



TOWN OF MILTON
PLANNING AND DEVELOPMENT
BUILDING PERMIT:17-5052

BUILDING: REVIEWED

SCOTT SHERRIFFS

APR 20, 2017

PLANS EXAMINER

DATE

Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relieves the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province of Ontario, By-laws of the Region of Halton and Town of Milton

RECEIVED
TOWN OF MILTON

MAR 29, 2017

17-5052

BUILDING DIVISION



TOP OF ALL PORCH BEAMS
AT 8' 7 1/4" A.F.F.

UNDERSIDE OF SOFFIT
FOR PORCHES AT
8' 6" A.F.F.

GARAGE WALL PLATES
AT 9' 1 2/16" A.F.F.

PARTY WALLS TO BE
FRAMED ON SITE A.P.P.

HANGER LEGEND:

▼ LUS24
● HGUS26

■ LJS26DS
× HGUS26-2

CONVENTIONAL FRAMING BY OTHERS

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
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES
TO BE 2x4 S.P.F. @ 24"O/C WITH A 2x4 VERTICAL
POST TO THE TRUSS UNDERNEATH EACH CROSS
POINT. VERTICAL POST LONGER THAN 6' TO HAVE
LATERAL BRACING SO THAT THE DISTANCE BETWEEN
END POINT AND BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'.

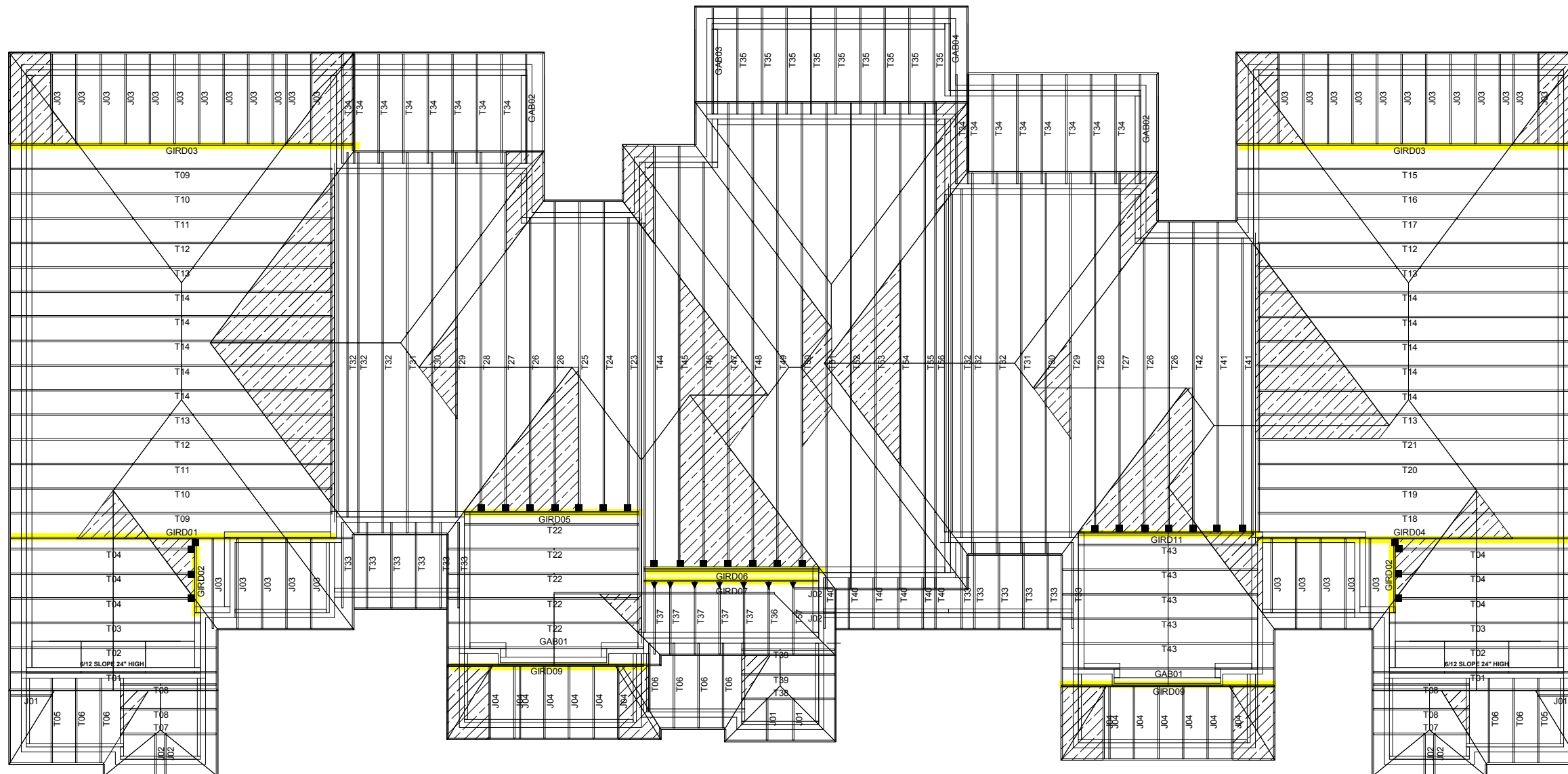
Model: **BLOCK 332**

Customer: GREENPARK

Project: LECCO RIDGE

Location: MILTON

Date: 3/10/2017 Drawn by: BB



IVY-6E
EL 3
332-1

IVY-1
EL 3
332-2

IVY-3
EL 3
332-3

IVY-1
EL 3
332-4

IVY-6E
EL 3
332-5

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

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.

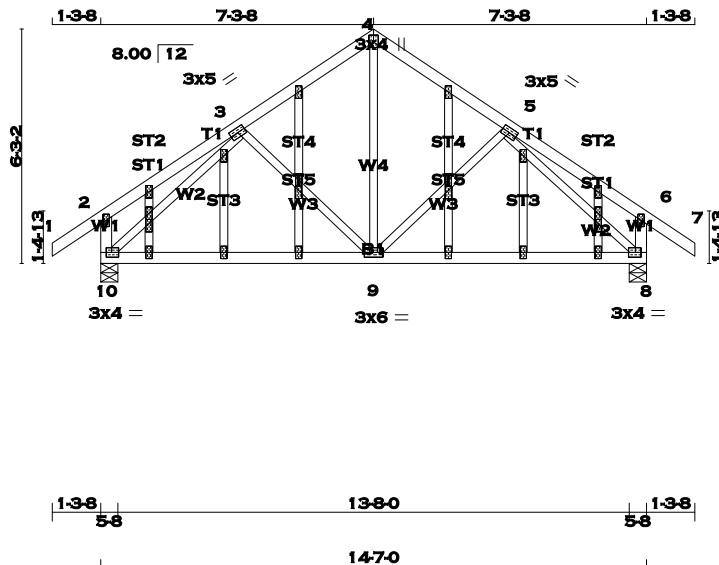
DIMENSIONS

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

WHERE CONTINUOUS LATERAL BRACING IS REQUIRED FOR WEBS BUT CAN NOT BE PROVIDED SUBSTITUTE EACH WITH ONE SPF #2 2" X 4" T-BRACE COVERING 90% OF WEB LENGTH AND FASTENED TO EDGE OF WEB USING 3 1/4" SPIRAL NAILS @ 6" C/C

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01/29/2013



TOTAL WEIGHT = 2 X 77 = 153 lb
[M][F]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
10 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
10 - 8	2x4	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.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMWW-t	MT20	3.0	5.0	
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	TMWW-t	MT20	3.0	5.0	
6	TMV+p	MT20	2.0	4.0	
8	BMVW1-t	MT20	3.0	4.0	1.50 1.75
9	BMVW1-t	MT20	3.0	6.0	
10	BMVW1-t	MT20	3.0	4.0	1.50 1.75
11, 16, 21, 26					
11	NP+w	MT20	2.0	4.0	1.50 1.00
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26					
11	NP+w	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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
10	798	0	798	0	0	5-8	5-8
8	798	0	798	0	0	5-8	5-8

UNFACTORED REACTIONS							
	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
JT							
10	558	403 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0
8	558	403 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0

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

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 (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	9-4	0 / 371	0.08 (1)
2-3	0 / 18	-77.3 -77.3	0.16 (1)	10.00	9-5	-155 / 5	0.07 (1)
3-4	-550 / 0	-77.3 -77.3	0.13 (1)	6.25	3-9	-155 / 5	0.07 (1)
4-5	-550 / 0	-77.3 -77.3	0.13 (1)	6.25	10-3	-770 / 0	0.31 (1)
5-6	0 / 18	-77.3 -77.3	0.16 (1)	10.00	5-8	-770 / 0	0.31 (1)
6-7	0 / 29	-77.3 -77.3	0.10 (1)	10.00			
10-2	-215 / 0	0.0 0.0	0.02 (1)	7.81			
8-6	-215 / 0	0.0 0.0	0.02 (1)	7.81			
10-9	0 / 554	-17.5 -17.5	0.30 (4)	10.00			
9-8	0 / 554	-17.5 -17.5	0.30 (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 (0.49")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.16 (5-6:1) , BC=0.30 (8-9:4) , WB=0.31 (5-8:1) , SSI=0.11 (4-5:1)

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

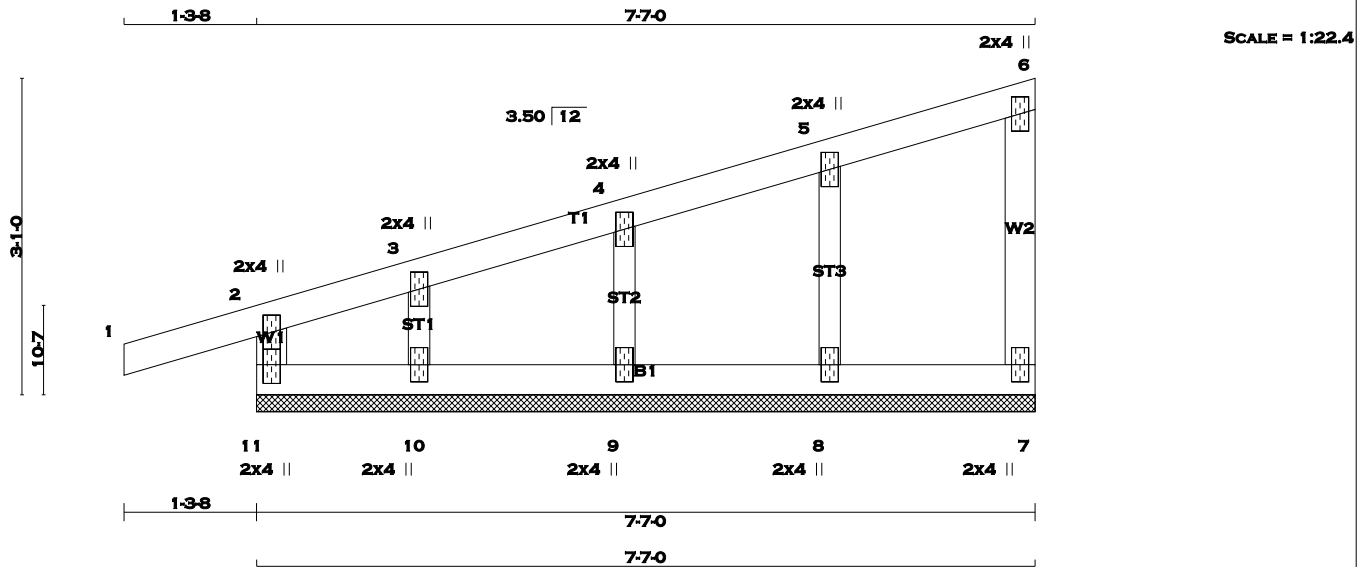
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (8) (INPUT = 0.90)
JSI METAL= 0.22 (3) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 26 = 52 lb [M]

LUMBER					DESCR.				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		SPF				
11 - 2	2x4	DRY	No.2		SPF				
1 - 6	2x4	DRY	No.2		SPF				
7 - 6	2x4	DRY	No.2		SPF				
11 - 7	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, 5						
3	TMW+w	MT20	2.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8, 9, 10						
8	BMW1+w	MT20	2.0	4.0		
11	BMV1+p	MT20	2.0	4.0	2.25	1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

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			
11-2	-195 / 0	0.0	0.0 0.03 (1)	7-8	-164 / 0	0.03 (1)	
1-2	0 / 14	-77.3	-77.3 0.10 (1)	9-4	-161 / 0	0.02 (1)	
2-3	-25 / 0	-77.3	-77.3 0.07 (1)	10-3	-100 / 0	0.01 (1)	
3-4	-10 / 0	-77.3	-77.3 0.04 (1)				
4-5	-8 / 0	-77.3	-77.3 0.04 (1)				
5-6	-8 / 0	-77.3	-77.3 0.04 (1)				
7-6	-69 / 0	0.0	0.0 0.01 (1)				
11-10	0 / 16	-17.5	-17.5 0.03 (1)				
10-9	0 / 12	-17.5	-17.5 0.01 (4)				
9-8	0 / 8	-17.5	-17.5 0.02 (4)				
8-7	0 / 5	-17.5	-17.5 0.02 (4)				

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

CSI: TC=0.10 (1-2:1), BC=0.03 (10-11:1), WB=0.03 (5-8:1), SSI=0.08 (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.

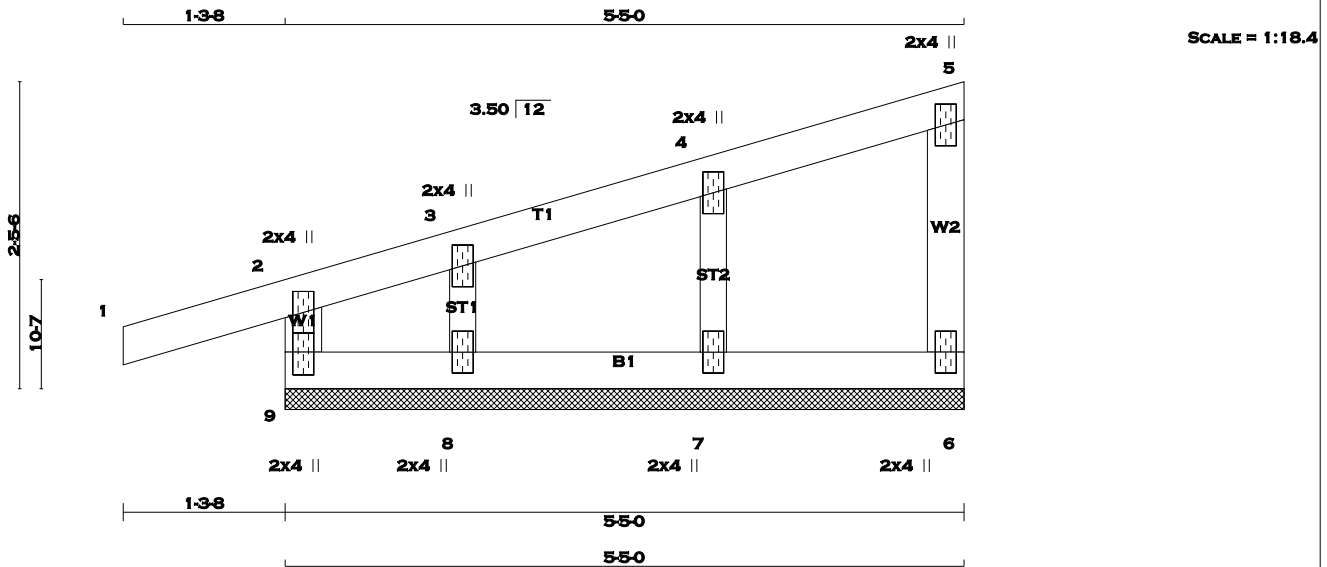
JSI GRIP= 0.11 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 18 lb [M]

LUMBER				
N. L. G. A. RULES	SIZE		LUMBER	DESCR.
CHORDS				
9 - 2	2x4	DRY	No.2	SPF
1 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	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	TMW+w	MT20	2.0	4.0		
4	TMW+w	MT20	2.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMV1+w	MT20	2.0	4.0		
8	BMV1+w	MT20	2.0	4.0		
9	BMV1+p	MT20	2.0	4.0	2.25	1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH (FT)	MAX. LC1 (LC)
FR-TO		FROM TO		FR-TO			
9-2	-192 / 0	0.0	0.0 0.03 (1)	7-8	-178 / 0	0.03 (1)	
1-2	0 / 14	-77.3	-77.3 0.10 (1)	8-3	-86 / 0	0.01 (1)	
2-3	-23 / 0	-77.3	-77.3 0.07 (1)				
3-4	-7 / 0	-77.3	-77.3 0.05 (1)				
4-5	-9 / 0	-77.3	-77.3 0.05 (1)				
6-5	-66 / 0	0.0	0.0 0.01 (1)				
9-8	0 / 14	-17.5	-17.5 0.03 (1)				
8-7	0 / 10	-17.5	-17.5 0.02 (4)				
7-6	0 / 5	-17.5	-17.5 0.02 (4)				

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

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- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
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- 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 (1-2:1) , BC=0.03 (8-9:1) , WB=0.03 (4-7:1) , SSI=0.08 (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.

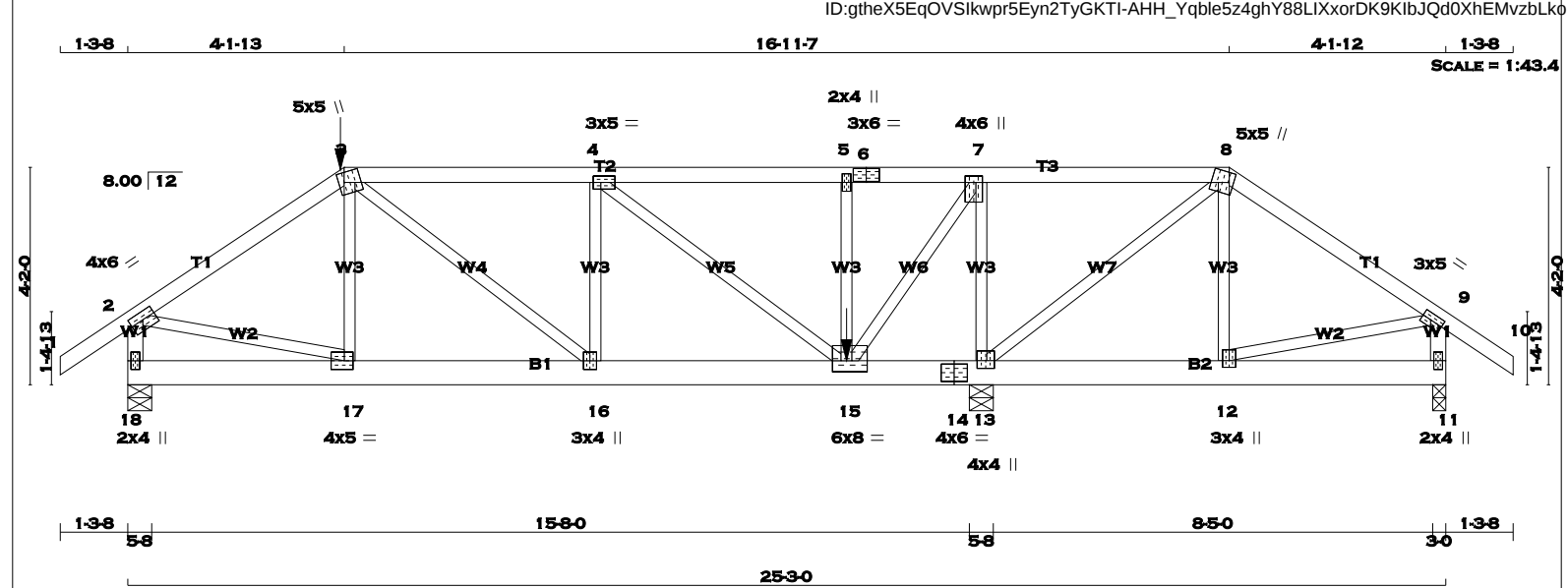
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)

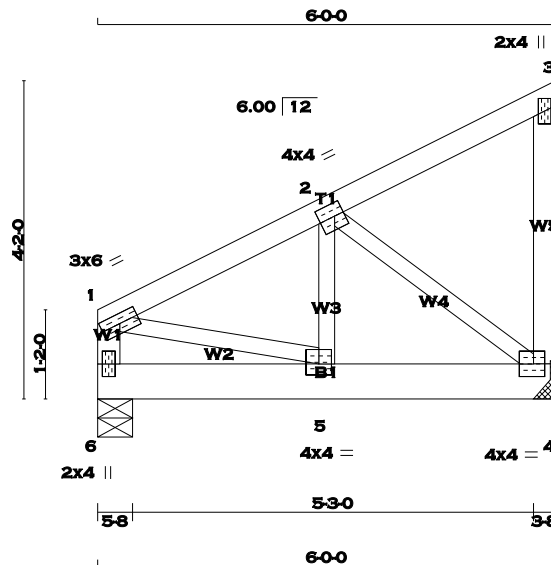


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TOTAL WEIGHT = 2 X 29 = 59 lb

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
1 - 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-t	MT20	3.0	6.0		
2	TMVW-t	MT20	4.0	4.0	2.00	1.50
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	4.0	2.00	1.75
5	BMVW-t	MT20	4.0	4.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
4	1085	0	1085	0	0	HANGER BY OTHERS	
6	1085	0	1085	0	0	MIN. SEAT SIZE: 3-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	761	533 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0
6	761	533 / 0	0 / 0	0 / 0	0 / 0	229 / 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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-923 / 0	-77.3	-77.3 0.11 (1)	5-2	0 / 773	0.19 (1)	
2-3	-10 / 0	-77.3	-77.3 0.10 (1)	6-25	-1047 / 0	0.26 (1)	
4-3	-93 / 0	0.0	0.0 0.02 (1)	7.81	1-5	0 / 862	0.21 (1)
6-1	-726 / 0	0.0	0.0 0.08 (1)	7.81			
6-5	0 / 0	-284.3	-284.3 0.17 (1)	10.00			
5-4	0 / 834	-284.3	-284.3 0.27 (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

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 13-8-8

END DISTANCE = 6-0-0

END SPAN CARRIED = 13-8-8

END WALL WIDTH = 5-8

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

(55 % OF 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 (0.01")

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

CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.11 (1-2:1), BC=0.27 (4-5:1), WB=0.26 (2-4:1), SSI=0.33 (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 (PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (2) (INPUT = 0.90)

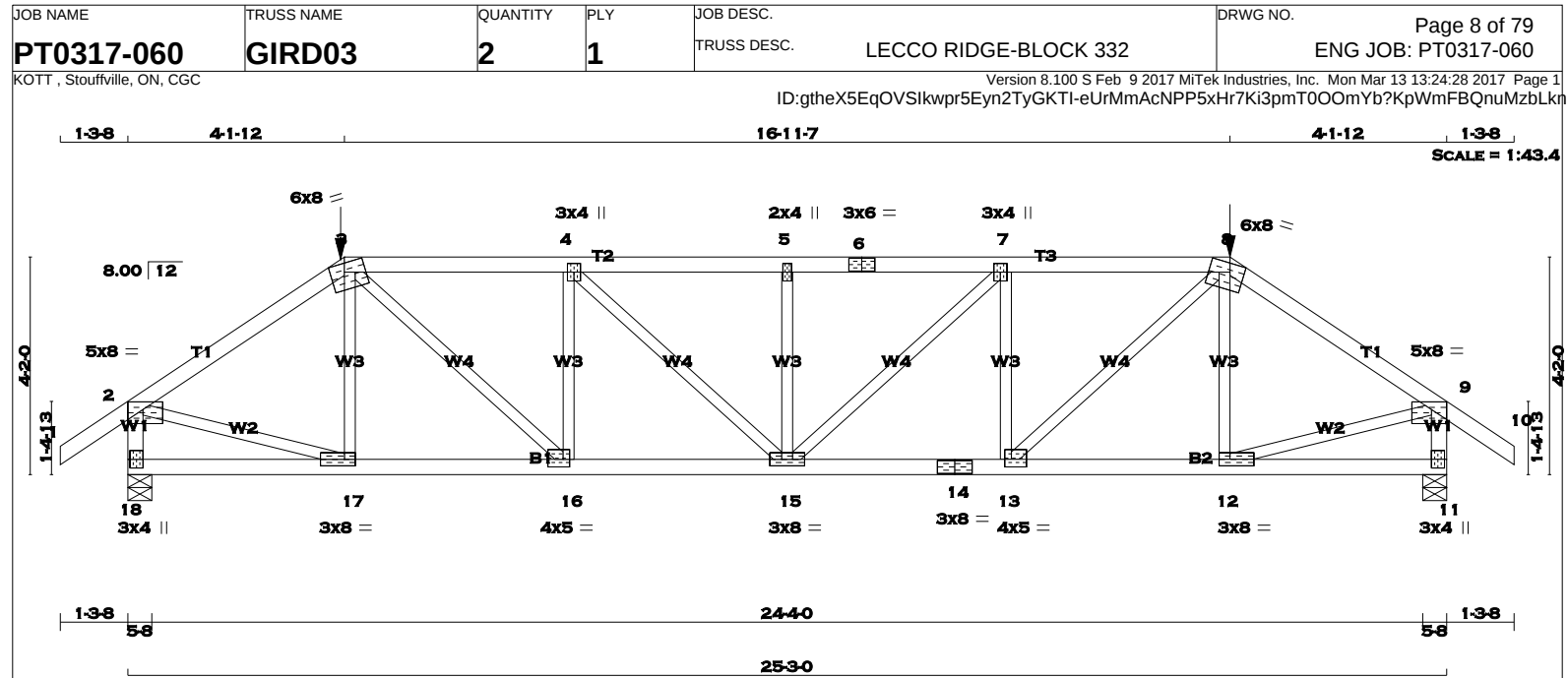
JSI METAL= 0.31 (5) (INPUT = 1.00)



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BUILDING DIVISION

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE 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 104 = 208 lb [M]

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 - 8	2x4	DRY	No.2	SPF
8 - 10	2x4	DRY	No.2	SPF
18 - 2	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
18 - 14	2x4	DRY	No.2	SPF
14 - 11	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-p	MT20	5.0	8.0	1.75	3.50
3	TTWW-m	MT20	6.0	8.0	2.00	3.25
4	TMVW-t	MT20	3.0	4.0		
5	TMVW-w	MT20	2.0	4.0		
6	TS-t	MT20	3.0	6.0		
7	TMVW-t	MT20	3.0	4.0		
8	TTWW-m	MT20	6.0	8.0	2.00	3.25
9	TMVW-p	MT20	5.0	8.0	1.75	3.50
11	BMV1+p	MT20	3.0	4.0	2.00	
12	BMVW-t	MT20	3.0	8.0	1.50	2.50
13	BMVW-t	MT20	4.0	5.0	1.75	1.50
14	BS-t	MT20	3.0	8.0		
15	BMVW-w	MT20	3.0	8.0		
16	BMVW-t	MT20	4.0	5.0	1.75	1.50
17	BMVW-t	MT20	3.0	8.0	1.50	2.50
18	BMV1+p	MT20	3.0	4.0	2.00	0.50

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 240.5 lbs FACTORED DOWN AT 21-1-4, AND 240.5 lbs FACTORED DOWN AT 4-1-12 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		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
18	2320	0	2320	0	0	5-8	5-8	5-8	5-8
11	2320	0	2320	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
18	1627	1146 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0
11	1627	1146 / 0	0 / 0	0 / 0	0 / 0	481 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.89 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		FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3 -77.3	0.11 (1)	10.00	17-3	-390 / 17	0.11 (1)
2-3	-2601 / 0	-77.3 -77.3	0.39 (1)	3.89	3-16	0 / 1753	0.43 (1)
3-4	-3453 / 0	-145.8 -145.8	0.63 (1)	3.10	16-4	-1040 / 0	0.29 (1)
4-5	-3830 / 0	-145.8 -145.8	0.67 (1)	2.89	4-15	0 / 514	0.13 (1)
5-6	-3830 / 0	-145.8 -145.8	0.67 (1)	2.89	15-5	-562 / 0	0.15 (1)
6-7	-3830 / 0	-145.8 -145.8	0.67 (1)	2.89	15-7	0 / 514	0.13 (1)
7-8	-3453 / 0	-145.8 -145.8	0.63 (1)	3.10	13-7	-1040 / 0	0.29 (1)
8-9	-2601 / 0	-77.3 -77.3	0.39 (1)	3.89	13-8	0 / 1753	0.43 (1)
9-10	0 / 29	-77.3 -77.3	0.11 (1)	10.00	12-8	-390 / 17	0.11 (1)
18-2	-2263 / 0	0.0 0.0	0.26 (1)	5.61	2-17	0 / 2229	0.55 (1)
11-9	-2263 / 0	0.0 0.0	0.26 (1)	5.61	12-9	0 / 2229	0.55 (1)
18-17	0 / 0	-33.0 -33.0	0.15 (4)	10.00			
17-16	0 / 2150	-33.0 -33.0	0.46 (1)	10.00			
16-15	0 / 3453	-33.0 -33.0	0.68 (1)	10.00			
15-14	0 / 3453	-33.0 -33.0	0.68 (1)	10.00			
14-13	0 / 3453	-33.0 -33.0	0.68 (1)	10.00			
13-12	0 / 2150	-33.0 -33.0	0.46 (1)	10.00			
12-11	0 / 0	-33.0 -33.0	0.15 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)						
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.
3	4-1-12	-241	-241	---	FRONT	VERT
8	21-1-4	-241	-241	---	FRONT	VERT

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 6.00/12

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-1-12
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
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, NBC2010

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 (0.84")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (0.84")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.67 (5-7:1), BC=0.68 (15-16:1), WB=0.55 (2-17:1), SSI=0.32 (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.

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.

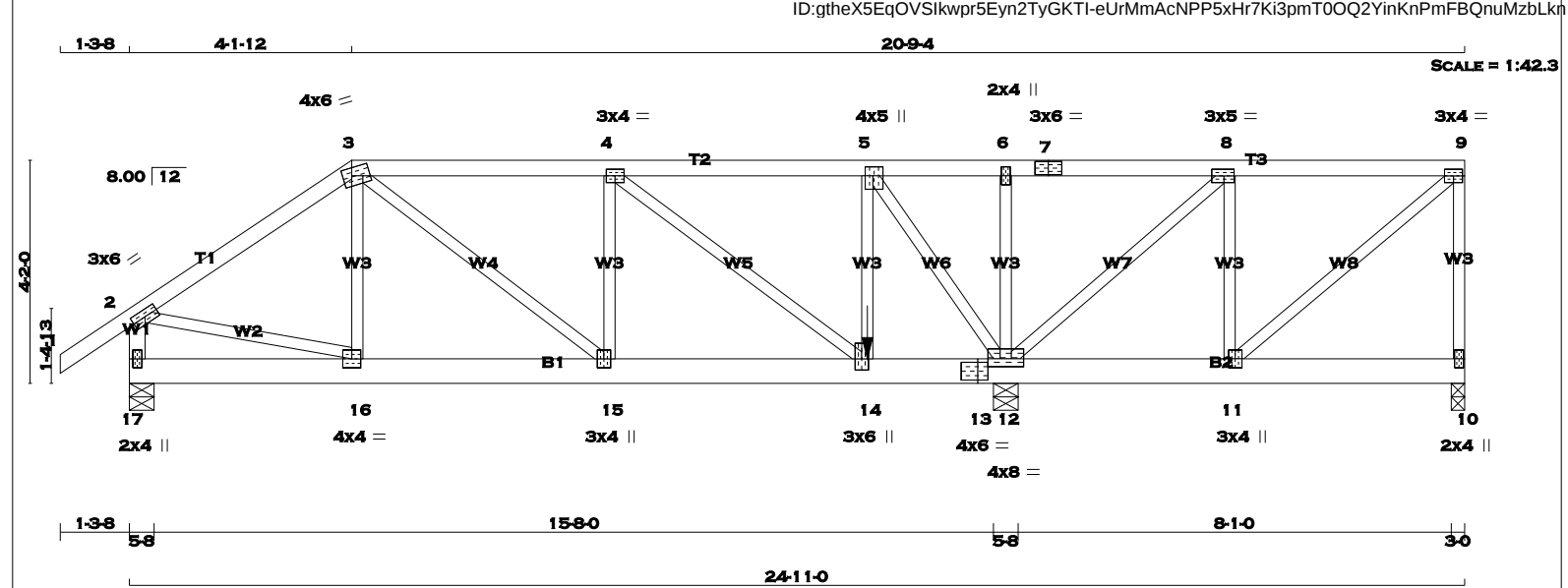
JSI GRIP= 0.90 (13) (INPUT = 0.90)
JSI METAL= 0.91 (14) (INPUT = 1.00)



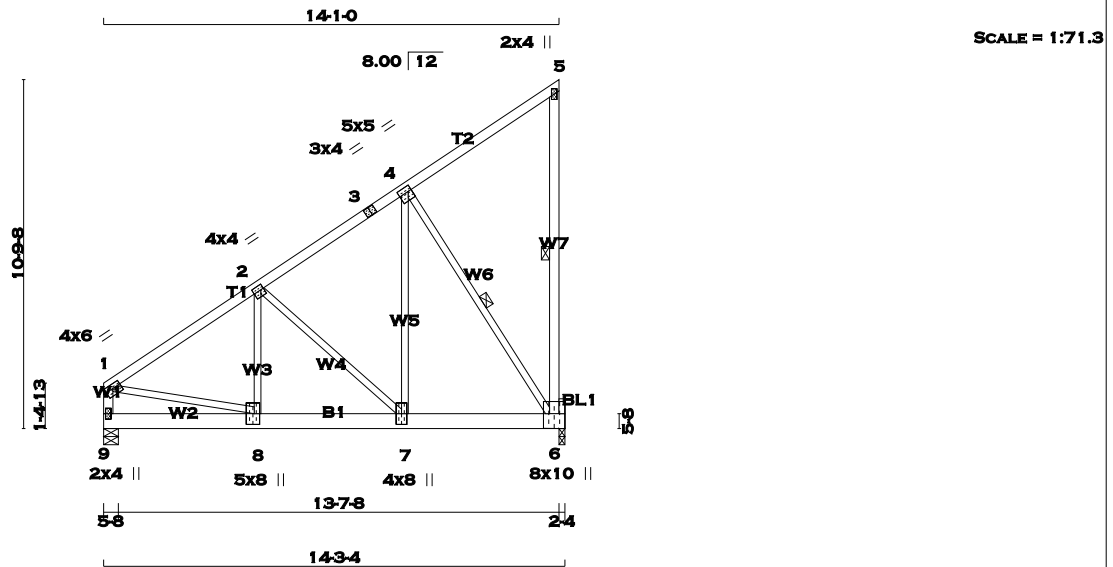
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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 118 lb							[M]																																																																																																																																																																																																																																																																										
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 10 - 9 2x3 DRY No.2 SPF 17 - 2 2x4 DRY No.2 SPF 17 - 13 2x6 DRY No.2 SPF 13 - 10 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORIZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>10</td><td>490</td><td>0</td><td>490</td><td>0</td><td>0</td><td>3-0</td><td>3-0</td></tr><tr><td>17</td><td>926</td><td>0</td><td>926</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>12</td><td>3074</td><td>0</td><td>3074</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX/MIN. COMBINED</th><th>LIVE</th><th>PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>10</td><td>345</td><td>235 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>110 / 0</td><td>0 / 0</td></tr><tr><td>17</td><td>648</td><td>463 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>185 / 0</td><td>0 / 0</td></tr><tr><td>12</td><td>2156</td><td>1518 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>638 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 17, 12 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.83 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) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1 (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. LC1 (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.11 (1)</td><td>10.00</td><td>16-3</td><td>-82 / 43</td><td>0.02 (1)</td></tr><tr><td>2-3</td><td>-833 / 0</td><td>-77.3 -77.3</td><td>0.27 (1)</td><td>6.25</td><td>3-15</td><td>0 / 382</td><td>0.09 (1)</td></tr><tr><td>3-4</td><td>-990 / 0</td><td>-77.3 -77.3</td><td>0.31 (1)</td><td>5.83</td><td>15-4</td><td>-122 / 38</td><td>0.03 (1)</td></tr><tr><td>4-5</td><td>-602 / 0</td><td>-77.3 -77.3</td><td>0.29 (1)</td><td>6.25</td><td>4-14</td><td>-495 / 0</td><td>0.32 (1)</td></tr><tr><td>5-6</td><td>0 / 520</td><td>-145.8 -145.8</td><td>0.33 (1)</td><td>10.00</td><td>14-5</td><td>0 / 1320</td><td>0.33 (1)</td></tr><tr><td>6-7</td><td>0 / 520</td><td>-145.8 -145.8</td><td>0.52 (1)</td><td>10.00</td><td>5-12</td><td>-1991 / 0</td><td>0.69 (1)</td></tr><tr><td>7-8</td><td>0 / 520</td><td>-145.8 -145.8</td><td>0.52 (1)</td><td>10.00</td><td>12-6</td><td>-491 / 0</td><td>0.13 (1)</td></tr><tr><td>8-9</td><td>-184 / 0</td><td>-145.8 -145.8</td><td>0.43 (1)</td><td>6.25</td><td>12-8</td><td>-950 / 0</td><td>0.51 (1)</td></tr><tr><td>10-9</td><td>-413 / 0</td><td>0.0 0.0</td><td>0.15 (1)</td><td>7.81</td><td>11-8</td><td>-82 / 102</td><td>0.04 (4)</td></tr><tr><td>17-2</td><td>-893 / 0</td><td>0.0 0.0</td><td>0.10 (1)</td><td>7.81</td><td>11-9</td><td>0 / 243</td><td>0.06 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>2-16</td><td>0 / 711</td><td>0.18 (1)</td></tr><tr><td>17-16</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.04 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>16-15</td><td>0 / 690</td><td>-17.5 -17.5</td><td>0.11 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>15-14</td><td>0 / 990</td><td>-17.5 -17.5</td><td>0.21 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 602</td><td>-33.0 -33.0</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 602</td><td>-33.0 -33.0</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 184</td><td>-33.0 -33.0</td><td>0.19 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 0</td><td>-33.0 -33.0</td><td>0.07 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table> FACTORED CONCENTRATED LOADS (LBS) <table><tr><th>JT</th><th>LOC.</th><th>LC1</th><th>MAX-</th><th>MAX+</th><th>FACE</th><th>DIR.</th><th>TYPE</th></tr><tr><td>14</td><td>13-9-4</td><td>-1084</td><td>-1084</td><td>---</td><td>FRONT</td><td>VERT</td><td>TOTAL</td></tr></table>								FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX	10	490	0	490	0	0	3-0	3-0	17	926	0	926	0	0	5-8	5-8	12	3074	0	3074	0	0	5-8	5-8	JT	1ST LCASE	MAX/MIN. COMBINED	LIVE	PERM. LIVE	WIND	DEAD	SOIL	10	345	235 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0	17	648	463 / 0	0 / 0	0 / 0	0 / 0	185 / 0	0 / 0	12	2156	1518 / 0	0 / 0	0 / 0	0 / 0	638 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)		FR-TO		FROM TO		FR-TO				1-2	0 / 29	-77.3 -77.3	0.11 (1)	10.00	16-3	-82 / 43	0.02 (1)	2-3	-833 / 0	-77.3 -77.3	0.27 (1)	6.25	3-15	0 / 382	0.09 (1)	3-4	-990 / 0	-77.3 -77.3	0.31 (1)	5.83	15-4	-122 / 38	0.03 (1)	4-5	-602 / 0	-77.3 -77.3	0.29 (1)	6.25	4-14	-495 / 0	0.32 (1)	5-6	0 / 520	-145.8 -145.8	0.33 (1)	10.00	14-5	0 / 1320	0.33 (1)	6-7	0 / 520	-145.8 -145.8	0.52 (1)	10.00	5-12	-1991 / 0	0.69 (1)	7-8	0 / 520	-145.8 -145.8	0.52 (1)	10.00	12-6	-491 / 0	0.13 (1)	8-9	-184 / 0	-145.8 -145.8	0.43 (1)	6.25	12-8	-950 / 0	0.51 (1)	10-9	-413 / 0	0.0 0.0	0.15 (1)	7.81	11-8	-82 / 102	0.04 (4)	17-2	-893 / 0	0.0 0.0	0.10 (1)	7.81	11-9	0 / 243	0.06 (1)						2-16	0 / 711	0.18 (1)	17-16	0 / 0	-17.5 -17.5	0.04 (4)	10.00				16-15	0 / 690	-17.5 -17.5	0.11 (1)	10.00				15-14	0 / 990	-17.5 -17.5	0.21 (1)	10.00				14-13	0 / 602	-33.0 -33.0	0.25 (1)	10.00				13-12	0 / 602	-33.0 -33.0	0.25 (1)	10.00				12-11	0 / 184	-33.0 -33.0	0.19 (1)	10.00				11-10	0 / 0	-33.0 -33.0	0.07 (4)	10.00				JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	14	13-9-4	-1084	-1084	---	FRONT	VERT	TOTAL	DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TOP CH. LL = 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 6.00/12 GIRDER TYPE: CPrimeHip LEFT SETBACK = 4-1-12 RIGHT SETBACK = 0-0 END SETBACK = 6-0-0 END WALL WIDTH = 5-8 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 11-1-12 OF SPAN MEASURED FROM THE RIGHT. *** NON STANDARD GIRDER *** ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - 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 (0.55") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.55") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05") CSI: TC=0.52 (6-8:1) , BC=0.25 (12-14:1) , WB=0.69 (5-12:1) , SSI=0.33 (8-9:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL = 0.250 inches PLATE ROTATION TOL = 0.5 degrees KOTT CONTINUED ON PAGE 2						
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																																																																																																													
JT	VERT	HORZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																																																																																																										
10	490	0	490	0	0	3-0	3-0																																																																																																																																																																																																																																																																										
17	926	0	926	0	0	5-8	5-8																																																																																																																																																																																																																																																																										
12	3074	0	3074	0	0	5-8	5-8																																																																																																																																																																																																																																																																										
JT	1ST LCASE	MAX/MIN. COMBINED	LIVE	PERM. LIVE	WIND	DEAD	SOIL																																																																																																																																																																																																																																																																										
10	345	235 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0																																																																																																																																																																																																																																																																										
17	648	463 / 0	0 / 0	0 / 0	0 / 0	185 / 0	0 / 0																																																																																																																																																																																																																																																																										
12	2156	1518 / 0	0 / 0	0 / 0	0 / 0	638 / 0	0 / 0																																																																																																																																																																																																																																																																										
CHORDS				WEBS																																																																																																																																																																																																																																																																													
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)																																																																																																																																																																																																																																																																											
FR-TO		FROM TO		FR-TO																																																																																																																																																																																																																																																																													
1-2	0 / 29	-77.3 -77.3	0.11 (1)	10.00	16-3	-82 / 43	0.02 (1)																																																																																																																																																																																																																																																																										
2-3	-833 / 0	-77.3 -77.3	0.27 (1)	6.25	3-15	0 / 382	0.09 (1)																																																																																																																																																																																																																																																																										
3-4	-990 / 0	-77.3 -77.3	0.31 (1)	5.83	15-4	-122 / 38	0.03 (1)																																																																																																																																																																																																																																																																										
4-5	-602 / 0	-77.3 -77.3	0.29 (1)	6.25	4-14	-495 / 0	0.32 (1)																																																																																																																																																																																																																																																																										
5-6	0 / 520	-145.8 -145.8	0.33 (1)	10.00	14-5	0 / 1320	0.33 (1)																																																																																																																																																																																																																																																																										
6-7	0 / 520	-145.8 -145.8	0.52 (1)	10.00	5-12	-1991 / 0	0.69 (1)																																																																																																																																																																																																																																																																										
7-8	0 / 520	-145.8 -145.8	0.52 (1)	10.00	12-6	-491 / 0	0.13 (1)																																																																																																																																																																																																																																																																										
8-9	-184 / 0	-145.8 -145.8	0.43 (1)	6.25	12-8	-950 / 0	0.51 (1)																																																																																																																																																																																																																																																																										
10-9	-413 / 0	0.0 0.0	0.15 (1)	7.81	11-8	-82 / 102	0.04 (4)																																																																																																																																																																																																																																																																										
17-2	-893 / 0	0.0 0.0	0.10 (1)	7.81	11-9	0 / 243	0.06 (1)																																																																																																																																																																																																																																																																										
					2-16	0 / 711	0.18 (1)																																																																																																																																																																																																																																																																										
17-16	0 / 0	-17.5 -17.5	0.04 (4)	10.00																																																																																																																																																																																																																																																																													
16-15	0 / 690	-17.5 -17.5	0.11 (1)	10.00																																																																																																																																																																																																																																																																													
15-14	0 / 990	-17.5 -17.5	0.21 (1)	10.00																																																																																																																																																																																																																																																																													
14-13	0 / 602	-33.0 -33.0	0.25 (1)	10.00																																																																																																																																																																																																																																																																													
13-12	0 / 602	-33.0 -33.0	0.25 (1)	10.00																																																																																																																																																																																																																																																																													
12-11	0 / 184	-33.0 -33.0	0.19 (1)	10.00																																																																																																																																																																																																																																																																													
11-10	0 / 0	-33.0 -33.0	0.07 (4)	10.00																																																																																																																																																																																																																																																																													
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE																																																																																																																																																																																																																																																																										
14	13-9-4	-1084	-1084	---	FRONT	VERT	TOTAL																																																																																																																																																																																																																																																																										
							RECEIVED TOWN OF MILTON MAR 29, 2017 17-5052 BUILDING DIVISION READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE 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 81 = 163 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
6 - 5	2x4	DRY	No.2
9 - 1	2x4	DRY	No.2
9 - 6	2x6	DRY	No.2

