	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	33.3	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 = 1-2-14

RIGHT SETBACK = 0-0

END SETBACK = 2-0-0

END WALL WIDTH = 5-8

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, CBCG 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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=0.29/1.00 (3-4:1), BC=0.09/1.00 (5-6:4), WB=0.05/1.00 (3-5:1), SSI=0.14/1.00 (3-4:1)

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.

CONTINUED ON PAGE 2



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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.

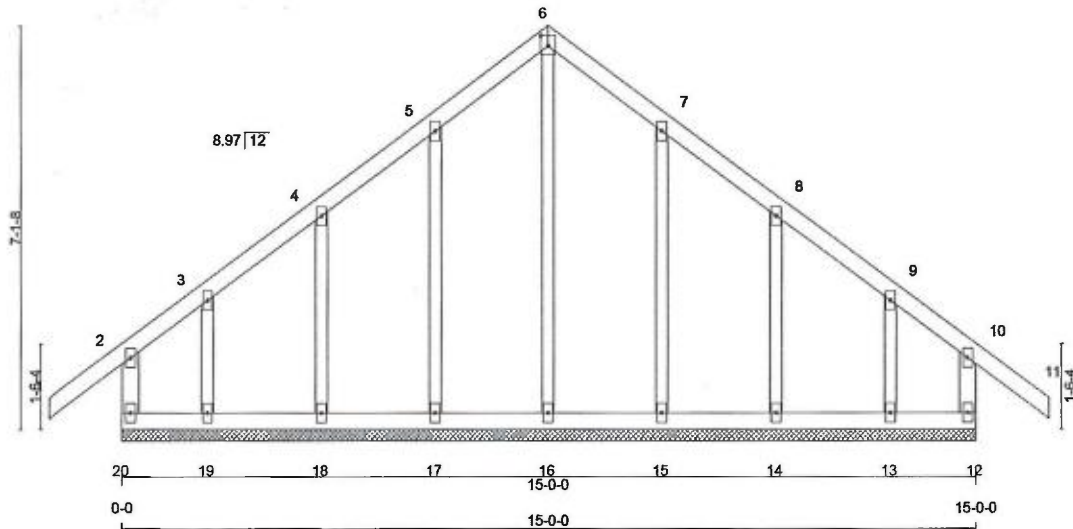
JSI GRIP= 0.34 (2) (INPUT = 0.90)
JSI METAL= 0.08 (2) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
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-1-3-8 0-0 7-6-0 7-6-0 15-0-0 16-3-8
1-3-8 7-6-0 7-6-0 15-0-0 1-3-8

Scale = 1:38.8



TOTAL WEIGHT = 68 lb [M]

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
20 - 2	2x4	DRY	No.2
1 - 6	2x4	DRY	No.2
6 - 11	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
20 - 12	2x4	DRY	No.2

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

GABLE STUDS SPACED AT 2-0-0 OC.

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
20-2	-177 / 0	0.0	0.0 0.03 (1)	7.81	16-6	-195 / 0	0.17 (1)
1-2	0 / 32	-77.4	-77.4 0.11 (1)	10.00	17-5	-157 / 0	0.08 (1)
2-3	0 / 2	-77.4	-77.4 0.07 (1)	10.00	18-4	-160 / 0	0.04 (1)
3-4	0 / 27	-77.4	-77.4 0.04 (1)	10.00	19-3	-96 / 0	0.02 (1)
4-5	0 / 27	-77.4	-77.4 0.04 (1)	10.00	15-7	-157 / 0	0.08 (1)
5-6	0 / 29	-77.4	-77.4 0.04 (1)	10.00	14-8	-160 / 0	0.04 (1)
6-7	0 / 29	-77.4	-77.4 0.04 (1)	10.00	13-9	-96 / 0	0.02 (1)
7-8	0 / 27	-77.4	-77.4 0.04 (1)	10.00			
8-9	0 / 27	-77.4	-77.4 0.04 (1)	10.00			
9-10	0 / 2	-77.4	-77.4 0.07 (1)	10.00			
10-11	0 / 32	-77.4	-77.4 0.11 (1)	10.00			
12-10	-177 / 0	0.0	0.0 0.03 (1)	7.81			
20-19	-14 / 0	-17.5	-17.5 0.01 (4)	6.25			
19-18	-18 / 0	-17.5	-17.5 0.01 (4)	6.25			
18-17	-22 / 0	-17.5	-17.5 0.01 (4)	6.25			
17-16	-24 / 0	-17.5	-17.5 0.01 (4)	6.25			
16-15	-24 / 0	-17.5	-17.5 0.01 (4)	6.25			
15-14	-22 / 0	-17.5	-17.5 0.01 (4)	6.25			
14-13	-18 / 0	-17.5	-17.5 0.01 (4)	6.25			
13-12	-14 / 0	-17.5	-17.5 0.01 (4)	6.25			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.11/1.00 (1-2:1), BC=0.01/1.00 (17-18:4), WB=0.17/1.00 (6-16:1), SSI=0.07/1.00 (1-2:1)

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= 0.14 (6) (INPUT = 0.90)
JSI METAL= 0.07 (6) (INPUT = 1.00)

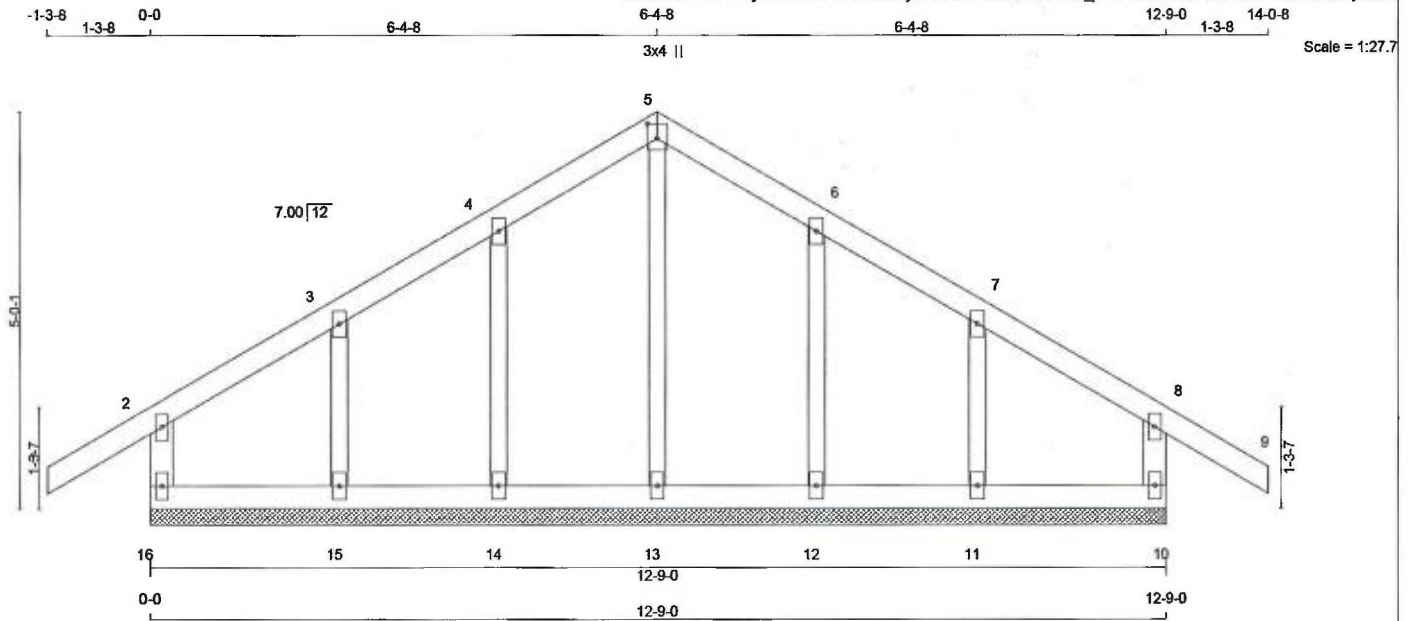
PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 4, 5, 7, 8, 9						
3	TMW+w	MT20	2.0	4.0		
6	TTW+p	MT20	3.0	4.0	2.25	1.50
10	TMV+p	MT20	2.0	4.0		
12	BMV1+p	MT20	2.0	4.0		
13, 14, 15, 16, 17, 18, 19						
13	BMW1+w	MT20	2.0	4.0		
20	BMV1+p	MT20	2.0	4.0		



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 49 lb [M]

LUMBER

N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR.
16 -	2	2x4	DRY	No.2	SPF
1 -	5	2x4	DRY	No.2	SPF
5 -	9	2x4	DRY	No.2	SPF
10 -	8	2x4	DRY	No.2	SPF
16 -	10	2x4	DRY	No.2	SPF

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
2 TMV+p	MT20	2.0	4.0		
3, 4, 6, 7					
3 TMW+w	MT20	2.0	4.0		
5 TTW+p	MT20	3.0	4.0	2.25	1.50
8 TMV+p	MT20	2.0	4.0		
10 BMV1+p	MT20	2.0	4.0		
11, 12, 13, 14, 15					
11 BMV1+w	MT20	2.0	4.0		
16 BMV1+p	MT20	2.0	4.0		

