



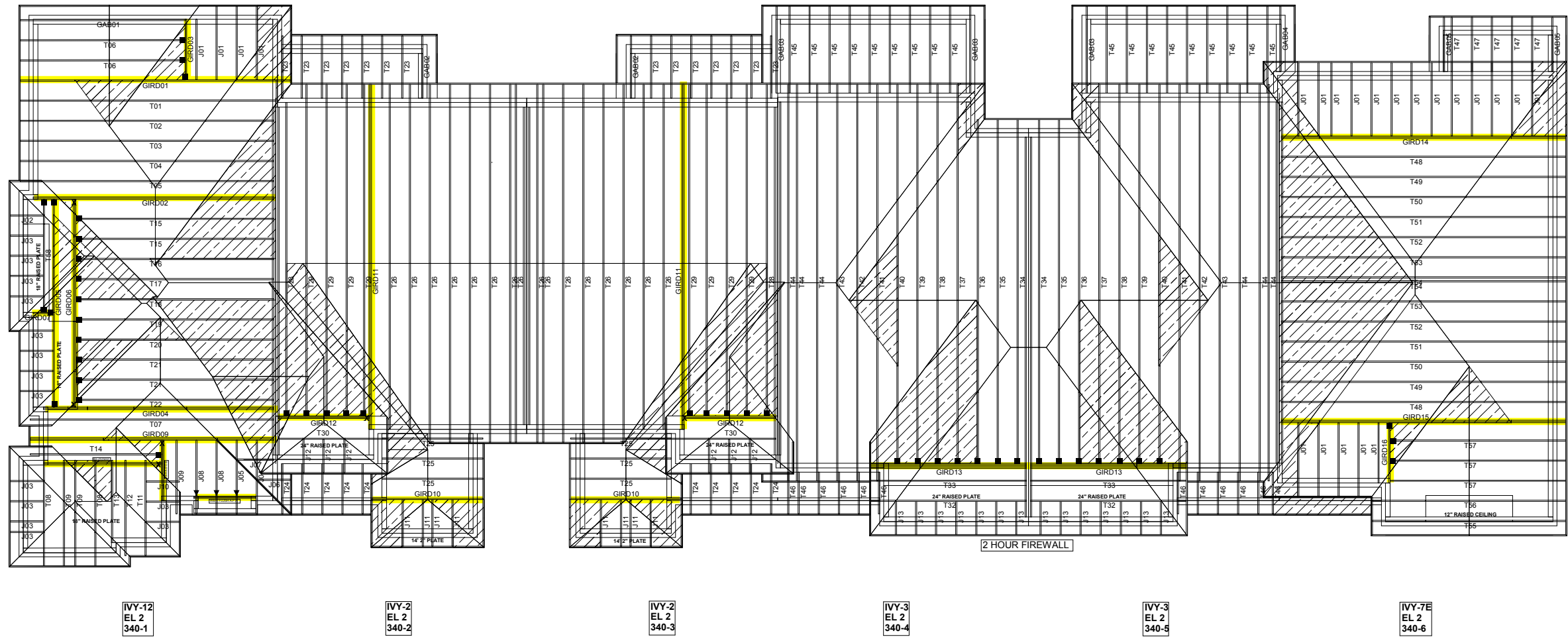
TOWN OF MILTON
PLANNING AND DEVELOPMENT
BUILDING PERMIT: 17-5409

BUILDING: REVIEWED
SCOTT SHERRIFFS

DATE
APR 26, 2017

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

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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.

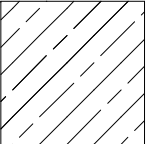
HANGER LEGEND:

▼ 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\"/>

Model: **BLOCK 347**

Customer: **GREENPARK**

Project: **LECCO RIDGE**

Location: **MILTON**

Date: **3/17/2017** Drawn by: **BB**

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 truss. Dimensions indicated on the drawing are identical to those of the installed

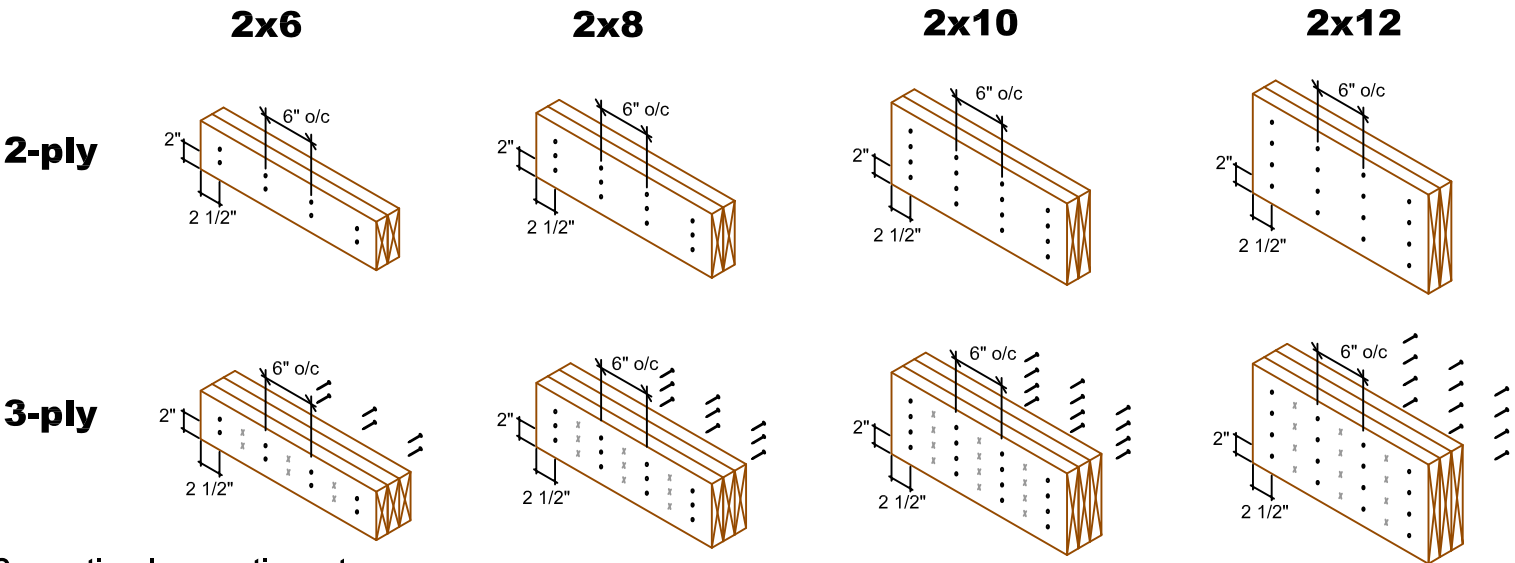
WHERE CONTINUOUS LATERAL BRACING IS REQUIRED FOR WEBS BUT CAN NOT BE PROVIDED SUBSTITUTE EACH WITH ONE SPF #2 2" X 4" T-BRACE COVERING 90% OF WEB LENGTH AND FASTENED TO EDGE OF WEB USING 3 1/4" SPIRAL NAILS @ 6" C/C

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01/29/2013

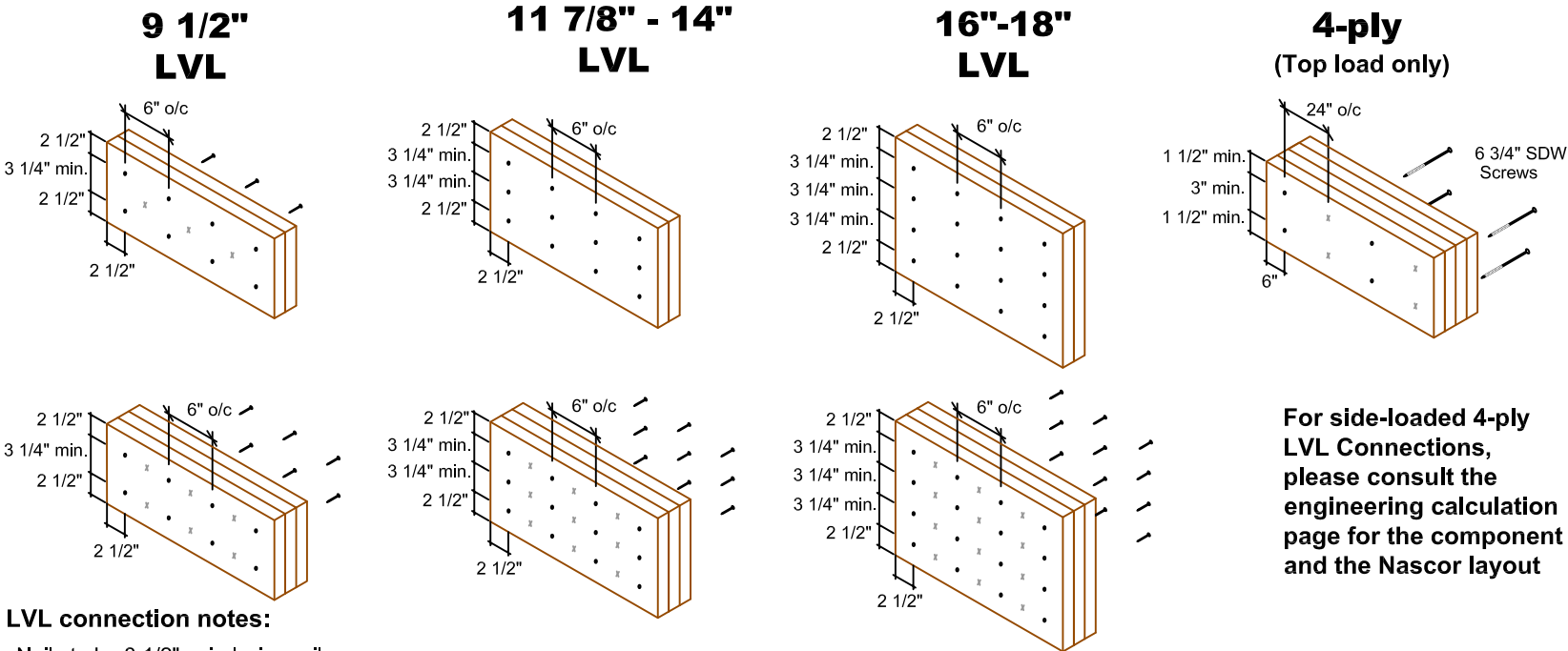
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



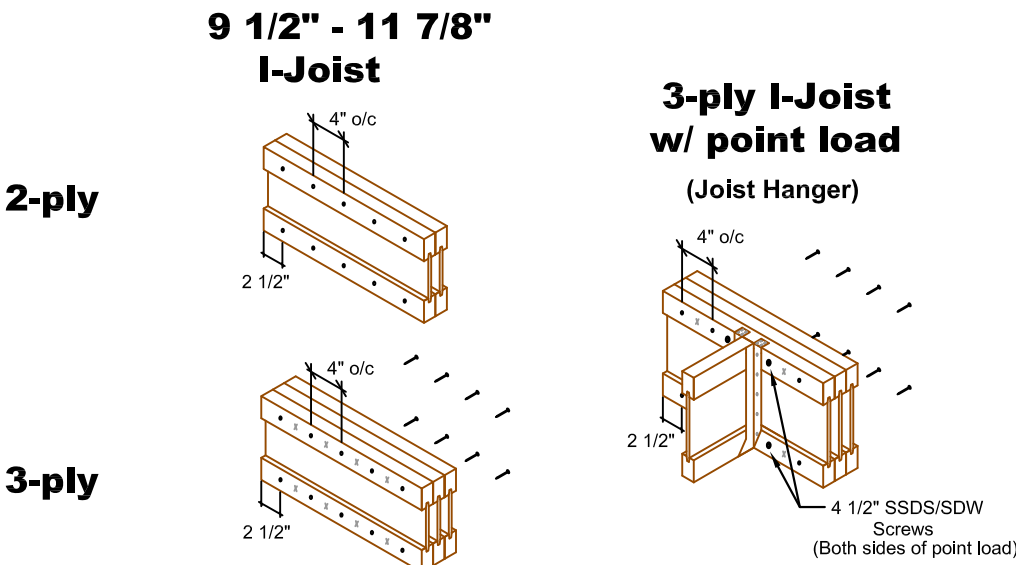
- Conventional connection notes:**
- Nails to be 3" 10d spiral wire nails.
 - Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
 - Number of rows and spacing as per details shown, unless noted otherwise.
 - "X" represents nail driven from the opposite side.

LVL Connections (for uniform distributed loads)



- LVL connection notes:**
- Nails to be 3 1/2" spiral wire nails.
 - Nails to be located a minimum of 2 1/2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
 - Minimum 3 1/4" spacing between rows.
 - Number of rows and spacing as per details shown, unless noted otherwise.
 - "X" represents nail or screw driven from the opposite side.

Vertical I-Joist Connections (for uniform distributed loads)



- Vertical I-Joist connection notes:**
- Nails to be 3" spiral wire nails.
 - Nails to be located at centre of top and bottom flanges. Start all nails a minimum of 2 1/2" in from ends.
 - Number of rows and spacing as per details shown, unless noted otherwise.
 - "X" represents nail driven from the opposite side.

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**MULTI -PLY
CONNECTION
DETAILS**

Date: November 30, 2016

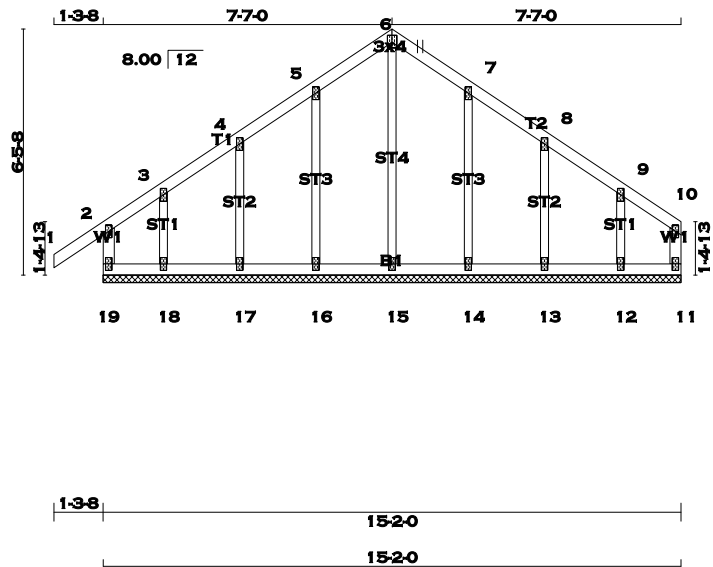
Scale: NTS

KOTT
3228 Moodie Drive
Ottawa, ON
K2H 7V1
Ph: 613-838-2775
Fx: 613-838-4751

KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 20 08:14:39 2017 Page 1

ID:Mn2zxnCa6NqoAskSkmTJtyfhrl-5rVlb2xyuIWR6v9O9LKQj3zq9mjK3p_uGYU?OAzZ6dE



SCALE = 1:60.5

TOTAL WEIGHT = 63 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
19 - 2	2x4	DRY	No.2	SPF
1 - 6	2x4	DRY	No.2	SPF
6 - 10	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
19 - 11	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.				

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
19-2	-196 / 0	0.0	0.02 (1)	7.81	15-6	-171 / 0	0.11 (1)
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	16-5	-155 / 0	0.06 (1)
2-3	-19 / 0	-77.4	-77.4 0.08 (1)	6.25	17-4	-162 / 0	0.04 (1)
3-4	0 / 7	-77.4	-77.4 0.04 (1)	10.00	18-3	-94 / 0	0.01 (1)
4-5	0 / 6	-77.4	-77.4 0.04 (1)	10.00	14-7	-157 / 0	0.06 (1)
5-6	0 / 10	-77.4	-77.4 0.04 (1)	10.00	13-8	-153 / 0	0.03 (1)
6-7	0 / 10	-77.4	-77.4 0.04 (1)	10.00	12-9	-142 / 0	0.02 (1)
7-8	0 / 7	-77.4	-77.4 0.04 (1)	10.00			
8-9	-1 / 3	-77.4	-77.4 0.04 (1)	10.00			
9-10	-1 / 2	-77.4	-77.4 0.03 (1)	10.00			
11-10	-49 / 0	0.0	0.01 (1)	7.81			
19-18	0 / 2	-17.5	-17.5 0.02 (1)	10.00			
18-17	-2 / 1	-17.5	-17.5 0.01 (4)	10.00			
17-16	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
16-15	-8 / 0	-17.5	-17.5 0.01 (4)	10.00			
15-14	-8 / 0	-17.5	-17.5 0.01 (4)	10.00			
14-13	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
13-12	-2 / 1	-17.5	-17.5 0.01 (4)	10.00			
12-11	0 / 4	-17.5	-17.5 0.01 (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

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=0.02 (18-19:1) , WB=0.11 (6-15:1) , 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= 0.13 (10) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)

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

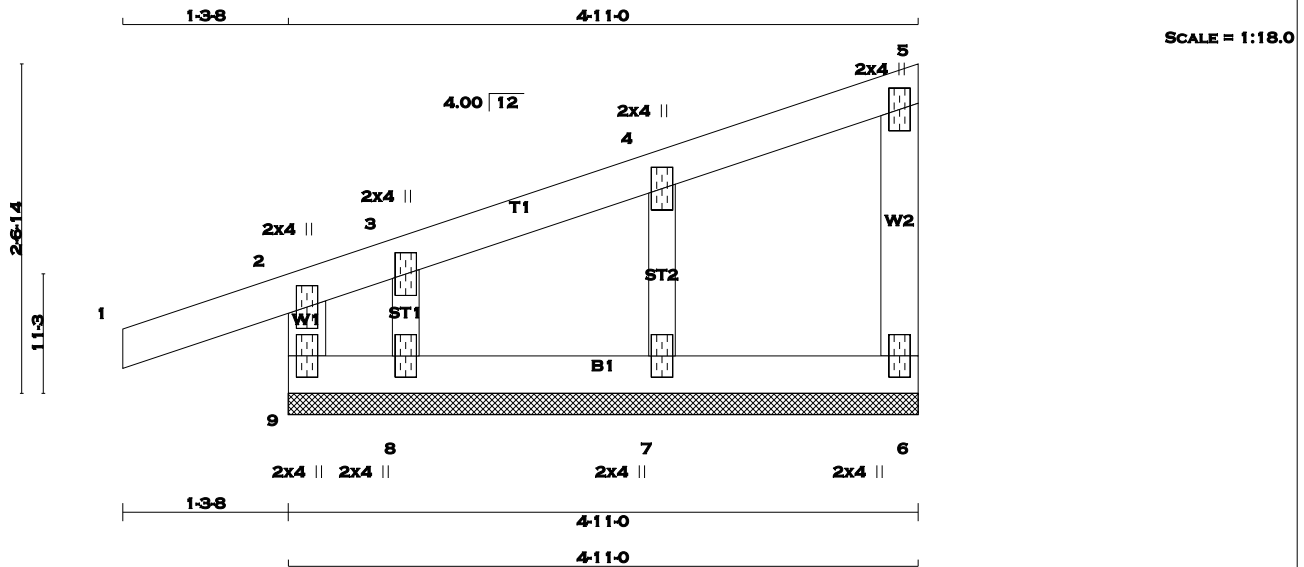
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



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TOTAL WEIGHT = 2 X 18 = 35 lb							[M]																																																																																																													
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 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.							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) <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. FACTORED LC1 (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED UNBRAC LENGTH (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>9-2</td><td>-194 / 0</td><td>0.0</td><td>0.0 0.03 (1)</td><td>7-8</td><td>-177 / 0</td><td>0.03 (1)</td><td></td></tr><tr><td>1-2</td><td>0 / 16</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>8-3</td><td>-46 / 0</td><td>0.01 (1)</td><td></td></tr><tr><td>2-3</td><td>-31 / 0</td><td>-77.4</td><td>-77.4 0.08 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>3-4</td><td>-8 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>4-5</td><td>-10 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>6-5</td><td>-66 / 0</td><td>0.0</td><td>0.0 0.01 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 13</td><td>-17.5</td><td>-17.5 0.03 (1)</td><td></td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>0 / 11</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td></td><td></td><td></td><td></td></tr><tr><td>7-6</td><td>0 / 6</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td></td><td></td><td></td><td></td></tr></table>							C H O R D S				W E B S				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRAC LENGTH (LC)		FR-TO		FROM TO		FR-TO				9-2	-194 / 0	0.0	0.0 0.03 (1)	7-8	-177 / 0	0.03 (1)		1-2	0 / 16	-77.4	-77.4 0.10 (1)	8-3	-46 / 0	0.01 (1)		2-3	-31 / 0	-77.4	-77.4 0.08 (1)					3-4	-8 / 0	-77.4	-77.4 0.04 (1)					4-5	-10 / 0	-77.4	-77.4 0.04 (1)					6-5	-66 / 0	0.0	0.0 0.01 (1)					9-8	0 / 13	-17.5	-17.5 0.03 (1)					8-7	0 / 11	-17.5	-17.5 0.02 (4)					7-6	0 / 6	-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 (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= 0.11 (2) (INPUT = 0.90) JSI METAL= 0.04 (2) (INPUT = 1.00)						
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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 BMW1+w MT20 2.0 4.0 8 BMW1+w MT20 2.0 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.																																																																																																																				

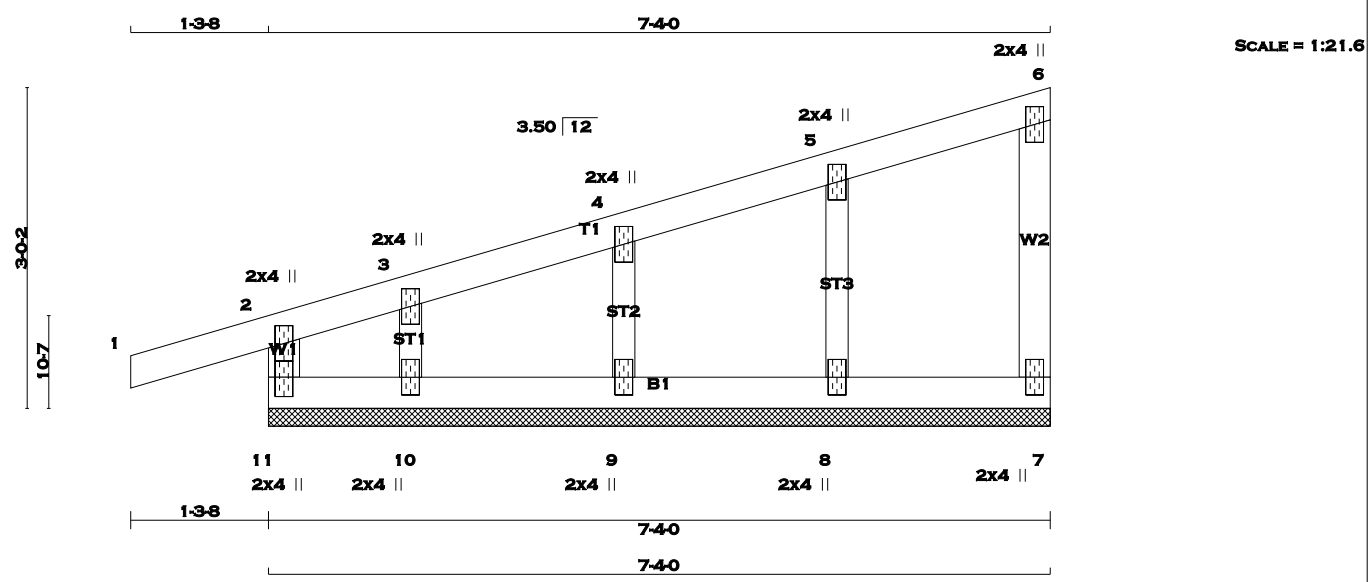


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KOTT , Stouffville, ON, CGC



TOTAL WEIGHT = 3 X 25 = 75 lb [M]