BEARING BLOCKS			
BL1	2x6	DRY	No.2
SPF			
ALL WEBS			
EXCEPT	2x3	DRY	No.2
SPF			

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1- 3	12	TOP
3- 5	12	TOP
5- 6	12	TOP
9- 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
9- 6	8	SIDE(301.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.50	3.00
2	TMWW-t	MT20	4.0	4.0	1.75	1.00
3	TS-t	MT20	3.0	4.0		
4	TMVW-t	MT20	5.0	5.0	2.00	1.25
5	TMV+p	MT20	2.0	4.0		
6	BMVWK1+t	MT20	8.0	10.0	Edge	4.00
7	BMWW+t	MT20	4.0	8.0		

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	4288	0	4288	0	0	2-4	2-4
9	4574	0	4574	0	0	5-8	5-8

UNFACTORED REACTIONS							
1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	3009	2107 / 0	0 / 0	0 / 0	0 / 0	903 / 0	0 / 0
9	3210	2246 / 0	0 / 0	0 / 0	0 / 0	965 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9
BEARING SIZE FACTOR = 1.08 AT JNT(S) 6 (BASED ON SUPPORT DEPTH = 1-8)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.42 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 19 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 93 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORIZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORIZ. LOAD (PLF)
FR-TO		FROM	TO	FR-TO		FROM	TO
1- 2	-4332 / 0	-77.3	-77.3	0.24 (1)	4.42	8- 2	0 / 2186
2- 3	-2397 / 0	-77.3	-77.3	0.17 (1)	5.64	2- 7	-2190 / 0
3- 4	-2397 / 0	-77.3	-77.3	0.17 (1)	5.64	7- 4	0 / 4050
4- 5	-18 / 0	-77.3	-77.3	0.13 (1)	6.25	4- 6	-3713 / 0
6- 5	-149 / 0	0.0	0.0	0.04 (1)	6.25	1- 8	0 / 3694
9- 1	-3327 / 0	0.0	0.0	0.19 (1)	6.39		
9- 8	0 / 0	-620.2	-620.2	0.46 (1)	10.00		
8- 7	0 / 3615	-525.3	-525.3	0.64 (1)	10.00		
7- 6	0 / 2001	-525.3	-525.3	0.49 (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

GIRDER TYPE: CStdGirder
START DISTANCE = 4-7-8
START SPAN CARRIED = 27-10-8
END DISTANCE = 4-7-8
END SPAN CARRIED = 27-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 4-7-8
START SPAN CARRIED = 23-10-8
END DISTANCE = 14-2-10
END SPAN CARRIED = 23-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

(55 % OF 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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.24 (1-2:1) , BC=0.64 (7-8:1) , WB=0.93 (4-6:1) , SSI=0.57 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

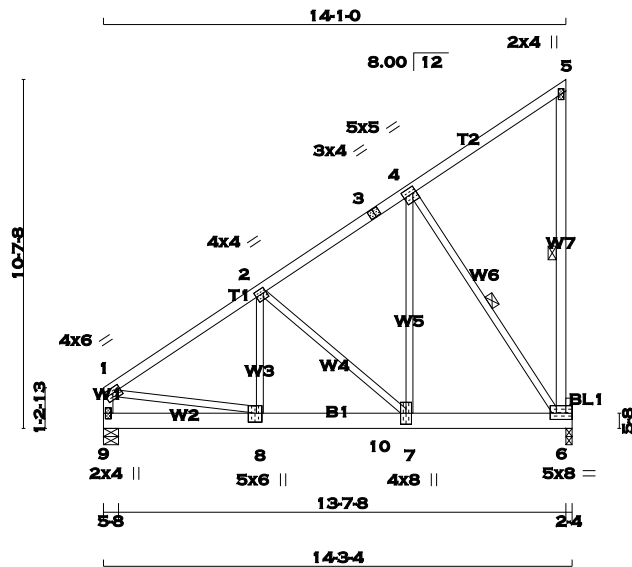
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.55 (1) (INPUT = 1.00)



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5052
BUILDING DIVISION

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



SCALE = 1:70.2

TOTAL WEIGHT = 3 X 81 = 242 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
9 - 6	2x6	DRY	2100F 1.8E	SPF

BEARING BLOCKS				
BL1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT				
2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF **3** TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-5	12	TOP
5-6	12	TOP
9-1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
9-6	5	SIDE(536.2)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.75	Edge
2	TMVW-t	MT20	4.0	4.0	1.75	1.00
3	TS-t	MT20	3.0	4.0		
4	TMVW-t	MT20	5.0	5.0	2.25	1.25
5	TMV+p	MT20	2.0	4.0		
6	BMVWK1-t	MT20	5.0	8.0	2.25	Edge

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	5899	0	5899	0	0	2-4	2-4
9	6168	0	6168	0	0	5-8	5-8

UNFACTORED REACTIONS							
1ST LCASE	MAX.	MIN.	COMPONENT	REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	4140	2897 / 0	0 / 0	0 / 0	0 / 0	1242 / 0	0 / 0
9	4329	3028 / 0	0 / 0	0 / 0	0 / 0	1301 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.61 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 18 LBS.
1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 130 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	-6204 / 0	-77.3 -77.3	0.16 (1)	4.61	8-2	0 / 3244	0.24 (1)		
2-3	-3402 / 0	-77.3 -77.3	0.11 (1)	5.86	2-7	-3103 / 0	0.65 (1)		
3-4	-3402 / 0	-77.3 -77.3	0.11 (1)	5.86	7-4	0 / 5811	0.44 (1)		
4-5	-18 / 0	-77.3 -77.3	0.08 (1)	6.25	4-6	-5183 / 0	0.81 (1)		
6-5	-148 / 0	0.0 0.0	0.03 (1)	6.25	1-8	0 / 5248	0.39 (1)		
9-1	-4513 / 0	0.0 0.0	0.15 (1)	6.69					
9-8	0 / 0	-821.7 -821.7	0.20 (1)	10.00					
8-10	0 / 5170	-821.7 -821.7	0.26 (1)	10.00					
10-7	0 / 5170	-738.7 -738.7	0.26 (1)	10.00					
7-6	0 / 2840	-738.7 -738.7	0.21 (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

GIRDER TYPE: CStdGirder
START DISTANCE = 8-2-8
START SPAN CARRIED = 36-4-8
END DISTANCE = 8-2-8
END SPAN CARRIED = 36-4-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 8-2-8
START SPAN CARRIED = 32-10-8
END DISTANCE = 14-2-10
END SPAN CARRIED = 32-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

(55 % OF 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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.16 (1-2-1) , BC=0.26 (7-8-1) , WB=0.81 (4-6-1) , SSI=0.45 (8-9-1)

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

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

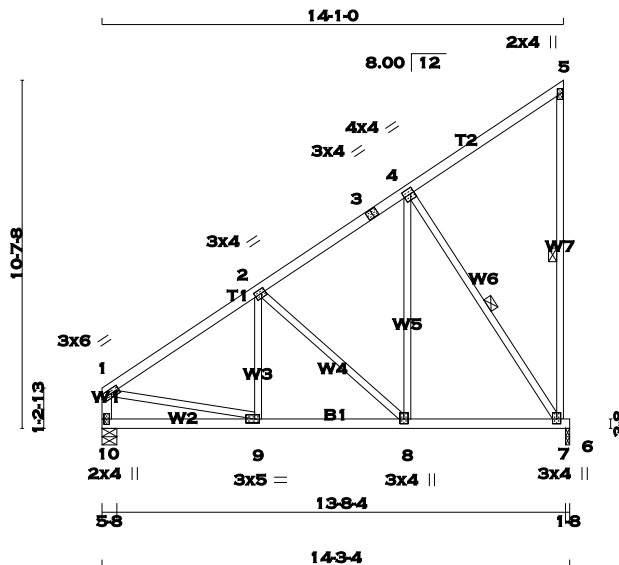
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90)
JSI METAL= 0.53 (1) (INPUT = 1.00)



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SCALE = 1:70.3

TOTAL WEIGHT = 69 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
7 - 5	2x3	DRY	No.2	SPF
10 - 1	2x4	DRY	No.2	SPF
10 - 6	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	3.0	6.0		
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TS-t	MT20	3.0	4.0		
4	TMVW-t	MT20	4.0	4.0	2.00	1.25
5	TMV+p	MT20	2.0	4.0		
7	BMVW+p	MT20	3.0	4.0	1.75	1.50
8	BMVW+t	MT20	3.0	4.0	1.75	1.50
9	BMVW-t	MT20	3.0	5.0	1.50	1.75
10	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
10	1036	0	1036	0	0	5-8	5-8	
6	1022	0	1022	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP
10	727		509 / 0		0 / 0		0 / 0		0 / 0		219 / 0		0 / 0	
6	718		500 / 0		0 / 0		0 / 0		0 / 0		217 / 0		0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 6

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.82 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-7. DBS = 20-0-0 . CBF = 19 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-7. DBS = 14-0-0 . CBF = 82 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO			FR-TO			FR-TO	
1-2	-1031 / 0	-77.3 -77.3	0.27 (1)	5.82	9-2	0 / 160	0.05 (4)		
2-3	-624 / 0	-77.3 -77.3	0.27 (1)	6.25	2-8	-473 / 0	0.32 (1)		
3-4	-624 / 0	-77.3 -77.3	0.27 (1)	6.25	8-4	0 / 727	0.18 (1)		
4-5	-20 / 0	-77.3 -77.3	0.25 (1)	6.25	4-7	-937 / 0	0.48 (1)		
7-5	-149 / 0	0.0 0.0	0.12 (1)	6.25	1-9	0 / 888	0.22 (1)		
10-1	-901 / 0	0.0 0.0	0.10 (1)	7.81					
10-9	0 / 0	-67.9 -67.9	0.20 (1)	10.00					
9-8	0 / 873	-67.9 -67.9	0.44 (1)	10.00					
8-7	0 / 521	-67.9 -67.9	0.45 (1)	10.00					
7-6	0 / 0	-67.9 -67.9	0.28 (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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 4-7-0
END DISTANCE = 14-2-10
END SPAN CARRIED = 4-7-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010

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 (0.48")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.27 (2-4:1) , BC=0.45 (7-8:1) , WB=0.48 (4-7:1) , SSI=0.88 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

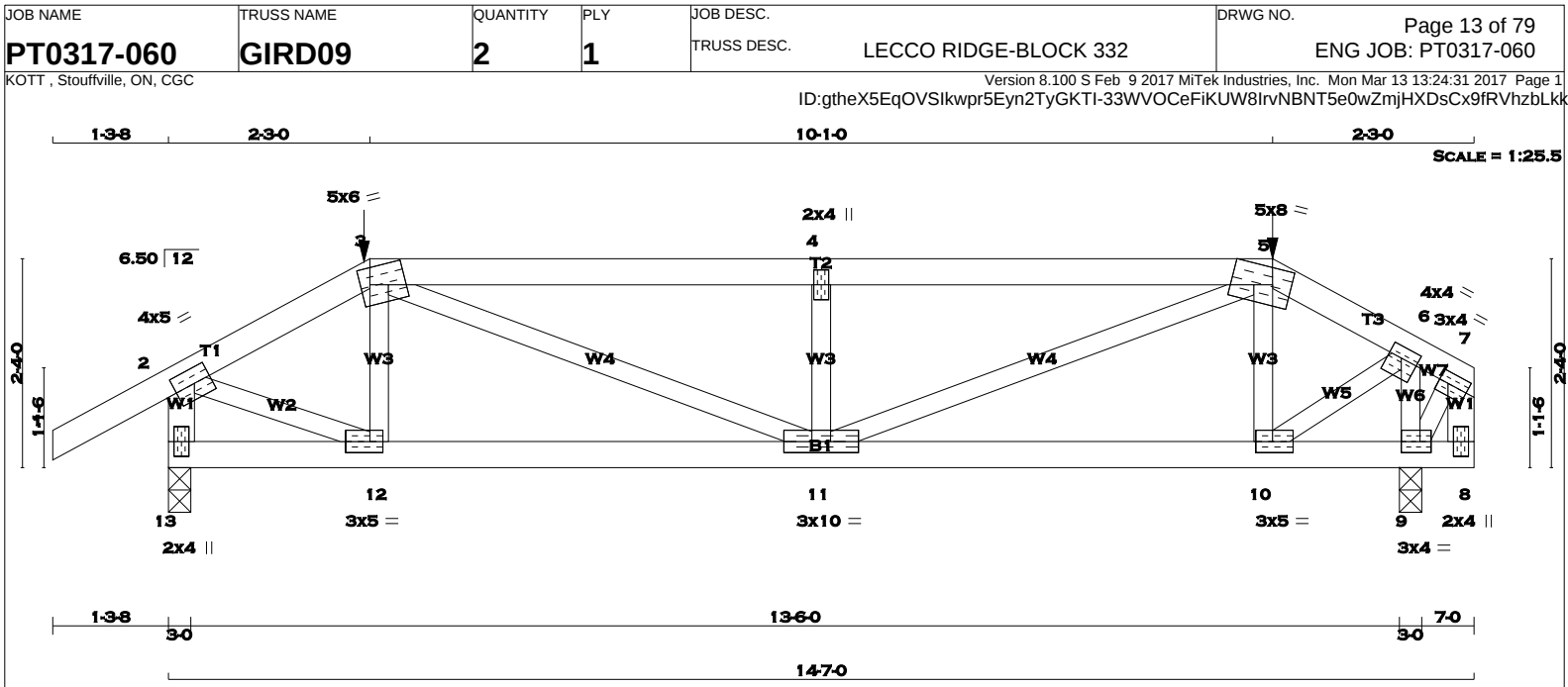
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.28 (1) (INPUT = 1.00)



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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 - 8	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-t	MT20	4.0	5.0	2.00	2.25
3	TTWW-m	MT20	5.0	6.0	2.25	1.25
4	TMVW-w	MT20	2.0	4.0		
5	TTWW-m	MT20	5.0	8.0	Edge	5.50
6	TMVW-t	MT20	4.0	4.0	1.50	1.75
7	TMVW-t	MT20	3.0	4.0	1.50	1.25
8	BMV+p	MT20	2.0	4.0		
9	BMVW1-t	MT20	3.0	4.0	1.50	1.50
10	BMVW-t	MT20	3.0	5.0	1.50	2.25
11	BMVW-t	MT20	3.0	10.0		
12	BMVW-t	MT20	3.0	5.0	1.50	1.75
13	BMV1+p	MT20	2.0	4.0		

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 88.2 lbs FACTORED DOWN AT 12-4-0, AND 88.2 lbs FACTORED DOWN AT 2-3-0 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
13	1127	0	1127	0
9	1131	0	1131	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
13	789	564 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0
9	794	554 / 0	0 / 0	0 / 0	0 / 0	240 / 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 = 3.96 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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	FACTORED VERT. LOAD (PLF)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 25	-77.3	-77.3	0.11 (1)	10.00	12-3	-226 / 24
2-3	-1187 / 0	-77.3	-77.3	0.09 (1)	5.74	3-11	0 / 1008
3-4	-1964 / 0	-121.7	-121.7	0.63 (1)	3.96	11-4	-742 / 0
4-5	-1964 / 0	-121.7	-121.7	0.63 (1)	3.96	11-5	0 / 1298
5-6	-901 / 0	-77.3	-77.3	0.05 (1)	6.25	10-5	-429 / 0
6-7	-10 / 5	-77.3	-77.3	0.04 (1)	10.00	2-12	0 / 1100
13-2	-1116 / 0	0.0	0.0	0.12 (1)	7.47	10-6	0 / 933
8-7	-30 / 6	0.0	0.0	0.00 (1)	7.81	9-6	-1106 / 0
						9-7	-2 / 38
13-12	0 / 0	-27.5	-27.5	0.11 (4)	10.00		
12-11	0 / 1030	-27.5	-27.5	0.26 (1)	10.00		
11-10	0 / 760	-27.5	-27.5	0.22 (1)	10.00		
10-9	-1 / 25	-27.5	-27.5	0.12 (4)	10.00		
9-8	0 / 0	-27.5	-27.5	0.04 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	2-3-0	-88	-88	---	FRONT	VERT	TOTAL
5	12-4-0	-88	-88	---	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 6.00/12

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 2-3-0
END SETBACK = 4-6-8
END WALL WIDTH = 3-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, 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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

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

CSI: TC=0.63 (3-4:1), BC=0.26 (11-12:1), WB=0.32 (5-11:1), SSI=0.32 (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

AUTOSOLVE LEFT HEEL ONLY

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

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

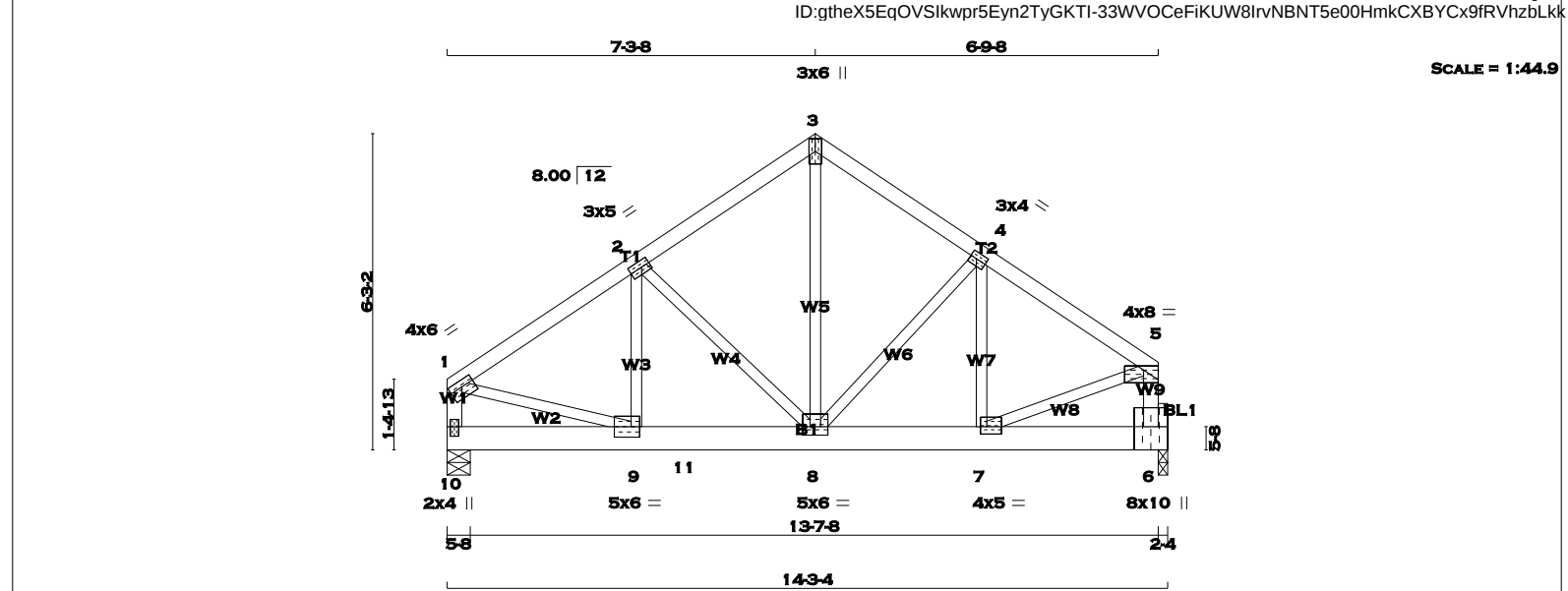
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.38 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 70 = 141 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
10 - 1	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
10 - 6	2x6	DRY	No.2	SPF

BEARING BLOCKS				
BL1	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT				
2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-5	12	TOP
10-1	12	TOP
6-5	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
10-6	9	SIDE(301.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.50	3.00
2	TMWW-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	6.0		
4	TMWW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW-p	MT20	4.0	8.0	1.00	Edge
6	BMVK1+p	MT20	8.0	10.0	5.50	Edge
7	BMWW-t	MT20	4.0	5.0	1.75	1.50

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
10	4566	0	4566	0	5-8
6	4284	0	4284	0	2-4

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
10	3204	2242 / 0	0 / 0	0 / 0	0 / 0	963 / 0	0 / 0
6	3006	2104 / 0	0 / 0	0 / 0	0 / 0	902 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 6
BEARING SIZE FACTOR = 1.08 AT JNT(S) 6 (BASED ON SUPPORT DEPTH = 1-8)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO	FR-TO			
1-2	-4392 / 0	-77.3	-77.3 0.16 (1)	4.46	9-2	0 / 1344	0.17 (1)
2-3	-3204 / 0	-77.3	-77.3 0.11 (1)	5.11	2-8	-1413 / 0	0.29 (1)
3-4	-3203 / 0	-77.3	-77.3 0.10 (1)	5.12	8-3	0 / 3315	0.41 (1)
4-5	-3706 / 0	-77.3	-77.3 0.12 (1)	4.80	8-4	-649 / 0	0.13 (1)
10-1	-3542 / 0	0.0	0.0 0.20 (1)	6.23	7-4	0 / 477	0.06 (1)
6-5	-3521 / 0	0.0	0.0 0.20 (1)	6.24	1-9	0 / 3790	0.47 (1)
					7-5	0 / 3717	0.46 (1)
10-9	0 / 0	-620.2	-620.2 0.17 (1)	10.00			
9-11	0 / 3663	-620.2	-620.2 0.20 (1)	10.00			
11-8	0 / 3663	-525.3	-525.3 0.20 (1)	10.00			
8-7	0 / 3091	-525.3	-525.3 0.18 (1)	10.00			
7-6	-384 / 0	-525.3	-525.3 0.12 (1)	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

GIRDER TYPE: CStdGirder
START DISTANCE = 4-7-8
START SPAN CARRIED = 27-10-8
END DISTANCE = 4-7-8
END SPAN CARRIED = 27-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 4-7-8
START SPAN CARRIED = 23-10-8
END DISTANCE = 14-2-10
END SPAN CARRIED = 23-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'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 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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.20 (5-6:1) , BC=0.20 (8-9:1) , WB=0.47 (1-9:1) , SSI=0.43 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

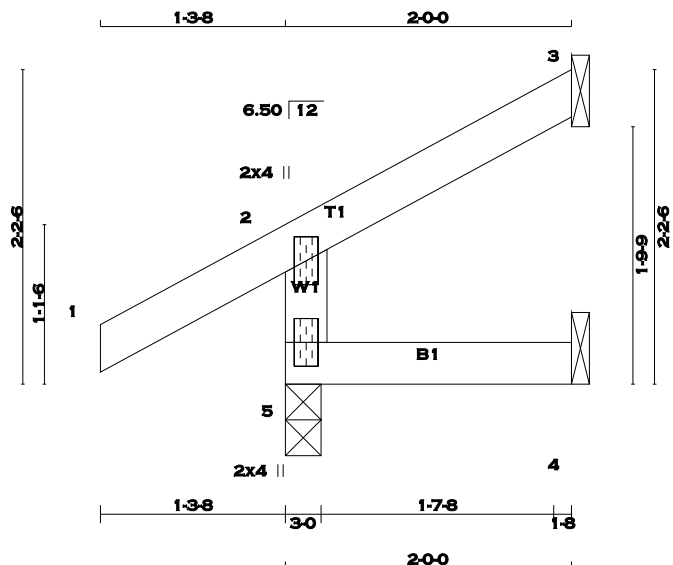
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (1) (INPUT = 0.90)
JSI METAL= 0.56 (1) (INPUT = 1.00)



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SCALE: 3/4"=1'

TOTAL WEIGHT = 4 X 7 = 30 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	No.2	SPF
1 - 3	2x4	No.2	SPF
5 - 4	2x4	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		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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		
5	221	0	221	0	3-0	3-0
3	58	0	58	0	1-8	1-8
4	16	0	17	0	1-8	1-8

SEE MITEK 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	121 / 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	12	0 / 0	0 / 0	0 / 0	0 / 0	12 / 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)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX	CSI (LC)	
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO			CSI (LC)	
5-2	-202 / 0	0.0	0.0	0.01 (4)	7.81				
1-2	0 / 25	-77.3	-77.3	0.10 (1)	10.00				
2-3	-9 / 0	-77.3	-77.3	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/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 (1-2:1) , BC=0.02 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.07 (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.

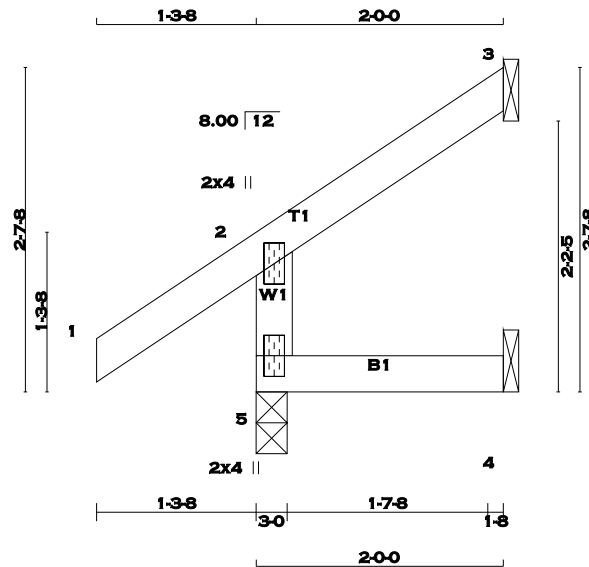
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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SCALE = 1:18.6

TOTAL WEIGHT = 6 X 8 = 48 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	No.2	SPF
1 - 3	2x4	No.2	SPF
5 - 4	2x4	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		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX
5	222	0	222	0	0	3-0	3-0	3-0
3	58	0	58	0	0	1-8	1-8	1-8
4	16	0	18	0	0	1-8	1-8	1-8

SEE MITEK 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 = 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: (5)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS		MAX. FACTORED
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	LC		MEMB. FORCE (LBS)	MAX. CSI (LC)	
FR-TO								
5-2	-202 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00			
2-3	-10 / 0	-77.3	-77.3	0.05 (1)	6.25			
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/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 (1-2:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), SSI=0.07 (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.

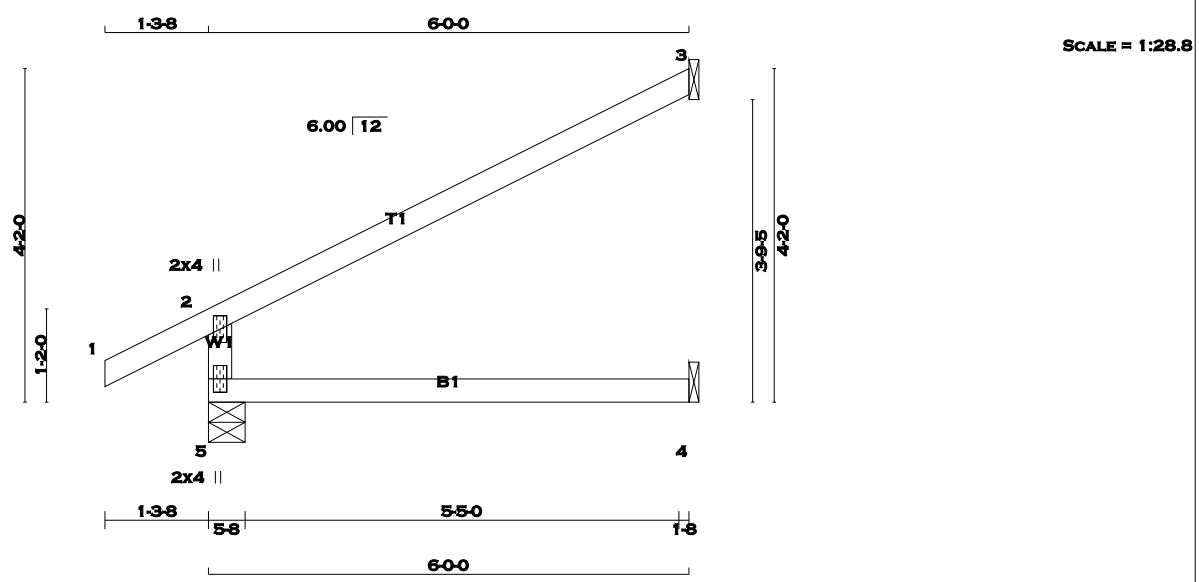
JSI GRIP= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 34 X 17 = 581 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	No.2	SPF
1 - 3	2x4	No.2	SPF
5 - 4	2x4	DRY	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		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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		
5	457	0	457	0	5-8	5-8
3	174	0	174	0	1-8	1-8
4	43	0	49	0	1-8	1-8

SEE MITEK 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	318	238 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 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 = 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.	CHORDS		FACTORED		MAX. UNBRAC	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX		MEMB. FORCE (LBS)	FACTORED MAX (LC)
FR-TO			FROM	TO		FR-TO	
5-2	-395 / 0		0.0	0.0	0.13 (4)	7.81	
1-2	0 / 23		-77.3	-77.3	0.10 (1)	10.00	
2-3	-26 / 0		-77.3	-77.3	0.47 (1)	6.25	
5-4	0 / 0		-17.5	-17.5	0.13 (4)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	3.0	PSF
BOT CH.	LL	PSF
DL	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=0.47 (2-3:1) , BC=0.13 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.20 (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

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

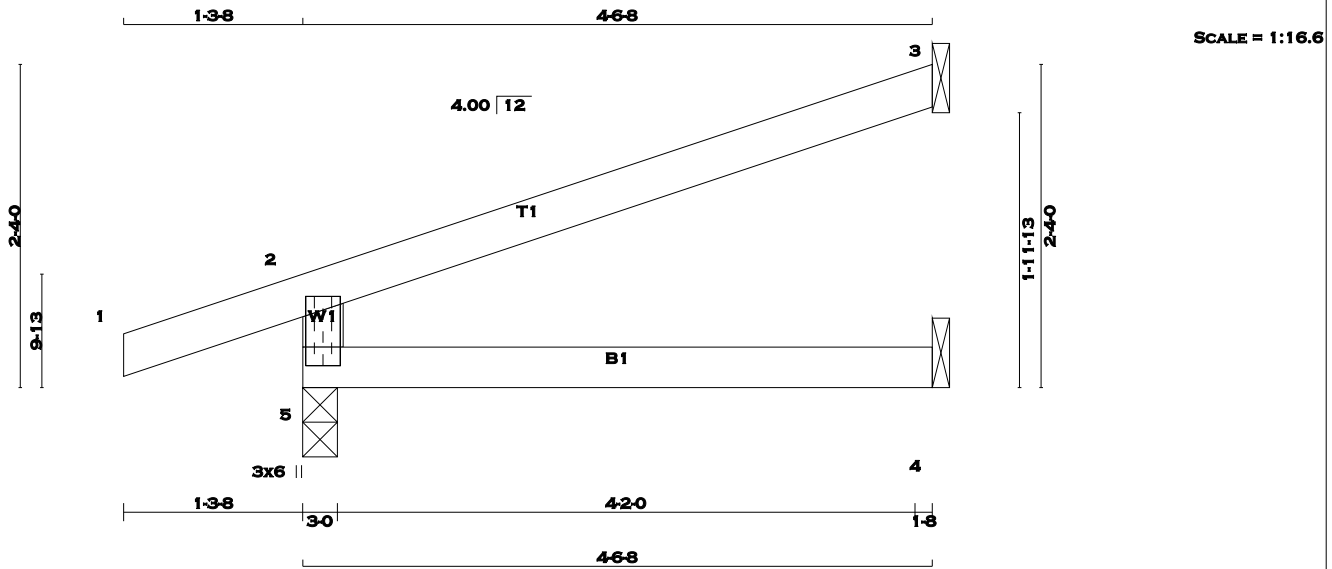
JSI GRIP= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 14 X 13 = 177 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2						
5	TMBMV1+p	MT20	3.0	6.0	3.50	1.50

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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	370	0	370	0	3-0	3-0
3	132	0	132	0	1-8	1-8
4	32	0	36	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	257	194 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0
3	90	79 / 0	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0
4	26	0 / 0	0 / 0	0 / 0	0 / 0	26 / 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 = 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.	CHORDS		FACTORED		MAX. UNBRAC	MEMB.	WEBS		MAX. UNBRAC
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX			MAX. FACTORED	FORCE	
	(LBS)	(LBS)	(PLF)	CSI (LC)			(LBS)	(LBS)	CSI (LC)
FR-TO			FROM TO	LENGTH	FR-TO				
5-2	-323 / 0	0.0	0.0	0.08 (4)	7.81				
1-2	0 / 16	-77.3	-77.3	0.10 (1)	10.00				
2-3	-14 / 0	-77.3	-77.3	0.27 (1)	6.25				
5-4	0 / 0	-17.5	-17.5	0.08 (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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.27 (2-3:1) , BC=0.08 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.16 (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

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

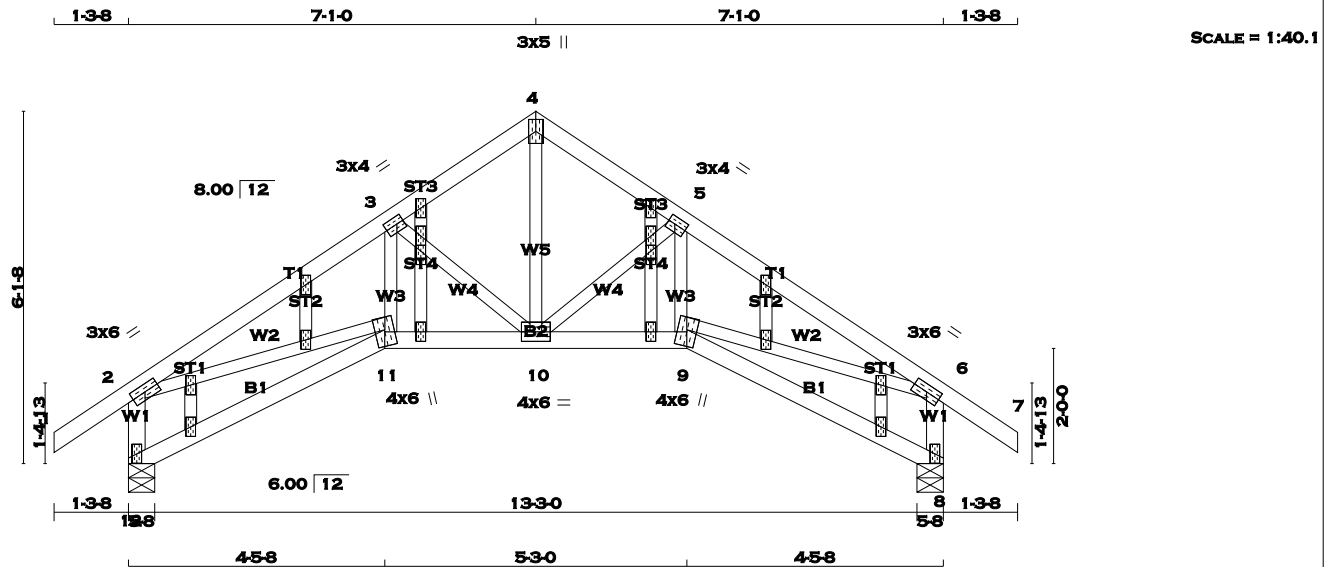
JSI GRIP= 0.28 (5) (INPUT = 0.90)
JSI METAL= 0.04 (5) (INPUT = 1.00)



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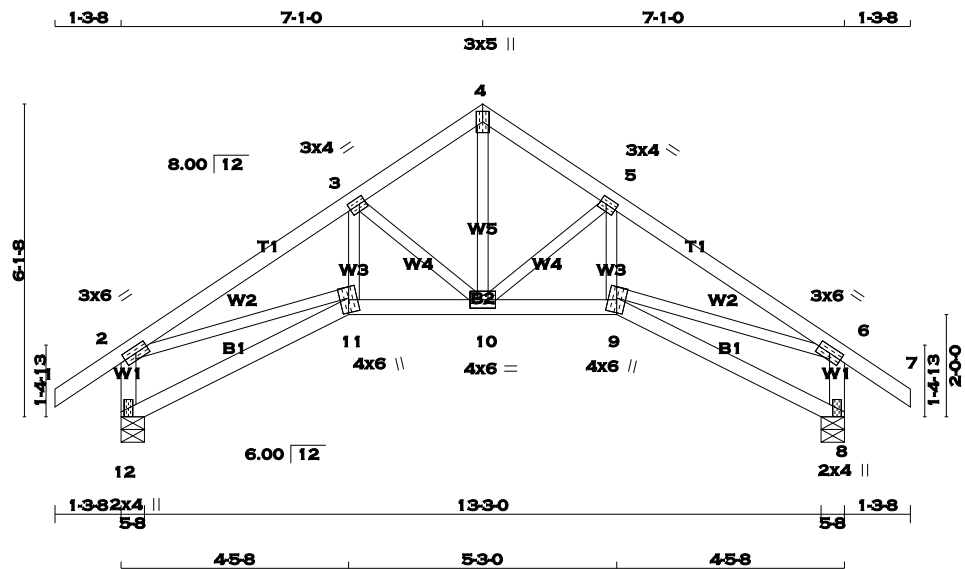
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA					
1 - 4 2x4 DRY No.2 SPF						FACTORED MAXIMUM FACTORED INPUT REQRD										SPECIFIED LOADS:					
4 - 7 2x4 DRY No.2 SPF						GROSS REACTION GROSS REACTION BRG BRG										TOP CH. LL = 23.3 PSF					
12 - 2 2x4 DRY No.2 SPF						JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 3.0 PSF					
8 - 6 2x4 DRY No.2 SPF						12 778 0 778 0 0 5-8 5-8										BOT CH. LL = 0.0 PSF					
12 - 11 2x4 DRY No.2 SPF						8 778 0 778 0 0 5-8 5-8										DL = 7.0 PSF					
11 - 9 2x4 DRY No.2 SPF																TOTAL LOAD = 33.3 PSF					
9 - 8 2x4 DRY No.2 SPF																					
ALL WEBS 2x3 DRY No.2 SPF						UNFACTORED REACTIONS										SPACING = 24.0 IN./C					
EXCEPT						1ST LCASE MAX./MIN. COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL					
ALL GABLE WEBS						JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										OR SMALL BUILDING REQUIREMENTS OF					
2x3 DRY No.2 SPF						12 544 394 / 0 0 / 0 0 / 0 0 / 0 150 / 0 0 / 0										PART 9, NBCC 2010					
DRY: SEASONED LUMBER.						8 544 394 / 0 0 / 0 0 / 0 0 / 0 150 / 0 0 / 0										THIS DESIGN COMPLIES WITH:					
GABLE STUDS SPACED AT 2'-0-0 OC.						BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014					
						BRACING										- CSA 086-09					
						TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.52 FT.										- TPIC 2011					
						MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										(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					
						ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										ALLOWABLE DEFL.(LL)= L/360 (0.47")					
PLATES (table is in inches)						LOADING										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")					
JT TYPE PLATES W LEN Y X						TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(TL)= L/360 (0.47")					
2 TMVW-t MT20 3.0 6.0						CHORDS										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")					
3 TMWW-t MT20 3.0 4.0 1.50 1.50						MAX. FACTORED FACTORED										CSI: TC=0.22 (5-6:1) , BC=0.18 (10-11:1) ,					
4 TTW+p MT20 3.0 5.0						MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. MAX. FACTORED										WB=0.24 (2-11:1) , SSI=0.13 (5-6:1)					
5 TMWW-t MT20 3.0 4.0 1.50 1.50						(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10					
6 TMVW-t MT20 3.0 6.0						FR-TO FROM TO										COMP=1.10 SHEAR=1.10 TENS= 1.10					
8 BMV1+p MT20 2.0 4.0						1- 2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 10- 4 0 / 741 0.17 (1)										COMPANION LIVE LOAD FACTOR = 0.50					
9 BBWW+m MT20 4.0 6.0						2- 3 -1252 / 0 -77.3 -77.3 0.22 (1) 5.52 10- 5 -538 / 0 0.11 (1)										AUTOSOLVE HEELS OFF					
10 BMWWW-t MT20 4.0 6.0						3- 4 -783 / 0 -77.3 -77.3 0.14 (1) 6.25 9- 5 0 / 281 0.06 (1)										TRUSS PLATE MANUFACTURER IS NOT					
11 BBWW+m MT20 4.0 6.0						4- 5 -783 / 0 -77.3 -77.3 0.14 (1) 6.25 3-10 -538 / 0 0.11 (1)										RESPONSIBLE FOR QUALITY CONTROL IN THE					
12 BMV1+p MT20 2.0 4.0						5- 6 -1252 / 0 -77.3 -77.3 0.22 (1) 5.52 11- 3 0 / 281 0.06 (1)										TRUSS MANUFACTURING PLANT .					
13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26						6- 7 0 / 29 -77.3 -77.3 0.10 (1) 10.00 2-11 0 / 1077 0.24 (1)										NAIL VALUES					
13 NP+w MT20 2.0 4.0						12- 2 -739 / 0 0.0 0.0 0.08 (1) 7.81 9- 6 0 / 1077 0.24 (1)										PLATE GRIP(DRY) SHEAR SECTION					
22 NP+w MT20 2.0 4.0 1.25 1.00						8- 6 -739 / 0 0.0 0.0 0.08 (1) 7.81										(PSI) (PLI) (PLI)					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						12-11 0 / 0 -17.5 -17.5 0.10 (4) 10.00										MAX MIN MAX MIN MAX MIN					
						11-10 0 / 1041 -17.5 -17.5 0.18 (1) 10.00										MT20 618 354 1667 822 2284 1656					
						10- 9 0 / 1041 -17.5 -17.5 0.18 (1) 10.00										PLATE PLACEMENT TOL. = 0.250 inches					
						9- 8 0 / 0 -17.5 -17.5 0.10 (4) 10.00										PLATE ROTATION TOL. = 5.0 Deg.					
																JSI GRIP= 0.78 (6) (INPUT = 0.90)					
																JSI METAL= 0.37 (11) (INPUT = 1.00)					



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TOTAL WEIGHT = 2 X 61 = 123 lb
[M][F]

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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	IN-SX	BRG	IN-SX
12	778	0	778	0	0	5-8	5-8	5-8	5-8
8	778	0	778	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
12	544	394 / 0	0 / 0	0 / 0	0 / 0	150 / 0	0 / 0		
8	544	394 / 0	0 / 0	0 / 0	0 / 0	150 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.52 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 (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10-4	0 / 741	0.17 (1)	
2-3	-1252 / 0	-77.3	-77.3 0.22 (1)	10-5	-538 / 0	0.11 (1)	
3-4	-783 / 0	-77.3	-77.3 0.14 (1)	9-5	0 / 281	0.06 (1)	
4-5	-783 / 0	-77.3	-77.3 0.14 (1)	3-10	-538 / 0	0.11 (1)	
5-6	-1252 / 0	-77.3	-77.3 0.22 (1)	5-11	0 / 281	0.06 (1)	
6-7	0 / 29	-77.3	-77.3 0.10 (1)	10-11	0 / 1077	0.24 (1)	
12-2	-739 / 0	0.0	0.0 0.08 (1)	7-8	0 / 1077	0.24 (1)	
8-6	-739 / 0	0.0	0.0 0.08 (1)				
12-11	0 / 0	-17.5	-17.5 0.10 (4)	10-10			
11-10	0 / 1041	-17.5	-17.5 0.18 (1)	10-10			
10-9	0 / 1041	-17.5	-17.5 0.18 (1)	10-10			
9-8	0 / 0	-17.5	-17.5 0.10 (4)	10-10			

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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.22 (5-6:1), BC=0.18 (10-11:1), WB=0.24 (2-11:1), SSI=0.13 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

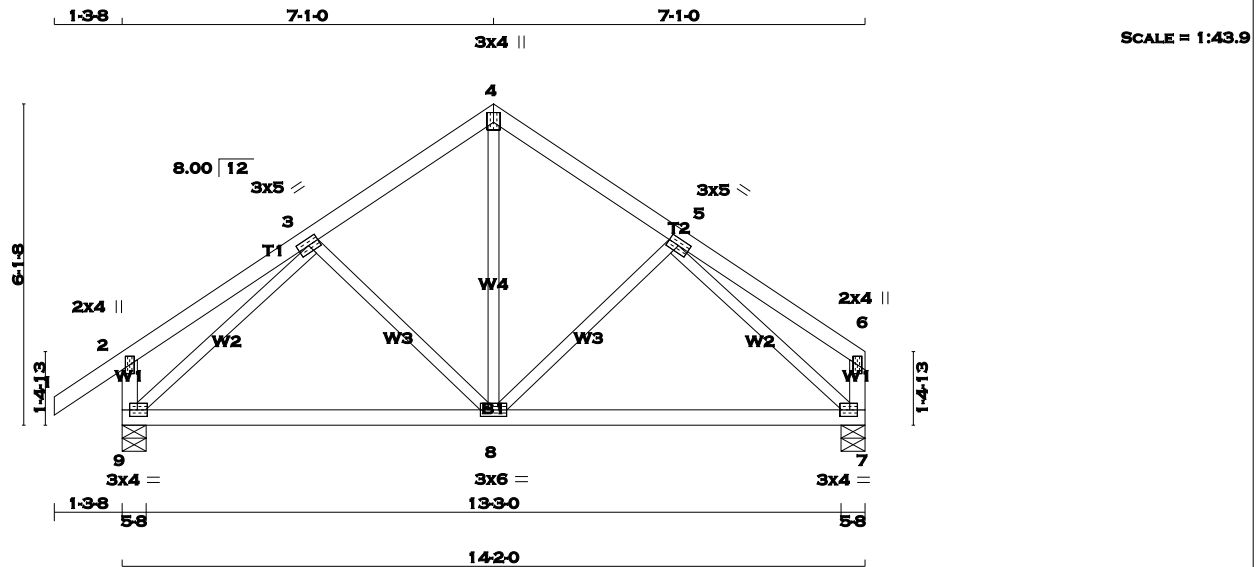
JSI GRIP= 0.78 (6) (INPUT = 0.90)
JSI METAL= 0.37 (11) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 59 = 119 lb
[M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2 EXCEPT				SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	5.0		
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	5.0		
6	TMV+p	MT20	2.0	4.0		
7	BMVW1-t	MT20	3.0	4.0	1.50	1.75
8	BMWW-t	MT20	3.0	6.0		
9	BMVW1-t	MT20	3.0	4.0	1.50	1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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
9	778	0	778	0	0
7	672	0	672	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS	2ND LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
9	544	394 / 0	0 / 0	0 / 0	0 / 0
7	472	330 / 0	0 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM TO		FR-TO	
1-2	0 / 29	-77.3 -77.3 0.10 (1)	10.00	8-4	0 / 357
2-3	0 / 17	-77.3 -77.3 0.15 (1)	10.00	8-5	-147 / 6
3-4	-531 / 0	-77.3 -77.3 0.12 (1)	6.25	3-8	-147 / 6
4-5	-531 / 0	-77.3 -77.3 0.12 (1)	6.25	9-3	-744 / 0
5-6	0 / 17	-77.3 -77.3 0.15 (1)	10.00	5-7	-744 / 0
9-2	-212 / 0	0.0 0.0 0.02 (1)	7.81		
7-6	-106 / 0	0.0 0.0 0.01 (1)	7.81		
9-8	0 / 533	-17.5 -17.5 0.29 (4)	10.00		
8-7	0 / 533	-17.5 -17.5 0.29 (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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.15 (2-3:1) , BC=0.29 (8-9:4) , WB=0.29 (3-9:1) , SSI=0.11 (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.