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH (LC)	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
16-2	-209 / 0	0.0	0.0 0.01 (1)	7.81	13-5	-150 / 0	0.05 (1)
1-2	0 / 27	-77.4	-77.4 0.10 (1)	10.00	14-4	-153 / 0	0.04 (1)
2-3	-24 / 0	-77.4	-77.4 0.05 (1)	6.25	15-3	-161 / 0	0.03 (1)
3-4	-17 / 0	-77.4	-77.4 0.04 (1)	6.25	12-6	-153 / 0	0.04 (1)
4-5	-12 / 0	-77.4	-77.4 0.04 (1)	6.25	11-7	-161 / 0	0.03 (1)
5-6	-12 / 0	-77.4	-77.4 0.04 (1)	6.25			
6-7	-17 / 0	-77.4	-77.4 0.04 (1)	6.25			
7-8	-24 / 0	-77.4	-77.4 0.05 (1)	6.25			
8-9	0 / 27	-77.4	-77.4 0.10 (1)	10.00			
10-8	-209 / 0	0.0	0.0 0.01 (1)	7.81			
16-15	0 / 19	-17.5	-17.5 0.02 (4)	10.00			
15-14	0 / 14	-17.5	-17.5 0.02 (4)	10.00			
14-13	0 / 10	-17.5	-17.5 0.02 (4)	10.00			
13-12	0 / 10	-17.5	-17.5 0.02 (4)	10.00			
12-11	0 / 14	-17.5	-17.5 0.02 (4)	10.00			
11-10	0 / 19	-17.5	-17.5 0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3 PSF
	DL = 3.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.10/1.00 (1-2:1), BC=0.02/1.00 (10-11:4), WB=0.05/1.00 (5-13:1), SSI=0.07/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

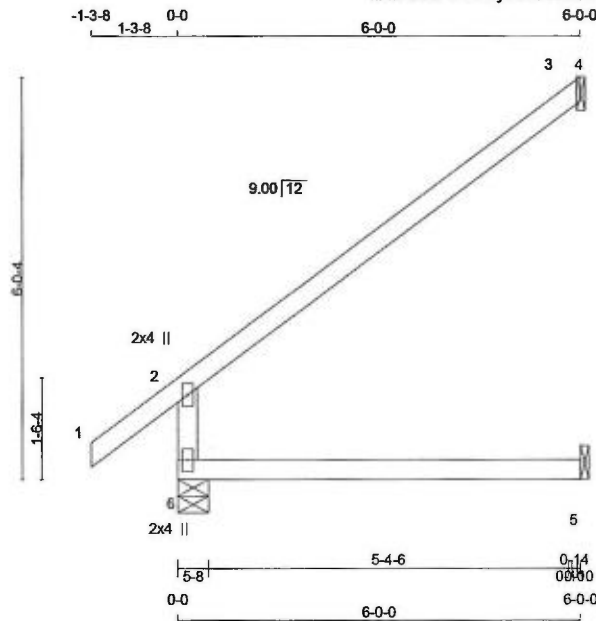
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (8) (INPUT = 0.90)
JSI METAL= 0.06 (5) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 15 X 19 = 281 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
6 - 2	2x4	DRY	No.2	SPF	
1 - 4	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
6	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
6	452	0	452	0	5-8	5-8
5	44	0	50	0	1-8	1-8
3	172	0	172	0	1-8	1-8

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 5, 3

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	
6	314	236 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0
5	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
3	117	103 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	FR-TO	CHORDS		WEBS	
		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)
6-2	0 / 32	-391 / 0	0.0	0.0	0.12 (4)
1-2	0 / 32	-77.4	-77.4	0.11 (1)	10.00
2-3	-34 / 0	-77.4	-77.4	0.46 (1)	6.25
3-4	0 / 0	-7.5	-7.5	0.00 (4)	10.00
6-5	0 / 0	-17.5	-17.5	0.13 (4)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
	DL = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 33.3	PSF

SPACING = 24.0 IN. C/C

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

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

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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) = $L/999$ (0.03")

CSI: TC=0.46/1.00 (2-3:1), BC=0.13/1.00 (5-6:4), WB=0.00/1.00 (n/a:0), SSI=0.18/1.00 (2-3:1)

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 RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

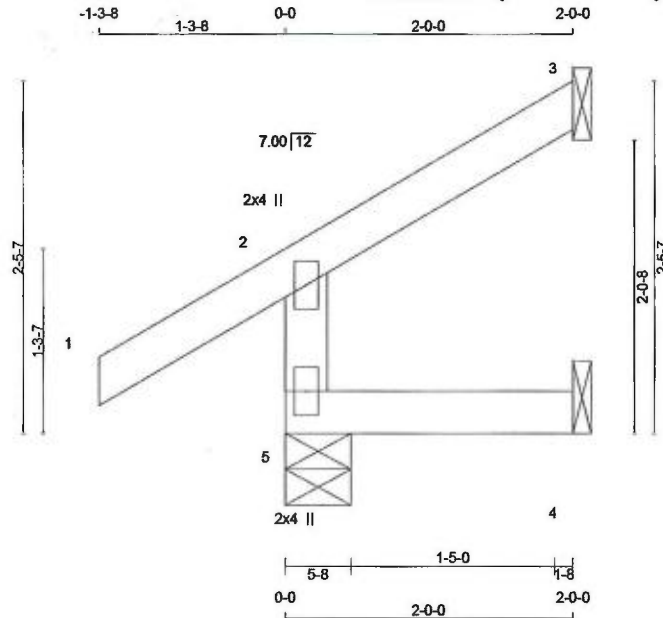
JSI GRIP= 0.27 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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ID:ibxBcPTYUOyd9wXNUTvYurz28ye-deAihRmC5p8NLZZn3I7R7IFGFhNg7zLilfY_BbynZ3R



TOTAL WEIGHT = 2 X 8 = 16 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	DRY	No.2	SPF
1 - 3	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
5	BMV1+p	MT20	2.0	4.0		

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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
JT	GROSS REACTION		GROSS REACTION		BRG	BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	
5	221	0	221	0	0	5-8	5-8
3	58	0	58	0	0	1-8	1-8
4	16	0	18	0	0	1-8	1-8

SEE MITTEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 3, 4

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	153	122 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX UNBRACED LENGTH (LC)	MEMB. MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO				
5-2	-202/0	0.0	0.0	0.01 (4)	7.81			
1-2	0/27	-77.4	-77.4	0.10 (1)	10.00			
2-3	-10/0	-77.4	-77.4	0.05 (1)	10.00			
5-4	0/0	-17.5	-17.5	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
	DL = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 33.3	PSF

SPACING = 24.0 IN./C

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.10/1.00 (1-2:1), BC=0.02/1.00 (4-5:4), WB=0.00/1.00 (n/a:0), SSI=0.07/1.00 (1-2:1)

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 RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

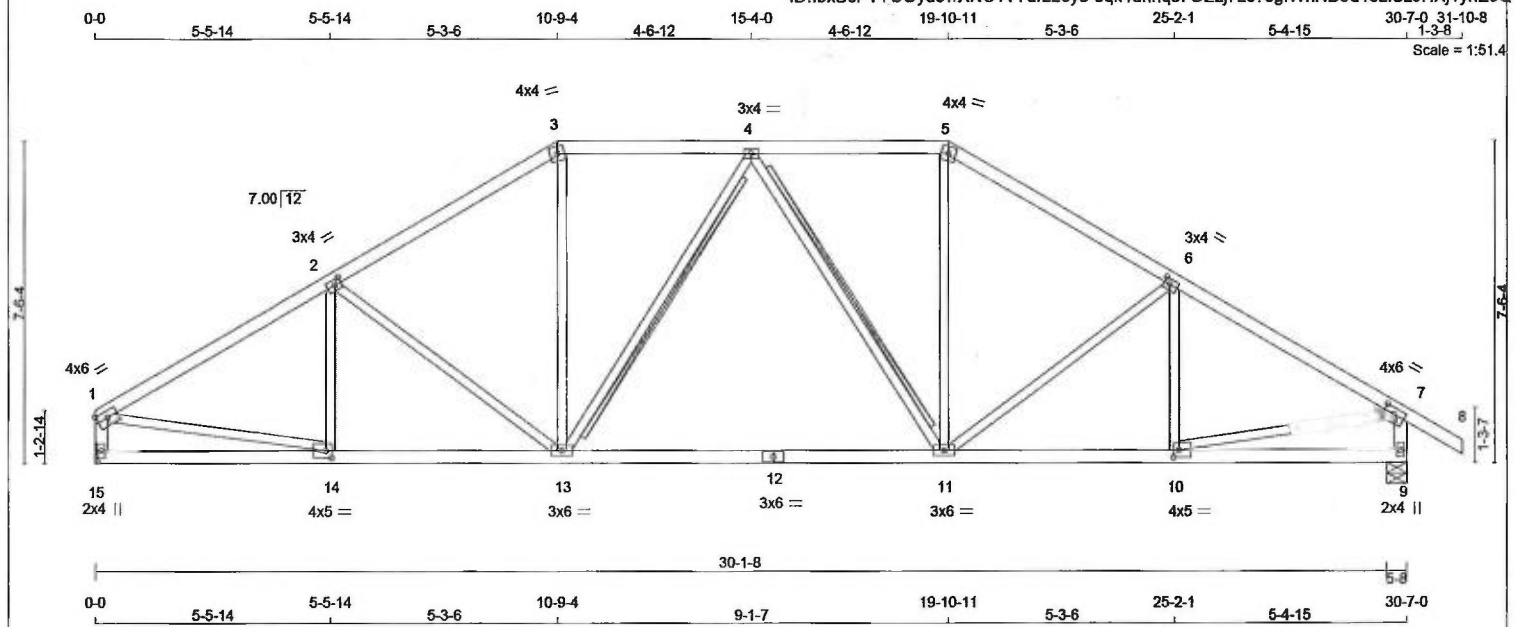
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 127 lb
(M)(F)