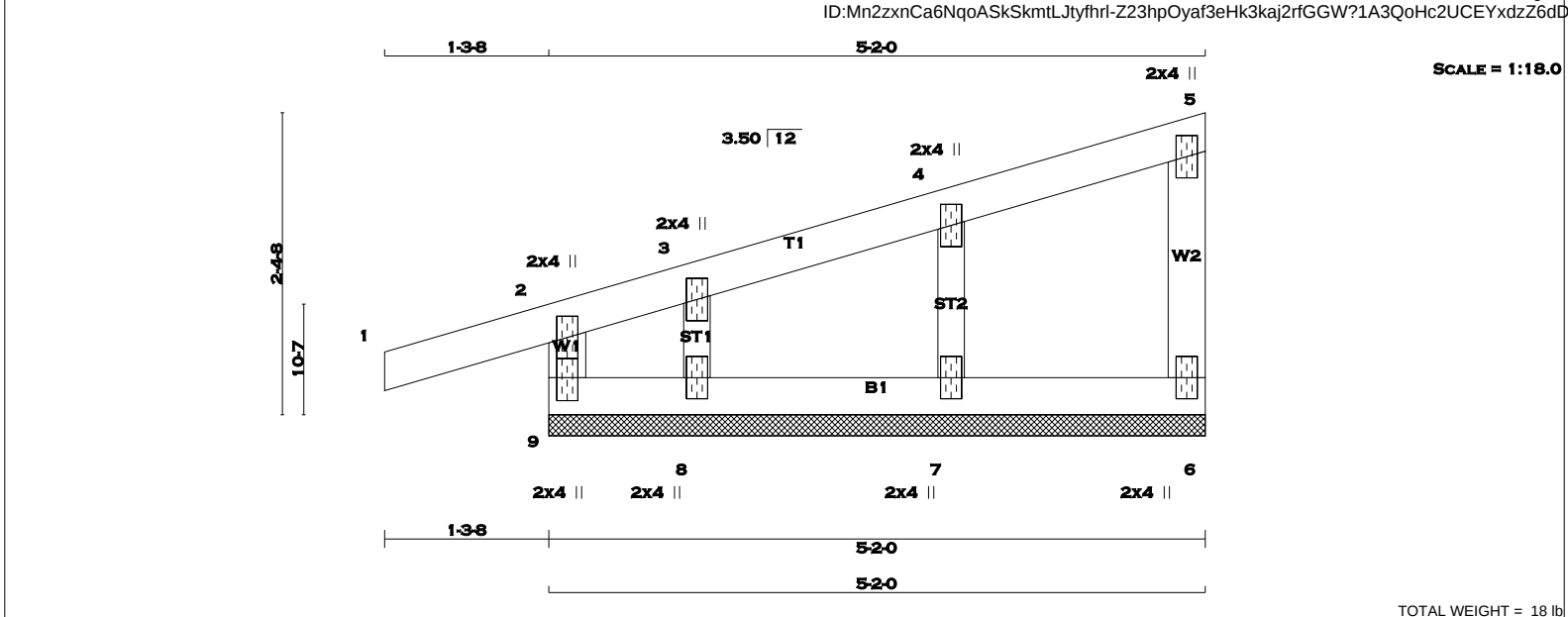
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 11 - 2 2x4 DRY No.2 1 - 6 2x4 DRY No.2 7 - 6 2x4 DRY No.2 11 - 7 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 ALL GABLE WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2-0-0 OC.										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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) <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. FACTORED VERT. LOAD (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED VERT. LOAD (LC)</th><th>MEMB.</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>11- 2</td><td>-192 / 0</td><td>0.0</td><td>0.0 0.03 (1)</td><td>7.81</td><td>8- 5</td><td>-164 / 0</td><td>0.03 (1)</td></tr><tr><td>1- 2</td><td>0 / 14</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>10.00</td><td>9- 4</td><td>-162 / 0</td><td>0.02 (1)</td></tr><tr><td>2- 3</td><td>-27 / 0</td><td>-77.4</td><td>-77.4 0.07 (1)</td><td>6.25</td><td>10- 3</td><td>-84 / 0</td><td>0.01 (1)</td></tr><tr><td>3- 4</td><td>-11 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td>6.25</td><td></td><td></td><td></td></tr><tr><td>4- 5</td><td>-9 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>5- 6</td><td>-8 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>7- 6</td><td>-69 / 0</td><td>0.0</td><td>0.0 0.02 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 16</td><td>-17.5</td><td>-17.5 0.03 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10- 9</td><td>0 / 13</td><td>-17.5</td><td>-17.5 0.01 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>9- 8</td><td>0 / 8</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>8- 7</td><td>0 / 5</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>										C H O R D S				W E B S				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	FR-TO		FROM TO		FR-TO				11- 2	-192 / 0	0.0	0.0 0.03 (1)	7.81	8- 5	-164 / 0	0.03 (1)	1- 2	0 / 14	-77.4	-77.4 0.10 (1)	10.00	9- 4	-162 / 0	0.02 (1)	2- 3	-27 / 0	-77.4	-77.4 0.07 (1)	6.25	10- 3	-84 / 0	0.01 (1)	3- 4	-11 / 0	-77.4	-77.4 0.04 (1)	6.25				4- 5	-9 / 0	-77.4	-77.4 0.04 (1)	10.00				5- 6	-8 / 0	-77.4	-77.4 0.04 (1)	10.00				7- 6	-69 / 0	0.0	0.0 0.02 (1)	7.81				11-10	0 / 16	-17.5	-17.5 0.03 (1)	10.00				10- 9	0 / 13	-17.5	-17.5 0.01 (4)	10.00				9- 8	0 / 8	-17.5	-17.5 0.02 (4)	10.00				8- 7	0 / 5	-17.5	-17.5 0.02 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.10 (1-2:1) , 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 <table><tr><th>PLATE</th><th>GRIP(DRY) (PSI)</th><th>SHEAR (PLI)</th><th>SECTION (PLI)</th></tr><tr><td>MT20</td><td>618 354</td><td>1667 822</td><td>2284 1656</td></tr></table> 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)										PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)	MT20	618 354	1667 822	2284 1656
C H O R D S				W E B S																																																																																																																																																	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MEMB.																																																																																																																																														
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11- 2	-192 / 0	0.0	0.0 0.03 (1)	7.81	8- 5	-164 / 0	0.03 (1)																																																																																																																																														
1- 2	0 / 14	-77.4	-77.4 0.10 (1)	10.00	9- 4	-162 / 0	0.02 (1)																																																																																																																																														
2- 3	-27 / 0	-77.4	-77.4 0.07 (1)	6.25	10- 3	-84 / 0	0.01 (1)																																																																																																																																														
3- 4	-11 / 0	-77.4	-77.4 0.04 (1)	6.25																																																																																																																																																	
4- 5	-9 / 0	-77.4	-77.4 0.04 (1)	10.00																																																																																																																																																	
5- 6	-8 / 0	-77.4	-77.4 0.04 (1)	10.00																																																																																																																																																	
7- 6	-69 / 0	0.0	0.0 0.02 (1)	7.81																																																																																																																																																	
11-10	0 / 16	-17.5	-17.5 0.03 (1)	10.00																																																																																																																																																	
10- 9	0 / 13	-17.5	-17.5 0.01 (4)	10.00																																																																																																																																																	
9- 8	0 / 8	-17.5	-17.5 0.02 (4)	10.00																																																																																																																																																	
8- 7	0 / 5	-17.5	-17.5 0.02 (4)	10.00																																																																																																																																																	
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)																																																																																																																																																		
MT20	618 354	1667 822	2284 1656																																																																																																																																																		



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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

CHORDS SIZE LUMBER DESCR.

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	BMW1+w	MT20	2.0	4.0		
8	BMW1+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

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)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH (FR-TO)	MAX CSI (LC)
9-2	-190 / 0	0.0	0.0 0.03 (1)	7-8	-178 / 0	0.03 (1)	0.01 (1)
1-2	0 / 14	-77.4	-77.4 0.10 (1)	8-3	-69 / 0	0.01 (1)	
2-3	-26 / 0	-77.4	-77.4 0.07 (1)				
3-4	-8 / 0	-77.4	-77.4 0.05 (1)				
4-5	-9 / 0	-77.4	-77.4 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 / 11	-17.5	-17.5 0.02 (4)				
7-6	0 / 6	-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

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 (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

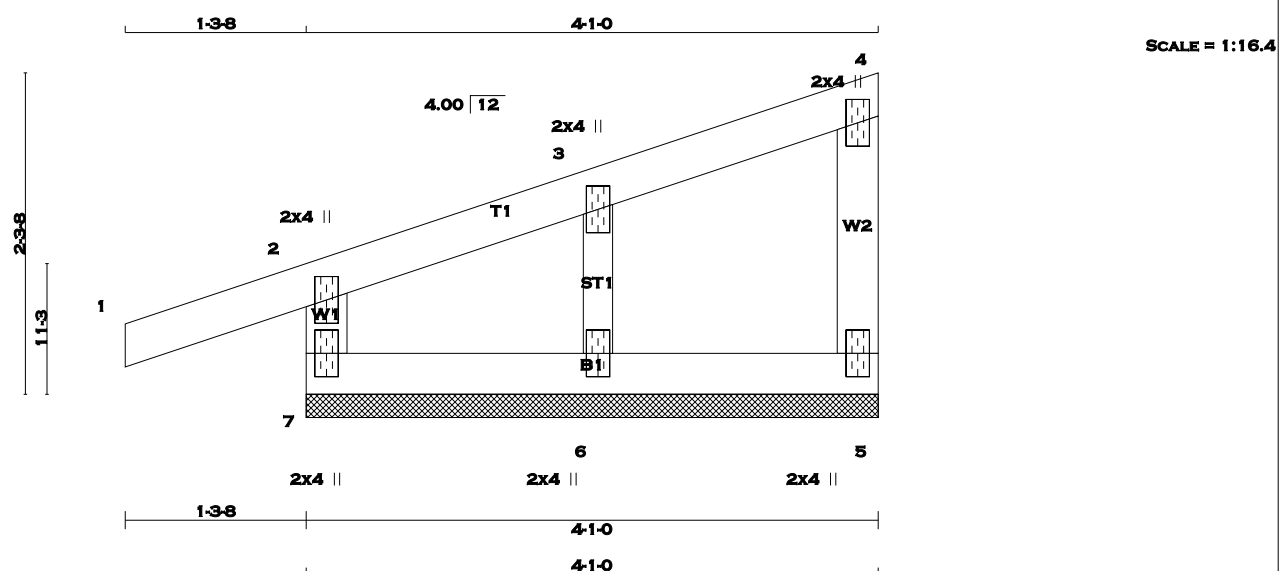
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.10 (2) (INPUT = 0.90)

JSI METAL= 0.04 (2) (INPUT = 1.00)

[M]



TOTAL WEIGHT = 2 X 15 = 29 lb [M]

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
7-2	-186 / 0	0.0	0.0 0.01 (1)	7.81	6-3	-164 / 0	0.02 (1)
1-2	0 / 16	-77.4	-77.4 0.10 (1)	10.00			
2-3	-17 / 0	-77.4	-77.4 0.04 (1)	6.25			
3-4	-13 / 0	-77.4	-77.4 0.04 (1)	6.25			
5-4	-69 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	0 / 16	-17.5	-17.5 0.02 (4)	10.00			
6-5	0 / 11	-17.5	-17.5 0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.10 (1-2:1), BC=0.02 (6-7:4), WB=0.02 (3-6:1), 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
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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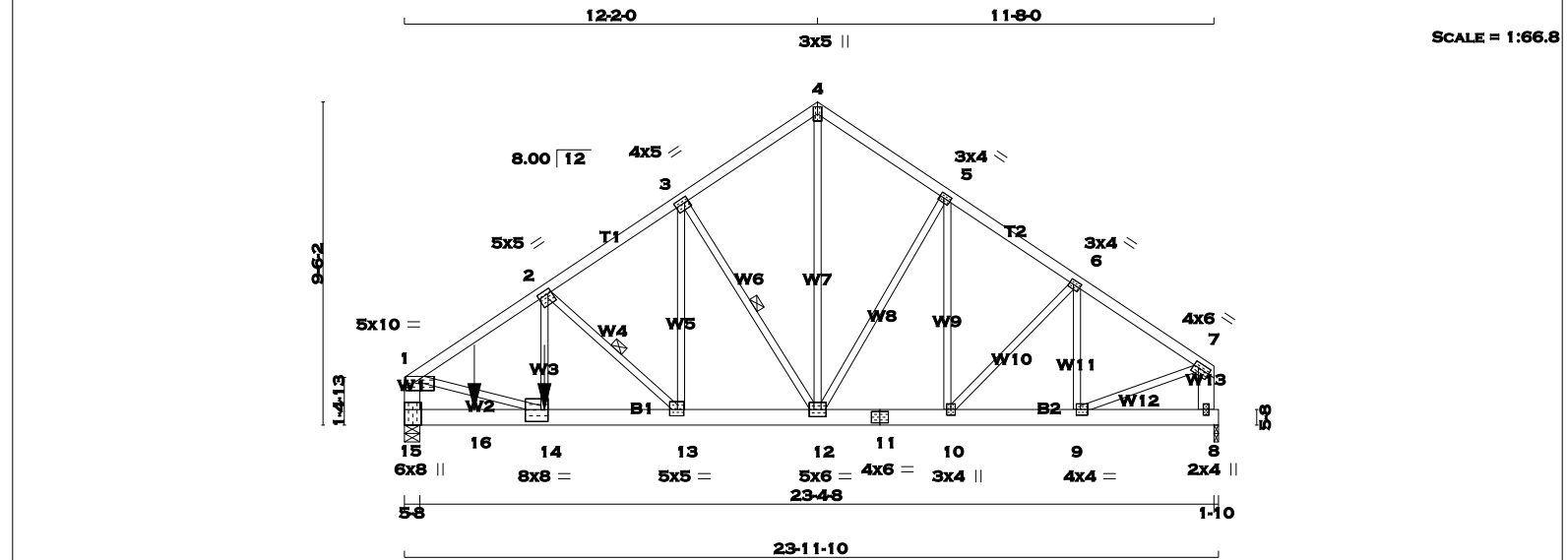


KOTT
CONTINUED ON PAGE 2

KOTT , Stouffville, ON, CGC

Version 8.100 S Feb. 9 2017 MiTek Industries, Inc. Mon Mar 20 08:14:42 2017 Page 1

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TOTAL WEIGHT = 2 X 129 = 258 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
15 - 1	2x6	DRY	No.2
8 - 7	2x6	DRY	No.2
15 - 11	2x6	DRY	No.2
11 - 8	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
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		
1-4	12	TOP
4-7	12	TOP
15-1	12	TOP
8-7	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
15-11	12	SIDE(109.7)
11-8	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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

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-p	MT20	5.0	10.0	Edge
2	TMVW-t	MT20	5.0	5.0	1.50 1.25
3	TMVW-t	MT20	4.0	5.0	1.75 1.50
4	TTW+p	MT20	3.0	5.0	
5	TMVW-t	MT20	3.0	4.0	1.50 1.50



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
15	6974	0	6974	0	0	5-8	5-8
8	2164	0	2164	0	0	1-10	1-10

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
15	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	1519	1062 / 0	0 / 0	0 / 0	0 / 0	1470 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.28 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.

1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-13. DBS = 6-0-0 . CBF = 156 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-12. DBS = 4-0-0 . CBF = 66 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)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	
FR-TO		FROM TO		FR-TO			
1-2	-7811 / 0	-77.4 -77.4 0.39 (1)	3.28	14-2	0 / 4550	0.56 (1)	
2-3	-4155 / 0	-77.4 -77.4 0.17 (1)	4.54	2-13	-4150 / 0	0.50 (1)	
3-4	-2512 / 0	-77.4 -77.4 0.12 (1)	5.59	13-3	0 / 2788	0.35 (1)	
4-5	-2507 / 0	-77.4 -77.4 0.10 (1)	5.62	3-12	-2623 / 0	0.52 (1)	
5-6	-2588 / 0	-77.4 -77.4 0.11 (1)	5.54	12-4	0 / 2518	0.31 (1)	
6-7	-2390 / 0	-77.4 -77.4 0.11 (1)	5.71	12-5	-147 / 0	0.08 (1)	
15-1	-6057 / 0	0.0 0.0 0.22 (1)	6.01	10-5	-134 / 13	0.05 (1)	
8-7	-2123 / 0	0.0 0.0 0.08 (1)	7.81	10-6	0 / 216	0.03 (1)	
				9-6	-595 / 0	0.08 (1)	
15-16	0 / 0	-236.9 -236.9 0.51 (1)	10.00	1-14	0 / 6690	0.83 (1)	
16-14	0 / 0	-17.5 -17.5 0.51 (1)	10.00	9-7	0 / 2107	0.26 (1)	
14-13	0 / 6503	-17.5 -17.5 0.46 (1)	10.00				
13-12	0 / 3467	-17.5 -17.5 0.27 (1)	10.00				
12-11	0 / 2150	-17.5 -17.5 0.18 (1)	10.00				
11-10	0 / 2150	-17.5 -17.5 0.18 (1)	10.00				
10-9	0 / 2001	-17.5 -17.5 0.15 (1)	10.00				
9-8	0 / 0	-17.5 -17.5 0.02 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX- MAX+	FACE	DIR.
14	4-1-8	-5292	-5292	---	FRONT VERT
16	2-0-12	-1133	-1133	---	FRONT VERT

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-3-0
END DISTANCE = 2-0-12
END SPAN CARRIED = 11-3-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.
(DEFINED BY USER)

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

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

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

(55 % OF 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 (0.79")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.14")

CSI: TC=0.39 (1-2:1) , BC=0.51 (14-15:1) , WB=0.83 (1-14:1) , SSI=0.30 (14-15:1)