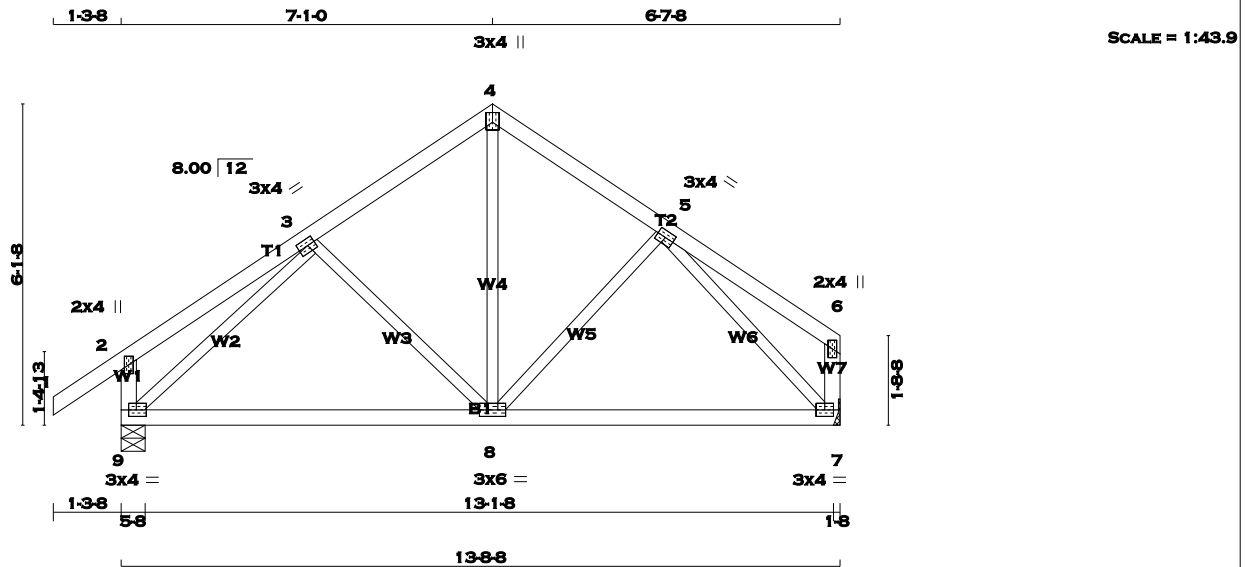
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JSI METAL= 0.21 (5) (INPUT = 1.00)

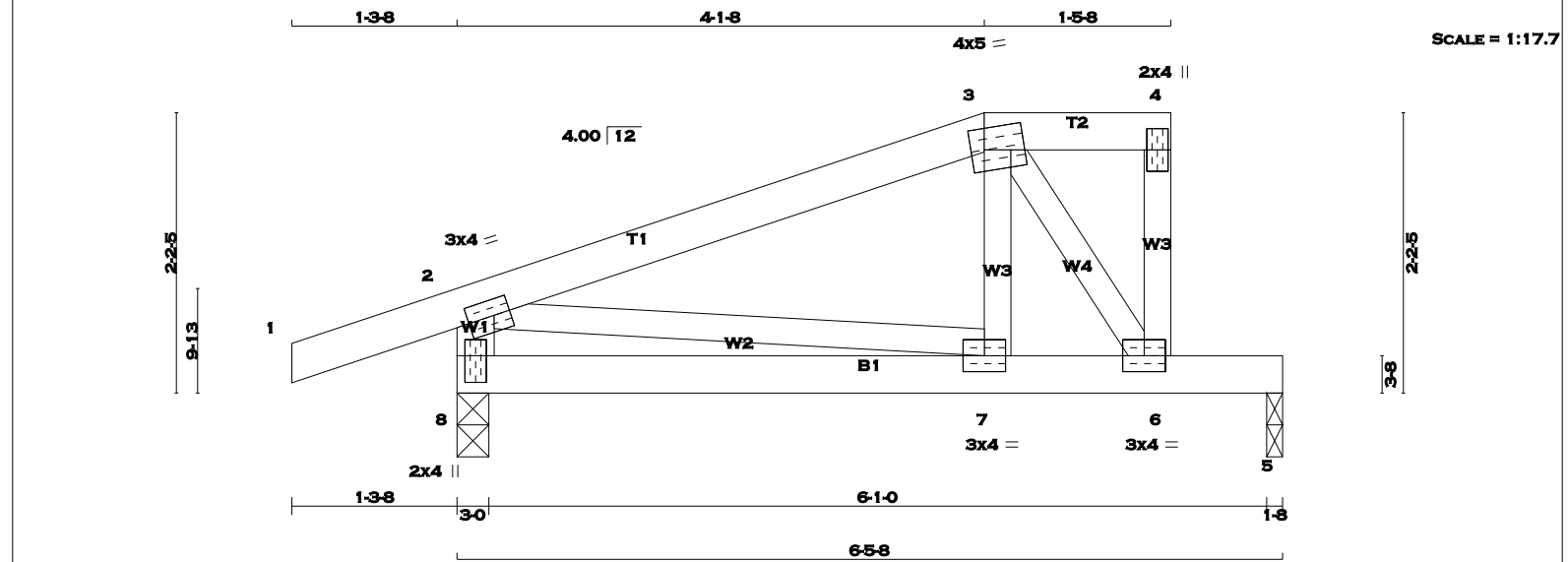


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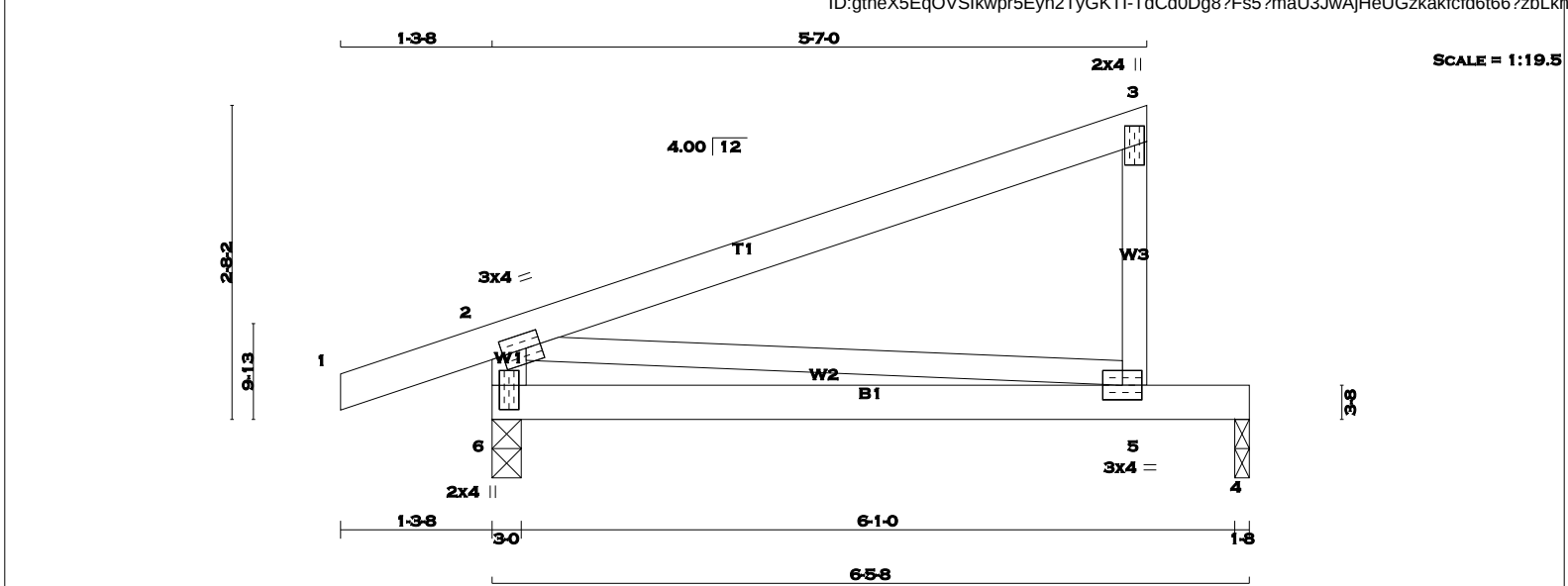
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
1 - 3 2x4 DRY No.2 SPF					BEARINGS										SPECIFIED LOADS:									
3 - 4 2x4 DRY No.2 SPF					FACTORED										TOP CH. LL = 23.3 PSF									
6 - 4 2x3 DRY No.2 SPF					GROSS REACTION										DL = 3.0 PSF									
8 - 2 2x4 DRY No.2 SPF					DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 0.0 PSF									
8 - 5 2x4 DRY No.2 SPF					8 410 0 410 0 0 3-0 3-0										DL = 7.0 PSF									
ALL WEBS 2x3 DRY No.2 SPF					5 306 0 306 0 0 1-8 1-8										TOTAL LOAD = 33.3 PSF									
EXCEPT					UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
DRY: SEASONED LUMBER.					1ST LCASE MAX./MIN. COMPONENT REACTIONS										LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12									
					JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010									
					8 285 213 / 0 0 / 0 0 / 0 0 / 0 73 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
					5 215 150 / 0 0 / 0 0 / 0 0 / 0 65 / 0 0 / 0										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014									
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5										- CSA 086-09									
					BRACING										- TPIC 2011									
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F.									
					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED									
					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										ROOF LIVE LOAD									
					LOADING										ALLOWABLE DEFL.(LL)= L/360 (0.22")									
					TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")									
					C H O R D S										ALLOWABLE DEFL.(TL)= L/360 (0.22")									
					MEMB. MAX. FACTORED FORCE FACTORED VERT. LOAD LC1 MAX MAX. MEMB. MAX. FACTORED FORCE MAX										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")									
					(LBS) (PLF) (LC) UNBRAC (LBS) (LC)										CSI: TC=0.23 (2-3:1) , BC=0.36 (6-7:1) , WB=0.07 (3-6:1) , SSI=0.24 (5-6:1)									
					FR-TO FROM TO LENGTH FR-TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
					1- 2 0 / 16 -77.3 -77.3 0.10 (1) 10.00 7- 3 0 / 231 0.05 (1)										COMP=1.10 SHEAR=1.10 TENS= 1.10									
					2- 3 -278 / 0 -77.3 -77.3 0.23 (1) 6.25 3- 6 -453 / 0 0.07 (1)										COMPANION LIVE LOAD FACTOR = 0.50									
					3- 4 0 / 0 -77.3 -77.3 0.03 (1) 10.00 2- 7 0 / 265 0.06 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
					6- 4 -56 / 0 0.0 0.0 0.01 (1) 7.81										NAIL VALUES									
					8- 2 -383 / 0 0.0 0.0 0.04 (1) 7.81										PLATE GRIP(DRY) SHEAR SECTION									
					8- 7 0 / 0 -17.5 -17.5 0.08 (4) 10.00										(PSI) (PLI) (PLI)									
					7- 6 0 / 276 -17.5 -17.5 0.36 (1) 10.00										MAX MIN MAX MIN MAX MIN									
					6- 5 0 / 0 -94.8 -94.8 0.32 (1) 10.00										MT20 618 354 1667 822 2284 1656									
															PLATE PLACEMENT TOL. = 0.250 inches									



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

5 - 3

2x3

DRY

No.2

SPF

6 - 2

2x4

DRY

No.2

SPF

6 - 4

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

2

TMVW-t

MT20

3.0

4.0

1.50

1.50

3

TMV+p

MT20

2.0

4.0

5

BMVW-t

MT20

3.0

4.0

6

BMV1+p

MT20

2.0

4.0

2.50

1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

6

405

0

405

0

0

3-0

3-0

4

243

0

243

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

6

282

210 / 0

0 / 0

0 / 0

0 / 0

72 / 0

0 / 0

4

172

112 / 0

0 / 0

0 / 0

0 / 0

60 / 0

0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 4

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: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

MEMB.

MAX.

FORCE

MAX

FR-TO

FORCE

VERT.

LOAD

LC1

MAX

MAX.

MEMB.

MAX.

MEMB.

MAX.

FORCE

MAX

1-2

0 / 16

-77.3

-77.3

0.10

(1)

10.00

2-5

0 / 0

-77.3

-77.3

0.41

(1)

10.00

2-3

0 / 0

-77.3

-77.3

0.41

(1)

10.00

5-3

-216 / 0

0.0

0.0

0.04

(1)

7.81

6-2

-319 / 0

0.0

0.0

0.03

(1)

7.81

6-5

0 / 0

-17.5

-17.5

0.29

(1)

10.00

5-4

0 / 0

-17.5

-17.5

0.28

(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

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 (0.22")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")

ALLOWABLE DEFL.(TL)= L/360 (0.22")

CALCULATED VERT. DEFL.(TL) = L/ 444 (0.17")

CSI: TC=0.41 (2-3:1) , BC=0.29 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.19 (4-5:1)

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

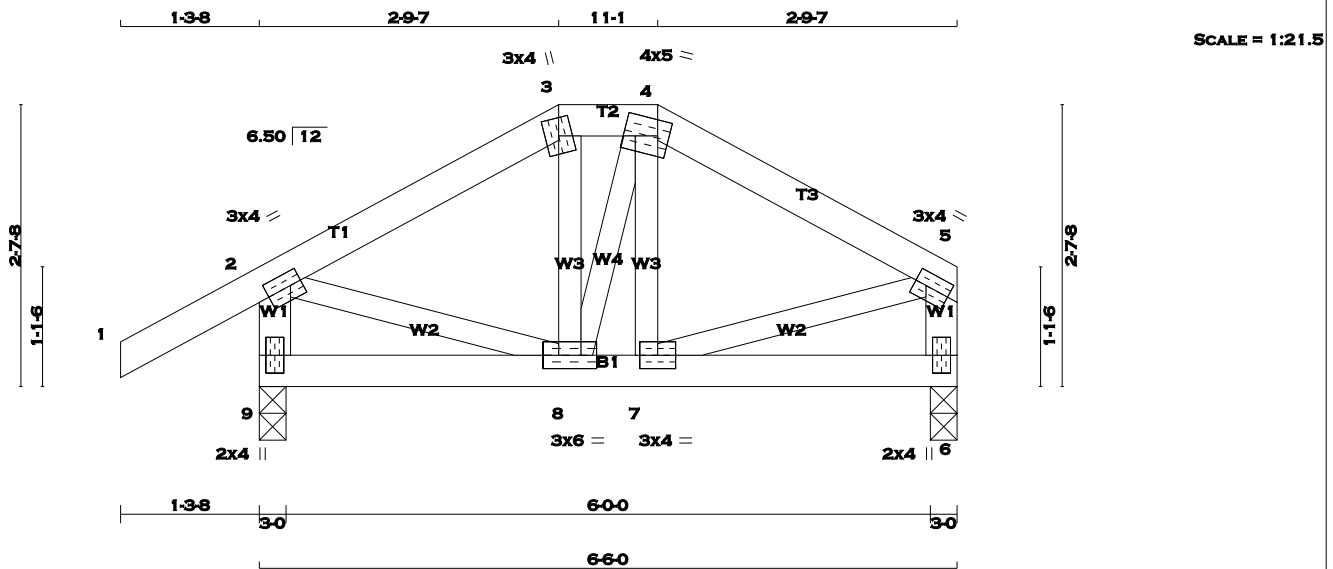
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (2) (INPUT = 0.90)

JSI METAL= 0.06 (6) (INPUT = 1.00)



TOTAL WEIGHT = 2 X 28 = 57 lb
[M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	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-t	MT20	3.0	4.0	1.50	1.25
3	TTW+m	MT20	3.0	4.0		
4	TTWW-m	MT20	4.0	5.0	1.75	1.25
5	TMVW-t	MT20	3.0	4.0	1.50	1.25
6	BMV1+p	MT20	2.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
8	BMWW-t	MT20	3.0	6.0		
9	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9		414	0	414	0	0	3-0	3-0	
6		308	0	308	0	0	3-0	3-0	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
9		288	215 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	
6		216	151 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 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 (LBS)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 25	-77.3	-77.3 0.10 (1)	10.00	8-3	-26 / 21	0.01 (4)
2-3	-246 / 0	-77.3	-77.3 0.08 (1)	6.25	8-4	-2 / 2	0.00 (4)
3-4	-215 / 0	-77.3	-77.3 0.01 (1)	6.25	7-4	-23 / 20	0.01 (4)
4-5	-247 / 0	-77.3	-77.3 0.08 (1)	6.25	2-8	0 / 224	0.05 (1)
9-2	-391 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 225	0.05 (1)
6-5	-286 / 0	0.0	0.0 0.03 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.03 (4)	10.00			
8-7	0 / 216	-17.5	-17.5 0.05 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.03 (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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (1-2:1), BC=0.05 (7-8:1), WB=0.05 (5-7:1), SSI=0.07 (4-5:1)

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.

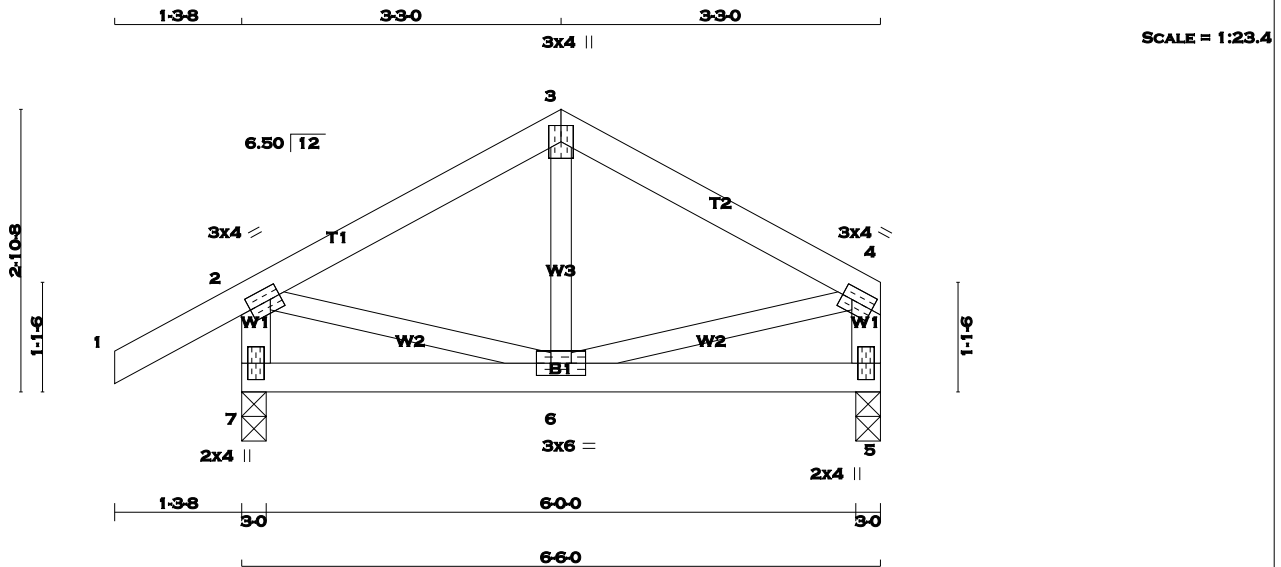
JSI GRIP= 0.56 (5) (INPUT = 0.90)
JSI METAL= 0.13 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 26 = 104 lb [M][F]

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
7	414	0	414	0	0	3-0	3-0	3-0	3-0
5	308	0	308	0	0	3-0	3-0	3-0	3-0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
7	288	215 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0	
5	216	151 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5

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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 25	-77.3 -77.3	0.10 (1)	6-3	-32 / 45	0.02 (4)	
2-3	-230 / 0	-77.3 -77.3	0.10 (1)	2-6	0 / 208	0.05 (1)	
3-4	-230 / 0	-77.3 -77.3	0.10 (1)	6-4	0 / 208	0.05 (1)	
7-2	-391 / 0	0.0 0.0	0.04 (1)				
5-4	-285 / 0	0.0 0.0	0.03 (1)				
7-6	0 / 0	-17.5 -17.5	0.05 (4)	10.00			
6-5	0 / 0	-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

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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (3-4:1), BC=0.05 (6-7:4), WB=0.05 (2-6:1), SSI=0.09 (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

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.

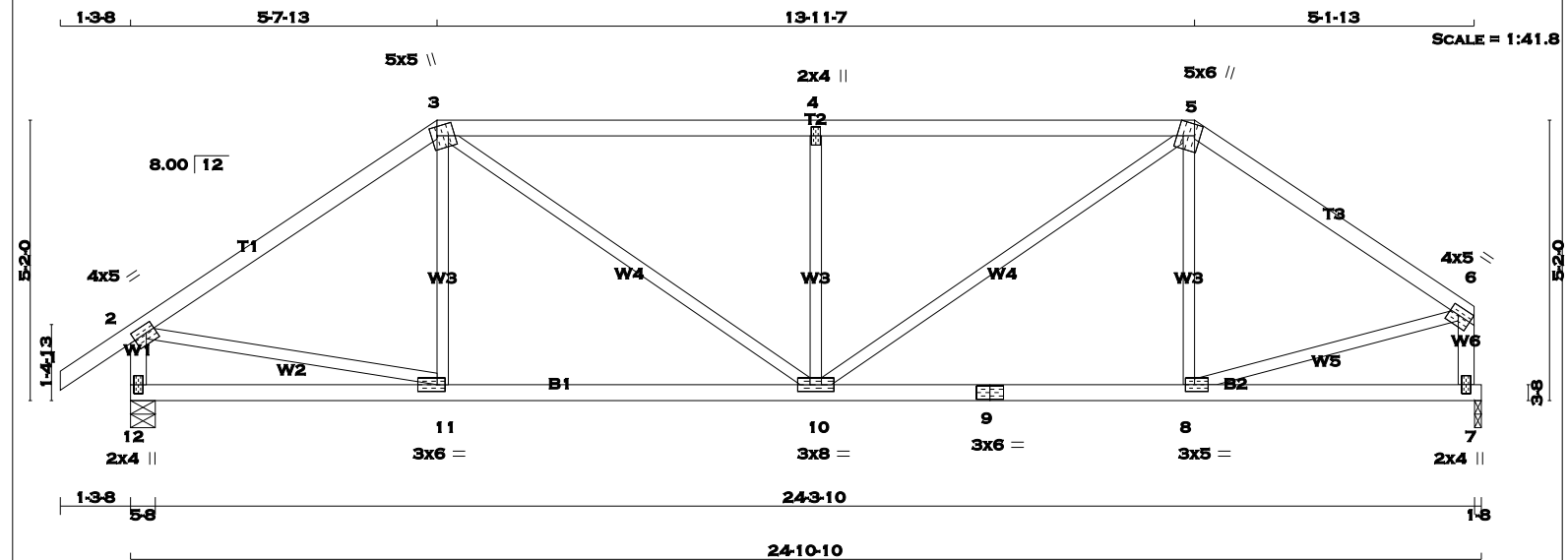
JSI GRIP= 0.52 (4) (INPUT = 0.90)
JSI METAL= 0.13 (4) (INPUT = 1.00)



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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
12 - 2	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF
9 - 7	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-t	MT20	4.0	5.0	1.75	2.00
3	TTWW+m	MT20	5.0	5.0	2.00	1.25
4	TMW+w	MT20	2.0	4.0		
5	TTWW+m	MT20	5.0	6.0	Edge	3.75
6	TMVW-t	MT20	4.0	5.0	1.75	Edge
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	3.0	5.0	1.50	2.00
9	BS-t	MT20	3.0	6.0		
10	BMWWW-t	MT20	3.0	8.0		
11	BMWW-t	MT20	3.0	6.0	1.50	1.75
12	BMV1+p	MT20	2.0	4.0		

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LK TL20 PLATES IS ALLOWED.



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
12	1280	0	1280	0
7	1174	0	1174	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
12	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0
7	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 7

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 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 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	11-3	-77 / 76	0.03 (1)
2-3	-1287 / 0	-77.3	-77.3 0.51 (1)	5.04	3-10	0 / 641	0.14 (1)
3-4	-1594 / 0	-77.3	-77.3 0.78 (1)	4.14	10-4	-663 / 0	0.26 (1)
4-5	-1594 / 0	-77.3	-77.3 0.78 (1)	4.14	10-5	0 / 725	0.16 (1)
5-6	-1206 / 0	-77.3	-77.3 0.41 (1)	5.31	8-5	-150 / 50	0.06 (1)
12-2	-1241 / 0	0.0	0.0 0.13 (1)	7.20	2-11	0 / 1088	0.24 (1)
7-6	-1140 / 0	0.0	0.0 0.12 (1)	7.45	8-6	0 / 1038	0.23 (1)
12-11	0 / 0	-17.5	-17.5 0.16 (4)	10.00			
11-10	0 / 1068	-17.5	-17.5 0.26 (1)	10.00			
10-9	0 / 999	-17.5	-17.5 0.25 (1)	10.00			
9-8	0 / 999	-17.5	-17.5 0.25 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.15 (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 6.00/12

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 (0.82")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
 ALLOWABLE DEFL.(TL)= L/360 (0.82")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.78 (3-4:1), BC=0.26 (10-11:1), WB=0.26 (4-10:1), SSI=0.26 (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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		822	2284
			1656

PLATE PLACEMENT TOL. = 0.250 inches

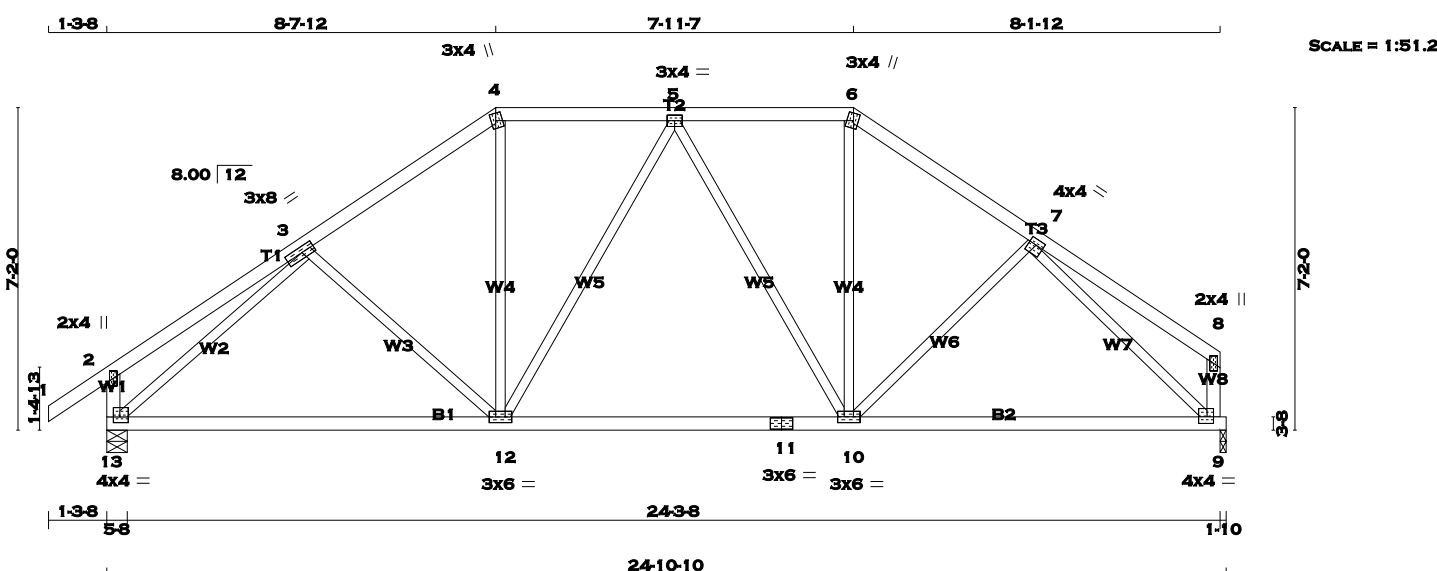
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
 JSI METAL= 0.44 (2) (INPUT = 1.00)

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LUMBER

N. L. G. A. RULES

CHORDS SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

6 - 8

2x4

DRY

No.2

SPF

13 - 2

2x4

DRY

No.2

SPF

9 - 8

2x4

DRY

No.2

SPF

13 - 11

2x4

DRY

No.2

SPF

11 - 9

2x4

DRY

No.2

SPF

ALL WEBS EXCEPT

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED GROSS REACTION

MAXIMUM FACTORED GROSS REACTION

INPUT BRG

REQRD BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

13

1280

0

1280

0

0

5-8

5-8

9

1174

0

1174

0

0

1-10

1-10

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

13

896

640 / 0

0 / 0

0 / 0

0 / 0

256 / 0

0 / 0

9

824

576 / 0

0 / 0

0 / 0

0 / 0

247 / 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 = 5.64 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

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

MAX

FR-TO

MEMB.

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

MAX

1-2

0 / 29

-77.3

-77.3

0.10

(1)

10.00

3-12

-125 / 23

0.08

(1)

2-3

0 / 21

-77.3

-77.3

0.23

(1)

10.00

12-4

0 / 403

0.09

(1)

3-4

-1197 / 0

-77.3

-77.3

0.19

(1)

5.64

12-5

-184 / 0

0.24

(1)

4-5

-983 / 0

-77.3

-77.3

0.16

(1)

6.11

5-10

-242 / 0

0.31

(1)

5-6

-955 / 0

-77.3

-77.3

0.16

(1)

6.18

10-6

0 / 391

0.09

(1)

6-7

-1162 / 0

-77.3

-77.3

0.17

(1)

5.73

10-7

-42 / 42

0.02

(1)

7-8

0 / 20

-77.3

-77.3

0.20

(1)

10.00

13-3

-1453 / 0

0.84

(1)

13-2

-235 / 0

0.0

0.0

0.02

(1)

7.81

7-9

-1394 / 0

0.77

(1)

9-8

-122 / 0

0.0

0.0

0.01

(1)

7.81

13-12

0 / 1071

-17.5

-17.5

0.36

(4)

10.00

12-11

0 / 1074

-17.5

-17.5

0.37

(4)

10.00

11-10

0 / 1074

-17.5

-17.5

0.37

(4)

10.00

10-9

0 / 978

-17.5

-17.5

0.32

(4)

10.00

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMV+p

MT20

2.0

4.0

3

TMWW-t

MT20

3.0

8.0

1.50

3.50

4

TTW+m

MT20

3.0

4.0

2.00

1.25

5

TMWW-t

MT20

3.0

4.0

6

TTW+m

MT20

3.0

4.0

2.00

1.25

7

TMWW-t

MT20

4.0

4.0

1.50

2.00

8

TMV+p

MT20

2.0

4.0

9

BMVW1-t

MT20

4.0

4.0

1.75

1.75

10

BMWW-t

MT20

3.0

6.0

11

BS-t

MT20

3.0

6.0

12

BMWW-t

MT20

3.0

6.0

13

BMVW1-t

MT20

4.0

4.0

1.50

1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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 6.00/12

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 (0.82")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")

ALLOWABLE DEFL.(TL)= L/360 (0.82")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.23 (2-3:1), BC=0.37 (10-12:4), WB=0.84 (3-13:1), SSI=0.15 (4-5:1)

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 (3) (INPUT = 0.90)

JSI METAL= 0.51 (7) (INPUT = 1.00)



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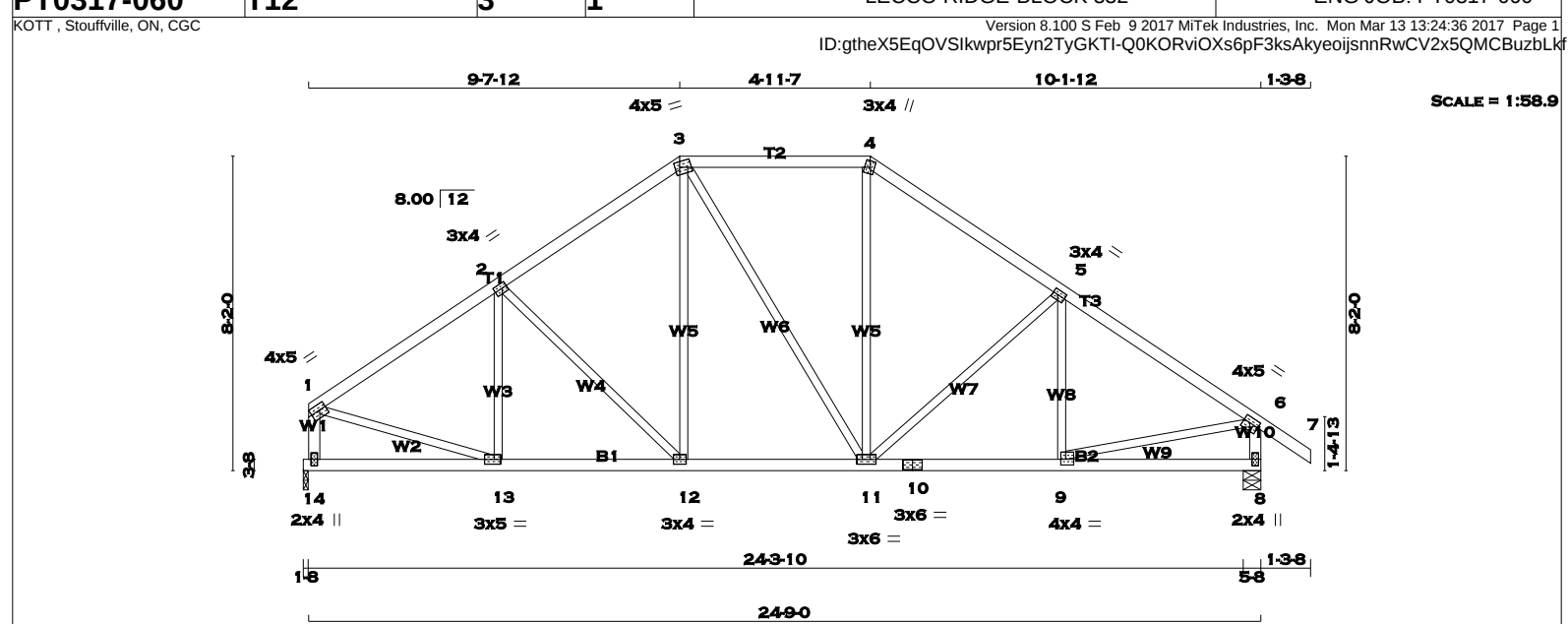
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BUILDING DIVISION

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





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

1 - 3 2x4 DRY No.2 SPF
3 - 4 2x4 DRY No.2 SPF
4 - 7 2x4 DRY No.2 SPF
14- 1 2x4 DRY No.2 SPF
8 - 6 2x4 DRY No.2 SPF
14- 10 2x4 DRY No.2 SPF
10- 8 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

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

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
14	1174	0	1174	0
8	1280	0	1280	0

UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
8	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0

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 6.00/12

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 (0.82")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.28 (5-6:1), BC=0.23 (9-11:1), WB=0.26 (5-11:1), SSI=0.16 (5-6:1)

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
(P.S.I) (P.L.I) (P.L.I)
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= 0.45 (6) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.75	Edge
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	4.0	5.0	1.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	4.0	4.0	1.75	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	6.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	3.0	5.0	1.50	2.00
14	BMV1+p	MT20	2.0	4.0		

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

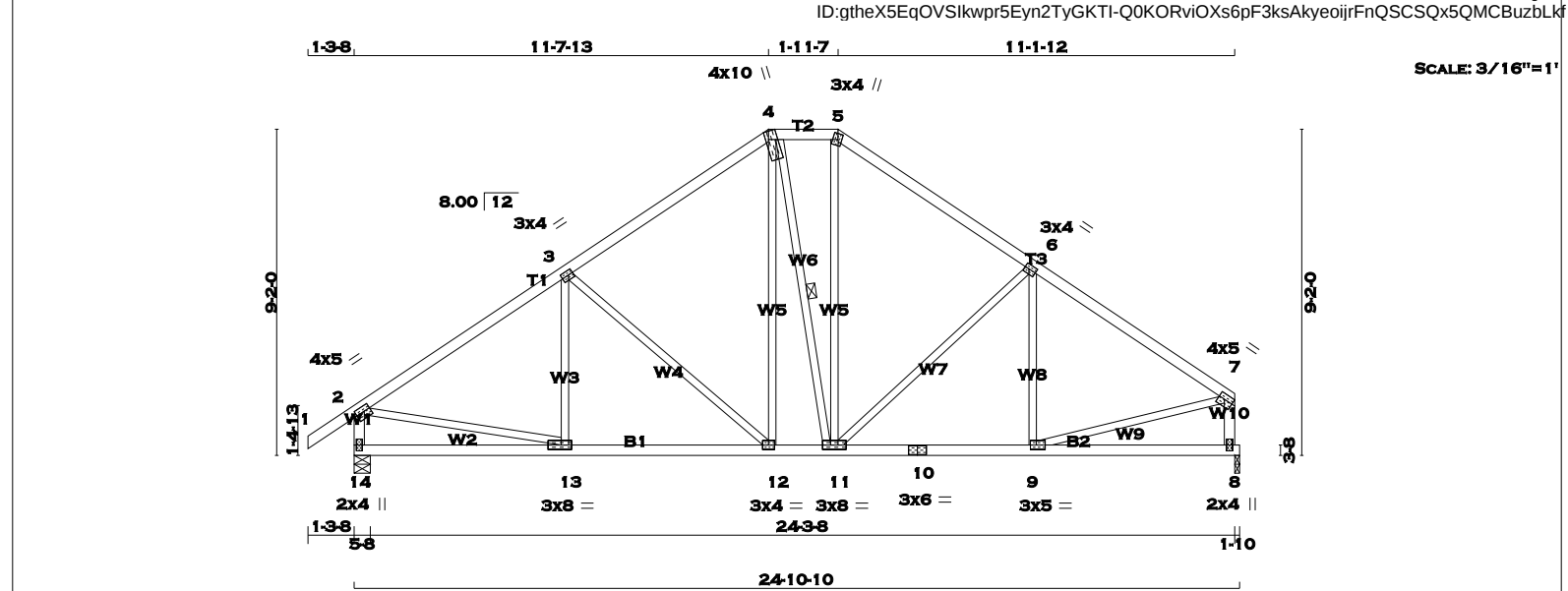
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO		FR-TO		
1-2	-1224 / 0	-77.3	-77.3 0.25 (1)	5.52	13-2	-205 / 20	0.08 (1)
2-3	-1085 / 0	-77.3	-77.3 0.24 (1)	5.79	2-12	-222 / 0	0.19 (1)
3-4	-899 / 0	-77.3	-77.3 0.25 (1)	6.18	12-3	0 / 236	0.05 (1)
4-5	-1104 / 0	-77.3	-77.3 0.27 (1)	5.71	3-11	0 / 29	0.01 (1)
5-6	-1322 / 0	-77.3	-77.3 0.28 (1)	5.33	11-4	0 / 264	0.06 (1)
6-7	0 / 29	-77.3	-77.3 0.10 (1)	10.00	11-5	-303 / 0	0.26 (1)
14-1	-1137 / 0	0.0	0.0 0.12 (1)	7.45	9-5	-137 / 44	0.05 (1)
8-6	-1242 / 0	0.0	0.0 0.13 (1)	7.20	1-13	0 / 1081	0.24 (1)
					9-6	0 / 1145	0.26 (1)
14-13	0 / 0	-17.5	-17.5 0.10 (4)	10.00			
13-12	0 / 1039	-17.5	-17.5 0.21 (1)	10.00			
12-11	0 / 883	-17.5	-17.5 0.19 (1)	10.00			
11-10	0 / 1121	-17.5	-17.5 0.23 (1)	10.00			
10-9	0 / 1121	-17.5	-17.5 0.23 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.11 (4)	10.00			

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TOTAL WEIGHT = 4 X 117 = 466 lb
[M][F]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 5	2x4	DRY	No.2		
5 - 7	2x4	DRY	No.2		
14- 2	2x4	DRY	No.2		
8 - 7	2x4	DRY	No.2		
14- 10	2x4	DRY	No.2		
10- 8	2x4	DRY	No.2		
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-t	MT20	4.0	5.0	1.75 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTWW+m	MT20	4.0	10.0	Edge 1.00
5	TTWW+m	MT20	3.0	4.0	2.00 1.25
6	TMVW-t	MT20	3.0	4.0	1.50 1.50
7	TMVW-t	MT20	4.0	5.0	1.75 Edge
8	BMV1+p	MT20	2.0	4.0	
9	BMVW-t	MT20	3.0	5.0	1.50 2.00
10	BS-t	MT20	3.0	6.0	
11	BMVW-t	MT20	3.0	8.0	
12	BMVW-t	MT20	3.0	4.0	
13	BMVW-t	MT20	3.0	8.0	1.50 3.50
14	BMV1+p	MT20	2.0	4.0	