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	DRY	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
5 - 8	2x4	DRY	No.2	SPF	
15 - 1	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
15 - 12	2x4	DRY	No.2	SPF	
12 - 9	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
1 TMVW-I	MT20	4.0	6.0	1.75	Edge
2 TMVW-I	MT20	3.0	4.0	1.50	1.75
3 TTW-m	MT20	4.0	4.0		
4 TMVW-I	MT20	3.0	4.0		
5 TTW-m	MT20	4.0	4.0		
6 TMVW-I	MT20	3.0	4.0	1.50	1.75
7 TMVW-I	MT20	4.0	6.0	1.75	3.00
9 BMV1+p	MT20	2.0	4.0		
10 BMVW-I	MT20	4.0	5.0	2.00	1.50
11 BMVW-I	MT20	3.0	6.0		
12 BS-I	MT20	3.0	6.0		
13 BMVW-I	MT20	3.0	6.0		
14 BMVW-I	MT20	4.0	5.0	2.00	1.50
15 BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
15	1451	0	1451	0
9	1556	0	1556	0

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 15 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
15	1018	712/0	0/0	0/0	0/0	306/0	0/0
9	1090	776/0	0/0	0/0	0/0	314/0	0/0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT 4-13, 4-11

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. UNBRACED LENGTH FR-TO	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO						FR-TO			
1-2	-1890/0	-77.4	-77.4	0.35 (1)	4.57	14-2	-192/21	0.06 (1)	
2-3	-1661/0	-77.4	-77.4	0.32 (1)	4.83	2-13	-304/0	0.26 (1)	
3-4	-1419/0	-77.4	-77.4	0.22 (1)	5.25	13-3	0/533	0.12 (1)	
4-5	-1415/0	-77.4	-77.4	0.22 (1)	5.26	13-4	-247/0	0.14 (1)	
5-6	-1655/0	-77.4	-77.4	0.32 (1)	4.84	4-11	-256/0	0.14 (1)	
6-7	-1867/0	-77.4	-77.4	0.34 (1)	4.60	11-5	0/530	0.12 (1)	
7-8	0/27	-77.4	-77.4	0.10 (1)	10.00	11-6	-285/0	0.24 (1)	
15-1	-1407/0	0.0	0.0	0.14 (1)	6.87	10-6	-208/15	0.06 (1)	
9-7	-1513/0	0.0	0.0	0.15 (1)	6.68	1-14	0/1676	0.38 (1)	
						10-7	0/1660	0.37 (1)	
15-14	0/0	-17.5	-17.5	0.11 (4)	10.00				
14-13	0/1653	-17.5	-17.5	0.39 (1)	10.00				
13-12	0/1549	-17.5	-17.5	0.38 (1)	10.00				
12-11	0/1549	-17.5	-17.5	0.38 (1)	10.00				
11-10	0/1634	-17.5	-17.5	0.39 (1)	10.00				
10-9	0/0	-17.5	-17.5	0.11 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	33.3	PSF	

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55% OF 27.2 P.S.F. G.S.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.02")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.35/1.00 (1-2:1), BC=0.39/1.00 (13-14:1), WB=0.38/1.00 (1-14:1), SSI=0.18/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

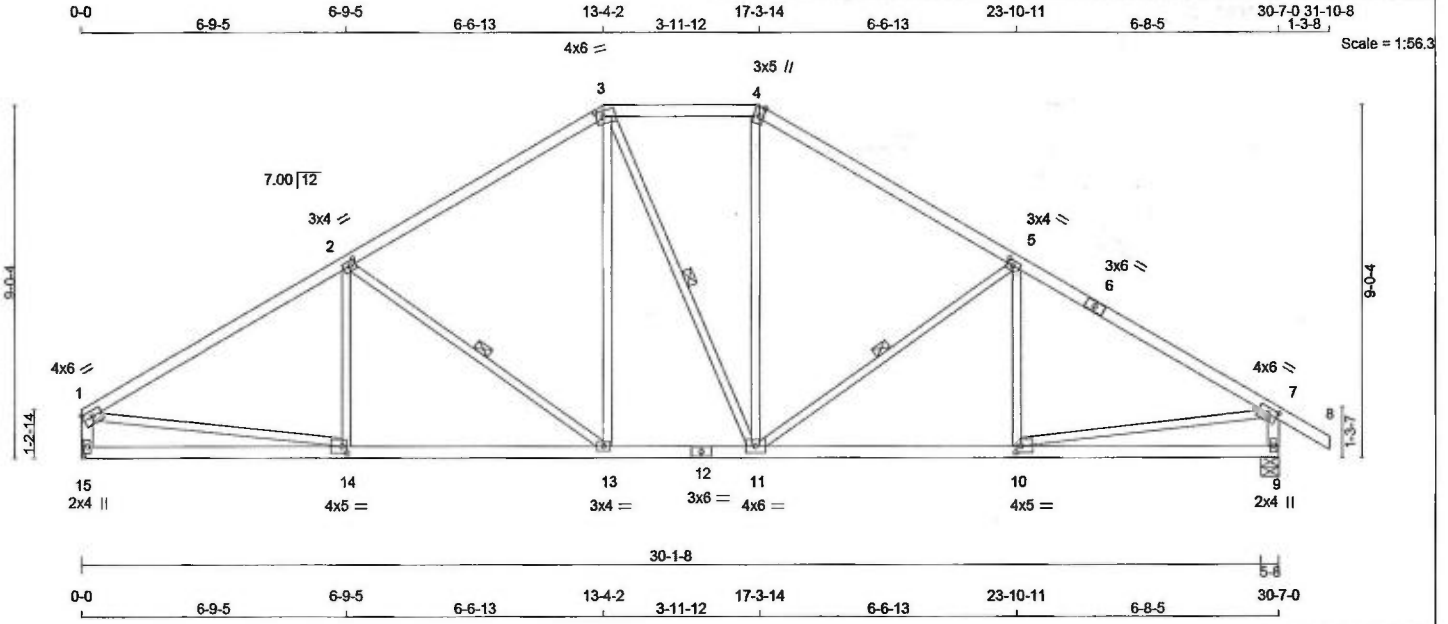
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.56 (12) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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ID:lbxBcPTYUOyd9wXNUTvYurZ28ye-Z1IS67oSDRO5bt9Aj9vCjKVeU_fbnwbCz15FTynZ3P



TOTAL WEIGHT = 131 lb
[MIF]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
15 - 1	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-l	MT20	4.0	6.0	1.75	Edge
2	TMVW-l	MT20	3.0	4.0	1.50	1.75
3	TTWV-m	MT20	4.0	6.0	1.75	2.25
4	TTWV-m	MT20	3.0	5.0	2.75	1.25
5	TMVW-l	MT20	3.0	4.0	1.50	1.75
6	TS-l	MT20	3.0	6.0		
7	TMVW-l	MT20	4.0	6.0	1.75	3.00
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-l	MT20	4.0	5.0	2.00	1.50
11	BMVW-l	MT20	4.0	6.0		
12	BS-l	MT20	3.0	6.0		
13	BMVW-l	MT20	3.0	4.0		
14	BMVW-l	MT20	4.0	5.0	2.00	1.50
15	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	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
15	1451	0	1451	0	MECHANICAL	5-8
9	1556	0	1556	0	5-8	5-8

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 15 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	1018	712 / 0	0 / 0	0 / 0	0 / 0	306 / 0	0 / 0
9	1090	776 / 0	0 / 0	0 / 0	0 / 0	314 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-13, 3-11, 5-11. DBS = 20-0-0. CBF = 65 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD		MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
		FROM	TO				
1-2	-1902 / 0	-77.4	-77.4	0.56 (1)	4-30	-94 / 87	0.04 (1)
2-3	-1482 / 0	-77.4	-77.4	0.50 (1)	4-80	-518 / 0	0.24 (1)
3-4	-1255 / 0	-77.4	-77.4	0.18 (1)	5-56	13-3	0 / 389
4-5	-1481 / 0	-77.4	-77.4	0.50 (1)	4-81	3-11	-2 / 0
5-6	-1884 / 0	-77.4	-77.4	0.54 (1)	4-33	11-4	0 / 386
6-7	-1884 / 0	-77.4	-77.4	0.54 (1)	4-33	11-5	-500 / 0
7-8	0 / 27	-77.4	-77.4	0.10 (1)	10-00	10-5	-108 / 81
15-1	-1402 / 0	0.0	0.0	0.14 (1)	6-88	1-14	0 / 1685
9-7	-1508 / 0	0.0	0.0	0.15 (1)	6-68	10-7	0 / 1672
15-14	0 / 0	-17.5	-17.5	0.20 (4)	10-00		
14-13	0 / 1669	-17.5	-17.5	0.37 (1)	10-00		
13-12	0 / 1256	-17.5	-17.5	0.26 (1)	10-00		
12-11	0 / 1256	-17.5	-17.5	0.26 (1)	10-00		
11-10	0 / 1654	-17.5	-17.5	0.36 (1)	10-00		
10-9	0 / 0	-17.5	-17.5	0.19 (4)	10-00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (1.02")
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")
ALLOWABLE DEFL.(TL) = L/360 (1.02")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.56/1.00 (1-2:1), BC=0.37/1.00 (13-14:1), WB=0.38/1.00 (1-14:1), SSI=0.22/1.00 (1-2:1)