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

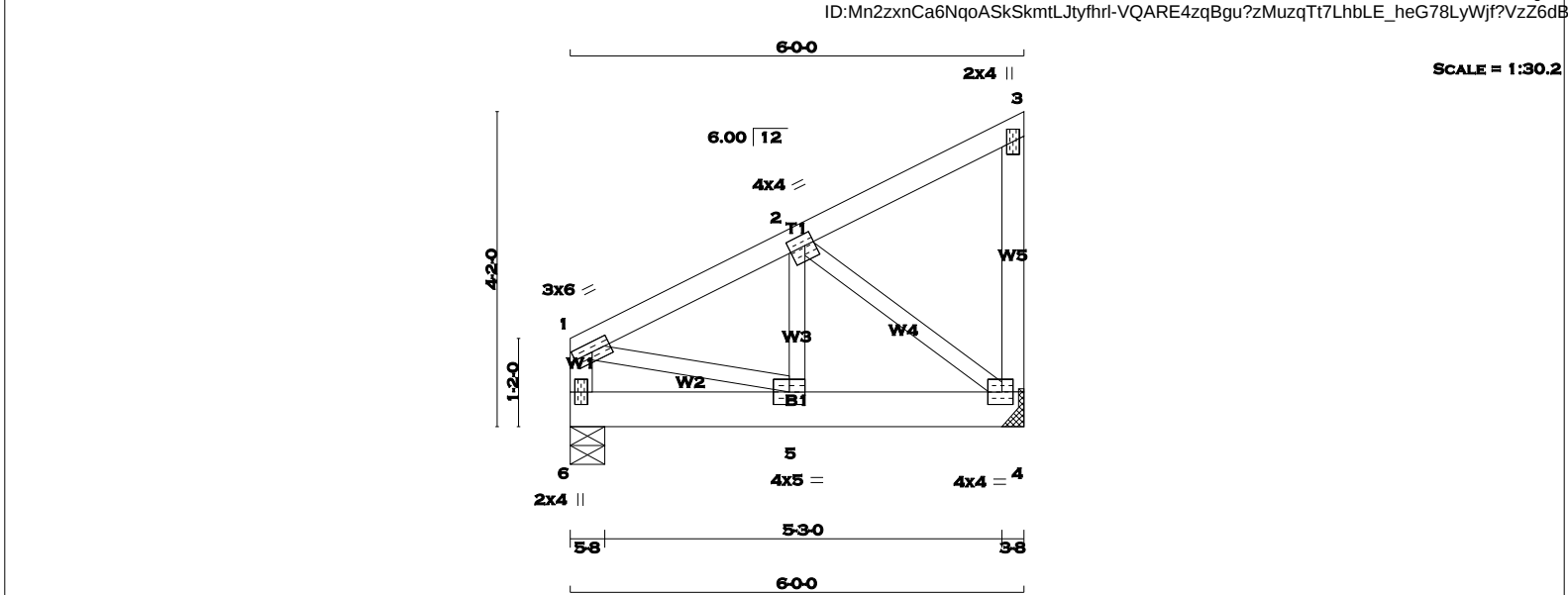
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.62 (1) (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 = 29 lb										[M]																																																																																																																																																																					
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 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.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th rowspan="2">JT</th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">MAXIMUM FACTORED GROSS REACTION</th><th rowspan="2">INPUT BRG</th><th rowspan="2">REQRD BRG</th></tr><tr><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>4</td><td>1189</td><td>0</td><td>1189</td><td>0</td><td>0</td><td>IN-SX</td></tr><tr><td>6</td><td>1189</td><td>0</td><td>1189</td><td>0</td><td>0</td><td>HANGER BY OTHERS</td></tr></table> UNFACTORED REACTIONS <table><tr><th rowspan="2">JT</th><th colspan="2">1ST LCASE</th><th colspan="2">MAX./MIN. COMPONENT REACTIONS</th><th rowspan="2">LIVE</th><th rowspan="2">PERM.LIVE</th><th rowspan="2">WIND</th><th rowspan="2">DEAD</th><th rowspan="2">SOIL</th></tr><tr><th>COMBINED</th><th>SNOW</th><th></th><th></th></tr><tr><td>4</td><td>834</td><td>584 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>251 / 0</td><td>0 / 0</td><td>0 / 0</td></tr><tr><td>6</td><td>834</td><td>584 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>251 / 0</td><td>0 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.07 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 rowspan="2">MEMB.</th><th colspan="2">CHORDS</th><th colspan="2">FACTORED</th><th rowspan="2">MAX. FACTORED</th><th rowspan="2">MAX. FACTORED</th><th rowspan="2">MEMB.</th><th colspan="2">WEBS</th><th rowspan="2">MAX. FACTORED</th><th rowspan="2">MAX. FACTORED</th></tr><tr><th>FORCE (LBS)</th><th>VERT. LOAD (LBS)</th><th>PLF (PLF)</th><th>CSI (LC)</th><th>FORCE (LBS)</th><th>CSI (LC)</th></tr><tr><td>FR-TO</td><td></td><td></td><td></td><td></td><td></td><td></td><td>FR-TO</td><td></td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>-1012 / 0</td><td>-77.4</td><td>-77.4</td><td>0.11 (1)</td><td>6.07</td><td>5-2</td><td>0 / 874</td><td>0.22 (1)</td><td></td><td></td><td></td></tr><tr><td>2-3</td><td>-10 / 0</td><td>-77.4</td><td>-77.4</td><td>0.10 (1)</td><td>10.00</td><td>2-4</td><td>-1147 / 0</td><td>0.28 (1)</td><td></td><td></td><td></td></tr><tr><td>4-3</td><td>-94 / 0</td><td>0.0</td><td>0.0</td><td>0.02 (1)</td><td>7.81</td><td>1-5</td><td>0 / 944</td><td>0.23 (1)</td><td></td><td></td><td></td></tr><tr><td>6-1</td><td>-787 / 0</td><td>0.0</td><td>0.0</td><td>0.09 (1)</td><td>7.81</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6-5</td><td>0 / 0</td><td>-318.9</td><td>-318.9</td><td>0.19 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5-4</td><td>0 / 914</td><td>-318.9</td><td>-318.9</td><td>0.30 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>					JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	VERT	HORZ	DOWN	HORZ	4	1189	0	1189	0	0	IN-SX	6	1189	0	1189	0	0	HANGER BY OTHERS	JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		LIVE	PERM.LIVE	WIND	DEAD	SOIL	COMBINED	SNOW			4	834	584 / 0	0 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0	0 / 0	6	834	584 / 0	0 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0	0 / 0	MEMB.	CHORDS		FACTORED		MAX. FACTORED	MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (LBS)	PLF (PLF)	CSI (LC)	FORCE (LBS)	CSI (LC)	FR-TO							FR-TO					1-2	-1012 / 0	-77.4	-77.4	0.11 (1)	6.07	5-2	0 / 874	0.22 (1)				2-3	-10 / 0	-77.4	-77.4	0.10 (1)	10.00	2-4	-1147 / 0	0.28 (1)				4-3	-94 / 0	0.0	0.0	0.02 (1)	7.81	1-5	0 / 944	0.23 (1)				6-1	-787 / 0	0.0	0.0	0.09 (1)	7.81							6-5	0 / 0	-318.9	-318.9	0.19 (1)	10.00							5-4	0 / 914	-318.9	-318.9	0.30 (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 = 15-2-0 END DISTANCE = 6-0-0 END SPAN CARRIED = 15-2-0 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. (DEFINED BY USER) 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=0.30 (4-5:1), WB=0.28 (2-4:1), SSI=0.37 (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= 0.34 (4) (INPUT = 1.00)				
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG																																																																																																																																																																									
	VERT	HORZ	DOWN	HORZ																																																																																																																																																																											
4	1189	0	1189	0	0	IN-SX																																																																																																																																																																									
6	1189	0	1189	0	0	HANGER BY OTHERS																																																																																																																																																																									
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																																																																						
	COMBINED	SNOW																																																																																																																																																																													
4	834	584 / 0	0 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0	0 / 0																																																																																																																																																																						
6	834	584 / 0	0 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0	0 / 0																																																																																																																																																																						
MEMB.	CHORDS		FACTORED		MAX. FACTORED	MAX. FACTORED	MEMB.	WEBS		MAX. FACTORED	MAX. FACTORED																																																																																																																																																																				
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6-1	-787 / 0	0.0	0.0	0.09 (1)	7.81																																																																																																																																																																										
6-5	0 / 0	-318.9	-318.9	0.19 (1)	10.00																																																																																																																																																																										
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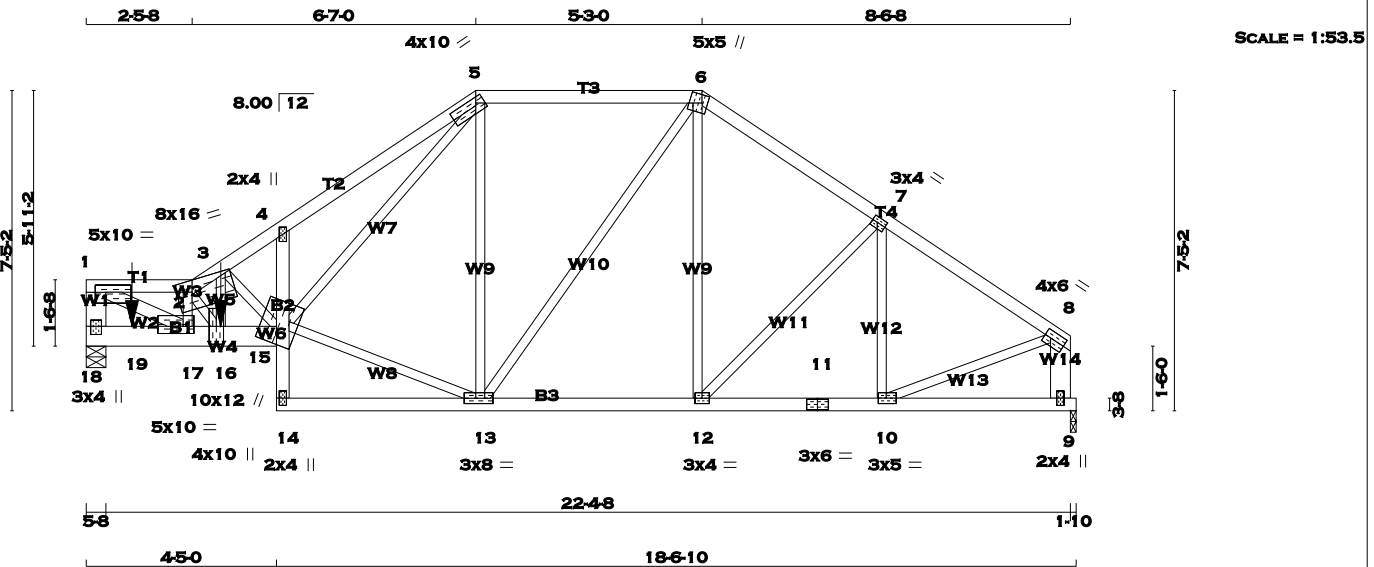




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LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.		
18 - 1	2x6	DRY	No.2	SPF	
1 - 2	2x4	DRY	No.2	SPF	
2 - 5	2x4	DRY	No.2	SPF	
5 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
9 - 8	2x6	DRY	No.2	SPF	
18 - 15	2x6	DRY	2100F 1.8E	SPF	
14 - 4	2x4	DRY	No.2	SPF	
14 - 11	2x4	DRY	No.2	SPF	
11 - 9	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
1 - 17	2x4	DRY	1650F 1.5E	SPF	

DRY: SEASONED LUMBER.

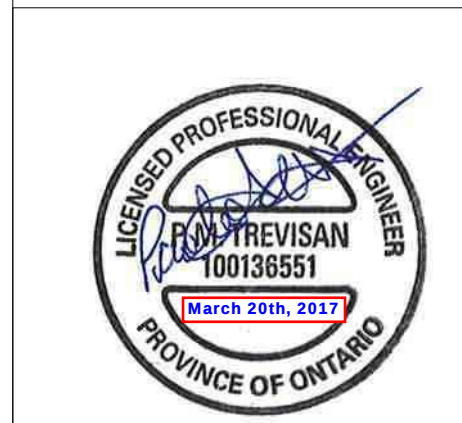
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
18-1	2	12
9-8	2	12
1-2	1	12
2-5	1	12
5-6	1	12
6-8	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
18-15	2	12
4-14	1	12
14-11	1	12
11-9	1	12
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6
2x4	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
18	6731	0	6731	0	0
9	1860	0	1860	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE
18	4724	3305 / 0	0 / 0	0 / 0
9	1305	913 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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				WEBS				MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT.	LOAD (PLF)	LC1	MAX	MEMB.	FORCE (LBS)	VERT.	LOAD (PLF)	MEMB.	FORCE (LBS)
FR-TO											
18-1	-5541 / 0	0.0	0.0	0.20 (1)	6.24	1-17	0 / 12430	0.80 (1)			
1-2	-11141 / 0	-77.4	-77.4	0.44 (1)	2.61	17-2	-4731 / 0	0.37 (1)			
2-3	-12291 / 0	-77.4	-77.4	0.47 (1)	2.42	2-16	-2483 / 0	0.19 (1)			
3-4	-8588 / 0	-77.4	-77.4	0.26 (1)	3.19	16-3	0 / 5318	0.66 (1)			
4-5	-8382 / 0	-77.4	-77.4	0.53 (1)	3.06	3-15	-4730 / 0	0.40 (1)			
5-6	-2334 / 0	-77.4	-77.4	0.24 (1)	5.60	15-13	0 / 2213	0.27 (1)			
6-7	-2126 / 0	-77.4	-77.4	0.15 (1)	5.93	15-5	0 / 7336	0.91 (1)			
7-8	-2036 / 0	-77.4	-77.4	0.14 (1)	6.02	13-5	-1424 / 0	0.71 (1)			
9-8	-1826 / 0	0.0	0.0	0.07 (1)	7.81	13-6	0 / 1000	0.12 (1)			
18-19	0 / 0	-17.5	-17.5	0.26 (1)	10.00	12-6	0 / 70	0.01 (4)			
19-17	0 / 0	-17.5	-17.5	0.26 (1)	10.00	10-7	-474 / 0	0.08 (1)			
17-16	0 / 11567	-17.5	-17.5	0.69 (1)	10.00	10-8	0 / 1798	0.22 (1)			
16-15	0 / 10322	-17.5	-17.5	0.65 (1)	10.00						
14-15	0 / 33	0.0	0.0	0.31 (1)	10.00						
15-4	-120 / 37	0.0	0.0	0.31 (1)	7.81						
14-13	0 / 263	-17.5	-17.5	0.08 (1)	10.00						
13-12	0 / 1749	-17.5	-17.5	0.21 (1)	10.00						
12-11	0 / 1711	-17.5	-17.5	0.17 (1)	10.00						
11-10	0 / 1711	-17.5	-17.5	0.17 (1)	10.00						
10-9	0 / 0	-17.5	-17.5	0.04 (4)	10.00						

FACTORED CONCENTRATED LOADS (LBS)		LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
JT								
16	3-1-8	-5292	-5292	---	---	FRONT	VERT	TOTAL
19	1-0-12	-1133	-1133	---	---	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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

*** 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 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/930 (0.29")

CSI: TC=0.53 (4-5:1), BC=0.69 (16-17:1), WB=0.91 (5-15:1), SSI=0.45 (15-16:1)

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

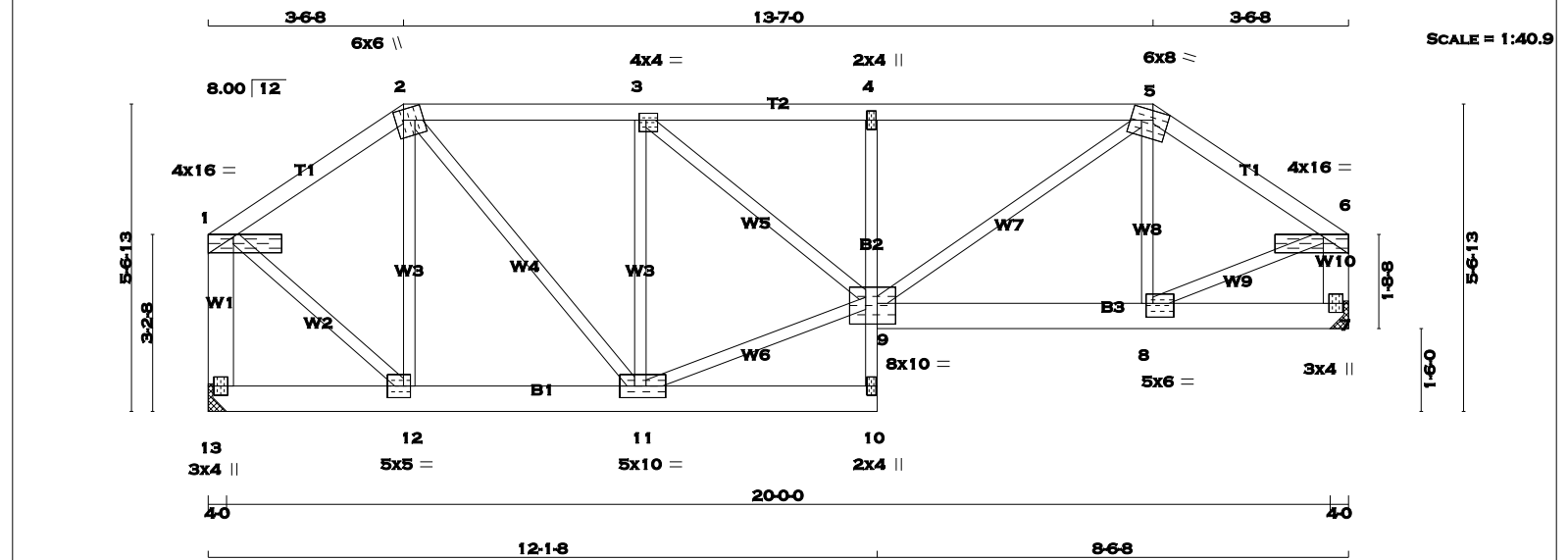
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (15) (INPUT = 0.90)
JSI METAL= 0.87 (17) (INPUT = 1.00)

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17-5409
BUILDING DIVISION

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TOTAL WEIGHT = 2 X 108 = 215 lb
[M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2
2 - 5	2x4	DRY	No.2
5 - 6	2x4	DRY	No.2
13- 1	2x6	DRY	No.2
7 - 6	2x6	DRY	No.2
13- 10	2x6	DRY	No.2
10- 4	2x3	DRY	No.2
9 - 7	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

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- 2	12	TOP
2- 5	12	TOP
5- 6	12	TOP
13- 1	12	TOP
7- 6	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
13- 10	12	SIDE(208.6)
9- 7	12	SIDE(208.6)
10- 4	12	TOP
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-p	MT20	4.0	16.0	0.50 Edge
2	TTVW+m	MT20	6.0	6.0	2.25 1.75
3	TMVW-t	MT20	4.0	4.0	1.50 1.50
4	TMV+p	MT20	2.0	4.0	



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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	HORZ
13	5292	0	5292
7	5292	0	5292

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
13	3714	2598	0	0/0	0/0	0/0	1116/0
7	3714	2598	0	0/0	0/0	0/0	1116/0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	-3794/0	-77.4	-77.4 0.15 (1)	4.73	12-2	-557/0	0.13 (1)
2-3	-5106/0	-77.4	-77.4 0.20 (1)	4.13	2-11	0/3082	0.38 (1)
3-4	-7218/0	-77.4	-77.4 0.28 (1)	3.47	11-3	-2194/0	0.49 (1)
4-5	-7236/0	-77.4	-77.4 0.40 (1)	3.38	11-9	0/5378	0.67 (1)
5-6	-5426/0	-77.4	-77.4 0.21 (1)	4.02	3-9	0/2816	0.35 (1)
13-1	-4672/0	0.0	0.0 0.27 (1)	6.68	9-5	0/3339	0.41 (1)
7-6	-4769/0	0.0	0.0 0.18 (1)	6.63	8-5	0/737	0.09 (1)
					1-12	0/3974	0.49 (1)
					8-6	0/4785	0.59 (1)
13-12	0/0	-434.7	-434.7 0.23 (1)	10.00			
12-11	0/3139	-434.7	-434.7 0.45 (1)	10.00			
11-10	0/43	-434.7	-434.7 0.25 (1)	10.00			
10-9	0/749	0.0	0.0 0.19 (1)	10.00			
9-4	-361/0	0.0	0.0 0.10 (1)	7.81			
9-8	0/4527	-434.7	-434.7 0.66 (1)	10.00			
8-7	0/0	-434.7	-434.7 0.36 (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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 19-8-10
END DISTANCE = 20-8-0
END SPAN CARRIED = 19-8-10
END WALL WIDTH = 1-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.
(DEFINED BY USER)

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 (0.69")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.69")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.40 (4-5:1), BC=0.66 (8-9:1), WB=0.67 (9-11:1), SSI=0.43 (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

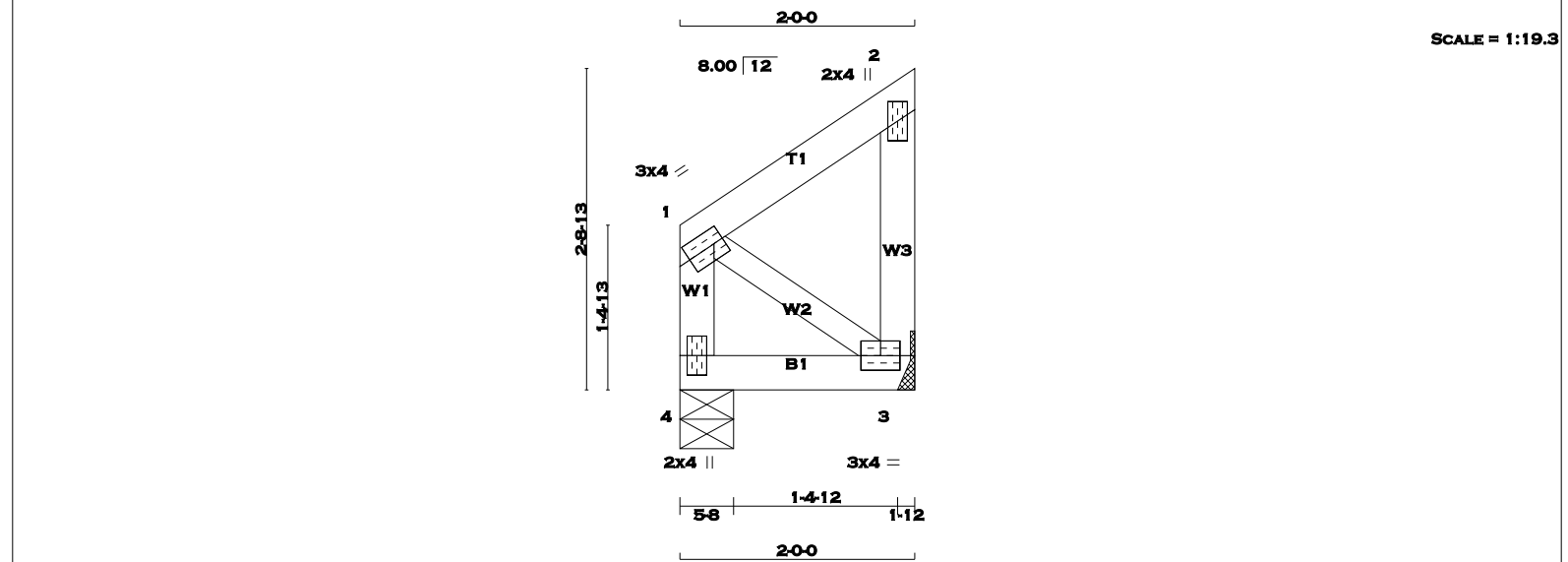
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.57 (8) (INPUT = 1.00)