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
14	1280	0	0	1280	0	0	5-8	5-8	
8	1174	0	0	1174	0	0	1-10	1-10	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
14	896	640 / 0	0 / 0	0 / 0	0 / 0	0 / 0	256 / 0
8	824	576 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 8

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 2 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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

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	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-87 / 75	0.04 (1)
2-3	-1324 / 0	-77.3 -77.3	0.38 (1)	5.19	3-12	-410 / 0	0.49 (1)
3-4	-1012 / 0	-77.3 -77.3	0.35 (1)	5.77	12-4	0 / 321	0.07 (1)
4-5	-816 / 0	-77.3 -77.3	0.04 (1)	6.25	4-11	-17 / 0	0.01 (1)
5-6	-1007 / 0	-77.3 -77.3	0.32 (1)	5.83	11-5	0 / 310	0.07 (1)
6-7	-1238 / 0	-77.3 -77.3	0.34 (1)	5.38	11-6	-329 / 0	0.39 (1)
14-2	-1238 / 0	0.0 0.0	0.13 (1)	7.22	9-6	-152 / 50	0.07 (1)
8-7	-1133 / 0	0.0 0.0	0.12 (1)	7.46	2-13	0 / 1145	0.26 (1)
					9-7	0 / 1085	0.24 (1)
14-13	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
13-12	0 / 1126	-17.5 -17.5	0.26 (1)	10.00			
12-11	0 / 820	-17.5 -17.5	0.18 (1)	10.00			
11-10	0 / 1053	-17.5 -17.5	0.24 (1)	10.00			
10-9	0 / 1053	-17.5 -17.5	0.24 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.14 (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 6.00/12

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 (0.82")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.38 (2-3:1), BC=0.26 (12-13:1), WB=0.49 (3-12:1), SSI=0.18 (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

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

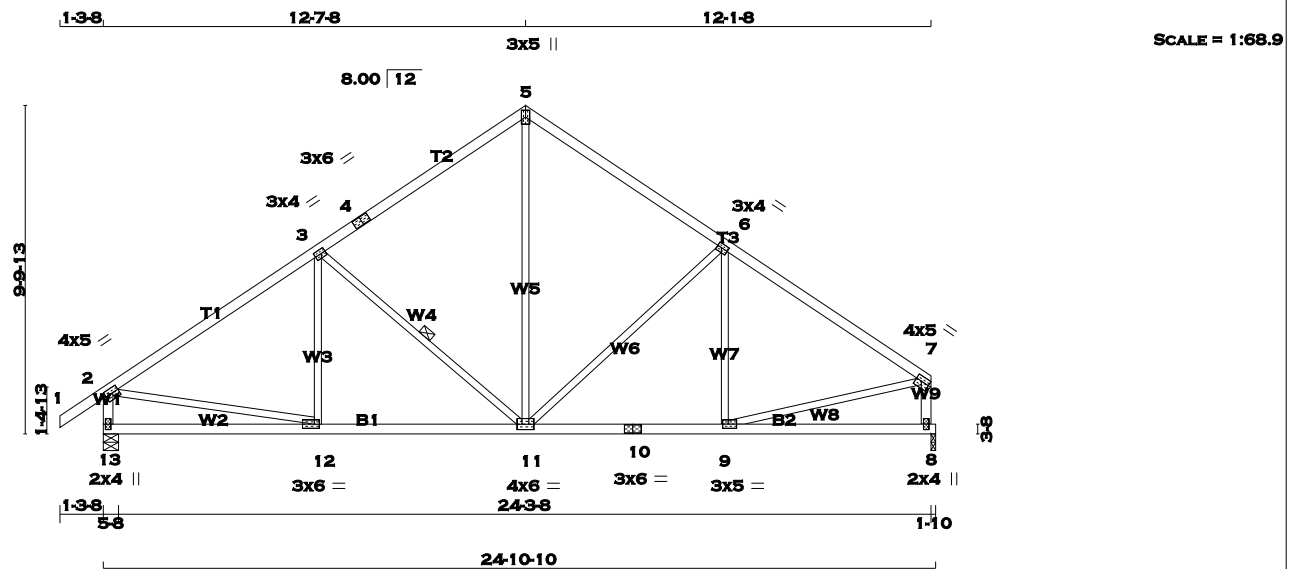
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 10 X 106 = 1055 lb

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

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
13	1280	0	1280	0	0	5-8	5-8	
8	1174	0	1174	0	0	1-10	1-10	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	13	8	896	640 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	256 / 0	248 / 0	0 / 0	0 / 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 = 5.10 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-11. DBS = 20-0-0 . CBF = 58 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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. UNBRACED LENGTH (LC)	MEMB.		MAX. FACTORED FORCE (LBS)
FR-TO			FROM TO		FR-TO		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	12-3	-66 / 86
2-3	-1317 / 0	-77.3	-77.3	0.45 (1)	5.10	3-11	-467 / 0
3-4	-958 / 0	-77.3	-77.3	0.42 (1)	5.79	11-5	0 / 674
4-5	-958 / 0	-77.3	-77.3	0.42 (1)	5.79	11-6	-392 / 0
5-6	-957 / 0	-77.3	-77.3	0.38 (1)	5.85	9-6	-125 / 64
6-7	-1239 / 0	-77.3	-77.3	0.41 (1)	5.29	2-12	0 / 1139
13-2	-1234 / 0	0.0	0.0	0.13 (1)	7.23	9-7	0 / 1084
8-7	-1129 / 0	0.0	0.0	0.12 (1)	7.47		
13-12	0 / 0	-17.5	-17.5	0.17 (4)	10.00		
12-11	0 / 1123	-17.5	-17.5	0.27 (1)	10.00		
11-10	0 / 1057	-17.5	-17.5	0.25 (1)	10.00		
10-9	0 / 1057	-17.5	-17.5	0.25 (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 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 (0.82")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.45 (2-3:1) , BC=0.27 (11-12:1) , WB=0.55 (6-11:1) , SSI=0.20 (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

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	MAX MIN
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

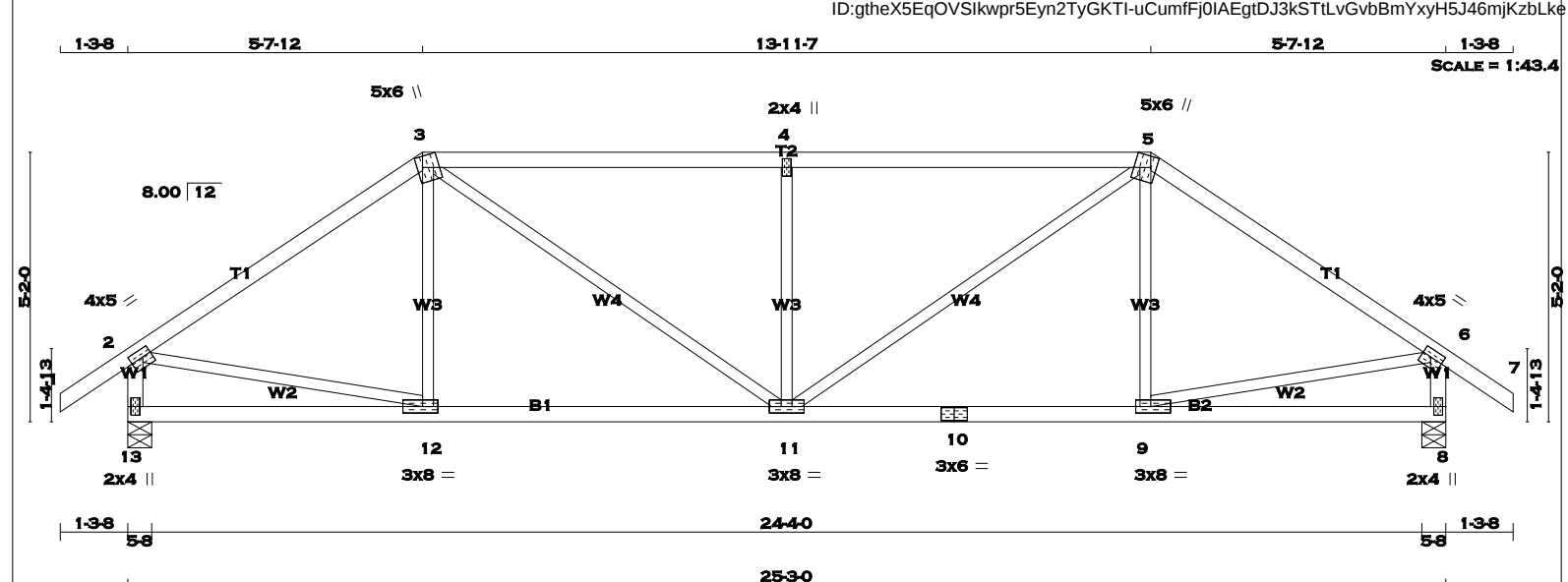
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)



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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 - 6 2x4 DRY No.2 SPF
13 - 10 2x4 DRY No.2 SPF
10 - 8 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

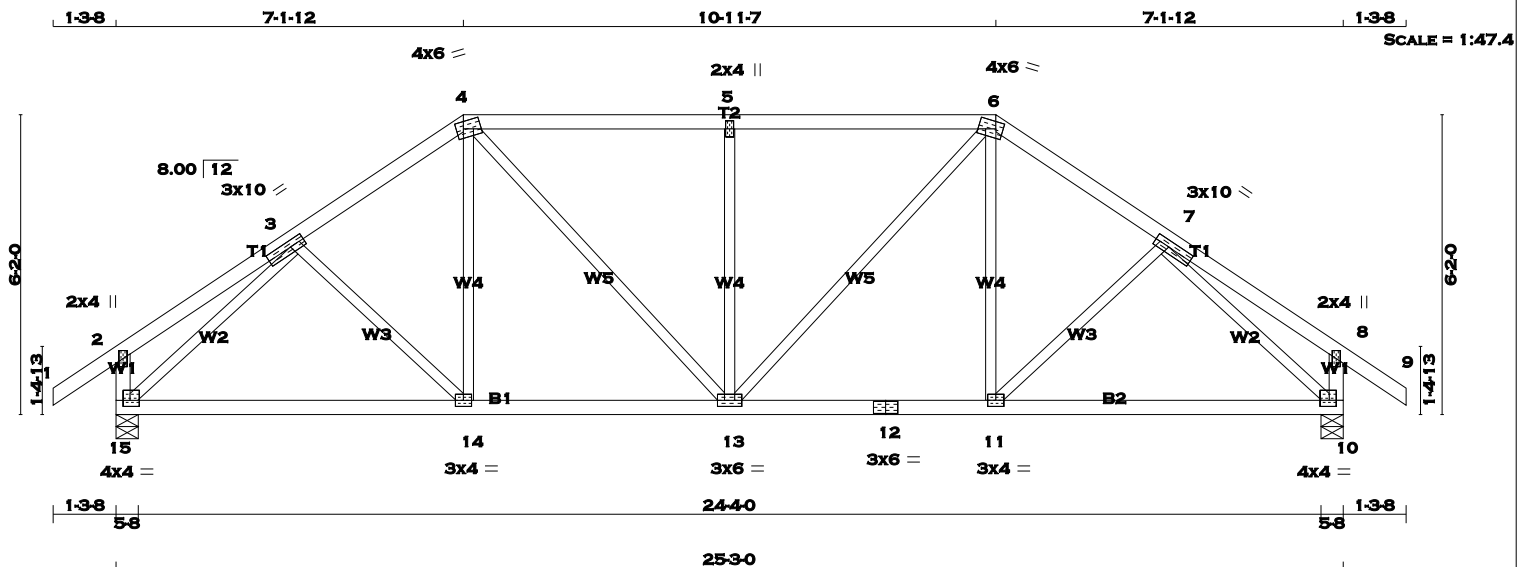
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED MAXIMUM FACTORED INPUT REQ'D
GROSS REACTION GROSS REACTION BRG BRG
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
13 1304 0 1304 0 0 5-8 5-8
8 1304 0 1304 0 0 5-8 5-8
UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
13 913 652 / 0 0 / 0 0 / 0 0 / 0 261 / 0 0 / 0
8 913 652 / 0 0 / 0 0 / 0 0 / 0 261 / 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 = 4.08 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
MAX. FACTORED MAX. FACTORED
MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX.
(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)
FR-TO FROM TO LENGTH FR-TO
1-2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 12-3 -82 / 75 0.03 (1)
2-3 -1321 / 0 -77.3 -77.3 0.51 (1) 4.99 3-11 0 / 682 0.15 (1)
3-4 -1655 / 0 -77.3 -77.3 0.79 (1) 4.08 11-4 -663 / 0 0.26 (1)
4-5 -1655 / 0 -77.3 -77.3 0.79 (1) 4.08 11-5 0 / 682 0.15 (1)
5-6 -1321 / 0 -77.3 -77.3 0.51 (1) 4.99 9-5 -82 / 75 0.03 (1)
6-7 0 / 29 -77.3 -77.3 0.10 (1) 10.00 2-12 0 / 1117 0.25 (1)
13-2 -1265 / 0 0.0 0.0 0.13 (1) 7.16 9-6 0 / 1117 0.25 (1)
8-6 -1265 / 0 0.0 0.0 0.13 (1) 7.16
13-12 0 / 0 -17.5 -17.5 0.16 (4) 10.00
12-11 0 / 1096 -17.5 -17.5 0.27 (1) 10.00
11-10 0 / 1096 -17.5 -17.5 0.27 (1) 10.00
10-9 0 / 1096 -17.5 -17.5 0.27 (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
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12
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 (0.84")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.84")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")
CSI: TC=0.79 (4-5:1), BC=0.27 (11-12:1), WB=0.26 (4-11:1), SSI=0.26 (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= 0.88 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
2 TMVW-t MT20 4.0 5.0 1.75 2.00
3 TTWW+m MT20 5.0 6.0 Edge 3.75
4 TMW+w MT20 2.0 4.0
5 TTWW+m MT20 5.0 6.0 Edge 3.75
6 TMVW-t MT20 4.0 5.0 1.75 2.00
8 BMV1+p MT20 2.0 4.0
9 BMWW-t MT20 3.0 8.0 1.50 3.50
10 BS-t MT20 3.0 6.0
11 BMWW-t MT20 3.0 8.0
12 BMWW-t MT20 3.0 8.0 1.50 3.50
13 BMV1+p MT20 2.0 4.0
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 9	2x4	DRY	No.2	SPF	
15 - 2	2x4	DRY	No.2	SPF	
10 - 8	2x4	DRY	No.2	SPF	
15 - 12	2x4	DRY	No.2	SPF	
12 - 10	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	TMV+p	MT20	2.0	4.0	
3	TMWW-t	MT20	3.0	10.0	1.50 3.75
4	TTWW-m	MT20	4.0	6.0	1.75 1.75
5	TMW+w	MT20	2.0	4.0	
6	TTWW-m	MT20	4.0	6.0	1.75 1.75
7	TMWW-t	MT20	3.0	10.0	1.50 3.75
8	TMV+p	MT20	2.0	4.0	
10	BMVW1-t	MT20	4.0	4.0	1.50 1.75
11	BMWW-t	MT20	3.0	4.0	
12	BS-t	MT20	3.0	6.0	
13	BMWW-t	MT20	3.0	6.0	
14	BMWW-t	MT20	3.0	4.0	
15	BMVW1-t	MT20	4.0	4.0	1.50 1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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	
15		1304	0	1304	0	0	5-8	5-8	
10		1304	0	1304	0	0	5-8	5-8	
UNFACTORED REACTIONS									
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
15		913	652 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0	
10		913	652 / 0	0 / 0	0 / 0	0 / 0	261 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 10

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 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.

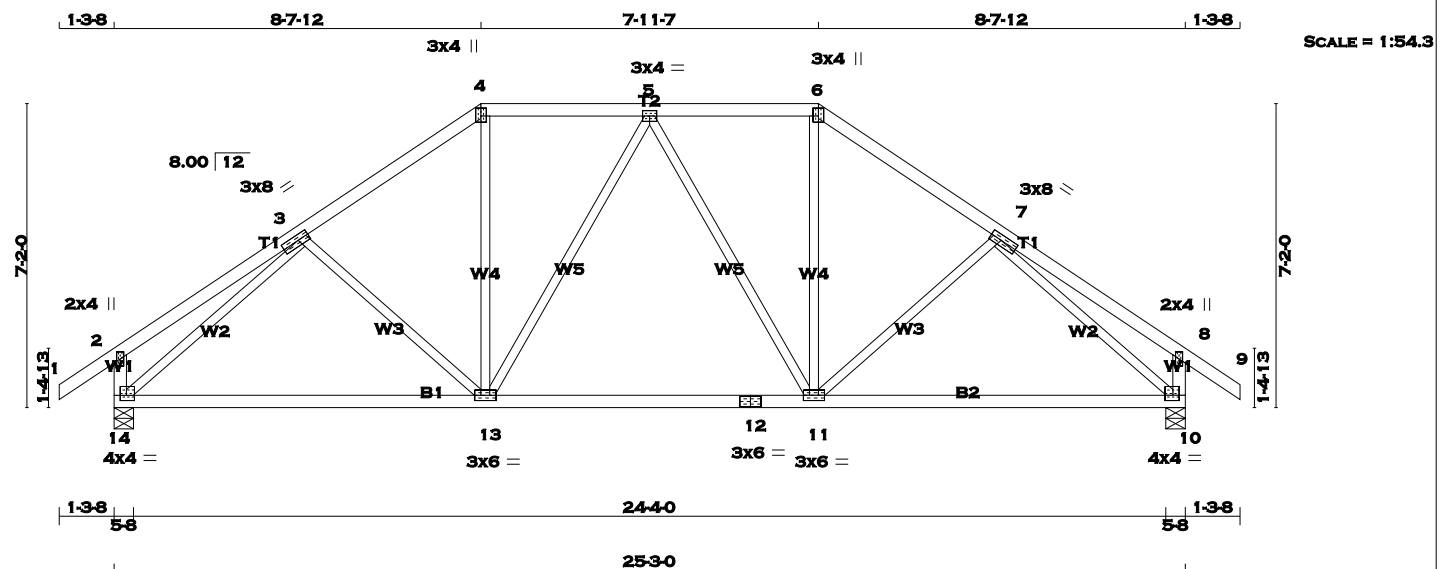
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	
FR-TO		FROM	TO		FR-TO		FROM	TO	
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	3-14	-13 / 45	0.02 (4)	
2-3	0 / 16	-77.3	-77.3	0.15 (1)	10.00	14-4	0 / 144	0.04 (4)	
3-4	-1292 / 0	-77.3	-77.3	0.13 (1)	5.55	4-13	0 / 401	0.09 (1)	
4-5	-1336 / 0	-77.3	-77.3	0.32 (1)	5.25	13-5	-518 / 0	0.31 (1)	
5-6	-1336 / 0	-77.3	-77.3	0.32 (1)	5.25	13-6	0 / 401	0.09 (1)	
6-7	-1292 / 0	-77.3	-77.3	0.13 (1)	5.55	11-6	0 / 144	0.04 (4)	
7-8	0 / 16	-77.3	-77.3	0.15 (1)	10.00	11-7	-13 / 45	0.02 (4)	
8-9	0 / 29	-77.3	-77.3	0.10 (1)	10.00	15-3	-1490 / 0	0.59 (1)	
15-2	-215 / 0	0.0	0.0	0.02 (1)	7.81	7-10	-1490 / 0	0.59 (1)	
10-8	-215 / 0	0.0	0.0	0.02 (1)	7.81				
15-14	0 / 1069	-17.5	-17.5	0.28 (1)	10.00				
14-13	0 / 1062	-17.5	-17.5	0.28 (4)	10.00				
13-12	0 / 1062	-17.5	-17.5	0.28 (4)	10.00				
12-11	0 / 1062	-17.5	-17.5	0.28 (4)	10.00				
11-10	0 / 1069	-17.5	-17.5	0.28 (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 6.00/12									
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 (0.84")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")									
ALLOWABLE DEFL.(TL)= L/360 (0.84")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")									
CSI: TC=0.32 (4-5:1), BC=0.28 (14-15:1), WB=0.59 (3-15:1), SSI=0.20 (4-5:1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10									
COMPANION LIVE LOAD FACTOR = 0.50									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
NAIL VALUES									
PLATE	GRIP(DRY)	SHEAR	SECTION						
(PSI)	(PLI)	(PLI)	(PLI)						
MAX	MIN	MAX	MIN	MAX	MIN				
MT20	618	354	1667	822	2284	1656			
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (3) (INPUT = 0.90)									
JSI METAL= 0.40 (15) (INPUT = 1.00)									

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TOTAL WEIGHT = 109 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 9	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
14 - 12	2x4	DRY	No.2	SPF
12 - 10	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	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	8.0	1.50	3.25
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	4.0		
6	TTW+p	MT20	3.0	4.0	2.25	1.50
7	TMWW-t	MT20	3.0	8.0	1.50	3.25
8	TMV+p	MT20	2.0	4.0		
10	BMVW1-t	MT20	4.0	4.0	1.50	1.75
11	BMVWW-t	MT20	3.0	6.0		
12	BS-t	MT20	3.0	6.0		
13	BMVWW-t	MT20	3.0	6.0		
14	BMVW1-t	MT20	4.0	4.0	1.50	1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
14	1304	0	1304	0	0	5-8	5-8
10	1304	0	1304	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	
14	913	652/0	0/0	0/0	0/0	261/0	0/0
10	913	652/0	0/0	0/0	0/0	261/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.58 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)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0/29	-77.3	-77.3 0.10 (1)	10.00	3-13	-120/25	0.07 (1)
2-3	0/21	-77.3	-77.3 0.23 (1)	10.00	13-4	0/423	0.10 (1)
3-4	-1233/0	-77.3	-77.3 0.19 (1)	5.58	13-5	-213/0	0.28 (1)
4-5	-1013/0	-77.3	-77.3 0.16 (1)	6.04	5-11	-213/0	0.28 (1)
5-6	-1013/0	-77.3	-77.3 0.16 (1)	6.04	11-6	0/423	0.10 (1)
6-7	-1233/0	-77.3	-77.3 0.19 (1)	5.58	11-7	-120/25	0.07 (1)
7-8	0/21	-77.3	-77.3 0.23 (1)	10.00	14-3	-1487/0	0.86 (1)
8-9	0/29	-77.3	-77.3 0.10 (1)	10.00	7-10	-1487/0	0.86 (1)
14-2	-235/0	0.0	0.0 0.02 (1)	7.81			
10-8	-235/0	0.0	0.0 0.02 (1)	7.81			
14-13	0/1096	-17.5	-17.5 0.35 (4)	10.00			
13-12	0/1118	-17.5	-17.5 0.36 (4)	10.00			
12-11	0/1118	-17.5	-17.5 0.36 (4)	10.00			
11-10	0/1096	-17.5	-17.5 0.35 (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 6.00/12

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 (0.84")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.84")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.23 (2-3:1) , BC=0.36 (11-13:4) ,
WB=0.86 (3-14:1) , SSI=0.15 (4-5:1)

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= 0.41 (14) (INPUT = 1.00)



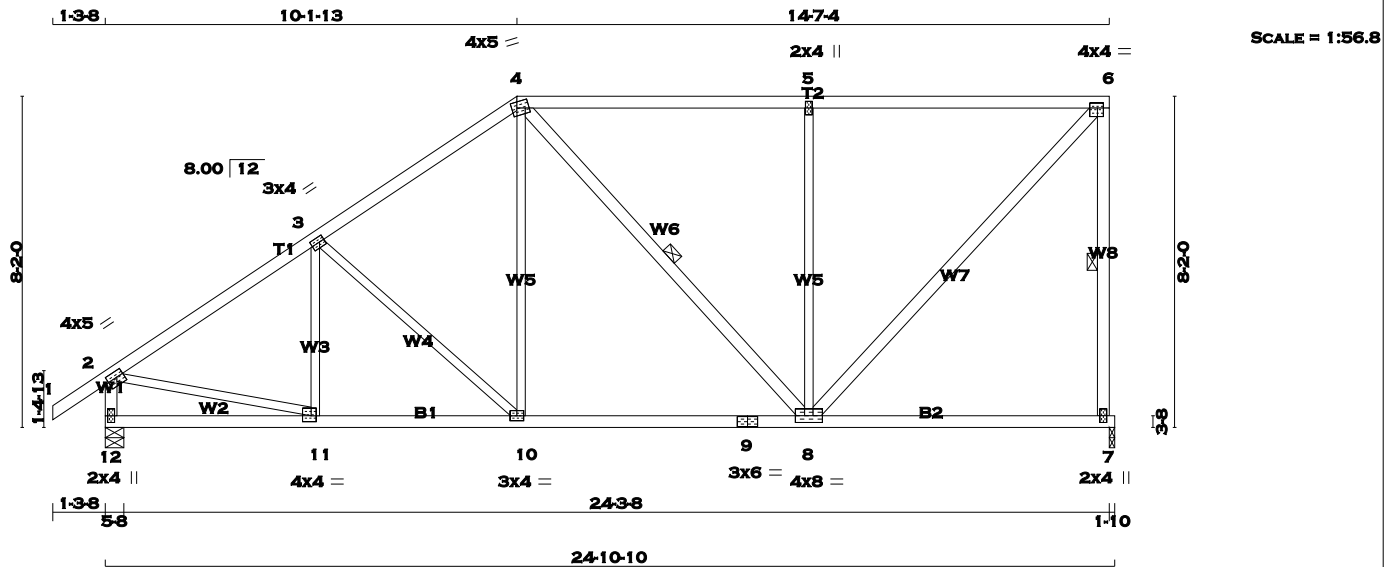
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TOTAL WEIGHT = 119 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	No.2	SPF
4 - 6	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
12 - 2	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
4 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	5.0	1.75 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTWW-m	MT20	4.0	5.0	1.75 1.50
5	TMW+ w	MT20	2.0	4.0	
6	TMVW-t	MT20	4.0	4.0	1.50 1.75
7	BMV1+p	MT20	2.0	4.0	
8	BMWWW-t	MT20	4.0	8.0	
9	BS-t	MT20	3.0	6.0	
10	BMWW-t	MT20	3.0	4.0	
11	BMWW-t	MT20	4.0	4.0	1.75 1.50
12	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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	UPLIFT	IN-SX	IN-SX
7	1174	0	1174	0	0	1-10	1-10
12	1280	0	1280	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
12	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 12

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 84 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8. DBS = 20-0-0 . CBF = 9 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MAX. 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			
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-3	-141 / 40	0.05 (1)	
2-3	-1321 / 0	-77.3	-77.3	0.39 (1)	5.16	3-10	-299 / 0	0.26 (1)	
3-4	-1106 / 0	-77.3	-77.3	0.37 (1)	5.54	10-4	0 / 302	0.07 (1)	
4-5	-850 / 0	-77.3	-77.3	0.77 (1)	5.18	4-8	-75 / 0	0.04 (1)	
5-6	-850 / 0	-77.3	-77.3	0.77 (1)	5.16	8-5	-702 / 0	0.91 (1)	
7-6	-1122 / 0	0.0	0.0	0.34 (1)	5.99	8-6	0 / 1241	0.20 (1)	
12-2	-1241 / 0	0.0	0.0	0.13 (1)	7.21	2-11	0 / 1144	0.26 (1)	
12-11	0 / 0	-17.5	-17.5	0.10 (4)	10.00				
11-10	0 / 1120	-17.5	-17.5	0.25 (1)	10.00				
10-9	0 / 901	-17.5	-17.5	0.31 (4)	10.00				
9-8	0 / 901	-17.5	-17.5	0.31 (4)	10.00				
8-7	0 / 0	-17.5	-17.5	0.24 (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 6.00/12

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 (0.82")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.77 (5-6:1), BC=0.31 (8-10:4), WB=0.91 (5-8:1), SSI=0.28 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

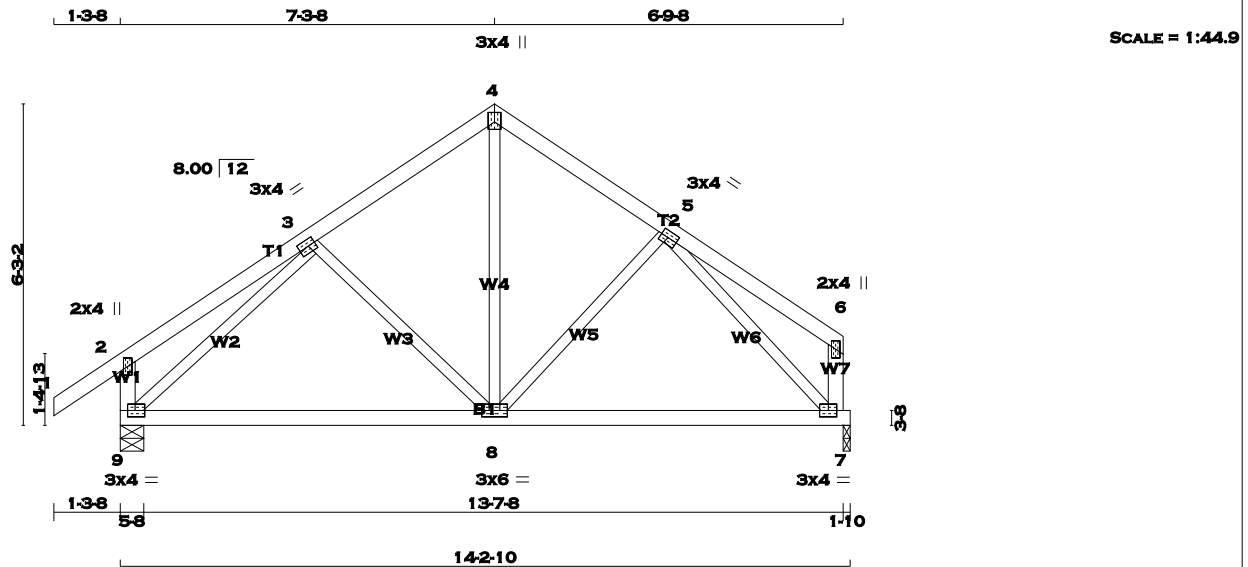
JSI GRIP= 0.86 (2) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 5 X 60 = 300 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 6	2x4	DRY	No.2		SPF
9 - 2	2x4	DRY	No.2		SPF
7 - 6	2x4	DRY	No.2		SPF
9 - 7	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2 EXCEPT					SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	4.0	1.50	1.75
6	TMV+p	MT20	2.0	4.0		
7	BMVW1-t	MT20	3.0	4.0		
8	BMWW-t	MT20	3.0	6.0		
9	BMVW1-t	MT20	3.0	4.0	1.50	1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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	
9		774	0	774	0	0	5-8	5-8	
7		668	0	668	0	0	1-10	1-10	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX	MIN	COMPONENT	REACTIONS		
9	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0
7	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 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. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX LC1 (PLF)	MAX CSI (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO		FROM	TO	
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	3-8	-161 / 3	0.07 (1)	
2-3	0 / 18	-77.3	-77.3	0.16 (1)	10.00	8-4	0 / 339	0.08 (1)	
3-4	-514 / 0	-77.3	-77.3	0.13 (1)	6.25	8-5	-102 / 16	0.04 (1)	
4-5	-512 / 0	-77.3	-77.3	0.11 (1)	6.25	9-3	-735 / 0	0.30 (1)	
5-6	0 / 16	-77.3	-77.3	0.14 (1)	10.00	5-7	-710 / 0	0.28 (1)	
9-2	-215 / 0	0.0	0.0	0.02 (1)	7.81				
7-6	-102 / 0	0.0	0.0	0.01 (1)	7.81				
9-8	0 / 529	-17.5	-17.5	0.28 (4)	10.00				
8-7	0 / 482	-17.5	-17.5	0.28 (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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.16 (2-3:1) , BC=0.28 (8-9:4) , WB=0.30 (3-9:1) , SSI=0.11 (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.

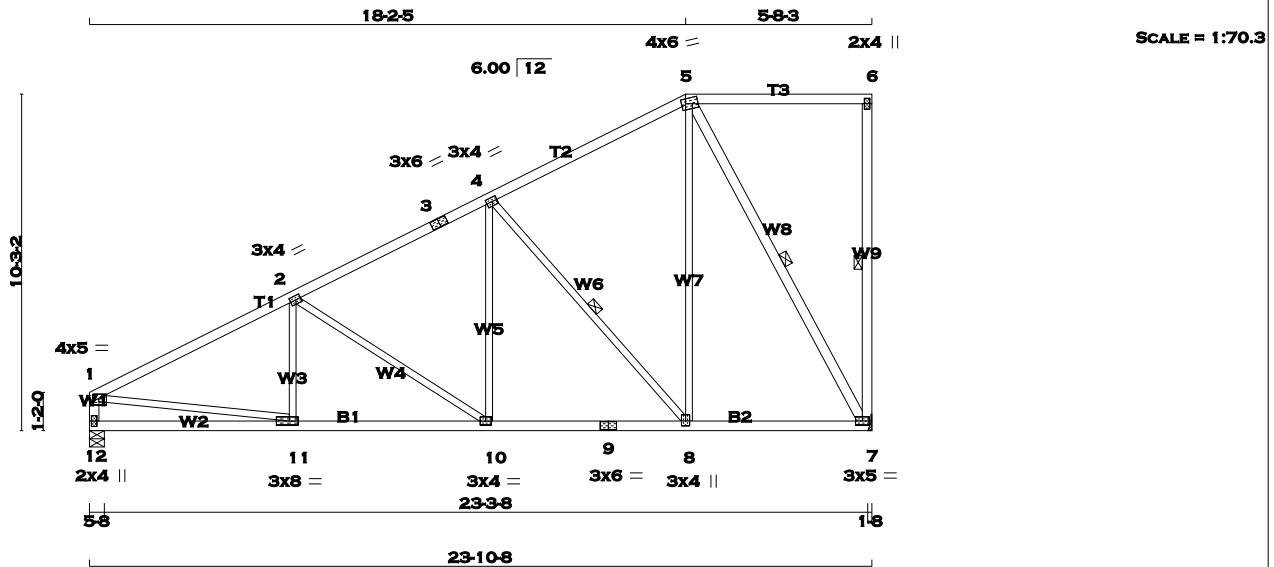
JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.26 (3) (INPUT = 1.00)



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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
7 - 6	2x4 DRY	No.2	SPF
12 - 1	2x4 DRY	No.2	SPF
12 - 9	2x4 DRY	No.2	SPF
9 - 7	2x4 DRY	No.2	SPF
ALL WEBS	2x3 DRY	No.2	SPF
EXCEPT			
5 - 7	2x4 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	5.0	1.50 2.25
2	TMVW-t	MT20	3.0	4.0	1.50 1.75
3	TS-t	MT20	3.0	6.0	
4	TMVW-t	MT20	3.0	4.0	1.50 1.75
5	TTWW-m	MT20	4.0	6.0	1.75 1.50
6	TMV+p	MT20	2.0	4.0	
7	BMVW1-t	MT20	3.0	5.0	
8	BMVW-t	MT20	3.0	4.0	1.75 1.50
9	BS-t	MT20	3.0	6.0	
10	BMVW-t	MT20	3.0	4.0	
11	BMVW-t	MT20	3.0	8.0	1.50 3.25
12	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



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	
7		1132	0	1132	0	0	HANGER BY OTHERS		
12		1132	0	1132	0	0	MIN. SEAT SIZE: 1-8	5-8	5-8
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. LIVE		PERM. LIVE		WIND	
JT		COMBINED	SNOW					DEAD	SOIL
7		795	556 / 0	0 / 0		0 / 0	0 / 0	239 / 0	0 / 0
12		795	556 / 0	0 / 0		0 / 0	0 / 0	239 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 20-0-0 . CBF = 27 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8. DBS = 18-0-0 . CBF = 90 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-7. DBS = 14-0-0 . CBF = 88 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRAC LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-1542 / 0	-77.3 -77.3	0.40 (1)	4.88	11-2	-76 / 78	0.03 (4)
2-3	-1137 / 0	-77.3 -77.3	0.32 (1)	5.59	2-10	-456 / 0	0.45 (1)
3-4	-1137 / 0	-77.3 -77.3	0.32 (1)	5.59	10-4	0 / 353	0.08 (1)
4-5	-570 / 0	-77.3 -77.3	0.32 (1)	6.25	4-8	-797 / 0	0.48 (1)
5-6	0 / 0	-77.3 -77.3	0.43 (1)	10.00	8-5	0 / 714	0.16 (1)
7-6	-220 / 0	0.0 0.0	0.11 (1)	6.25	5-7	-1006 / 0	0.72 (1)
12-1	-1087 / 0	0.0 0.0	0.11 (1)	7.58	1-11	0 / 1410	0.32 (1)
12-11	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
11-10	0 / 1397	-17.5 -17.5	0.30 (1)	10.00			
10-9	0 / 1016	-17.5 -17.5	0.24 (1)	10.00			
9-8	0 / 1016	-17.5 -17.5	0.24 (1)	10.00			
8-7	0 / 499	-17.5 -17.5	0.18 (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 6.00/12

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.43 (5-6:1) , BC=0.30 (10-11:1) , WB=0.72 (5-7:1) , SSI=0.20 (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

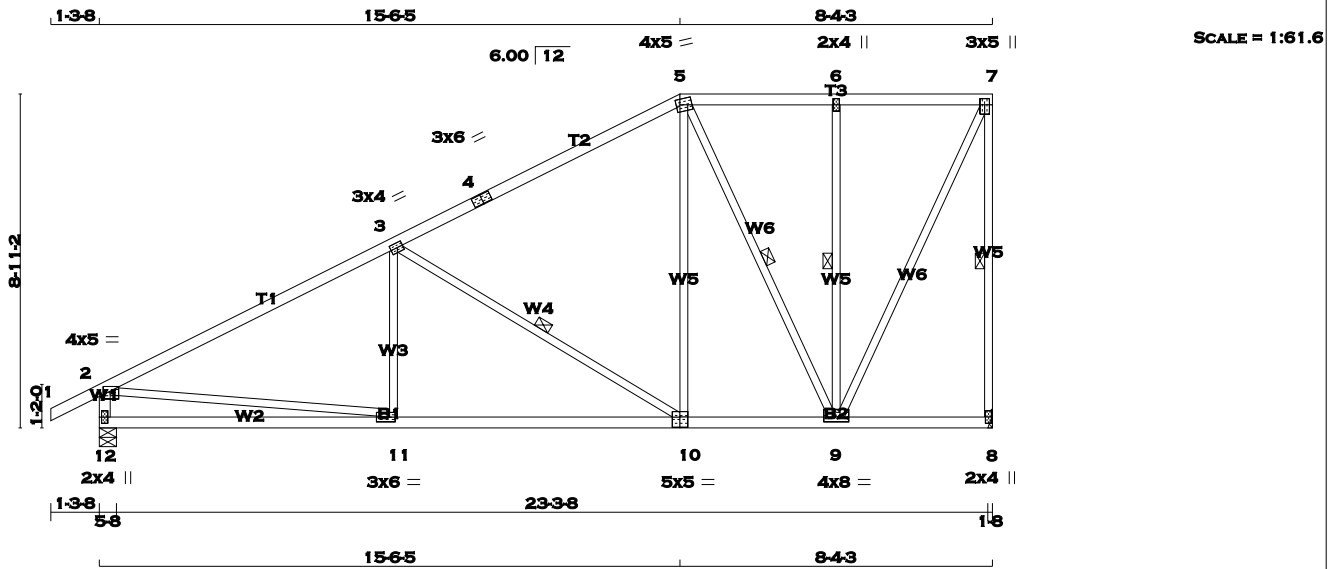
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (7) (INPUT = 0.90)
JSI METAL= 0.39 (1) (INPUT = 1.00)

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TOTAL WEIGHT = 111 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
8 - 7	2x3	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF
12 - 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-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	5.0	1.75	1.25
6	TMVW-w	MT20	2.0	4.0		
7	TMVW+p	MT20	3.0	5.0	2.00	1.50
8	BMV1+p	MT20	2.0	4.0		
9	BMVWV-t	MT20	4.0	8.0	1.50	4.00
10	BSWW-I	MT20	5.0	5.0	3.25	2.50
11	BMVW-t	MT20	3.0	6.0	1.50	1.75
12	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DOWN	REQRD BRG IN-SX			
	VERT	HORZ	DOWN	HORZ			UPLIFT	IN-SX	
8	1132	0	1132	0	0	HANGER BY OTHERS			
12	1237	0	1237	0	0	MIN. SEAT SIZE: 1-8	5-8	5-8	
UNFACTORED REACTIONS									
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
8	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0		
12	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-10. DBS = 18-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9, 6-9. DBS = 20-0-0 . CBF = 71 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	11-3	0 / 134	0.05 (4)		
2-3	-1519 / 0	-77.3 -77.3	0.72 (1)	4.37	3-10	-792 / 0	0.46 (1)		
3-4	-831 / 0	-77.3 -77.3	0.64 (1)	5.63	10-5	0 / 523	0.12 (1)		
4-5	-831 / 0	-77.3 -77.3	0.64 (1)	5.63	5-9	-570 / 0	0.37 (1)		
5-6	-471 / 0	-77.3 -77.3	0.17 (1)	6.25	9-6	-397 / 0	0.20 (1)		
6-7	-471 / 0	-77.3 -77.3	0.17 (1)	6.25	9-7	0 / 1083	0.24 (1)		
8-7	-1099 / 0	0.0 0.0	0.57 (1)	5.31	2-11	0 / 1395	0.31 (1)		
12-2	-1182 / 0	0.0 0.0	0.12 (1)	7.34					
12-11	0 / 0	-17.5 -17.5	0.27 (4)	10.00					
11-10	0 / 1387	-17.5 -17.5	0.37 (4)	10.00					
10-9	0 / 719	-17.5 -17.5	0.19 (1)	10.00					
9-8	0 / 0	-17.5 -17.5	0.07 (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 6.00/12

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.72 (2-3:1) , BC=0.37 (10-11:4) , WB=0.46 (3-10:1) , SSI=0.26 (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

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.

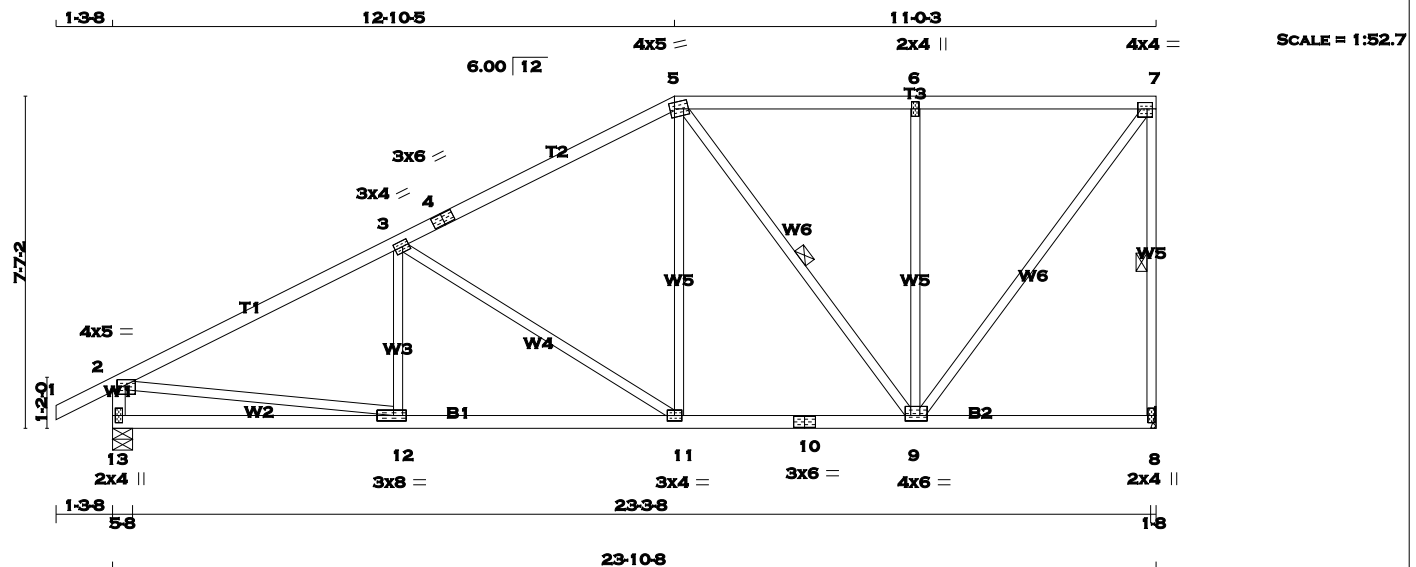
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 104 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
8 - 7	2x3	DRY	No.2	SPF
13- 2	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-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	5.0	1.75	1.25
6	TMW-w	MT20	2.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.75	1.50
8	BMV1+p	MT20	2.0	4.0		
9	BMVWV-t	MT20	4.0	6.0	1.50	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	4.0		
12	BMVW-t	MT20	3.0	8.0	1.50	3.50
13	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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	
8		1132	0	1132	0	0	HANGER BY OTHERS		
13		1237	0	1237	0	0	MIN. SEAT SIZE: 1-8		
UNFACTORED REACTIONS									
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	
13		866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 20-0-0 . CBF = 47 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD	LC1 MAX	CSI (LC)	MEMB.	FORCE (LBS)	MAX	CSI (LC)
FR-TO			FROM TO	LENGTH	FR-TO				
1-2		0 / 23	-77.3	-77.3	0.10 (1)	10.00	12-3	-59 / 91	0.03 (4)
2-3		-1552 / 0	-77.3	-77.3	0.47 (1)	4.75	3-11	-582 / 0	0.69 (1)
3-4		-1058 / 0	-77.3	-77.3	0.43 (1)	5.56	11-5	0 / 415	0.09 (1)
4-5		-1058 / 0	-77.3	-77.3	0.43 (1)	5.56	5-9	-375 / 0	0.21 (1)
5-6		-702 / 0	-77.3	-77.3	0.30 (1)	6.25	9-6	-528 / 0	0.56 (1)
6-7		-702 / 0	-77.3	-77.3	0.30 (1)	6.25	9-7	0 / 1166	0.26 (1)
8-7		-1092 / 0	0.0	0.0	0.40 (1)	5.32	2-12	0 / 1424	0.32 (1)
13-2		-1190 / 0	0.0	0.0	0.12 (1)	7.32			
13-12		0 / 0	-17.5	-17.5	0.18 (4)	10.00			
12-11		0 / 1411	-17.5	-17.5	0.31 (1)	10.00			
11-10		0 / 928	-17.5	-17.5	0.21 (1)	10.00			
10-9		0 / 928	-17.5	-17.5	0.21 (1)	10.00			
9-8		0 / 0	-17.5	-17.5	0.12 (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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.47 (2-3:1), BC=0.31 (11-12:1), WB=0.69 (3-11:1), SSI=0.22 (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

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.