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

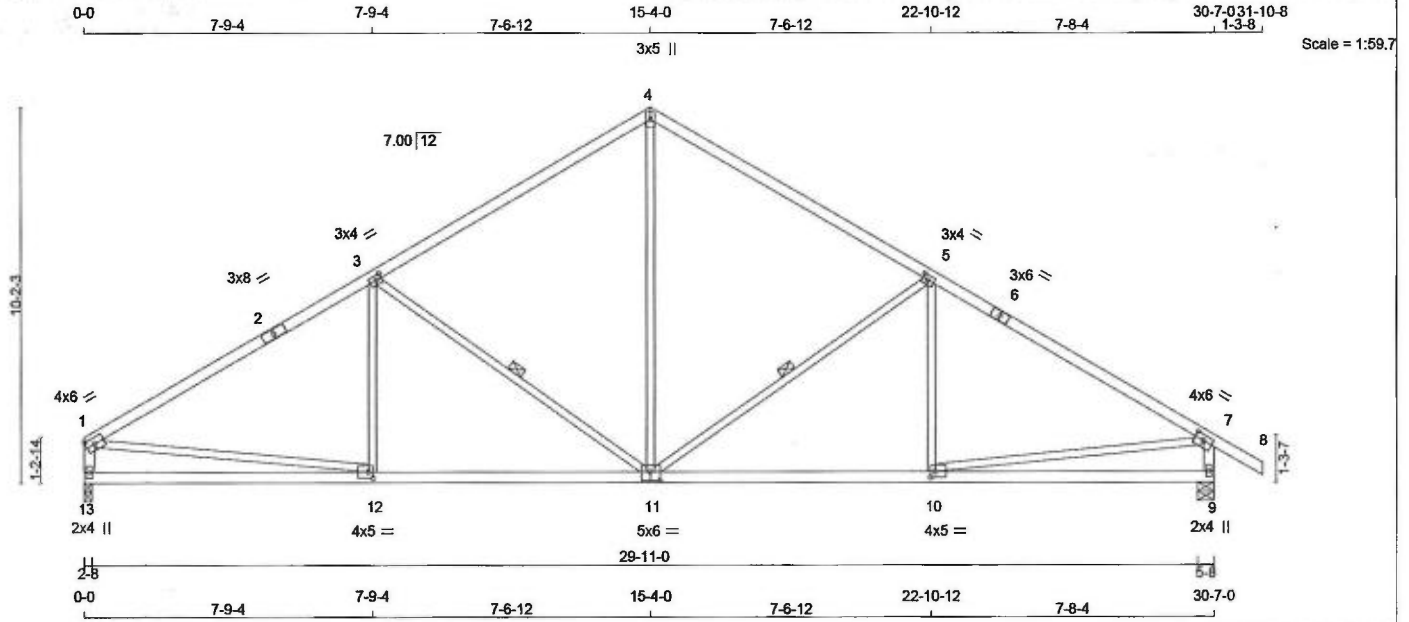
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.52 (7) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 7 X 122 = 855 lb [M][F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF	
2 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
13 - 1	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
13 - 11	2x4	DRY	No.2	SPF	
11 - 9	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
1	TMVW-t	MT20	4.0	6.0		Edge
2	TS-t	MT20	3.0	8.0		
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TTW+p	MT20	3.0	5.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.75
6	TS-t	MT20	3.0	6.0		
7	TMVW-t	MT20	4.0	6.0	1.75	3.00
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	4.0	5.0	2.00	1.50
11	BSVWVW-t	MT20	5.0	6.0	3.00	3.00
12	BMVW-t	MT20	4.0	5.0	2.00	1.50
13	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
13	1451	0	1451	0	0	2-8	2-8		
9	1556	0	1556	0	0	5-8	5-8		

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	1018	712 / 0	0 / 0	0 / 0	0 / 0	306 / 0	0 / 0
9	1090	776 / 0	0 / 0	0 / 0	0 / 0	314 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 9

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-11, 5-11. DBS = 20-0-0. CBF = 81 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	-1886 / 0	-77.4	-77.4 0.77 (1)	3.99	12-3	-48 / 113	0.04 (4)
2-3	-1886 / 0	-77.4	-77.4 0.77 (1)	3.99	3-11	-651 / 0	0.40 (1)
3-4	-1347 / 0	-77.4	-77.4 0.67 (1)	4.66	11-4	0 / 881	0.20 (1)
4-5	-1347 / 0	-77.4	-77.4 0.67 (1)	4.66	11-5	-637 / 0	0.39 (1)
5-6	-1872 / 0	-77.4	-77.4 0.75 (1)	4.03	10-5	-60 / 109	0.04 (4)
6-7	-1872 / 0	-77.4	-77.4 0.75 (1)	4.03	1-12	0 / 1672	0.38 (1)
7-8	0 / 27	-77.4	-77.4 0.10 (1)	10.00	10-7	0 / 1661	0.37 (1)
13-1	-1395 / 0	0.0	0.0 0.14 (1)	6.90			
9-7	-1501 / 0	0.0	0.0 0.15 (1)	6.70			
13-12	0 / 0	-17.5	-17.5 0.25 (4)	10.00			
12-11	0 / 1660	-17.5	-17.5 0.40 (1)	10.00			
11-10	0 / 1648	-17.5	-17.5 0.39 (1)	10.00			
10-9	0 / 0	-17.5	-17.5 0.25 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
DL = 3.0	PSF	
BOT CH.	LL = 0.0	PSF
DL = 7.0	PSF	
TOTAL LOAD = 33.3	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 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.02")
CALCULATED VERT. DEFL.(LL)= L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.77/1.00 (1-3:1), BC=0.40/1.00 (11-12:1), WB=0.40/1.00 (3-11:1), SSI=0.25/1.00 (1-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

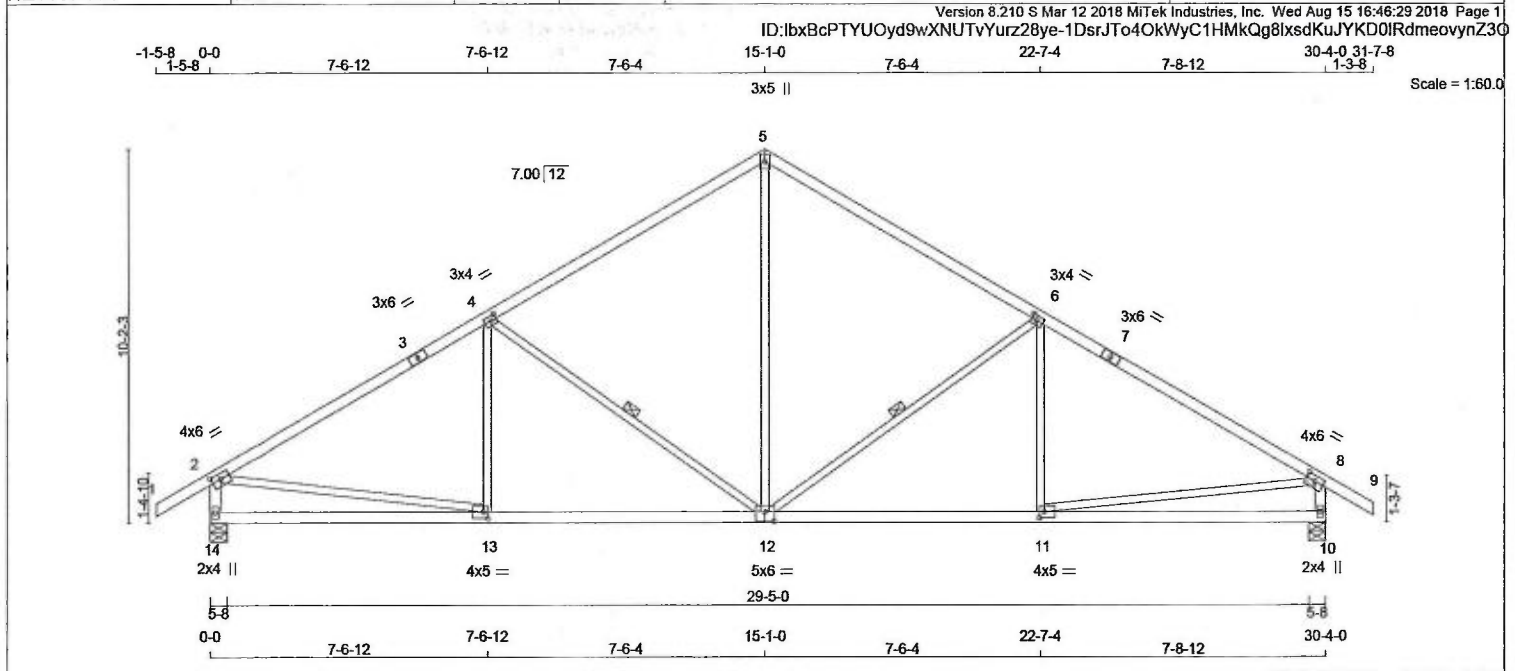
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (1) (INPUT = 0.90)
JSI METAL= 0.52 (7) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
1 - 3	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL = 23.3	PSF	
3 - 5	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	BOT CH.	DL = 0.0	PSF	
5 - 7	2x4	DRY	No.2	JT VERT	HORZ	DOWN	HORZ	DL	DL = 7.0	PSF	
7 - 9	2x4	DRY	No.2	14	1557	0	1557	0	TOTAL LOAD	= 33.3	PSF
14 - 2	2x4	DRY	No.2	10	1544	0	1544	0			
10 - 8	2x4	DRY	No.2								
14 - 12	2x4	DRY	No.2								
12 - 10	2x4	DRY	No.2								
ALL WEBS	2x3	DRY	No.2	UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
EXCEPT				1ST LCASE	MAX/MIN	COMPONENT REACTIONS		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
				JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
				14	1090	778 / 0	0 / 0	0 / 0	313 / 0	0 / 0	
				10	1081	770 / 0	0 / 0	0 / 0	312 / 0	0 / 0	

DRY: SEASONED LUMBER.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 10

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.04 FT.