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TOTAL WEIGHT = 10 lb							[M]																																																																																																																																																																													
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 4 - 1 2x4 DRY No.2 SPF 1 - 2 2x4 DRY No.2 SPF 4 - 3 2x4 DRY No.2 SPF ALL WEBS 2x4 DRY No.2 SPF EXCEPT 1 - 3 2x3 DRY No.2 SPF DRY: SEASONED LUMBER.							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td></td><td></td><td>FACTORED</td><td></td><td>MAXIMUM FACTORED</td><td></td><td>INPUT</td><td></td><td>REQRD</td></tr><tr><td></td><td></td><td></td><td>GROSS REACTION</td><td></td><td>GROSS REACTION</td><td></td><td>BRG</td><td></td><td>BRG</td></tr><tr><td>JT</td><td></td><td></td><td>VERT</td><td></td><td>HORZ</td><td></td><td>DOWN</td><td></td><td>HORZ</td></tr><tr><td>4</td><td></td><td></td><td>281</td><td></td><td>0</td><td></td><td>281</td><td></td><td>0</td></tr><tr><td>3</td><td></td><td></td><td>275</td><td></td><td>0</td><td></td><td>275</td><td></td><td>0</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>UPLIFT</td><td></td><td>IN-SX</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5-8</td><td></td><td>5-8</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="2">HANGER BY OTHERS</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td colspan="2">MIN. SEAT SIZE: 1-12</td><td></td></tr></table> UNFACTORED REACTIONS <table><tr><td></td><td></td><td></td><td>1ST LCASE</td><td></td><td colspan="4">MAX./MIN. COMPONENT REACTIONS</td><td></td></tr><tr><td>JT</td><td></td><td></td><td>COMBINED</td><td></td><td>SNOW</td><td></td><td>LIVE</td><td></td><td>PERM.LIVE</td></tr><tr><td>4</td><td></td><td></td><td>197</td><td></td><td>138 / 0</td><td></td><td>0 / 0</td><td></td><td>0 / 0</td></tr><tr><td>3</td><td></td><td></td><td>193</td><td></td><td>134 / 0</td><td></td><td>0 / 0</td><td></td><td>0 / 0</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>WIND</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>DEAD</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>SOIL</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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.										FACTORED		MAXIMUM FACTORED		INPUT		REQRD				GROSS REACTION		GROSS REACTION		BRG		BRG	JT			VERT		HORZ		DOWN		HORZ	4			281		0		281		0	3			275		0		275		0								UPLIFT		IN-SX								5-8		5-8								HANGER BY OTHERS										MIN. SEAT SIZE: 1-12						1ST LCASE		MAX./MIN. COMPONENT REACTIONS					JT			COMBINED		SNOW		LIVE		PERM.LIVE	4			197		138 / 0		0 / 0		0 / 0	3			193		134 / 0		0 / 0		0 / 0										WIND										DEAD										SOIL	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 = 11-3-0 END DISTANCE = 2-0-0 END SPAN CARRIED = 11-3-0 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. (DEFINED BY USER) 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 (0.01") CSI: TC=0.05 (1-2:1) , BC=0.15 (3-4:1) , WB=0.01 (2-3:1) , SSI=0.18 (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= 0.07 (3) (INPUT = 0.90) JSI METAL= 0.02 (2) (INPUT = 1.00)						
			FACTORED		MAXIMUM FACTORED		INPUT		REQRD																																																																																																																																																																											
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PLATES (table is in inches) <table><tr><td>JT</td><td>TYPE</td><td>PLATES</td><td>W</td><td>LEN</td><td>Y</td><td>X</td></tr><tr><td>1</td><td>TMVW-t</td><td>MT20</td><td>3.0</td><td>4.0</td><td>1.50</td><td>1.00</td></tr><tr><td>2</td><td>TMVW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>3</td><td>BMVW1-t</td><td>MT20</td><td>3.0</td><td>4.0</td><td></td><td></td></tr><tr><td>4</td><td>BMV1+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr></table> A SIZE FOR SIZE SUBSTITUTION OF MI TEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.							JT	TYPE	PLATES	W	LEN	Y	X	1	TMVW-t	MT20	3.0	4.0	1.50	1.00	2	TMVW+w	MT20	2.0	4.0			3	BMVW1-t	MT20	3.0	4.0			4	BMV1+p	MT20	2.0	4.0			LOADING TOTAL LOAD CASES: (4) <table><tr><td></td><td colspan="2">CHORDS</td><td colspan="4"></td><td colspan="2">WEBS</td></tr><tr><td></td><td>MAX. FACTORED</td><td>FACTORED</td><td></td><td></td><td></td><td>MAX. FACTORED</td><td></td></tr><tr><td>MEMB.</td><td>FORCE (LBS)</td><td>VERT. LOAD (PLF)</td><td>LC1</td><td>MAX. (CSI (LC)</td><td>MAX. UNBRAC LENGTH</td><td>MEMB.</td><td>FORCE (LBS)</td></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td></td><td>FR-TO</td><td></td></tr><tr><td>4-1</td><td>-72 / 0</td><td>0.0</td><td>0.0</td><td>0.01 (1)</td><td>7.81</td><td>3-2</td><td>-67 / 0</td></tr><tr><td>1-2</td><td>-3 / 0</td><td>-77.4</td><td>-77.4</td><td>0.05 (1)</td><td>10.00</td><td>1-3</td><td>0 / 3</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00 (1)</td></tr><tr><td>4-3</td><td>0 / 0</td><td>-226.0</td><td>-226.0</td><td>0.15 (1)</td><td>10.00</td><td></td><td></td></tr></table>								CHORDS						WEBS			MAX. FACTORED	FACTORED				MAX. FACTORED		MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. (CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	FR-TO		FROM TO				FR-TO		4-1	-72 / 0	0.0	0.0	0.01 (1)	7.81	3-2	-67 / 0	1-2	-3 / 0	-77.4	-77.4	0.05 (1)	10.00	1-3	0 / 3								0.00 (1)	4-3	0 / 0	-226.0	-226.0	0.15 (1)	10.00																																																																					
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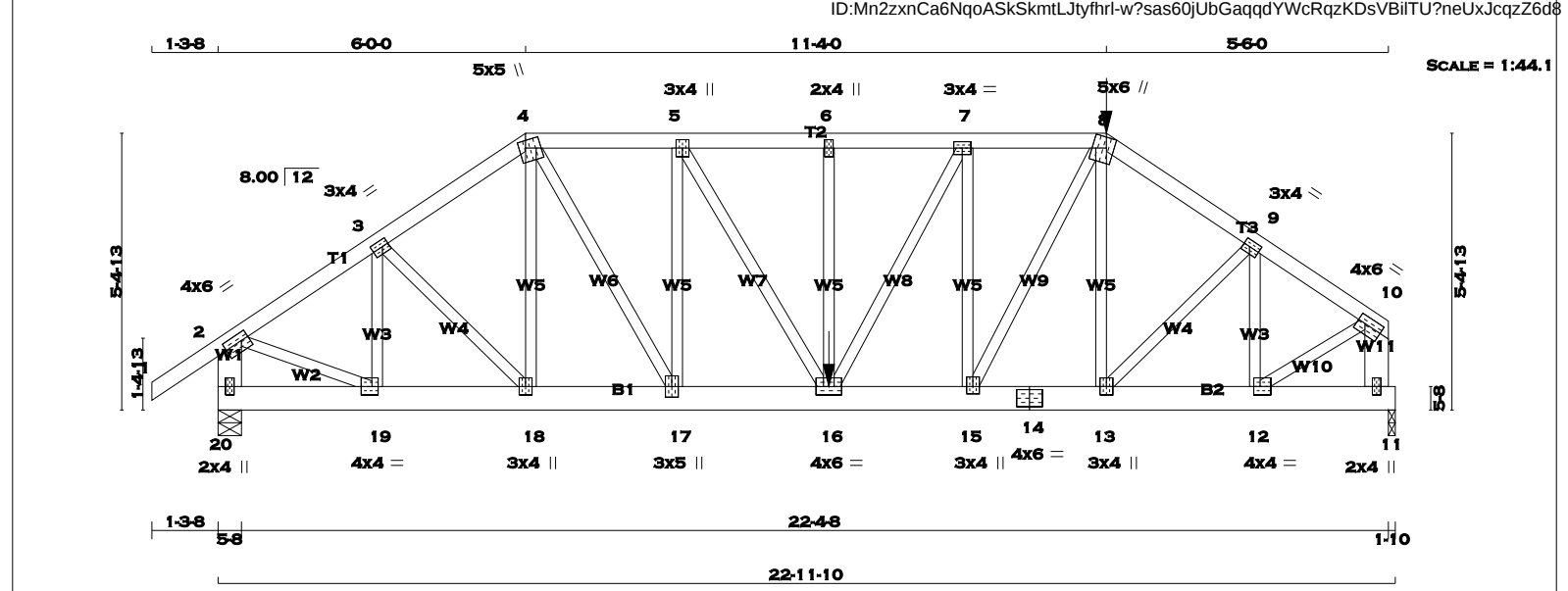


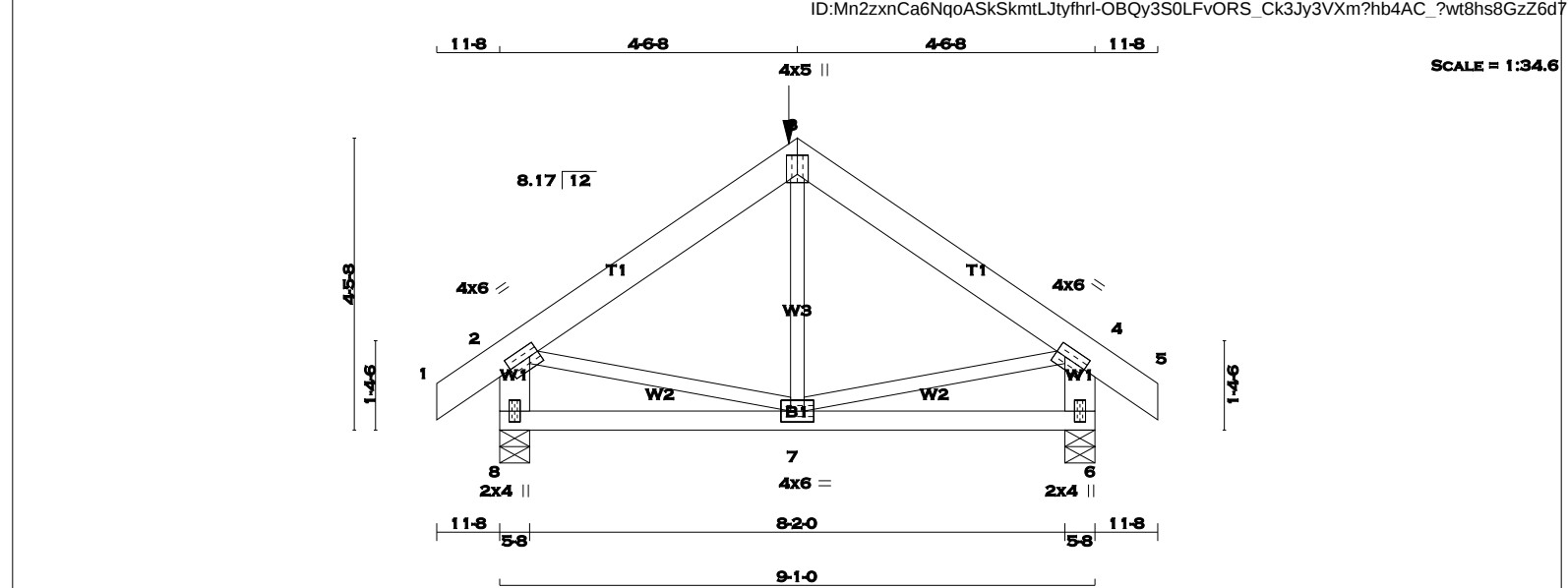
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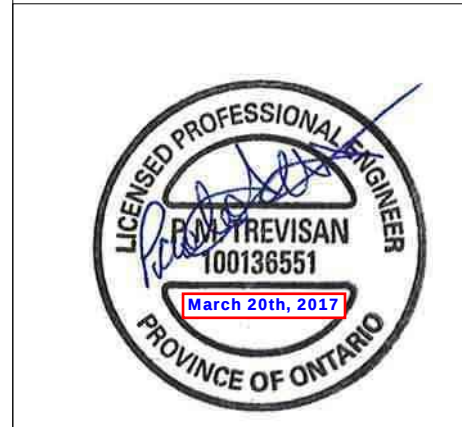
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TOTAL WEIGHT = 2 X 48 = 96 lb										[M]
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA
1 - 3 2x6 DRY No.2 SPF					BEARINGS					SPECIFIED LOADS:
3 - 5 2x6 DRY No.2 SPF					FACTORED MAXIMUM FACTORED INPUT REQRD					TOP CH. LL = 23.3 PSF
8 - 2 2x6 DRY No.2 SPF					GROSS REACTION GROSS REACTION BRG BRG					DL = 3.0 PSF
6 - 4 2x6 DRY No.2 SPF					JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX					BOT CH. LL = 0.0 PSF
8 - 6 2x4 DRY No.2 SPF					8 632 0 632 0 0 5-8 5-8					DL = 7.0 PSF
ALL WEBS 2x3 DRY No.2 SPF					6 632 0 632 0 0 5-8 5-8					TOTAL LOAD = 33.3 PSF
EXCEPT										
DRY: SEASONED LUMBER.										
										SPACING = 24.0 IN. C/C
PLATES (table is in inches)										GIRDER TYPE: CPrimeHip
JT TYPE PLATES W LEN Y X										SIDE SETBACK = 4-6-8
2 TMVW-t MT20 4.0 6.0 2.00 1.75										END SETBACK = 3-2-3
3 TTW+p MT20 4.0 5.0 3.50 2.00										END WALL WIDTH = 3-0
4 TMVW-t MT20 4.0 6.0 2.00 1.75										CORNER FRAMING TYPE: CONVENTIONAL
6 BMV1+p MT20 2.0 4.0										END JACK TYPE: CONVENTIONAL
7 BMWWW-t MT20 4.0 6.0										APPLIED TO FRONT SIDE
8 BMV1+p MT20 2.0 4.0										- ADDT'L LOADS BASED ON 55 % OF GSL.
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.										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
HANGERS NOTES										ALLOWABLE DEFL.(LL)= L/360 (0.30")
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 197.0 lbs FACTORED DOWN AT 4-6-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
										ALLOWABLE DEFL.(TL)= L/360 (0.30")
										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")
										CSI: TC=0.15 (3-4:1) , BC=0.14 (6-7:4) , WB=0.10 (2-7:1) , SSI=0.10 (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)

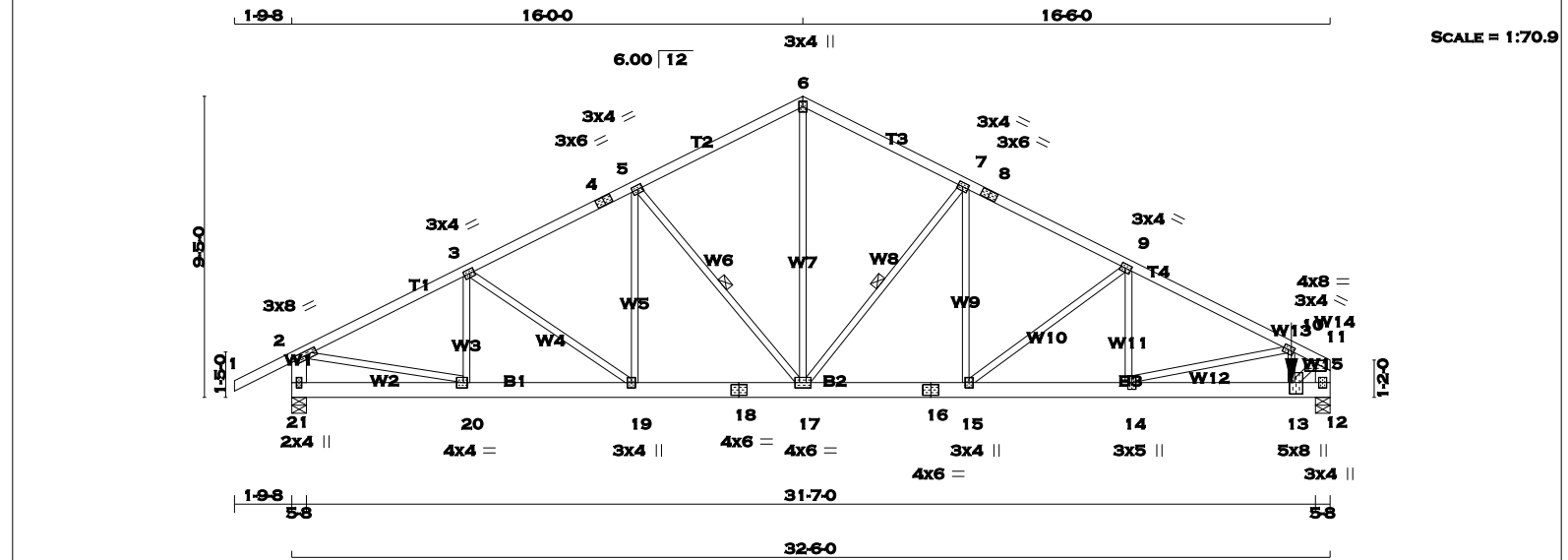


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READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 4 X 160 = 640 lb
[M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	No.2	SPF
4 - 6	2x4	No.2	SPF
6 - 8	2x4	No.2	SPF
8 - 11	2x4	No.2	SPF
21 - 2	2x6	No.2	SPF
12 - 11	2x6	No.2	SPF
21 - 18	2x6	No.2	SPF
18 - 16	2x6	No.2	SPF
16 - 12	2x6	No.2	SPF
ALL WEBS EXCEPT	2x3	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		
1-4	12	TOP
4-6	12	TOP
6-8	12	TOP
8-11	12	TOP
21-2	12	TOP
12-11	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
21-18	12	TOP
18-16	12	TOP
16-12	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	SIDE(0.0)

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

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

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.

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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	HORZ
21	1811	0	1811
12	4801	0	4801
UNFACTORED REACTIONS			
1ST LCASE MAX./MIN. COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE
21	1268	905 / 0	0 / 0
12	3369	2357 / 0	0 / 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 = 4.52 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-17. DBS = 20-0-0. CBF = 71 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-17. DBS = 14-0-0. CBF = 82 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)

CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)
FR-TO	0 / 32	-77.4	10.00
1-2	-2329 / 0	-77.4	5.67
2-3	-2212 / 0	-77.4	5.79
3-4	-2212 / 0	-77.4	5.79
4-5	-1826 / 0	-77.4	6.23
5-6	-1826 / 0	-77.4	6.24
6-7	-2456 / 0	-77.4	5.57
7-8	-2456 / 0	-77.4	5.57
8-9	-3233 / 0	-77.4	5.00
9-10	-4360 / 0	-77.4	4.52
10-11	-1759 / 0	0.0	7.81
11-12	-4472 / 0	0.0	6.81
12-11	0 / 0	-17.5	10.00
21-20	0 / 2099	-17.5	10.00
20-19	0 / 1978	-17.5	10.00
19-18	0 / 1978	-17.5	10.00
18-17	0 / 2198	-17.5	10.00
17-16	0 / 2198	-17.5	10.00
16-15	0 / 2901	-17.5	10.00
15-14	0 / 3917	-17.5	10.00
14-13	0 / 0	-17.5	10.00

FACTORED CONCENTRATED LOADS (LBS)			
JT	LOC.	LC1	MAX-
13	31-3-8	-3386	-3386



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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

*** NON STANDARD GIRDER ***

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.08")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.20 (2-3:1), BC=0.40 (13-14:1), WB=0.58 (11-13:1), SSI=0.11 (12-13:1)

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

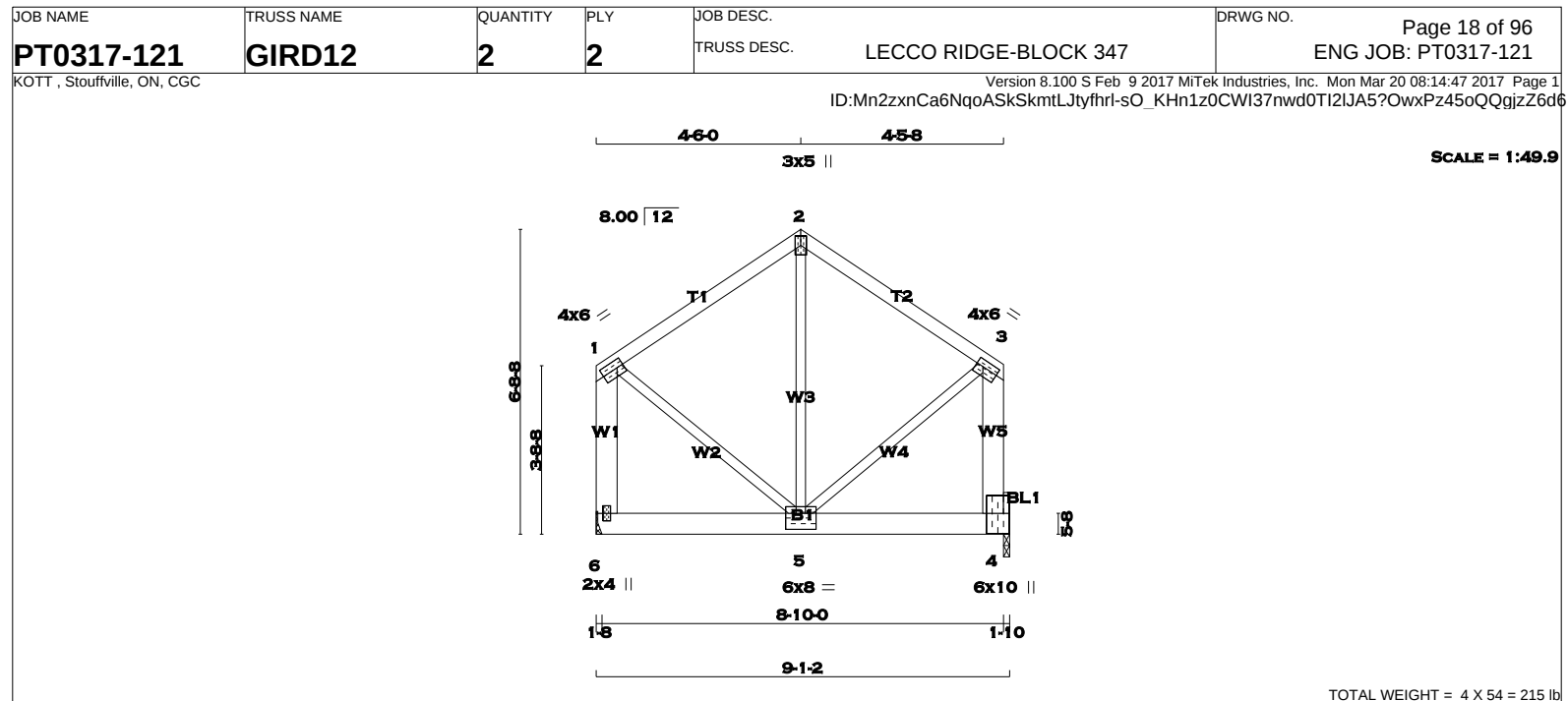
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

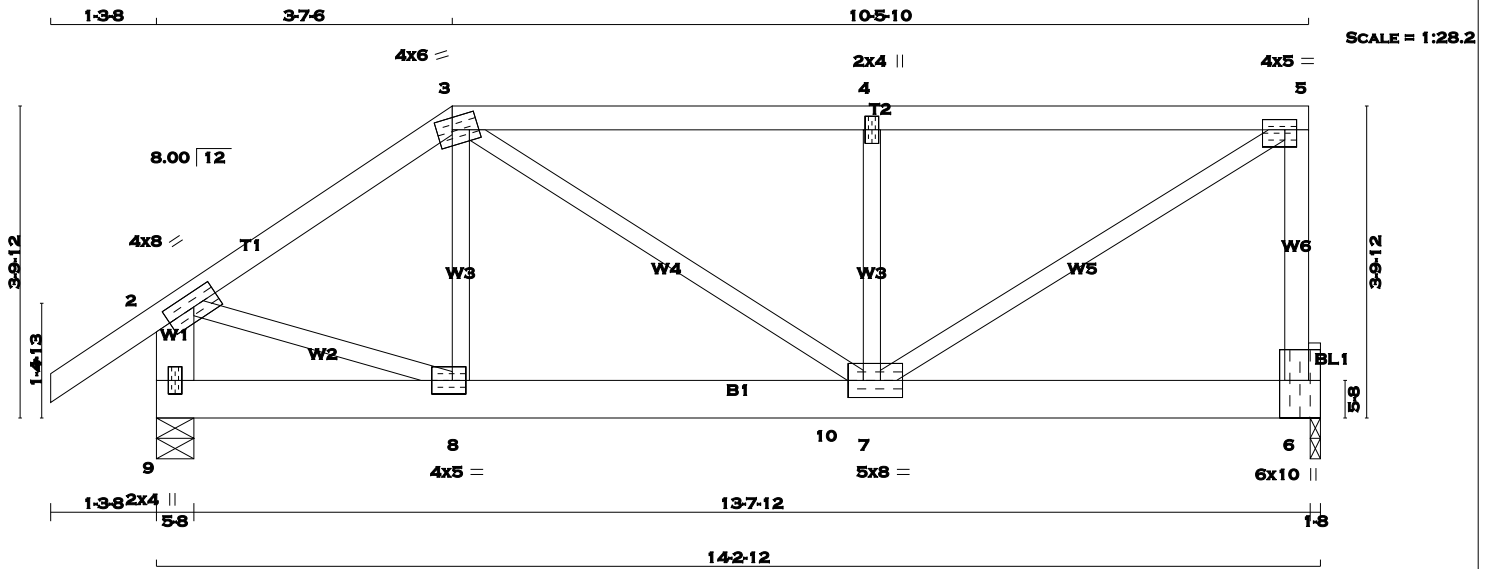
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (20) (INPUT = 0.90)
JSI METAL= 0.51 (13) (INPUT = 1.00)