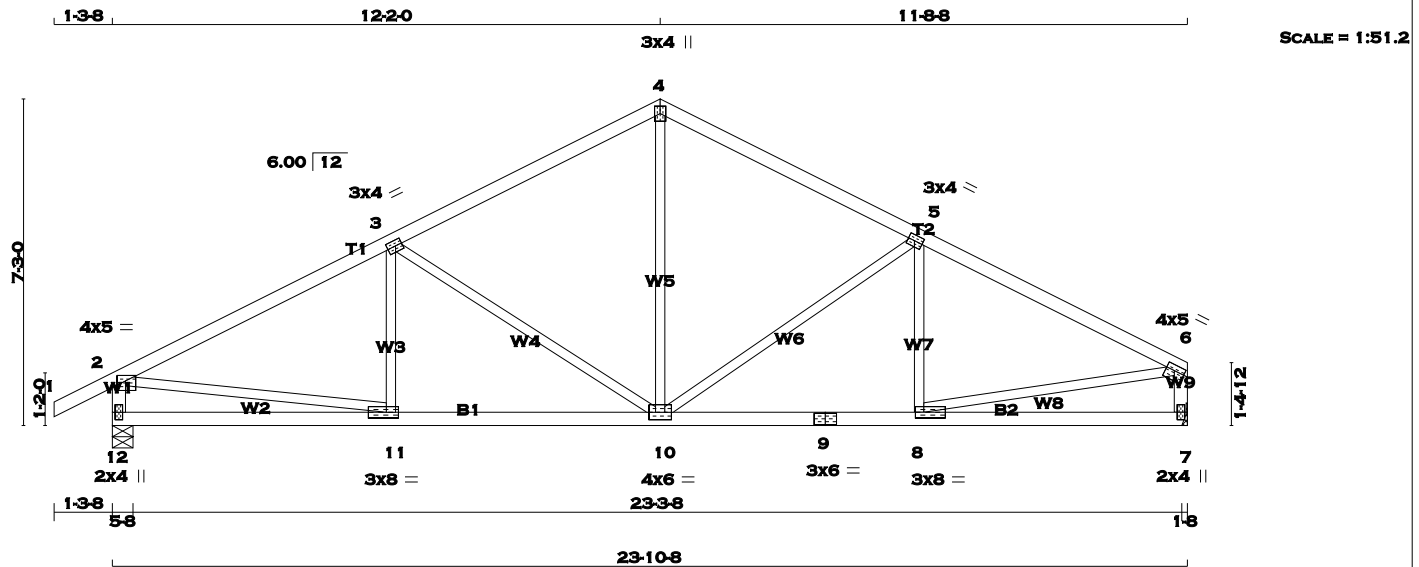
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 93 = 374 lb

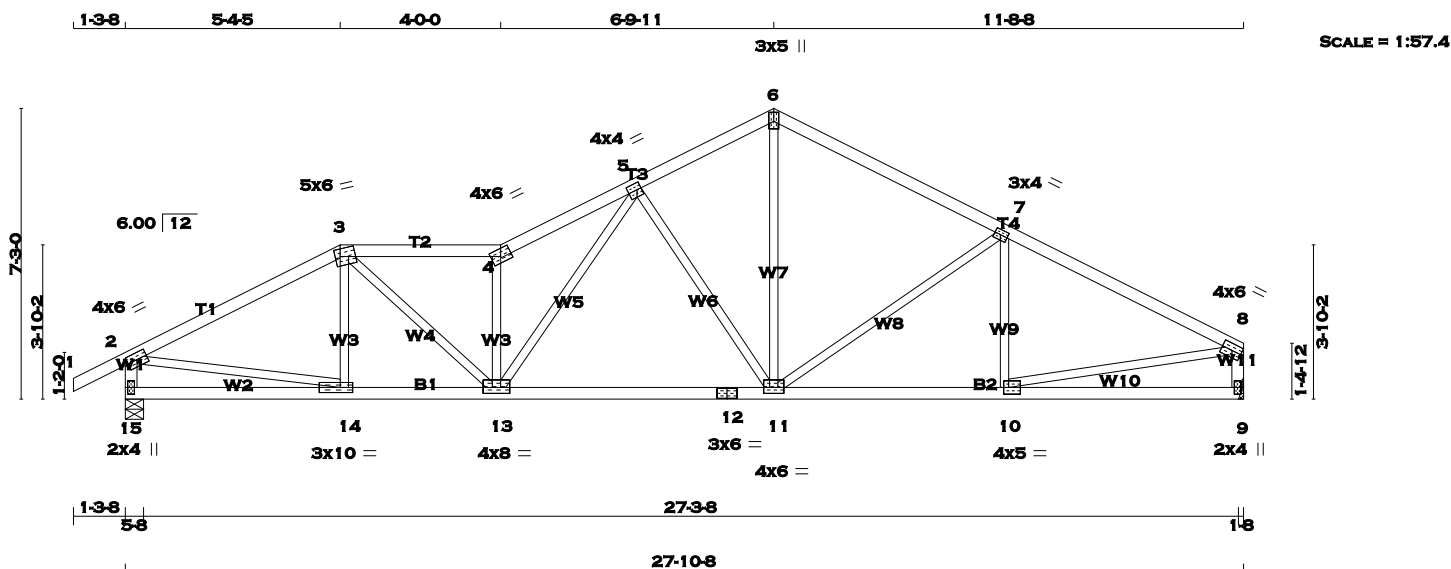
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
1 - 4	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL =	23.3	PSF
4 - 6	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	DL =	3.0	PSF	
12 - 2	2x4	DRY	No.2	JT VERT	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX		
7 - 6	2x4	DRY	No.2	12 1237	0	1237	0	5-8	5-8		
12 - 9	2x4	DRY	No.2	7 1132	0	1132	0		HANGER BY OTHERS		
9 - 7	2x4	DRY	No.2						MIN. SEAT SIZE: 1-8		
ALL WEBS 2x3 DRY No.2 SPF				UNFACTORED REACTIONS				SPACING = 24.0 IN./C			
EXCEPT				1ST LCASE	MAX./MIN.	COMPONENT REACTIONS		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
DRY: SEASONED LUMBER.				JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
				12 866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
				7 795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	
				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12				THIS DESIGN COMPLIES WITH:			
				BRACING				- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.83 FT.				- CSA 086-09			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.				- TPIC 2011			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				(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			
				LOADING				ALLOWABLE DEFL.(LL)= L/360 (0.80")			
				TOTAL LOAD CASES: (4)				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")			
								ALLOWABLE DEFL.(TL)= L/360 (0.80")			
								CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")			
								CSI: TC=0.42 (2-3:1) , BC=0.30 (10-11:1) ,			
								WB=0.51 (3-10:1) , SS=0.21 (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			
								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 (8) (INPUT = 0.90)			
								JSI METAL= 0.47 (6) (INPUT = 1.00)			



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 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 2 X 112 = 225 lb
[M][F]

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 - 2	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	4.0	6.0	2.00 3.00
3	TTWW-m	MT20	5.0	6.0	2.25 1.50
4	TTW-h	MT20	4.0	6.0	2.25 3.25
5	TMWW-t	MT20	4.0	4.0	2.00 1.25
6	TTW+p	MT20	3.0	5.0	2.75 1.50
7	TMWW-t	MT20	3.0	4.0	1.50 1.75
8	TMVW-t	MT20	4.0	6.0	Edge
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	5.0	2.00 1.50
11	BMWWW-t	MT20	4.0	6.0	1.75 3.00
12	BS-t	MT20	3.0	6.0	
13	BMWWW-t	MT20	4.0	8.0	1.75 4.00
14	BMWW-t	MT20	3.0	10.0	1.50 3.75
15	BMV1+p	MT20	2.0	4.0	

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
JT	GROSS REACTION		GROSS REACTION		DOWN	BRG	BRG
15	1427	0	1427	0	0	IN-SX	IN-SX
9	1322	0	1322	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	999	712 / 0	0 / 0	0 / 0	0 / 0	287 / 0	0 / 0
9	928	649 / 0	0 / 0	0 / 0	0 / 0	279 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 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	FACTORED	VERT. LOAD	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD
FR-TO	(LBS)	(PLF)	LC1	FR-TO	(LBS)	(PLF)	LC1
1-2	0 / 23	-77.3	-77.3	10-11	-165 / 21	0.04 (1)	0.04 (1)
2-3	-1823 / 0	-77.3	-77.3	11-12	0 / 922	0.21 (1)	0.21 (1)
3-4	-2306 / 0	-77.3	-77.3	12-13	-1423 / 0	0.33 (1)	0.33 (1)
4-5	-2608 / 0	-77.3	-77.3	13-14	0 / 1065	0.24 (1)	0.24 (1)
5-6	-1472 / 0	-77.3	-77.3	14-15	-829 / 0	0.57 (1)	0.57 (1)
6-7	-1482 / 0	-77.3	-77.3	15-16	0 / 1035	0.23 (1)	0.23 (1)
7-8	-1776 / 0	-77.3	-77.3	16-17	-375 / 0	0.35 (1)	0.35 (1)
15-2	-1385 / 0	0.0	0.0	17-18	-190 / 37	0.05 (1)	0.05 (1)
9-8	-1276 / 0	0.0	0.0	18-19	0 / 1649	0.37 (1)	0.37 (1)
15-14	0 / 0	-17.5	-17.5	19-20	0 / 1636	0.37 (1)	0.37 (1)
14-13	0 / 1624	-17.5	-17.5				
13-12	0 / 1755	-17.5	-17.5				
12-11	0 / 1755	-17.5	-17.5				
11-10	0 / 1610	-17.5	-17.5				
10-9	0 / 0	-17.5	-17.5				

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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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 (0.93")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.93")
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.40 (7-8:1), BC=0.38 (11-13:1), WB=0.57 (5-11:1), SSI=0.20 (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

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.

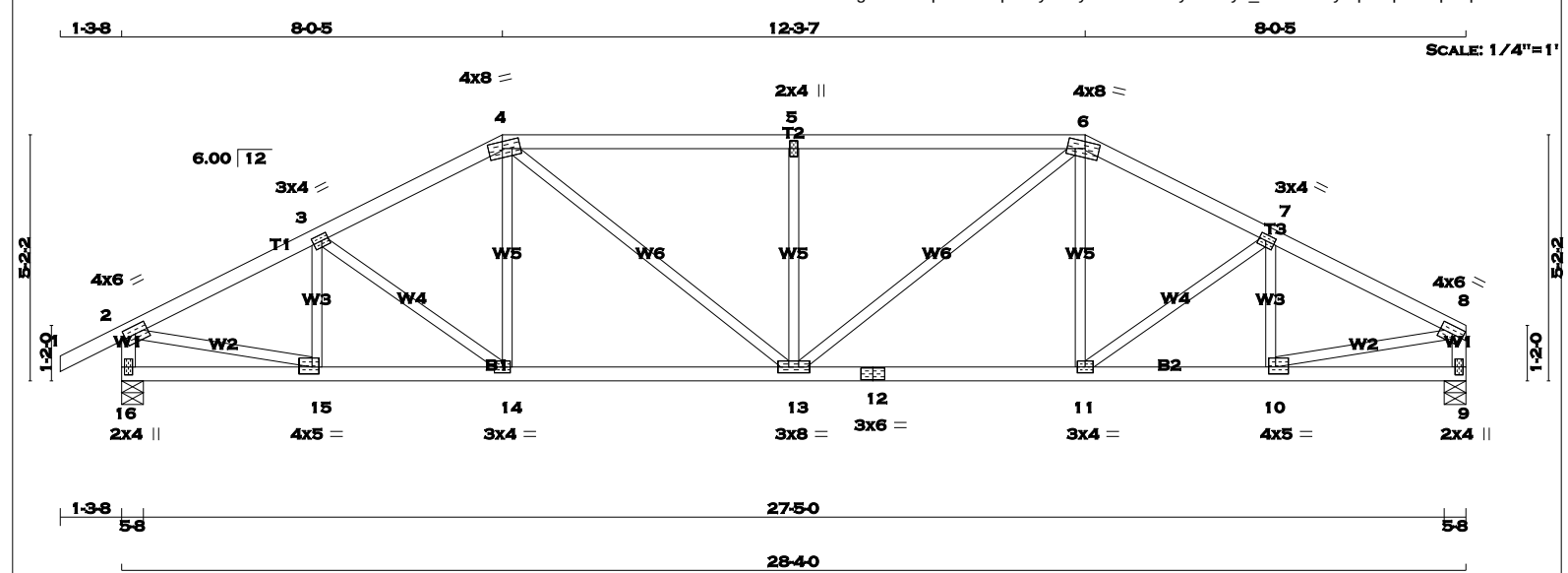
JSI GRIP= 0.89 (10) (INPUT = 0.90)
JSI METAL= 0.52 (4) (INPUT = 1.00)



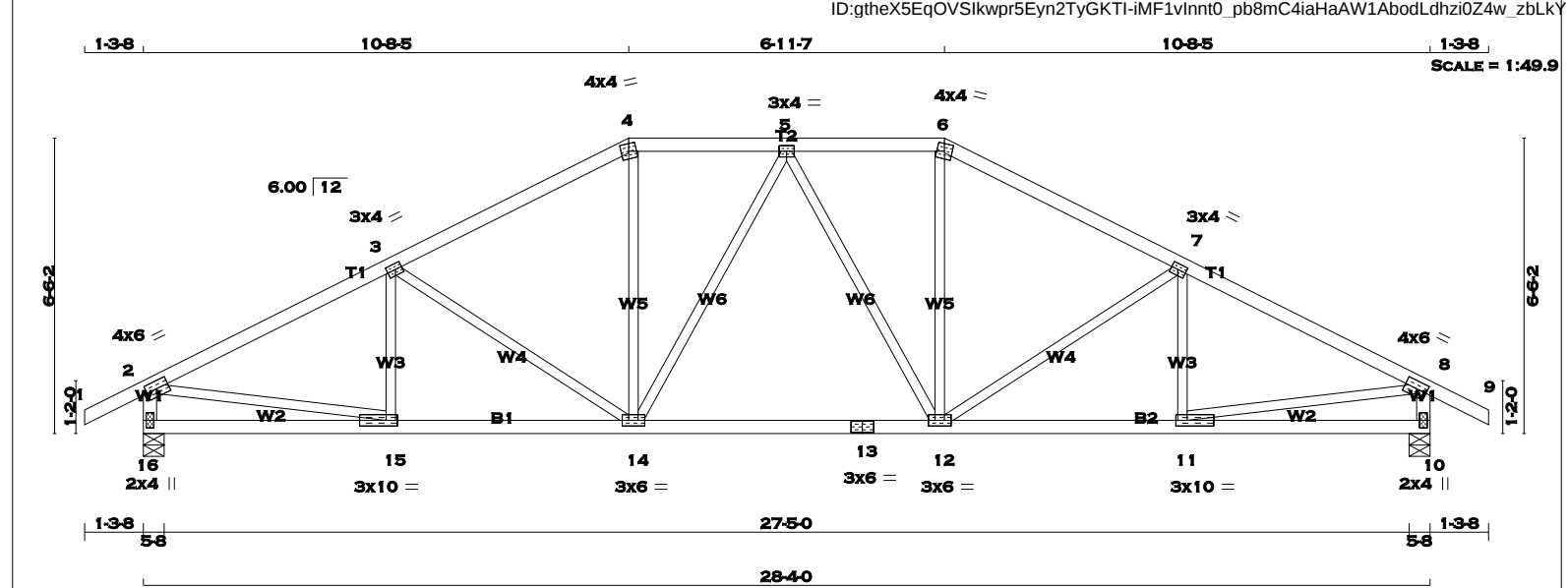
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TOTAL WEIGHT = 2 X 112 = 223 lb		[M][F]	
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 16 - 2 2x4 DRY No.2 SPF 9 - 8 2x4 DRY No.2 SPF 16 - 12 2x4 DRY No.2 SPF 12 - 9 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 16 1449 0 1449 0 0 5-8 5-8 9 1344 0 1344 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 16 1014 723 / 0 0 / 0 0 / 0 291 / 0 0 / 0 9 943 660 / 0 0 / 0 0 / 0 283 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 9 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.31 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 MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 15-3 -286 / 0 0.05 (1) 2-3 -1850 / 0 -77.3 -77.3 0.19 (1) 4.78 3-14 -95 / 0 0.04 (1) 3-4 -1795 / 0 -77.3 -77.3 0.18 (1) 4.84 14-4 0 / 154 0.04 (4) 4-5 -2028 / 0 -77.3 -77.3 0.44 (1) 4.31 4-13 0 / 554 0.12 (1) 5-6 -2028 / 0 -77.3 -77.3 0.44 (1) 4.31 13-5 -583 / 0 0.23 (1) 6-7 -1795 / 0 -77.3 -77.3 0.18 (1) 4.84 13-6 0 / 554 0.12 (1) 7-8 -1850 / 0 -77.3 -77.3 0.19 (1) 4.78 11-6 0 / 154 0.04 (4) 16-2 -1413 / 0 0.0 0.0 0.14 (1) 6.86 11-7 -95 / 0 0.04 (1) 9-8 -1308 / 0 0.0 0.0 0.13 (1) 7.06 10-7 -286 / 0 0.05 (1) 2-15 0 / 1703 0.38 (1) 10-8 0 / 1703 0.38 (1) 16-15 0 / 0 -17.5 -17.5 0.07 (4) 10.00 15-14 0 / 1667 -17.5 -17.5 0.33 (1) 10.00 14-13 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 13-12 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 12-11 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 11-10 0 / 1667 -17.5 -17.5 0.33 (1) 10.00 10-9 0 / 0 -17.5 -17.5 0.07 (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 6.00/12 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 (0.94") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09") ALLOWABLE DEFL.(TL)= L/360 (0.94") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17") CSI: TC=0.44 (5-6:1) , BC=0.33 (14-15:1) , WB=0.38 (8-10:1) , SSI=0.23 (5-6:1) 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 (2) (INPUT = 0.90) JSI METAL= 0.50 (15) (INPUT = 1.00)			
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 4.0 6.0 2.00 2.75 4 TMVW-t MT20 3.0 4.0 1.50 1.75 6 TTWW-m MT20 4.0 8.0 1.75 3.50 5 TMW+w MT20 2.0 4.0 6 TTWW-m MT20 4.0 8.0 1.75 3.50 7 TMVW-t MT20 3.0 4.0 1.50 1.75 8 TMVW-t MT20 4.0 6.0 2.00 2.75 9 BMV1+p MT20 2.0 4.0 10 BMVW-t MT20 4.0 5.0 1.75 1.75 11 BMVW-t MT20 3.0 4.0 12 BS-t MT20 3.0 6.0 13 BMVW-t MT20 3.0 8.0 14 BMVW-t MT20 3.0 4.0 15 BMVW-t MT20 4.0 5.0 1.75 1.75 16 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.		 RECEIVED TOWN OF MILTON MAR 29, 2017 17-5052 BUILDING DIVISION READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. 	



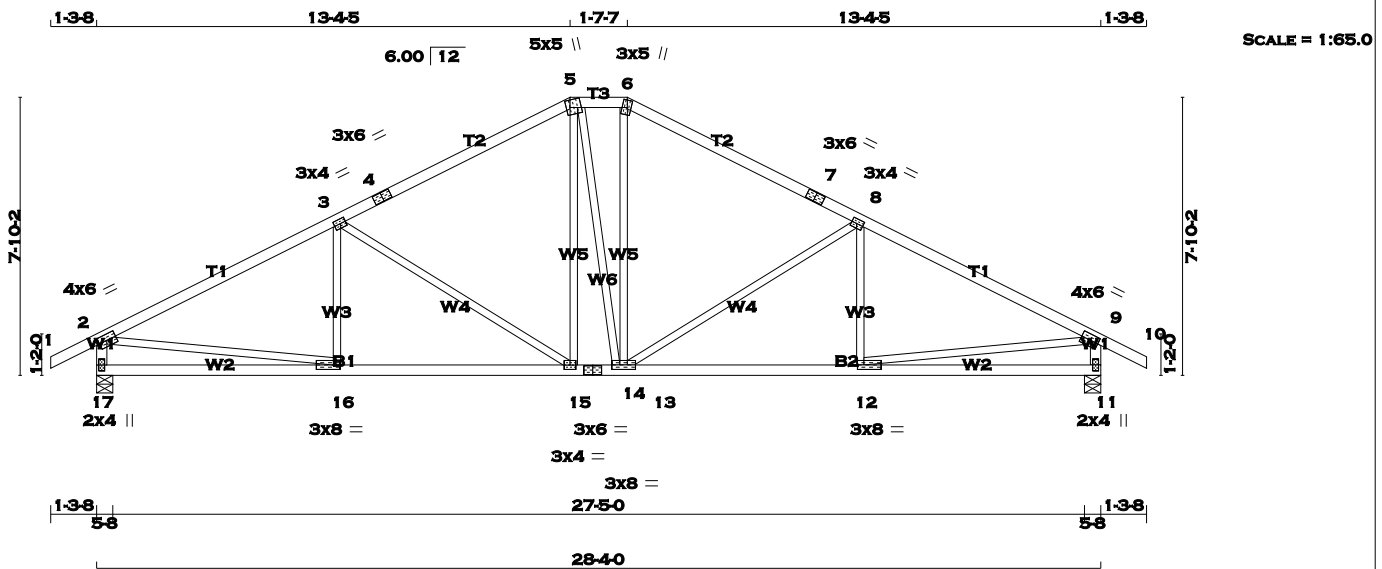
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS				DESIGN CRITERIA			
1 - 4	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:		
4 - 6	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL =	23.3	PSF
6 - 9	2x4	DRY	No.2	SPF	JT VERT	DOWN	HORZ	UPLIFT	DL =	3.0	PSF
16 - 2	2x4	DRY	No.2	SPF	16 1449	0	1449	0	BOT CH. LL =	0.0	PSF
10 - 8	2x4	DRY	No.2	SPF	10 1449	0	1449	0	DL =	7.0	PSF
16 - 13	2x4	DRY	No.2	SPF					TOTAL LOAD =	33.3	PSF
13 - 10	2x4	DRY	No.2	SPF							
ALL WEBS	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C		
EXCEPT					1ST LCASE	MAX/MIN. COMPONENT REACTIONS			LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12		
DRY: SEASONED LUMBER.					JT COMBINED	SNOW	LIVE	PERM. LIVE	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
					16 1014	723 / 0	0 / 0	0 / 0	THIS DESIGN COMPLIES WITH:		
					10 1014	723 / 0	0 / 0	0 / 0	- 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 (0.94")		
									CALCULATED VERT. DEFL.(LL)= L/ 999 (0.08")		
									ALLOWABLE DEFL.(TL)= L/360 (0.94")		
									CALCULATED VERT. DEFL.(TL)= L/ 999 (0.17")		
									CSI: TC=0.34 (2-3:1), BC=0.35 (14-15:1), WB=0.39 (2-15:1), SSI=0.18 (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		
									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 (11) (INPUT = 0.90)		
									JSI METAL= 0.51 (8) (INPUT = 1.00)		



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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 2 X 121 = 241 lb
[M][F]

LUMBER		LUMBER	DESCR.
CHORDS	SIZE		
1 - 4	2x4 DRY	No.2	SPF
4 - 5	2x4 DRY	No.2	SPF
5 - 6	2x4 DRY	No.2	SPF
6 - 7	2x4 DRY	No.2	SPF
7 - 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
2	TMVW-t	MT20	4.0	6.0	2.00 2.75
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TTWW+m	MT20	5.0	5.0	2.50 1.25
6	TTW+m	MT20	3.0	5.0	2.50 1.25
7	TS-t	MT20	3.0	6.0	
8	TMVW-t	MT20	3.0	4.0	1.50 1.75
9	TMVW-t	MT20	4.0	6.0	2.00 2.75
11	BMV1+p	MT20	2.0	4.0	
12	BMVW-t	MT20	3.0	8.0	1.50 2.25
13	BMVW-t	MT20	3.0	8.0	
14	BS-t	MT20	3.0	6.0	
15	BMVW-t	MT20	3.0	4.0	
16	BMVW-t	MT20	3.0	8.0	1.50 2.25
17	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
17	1449	0	1449	0	0	5-8	5-8	5-8	5-8
11	1449	0	1449	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
17	1014	723 / 0	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 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 = 4.28 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		CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	16-3	-88 / 88	0.03 (4)
2-3	-1924 / 0	-77.3	-77.3 0.55 (1)	4.28	3-15	-579 / 0	0.75 (1)
3-4	-1434 / 0	-77.3	-77.3 0.49 (1)	4.87	15-5	0 / 364	0.08 (1)
4-5	-1434 / 0	-77.3	-77.3 0.49 (1)	4.87	5-13	0 / 12	0.00 (1)
5-6	-1265 / 0	-77.3	-77.3 0.04 (1)	5.69	13-6	0 / 378	0.08 (1)
6-7	-1437 / 0	-77.3	-77.3 0.49 (1)	4.87	13-8	-575 / 0	0.75 (1)
7-8	-1437 / 0	-77.3	-77.3 0.49 (1)	4.87	12-8	-91 / 87	0.03 (4)
8-9	-1923 / 0	-77.3	-77.3 0.55 (1)	4.28	2-16	0 / 1759	0.40 (1)
9-10	0 / 23	-77.3	-77.3 0.10 (1)	10.00	12-9	0 / 1758	0.40 (1)
17-2	-1400 / 0	0.0	0.0 0.14 (1)	6.88			
11-9	-1399 / 0	0.0	0.0 0.14 (1)	6.88			
17-16	0 / 0	-17.5	-17.5 0.20 (4)	10.00			
16-15	0 / 1745	-17.5	-17.5 0.38 (1)	10.00			
15-14	0 / 1262	-17.5	-17.5 0.28 (1)	10.00			
14-13	0 / 1262	-17.5	-17.5 0.28 (1)	10.00			
13-12	0 / 1744	-17.5	-17.5 0.37 (1)	10.00			
12-11	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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.55 (2-3:1), BC=0.38 (15-16:1), WB=0.75 (3-15:1), SSI=0.23 (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

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.

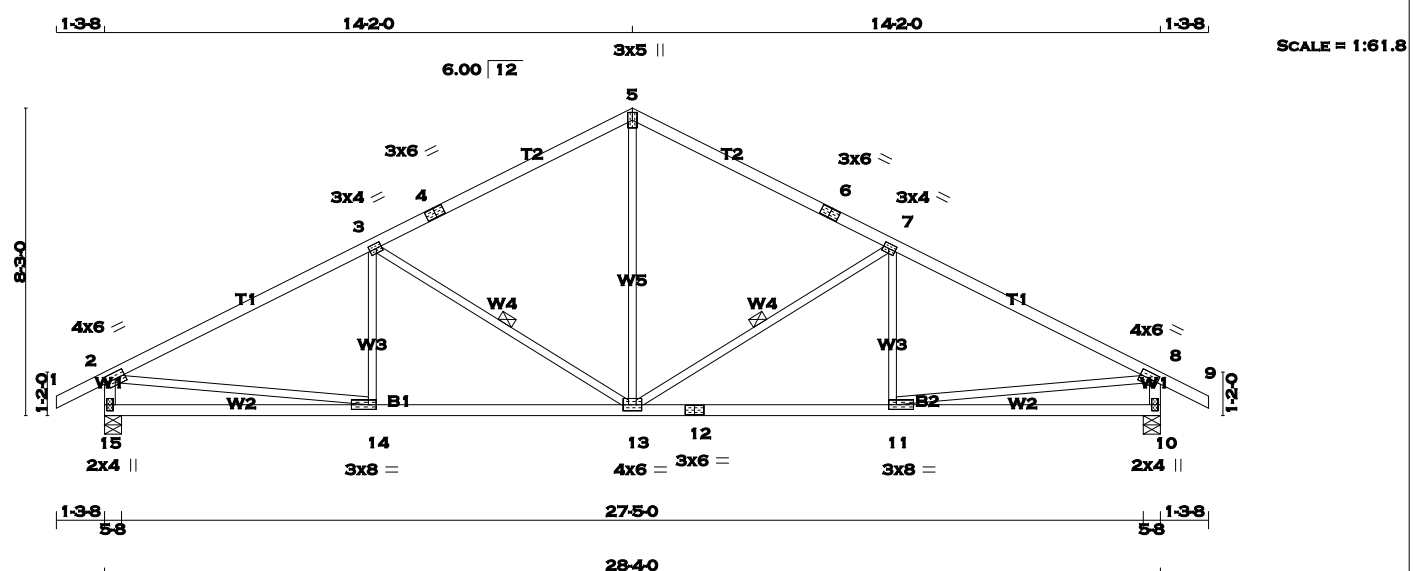
JSI GRIP= 0.89 (16) (INPUT = 0.90)
JSI METAL= 0.52 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 6 X 111 = 665 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF			
4 - 5	2x4	DRY	No.2	SPF			
5 - 6	2x4	DRY	No.2	SPF			
6 - 9	2x4	DRY	No.2	SPF			
15 - 2	2x4	DRY	No.2	SPF			
10 - 8	2x4	DRY	No.2	SPF			
15 - 12	2x4	DRY	No.2	SPF			
12 - 10	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-t	MT20	4.0	6.0	2.00	2.75	
3	TMVW-t	MT20	3.0	4.0	1.50	1.75	
4	TS-t	MT20	3.0	6.0			
5	TTW+p	MT20	3.0	5.0			
6	TS-t	MT20	3.0	6.0			
7	TMVW-t	MT20	3.0	4.0	1.50	1.75	
8	TMVW-t	MT20	4.0	6.0	2.00	2.75	
10	BMV1+p	MT20	2.0	4.0			
11	BMVW-t	MT20	3.0	8.0	1.50	2.50	
12	BS-t	MT20	3.0	6.0			
13	BMVW-t	MT20	4.0	6.0			
14	BMVW-t	MT20	3.0	8.0	1.50	2.50	
15	BMV1+p	MT20	2.0	4.0			
A SIZE FOR SIZE SUBSTITUTION OF MIITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.							

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
				GROSS REACTION				GROSS REACTION				BRG				BRG			
				JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX					IN-SX			
15	1449	0		1449	0			0	0	5-8	5-8								
10	1449	0		1449	0			0	0	5-8	5-8								

UNFACTORED REACTIONS							
1ST LCASE MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0
10	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 10

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-13, 3-13. DBS = 20-0-0 . CBF = 79 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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 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			
MAX. FACTORED				MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	MAX	
FR-TO				FR-TO			
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	13-5	0 / 801	0.18 (1)
2-3	-1917 / 0	-77.3	-77.3 0.62 (1)	4.17	13-7	-633 / 0	0.30 (1)
3-4	-1379 / 0	-77.3	-77.3 0.55 (1)	4.84	11-7	-72 / 96	0.03 (4)
4-5	-1379 / 0	-77.3	-77.3 0.55 (1)	4.84	3-13	-633 / 0	0.30 (1)
5-6	-1379 / 0	-77.3	-77.3 0.55 (1)	4.84	14-3	-72 / 96	0.03 (4)
6-7	-1379 / 0	-77.3	-77.3 0.55 (1)	4.84	2-14	0 / 1753	0.39 (1)
7-8	-1917 / 0	-77.3	-77.3 0.62 (1)	4.17	11-8	0 / 1753	0.39 (1)
8-9	0 / 23	-77.3	-77.3 0.10 (1)	10.00			
15-2	-1396 / 0	0.0	0.0 0.14 (1)	6.89			
10-8	-1396 / 0	0.0	0.0 0.14 (1)	6.89			
15-14	0 / 0	-17.5	-17.5 0.21 (4)	10.00			
14-13	0 / 1741	-17.5	-17.5 0.38 (1)	10.00			
13-12	0 / 1741	-17.5	-17.5 0.38 (1)	10.00			
12-11	0 / 1741	-17.5	-17.5 0.38 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.21 (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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.62 (2-3:1) , BC=0.38 (13-14:1) , WB=0.39 (2-14:1) , SSI=0.24 (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

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.

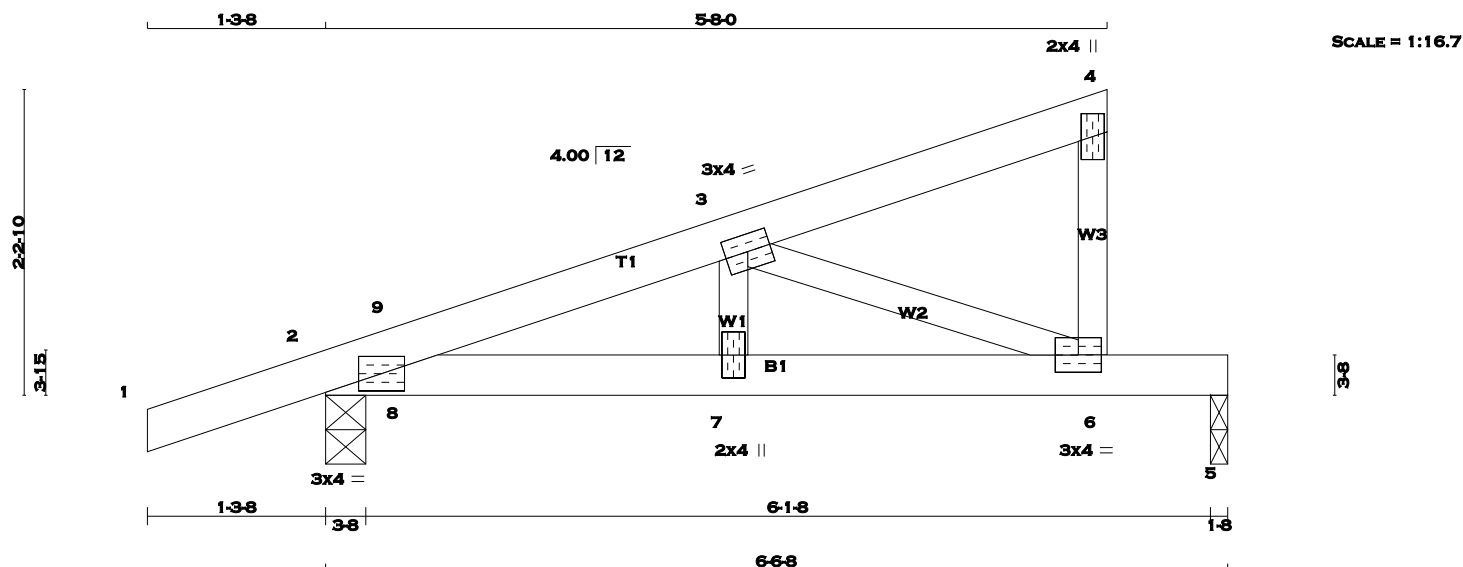
JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.52 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 12 X 20 = 239 lb

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE		LUMBER	DESCR.
1	- 4	2x4	DRY	No.2	SPF
6	- 4	2x3	DRY	No.2	SPF
2	- 5	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
2	TMB1-l	MT20	3.0	4.0		
3	TMWW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0		
7	BMW-w	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
2	409	0	409	0	0	3-8
5	247	0	247	0	0	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2	285	212 / 0	0 / 0	0 / 0	0 / 0	73 / 0	0 / 0
5	175	114 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0

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

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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 15	-77.3	-77.3 0.10 (1)	10.00	7-3	0 / 178	0.04 (1)
2-9	-607 / 0	-77.3	-77.3 0.01 (1)	6.25	3-6	-606 / 0	0.11 (1)
9-3	-593 / 0	-77.3	-77.3 0.05 (1)	6.25	8-9	-74 / 2	0.00 (1)
3-4	-4 / 0	-77.3	-77.3 0.06 (1)	10.00			
6-4	-91 / 0	0.0	0.0 0.01 (1)	7.81			
2-8	0 / 568	-17.5	-17.5 0.14 (1)	10.00			
8-7	0 / 568	-17.5	-17.5 0.16 (1)	10.00			
7-6	0 / 568	-17.5	-17.5 0.38 (1)	10.00			
6-5	0 / 0	-17.5	-17.5 0.29 (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

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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.10 (1-2:1) , BC=0.38 (6-7:1) , WB=0.11 (3-6:1) , SSI=0.19 (5-6:1)

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.

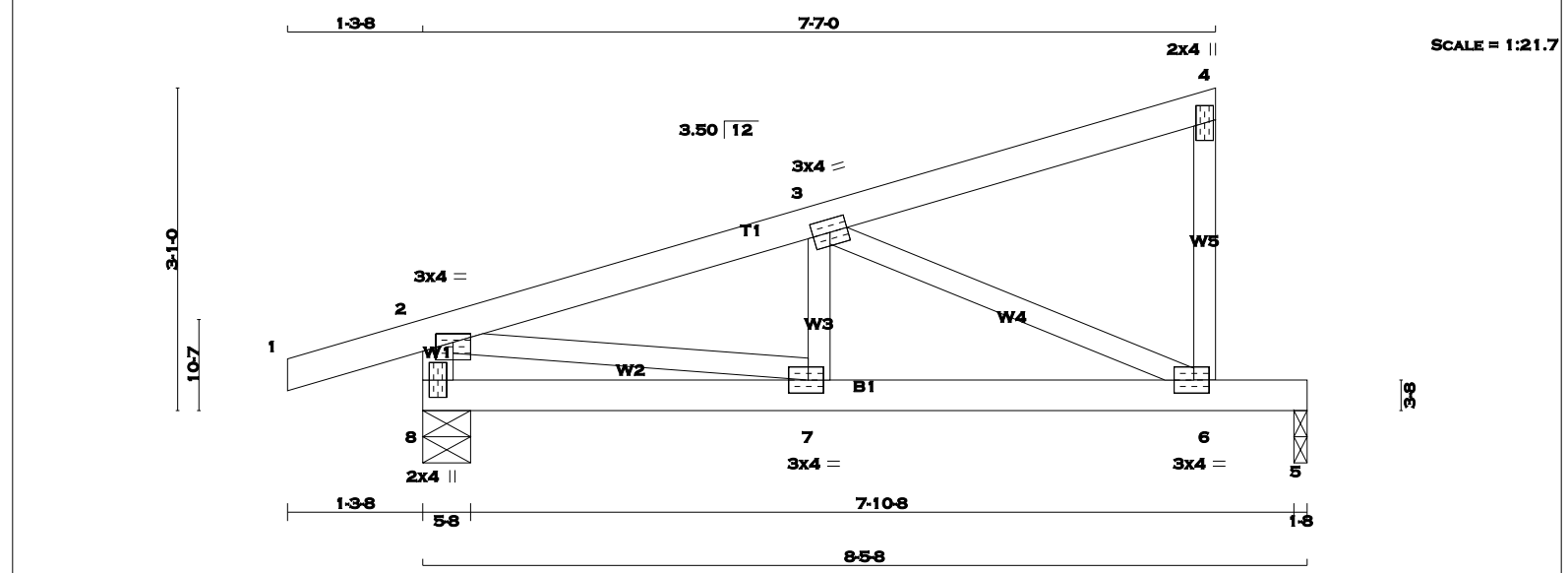
JSI GRIP= 0.86 (6) (INPUT = 0.90)
JSI METAL= 0.21 (6) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.**





LUMBER

N. L. G. A. RULES

CHORDS SIZE

1 - 42x4

DRY

No.2

SPF

6 - 42x3

DRY

No.2

SPF

8 - 22x4

DRY

No.2

SPF

8 - 52x4

DRY

No.2

SPF

ALL WEBS EXCEPT

2x3

DRY

No.2

SPF

DESCR.