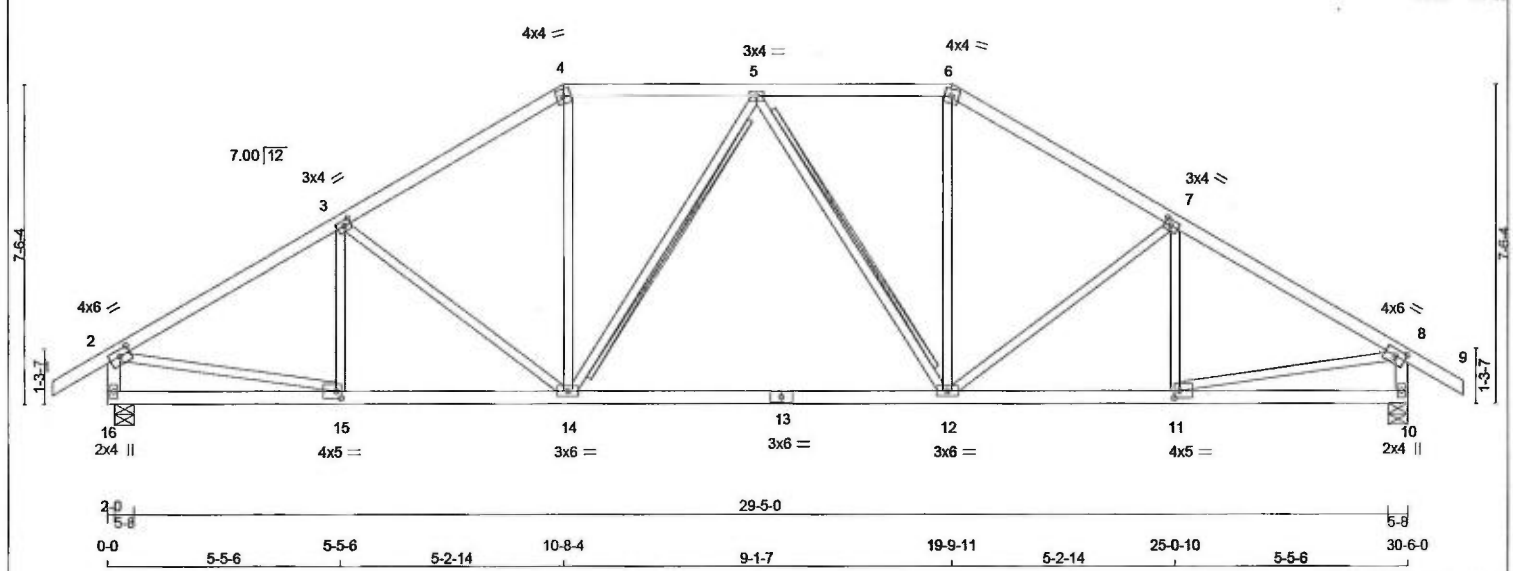
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.75	3.00
3	TS-t	MT20	3.0	6.0		
4	TMWW-t	MT20	3.0	4.0	1.50	1.75
5	TTW+p	MT20	3.0	5.0		
6	TMWW-t	MT20	3.0	4.0	1.50	1.75
7	TS-t	MT20	3.0	6.0		
8	TMVW-t	MT20	4.0	6.0	1.75	3.00
10	BMV1+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	5.0	2.00	1.50
12	BSWWW-t	MT20	5.0	6.0	3.00	3.00
13	BMWW-t	MT20	4.0	5.0	2.00	1.50
14	BMV1+p	MT20	2.0	4.0		

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 30	-77.4 -77.4	0.13 (1)	10-00	13-4	-81 / 101	0.04 (1)
2-3	-1822 / 0	-77.4 -77.4	0.72 (1)	4-11	4-12	-608 / 0	0.37 (1)
3-4	-1822 / 0	-77.4 -77.4	0.72 (1)	4-11	12-5	0 / 861	0.19 (1)
4-5	-1325 / 0	-77.4 -77.4	0.65 (1)	4-74	12-6	-639 / 0	0.39 (1)
5-6	-1326 / 0	-77.4 -77.4	0.66 (1)	4-71	11-6	-56 / 110	0.04 (4)
6-7	-1851 / 0	-77.4 -77.4	0.75 (1)	4-04	2-13	0 / 1621	0.36 (1)
7-8	-1851 / 0	-77.4 -77.4	0.75 (1)	4-04	11-8	0 / 1642	0.37 (1)
8-9	0 / 27	-77.4 -77.4	0.10 (1)	10-00			
14-2	-1503 / 0	0.0	0.0	15 (1)	6.70		
10-8	-1469 / 0	0.0	0.0	15 (1)	6.72		
14-13	0 / 0	-17.5 -17.5	0.24 (4)	10.00			
13-12	0 / 1605	-17.5 -17.5	0.38 (1)	10.00			
12-11	0 / 1630	-17.5 -17.5	0.39 (1)	10.00			
11-10	0 / 0	-17.5 -17.5	0.25 (4)	10.00			

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Wed Aug 15 16:46:30 2018 Page 1
ID:lbxBcPTYUOyd9wXNUTvYurz28ye-VPQDXppi92epqBsYH8CNH8PuZlfo3hWugHwBKMynZ3N
Scale = 1:51.8



TOTAL WEIGHT = 129 [M/F]

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED	MAXIMUM FACTORED
1 - 4	2x4	DRY	No.2	SPF	FACTORED	GROSS REACTION	GROSS REACTION
4 - 6	2x4	DRY	No.2	SPF	JT	VERT	HORZ
6 - 9	2x4	DRY	No.2	SPF	16	1552	0
16 - 2	2x4	DRY	No.2	SPF	10	1552	0
10 - 8	2x4	DRY	No.2	SPF			
16 - 13	2x4	DRY	No.2	SPF			
13 - 10	2x4	DRY	No.2	SPF			

ALL WEBS EXCEPT				UNFACTORED REACTIONS			
2x3	DRY	No.2	SPF	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	
				JT	COMBINED	SNOW	LIVE
				16	1087	774/0	0/0
				10	1087	774/0	0/0

DRY: SEASONED LUMBER.

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 10

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT 5-14, 5-12

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	UNBRACED LENGTH (FR-TO)
1-2	0/27	-77.4	-77.4 0.10 (1)	10.00	15-3	-205/16	0.06 (1)
2-3	-1860/0	-77.4	-77.4 0.34 (1)	4.60	3-14	-287/0	0.24 (1)
3-4	-1648/0	-77.4	-77.4 0.32 (1)	4.85	14-4	0/528	0.12 (1)
4-5	-1409/0	-77.4	-77.4 0.22 (1)	5.27	14-5	-252/0	0.14 (1)
5-6	-1409/0	-77.4	-77.4 0.22 (1)	5.27	5-12	-251/0	0.14 (1)
6-7	-1649/0	-77.4	-77.4 0.32 (1)	4.85	12-6	0/528	0.12 (1)
7-8	-1861/0	-77.4	-77.4 0.34 (1)	4.60	12-7	-288/0	0.24 (1)
8-9	0/27	-77.4	-77.4 0.10 (1)	10.00	11-7	-205/16	0.06 (1)
16-2	-1509/0	0.0	0.0 0.15 (1)	6.68	2-15	0/1653	0.37 (1)
10-8	-1509/0	0.0	0.0 0.15 (1)	6.68	11-8	0/1654	0.37 (1)
16-15	0/0	-17.5	-17.5 0.11 (4)	10.00			
15-14	0/1628	-17.5	-17.5 0.39 (1)	10.00			
14-13	0/1541	-17.5	-17.5 0.37 (1)	10.00			
13-12	0/1541	-17.5	-17.5 0.37 (1)	10.00			
12-11	0/1628	-17.5	-17.5 0.39 (1)	10.00			
11-10	0/0	-17.5	-17.5 0.11 (4)	10.00			

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

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

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.02")
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL)= L/999 (0.22")

CSI: TC=0.34/1.00 (7-8:1), BC=0.39/1.00 (11-12:1), WB=0.37/1.00 (8-11:1), SSI=0.17/1.00 (7-8:1)

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 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

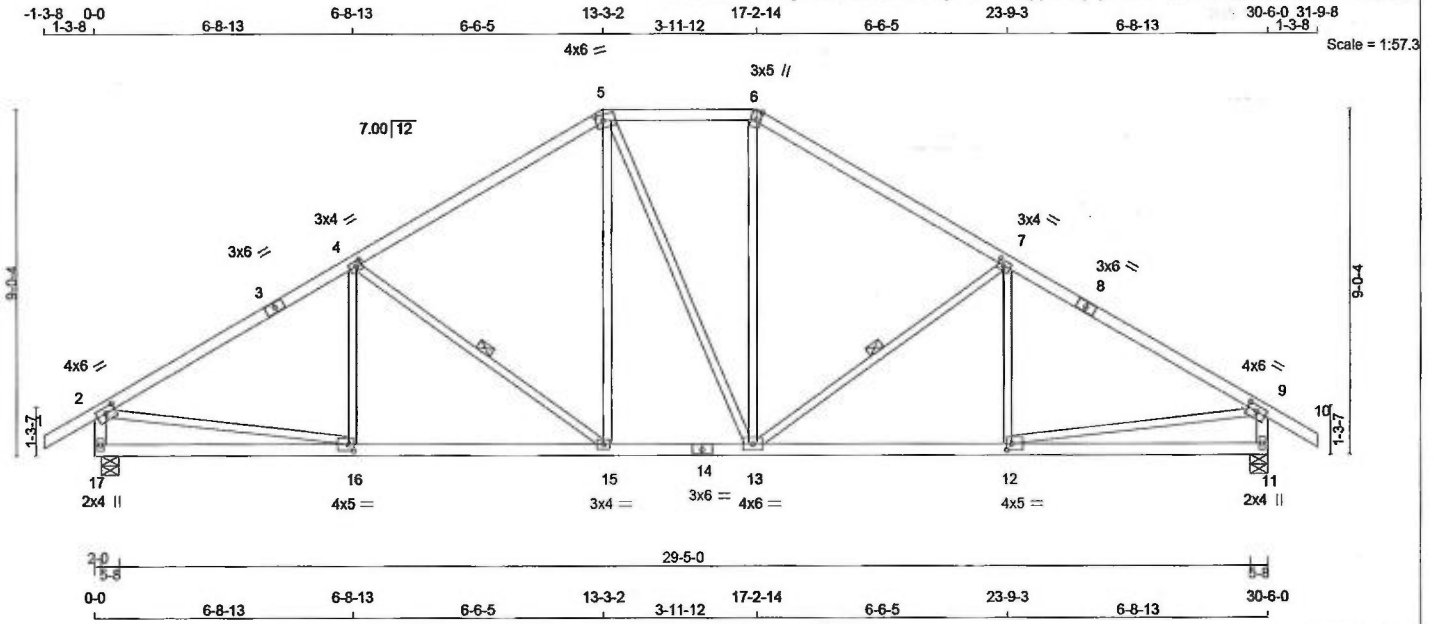
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (15) (INPUT = 0.90)
JSI METAL= 0.56 (13) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 132 lb [M]F