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 2 2x4 DRY No.2 SPF 2 - 3 2x4 DRY No.2 SPF 6 - 1 2x6 DRY No.2 SPF 4 - 3 2x6 DRY No.2 SPF 6 - 4 2x6 DRY 2100F 1.8E SPF BEARING BLOCKS BL1 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 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 1-2 1 12 TOP 2-3 1 12 TOP 6-1 2 12 TOP 4-3 2 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 6-4 2 8 SIDE(340.4) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 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 2.00 1.75 2 TTW+p MT20 3.0 5.0 3 TMVW-t MT20 4.0 6.0 1.75 1.75 4 BMVK1+p MT20 6.0 10.0 5.25 1.50 5 BMVWW-t MT20 6.0 8.0 4.25 4.00			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>6</td><td>3385</td><td>0</td><td>3385</td><td>0</td><td>0</td><td>HANGER BY OTHERS</td><td>MIN. SEAT SIZE: 1-8</td></tr><tr><td>4</td><td>3404</td><td>0</td><td>3404</td><td>0</td><td>0</td><td>1-10</td><td>1-10 + FLUSH PLATE</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX./MIN. COMPONENT REACTIONS</th><th></th><th></th><th></th><th></th><th></th></tr><tr><td>6</td><td>2376</td><td>1662 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>714 / 0</td><td>0 / 0</td></tr><tr><td>4</td><td>2388</td><td>1673 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>715 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 4 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 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) <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>LC1 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>-1691 / 0</td><td>-77.4 -77.4</td><td>0.17 (1)</td><td>6.25</td><td>5-2</td><td>0 / 1530</td><td>0.19 (1)</td></tr><tr><td>2-3</td><td>-1691 / 0</td><td>-77.4 -77.4</td><td>0.16 (1)</td><td>6.25</td><td>1-5</td><td>0 / 1746</td><td>0.22 (1)</td></tr><tr><td>6-1</td><td>-2145 / 0</td><td>0.0 0.0</td><td>0.16 (1)</td><td>7.81</td><td>5-3</td><td>0 / 1952</td><td>0.24 (1)</td></tr><tr><td>4-3</td><td>-2284 / 0</td><td>0.0 0.0</td><td>0.17 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>6-5</td><td>0 / 0</td><td>-698.3 -698.3</td><td>0.30 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>5-4</td><td>-157 / 0</td><td>-698.3 -698.3</td><td>0.30 (1)</td><td>6.25</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	6	3385	0	3385	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8	4	3404	0	3404	0	0	1-10	1-10 + FLUSH PLATE	JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						6	2376	1662 / 0	0 / 0	0 / 0	0 / 0	714 / 0	0 / 0	4	2388	1673 / 0	0 / 0	0 / 0	0 / 0	715 / 0	0 / 0	CHORDS				WEBS				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	-1691 / 0	-77.4 -77.4	0.17 (1)	6.25	5-2	0 / 1530	0.19 (1)	2-3	-1691 / 0	-77.4 -77.4	0.16 (1)	6.25	1-5	0 / 1746	0.22 (1)	6-1	-2145 / 0	0.0 0.0	0.16 (1)	7.81	5-3	0 / 1952	0.24 (1)	4-3	-2284 / 0	0.0 0.0	0.17 (1)	7.81				6-5	0 / 0	-698.3 -698.3	0.30 (1)	10.00				5-4	-157 / 0	-698.3 -698.3	0.30 (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 = 0-0 START SPAN CARRIED = 31-2-0 END DISTANCE = 9-1-2 END SPAN CARRIED = 31-2-0 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. (DEFINED BY USER) 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 (0.29") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.29") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05") CSI: TC=0.17 (3-4:1), BC=0.30 (4-5:1), WB=0.24 (3-5:1), SSI=0.63 (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= 0.89 (1) (INPUT = 0.90) JSI METAL= 0.23 (5) (INPUT = 1.00)		
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD																																																																																																																																	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																														
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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 6 - 5 2x4 DRY No.2 SPF 9 - 2 2x6 DRY No.2 SPF 9 - 6 2x6 DRY 2100F 1.8E SPF BEARING BLOCKS BL1 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. DESIGN CONSISTS OF 4 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS: CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF) TOP CHORDS : (0.122"x3") SPIRAL NAILS 1-3 1 12 TOP 3-5 1 12 TOP 5-6 1 12 TOP 9-2 2 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 9-6 2 4 SIDE(603.3) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES. IN ADDITION, PRE-DRILL ONE 0.56" DIAM. HOLE IN EACH CHORD PANEL AND INSTALL 0.50" DIAM. ASTM A307 BOLTS WITH WASHERS, BOTH SIDES. FOR OTHER BOLT TYPES SEE CSA086 3.3.2. 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 TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.					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><td>JT VERT</td><td>5900 0</td><td>5900 0</td><td>0 0</td><td>1-8</td></tr><tr><td>9 6275 0</td><td>6275 0</td><td>6275 0</td><td>5-8</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>1ST LCASE</th><th colspan="6">MAX./MIN. COMPONENT REACTIONS</th></tr><tr><td>JT COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM.LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>6 4140</td><td>2898 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>1242 / 0</td><td>0 / 0</td></tr><tr><td>9 4401</td><td>3092 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>1309 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.80 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) <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. FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1 (LC)</th><th>MEMB.</th><th>MAX. FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1 (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td>FROM TO</td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.4 -77.4</td><td>0.04 (1)</td><td>10.00</td><td>8-3</td><td>0 / 2480</td><td>0.14 (1)</td></tr><tr><td>2-3</td><td>-6224 / 0</td><td>-77.4 -77.4</td><td>0.12 (1)</td><td>4.85</td><td>3-7</td><td>0 / 1199</td><td>0.07 (1)</td></tr><tr><td>3-4</td><td>-6241 / 0</td><td>-77.4 -77.4</td><td>0.16 (1)</td><td>4.81</td><td>7-4</td><td>-452 / 0</td><td>0.02 (1)</td></tr><tr><td>4-5</td><td>-6241 / 0</td><td>-77.4 -77.4</td><td>0.18 (1)</td><td>4.80</td><td>7-5</td><td>0 / 7642</td><td>0.43 (1)</td></tr><tr><td>6-5</td><td>-4316 / 0</td><td>0.0 0.0</td><td>0.26 (1)</td><td>7.11</td><td>2-8</td><td>0 / 5351</td><td>0.30 (1)</td></tr><tr><td>9-2</td><td>-5097 / 0</td><td>0.0 0.0</td><td>0.09 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 0</td><td>-821.8 -821.8</td><td>0.15 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>8-10</td><td>0 / 5244</td><td>-821.8 -821.8</td><td>0.26 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10-7</td><td>0 / 5244</td><td>-738.8 -738.8</td><td>0.26 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>7-6</td><td>-183 / 0</td><td>-738.8 -738.8</td><td>0.19 (1)</td><td>6.25</td><td></td><td></td><td></td></tr></table>						FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT VERT	5900 0	5900 0	0 0	1-8	9 6275 0	6275 0	6275 0	5-8	5-8	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	6 4140	2898 / 0	0 / 0	0 / 0	0 / 0	1242 / 0	0 / 0	9 4401	3092 / 0	0 / 0	0 / 0	0 / 0	1309 / 0	0 / 0	C H O R D S				W E B S				MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	FR-TO		FROM TO		FR-TO		FROM TO		1-2	0 / 29	-77.4 -77.4	0.04 (1)	10.00	8-3	0 / 2480	0.14 (1)	2-3	-6224 / 0	-77.4 -77.4	0.12 (1)	4.85	3-7	0 / 1199	0.07 (1)	3-4	-6241 / 0	-77.4 -77.4	0.16 (1)	4.81	7-4	-452 / 0	0.02 (1)	4-5	-6241 / 0	-77.4 -77.4	0.18 (1)	4.80	7-5	0 / 7642	0.43 (1)	6-5	-4316 / 0	0.0 0.0	0.26 (1)	7.11	2-8	0 / 5351	0.30 (1)	9-2	-5097 / 0	0.0 0.0	0.09 (1)	7.81				9-8	0 / 0	-821.8 -821.8	0.15 (1)	10.00				8-10	0 / 5244	-821.8 -821.8	0.26 (1)	10.00				10-7	0 / 5244	-738.8 -738.8	0.26 (1)	10.00				7-6	-183 / 0	-738.8 -738.8	0.19 (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 LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 GIRDER TYPE: CStdGirder START DISTANCE = 0-0 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. (DEFINED BY USER) GIRDER TYPE: CStdGirder START DISTANCE = 8-2-8 START SPAN CARRIED = 32-10-8 END DISTANCE = 14-0-0 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. (DEFINED BY USER) 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 (0.08") CSI: TC=0.26 (5-6:1) , BC=0.26 (7-8:1) , WB=0.43 (5-7:1) , SSI=0.38 (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. = 1/8 deg TOTAL WEIGHT = 8 X 67 = 534 lb				
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																													
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LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 20th, 2017

PROVINCE OF ONTARIO

KOTT

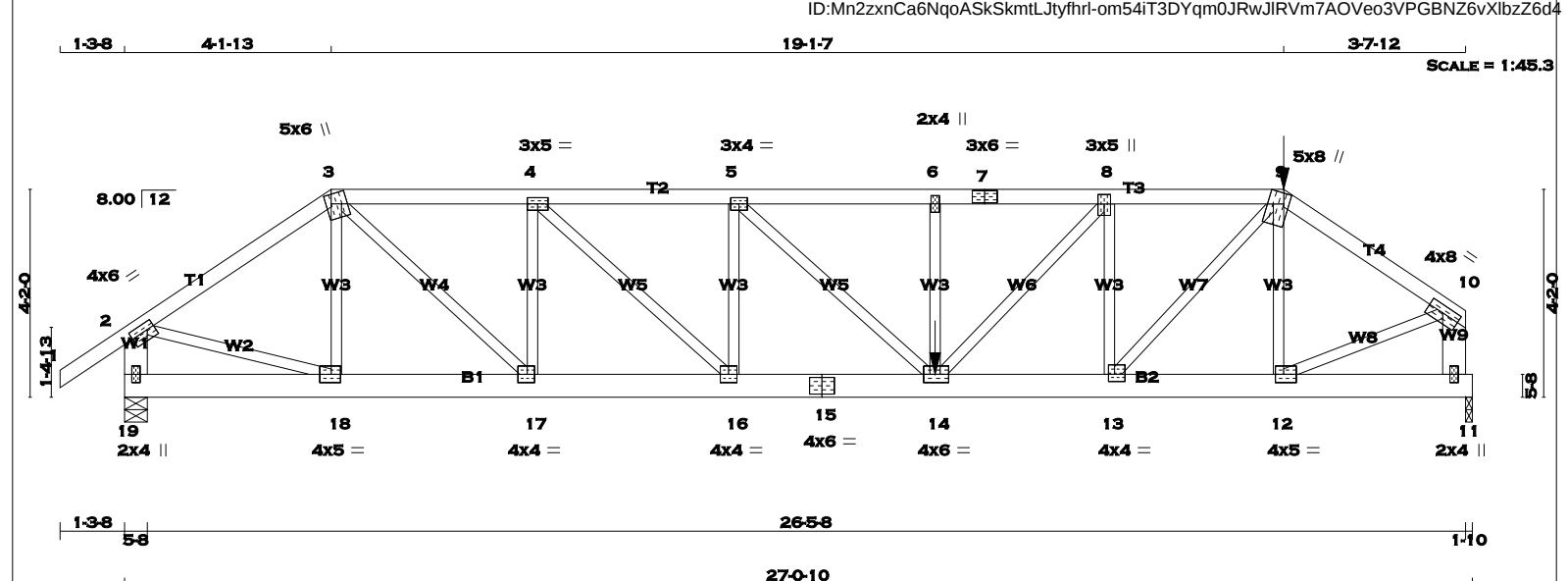
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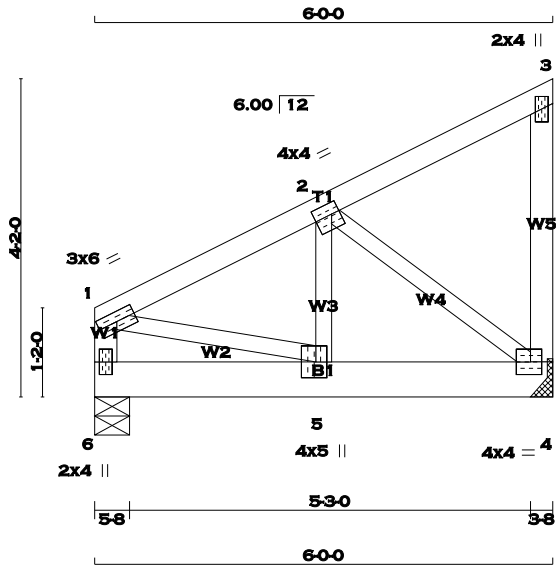


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SCALE = 1:30.2

TOTAL WEIGHT = 29 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
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 EXCEPT	2x3	DRY	No.2		SPF

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	1.75 1.25
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	5.0	2.50 1.75
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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
4		1263	0	1263	0	0	HANGER BY OTHERS		
6		1263	0	1263	0	0	MIN. SEAT SIZE: 3-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
4	886	620 / 0	0 / 0	0 / 0	0 / 0	0 / 0	266 / 0
6	886	620 / 0	0 / 0	0 / 0	0 / 0	0 / 0	266 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.93 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-1076 / 0	-77.4	-77.4 0.11 (1)	5-93	0 / 946	0.23 (1)	
2-3	-10 / 0	-77.4	-77.4 0.10 (1)	10.00	2-4 -1218 / 0	0.30 (1)	
4-3	-95 / 0	0.0	0.0 0.02 (1)	7.81	1-5 0 / 1003	0.25 (1)	
6-1	-831 / 0	0.0	0.0 0.09 (1)	7.81			
6-5	0 / 0	-343.6	-343.6 0.20 (1)	10.00			
5-4	0 / 971	-343.6	-343.6 0.33 (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 = 16-2-8
END DISTANCE = 6-0-0
END SPAN CARRIED = 16-2-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.
(DEFINED BY USER)

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=0.33 (4-5:1) , WB=0.30 (2-4:1) , SSI=0.40 (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= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.36 (4) (INPUT = 1.00)



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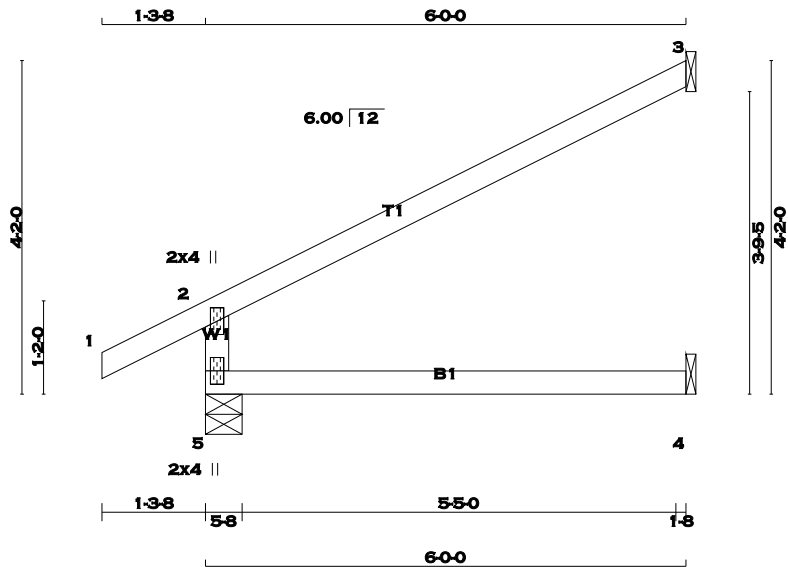
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KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 20 08:14:50 2017 Page 1

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TOTAL WEIGHT = 22 X 17 = 376 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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	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 COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE			
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.	MAX.	MEMB.	WEBS		MAX.
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	LC1 MAX	UNBRAC		MAX. FACTORED	FORCE	
FR-TO		(LBS)	(PLF)	CSI (LC)	UNBRAC	LENGTH	FR-TO		(LBS)	CSI (LC)
5-2	-395 / 0		0.0	0.0	0.13 (4)	7.81				
1-2	0 / 23		-77.4	-77.4	0.10 (1)	10.00				
2-3	-26 / 0		-77.4	-77.4	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 = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.47 (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)
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= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



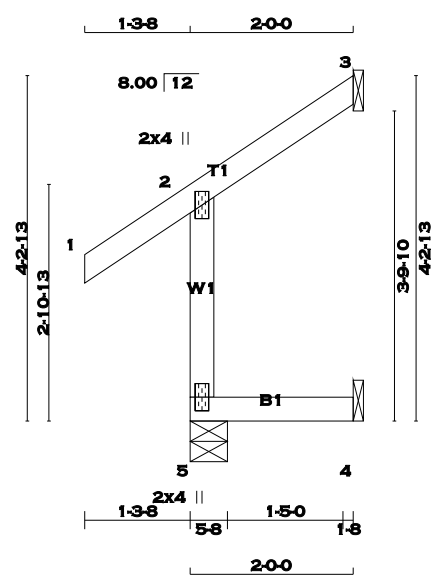
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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





SCALE = 1:28.3

TOTAL WEIGHT = 10 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	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		
5	220	0	220	0	0	5-8	5-8		
3	59	0	59	0	0	1-8	1-8		
4	17	0	19	0	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	152	121 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0
3	40	36 / 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		WEBS		
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB. FORCE	MAX. FORCE
	(LBS)	(LBS)	(PLF)	CSI (LC)	LENGTH	(LBS)	CSI (LC)
FR-TO			FROM	TO	FR-TO		
5-2	-202 / 0		0.0	0.0 0.00 (4)	7.81		
1-2	0 / 29		-77.4	-77.4 0.10 (1)	10.00		
2-3	-10 / 0		-77.4	-77.4 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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

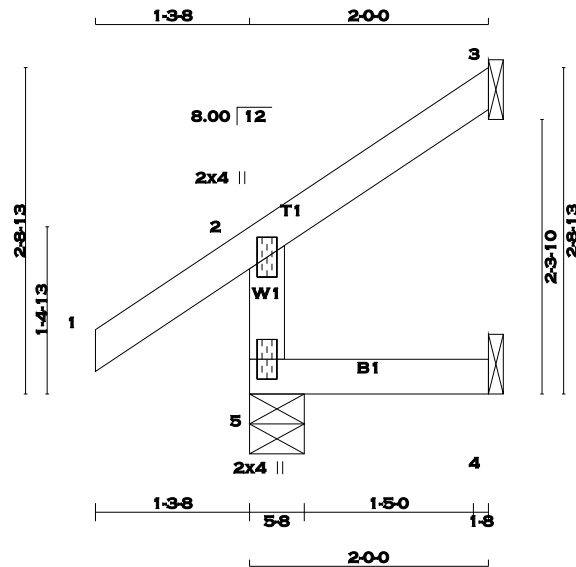
JSI GRIP= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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SCALE = 1:19.3

TOTAL WEIGHT = 15 X 8 = 122 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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	
5		222	0	222	0	0	5-8	5-8	
3		59	0	59	0	0	1-8	1-8	
4		16	0	18	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		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)

		CHORDS		FACTORED		WEBS		FACTORED	
MEMB.		MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MEMB.		MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO						FR-TO			
5-2		-202 / 0	0.0	0.0	0.01 (4)	7.81			
1-2		0 / 29	-77.4	-77.4	0.10 (1)	10.00			
2-3		-10 / 0	-77.4	-77.4	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
MT20	618	354	1667	822	2284

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)



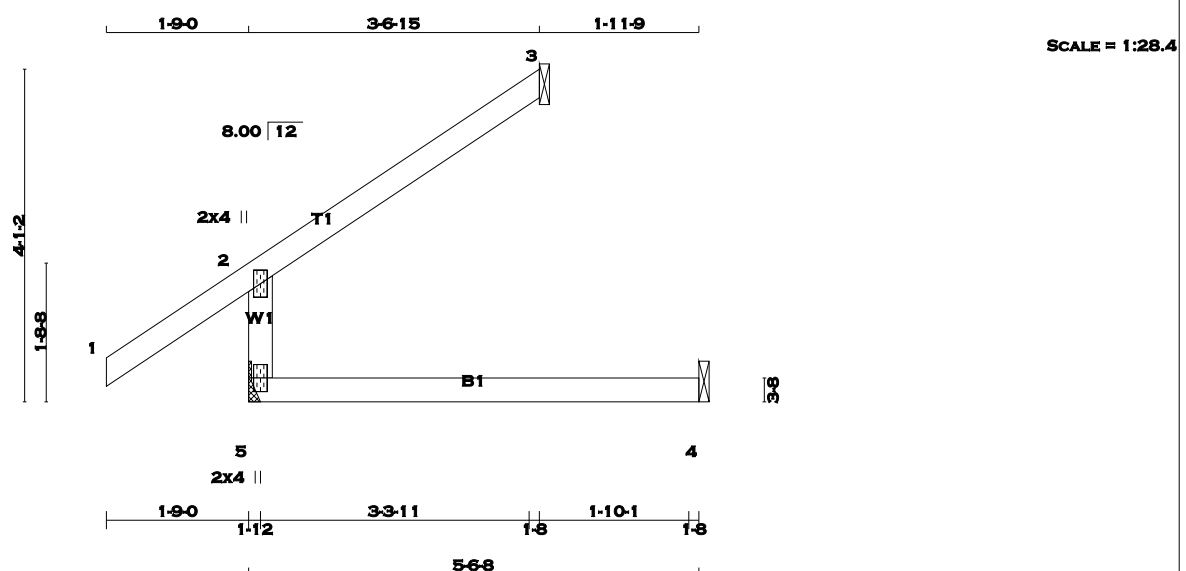
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TOTAL WEIGHT = 15 lb [M]

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	370	0	370	0	0	
3	104	0	104	0	0	
4	42	0	47	0	0	

MIN. SEAT SIZE: 1-12

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	258	189 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0
3	71	63 / 0	0 / 0	0 / 0	0 / 0	8 / 0	0 / 0
4	33	0 / 0	0 / 0	0 / 0	0 / 0	33 / 0	0 / 0

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	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO				
5-2	-314 / 0	0.0	0.0 0.09 (4)	7.81				
1-2	0 / 39	-77.4	-77.4 0.18 (1)	10.00				
2-3	-19 / 0	-77.4	-77.4 0.17 (1)	6.25				
5-4	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/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 (0.03")

CSI: TC=0.18 (1-2:1), BC=0.12 (4-5:4), WB=0.00 (n/a:0), SSI=0.11 (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.