SPF

SPF

SPF

SPF

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	3.0	4.0	1.00	2.00
3	TMVW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0	1.50	1.75
7	BMVW-t	MT20	3.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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	DOWN	HORZ	UPLIFT
8	501	0	501	0
5	337	0	337	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
	COMBINED	SNOW
8	349	257 / 0
5	238	158 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5

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)	UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	0 / 14	-77.3	-77.3	0.10 (1)	10.00	7-3	0 / 97	0.03 (4)	
2-3	-629 / 0	-77.3	-77.3	0.13 (1)	6.25	3-6	-670 / 0	0.19 (1)	
3-4	-9 / 0	-77.3	-77.3	0.13 (1)	10.00	2-7	0 / 619	0.14 (1)	
6-4	-115 / 0	0.0	0.0	0.03 (1)	7.81				
8-2	-489 / 0	0.0	0.0	0.05 (1)	7.81				
8-7	0 / 0	-17.5	-17.5	0.11 (1)	10.00				
7-6	0 / 612	-17.5	-17.5	0.49 (1)	10.00				
6-5	0 / 0	-17.5	-17.5	0.39 (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

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

- TPC 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 (0.28")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")

ALLOWABLE DEFL.(TL)= L/360 (0.28")

CALCULATED VERT. DEFL.(TL) = L/ 873 (0.12")

CSI: TC=0.13 (2-3:1) , BC=0.49 (6-7:1) , WB=0.19 (3-6:1) , SSI=0.26 (5-6:1)

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

2284 1656

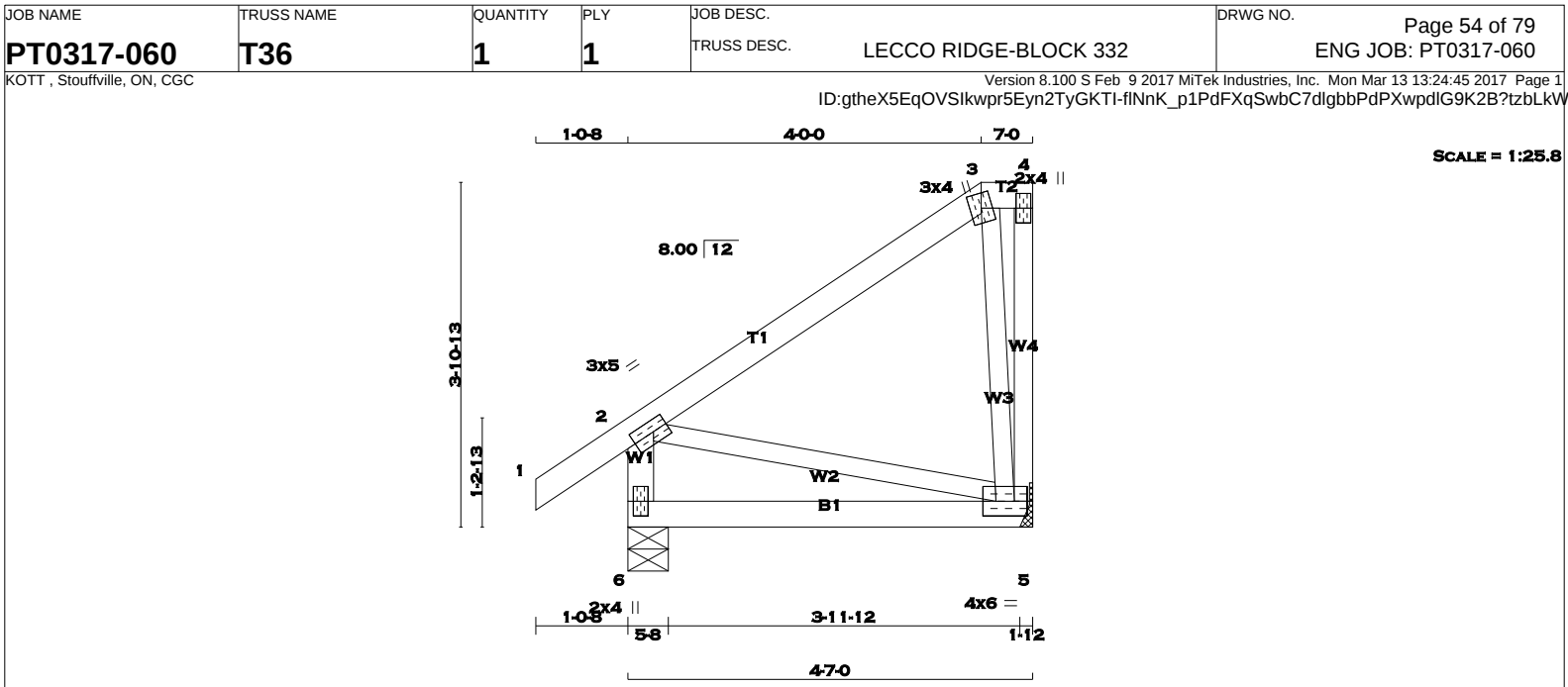
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (7) (INPUT = 0.90)

JSI METAL= 0.23 (7) (INPUT = 1.00)

[M][F]



TOTAL WEIGHT = 23 lb									
[M]									
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 6.00/12									
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.(TL)= L/360 (0.19")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")									
CSI: TC=0.21 (2-3:1), BC=0.11 (5-6:4), WB=0.04 (3-5:1), SSI=0.10 (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 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= 0.24 (2) (INPUT = 0.90)									
JSI METAL= 0.07 (3) (INPUT = 1.00)									

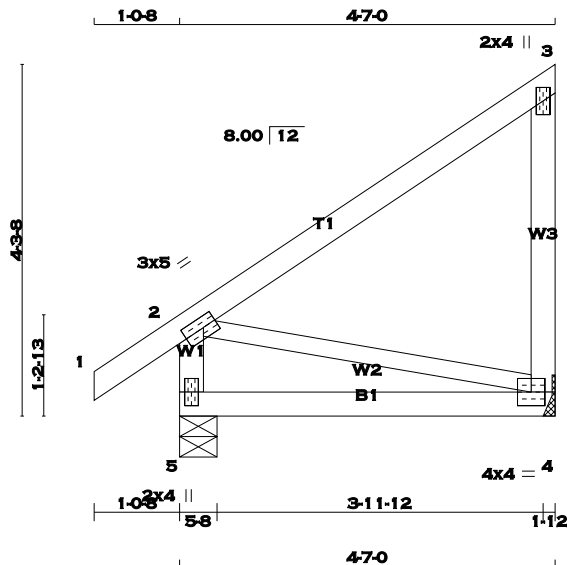
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED MAXIMUM FACTORED INPUT REQRD									
GROSS REACTION GROSS REACTION BRG BRG									
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX									
5 217 0 217 0 0 HANGER BY OTHERS									
MIN. SEAT SIZE: 1-12									
6 304 0 304 0 0 5-8 5-8									
UNFACTORED REACTIONS									
1ST LCASE MAX./MIN. COMPONENT REACTIONS									
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL									
5 153 107 / 0 0 / 0 0 / 0 46 / 0 0 / 0									
6 212 159 / 0 0 / 0 0 / 0 53 / 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)									
CHORDS WEBS									
MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. (LC) MAX. UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. (LC)									
FR-TO FROM TO LENGTH FR-TO									
1- 2 0 / 24 -77.3 -77.3 0.07 (1) 10.00 3- 5 -162 / 0 0.04 (1)									
2- 3 -31 / 0 -77.3 -77.3 0.21 (1) 6.25 2- 5 0 / 26 0.01 (1)									
3- 4 0 / 0 -77.3 -77.3 0.00 (1) 10.00									
5- 4 -23 / 0 0.0 0.0 0.01 (1) 7.81									
6- 2 -264 / 0 0.0 0.0 0.03 (1) 7.81									
6- 5 0 / 0 -17.5 -17.5 0.11 (4) 10.00									

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 2x3 DRY No.2 SPF									
6 - 2 2x4 DRY No.2 SPF									
6 - 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-t MT20 3.0 5.0 1.50 2.00									
3 TTW+m MT20 3.0 4.0									
4 TMV+p MT20 2.0 4.0									
5 BMVWW1-t MT20 4.0 6.0									
6 BMV1+p MT20 2.0 4.0									
A SIZE FOR SIZE SUBSTITUTION OF MI TEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.									

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LICENSED PROFESSIONAL ENGINEER									
P. TREVISAN									
100136551									
March 13th, 2017									
PROVINCE OF ONTARIO									

KOTT									
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SCALE = 1:28.1

TOTAL WEIGHT = 5 X 22 = 108 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	No.2	SPF
1 - 3	2x4	No.2	SPF
4 - 3	2x4	No.2	SPF
5 - 4	2x4	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
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	4.0		
5	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MI TEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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		
5	304	0	304	0	5-8	5-8
4	217	0	217	0	5-8	5-8

HANGER BY OTHERS
 MIN. SEAT SIZE: 1-12

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	212	159 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
4	153	107 / 0	0 / 0	0 / 0	0 / 0	46 / 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: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM TO			FR-TO				
5-2	-264 / 0	0.0	0.0 0.03 (1)	7.81	2-4	0 / 0	0.00 (1)		
1-2	0 / 24	-77.3	-77.3 0.07 (1)	10.00					
2-3	0 / 0	-77.3	-77.3 0.28 (1)	10.00					
4-3	-177 / 0	0.0	0.0 0.05 (1)	7.81					
5-4	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

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.(TL)= L/360 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.28 (2-3:1) , BC=0.11 (4-5:4) , WB=0.00 (2-4:1) , SSI=0.12 (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

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.

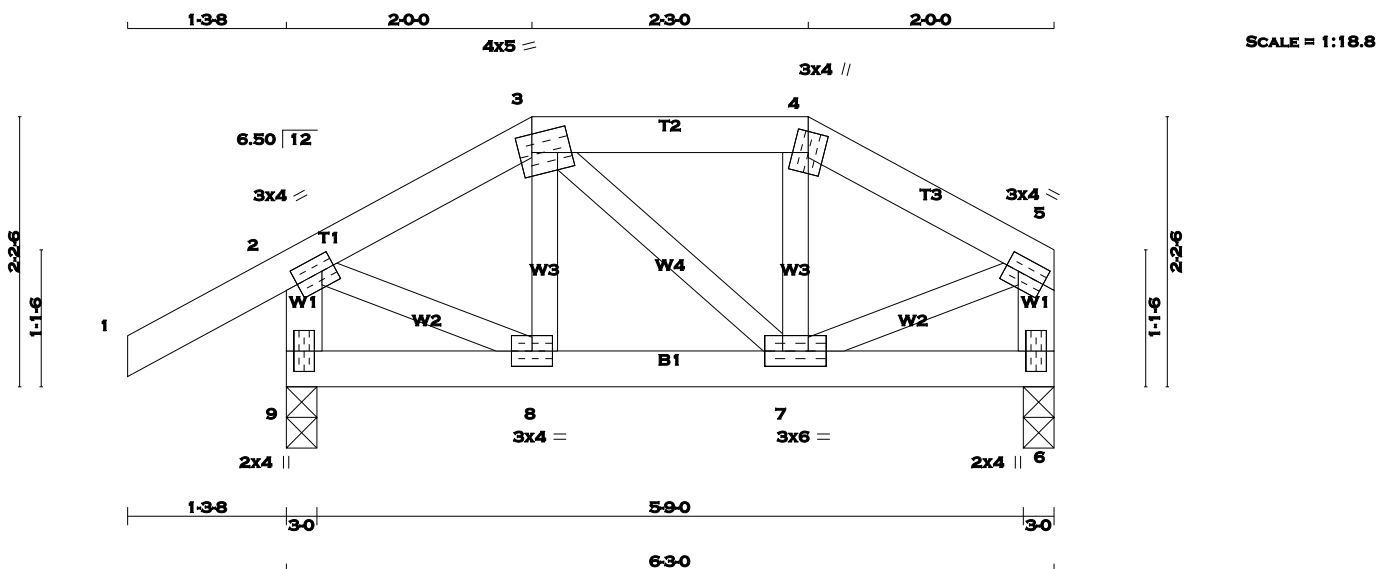
JSI GRIP= 0.24 (2) (INPUT = 0.90)
 JSI METAL= 0.05 (2) (INPUT = 1.00)



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 IS AN INTEGRAL PART OF THIS DRAWING AS IT
 CONTAINS SPECIFICATIONS AND CRITERIA USED
 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 26 lb [M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	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-t	MT20	3.0	4.0	1.50	1.25
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.25
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	BMVWW-t	MT20	3.0	4.0		
9	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9	402	0	402	0	0	3-0	3-0	
6	296	0	296	0	0	3-0	3-0	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	280	209 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0	0 / 0	0 / 0
6	208	146 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 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 (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 25	-77.3	-77.3 0.10 (1)	10.00	8-3	-45 / 18	0.01 (1)
2-3	-248 / 0	-77.3	-77.3 0.04 (1)	6.25	3-7	0 / 0	0.00 (1)
3-4	-215 / 0	-77.3	-77.3 0.05 (1)	6.25	7-4	-45 / 19	0.01 (1)
4-5	-248 / 0	-77.3	-77.3 0.04 (1)	6.25	2-8	0 / 233	0.05 (1)
9-2	-385 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 233	0.05 (1)
6-5	-279 / 0	0.0	0.0 0.03 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.02 (4)	10.00			
8-7	0 / 215	-17.5	-17.5 0.04 (1)	10.00			
7-6	0 / 0	-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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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 (0.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.10 (1-2:1), BC=0.04 (7-8:1), WB=0.05 (2-8:1), SSI=0.07 (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.

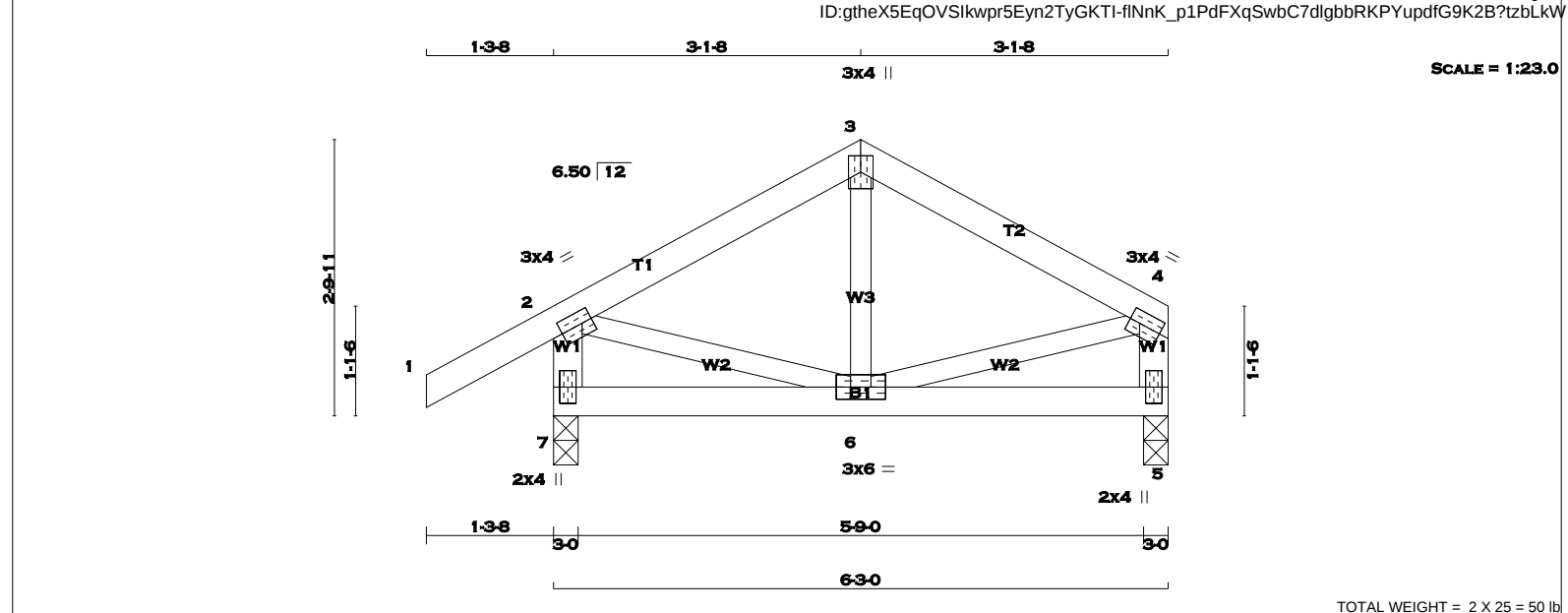
JSI GRIP= 0.59 (2) (INPUT = 0.90)
JSI METAL= 0.13 (2) (INPUT = 1.00)



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BUILDING DIVISION

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE 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				[M][F]	
N. L. G. A. RULES																		
CHORDS SIZE					LUMBER					DESCR.								
1 - 3	2x4	DRY	No.2	SPF														
3 - 4	2x4	DRY	No.2	SPF														
7 - 2	2x4	DRY	No.2	SPF														
5 - 4	2x4	DRY	No.2	SPF														
7 - 5	2x4	DRY	No.2	SPF														
ALL WEBS 2x3 DRY No.2 EXCEPT					SPF													
DRY: SEASONED LUMBER.																		

PLATES (table is in inches)				BRACING				LOADING			
JT	TYPE	PLATES	W	LEN	Y	X		CHORDS	WEBS		
2	TMVW-t	MT20	3.0	4.0	1.50	1.25		MAX. FACTORED	MAX. FACTORED		
3	TTW+p	MT20	3.0	4.0				MEMB. FORCE (LBS)	MEMB. FORCE (LBS)		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25		VERT. LOAD (PLF)	MAX. UNBRAC		
5	BMV1+p	MT20	2.0	4.0				CSI (LC)	LENGTH FR-TO		
6	BMVWW-t	MT20	3.0	6.0							
7	BMV1+p	MT20	2.0	4.0							
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				TOTAL LOAD CASES: (4)							
				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5							
				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.							

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 25	-77.3 -77.3	0.10 (1)	10.00	6-3	-34 / 43	0.01 (4)
2-3	-218 / 0	-77.3 -77.3	0.10 (1)	6.25	2-6	0 / 198	0.04 (1)
3-4	-218 / 0	-77.3 -77.3	0.10 (1)	6.25	6-4	0 / 198	0.04 (1)
7-2	-379 / 0	0.0 0.0	0.04 (1)	7.81			
5-4	-274 / 0	0.0 0.0	0.03 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.05 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.05 (4)	10.00			

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 25	-77.3 -77.3	0.10 (1)	10.00	6-3	-34 / 43	0.01 (4)
2-3	-218 / 0	-77.3 -77.3	0.10 (1)	6.25	2-6	0 / 198	0.04 (1)
3-4	-218 / 0	-77.3 -77.3	0.10 (1)	6.25	6-4	0 / 198	0.04 (1)
7-2	-379 / 0	0.0 0.0	0.04 (1)	7.81			
5-4	-274 / 0	0.0 0.0	0.03 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.05 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.05 (4)	10.00			

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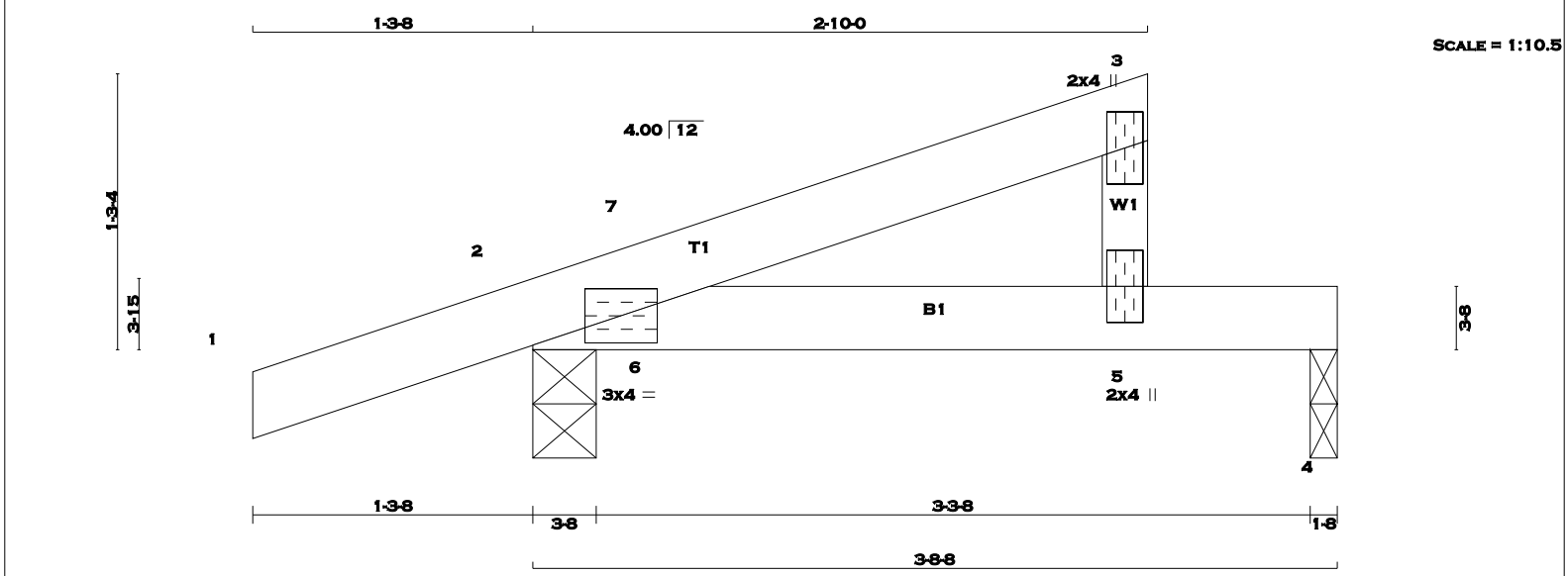
TOWN OF MILTON

MAR 29, 2017

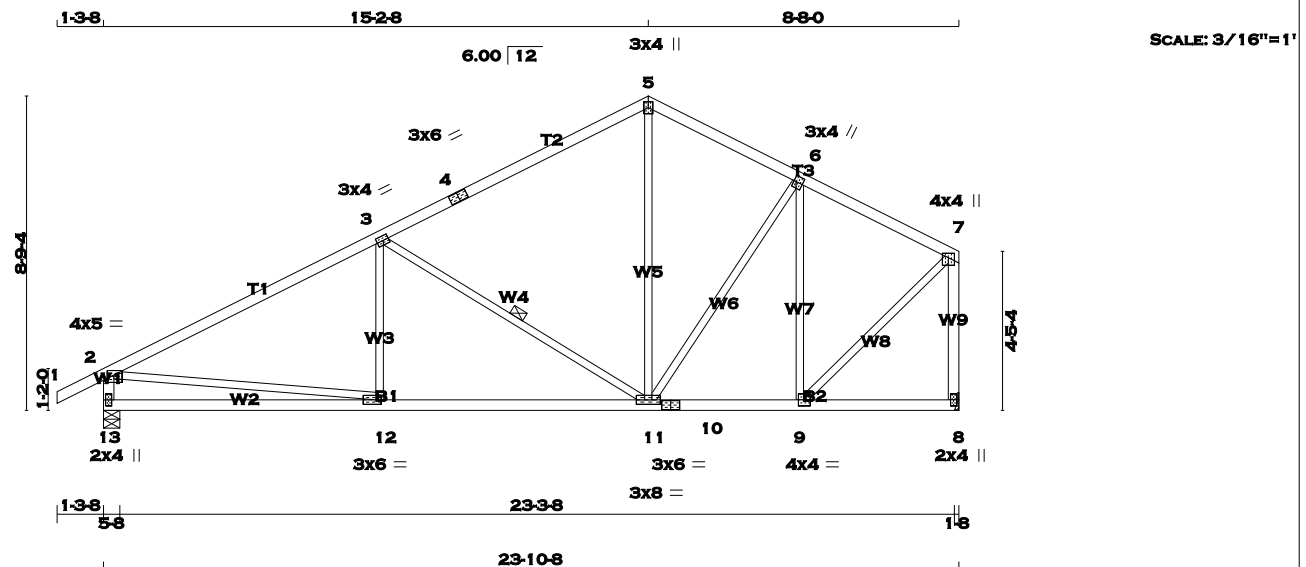
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BUILDING DIVISION

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LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES																													
CHORDS SIZE										LUMBER										DESCR.									
1 - 3 2x4 DRY No.2																				SPF									
5 - 3 2x3 DRY No.2																				SPF									
2 - 4 2x4 DRY No.2																				SPF									
DRY: SEASONED LUMBER.																													
PLATES (table is in inches)																													
JT TYPE PLATES										W LEN Y X																			
2 TMB1-I MT20 3.0 4.0																													
3 TMV+p MT20 2.0 4.0																													
5 BMV+p MT20 2.0 4.0																													
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.																													
UNFACTORED REACTIONS																													
1ST LCASE										MAX./MIN. COMPONENT REACTIONS																			
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL																													
2 188 144 / 0 0 / 0 0 / 0 44 / 0 0 / 0																													
4 83 50 / 0 0 / 0 0 / 0 0 / 0 32 / 0 0 / 0																													
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 2, 4																													
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: (5)																													
CHORDS										WEBS																			
MAX. FACTORED FORCE (LBS)										FACTORED VERT. LOAD (PLF)										MAX. FACTORED FORCE (LBS)									
MEMB. (LBS)										MAX. LC1 (LC)										MEMB. UNBRACED LENGTH									
FR-TO										FROM TO										FR-TO									
1-2 0 / 15										-77.3 -77.3 0.10 (1)										10.00 6-7 -18 / 32 0.00 (1)									
2-7 -25 / 0										-77.3 -77.3 0.06 (1)										6.25									
7-3 0 / 6										-77.3 -77.3 0.10 (1)										10.00									
5-3 -106 / 0										0.0 0.0 0.01 (1)										7.81									
2-6 0 / 0										-17.5 -17.5 0.06 (1)										10.00									
6-5 0 / 0										-17.5 -17.5 0.13 (1)										10.00									
5-4 0 / 0										-17.5 -17.5 0.13 (1)										10.00									
CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN																													
NAIL VALUES																													
PLATE GRIP(DRY) SHEAR SECTION																													
(PSI) (PLI) (PLI)																													
MAX MIN MAX MIN MAX MIN																													
MT20 618 354 1667 822 2284 1656																													
PLATE PLACEMENT TOL. = 0.250 inches																													
PLATE ROTATION TOL. = 5.0 Deg.																													
JSI GRIP= 0.12 (2) (INPUT = 0.90)																													
JSI METAL= 0.04 (2) (INPUT = 1.00)																													



TOTAL WEIGHT = 2 X 104 = 207 lb
[M][F]

LUMBER					DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER			
1 - 4	2x4	DRY	No.2		SPF	
4 - 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 2x3 DRY No.2 EXCEPT					SPF	
DRY: SEASONED LUMBER.						

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	4.0		
6	TMVW+t	MT20	3.0	4.0	2.00	0.75
7	TMVW+p	MT20	4.0	4.0	1.50	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	4.0	4.0	2.00	1.75
10	BS-t	MT20	3.0	6.0		
11	BMVW+t	MT20	3.0	8.0		
12	BMVW-t	MT20	3.0	6.0	1.50	1.75
13	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
13	1237	0	1237	0	0	5-8	5-8
8	1132	0	1132	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 1-8							

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
13	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	0 / 0
8	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.43 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-11. DBS = 18-0-0. CBF = 86 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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 LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	12-3	-3 / 128	0.04 (4)
2-3	-1523 / 0	-77.3 -77.3	0.69 (1)	4.43	3-11	-763 / 0	0.41 (1)
3-4	-865 / 0	-77.3 -77.3	0.61 (1)	5.61	11-5	0 / 405	0.09 (1)
4-5	-865 / 0	-77.3 -77.3	0.61 (1)	5.61	11-6	0 / 126	0.03 (1)
5-6	-851 / 0	-77.3 -77.3	0.19 (1)	6.25	9-6	-554 / 0	0.41 (1)
6-7	-738 / 0	-77.3 -77.3	0.19 (1)	6.25	2-12	0 / 1399	0.31 (1)
13-2	-1182 / 0	0.0 0.0	0.12 (1)	7.34	9-7	0 / 922	0.21 (1)
8-7	-1099 / 0	0.0 0.0	0.36 (1)	7.55			
13-12	0 / 0	-17.5 -17.5	0.26 (4)	10.00			
12-11	0 / 1391	-17.5 -17.5	0.36 (4)	10.00			
11-10	0 / 675	-17.5 -17.5	0.18 (1)	10.00			
10-9	0 / 675	-17.5 -17.5	0.18 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.07 (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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.69 (2-3:1), BC=0.36 (11-12:4), WB=0.41 (3-11:1), SSI=0.26 (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

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.

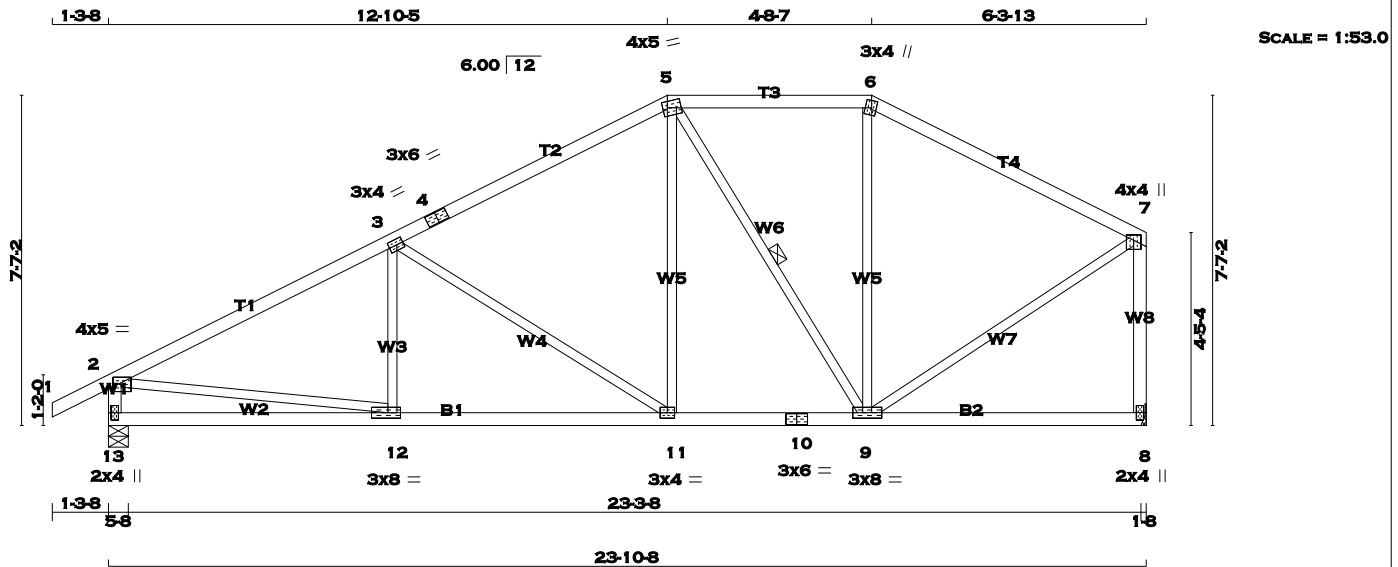
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF			
4 - 5	2x4	DRY	No.2	SPF			
5 - 6	2x4	DRY	No.2	SPF			
6 - 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-p	MT20	4.0	5.0	1.50	2.25	
3	TMVW-t	MT20	3.0	4.0	1.50	1.75	
4	TS-t	MT20	3.0	6.0			
5	TTWV-m	MT20	4.0	5.0	1.75	1.25	
6	TTW+m	MT20	3.0	4.0	2.00	1.25	
7	TMVW+p	MT20	4.0	4.0	1.50	2.00	
8	BMV1+p	MT20	2.0	4.0			
9	BMVWV-t	MT20	3.0	8.0			
10	BS-t	MT20	3.0	6.0			
11	BMVW-t	MT20	3.0	4.0			
12	BMVW-t	MT20	3.0	8.0	1.50	3.50	
13	BMV1+p	MT20	2.0	4.0			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.							



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
<u>BEARINGS</u>									
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
13	1237	0	1237	0	0	5-8	5-8		
8	1132	0	1132	0	0	HANGER BY OTHERS			
							MIN. SEAT SIZE: 1-8		
<u>UNFACTORED REACTIONS</u>									
1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
13	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0		
8	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 20-0-0 . CBF = 45 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1- 2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	12- 3	-57 / 94	0.03 (4)
2- 3	-1553 / 0	-77.3 -77.3	0.47 (1)	4.75	3-11	-585 / 0	0.69 (1)
3- 4	-1056 / 0	-77.3 -77.3	0.43 (1)	5.57	11- 5	0 / 400	0.09 (1)
4- 5	-1056 / 0	-77.3 -77.3	0.43 (1)	5.57	5- 9	-359 / 0	0.18 (1)
5- 6	-734 / 0	-77.3 -77.3	0.23 (1)	6.25	9- 6	-57 / 66	0.06 (1)
6- 7	-822 / 0	-77.3 -77.3	0.41 (1)	6.13	2-12	0 / 1424	0.32 (1)
13- 2	-1190 / 0	0.0 0.0	0.12 (1)	7.32	9- 7	0 / 874	0.20 (1)
8- 7	-1086 / 0	0.0 0.0	0.36 (1)	7.58			
13-12	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
12-11	0 / 1412	-17.5 -17.5	0.32 (1)	10.00			
11-10	0 / 926	-17.5 -17.5	0.23 (1)	10.00			
10- 9	0 / 926	-17.5 -17.5	0.23 (1)	10.00			
9- 8	0 / 0	-17.5 -17.5	0.15 (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 6.00/12

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.47 (2-3:1) , BC=0.32 (11-12:1) , WB=0.69 (3-11:1) , SSI=0.22 (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

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

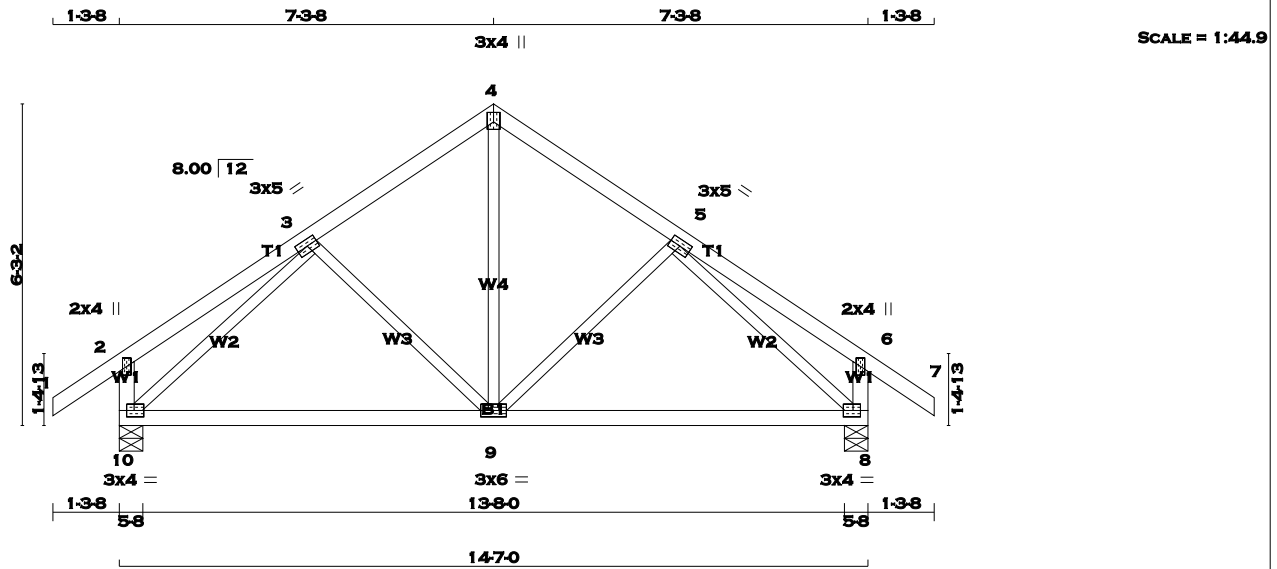
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 5 X 63 = 313 lb
[M][F]

LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS					SPECIFIED LOADS:				
1 - 4	2x4	DRY	No.2	SPF	FACTORED					TOP CH. LL = 23.3 PSF				
4 - 7	2x4	DRY	No.2	SPF	GROSS REACTION					DL = 3.0 PSF				
10 - 2	2x4	DRY	No.2	SPF	FACTORED					BOT CH. LL = 0.0 PSF				
8 - 6	2x4	DRY	No.2	SPF	GROSS REACTION					DL = 7.0 PSF				
10 - 8	2x4	DRY	No.2	SPF	FACTORED					TOTAL LOAD = 33.3 PSF				
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS					SPACING = 24.0 IN./C/C				
DRY: SEASONED LUMBER.					1ST LCASE					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010				
					MAX./MIN. COMPONENT REACTIONS					THIS DESIGN COMPLIES WITH:				
					JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL					- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014				
					10 558 403 / 0 0 / 0 0 / 0 0 / 0 154 / 0 0 / 0					- CSA 086-09				
					8 558 403 / 0 0 / 0 0 / 0 0 / 0 154 / 0 0 / 0					- TPIC 2011				
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 8					(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				
					BRACING					ALLOWABLE DEFL.(LL)= L/360 (0.49")				
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.					CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")				
					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.					ALLOWABLE DEFL.(TL)= L/360 (0.49")				
					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.					CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")				
					LOADING					CSI: TC=0.16 (5-6:1) , BC=0.30 (8-9:4) , WB=0.31 (5-8:1) , SSI=0.11 (4-5:1)				
					TOTAL LOAD CASES: (4)					DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10				
					CHORDS					COMPANION LIVE LOAD FACTOR = 0.50				
					MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX					TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .				
					(LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO					NAIL VALUES				
					FR-TO 0 / 29 -77.3 -77.3 0.10 (1) 10.00 9-4 0 / 371 0.08 (1)					PLATE GRIP(DRY) SHEAR SECTION				
					2-3 0 / 18 -77.3 -77.3 0.16 (1) 10.00 9-5 -155 / 5 0.07 (1)					(PSI) (PLI) (PLI)				
					3-4 -550 / 0 -77.3 -77.3 0.13 (1) 6.25 3-9 -155 / 5 0.07 (1)					MAX MIN MAX MIN MAX MIN				
					4-5 -550 / 0 -77.3 -77.3 0.13 (1) 6.25 10-3 -770 / 0 0.31 (1)					MT20 618 354 1667 822 2284 1656				
					5-6 0 / 18 -77.3 -77.3 0.16 (1) 10.00 5-8 -770 / 0 0.31 (1)					PLATE PLACEMENT TOL. = 0.250 inches				
					6-7 0 / 29 -77.3 -77.3 0.10 (1) 10.00					PLATE ROTATION TOL. = 5.0 Deg.				
					10-2 -215 / 0 0.0 0.0 0.02 (1) 7.81					JSI GRIP= 0.85 (8) (INPUT = 0.90)				
					8-6 -215 / 0 0.0 0.0 0.02 (1) 7.81					JSI METAL= 0.22 (3) (INPUT = 1.00)				
					10-9 0 / 554 -17.5 -17.5 0.30 (4) 10.00									
					9-8 0 / 554 -17.5 -17.5 0.30 (4) 10.00									

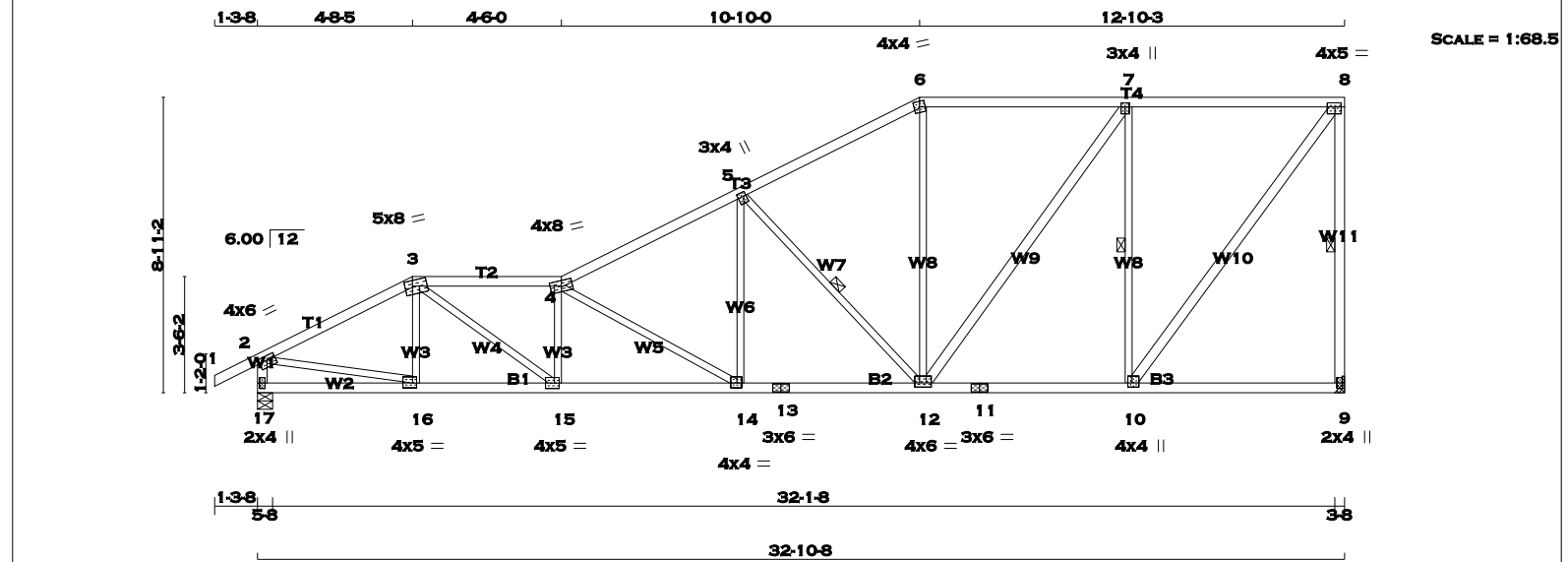


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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.







LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
17 - 2	2x4	DRY	No.2	SPF
17 - 13	2x4	DRY	No.2	SPF
13 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
12 - 7	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	6.0	1.50 3.00
3	TTWW-m	MT20	5.0	8.0	2.00 2.75
4	TTWW-m	MT20	4.0	8.0	
5	TMWW+t	MT20	3.0	4.0	1.50 0.75
6	TTW-m	MT20	4.0	4.0	
7	TMWW+t	MT20	3.0	4.0	1.50 1.50
8	TMVW-t	MT20	4.0	5.0	1.50 2.25
9	BMV1+p	MT20	2.0	4.0	
10	BMWW+t	MT20	4.0	4.0	1.50 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWWW-t	MT20	4.0	6.0	1.50 3.00
13	BS-t	MT20	3.0	6.0	
14	BMWW-t	MT20	4.0	4.0	1.75 1.75
15	BMWW-t	MT20	4.0	5.0	2.00 1.75
16	BMWW-t	MT20	4.0	5.0	1.75 1.50
17	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
9	1559	0	1559	0	0	HANGER BY OTHERS	
17	1664	0	1664	0	0	5-8	5-8

UNFACTORED REACTIONS		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE
9	1094	765 / 0	0 / 0
17	1165	829 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.54 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-9. DBS = 8-0-0 . CBF = 76 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-12, 7-10. DBS = 12-0-0 . CBF = 89 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10-0	16-3	-259 / 0	0.05 (1)
2-3	-2206 / 0	-77.3 -77.3	0.40 (1)	4-20	3-15	0 / 1514	0.34 (1)
3-4	-3186 / 0	-77.3 -77.3	0.43 (1)	3-54	15-4	-823 / 0	0.17 (1)
4-5	-2429 / 0	-77.3 -77.3	0.55 (1)	3-89	4-14	-1184 / 0	0.86 (1)
5-6	-1598 / 0	-77.3 -77.3	0.46 (1)	4-69	14-5	0 / 708	0.16 (1)
6-7	-1413 / 0	-77.3 -77.3	0.63 (1)	4-61	5-12	-1151 / 0	0.51 (1)
7-8	-998 / 0	-77.3 -77.3	0.59 (1)	5-32	12-6	0 / 363	0.08 (1)
9-8	-1513 / 0	0.0 0.0	0.56 (1)	5-34	12-7	0 / 710	0.11 (1)
17-2	-1629 / 0	0.0 0.0	0.16 (1)	6-48	10-7	-1192 / 0	0.61 (1)
				10-8	0 / 1655	0.27 (1)	
				2-16	0 / 2003	0.45 (1)	
17-16	0 / 0	-17.5 -17.5	0.08 (4)	10-0			
16-15	0 / 1963	-17.5 -17.5	0.36 (1)	10-0			
15-14	0 / 3212	-17.5 -17.5	0.58 (1)	10-0			
14-13	0 / 2194	-17.5 -17.5	0.41 (1)	10-0			
13-12	0 / 2194	-17.5 -17.5	0.41 (1)	10-0			
12-11	0 / 998	-17.5 -17.5	0.26 (1)	10-0			
11-10	0 / 998	-17.5 -17.5	0.26 (1)	10-0			
10-9	0 / 0	-17.5 -17.5	0.18 (4)	10-0			

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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CSI: TC=0.63 (6-7:1), BC=0.58 (14-15:1), WB=0.86 (4-14:1), SSI=0.24 (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

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

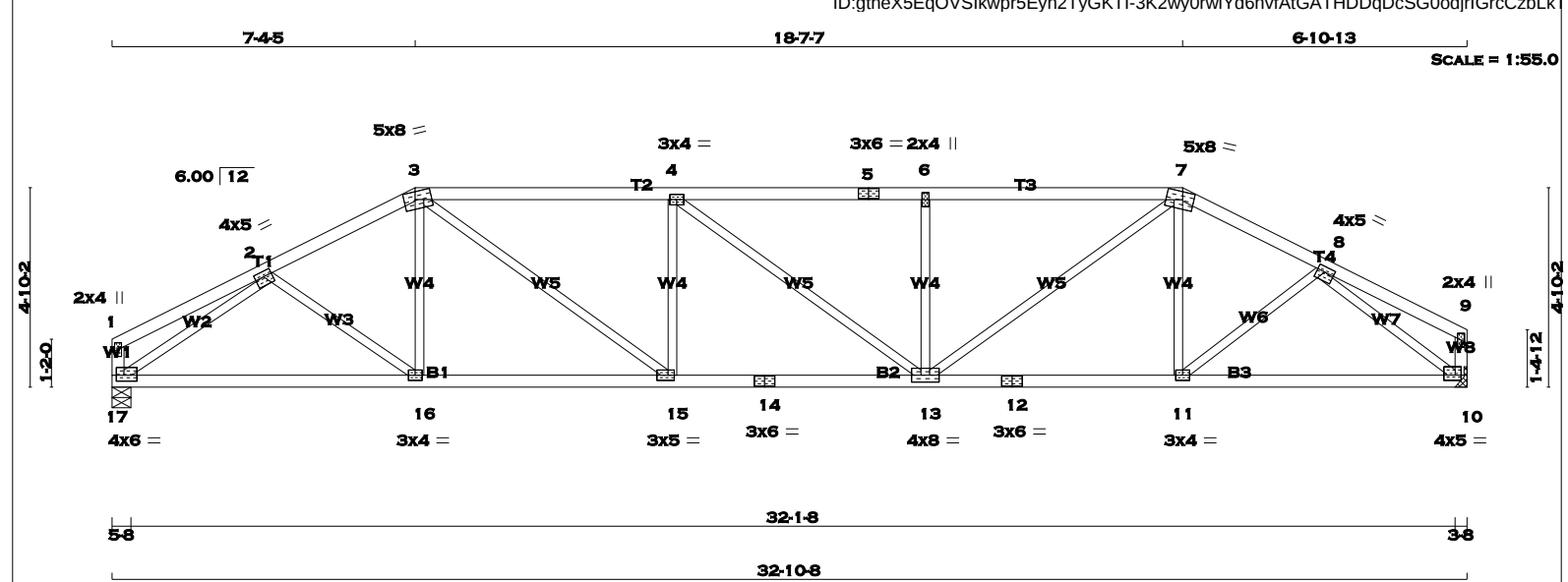
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.59 (16) (INPUT = 1.00)

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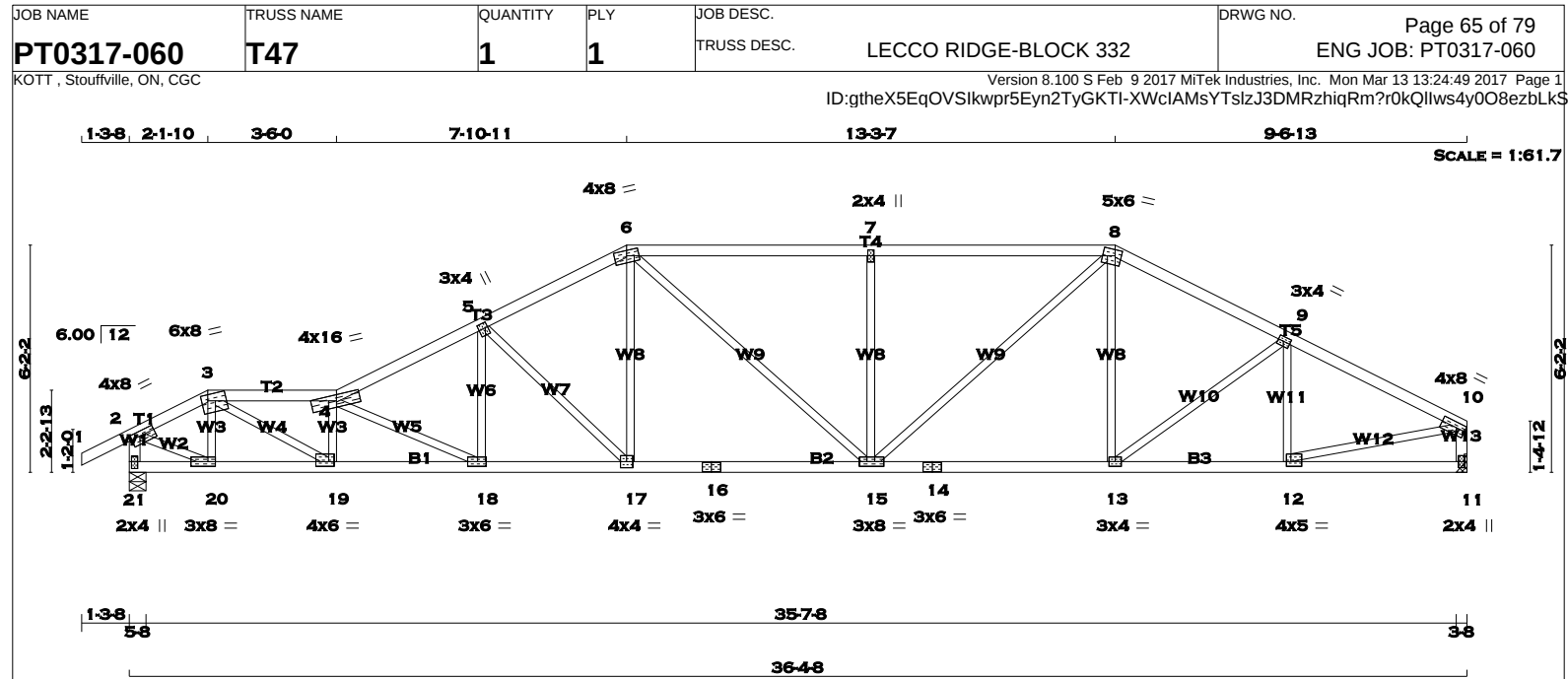
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 5 2x4 DRY No.2 SPF 5 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 17 - 1 2x4 DRY No.2 SPF 10 - 9 2x4 DRY No.2 SPF 17 - 14 2x4 DRY No.2 SPF 14 - 12 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 17 1559 0 1559 0 0 5-8 5-8 10 1559 0 1559 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 17 1094 765 / 0 0 / 0 0 / 0 0 / 0 329 / 0 0 / 0 10 1094 765 / 0 0 / 0 0 / 0 0 / 0 329 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.59 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 MAX. FACTORED FORCE VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) MAX. FACTORED FR-TO FROM TO LENGTH FR-TO (LBS) CSI (LC) 1-2 0 / 12 -77.3 -77.3 0.13 (1) 10.00 2-16 0 / 99 0.03 (4) 2-3 -2224 / 0 -77.3 -77.3 0.20 (1) 4.41 16-3 0 / 104 0.04 (4) 3-4 -2800 / 0 -77.3 -77.3 0.64 (1) 3.59 3-15 0 / 1016 0.23 (1) 4-5 -2770 / 0 -77.3 -77.3 0.62 (1) 3.61 15-4 -498 / 0 0.17 (1) 5-6 -2770 / 0 -77.3 -77.3 0.62 (1) 3.61 4-13 -37 / 0 0.04 (1) 6-7 -2770 / 0 -77.3 -77.3 0.63 (1) 3.62 13-6 -519 / 0 0.18 (1) 7-8 -2124 / 0 -77.3 -77.3 0.18 (1) 4.52 13-7 0 / 1091 0.25 (1) 8-9 0 / 11 -77.3 -77.3 0.12 (1) 10.00 11-7 -2 / 76 0.03 (4) 17-1 -116 / 0 0.0 0.0 0.01 (1) 7.81 11-8 0 / 216 0.05 (1) 10-9 -109 / 0 0.0 0.0 0.01 (1) 7.81 17-2 -2350 / 0 0.80 (1) 8-10 -2217 / 0 0.71 (1) 17-16 0 / 1896 -17.5 -17.5 0.42 (1) 10.00 16-15 0 / 1979 -17.5 -17.5 0.43 (1) 10.00 15-14 0 / 2800 -17.5 -17.5 0.51 (1) 10.00 14-13 0 / 2800 -17.5 -17.5 0.51 (1) 10.00 13-12 0 / 1888 -17.5 -17.5 0.41 (1) 10.00 12-11 0 / 1888 -17.5 -17.5 0.41 (1) 10.00 11-10 0 / 1719 -17.5 -17.5 0.38 (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 6.00/12 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 (1.10") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17") ALLOWABLE DEFL.(TL)= L/360 (1.10") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.31") CSI: TC=0.64 (3-4:1), BC=0.51 (13-15:1), WB=0.80 (2-17:1), SSI=0.22 (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 (15) (INPUT = 0.90) JSI METAL= 0.78 (14) (INPUT = 1.00)			
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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.

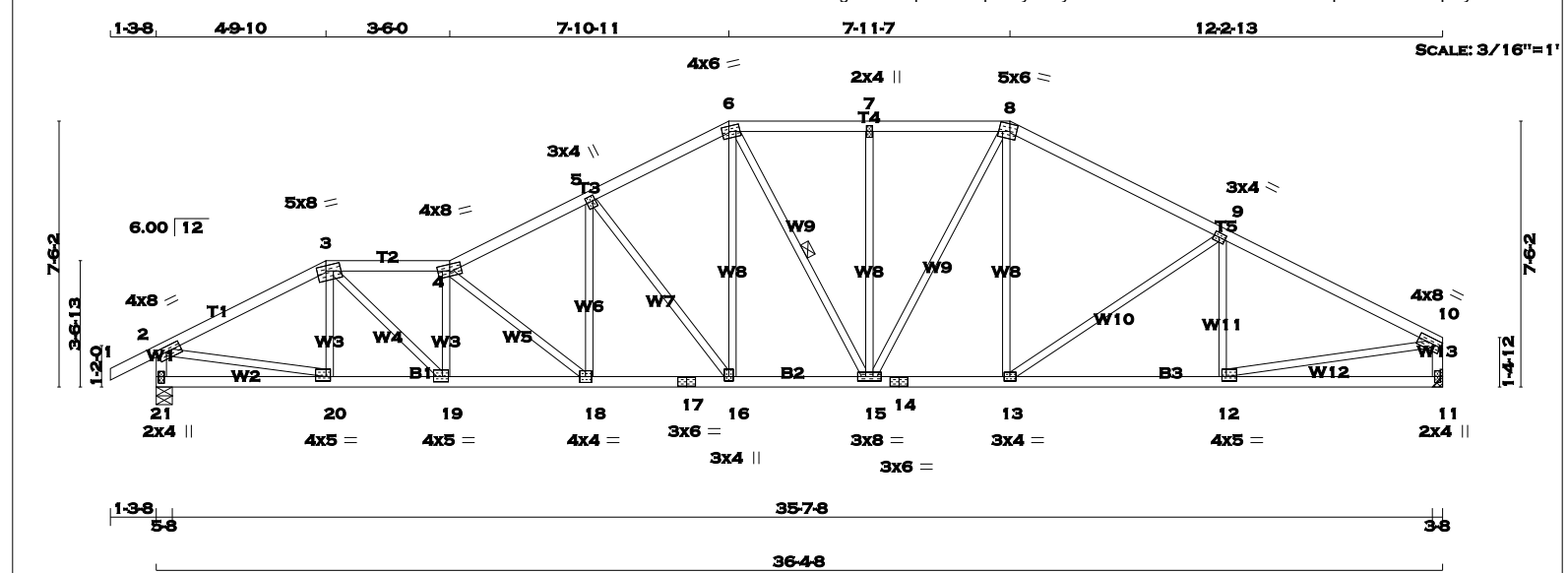




LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 10 2x4 DRY No.2 SPF 21 - 2 2x4 DRY No.2 SPF 11 - 10 2x4 DRY No.2 SPF 21 - 16 2x4 DRY No.2 SPF 16 - 14 2x4 DRY No.2 SPF 14 - 11 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 21 1830 0 1830 0 0 5-8 5-8 11 1725 0 1725 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1282 910 / 0 0 / 0 0 / 0 0 / 0 372 / 0 0 / 0 11 1211 847 / 0 0 / 0 0 / 0 0 / 0 364 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.25 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) VERT. LOAD LC1 MAX. (PLF) CSI (LC) UNBRAC. LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. (LC) CSI (LC) FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 20-3 -613 / 0 0.09 (1) 2-3 -2069 / 0 -77.3 -77.3 0.09 (1) 4.66 3-19 0 / 2679 0.60 (1) 3-4 -4143 / 0 -77.3 -77.3 0.31 (1) 3.25 19-4 -1313 / 0 0.20 (1) 4-5 -3515 / 0 -77.3 -77.3 0.29 (1) 3.55 4-18 -1174 / 0 0.39 (1) 5-6 -2799 / 0 -77.3 -77.3 0.23 (1) 3.99 18-5 0 / 599 0.13 (1) 6-7 -2712 / 0 -77.3 -77.3 0.58 (1) 3.66 5-17 -931 / 0 0.50 (1) 7-8 -2712 / 0 -77.3 -77.3 0.58 (1) 3.66 17-6 0 / 745 0.17 (1) 8-9 -2342 / 0 -77.3 -77.3 0.29 (1) 4.24 6-15 0 / 281 0.06 (1) 9-10 -2360 / 0 -77.3 -77.3 0.30 (1) 4.22 15-7 -630 / 0 0.38 (1) 21-2 -1827 / 0 0.0 0.0 0.18 (1) 6.20 15-8 0 / 846 0.19 (1) 11-10 -1685 / 0 0.0 0.0 0.17 (1) 6.39 13-8 0 / 144 0.04 (1) 21-20 0 / 0 -17.5 -17.5 0.05 (1) 10.00 12-9 -393 / 0 0.09 (1) 20-19 0 / 1815 -17.5 -17.5 0.38 (1) 10.00 2-20 0 / 1979 0.45 (1) 19-18 0 / 4214 -17.5 -17.5 0.78 (1) 10.00 12-10 0 / 2179 0.49 (1) 18-17 0 / 3159 -17.5 -17.5 0.57 (1) 10.00 17-16 0 / 2502 -17.5 -17.5 0.48 (1) 10.00 16-15 0 / 2502 -17.5 -17.5 0.48 (1) 10.00 15-14 0 / 2079 -17.5 -17.5 0.41 (1) 10.00 14-13 0 / 2079 -17.5 -17.5 0.41 (1) 10.00 13-12 0 / 2127 -17.5 -17.5 0.41 (1) 10.00 12-11 0 / 0 -17.5 -17.5 0.09 (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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 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 - TPC 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 (1.21") CALCULATED VERT. DEFL.(LL) = L/999 (0.22") ALLOWABLE DEFL.(TL)= L/360 (1.21") CALCULATED VERT. DEFL.(TL) = L/999 (0.41") CSI: TC=0.58 (6-7:1), BC=0.78 (18-19:1), WB=0.60 (3-19:1), SSI=0.25 (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 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 (15) (INPUT = 0.90) JSI METAL= 0.70 (16) (INPUT = 1.00)			
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 3 2x4 DRY No.2 SPF
3 - 4 2x4 DRY No.2 SPF
4 - 6 2x4 DRY No.2 SPF
6 - 8 2x4 DRY No.2 SPF
8 - 10 2x4 DRY No.2 SPF
21 - 2 2x4 DRY No.2 SPF
11 - 10 2x4 DRY No.2 SPF
21 - 17 2x4 DRY No.2 SPF
17 - 14 2x4 DRY No.2 SPF
14 - 11 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

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
21 1830 0 1830 0 0 5-8 5-8
11 1725 0 1725 0 0 HANGER BY OTHERS
MIN. SEAT SIZE: 3-8
UNFACTORED REACTIONS
1ST LCASE MAX./MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
21 1282 910 / 0 0 / 0 0 / 0 0 / 0 372 / 0 0 / 0
11 1211 847 / 0 0 / 0 0 / 0 0 / 0 364 / 0 0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.66 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-15. DBS = 20-0-0. CBF = 2 LBS.
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	20-3	-297 / 0	0.06 (1)
2-3	-2484 / 0	-77.3 -77.3	0.32 (1)	4.11	3-19	0 / 1571	0.35 (1)
3-4	-3343 / 0	-77.3 -77.3	0.25 (1)	3.66	19-4	-1047 / 0	0.22 (1)
4-5	-3008 / 0	-77.3 -77.3	0.25 (1)	3.85	4-18	-869 / 0	0.38 (1)
5-6	-2411 / 0	-77.3 -77.3	0.21 (1)	4.27	18-5	0 / 630	0.14 (1)
6-7	-2168 / 0	-77.3 -77.3	0.20 (1)	4.46	5-16	-924 / 0	0.74 (1)
7-8	-2168 / 0	-77.3 -77.3	0.20 (1)	4.46	16-6	0 / 805	0.18 (1)
8-9	-2200 / 0	-77.3 -77.3	0.46 (1)	4.16	6-15	0 / 32	0.01 (1)
9-10	-2449 / 0	-77.3 -77.3	0.50 (1)	3.95	15-7	-367 / 0	0.37 (1)
21-2	-1793 / 0	0.0 0.0	0.18 (1)	6.24	15-8	0 / 455	0.10 (1)
11-10	-1679 / 0	0.0 0.0	0.17 (1)	6.41	13-8	0 / 276	0.06 (1)
					13-9	-326 / 0	0.35 (1)
21-20	0 / 0	-17.5 -17.5	0.09 (4)	10.00	12-9	-269 / 25	0.08 (1)
20-19	0 / 2210	-17.5 -17.5	0.39 (1)	10.00	2-20	0 / 2253	0.51 (1)
19-18	0 / 3376	-17.5 -17.5	0.60 (1)	10.00	12-10	0 / 2246	0.51 (1)
18-17	0 / 2707	-17.5 -17.5	0.46 (1)	10.00			
17-16	0 / 2707	-17.5 -17.5	0.46 (1)	10.00			
16-15	0 / 2152	-17.5 -17.5	0.38 (1)	10.00			
15-14	0 / 1948	-17.5 -17.5	0.37 (1)	10.00			
14-13	0 / 1948	-17.5 -17.5	0.37 (1)	10.00			
13-12	0 / 2212	-17.5 -17.5	0.42 (1)	10.00			
12-11	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
LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12
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
- TPC 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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")
CSI: TC=0.50 (9-10:1), BC=0.60 (18-19:1), WB=0.74 (5-16:1), SSI=0.21 (9-10:1)
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 (19) (INPUT = 0.90)
JSI METAL= 0.70 (17) (INPUT = 1.00)

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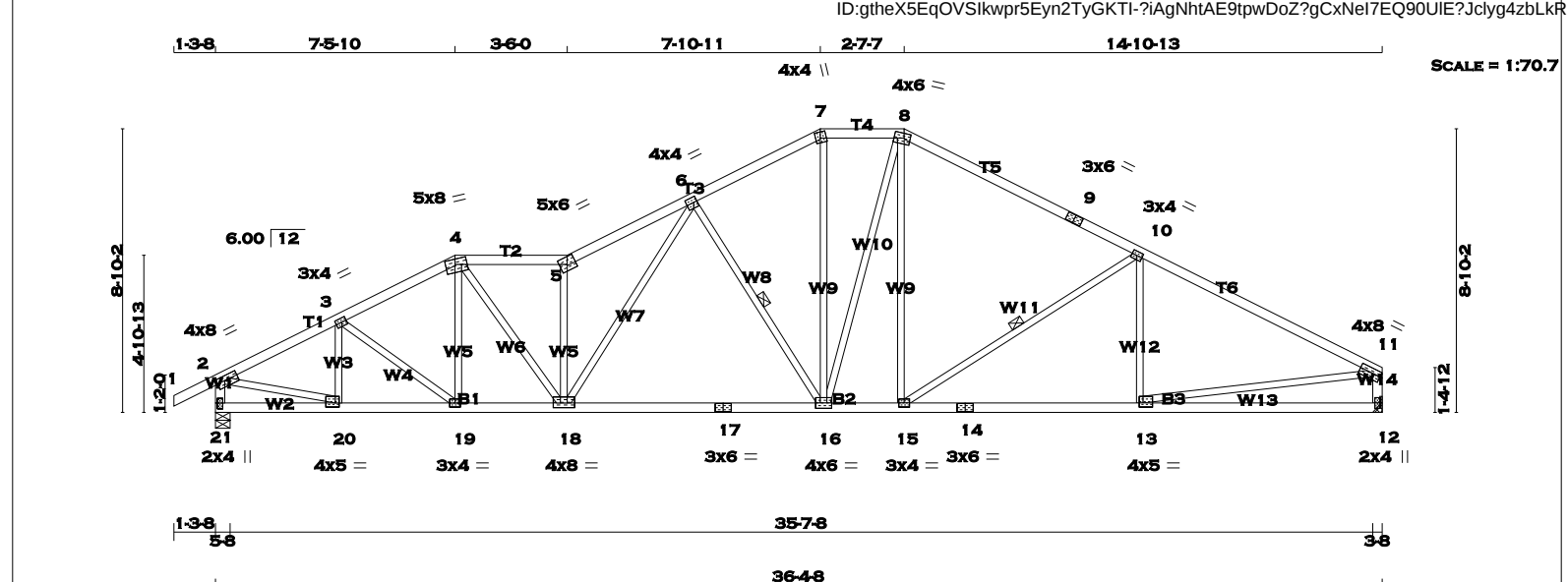
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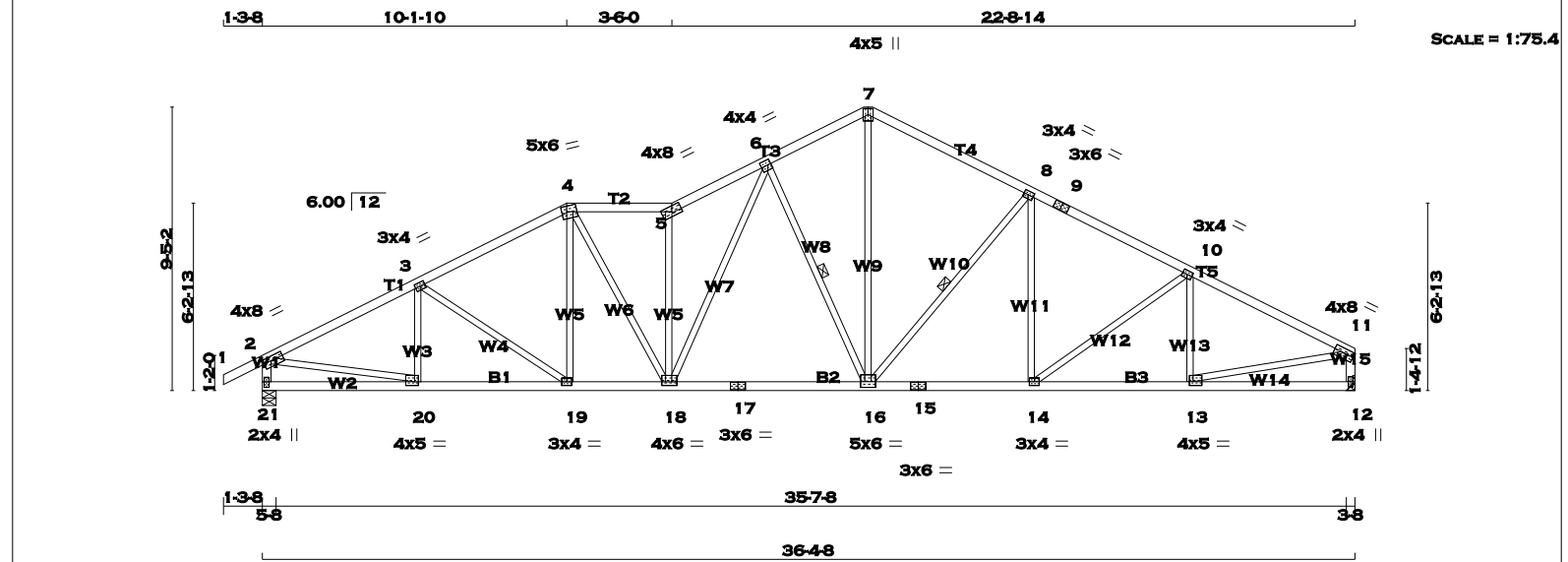
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA									
1 - 4 2x4 DRY No.2 SPF					FACTORED MAXIMUM FACTORED INPUT REQRD					SPECIFIED LOADS:														
4 - 5 2x4 DRY No.2 SPF					GROSS REACTION GROSS REACTION BRG BRG					TOP CH. LL = 23.3 PSF														
5 - 7 2x4 DRY No.2 SPF					JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX					DL = 3.0 PSF														
7 - 8 2x4 DRY No.2 SPF					21 1830 0 1830 0 0 5-8 5-8					BOT CH. LL = 0.0 PSF														
8 - 9 2x4 DRY No.2 SPF					12 1725 0 1725 0 0 HANGER BY OTHERS					DL = 7.0 PSF														
9 - 11 2x4 DRY No.2 SPF										TOTAL LOAD = 33.3 PSF														
21- 2 2x4 DRY No.2 SPF										SPACING = 24.0 IN. C/C														
12- 11 2x4 DRY No.2 SPF										LOADING IN ALL FLAT SECTIONS BASED ON A														
21- 17 2x4 DRY No.2 SPF										SLOPE OF 6.00/12														
17- 14 2x4 DRY No.2 SPF										THIS TRUSS IS DESIGNED FOR RESIDENTIAL														
14- 12 2x4 DRY No.2 SPF										OR SMALL BUILDING REQUIREMENTS OF														
ALL WEBS 2x3 DRY No.2 SPF										PART 9, NBCC 2010														
EXCEPT										THIS DESIGN COMPLIES WITH:														
DRY: SEASONED LUMBER.										- 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 (1.21")														
										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")														
										ALLOWABLE DEFL.(TL)= L/360 (1.21")														
										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.37")														
										CSI: TC=0.79 (10-11:1), BC=0.50 (16-18:1) ,														
										WB=0.60 (5-18:1) , SSI=0.25 (10-11:1)														
										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														



TOTAL WEIGHT = 161 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
9 - 11	2x4	DRY	No.2
21 - 2	2x4	DRY	No.2
12 - 11	2x4	DRY	No.2
21 - 17	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 12	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
2	TMVW-t	MT20	4.0	8.0	1.75 3.00
3, 8, 10					
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TTWW-m	MT20	5.0	6.0	2.25 2.00
5	TTW-h	MT20	4.0	8.0	2.25 4.00
6	TMWW-t	MT20	4.0	4.0	2.00 1.25
7	TTW+p	MT20	4.0	5.0	
9	TS-t	MT20	3.0	6.0	
11	TMVW-t	MT20	4.0	8.0	1.75 Edge
12	BMV1+p	MT20	2.0	4.0	
13	BMWW-t	MT20	4.0	5.0	1.50 1.50
14	BMWW-t	MT20	3.0	4.0	
15	BS-t	MT20	3.0	6.0	
16	BMWW-t	MT20	5.0	6.0	2.25 3.00
17	BS-t	MT20	3.0	6.0	
18	BMWW-t	MT20	4.0	6.0	1.50 1.50
19	BMWW-t	MT20	3.0	4.0	
20	BMWW-t	MT20	4.0	5.0	1.50 1.50
21	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	HORIZ
21	1830	0	1830
12	1725	0	1725

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
21	1282	910 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
12	1211	847 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.03 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-16. DBS = 14-0-0. CBF = 83 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-16. DBS = 20-0-0. CBF = 71 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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				
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	20-3	-288 / 3	0.06 (1)	
2-3	-2545 / 0	-77.3 -77.3	0.34 (1)	4.05	3-19	-201 / 0	0.13 (1)	
3-4	-2400 / 0	-77.3 -77.3	0.32 (1)	4.16	19-4	0 / 190	0.04 (1)	
4-5	-2471 / 0	-77.3 -77.3	0.19 (1)	4.24	4-18	0 / 685	0.15 (1)	
5-6	-2775 / 0	-77.3 -77.3	0.19 (1)	4.03	18-5	-1471 / 0	0.91 (1)	
6-7	-1907 / 0	-77.3 -77.3	0.14 (1)	4.76	18-6	0 / 1039	0.23 (1)	
7-8	-1912 / 0	-77.3 -77.3	0.32 (1)	4.57	6-16	-951 / 0	0.44 (1)	
8-9	-2299 / 0	-77.3 -77.3	0.32 (1)	4.26	16-8	-564 / 0	0.27 (1)	
9-10	-2299 / 0	-77.3 -77.3	0.32 (1)	4.26	14-8	0 / 160	0.04 (4)	
10-11	-2400 / 0	-77.3 -77.3	0.37 (1)	4.13	14-10	-129 / 0	0.10 (1)	
21- 2	-1789 / 0	0.0	0.0	18 (1)	6.24	13-10	-325 / 0	0.08 (1)
12-11	-1683 / 0	0.0	0.0	0.17 (1)	6.40	2-20	0 / 2325	0.52 (1)
					13-11	0 / 2203	0.50 (1)	
21-20	0 / 0	-17.5 -17.5	0.10 (4)	10.00	16- 7	0 / 1423	0.32 (1)	
20-19	0 / 2293	-17.5 -17.5	0.41 (1)	10.00				
19-18	0 / 2131	-17.5 -17.5	0.38 (1)	10.00				
18-17	0 / 2080	-17.5 -17.5	0.43 (1)	10.00				
17-16	0 / 2080	-17.5 -17.5	0.43 (1)	10.00				
16-15	0 / 2057	-17.5 -17.5	0.43 (1)	10.00				
15-14	0 / 2057	-17.5 -17.5	0.43 (1)	10.00				
14-13	0 / 2161	-17.5 -17.5	0.39 (1)	10.00				
13-12	0 / 0	-17.5 -17.5	0.12 (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

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.33")

CSI: TC=0.37 (10-11:1), BC=0.43 (16-18:1), WB=0.91 (5-18:1), SSI=0.17 (10-11:1)

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

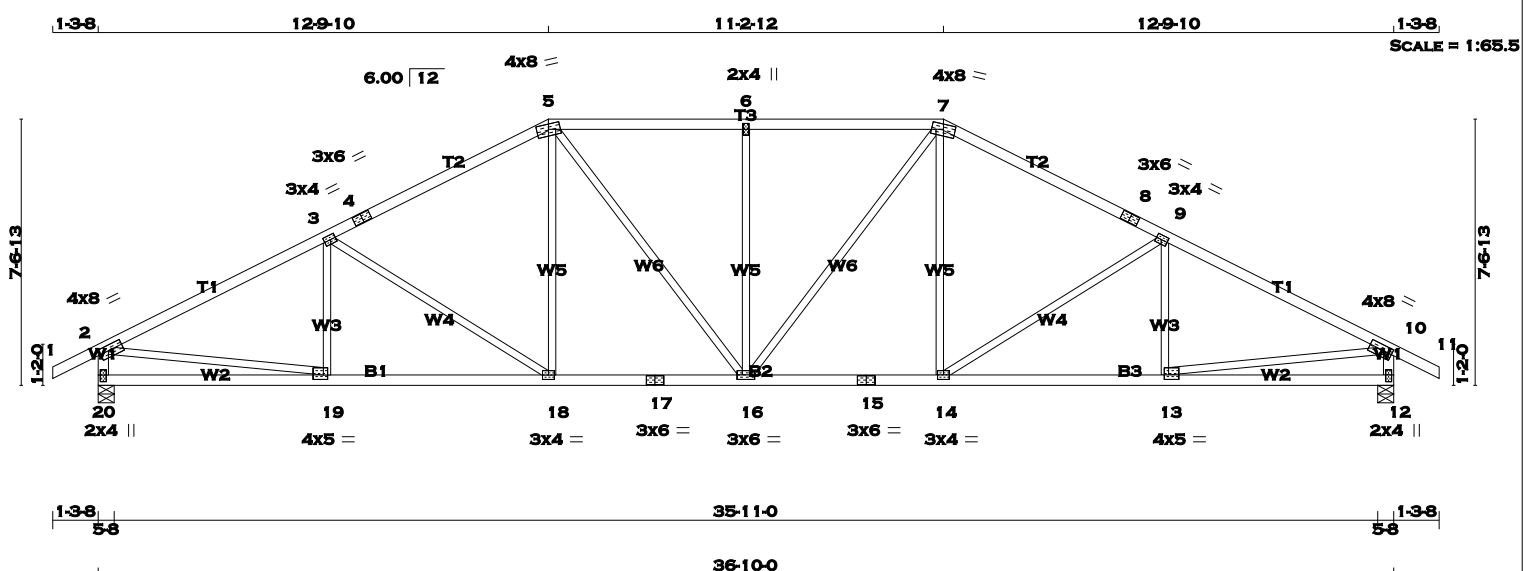
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (18) (INPUT = 0.90)
JSI METAL= 0.69 (20) (INPUT = 1.00)

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





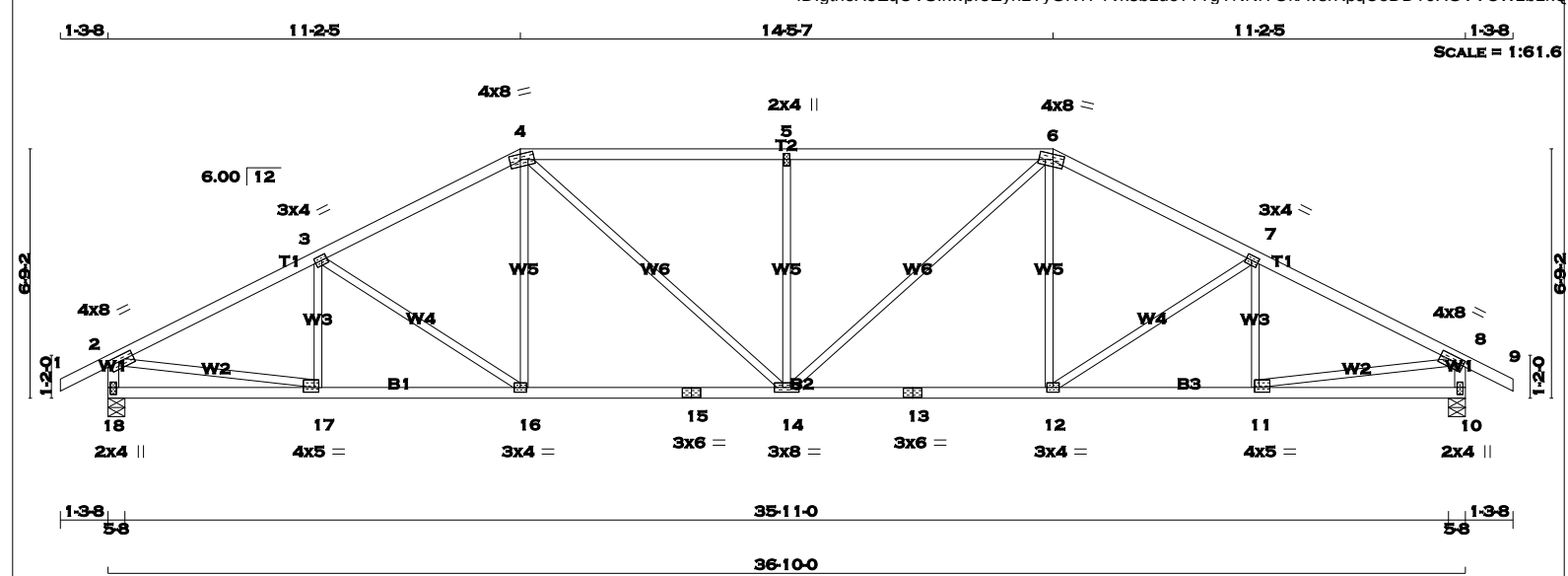
TOTAL WEIGHT = 152 LB										[M][F]							
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA			
1 - 4 2x4 DRY No.2 SPF				BEARINGS										SPECIFIED LOADS:			
4 - 5 2x4 DRY No.2 SPF				FACTORED MAXIMUM FACTORED INPUT REQD										TOP CH. LL = 23.3 PSF			
5 - 7 2x4 DRY No.2 SPF				GROSS REACTION GROSS REACTION BRG BRG										DL = 3.0 PSF			
7 - 8 2x4 DRY No.2 SPF				JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 0.0 PSF			
8 - 11 2x4 DRY No.2 SPF				20 1852 0 1852 0 0 5-8 5-8										DL = 7.0 PSF			
20 - 2 2x4 DRY No.2 SPF				12 1852 0 1852 0 0 5-8 5-8										TOTAL LOAD = 33.3 PSF			
12 - 10 2x4 DRY No.2 SPF																	
20 - 17 2x4 DRY No.2 SPF																	
17 - 15 2x4 DRY No.2 SPF																	
15 - 12 2x4 DRY No.2 SPF																	
ALL WEBS 2x3 DRY No.2 SPF																	
EXCEPT																	
DRY: SEASONED LUMBER.														LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 12										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
				BRACING										THIS DESIGN COMPLIES WITH:			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 FT.										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										- CSA 086-09			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										- TPIC 2011			
PLATES (table is in inches)				LOADING										(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			
JT TYPE PLATES W LEN Y X				TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(LL)= L/360 (1.23")			
2 TMVW-t MT20 4.0 8.0 1.75 3.00				CHORDS										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")			
3 TMWW-t MT20 3.0 4.0 1.50 1.75				MAX. FACTORED FACTORED										ALLOWABLE DEFL.(TL)= L/360 (1.23")			
4 TS-t MT20 3.0 6.0				MEMB. FORCE VERT. LOAD LC1 MAX										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")			
5 TTWW-m MT20 4.0 8.0 1.75 4.00				(LBS) (PLF) CSI (LC)													
6 TMW+w MT20 2.0 4.0				FR-TO FROM TO													
7 TTWW-m MT20 4.0 8.0 1.75 4.00				1- 2 0 / 23 -77.3 -77.3 0.10 (1)										10.00 19- 3 -193 / 51 0.06 (1)			
8 TS-t MT20 3.0 6.0				2- 3 -2635 / 0 -77.3 -77.3 0.58 (1)										3.75 3-18 -439 / 0 0.51 (1)			
9 TMWW-t MT20 3.0 4.0 1.50 1.75				3- 4 -2275 / 0 -77.3 -77.3 0.51 (1)										4.05 18- 5 0 / 345 0.08 (1)			
10 TMVW-t MT20 4.0 8.0 1.75 3.00				4- 5 -2275 / 0 -77.3 -77.3 0.51 (1)										4.05 5-16 0 / 392 0.09 (1)			
12 BMV1+p MT20 2.0 4.0 2.25 1.00				5- 6 -2255 / 0 -77.3 -77.3 0.38 (1)										4.19 16- 6 -531 / 0 0.55 (1)			
13 BMWW-t MT20 4.0 5.0 1.50 1.50				6- 7 -2255 / 0 -77.3 -77.3 0.38 (1)										4.19 16- 7 0 / 392 0.09 (1)			
15 BS-t MT20 3.0 6.0				7- 8 -2275 / 0 -77.3 -77.3 0.51 (1)										4.05 14- 7 0 / 345 0.08 (1)			
16 BMWWW-t MT20 3.0 6.0				8- 9 -2275 / 0 -77.3 -77.3 0.51 (1)										4.05 14- 9 -439 / 0 0.51 (1)			
17 BS-t MT20 3.0 6.0				9-10 -2635 / 0 -77.3 -77.3 0.58 (1)										3.75 13- 9 -193 / 51 0.06 (1)			
18 BMWW-t MT20 3.0 4.0				10-11 0 / 23 -77.3 -77.3 0.10 (1)										10.00 2-19 0 / 2401 0.54 (1)			
19 BMWWW-t MT20 4.0 5.0 1.50 1.50				20- 2 -1803 / 0 0.0 0.0 0.18 (1)										6.23 13-10 0 / 2401 0.54 (1)			
20 BMV1+p MT20 2.0 4.0 2.25 1.00				12-10 -1803 / 0 0.0 0.0 0.18 (1)										6.23			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				20-19 0 / 0 -17.5 -17.5 0.17 (4)										10.00			
				19-18 0 / 2380 -17.5 -17.5 0.45 (1)										10.00			
				18-17 0 / 2015 -17.5 -17.5 0.39 (1)										10.00			
				17-16 0 / 2015 -17.5 -17.5 0.39 (1)										10.00			
				16-15 0 / 2015 -17.5 -17.5 0.39 (1)										10.00			
				15-14 0 / 2015 -17.5 -17.5 0.39 (1)										10.00			
				14-13 0 / 2380 -17.5 -17.5 0.45 (1)										10.00			
				13-12 0 / 0 -17.5 -17.5 0.17 (4)										10.00			



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IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

6 - 9

2x4

DRY

No.2

SPF

18 - 2

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

18 - 15

2x4

DRY

No.2

SPF

15 - 13

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

JT

18

1852

0

1852

0

0

5-8

5-8

10

1852

0

1852

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

18

1297

921 / 0

0 / 0

0 / 0

0 / 0

376 / 0

0 / 0

10

1297

921 / 0

0 / 0

0 / 0

0 / 0

376 / 0

0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.60 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.