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 10	2x4	DRY	No.2	SPF
17 - 2	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
17 - 14	2x4	DRY	No.2	SPF
14 - 11	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
1	TMVW-I	MT20	4.0	6.0	1.75	3.00
2	TS-I	MT20	3.0	6.0		
3	TMVW-I	MT20	3.0	4.0	1.50	1.75
4	TTWW-m	MT20	4.0	6.0	1.75	2.25
5	TTW+m	MT20	3.0	5.0	2.75	1.25
6	TMVW-I	MT20	3.0	4.0	1.50	1.75
7	TS-I	MT20	3.0	6.0		
8	TMVW-I	MT20	4.0	6.0	1.75	3.00
9	BMV1+p	MT20	2.0	4.0		
12	BMVW-I	MT20	4.0	5.0	2.00	1.50
13	BMVW-I	MT20	4.0	6.0		
14	BS-I	MT20	3.0	6.0		
15	BMVW-I	MT20	3.0	4.0		
16	BMVW-I	MT20	4.0	5.0	2.00	1.50
17	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
17	1552	0	1552	0	0	5-8	5-8		
11	1552	0	1552	0	0	5-8	5-8		

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
17	1087	774 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0
11	1087	774 / 0	0 / 0	0 / 0	0 / 0	313 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17, 11

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-15, 7-13. DBS = 20-0-0. CBF = 63 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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. LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 27	-77.4 -77.4	0.10 (1)	10.00	16-4	-105 / 83	0.04 (1)
2-3	-1877 / 0	-77.4 -77.4	0.55 (1)	4.33	4-15	-502 / 0	0.23 (1)
3-4	-1877 / 0	-77.4 -77.4	0.55 (1)	4.33	15-5	0 / 382	0.09 (1)
4-5	-1473 / 0	-77.4 -77.4	0.49 (1)	4.82	5-13	0 / 2	0.00 (1)
5-6	-1249 / 0	-77.4 -77.4	0.17 (1)	5.57	13-6	0 / 385	0.09 (1)
6-7	-1474 / 0	-77.4 -77.4	0.49 (1)	4.82	13-7	-501 / 0	0.23 (1)
7-8	-1877 / 0	-77.4 -77.4	0.55 (1)	4.33	12-7	-106 / 82	0.04 (1)
8-9	-1877 / 0	-77.4 -77.4	0.55 (1)	4.33	2-16	0 / 1665	0.37 (1)
9-10	0 / 27	-77.4 -77.4	0.10 (1)	10.00	12-9	0 / 1665	0.37 (1)
17-2	-1504 / 0	0.0	0.0	15 (1)			
11-9	-1504 / 0	0.0	0.0	15 (1)			
17-16	0 / 0	-17.5 -17.5	0.20 (4)	10.00			
16-15	0 / 1648	-17.5 -17.5	0.36 (1)	10.00			
15-14	0 / 1248	-17.5 -17.5	0.26 (1)	10.00			
14-13	0 / 1248	-17.5 -17.5	0.26 (1)	10.00			
13-12	0 / 1648	-17.5 -17.5	0.36 (1)	10.00			
12-11	0 / 0	-17.5 -17.5	0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
DL = 3.0	PSF	
BOT CH.	LL = 0.0	PSF
DL = 7.0	PSF	
TOTAL LOAD =	33.3	PSF

SPACING = 24.0 IN./C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.02")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (1.02")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.16")

CSI: TC=0.55/1.00 (7-9:1), BC=0.36/1.00 (15-16:1), WB=0.37/1.00 (9-12:1), SSI=0.22/1.00 (7-9:1)

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 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)
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

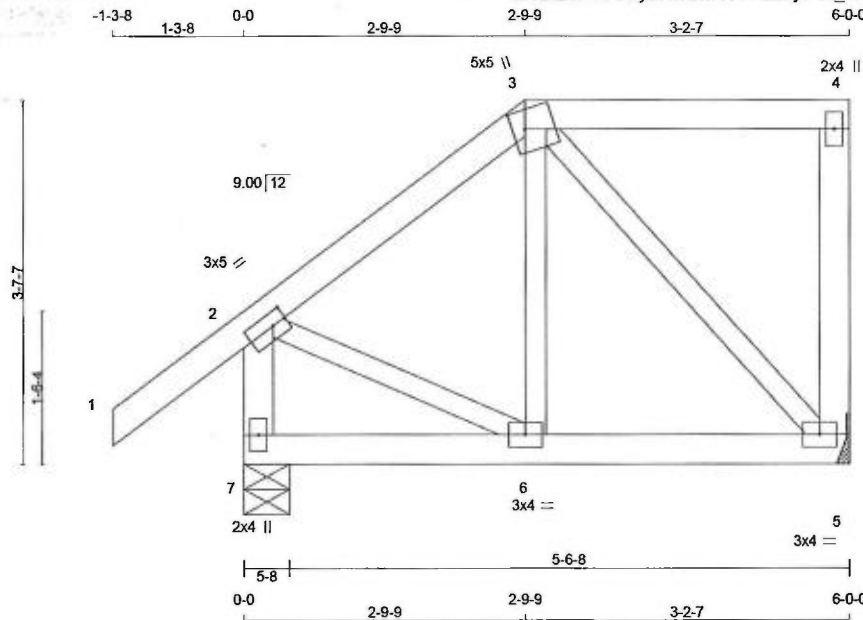
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.51 (9) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





Scale = 1:21.9

TOTAL WEIGHT = 29 lb

LUMBER

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF
7 - 2	2x4	DRY	No.2	SPF
7 - 5	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
2	TMVW-1	MT20	3.0	5.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMV+p	MT20	2.0	4.0		
5	BMVW1-t	MT20	3.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	285	0	285	0	MECHANICAL	5-8
7	391	0	391	0	5-8	5-8

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX / MIN COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD	SOIL
		SNOW	LIVE				
5	200	140 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
7	272	204 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	UNBRAC LENGTH	FR-TO			
1-2	0 / 32	-77.4 -77.4 0.11 (1)	10.00	6-3	0 / 54	0.02 (4)	
2-3	-168 / 0	-77.4 -77.4 0.10 (1)	6.25	3-5	-193 / 0	0.06 (1)	
3-4	0 / 0	-77.4 -77.4 0.14 (1)	10.00	2-6	0 / 145	0.03 (1)	
5-4	-124 / 0	0.0 0.0 0.03 (1)	7.81				
7-2	-371 / 0	0.0 0.0 0.04 (1)	7.81				
7-6	0 / 0	-17.5 -17.5 0.04 (4)	10.00				
6-5	0 / 134	-17.5 -17.5 0.05 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
	DL = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 33.3	PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 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 (0.00")

CSI: TC=0.14/1.00 (3-4:1), BC=0.05/1.00 (5-6:4), WB=0.06/1.00 (3-5:1), SSI=0.10/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

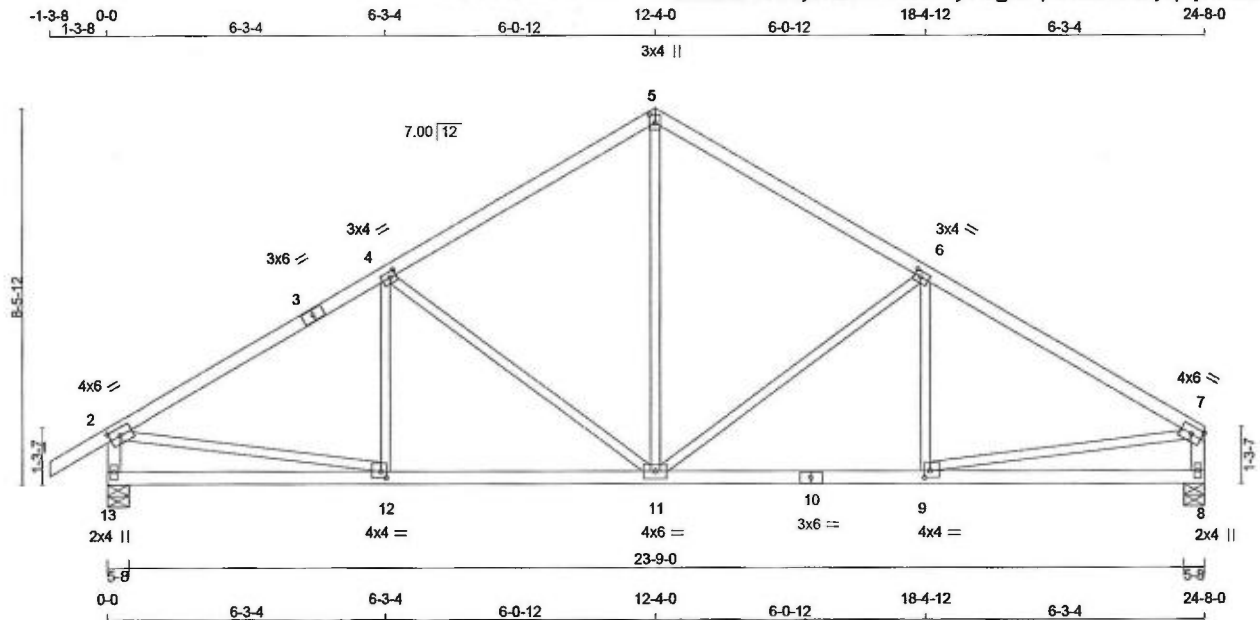
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 2 X 100 = 200 lb (M/F)