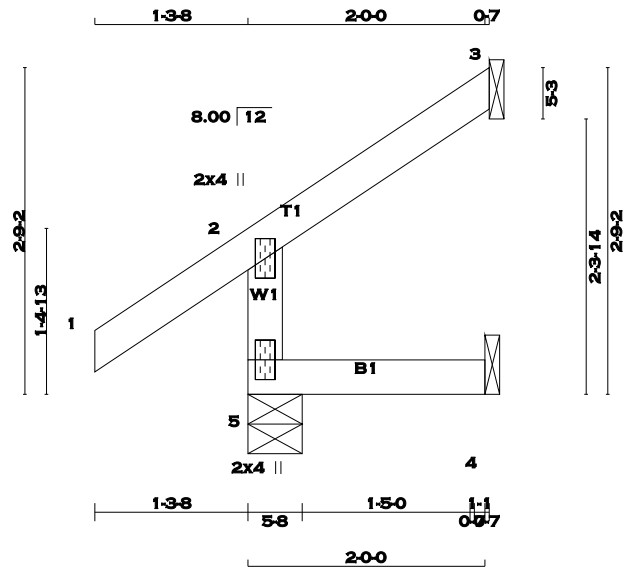
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JSI METAL= 0.08 (2) (INPUT = 1.00)



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SCALE = 1:19.4

TOTAL WEIGHT = 8 lb
[M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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	
5	223	0	223	0	0	5-8	5-8	
3	60	0	60	0	0	1-8	1-8	
4	16	0	18	0	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		LIVE	PERM.LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	VERT	HORZ					
5	154	123 / 0	0 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 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		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)
FR-TO								
5-2	-204 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00			
2-3	-11 / 0	-77.4	-77.4	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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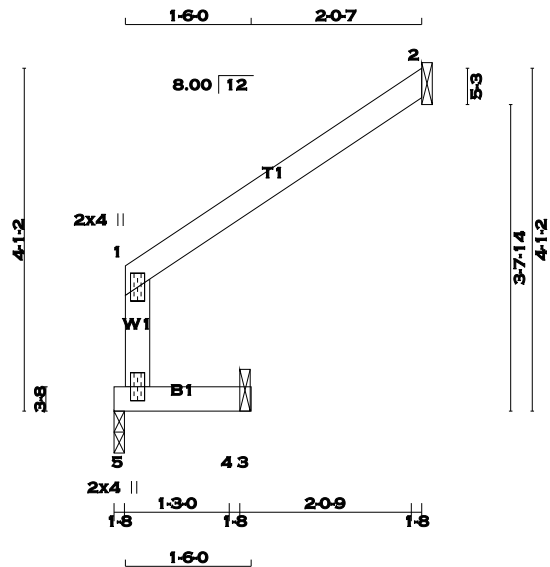
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Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 20 08:14:52 2017 Page 1

ID:Mn2zxnCa6NqoASkSkmLTJtyfhrl-DLnDKV56ql8aAvfuQa3Tlo02a08ecizpF38BMwzZ6d1



SCALE = 1:27.5

TOTAL WEIGHT = 8 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5	123	0	123	0	0	1-8	1-8	
2	122	0	122	0	0	1-8	1-8	
4	55	0	55	0	0	1-8	1-8	

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 2 , 4

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
5	85		67 / 0		0 / 0		0 / 0		0 / 0		18 / 0		0 / 0	
2	83		73 / 0		0 / 0		0 / 0		0 / 0		10 / 0		0 / 0	
4	39		24 / 0		0 / 0		0 / 0		0 / 0		15 / 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 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
5-1	-151 / 0	0.0	0.0	0.06 (1)	7.81		
1-2	-8 / 0	-77.4	-77.4	0.12 (1)	10.00		
5-4	0 / 0	-17.5	-17.5	0.07 (1)	10.00		
4-3	0 / 0	-17.5	-17.5	0.00 (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 (0.19")
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=0.12 (1-2:1) , BC=0.07 (4-5:1) , WB=0.00 (n/a:0) , SSI=0.10 (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.

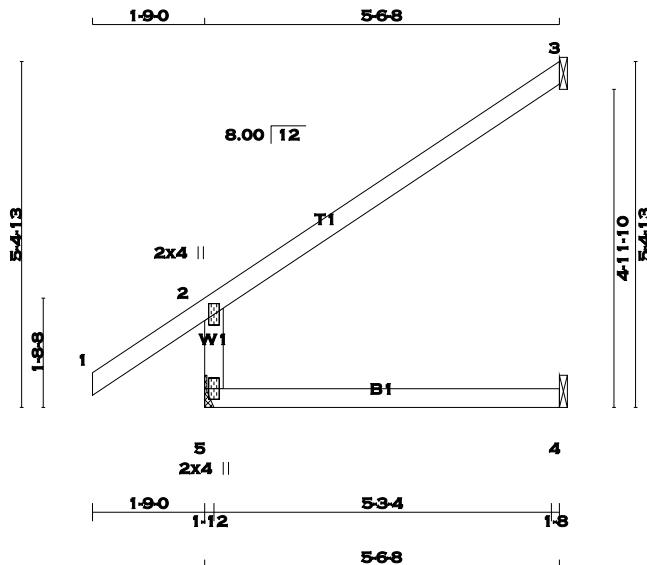
JSI GRIP= 0.10 (1) (INPUT = 0.90)
JSI METAL= 0.04 (1) (INPUT = 1.00)



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SCALE = 1:36.0

TOTAL WEIGHT = 2 X 18 = 36 lb [M]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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	465	0	465	0	0	
3	161	0	161	0	0	
4	42	0	47	0	0	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
5	323	247 / 0	0 / 0		0 / 0	0 / 0	76 / 0	0 / 0
3	109	97 / 0	0 / 0		0 / 0	0 / 0	12 / 0	0 / 0
4	33	0 / 0	0 / 0		0 / 0	0 / 0	33 / 0	0 / 0

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		WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)	MAX. (LC)
FR-TO		FROM TO				
5-2	-410 / 0	0.0	0.0	0.09 (4)	7.81	
1-2	0 / 39	-77.4	-77.4	0.18 (1)	10.00	
2-3	-30 / 0	-77.4	-77.4	0.40 (1)	6.25	
5-4	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/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 (0.03")

CSI: TC=0.40 (2-3:1) , BC=0.12 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.17 (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= 0.26 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



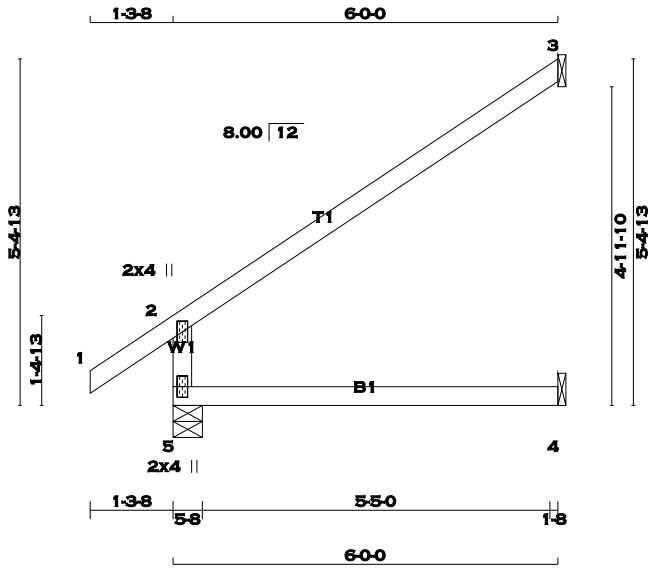
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SCALE = 1:35.9

TOTAL WEIGHT = 18 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	UP
5	457	0	457	0
3	174	0	174	0
4	44	0	49	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE
5	318	239 / 0	0 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0
4	35	0 / 0	0 / 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	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FACTORED	VERT. LOAD	LC1	MAX	MAX.
	MAX. FACTORED	FORCE	(LBS)	(PLF)	CSI (LC)	UNBRAC		MAX. FACTORED	FORCE	(LBS)	CSI (LC)	UNBRAC
FR-TO							FR-TO					
5-2	-396 / 0	0.0	0.0	0.12 (4)	7.81		5-2	-396 / 0	0.0	0.0	0.12 (4)	7.81
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00		1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00
2-3	-32 / 0	-77.4	-77.4	0.47 (1)	6.25		2-3	-32 / 0	-77.4	-77.4	0.47 (1)	6.25
5-4	0 / 0	-17.5	-17.5	0.13 (4)	10.00		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	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=0.19 (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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (2) (INPUT = 0.90)

JSI METAL= 0.10 (2) (INPUT = 1.00)



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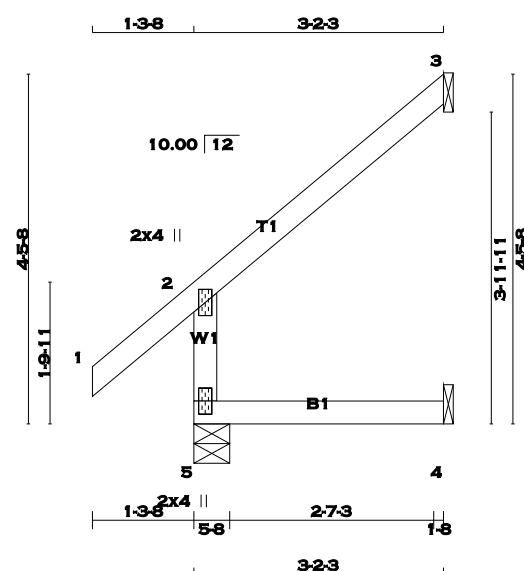
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SCALE = 1:29.4

TOTAL WEIGHT = 8 X 12 = 97 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	No.2

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	292	0	292	0	5-8	5-8
3	93	0	93	0	1-8	1-8
4	25	0	28	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	202	157 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
3	63	56 / 0	0 / 0	0 / 0	0 / 0	7 / 0	0 / 0
4	20	0 / 0	0 / 0	0 / 0	0 / 0	20 / 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		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. (LC)	MEMB. FORCE (LBS)	MAX. (LC)	MEMB. FORCE (LBS)	MAX. (LC)
FR-TO								
5-2	-261 / 0	0.0	0.0	0.02 (4)	7.81			
1-2	0 / 34	-77.4	-77.4	0.11 (1)	10.00			
2-3	-20 / 0	-77.4	-77.4	0.13 (1)	6.25			
5-4	0 / 0	-17.5	-17.5	0.04 (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=0.13 (2-3:1) , BC=0.04 (4-5:4) , WB=0.00 (n/a:0) , 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= 0.19 (2) (INPUT = 0.90)
JSI METAL= 0.07 (2) (INPUT = 1.00)



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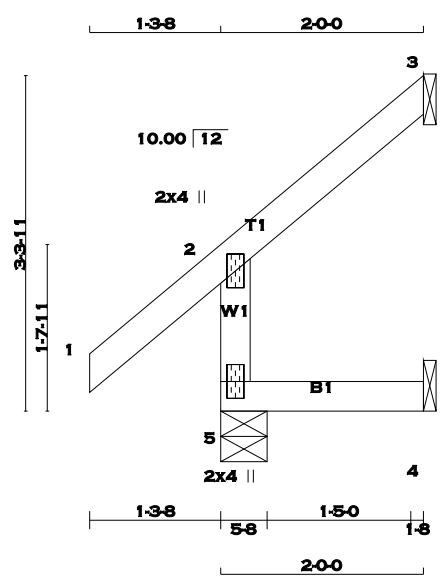
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KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 20 08:14:53 2017 Page 1

ID:Mn2zxnCa6NqoAskSkmLJtyfhrL-hYLBxR6kb2HRn2E4_HaiH0YDaPViL9DyUjtkuMzZ6d0



TOTAL WEIGHT = 6 X 9 = 53 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
5	BMV1+p	MT20	2.0	4.0	

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	
5	222	0	222	0	0	5-8	
3	59	0	59	0	0	1-8	
4	16	0	18	0	0	1-8	

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	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, 3

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		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	FACTORED MAX. FORCE (LBS)
				CSI (LC)
FR-TO		FROM TO		
5-2	-203 / 0	0.0 0.01 (4)	7.81	
1-2	0 / 34	-77.4 -77.4 (1)	10.00	
2-3	-12 / 0	-77.4 -77.4 (1)	6.25	
5-4	0 / 0	-17.5 -17.5 (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=0.11 (1-2:1) , BC=0.02 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.06 (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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

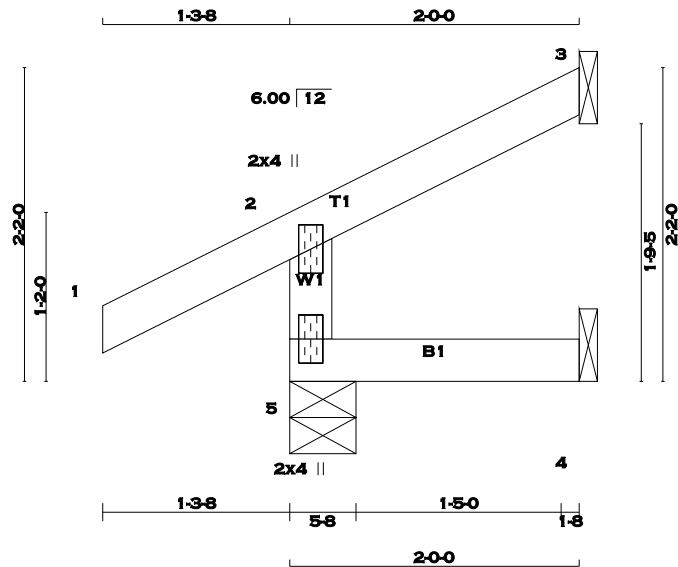
JSI GRIP= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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SCALE: 3/4"=1'

TOTAL WEIGHT = 14 X 7 = 104 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	5-8	5-8
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	152	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		FACTORED			MEMB.	MAX. FACTORED		
	FORCE		VERT. LOAD	LC1	MAX		FORCE	MAX	
	(LBS)		(PLF)	CSI	(LC)		(LBS)	CSI (LC)	
FR-TO			FROM	TO		FR-TO			
5-2	-201 / 0		0.0	0.0	0.01 (4)				
1-2	0 / 23		-77.4	-77.4	0.10 (1)				
2-3	-8 / 0		-77.4	-77.4	0.05 (1)				
5-4	0 / 0		-17.5	-17.5	0.02 (4)				
				</					

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= 0.04 (2) (INPUT = 1.00)



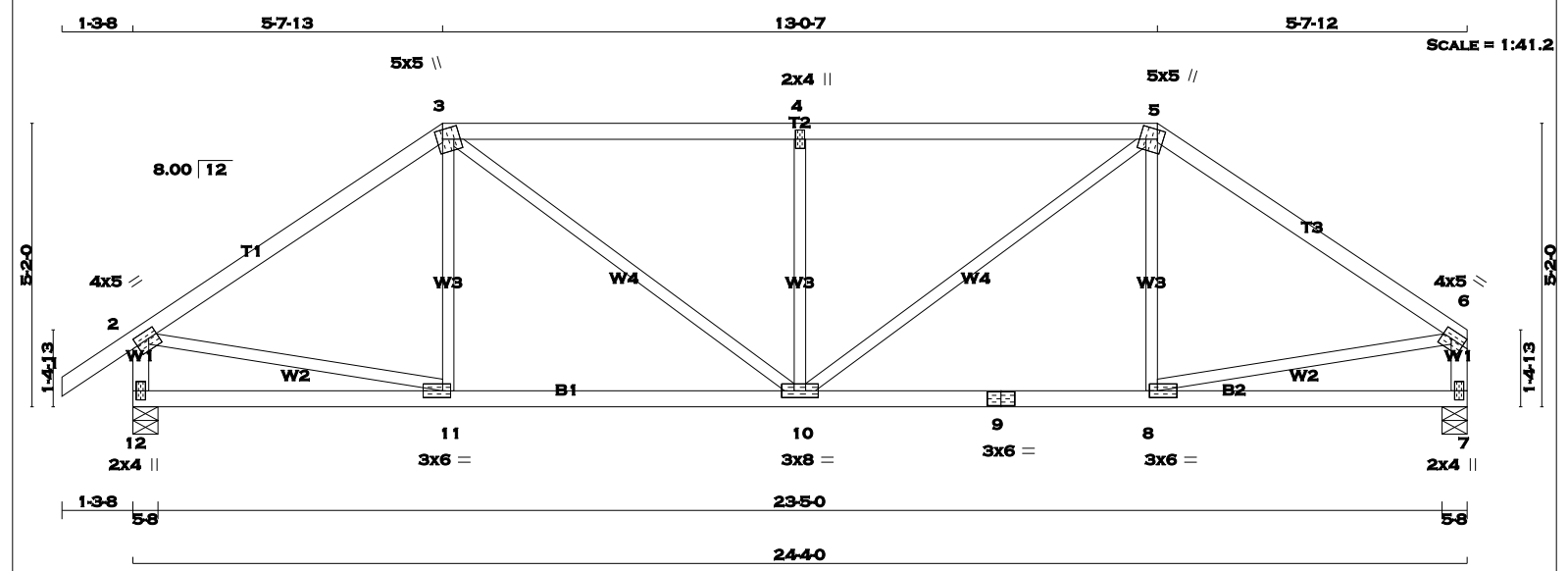
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BUILDING DIVISION

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TOTAL WEIGHT = 95 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
5 - 6	2x4	DRY	No.2
12 - 2	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
9 - 7	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	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	5.0	2.00	1.25
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	6.0	1.50	1.75
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-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	
12		1260	0	1260	0	0	5-8	5-8	
7		1154	0	1154	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN.		COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
12		882	631 / 0	0 / 0	0 / 0	0 / 0	252 / 0	0 / 0	
7		810	567 / 0	0 / 0	0 / 0	0 / 0	243 / 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 = 4.43 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.									
LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS		WEBS					
		MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED
MEMB.		FORCE (LBS)	VERT. LOAD (LBS)	LC1 (PLF)	MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	MEMB.
FR-TO		FROM TO		LENGTH		FR-TO		LENGTH	
1-2		0 / 29	-77.4	-77.4	0.10 (1)	10.00	11-3	-76 / 74	0.03 (1)
2-3		-1259 / 0	-77.4	-77.4	0.50 (1)	5.08	3-10	0 / 607	0.14 (1)
3-4		-1531 / 0	-77.4	-77.4	0.66 (1)	4.43	10-4	-619 / 0	0.24 (1)
4-5		-1531 / 0	-77.4	-77.4	0.66 (1)	4.43	10-5	0 / 607	0.14 (1)
5-6		-1259 / 0	-77.4	-77.4	0.50 (1)	5.08	8-5	-76 / 74	0.03 (1)
12-2		-1221 / 0	0.0	0.0	0.13 (1)	7.25	2-11	0 / 1064	0.24 (1)
7-6		-1115 / 0	0.0	0.0	0.11 (1)	7.51	8-6	0 / 1064	0.24 (1)
12-11		0 / 0	-17.5	-17.5	0.15 (4)	10.00			
11-10		0 / 1044	-17.5	-17.5	0.25 (1)	10.00			
10-9		0 / 1044	-17.5	-17.5	0.25 (1)	10.00			
9-8		0 / 1044	-17.5	-17.5	0.25 (1)	10.00			
8-7		0 / 0	-17.5	-17.5	0.15 (4)	10.00			

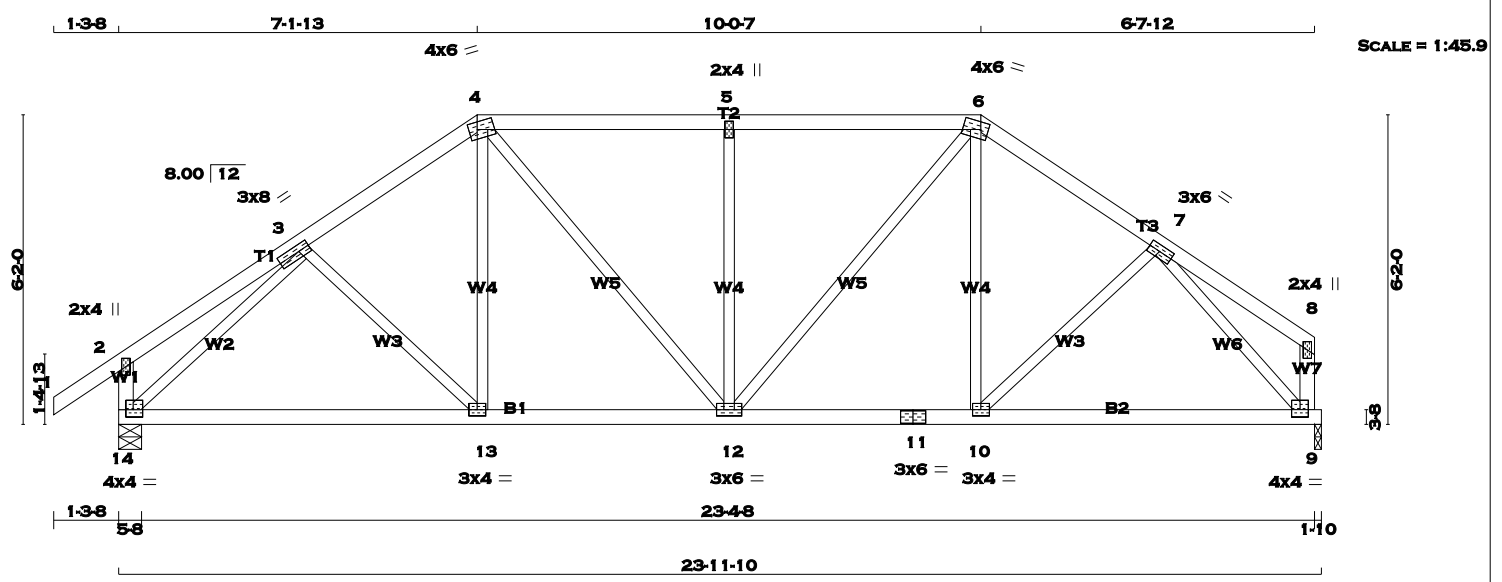
DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN. C/C									
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12									
THIS TRUSS IS DESIGNED FOR RESIDENTIAL 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 (0.81")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")									
ALLOWABLE DEFL.(TL)= L/360 (0.81")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")									
CSI: TC=0.66 (3-4:1), BC=0.25 (8-10:1), WB=0.24 (4-10:1), SSI=0.24 (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	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 (8) (INPUT = 0.90)									
JSI METAL= 0.43 (2) (INPUT = 1.00)									

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KOTT , Stouffville, ON, CGC



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
14 - 2	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
14 - 11	2x4	DRY	No.2
11 - 9	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	TMV+p	MT20	2.0	4.0	
3	TMVW-t	MT20	3.0	8.0	1.50 2.75
4	TTWW-m	MT20	4.0	6.0	1.75 2.00
5	TMV+w	MT20	2.0	4.0	
6	TTWW-m	MT20	4.0	6.0	1.75 1.75
7	TMVW-t	MT20	3.0	6.0	1.50 2.75
8	TMV+p	MT20	2.0	4.0	
9	BMVW1-t	MT20	4.0	4.0	1.75 2.00
10	BMVW-t	MT20	3.0	4.0	
11	BS-t	MT20	3.0	6.0	
12	BMVW-t	MT20	3.0	6.0	
13	BMVW-t	MT20	3.0	4.0	
14	BMVW1-t	MT20	4.0	4.0	1.75 1.75
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