LOADING

TOTAL LOAD CASES: (4)

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 6.00/12

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 (1.23")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.16")

ALLOWABLE DEFL.(TL)= L/360 (1.23")

CALCULATED VERT. DEFL.(TL)= L/ 999 (0.30")

CSI: TC=0.68 (4-5:1) , BC=0.46 (11-12:1) , WB=0.54 (8-11:1) , SSI=0.27 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PSI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

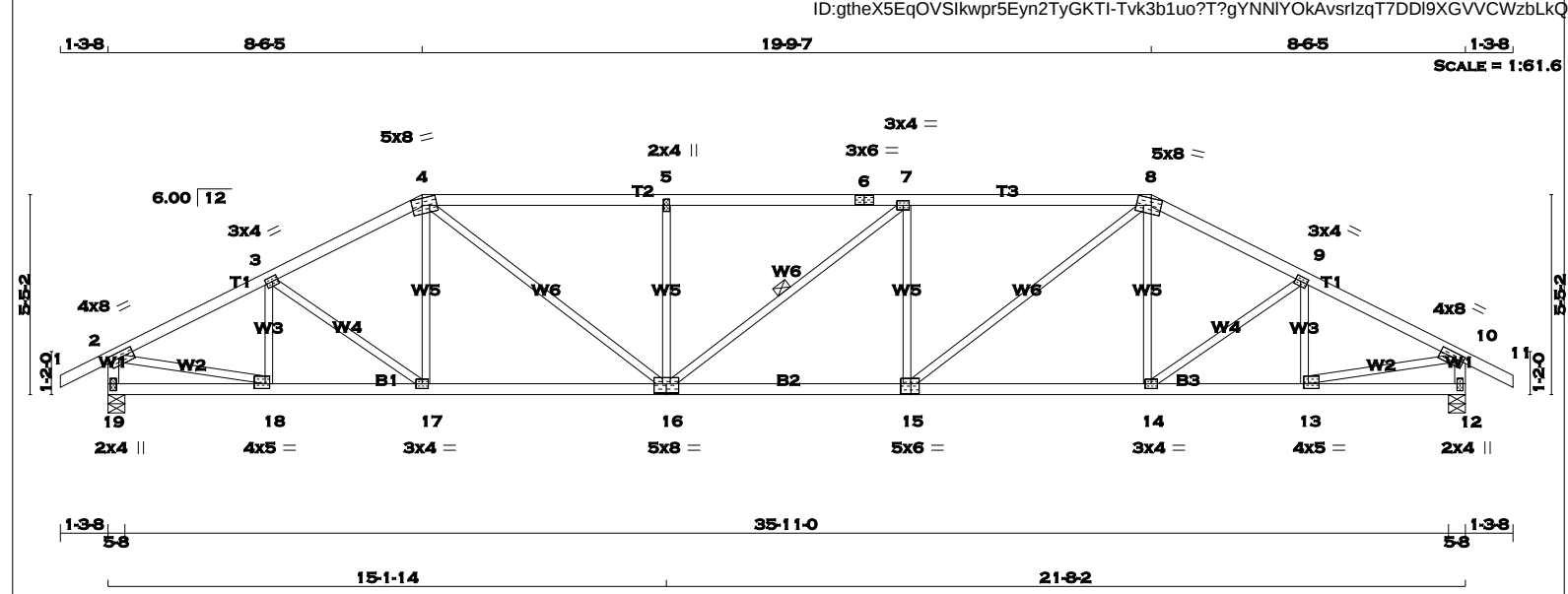
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90)

JSI METAL= 0.71 (11) (INPUT = 1.00)

N. L. G. A. RULES					BUILDING DESIGNER					DESIGN CRITERIA							
CHORDS					BEARINGS					SPECIFIED LOADS:							
1 - 4	2x4	DRY	LUMBER	DESCR.	FACTORED					TOP CH. LL = 23.3 PSF							
4 - 6	2x4	DRY	No.2	SPF	GROSS REACTION					OR DL = 3.0 PSF							
6 - 9	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF				
18 - 2	2x4	DRY	No.2	SPF	18	1852	0	1852	0	0	5-8	5-8	DL = 7.0 PSF				
10 - 8	2x4	DRY	No.2	SPF	10	1852	0	1852	0	0	5-8	5-8	TOTAL LOAD = 33.3 PSF				
18 - 15	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS								SPACING = 24.0 IN. C/C				
15 - 13	2x4	DRY	No.2	SPF									1ST LCASE		MAX./MIN. COMPONENT REACTIONS		
13 - 10	2x4	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12				
ALL WEBS	2x3	DRY	No.2	SPF	18	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0					
EXCEPT					10	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0					
DRY: SEASONED LUMBER.					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10												
PLATES (table is in inches)					BRACING												
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.60 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.												
					LOADING												
					TOTAL LOAD CASES: (4)												
					CHORDS												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
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					MEMB. FORCE (LBS)												
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					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
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					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
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					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR-TO												
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					UNBRAC LENGTH FR-TO												
					MEMB. FORCE (LBS)												
					FACTORED VERT. LOAD LC1 MAX												
					UNBRAC LENGTH FR												



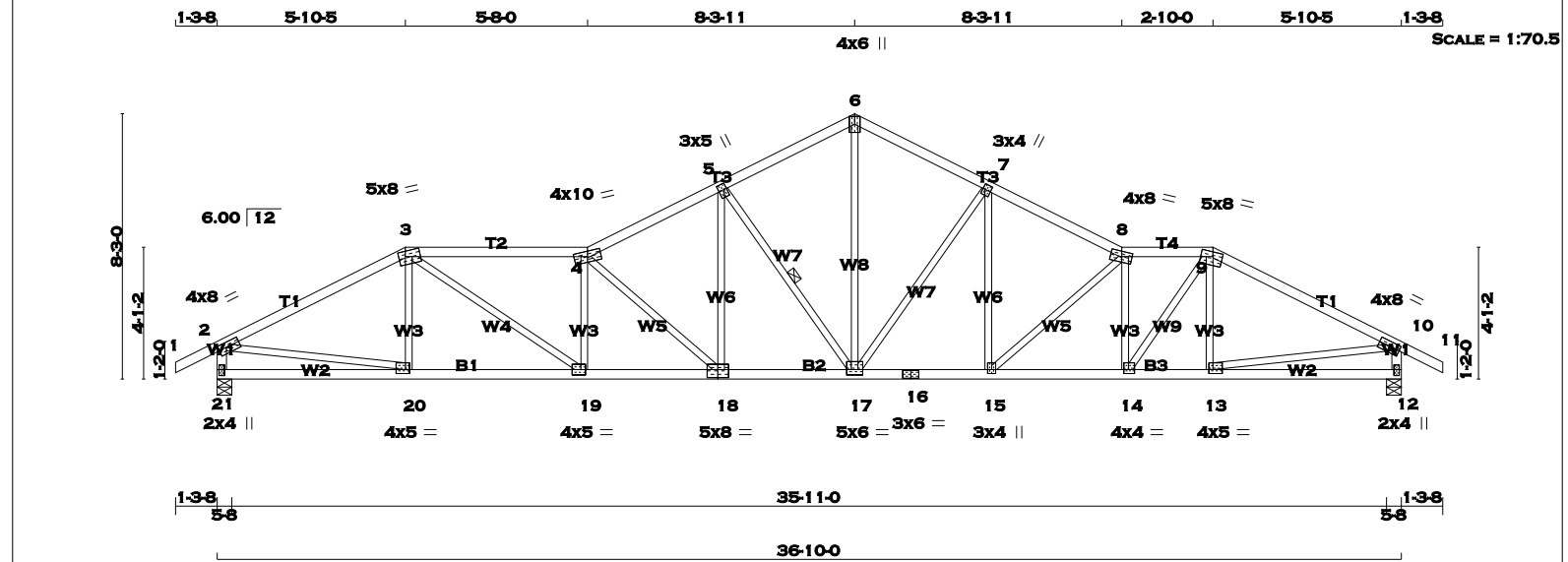
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 11 2x4 DRY No.2 SPF 19 - 2 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 15 2x4 DRY No.2 SPF 15 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 19 1852 0 1852 0 0 5-8 5-8 12 1852 0 1852 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 19 1297 921 / 0 0 / 0 0 / 0 0 / 0 376 / 0 0 / 0 12 1297 921 / 0 0 / 0 0 / 0 0 / 0 376 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 12 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 20-0-0 . CBF = 0 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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 MAX. FACTORED FACTORED VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED MEMB. FORCE MAX CS									
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READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 3	2x4	DRY	No.2	SPF	
3 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
8 - 9	2x4	DRY	No.2	SPF	
9 - 11	2x4	DRY	No.2	SPF	
21 - 2	2x4	DRY	No.2	SPF	
12 - 10	2x4	DRY	No.2	SPF	
21 - 18	2x4	DRY	No.2	SPF	
18 - 16	2x4	DRY	No.2	SPF	
16 - 12	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-t	MT20	4.0	8.0	1.75 3.00
3	TTWW-m	MT20	5.0	8.0	2.00 2.50
4	TTWW-m	MT20	4.0	10.0	
5	TMWWW+t	MT20	3.0	5.0	2.25 0.75
6	TTW+p	MT20	4.0	6.0	Edge
7	TMWWW+t	MT20	3.0	4.0	2.00 0.75
8	TTWW-m	MT20	4.0	8.0	2.00 3.75
9	TTWW-m	MT20	5.0	8.0	1.75 3.50
10	TMVW-t	MT20	4.0	8.0	1.75 3.00
12	BMV1+p	MT20	2.0	4.0	2.25 1.00
13	BMWW-t	MT20	4.0	5.0	1.50 1.50
14	BMWW-t	MT20	4.0	4.0	1.50 1.75
15	BMWWW+t	MT20	3.0	4.0	1.50 1.50
16	BS-t	MT20	3.0	6.0	
17	BMWWWW-t	MT20	5.0	6.0	2.00 3.00
18	BSWW-l	MT20	5.0	8.0	3.00 4.00
19	BMWW-t	MT20	4.0	5.0	2.00 1.75
20	BMWW-t	MT20	4.0	5.0	1.50 1.50
21	BMV1+p	MT20	2.0	4.0	2.25 1.00
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



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	
21		1852	0	1852	0	0	5-8	5-8	
12		1852	0	1852	0	0	5-8	5-8	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
21		1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0
12		1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-17. DBS = 12-0-0 . CBF = 89 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	20-3	-210 / 33	0.05 (1)	
2-3	-2561 / 0	-77.3	-77.3	0.47 (1)	3.90	3-19	0 / 1618	0.36 (1)	
3-4	-3621 / 0	-77.3	-77.3	0.53 (1)	3.27	19-4	-839 / 0	0.21 (1)	
4-5	-3010 / 0	-77.3	-77.3	0.27 (1)	3.83	4-18	-1267 / 0	0.69 (1)	
5-6	-2272 / 0	-77.3	-77.3	0.22 (1)	4.36	18-5	0 / 921	0.21 (1)	
6-7	-2272 / 0	-77.3	-77.3	0.22 (1)	4.36	5-17	-1193 / 0	0.42 (1)	
7-8	-2798 / 0	-77.3	-77.3	0.26 (1)	3.97	17-6	0 / 1767	0.40 (1)	
8-9	-3024 / 0	-77.3	-77.3	0.18 (1)	3.89	17-7	-866 / 0	0.86 (1)	
9-10	-2557 / 0	-77.3	-77.3	0.47 (1)	3.91	15-7	0 / 560	0.13 (1)	
10-11	0 / 23	-77.3	-77.3	0.10 (1)	10.00	15-8	-722 / 0	0.39 (1)	
21-2	-1809 / 0	0.0	0.0	0.18 (1)	6.22	14-8	-1003 / 0	0.26 (1)	
12-10	-1807 / 0	0.0	0.0	0.18 (1)	6.22	14-9	0 / 1275	0.29 (1)	
						13-9	-225 / 16	0.06 (1)	
21-20	0 / 0	-17.5	-17.5	0.15 (4)	10.00	2-20	0 / 2313	0.52 (1)	
20-19	0 / 2284	-17.5	-17.5	0.44 (1)	10.00	13-10	0 / 2309	0.52 (1)	
19-18	0 / 3644	-17.5	-17.5	0.64 (1)	10.00				
18-17	0 / 2708	-17.5	-17.5	0.49 (1)	10.00				
17-16	0 / 2519	-17.5	-17.5	0.46 (1)	10.00				
16-15	0 / 2519	-17.5	-17.5	0.46 (1)	10.00				
15-14	0 / 3052	-17.5	-17.5	0.55 (1)	10.00				
14-13	0 / 2280	-17.5	-17.5	0.42 (1)	10.00				
13-12	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

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.26")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/975 (0.45")

CSI: TC=0.53 (3-4:1), BC=0.64 (18-19:1), WB=0.86 (7-17:1), SSI=0.17 (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

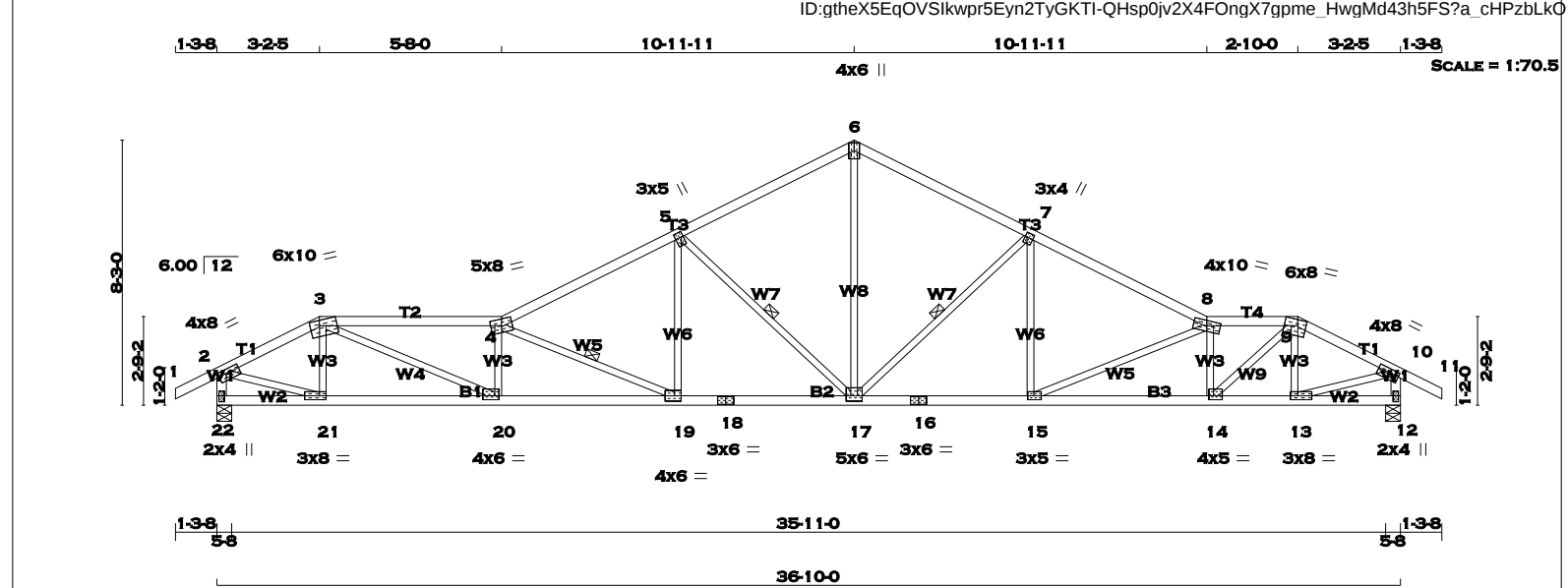
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90)
JSI METAL= 0.69 (18) (INPUT = 1.00)

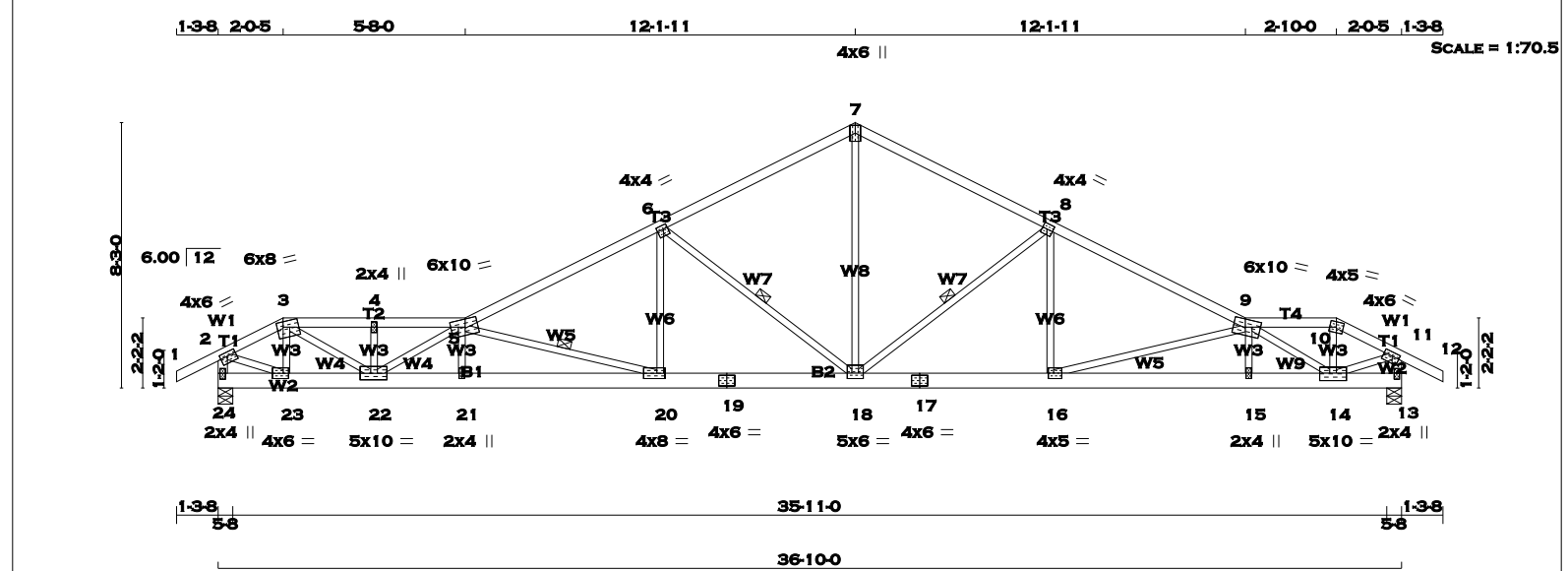
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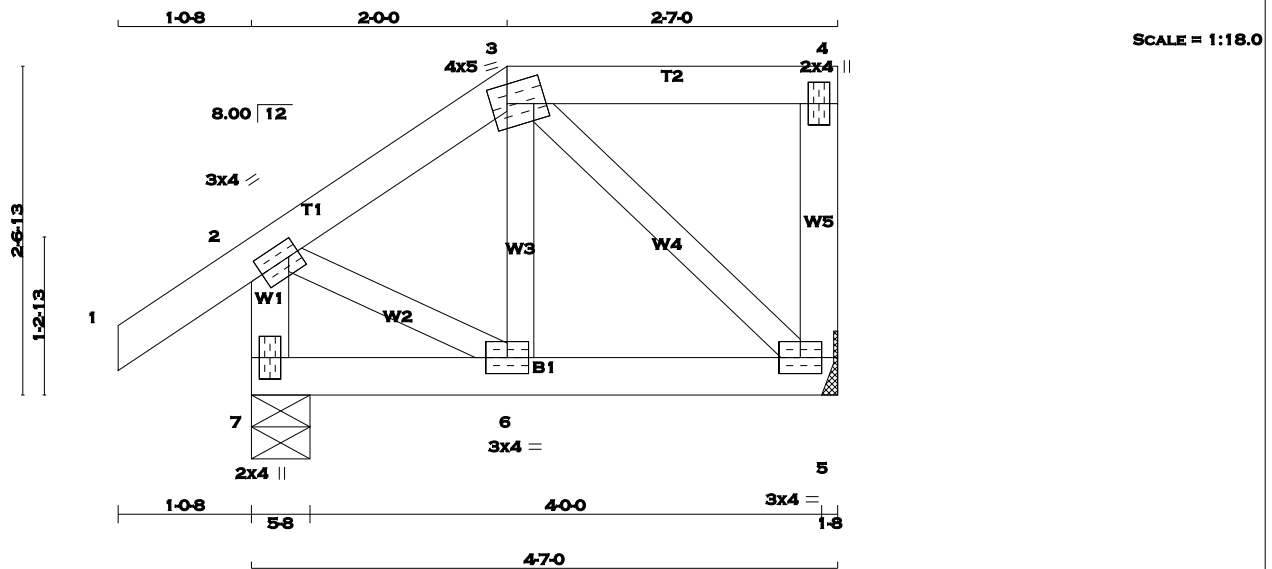
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





LUMBER N. L. G. A. RULES <table><tr><th>CHORDS</th><th>SIZE</th><th>LUMBER</th><th>DESCR.</th></tr><tr><td>1 - 3</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>3 - 4</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>4 - 6</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>6 - 8</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>8 - 9</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>9 - 11</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>22 - 2</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>12 - 10</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>22 - 18</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>18 - 16</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>16 - 12</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>ALL WEBS EXCEPT</td><td>2x3</td><td>DRY</td><td>No.2 SPF</td></tr></table> DRY: SEASONED LUMBER.										CHORDS	SIZE	LUMBER	DESCR.	1 - 3	2x4	DRY	No.2 SPF	3 - 4	2x4	DRY	No.2 SPF	4 - 6	2x4	DRY	No.2 SPF	6 - 8	2x4	DRY	No.2 SPF	8 - 9	2x4	DRY	No.2 SPF	9 - 11	2x4	DRY	No.2 SPF	22 - 2	2x4	DRY	No.2 SPF	12 - 10	2x4	DRY	No.2 SPF	22 - 18	2x4	DRY	No.2 SPF	18 - 16	2x4	DRY	No.2 SPF	16 - 12	2x4	DRY	No.2 SPF	ALL WEBS EXCEPT	2x3	DRY	No.2 SPF	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT</th><th>REQRD</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>22</td><td>1852</td><td>0</td><td>1852</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>12</td><td>1852</td><td>0</td><td>1852</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX./MIN. SNOW</th><th>COMPONENT LIVE</th><th>REACTIIONS PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>22</td><td>1297</td><td>921 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>376 / 0</td><td>0 / 0</td></tr><tr><td>12</td><td>1297</td><td>921 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>376 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22, 12 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.75 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 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-19. DBS = 6-0-0 . CBF = 72 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-17. DBS = 10-0-0 . CBF = 85 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-17. DBS = 14-0-0 . CBF = 85 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. 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) <table><tr><th colspan="4">C H O R D S</th><th colspan="4">W E B S</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. CSI (LC)</th><th>MAX. UNBRAC LENGTH</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. CSI (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 23</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>21-3</td><td>-440 / 0</td><td>0.07 (1)</td></tr><tr><td>2-3</td><td>-2364 / 0</td><td>-77.3 -77.3</td><td>0.16 (1)</td><td>4.35</td><td>3-20</td><td>0 / 2864</td><td>0.64 (1)</td></tr><tr><td>3-4</td><td>-4712 / 0</td><td>-77.3 -77.3</td><td>0.67 (1)</td><td>2.75</td><td>20-4</td><td>-1094 / 0</td><td>0.18 (1)</td></tr><tr><td>4-5</td><td>-3335 / 0</td><td>-77.3 -77.3</td><td>0.49 (1)</td><td>3.47</td><td>4-19</td><td>-1922 / 0</td><td>0.51 (1)</td></tr><tr><td>5-6</td><td>-2280 / 0</td><td>-77.3 -77.3</td><td>0.38 (1)</td><td>4.19</td><td>19-5</td><td>0 / 897</td><td>0.20 (1)</td></tr><tr><td>6-7</td><td>-2280 / 0</td><td>-77.3 -77.3</td><td>0.38 (1)</td><td>4.19</td><td>5-17</td><td>-1358 / 0</td><td>0.52 (1)</td></tr><tr><td>7-8</td><td>-3017 / 0</td><td>-77.3 -77.3</td><td>0.45 (1)</td><td>3.66</td><td>17-6</td><td>0 / 1694</td><td>0.38 (1)</td></tr><tr><td>8-9</td><td>-3513 / 0</td><td>-77.3 -77.3</td><td>0.21 (1)</td><td>3.61</td><td>17-7</td><td>-966 / 0</td><td>0.37 (1)</td></tr><tr><td>9-10</td><td>-2343 / 0</td><td>-77.3 -77.3</td><td>0.16 (1)</td><td>4.36</td><td>15-7</td><td>0 / 487</td><td>0.11 (1)</td></tr><tr><td>10-11</td><td>0 / 23</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>15-8</td><td>-927 / 0</td><td>0.61 (1)</td></tr><tr><td>22-2</td><td>-1840 / 0</td><td>0.0 0.0</td><td>0.19 (1)</td><td>6.17</td><td>14-8</td><td>-1250 / 0</td><td>0.21 (1)</td></tr><tr><td>12-10</td><td>-1826 / 0</td><td>0.0 0.0</td><td>0.18 (1)</td><td>6.20</td><td>14-9</td><td>0 / 1940</td><td>0.44 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>13-9</td><td>-480 / 0</td><td>0.08 (1)</td></tr><tr><td>22-21</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.09 (4)</td><td>10.00</td><td>2-21</td><td>0 / 2182</td><td>0.49 (1)</td></tr><tr><td>21-20</td><td>0 / 2093</td><td>-17.5 -17.5</td><td>0.42 (1)</td><td>10.00</td><td>13-10</td><td>0 / 2163</td><td>0.49 (1)</td></tr><tr><td>20-19</td><td>0 / 4758</td><td>-17.5 -17.5</td><td>0.86 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>19-18</td><td>0 / 3005</td><td>-17.5 -17.5</td><td>0.54 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>18-17</td><td>0 / 3005</td><td>-17.5 -17.5</td><td>0.54 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>17-16</td><td>0 / 2720</td><td>-17.5 -17.5</td><td>0.50 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>16-15</td><td>0 / 2720</td><td>-17.5 -17.5</td><td>0.50 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>15-14</td><td>0 / 3566</td><td>-17.5 -17.5</td><td>0.65 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 2073</td><td>-17.5 -17.5</td><td>0.36 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.04 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	22	1852	0	1852	0	0	5-8	5-8	12	1852	0	1852	0	0	5-8	5-8	JT	1ST LCASE COMBINED	MAX./MIN. SNOW	COMPONENT LIVE	REACTIIONS PERM.LIVE	WIND	DEAD	SOIL	22	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	12	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	C H O R D S				W E B S				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	FR-TO		FROM TO			FR-TO			1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	21-3	-440 / 0	0.07 (1)	2-3	-2364 / 0	-77.3 -77.3	0.16 (1)	4.35	3-20	0 / 2864	0.64 (1)	3-4	-4712 / 0	-77.3 -77.3	0.67 (1)	2.75	20-4	-1094 / 0	0.18 (1)	4-5	-3335 / 0	-77.3 -77.3	0.49 (1)	3.47	4-19	-1922 / 0	0.51 (1)	5-6	-2280 / 0	-77.3 -77.3	0.38 (1)	4.19	19-5	0 / 897	0.20 (1)	6-7	-2280 / 0	-77.3 -77.3	0.38 (1)	4.19	5-17	-1358 / 0	0.52 (1)	7-8	-3017 / 0	-77.3 -77.3	0.45 (1)	3.66	17-6	0 / 1694	0.38 (1)	8-9	-3513 / 0	-77.3 -77.3	0.21 (1)	3.61	17-7	-966 / 0	0.37 (1)	9-10	-2343 / 0	-77.3 -77.3	0.16 (1)	4.36	15-7	0 / 487	0.11 (1)	10-11	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-8	-927 / 0	0.61 (1)	22-2	-1840 / 0	0.0 0.0	0.19 (1)	6.17	14-8	-1250 / 0	0.21 (1)	12-10	-1826 / 0	0.0 0.0	0.18 (1)	6.20	14-9	0 / 1940	0.44 (1)						13-9	-480 / 0	0.08 (1)	22-21	0 / 0	-17.5 -17.5	0.09 (4)	10.00	2-21	0 / 2182	0.49 (1)	21-20	0 / 2093	-17.5 -17.5	0.42 (1)	10.00	13-10	0 / 2163	0.49 (1)	20-19	0 / 4758	-17.5 -17.5	0.86 (1)	10.00				19-18	0 / 3005	-17.5 -17.5	0.54 (1)	10.00				18-17	0 / 3005	-17.5 -17.5	0.54 (1)	10.00				17-16	0 / 2720	-17.5 -17.5	0.50 (1)	10.00				16-15	0 / 2720	-17.5 -17.5	0.50 (1)	10.00				15-14	0 / 3566	-17.5 -17.5	0.65 (1)	10.00				14-13	0 / 2073	-17.5 -17.5	0.36 (1)	10.00				13-12	0 / 0	-17.5 -17.5	0.04 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: <table><tr><td>TOP CH.</td><td>LL</td><td>=</td><td>23.3</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>3.0</td><td>PSF</td></tr><tr><td>BOT CH.</td><td>LL</td><td>=</td><td>0.0</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>7.0</td><td>PSF</td></tr><tr><td>TOTAL LOAD</td><td>=</td><td>33.3</td><td>PSF</td><td></td></tr></table> SPACING = 24.0 IN. C/C LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 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 (1.23") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.34") ALLOWABLE DEFL.(TL)= L/360 (1.23") CALCULATED VERT. DEFL.(TL) = L/ 729 (0.61") CSI: TC=0.67 (3-4:1) , BC=0.86 (19-20:1) , WB=0.64 (3-20:1) , SSI=0.18 (4-5:1) 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 <table><tr><th>PLATE</th><th>GRIP(DRY)</th><th>SHEAR</th><th>SECTION</th></tr><tr><th></th><th>(PSI)</th><th>(PLI)</th><th>(PLI)</th></tr><tr><th></th><th>MAX</th><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th><th>MIN</th></tr><tr><td>MT20</td><td>618</td><td>354</td><td>1667</td><td>822</td><td>2284</td><td>1656</td></tr></table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (14) (INPUT = 0.90) JSI METAL= 0.76 (18) (INPUT = 1.00)										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		PLATE	GRIP(DRY)	SHEAR	SECTION		(PSI)	(PLI)	(PLI)		MAX	MIN	MAX	MIN	MAX	MIN	MT20	618	354	1667	822	2284	1656
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13-12	0 / 0	-17.5 -17.5	0.04 (4)	10.00																																																																																																																																																																																																																																																																																																																																																																																																	
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BOT CH.	LL	=	0.0	PSF																																																																																																																																																																																																																																																																																																																																																																																																	
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LICENSED PROFESSIONAL ENGINEER PAUL TREVISAN 100136551 March 13th, 2017 PROVINCE OF ONTARIO RECEIVED TOWN OF MILTON MAR 29, 2017 17-5052 BUILDING DIVISION READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. KOTT CONTINUED ON PAGE 2																																																																																																																																																																																																																																																																																																																																																																																																					





TOTAL WEIGHT = 21 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	No.2	SPF
3 - 4	2x4	No.2	SPF
5 - 4	2x4	No.2	SPF
7 - 2	2x4	No.2	SPF
7 - 5	2x4	No.2	SPF
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	4.0	1.50	1.00
3	TTWW-m	MT20	4.0	5.0	1.75	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		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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		
5	217	0	217	0	0	0
7	304	0	304	0	0	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	153	107 / 0	0 / 0	0 / 0	0 / 0	46 / 0	0 / 0
7	212	159 / 0	0 / 0	0 / 0	0 / 0	53 / 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 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 24	-77.3	-77.3	0.07 (1)	10.00	6-3	-3 / 39
2-3	-136 / 0	-77.3	-77.3	0.05 (1)	6.25	3-5	-150 / 0
3-4	0 / 0	-77.3	-77.3	0.09 (1)	10.00	2-6	0 / 123
5-4	-100 / 0	0.0	0.0	0.01 (1)	7.81		
7-2	-289 / 0	0.0	0.0	0.03 (1)	7.81		
7-6	0 / 0	-17.5	-17.5	0.02 (4)	10.00		
6-5	0 / 112	-17.5	-17.5	0.03 (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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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 (0.19")
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=0.09 (3-4:1), BC=0.03 (5-6:4), WB=0.03 (3-5:1), SSI=0.08 (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= 0.40 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



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



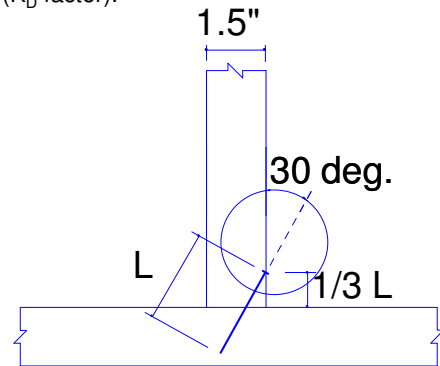
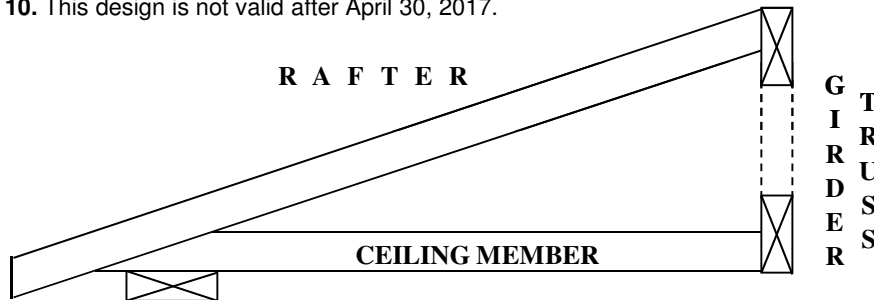
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

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, 2017.



TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	(3.5" nail)		(3" and 3.25" nail)	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4



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April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

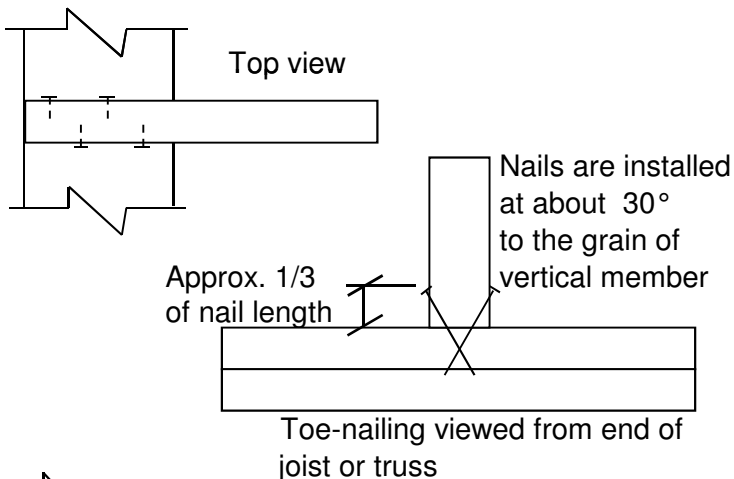
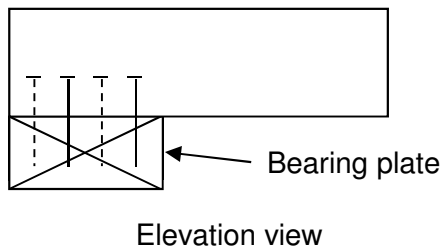
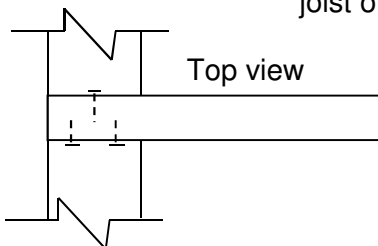
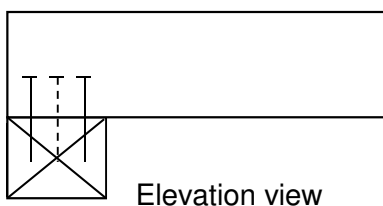
B37579H2

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
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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, 2017

Toe-nailing on 2x6 Bearing Plate**Toe-nailing on 2x4 Bearing Plate**

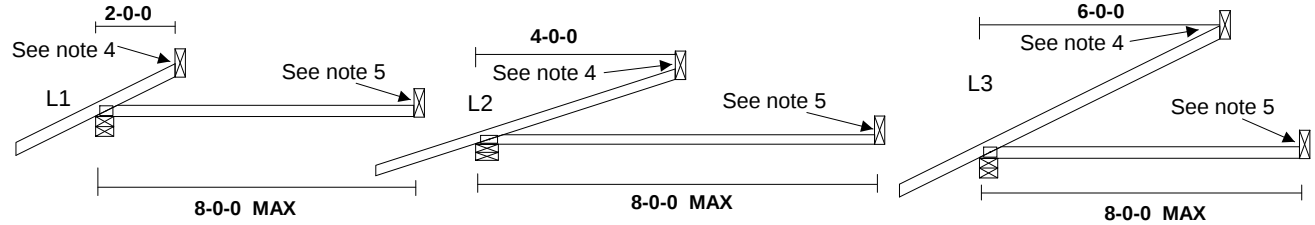
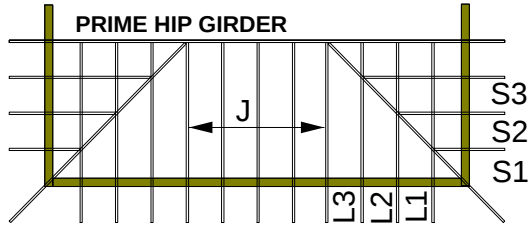
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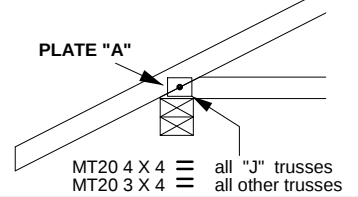
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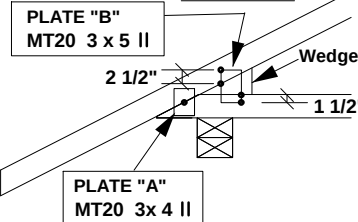
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DETAIL "A"



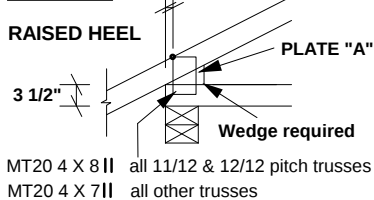
DETAIL "C"



CANTILEVER DETAIL "C"

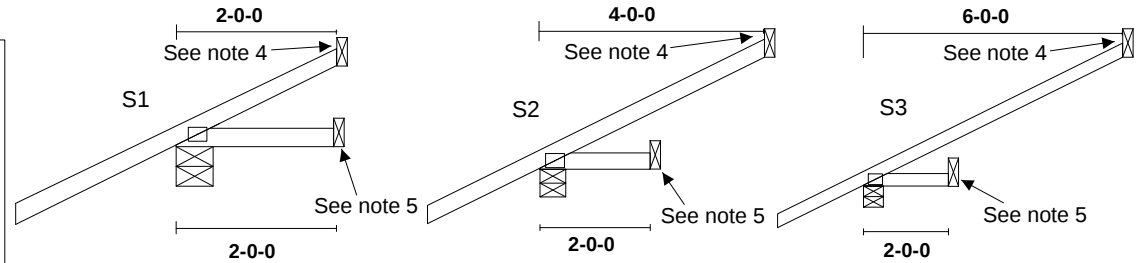
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

DETAIL "B"

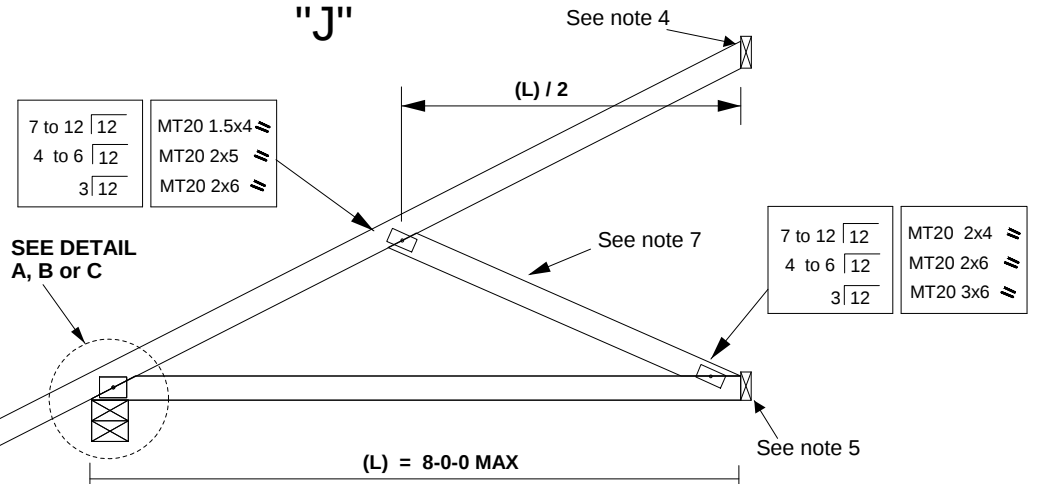


NOTES:

- ALL LUMBER SHALL BE 2x4 SPF OR D. Fir No. 2 DRY OR BETTER.
- THIS TRUSS IS DESIGNED FOR HOUSING AND SMALL BUILDING REQUIREMENTS OF PART 9 NBC 2010, WHERE GROUND SNOW LOAD IS 60.0 PSF OR LESS AND RAIN LOAD DOES NOT EXCEED 12.53 PSF; TOP CHORD DEAD LOAD IS 6 PSF OR LESS; BC LIVE LOAD IS 0 PSF AND BC DEAD LOAD IS 7 PSF.
- HIP RAFTER DESIGN SHALL CONFORM TO SECTION 9.23.14.6 OF NBC 2010.
- FASTEN HIGH END OF RAFTERS USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- FASTEN RIGHT END OF CEILING USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- OVERHANG LENGTH SHALL NOT EXCEED 2 FT.
- WHEN SETBACK IS 6 FT OR LESS, DIAGONAL WEB MAY BE OMITTED AND HIGH END OF TOP CHORD SHALL BE CONNECTED AS PER NOTE 4.
- ALL PLATES SPECIFIED ARE PRESSED INTO BOTH FACES OF THE TRUSS.
- MITEK REFERENCE PAGE MII-7473C FORMS AN INTEGRAL PART OF THIS DETAIL.
- THIS DETAIL IS NOT VALID AFTER APRIL 30, 2017



"J"



SEE DETAIL A, B or C



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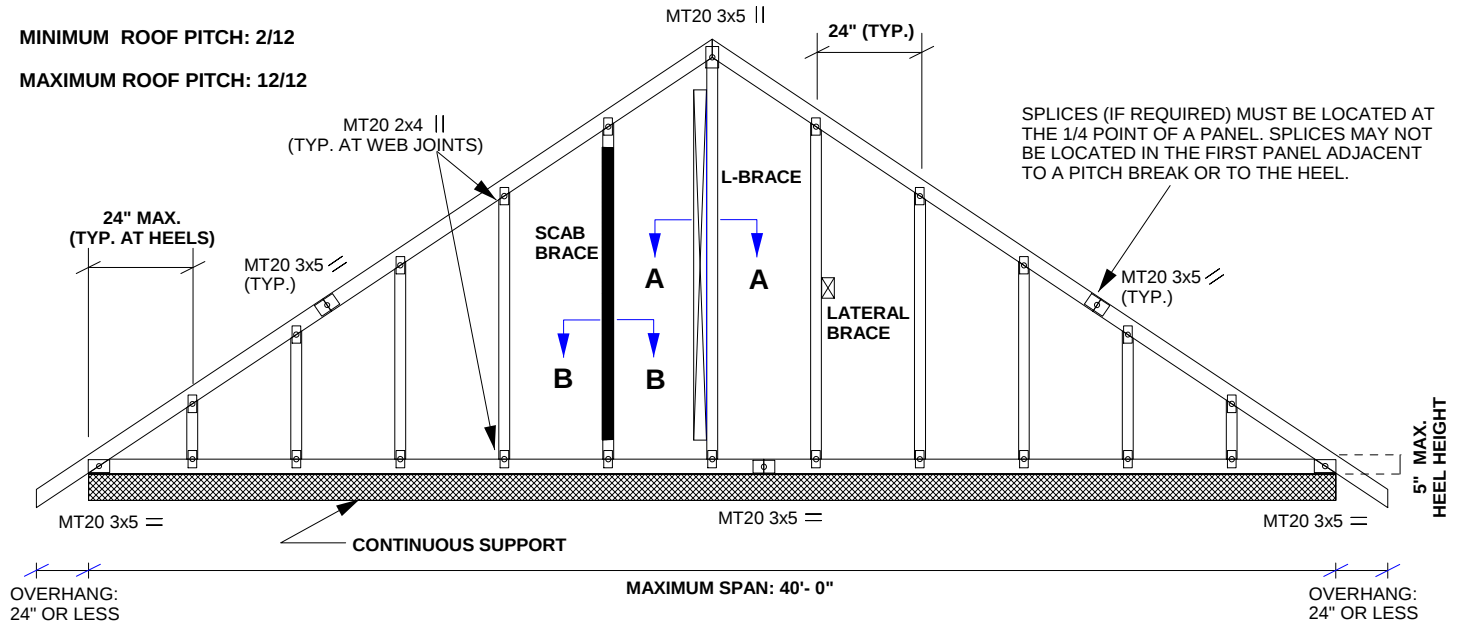


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MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

TOP CHORD: 2 X 4 No. 2 DRY SPF or D- Fir
 BOTTOM CHORD: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir
 GABLE WEB: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir

PLATES

JOINT PLATES
 HEELS MT20 3 X 5
 PEAK MT20 3 X 5
 TC SPLICES MT20 3 X 5
 BC SPLICES MT20 3 X 5
 WEB JOINTS MT20 2 X 4

DESIGN CRITERIA

TOP CHORD LL = 60.0 PSF OR LESS
 TOP CHORD DL = 6.0 PSF OR LESS
 BOTTOM CHORD LL = 0 PSF
 BOTTOM CHORD DL = 7.0 PSF

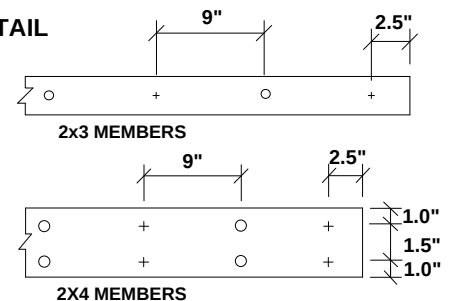
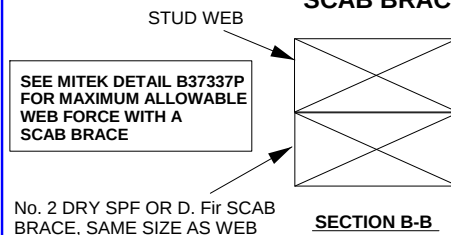
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED.
 WEBS MUST BE Laterally Braced, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

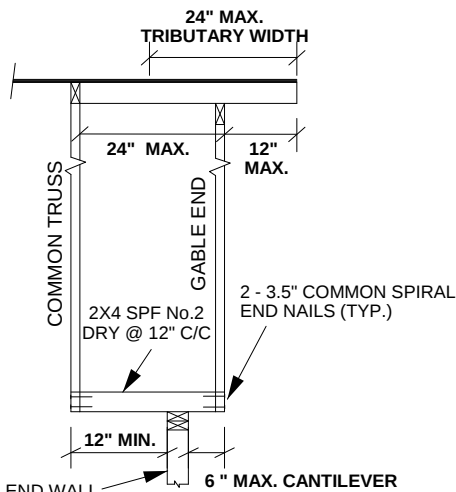
SCAB BRACE DETAIL



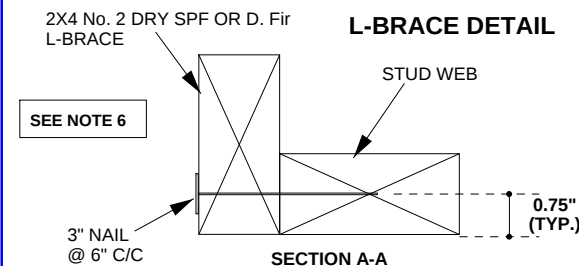
FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

CANTILEVER DETAIL

Note: Gable end may be cantilevered up to 6 inches past end wall as shown. Gable end to be continuously supported by 2x4 SPF No.2 (DRY) members at 12" o.c. along the bottom chord. Roof design loads shall not exceed the loading shown above.



L-BRACE DETAIL



FASTEN L-BRACE TO NARROW EDGE OF WEB WITH ONE ROW OF 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED AT 6" C/C WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

NOTES:

- Gable studs are spaced at 24" C/C (max.) with a max. length of 12 ft.
- All plates specified are MiTek MT20, centered at each joint, and pressed into both faces of truss.
- Truss spacing is 24" C/C, maximum.
- Gable truss is designed for continuous support. Bearing material must be of the same species as chord member and of grade No. 2 or better.
- This truss requires rigid sheathing attached to exposed face.
- 2x3 or 2x4 T-braces shown for gable webs in the MiTek engineering drawings may be replaced by a 2x4 L-brace as shown above.
- This truss is designed for residential or small building requirements, conforming to Part 9, NBCC 2010.
- This detail is not valid after April 30, 2017.

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