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
5 - 7	2x4	DRY	No.2	SPF	
13 - 2	2x4	DRY	No.2	SPF	
8 - 7	2x4	DRY	No.2	SPF	
13 - 10	2x4	DRY	No.2	SPF	
10 - 8	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
2	TMVW-I	MT20	4.0	6.0	2.00	3.00
3	TS-I	MT20	3.0	6.0		
4	TMWW-I	MT20	3.0	4.0	1.50	1.75
5	TTW+p	MT20	3.0	4.0	2.25	1.50
6	TMWW-I	MT20	3.0	4.0	1.50	1.75
7	TMVW-I	MT20	4.0	6.0		Edge
8	BMV1+p	MT20	2.0	4.0		
9	BMWW-I	MT20	4.0	4.0	1.75	1.50
10	BS-I	MT20	3.0	6.0		
11	BMWW-I	MT20	4.0	6.0		
12	BMWW-I	MT20	4.0	4.0	1.75	1.50
13	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	IN-SX
13	1276	0	1276	0	0	0	5-8	5-8	5-8
8	1170	0	1170	0	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	893	638 / 0	0 / 0	0 / 0	0 / 0	255 / 0	0 / 0
8	821	574 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.96 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	FR-TO
1-2	0 / 27	-77.4	-77.4 0.10 (1)	10.00	12-4	-79 / 79	0.03 (1)
2-3	-1443 / 0	-77.4	-77.4 0.43 (1)	4.96	4-11	-480 / 0	0.56 (1)
3-4	-1443 / 0	-77.4	-77.4 0.43 (1)	4.96	11-5	0 / 686	0.15 (1)
4-5	-1059 / 0	-77.4	-77.4 0.40 (1)	5.62	11-6	-480 / 0	0.56 (1)
5-6	-1059 / 0	-77.4	-77.4 0.40 (1)	5.62	9-6	-78 / 79	0.03 (1)
6-7	-1443 / 0	-77.4	-77.4 0.43 (1)	4.96	2-12	0 / 1286	0.29 (1)
13-2	-1230 / 0	0.0	0.0 0.13 (1)	7.23	9-7	0 / 1286	0.29 (1)
8-7	-1124 / 0	0.0	0.0 0.11 (1)	7.48			
13-12	0 / 0	-17.5	-17.5 0.16 (4)	10.00			
12-11	0 / 1271	-17.5	-17.5 0.28 (1)	10.00			
11-10	0 / 1271	-17.5	-17.5 0.28 (1)	10.00			
10-9	0 / 1271	-17.5	-17.5 0.28 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.16 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 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 088-09
- TPIC 2011

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.82")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.43/1.00 (6-7:1), BC=0.28/1.00 (9-11:1), WB=0.56/1.00 (6-11:1), SSI=0.20/1.00 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

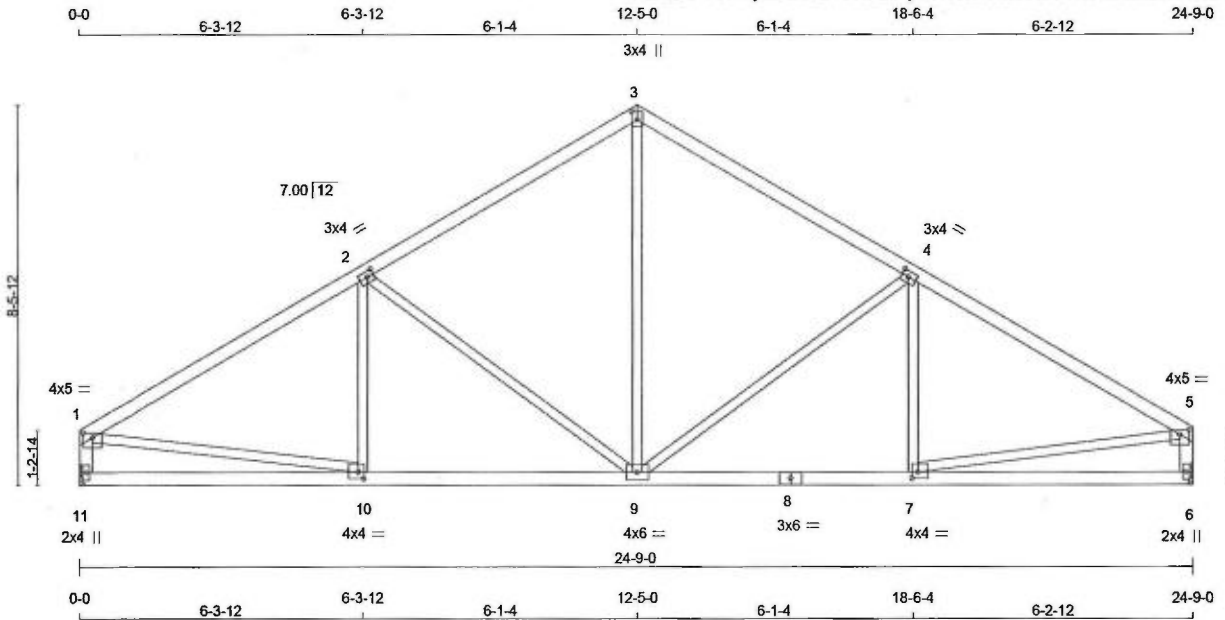
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (5) (INPUT = 0.90)
JSI METAL= 0.48 (12) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 98 lb
(M)F

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
11 - 1	2x4	DRY	No.2
6 - 5	2x4	DRY	No.2
11 - 8	2x4	DRY	No.2
8 - 6	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	5.0	1.25	2.50
2	TMWW-l	MT20	3.0	4.0	1.50	1.75
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMWW-l	MT20	3.0	4.0	1.50	1.75
5	TMVW-p	MT20	4.0	5.0	1.25	2.50
6	BMV1+p	MT20	2.0	4.0		
7	BMWW-l	MT20	4.0	4.0	1.75	1.50
8	BS-l	MT20	3.0	6.0		
9	BMWW-l	MT20	4.0	6.0		
10	BMWW-l	MT20	4.0	4.0	1.75	1.50
11	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQD
		GROSS REACTION	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
11	1174	0	1174	0	0
6	1174	0	1174	0	0

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 11, 6 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
6	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.92 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-1464 / 0	-77.4 -77.4 0.44 (1)	4.92	10-2	-69 / 83	0.03 (4)	
2-3	-1067 / 0	-77.4 -77.4 0.40 (1)	5.59	2-9	-493 / 0	0.58 (1)	
3-4	-1066 / 0	-77.4 -77.4 0.40 (1)	5.60	9-3	0 / 690	0.16 (1)	
4-5	-1451 / 0	-77.4 -77.4 0.43 (1)	4.95	9-4	-479 / 0	0.57 (1)	
11-1	-1128 / 0	0.0 0.0 0.11 (1)	7.48	7-4	-81 / 79	0.03 (1)	
6-5	-1128 / 0	0.0 0.0 0.11 (1)	7.48	1-10	0 / 1303	0.29 (1)	
11-10	0 / 0	-17.5 -17.5 0.16 (4)	10.00	7-5	0 / 1293	0.29 (1)	
10-9	0 / 1289	-17.5 -17.5 0.29 (1)	10.00				
9-8	0 / 1278	-17.5 -17.5 0.28 (1)	10.00				
8-7	0 / 1278	-17.5 -17.5 0.28 (1)	10.00				
7-6	0 / 0	-17.5 -17.5 0.16 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

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

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

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.44/1.00 (1-2:1), BC=0.29/1.00 (9-10:1),
WB=0.58/1.00 (2-9:1), SSI=0.20/1.00 (1-2:1)

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

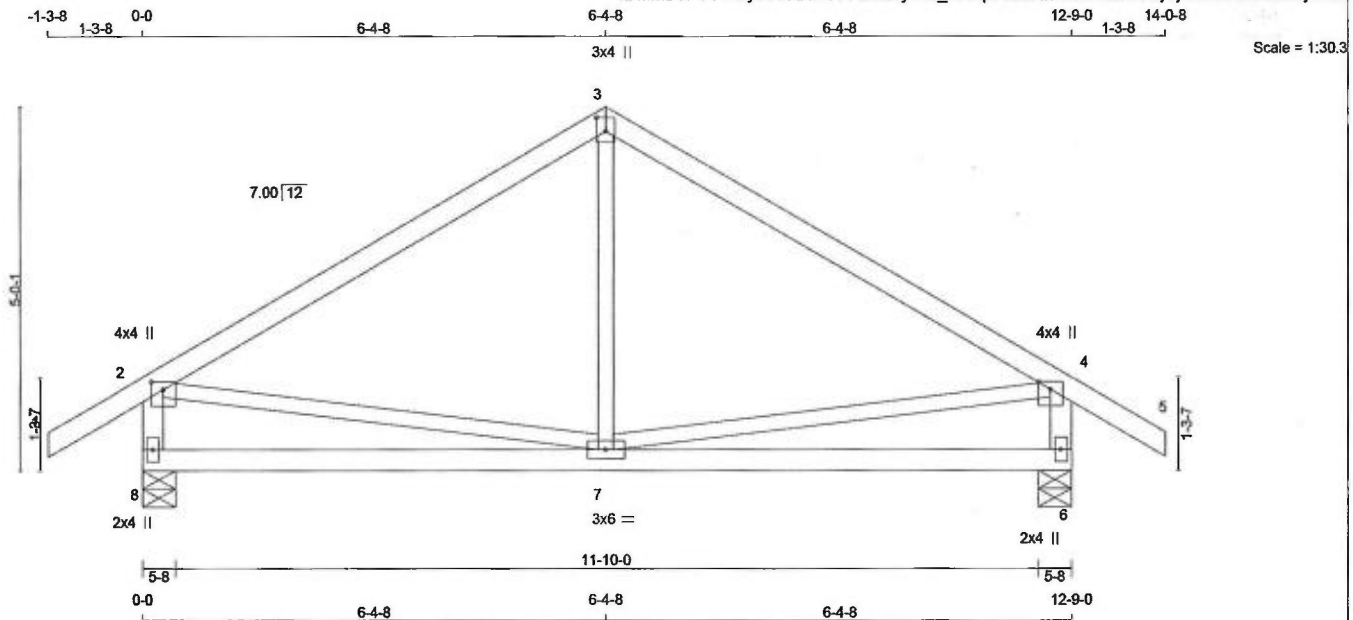
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (1) (INPUT = 0.90)
JSI METAL= 0.48 (10) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 50 lb (M) [F]