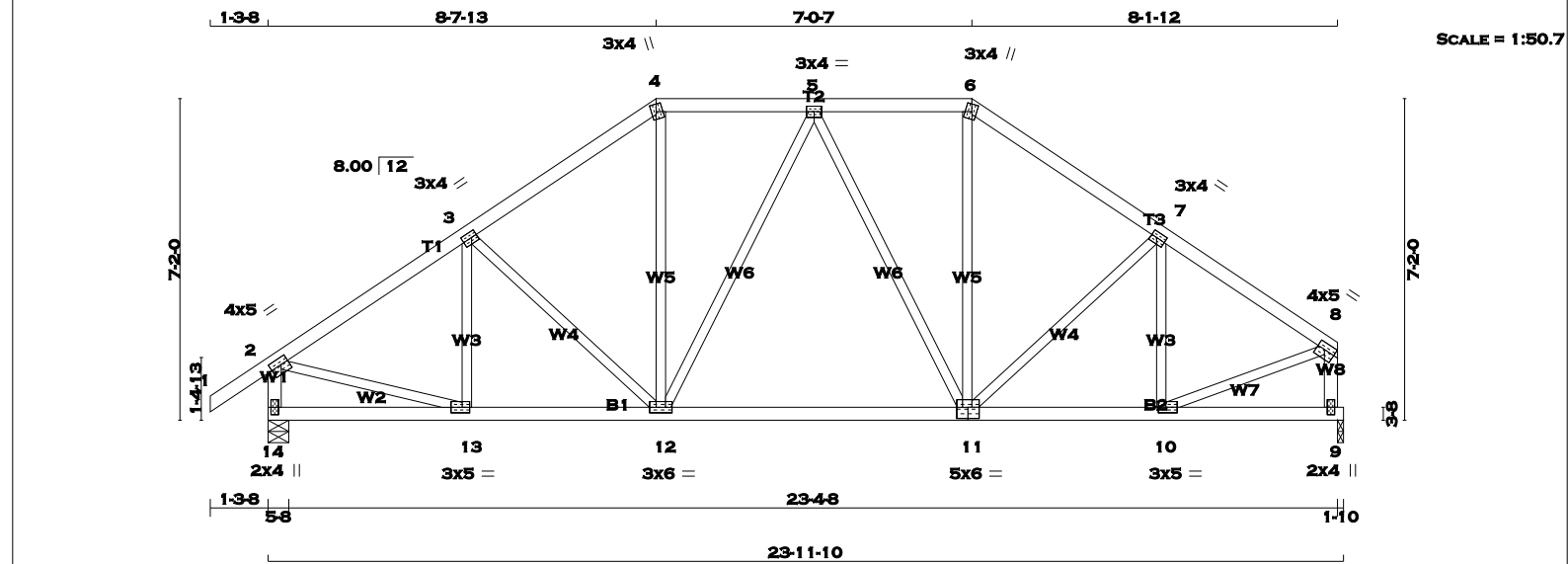
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		1237	0	1237	0	0	5-8	5-8	
9		1130	0	1130	0	0	1-10	1-10	
UNFACTORED REACTIONS									
		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
14		866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
9		793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.57 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS			WEBS				
		MAX. FACTORED	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	-77.4	-77.4	0.10 (1)	10.00	3-13	-31 / 40	0.01 (4)
2-3		0 / 16	-77.4	-77.4	0.15 (1)	10.00	13-4	0 / 154	0.04 (4)
3-4		-1193 / 0	-77.4	-77.4	0.13 (1)	5.73	4-12	0 / 317	0.07 (1)
4-5		-1186 / 0	-77.4	-77.4	0.26 (1)	5.57	12-5	-474 / 0	0.28 (1)
5-6		-1186 / 0	-77.4	-77.4	0.26 (1)	5.57	12-6	0 / 382	0.09 (1)
6-7		-1142 / 0	-77.4	-77.4	0.12 (1)	5.83	10-6	0 / 97	0.03 (4)
7-8		0 / 17	-77.4	-77.4	0.13 (1)	10.00	10-7	0 / 76	0.02 (4)
14-2		-214 / 0	0.0	0.0	0.02 (1)	7.81	14-3	-1393 / 0	0.55 (1)
9-8		-89 / 0	0.0	0.0	0.01 (1)	7.81	7-9	-1328 / 0	0.45 (1)
14-13		0 / 1000	-17.5	-17.5	0.27 (1)	10.00			
13-12		0 / 980	-17.5	-17.5	0.27 (4)	10.00			
12-11		0 / 938	-17.5	-17.5	0.25 (1)	10.00			
11-10		0 / 938	-17.5	-17.5	0.25 (1)	10.00			
10-9		0 / 881	-17.5	-17.5	0.24 (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 (0.79")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")									
ALLOWABLE DEFL.(TL)= L/360 (0.79")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")									
CSI: TC=0.26 (4-5:1), BC=0.27 (12-13:4), WB=0.55 (3-14:1), 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)	(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= 0.37 (14) (INPUT = 1.00)									

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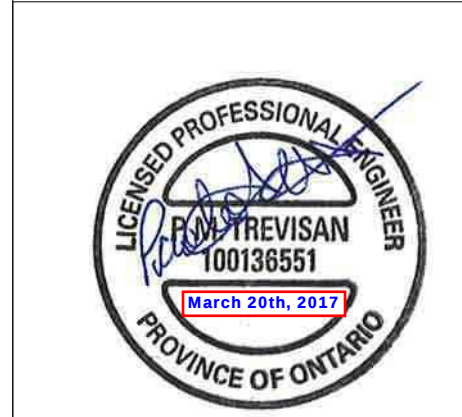




TOTAL WEIGHT = 108 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	No.2
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
14 - 2	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
14 - 11	2x4	DRY	No.2	SPF	
11 - 9	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	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TMVW-t	MT20	3.0	4.0		
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	5.0	1.75	Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	2.00
11	BSVW-t	MT20	5.0	6.0	3.00	3.00
12	BMVW-t	MT20	3.0	6.0		
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.						



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	
14		1237	0	1237	0	0	5-8	5-8	
9		1130	0	1130	0	0	1-10	1-10	
UNFACTORED REACTIONS									
		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
14		866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
9		793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.55 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		FACTORED VERT. LOAD (LBS)	MAX. FACTORED		MAX. FACTORED		MAX. FACTORED
		MEMB.	FORCE (LBS)		MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)	
				VERT. LOAD LC1 MAX (PLF)		UNBRAC LENGTH (LC)		UNBRAC LENGTH (LC)	
		FR-TO	TO	FROM	TO	FR-TO	TO	FR-TO	TO
1-2		0 / 29		-77.4	-77.4	0.10 (1)	10.00	13-3	-186 / 9
2-3		-1249 / 0		-77.4	-77.4	0.20 (1)	5.55	3-12	-196 / 0
3-4		-1121 / 0		-77.4	-77.4	0.19 (1)	5.78	12-4	0 / 379
4-5		-919 / 0		-77.4	-77.4	0.12 (1)	6.25	12-5	-155 / 0
5-6		-895 / 0		-77.4	-77.4	0.12 (1)	6.25	5-11	-208 / 0
6-7		-1091 / 0		-77.4	-77.4	0.17 (1)	5.87	11-6	0 / 359
7-8		-1132 / 0		-77.4	-77.4	0.17 (1)	5.78	11-7	-95 / 0
14-2		-1201 / 0		0.0	0.0	0.12 (1)	7.29	10-7	-280 / 0
9-8		-1099 / 0		0.0	0.0	0.12 (1)	7.55	2-13	0 / 1087
								10-8	0 / 1020
14-13		0 / 0		-17.5	-17.5	0.07 (4)	10.00		0.23 (1)
13-12		0 / 1056		-17.5	-17.5	0.24 (1)	10.00		
12-11		0 / 988		-17.5	-17.5	0.23 (1)	10.00		
11-10		0 / 960		-17.5	-17.5	0.23 (1)	10.00		
10-9		0 / 0		-17.5	-17.5	0.06 (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 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.20 (2-3:1), BC=0.24 (12-13:1), WB=0.25 (5-11:1), SSI=0.14 (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

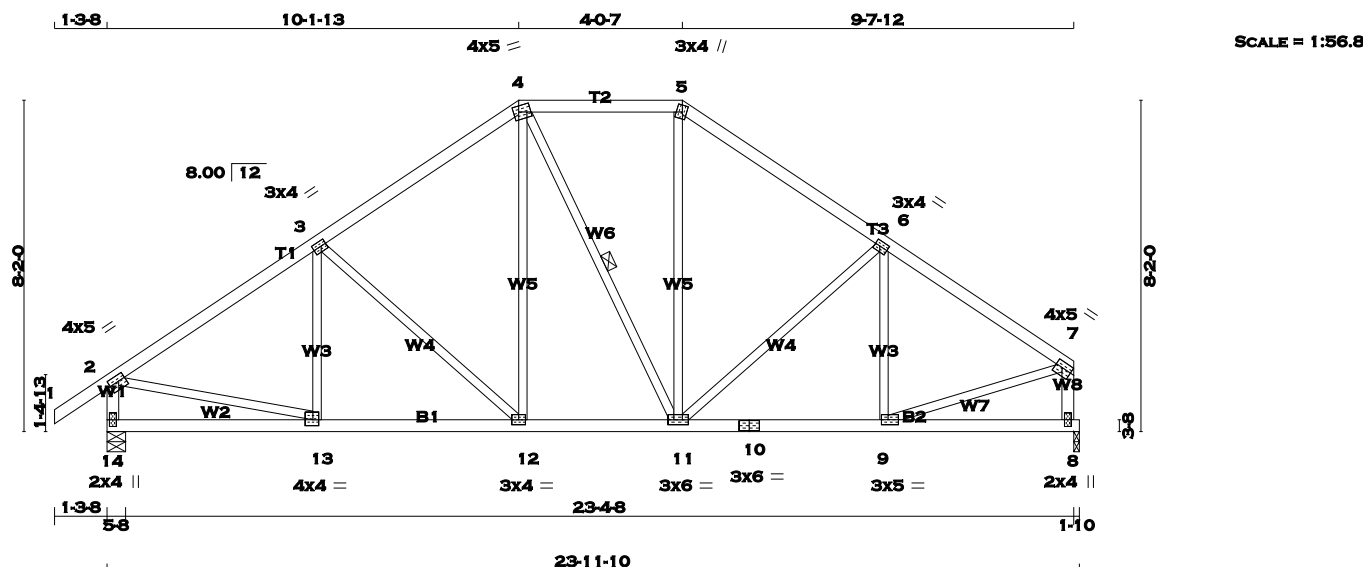
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (13) (INPUT = 0.90)
JSI METAL= 0.42 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 108 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
14 - 2	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
14 - 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	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	TTW+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	6.0	
12	BMVW-t	MT20	3.0	4.0	
13	BMVW-t	MT20	4.0	4.0	1.75 1.75
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	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
14	1237	0	1237	0	0	5-8	5-8		
8	1130	0	1130	0	0	1-10	1-10		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
14	866	619 / 0	0 / 0	0 / 0	247 / 0
8	793	555 / 0	0 / 0	0 / 0	238 / 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 = 5.43 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 4-11. DBS = 20-0-0, CBF = 3 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		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10-00	13-3	-123 / 50	0.04 (1)
2-3	-1263 / 0	-77.4 -77.4	0.28 (1)	5.43	3-12	-314 / 0	0.27 (1)
3-4	-1035 / 0	-77.4 -77.4	0.27 (1)	5.85	12-4	0 / 282	0.06 (1)
4-5	-830 / 0	-77.4 -77.4	0.17 (1)	6.25	4-11	-24 / 0	0.01 (1)
5-6	-1020 / 0	-77.4 -77.4	0.24 (1)	5.92	11-5	0 / 249	0.06 (1)
6-7	-1168 / 0	-77.4 -77.4	0.25 (1)	5.62	11-6	-222 / 0	0.19 (1)
14-2	-1199 / 0	0.0 0.0	0.12 (1)	7.30	9-6	-207 / 20	0.07 (1)
8-7	-1097 / 0	0.0 0.0	0.12 (1)	7.55	2-13	0 / 1095	0.25 (1)
					9-7	0 / 1037	0.23 (1)
14-13	0 / 0	-17.5 -17.5	0.11 (4)	10.00			
13-12	0 / 1072	-17.5 -17.5	0.23 (1)	10.00			
12-11	0 / 841	-17.5 -17.5	0.18 (1)	10.00			
11-10	0 / 993	-17.5 -17.5	0.21 (1)	10.00			
10-9	0 / 993	-17.5 -17.5	0.21 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.10 (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 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.28 (2-3:1), BC=0.23 (12-13:1), WB=0.27 (3-12:1), 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 (PLI)		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.

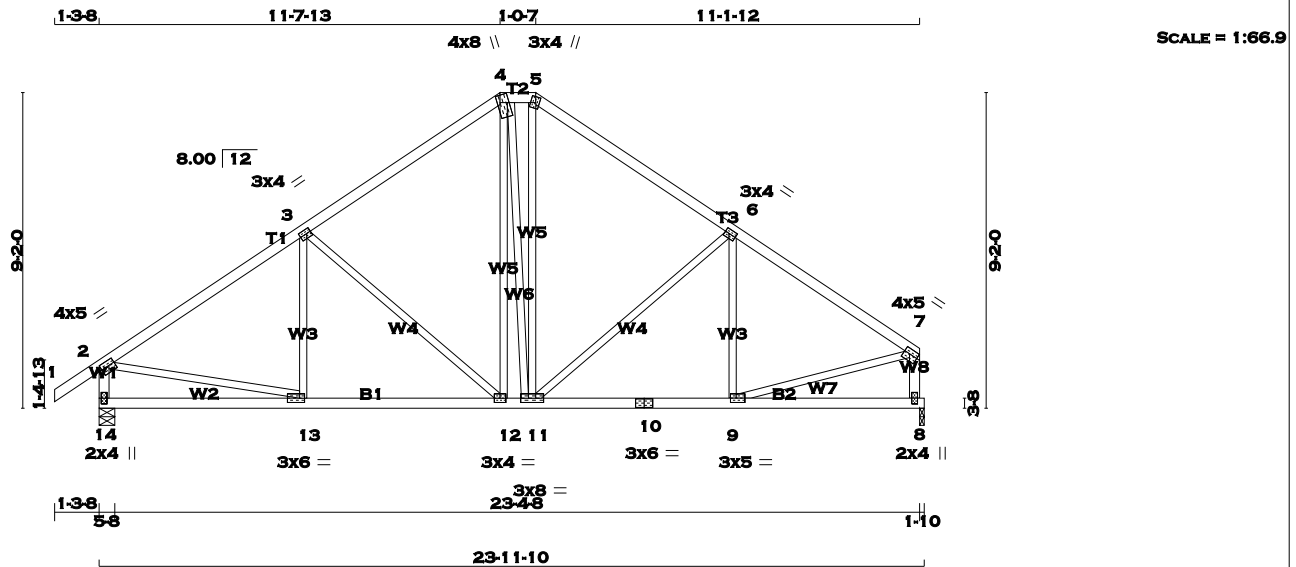
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.43 (2) (INPUT = 1.00)



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LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE						
1 - 4	2x4	DRY	No.2			SPF	
4 - 5	2x4	DRY	No.2			SPF	
5 - 7	2x4	DRY	No.2			SPF	
14 - 2	2x4	DRY	No.2			SPF	
8 - 7	2x4	DRY	No.2			SPF	
14 - 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	TTW+m	MT20	4.0	8.0	2.50	1.00
5	TTW+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	6.0	1.50	1.75
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.						



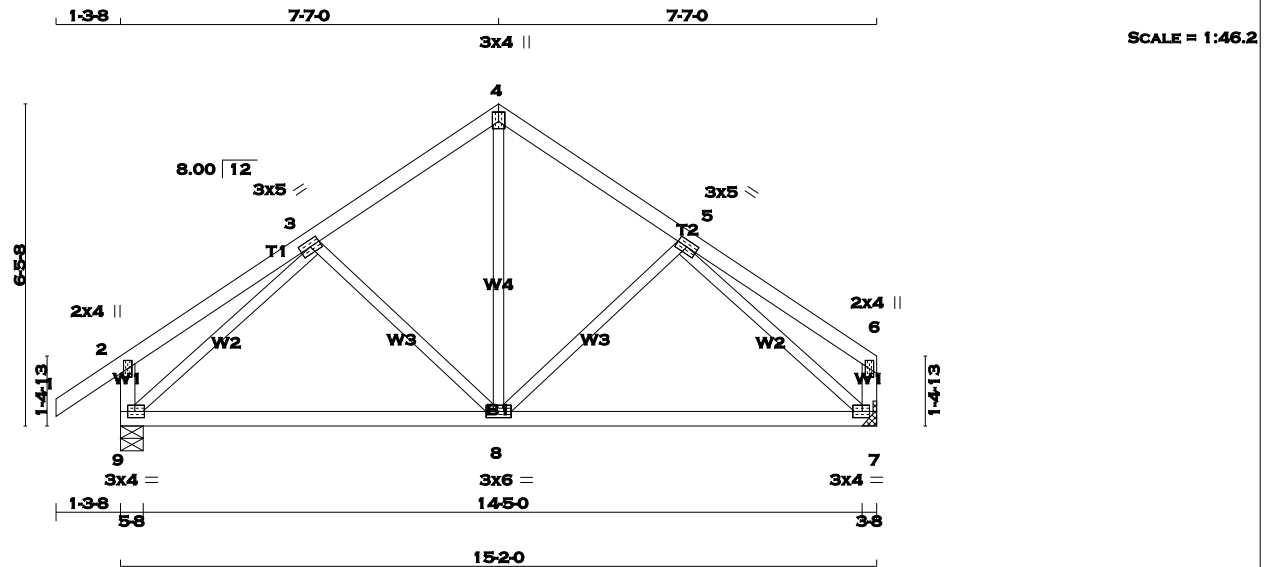
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		1237	0	1237	0	0	5-8	5-8	
8		1130	0	1130	0	0	1-10	1-10	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
14		866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
8		793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 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 = 5.29 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 (LBS)		VERT. LOAD LC1 MAX (PLF) CSI (LC)		MEMB. FORCE (LBS) MAX (PLF) CSI (LC)			
				FROM TO		LENGTH FR-TO			
1-2		0 / 29		-77.4	-77.4 0.10 (1)	10.00	13-3	-77 / 77	0.03 (1)
2-3		-1263 / 0		-77.4	-77.4 0.38 (1)	5.29	3-12	-419 / 0	0.50 (1)
3-4		-944 / 0		-77.4	-77.4 0.35 (1)	5.93	12-4	0 / 286	0.06 (1)
4-5		-764 / 0		-77.4	-77.4 0.02 (1)	6.25	4-11	0 / 16	0.00 (4)
5-6		-943 / 0		-77.4	-77.4 0.33 (1)	5.97	11-5	0 / 298	0.07 (1)
6-7		-1182 / 0		-77.4	-77.4 0.33 (1)	5.48	11-6	-328 / 0	0.39 (1)
14-2		-1195 / 0		0.0	0.0 0.12 (1)	7.31	9-6	-157 / 47	0.07 (1)
8-7		-1091 / 0		0.0	0.0 0.12 (1)	7.57	2-13	0 / 1093	0.25 (1)
							9-7	0 / 1042	0.23 (1)
14-13		0 / 0		-17.5	-17.5 0.15 (4)	10.00			
13-12		0 / 1075		-17.5	-17.5 0.25 (1)	10.00			
12-11		0 / 762		-17.5	-17.5 0.20 (1)	10.00			
11-10		0 / 1009		-17.5	-17.5 0.24 (1)	10.00			
10-9		0 / 1009		-17.5	-17.5 0.24 (1)	10.00			
9-8		0 / 0		-17.5	-17.5 0.13 (4)	10.00			

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN./C/C									
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 (0.79")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")									
ALLOWABLE DEFL.(TL)= L/360 (0.79")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")									
CSI: TC=0.38 (2-3:1), BC=0.25 (12-13:1), WB=0.50 (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 1656									
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (13) (INPUT = 0.90)									
JSI METAL= 0.43 (2) (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
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
9 - 2	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
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		MAXIMUM FACTORED		INPUT	REQRD		
	GROSS REACTION		GROSS REACTION		BRG	BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9	826	0	826	0	0	5-8	5-8	
7	719	0	719	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
9		577	417 / 0	0 / 0	0 / 0	0 / 0	160 / 0
7		505	353 / 0	0 / 0	0 / 0	0 / 0	152 / 0

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

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)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC)	
FR-TO				FROM	TO	FR-TO			
1-2	0 / 29		-77.4	-77.4	0.10 (1)	10.00	8-4	0 / 391	0.09 (1)
2-3	0 / 19		-77.4	-77.4	0.18 (1)	10.00	8-5	-165 / 4	0.08 (1)
3-4	-576 / 0		-77.4	-77.4	0.14 (1)	6.25	3-8	-165 / 4	0.08 (1)
4-5	-576 / 0		-77.4	-77.4	0.14 (1)	6.25	9-3	-806 / 0	0.35 (1)
5-6	0 / 19		-77.4	-77.4	0.18 (1)	10.00	5-7	-806 / 0	0.35 (1)
9-2	-219 / 0		0.0	0.0	0.02 (1)	7.81			
7-6	-113 / 0		0.0	0.0	0.01 (1)	7.81			
9-8	0 / 584		-17.5	-17.5	0.33 (4)	10.00			
8-7	0 / 584		-17.5	-17.5	0.33 (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 (0.51")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.51")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.18 (2-3:1) , BC=0.33 (8-9:4) , WB=0.35 (3-9:1) , SSI=0.12 (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 (9) (INPUT = 0.90)
JSI METAL= 0.23 (3) (INPUT = 1.00)

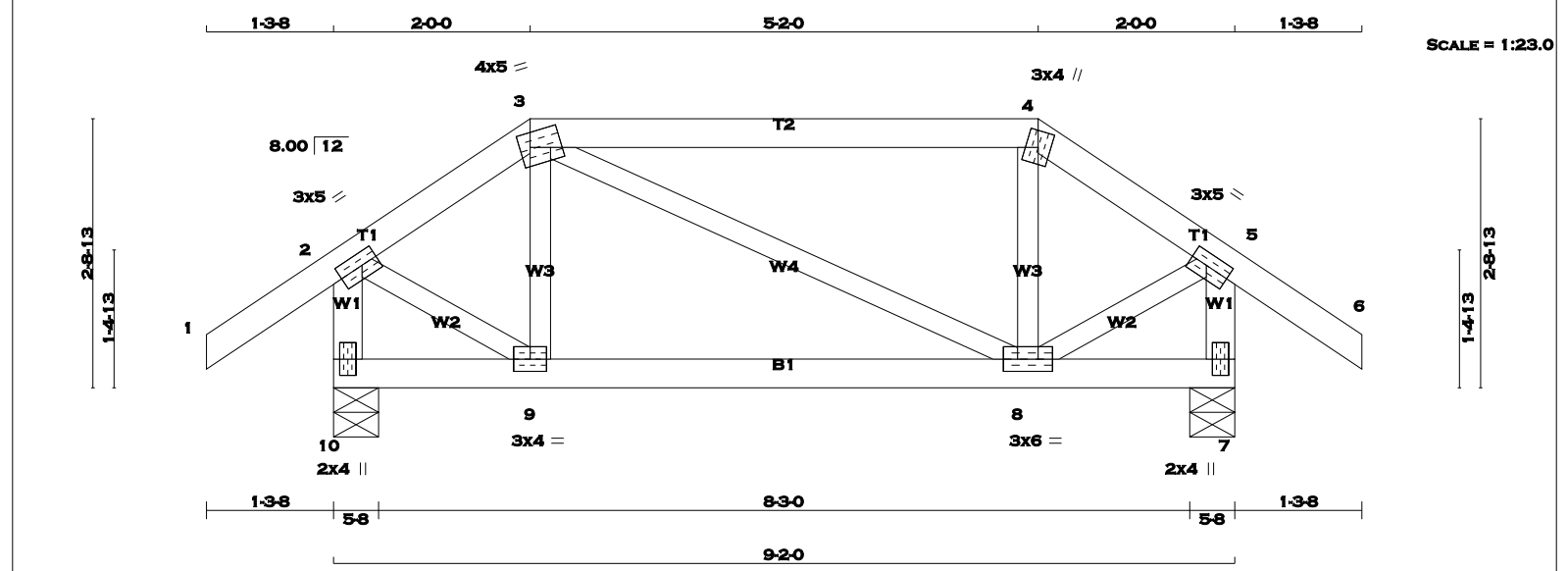


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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