LUMBER	CHORDS	SIZE	DRY	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
8 - 2	2x4	DRY	No.2	SPF	
6 - 4	2x4	DRY	No.2	SPF	
8 - 6	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
1	TMVW+p	MT20	4.0	4.0	1.25	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW+p	MT20	4.0	4.0	1.25	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		

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

BEARINGS			FACTORED		MAXIMUM FACTORED		INPUT	REQD
	GROSS REACTION		GROSS REACTION			BRG	BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8	710	0	710	0	0	5-8	5-8	
6	710	0	710	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	496	360 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0
6	496	360 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 6

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 27	-77.4 -77.4	0.10 (1)	10.00	7-3	0 / 112	0.04 (4)
2-3	-496 / 0	-77.4 -77.4	0.41 (1)	6.25	2-7	0 / 434	0.10 (1)
3-4	-496 / 0	-77.4 -77.4	0.41 (1)	6.25	7-4	0 / 434	0.10 (1)
4-5	0 / 27	-77.4 -77.4	0.10 (1)	10.00			
8-2	-668 / 0	0.0 0.0	0.07 (1)	7.81			
6-4	-668 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.20 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
	DL = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.0	PSF
TOTAL LOAD	= 33.3	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 088-09
- TPIC 2011

(55% OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.43")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.43")
CALCULATED VERT. DEFL.(TL)= L/999 (0.04")

CSI: TC=0.41/1.00 (3-4:1), BC=0.20/1.00 (7-8:4), WB=0.10/1.00 (2-7:1), SSI=0.17/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

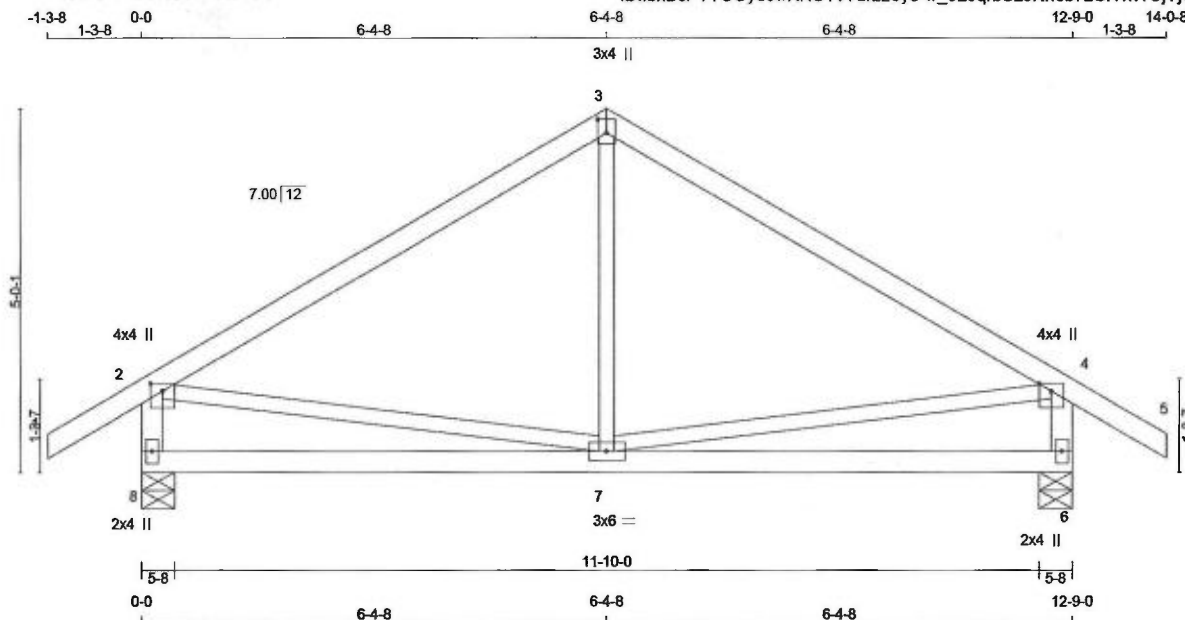
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 50 lb (M/F)

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
8 - 2	2x4	DRY	No.2	SPF	
6 - 4	2x4	DRY	No.2	SPF	
8 - 6	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
2	TMVW+p	MT20	4.0	4.0	1.25	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW+p	MT20	4.0	4.0	1.25	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
8	710	0	710	0	0	0	5-8	5-8	5-8
6	710	0	710	0	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	496	360 / 0	0 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0
6	496	360 / 0	0 / 0	0 / 0	0 / 0	0 / 0	136 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 6

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
1-2	0 / 27	-77.4 -77.4	0.10 (1)	10.00	7-3	0 / 112	0.04 (4)
2-3	-496 / 0	-77.4 -77.4	0.41 (1)	6.25	2-7	0 / 434	0.10 (1)
3-4	-496 / 0	-77.4 -77.4	0.41 (1)	6.25	7-4	0 / 434	0.10 (1)
4-5	0 / 27	-77.4 -77.4	0.10 (1)	10.00			
8-2	-668 / 0	0.0 0.0	0.07 (1)	7.81			
6-4	-668 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.20 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./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 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.43")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.43")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.41/1.00 (3-4:1), BC=0.20/1.00 (7-8:4), WB=0.10/1.00 (2-7:1), SSI=0.17/1.00 (3-4:1)

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= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



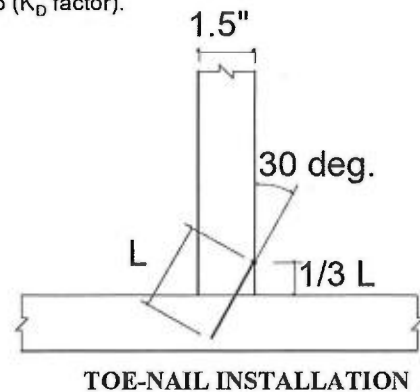
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON	3.00	0.144	132	147
WIRE	3.25	0.144	132	147
	3.50	0.160	159	177

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2019.



Nail type	Common wire	Common spiral	Common wire
Nail dia. (in)	0.160	0.152	0.144
	(3.5" nail)		(3" and 3.25" nail)
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS		
2X4 SPF	2	2	3
2X4 D. Fir	2	2	2
2X6 SPF	4	4	4
2X6 D. Fir	3	3	3



MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

PEO
Certificate No. 10889485



April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

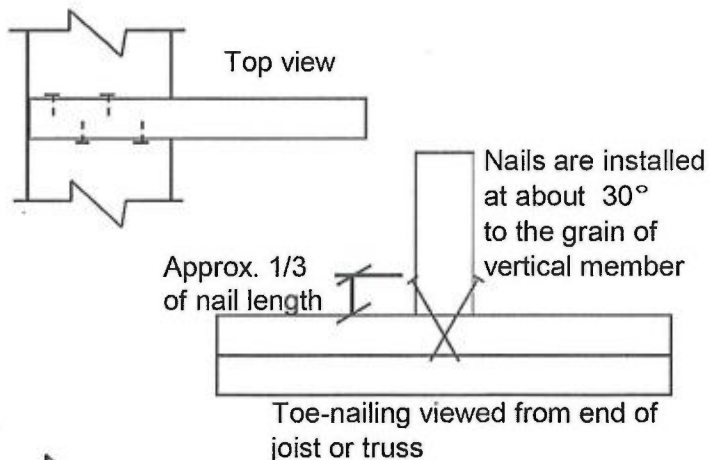
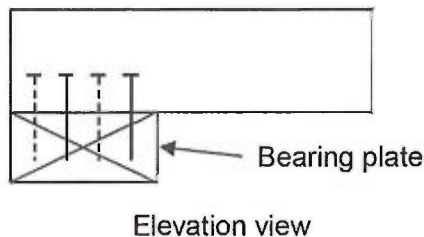
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

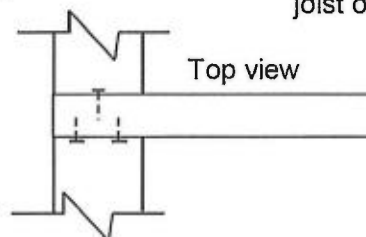
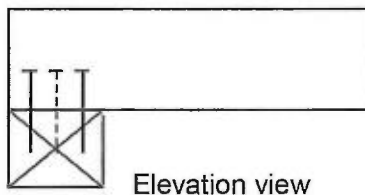
NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind or earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-09, section 10.9.5
9. This design is not valid after April 30, 2019

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



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April 26, 2017