10 - 2

2x4

DRY

No.2

SPF

7 - 5

2x4

DRY

No.2

SPF

10 - 7

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

10

541

0

541

0

0

5-8

5-8

7

541

0

541

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE COMBINED

MAX./MIN. COMPONENT REACTIONS

JT

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

10

377

277 / 0

0 / 0

0 / 0

0 / 0

100 / 0

0 / 0

7

377

277 / 0

0 / 0

0 / 0

0 / 0

100 / 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

TOTAL WEIGHT = 2 X 39 = 78 lb

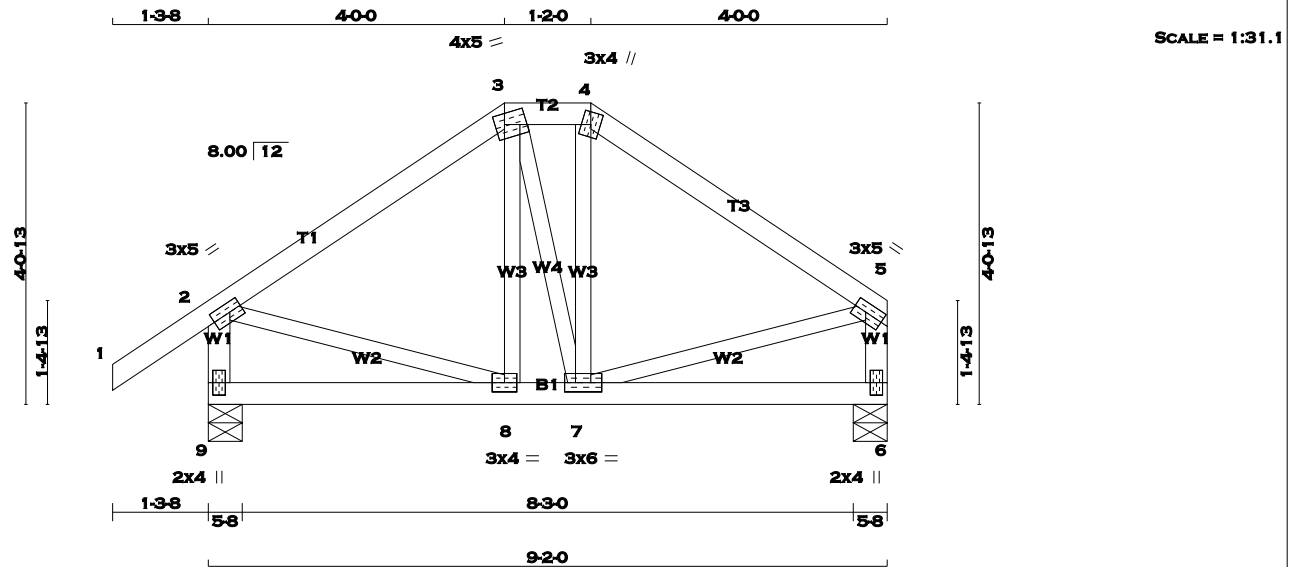
[M]



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TOTAL WEIGHT = 2 X 42 = 84 lb [M][F]

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 - 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	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
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	541	0	541	0	0	5-8	5-8	
6	435	0	435	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
9	377	277 / 0			0 / 0		0 / 0	0 / 0	0 / 0		100 / 0		0 / 0	
6	305	213 / 0			0 / 0		0 / 0	0 / 0	0 / 0		92 / 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 (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	8-3	-20 / 33	0.01 (4)
2-3	-322 / 0	-77.4 -77.4	0.16 (1)	6.25	3-7	0 / 2	0.00 (4)
3-4	-267 / 0	-77.4 -77.4	0.01 (1)	6.25	7-4	-21 / 35	0.01 (4)
4-5	-322 / 0	-77.4 -77.4	0.16 (1)	6.25	2-8	0 / 277	0.06 (1)
9-2	-511 / 0	0.0 0.0	0.05 (1)	7.81	7-5	0 / 277	0.06 (1)
6-5	-404 / 0	0.0 0.0	0.04 (1)	7.81			
9-8	0 / 0	-17.5 -17.5	0.06 (4)	10.00			
8-7	0 / 267	-17.5 -17.5	0.08 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.06 (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 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.16 (2-3:1), BC=0.08 (7-8:4), WB=0.06 (2-8:1), 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

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= 0.51 (7) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)



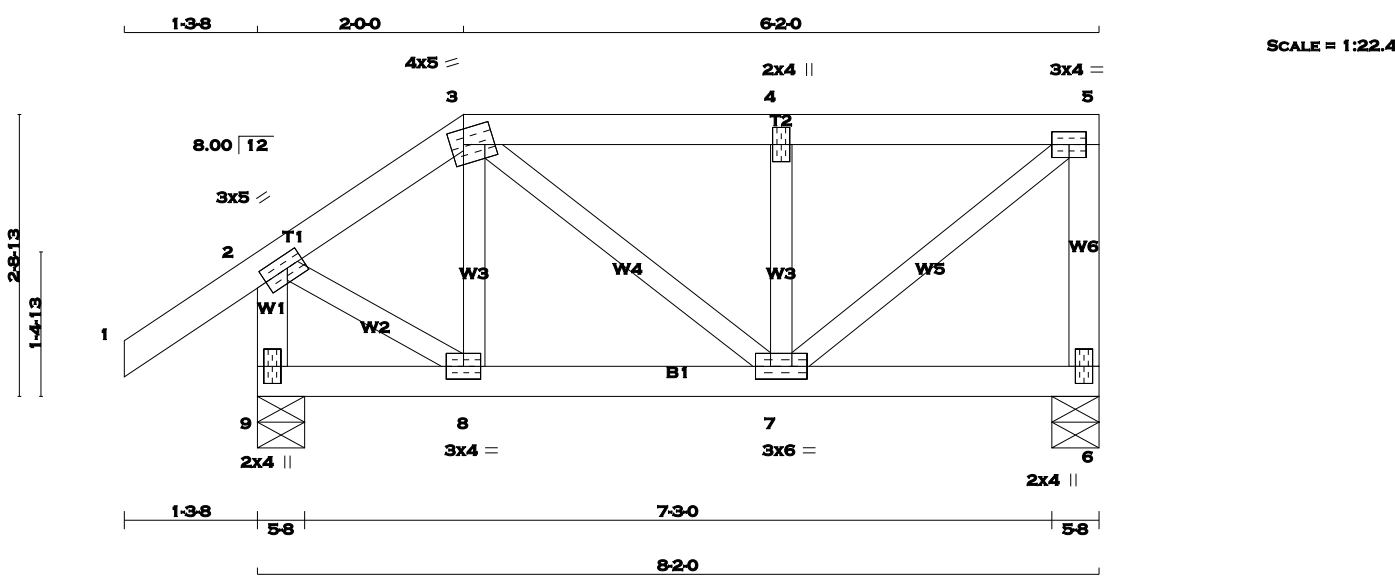
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TOTAL WEIGHT = 35 lb [M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
6 - 5	2x4	DRY	No.2
9 - 2	2x4	DRY	No.2
9 - 6	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TMW+w	MT20	2.0	4.0		
5	TMVW-t	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	3.0	6.0		
8	BMWW-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 REQRD
6	387 0	387 0	5-8 5-8
9	494 0	494 0	5-8 5-8

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
6	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
9	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 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 = 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			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)
FR-TO		FROM	TO
1-2	0 / 29	-77.4	-77.4 0.10 (1)
2-3	-301 / 0	-77.4	-77.4 0.05 (1)
3-4	-341 / 0	-77.4	-77.4 0.11 (1)
4-5	-341 / 0	-77.4	-77.4 0.11 (1)
6-5	-363 / 0	0.0	0.0 0.05 (1)
9-2	-480 / 0	0.0	0.0 0.05 (1)
9-8	0 / 0	-17.5	-17.5 0.02 (4)
8-7	0 / 246	-17.5	-17.5 0.06 (4)
7-6	0 / 0	-17.5	-17.5 0.04 (4)

WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. (LC)
FR-TO		FR-TO	
8-3	-78 / 14	10.00	0.01 (1)
3-7	0 / 120	6.25	0.03 (1)
7-4	-290 / 0	6.25	0.05 (1)
7-5	0 / 435	6.25	0.10 (1)
2-8	0 / 280	7.81	0.06 (1)

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 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.11 (4-5:1), BC=0.06 (7-8:4), WB=0.10 (5-7:1), 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)
	(PSI)	(PLI)	(PLI)		
	MAX	MIN	MAX	MIN	MAX
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

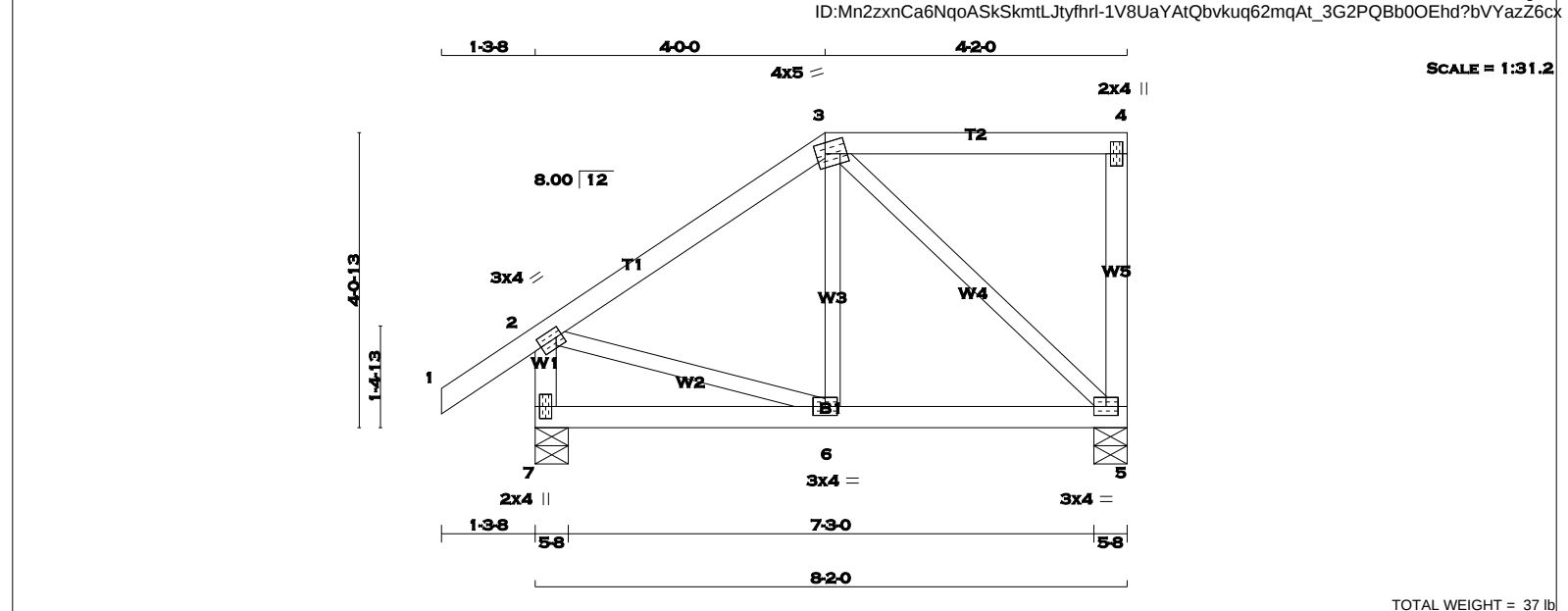
JSI GRIP= 0.82 (7) (INPUT = 0.90)
JSI METAL= 0.13 (7) (INPUT = 1.00)



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LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								DESIGN CRITERIA				[M]	
N. L. G. A. RULES															SPECIFIED LOADS:			
CHORDS SIZE					LUMBER					DESCR.					TOP CH. LL = 23.3 PSF			
1 - 3 2x4 DRY No.2 SPF															DL = 3.0 PSF			
3 - 4 2x4 DRY No.2 SPF															BOT CH. LL = 0.0 PSF			
5 - 4 2x4 DRY No.2 SPF															DL = 7.0 PSF			
7 - 2 2x4 DRY No.2 SPF															TOTAL LOAD = 33.3 PSF			
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	1.00
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.

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED MAX. (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	6-3	0 / 80	0.03 (4)
2-3	-263 / 0	-77.4 -77.4	0.21 (1)	6.25	3-5	-296 / 0	0.14 (1)
3-4	0 / 0	-77.4 -77.4	0.23 (1)	10.00	2-6	0 / 226	0.05 (1)
5-4	-161 / 0	0.0 0.0	0.04 (1)	7.81			
7-2	-465 / 0	0.0 0.0	0.05 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.08 (4)	10.00			
6-5	0 / 220	-17.5 -17.5	0.10 (4)	10.00			

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

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 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.23 (3-4:1), BC=0.10 (5-6:4), WB=0.14 (3-5:1), SSI=0.13 (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= 0.74 (2) (INPUT = 0.90)
JSI METAL= 0.15 (2) (INPUT = 1.00)



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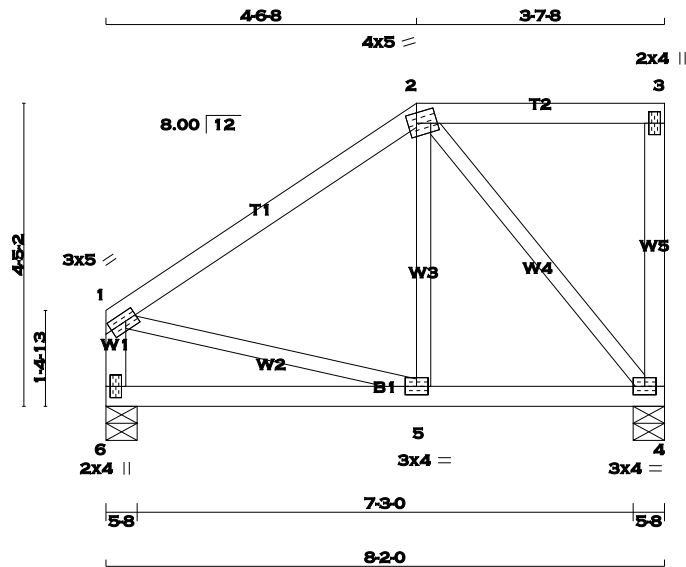
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SCALE = 1:33.7

TOTAL WEIGHT = 36 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF
2 - 3	2x4	DRY	No.2	SPF
4 - 3	2x4	DRY	No.2	SPF
6 - 1	2x4	DRY	No.2	SPF
6 - 4	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	5.0	1.50	2.00
2	TTWW-m	MT20	4.0	5.0	1.75	1.50
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	4.0		
5	BMVW-t	MT20	3.0	4.0		
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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
4	387	0	387	0	0	5-8	5-8	5-8	5-8
6	387	0	387	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		
4	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0		
6	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-238 / 0	-77.4 -77.4	0.20 (1)	6.25	5-2	0 / 85	0.03 (4)
2-3	0 / 0	-77.4 -77.4	0.17 (1)	10.00	2-4	-301 / 0	0.14 (1)
4-3	-140 / 0	0.0 0.0	0.04 (1)	7.81	1-5	0 / 203	0.05 (1)
6-1	-354 / 0	0.0 0.0	0.04 (1)	7.81			
6-5	0 / 0	-17.5 -17.5	0.09 (4)	10.00			
5-4	0 / 199	-17.5 -17.5	0.10 (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 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.20 (1-2:1), BC=0.10 (4-5:4), WB=0.14 (2-4:1), SSI=0.11 (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= 0.55 (2) (INPUT = 0.90)
JSI METAL= 0.10 (1) (INPUT = 1.00)



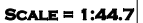
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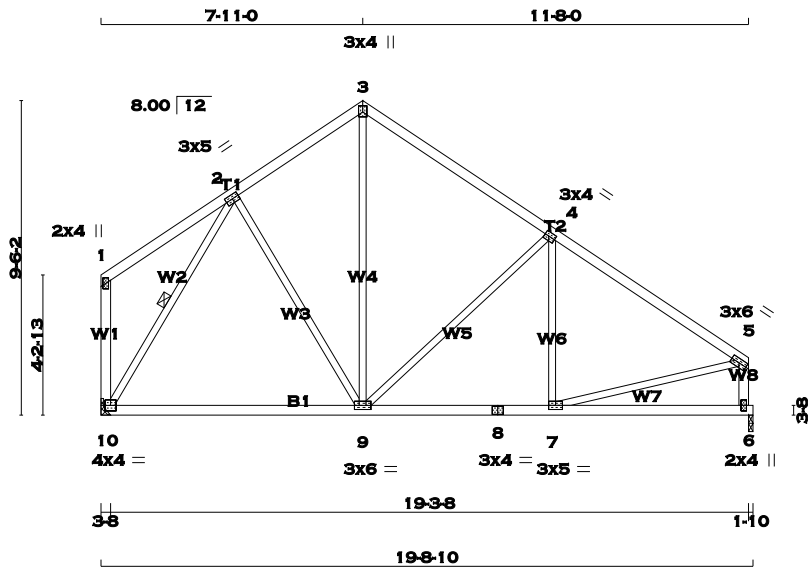
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





M][F]





TOTAL WEIGHT = 2 X 90 = 179 lb
[M][F]

LUMBER					DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER			
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 - 8	2x4	DRY	No.2		SPF	
8 - 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	TMV+p	MT20	2.0	4.0		
2	TMVW-t	MT20	3.0	5.0		
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW-t	MT20	3.0	6.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMVW-t	MT20	3.0	5.0		
8	BS-t	MT20	3.0	4.0		
9	BMVW-t	MT20	3.0	6.0		
10	BMVW1-t	MT20	4.0	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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
10	929	0	929	0	0	HANGER BY OTHERS		MIN. SEAT SIZE: 3-8	
6	929	0	929	0	0	1-10	1-10		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS						
10	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
10	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0		
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 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 = 5.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-10. DBS = 16-0-0 . 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)

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 / 20	-77.4 -77.4	0.20 (1)	10.00	2-9	0 / 64	0.02 (4)
2-3	-605 / 0	-77.4 -77.4	0.15 (1)	6.25	9-3	0 / 368	0.08 (1)
3-4	-617 / 0	-77.4 -77.4	0.34 (1)	6.25	9-4	-406 / 0	0.52 (1)
4-5	-911 / 0	-77.4 -77.4	0.36 (1)	5.99	7-4	-87 / 59	0.04 (1)
10-1	-119 / 0	0.0 0.0	0.04 (1)	7.81	10-2	-881 / 0	0.34 (1)
6-5	-884 / 0	0.0 0.0	0.10 (1)	7.81	7-5	0 / 805	0.18 (1)
10-9	0 / 457	-17.5 -17.5	0.26 (4)	10.00			
9-8	0 / 783	-17.5 -17.5	0.29 (4)	10.00			
8-7	0 / 783	-17.5 -17.5	0.29 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.13 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

(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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.36 (4-5:1) , BC=0.29 (7-9:4) , WB=0.52 (4-9:1) , 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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

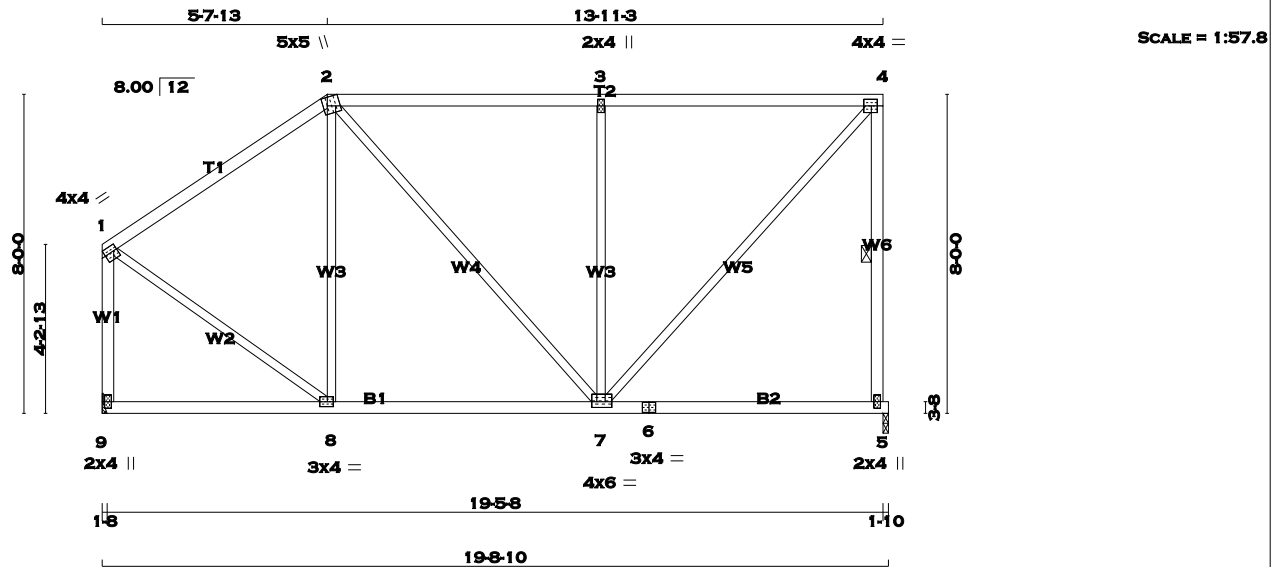
JSI GRIP= 0.88 (9) (INPUT = 0.90)
JSI METAL= 0.26 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 93 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 2	2x4	DRY	No.2		SPF
2 - 4	2x4	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
9 - 1	2x4	DRY	No.2		SPF
9 - 6	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
1	TMVW-t	MT20	4.0	4.0	1.75	Edge
2	TTWW+m	MT20	5.0	5.0	Edge	3.75
3	TMVW+w	MT20	2.0	4.0		
4	TMVW-t	MT20	4.0	4.0	2.00	1.75
5	BMV1+p	MT20	2.0	4.0		
6	BS-t	MT20	3.0	4.0		
7	BMVWW-t	MT20	4.0	6.0	1.75	1.50
8	BMVWW-t	MT20	3.0	4.0	1.50	1.75
9	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									
<u>BEARINGS</u>									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG		
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
5	929	0	929	0	0	1-10	1-10		
9	929	0	929	0	0	HANGER BY OTHERS			
								MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
9	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 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 = 6.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-5. DBS = 16-0-0 . 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

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)		MAX. UNBRACED LENGTH
	FR-TO	FROM	TO	TO			FR-TO	FROM	TO
1-2	-598 / 0	-77.4	-77.4	0.45 (1)	6.25	8-2	-221 / 27	0.27 (1)	
2-3	-614 / 0	-77.4	-77.4	0.67 (1)	6.12	2-7	0 / 181	0.04 (1)	
3-4	-615 / 0	-77.4	-77.4	0.67 (1)	6.12	7-3	-670 / 0	0.82 (1)	
5-4	-878 / 0	0.0	0.0	0.25 (1)	6.25	7-4	0 / 909	0.20 (1)	
9-1	-889 / 0	0.0	0.0	0.27 (1)	7.81	1-8	0 / 601	0.14 (1)	
9-8	0 / 0	-17.5	-17.5	0.15 (4)	10.00				
8-7	0 / 494	-17.5	-17.5	0.24 (4)	10.00				
7-6	0 / 0	-17.5	-17.5	0.21 (4)	10.00				
6-5	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/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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.67 (3-4:1) , BC=0.24 (7-8:4) , WB=0.82 (3-7:1) , 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= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.27 (1) (INPUT = 1.00)



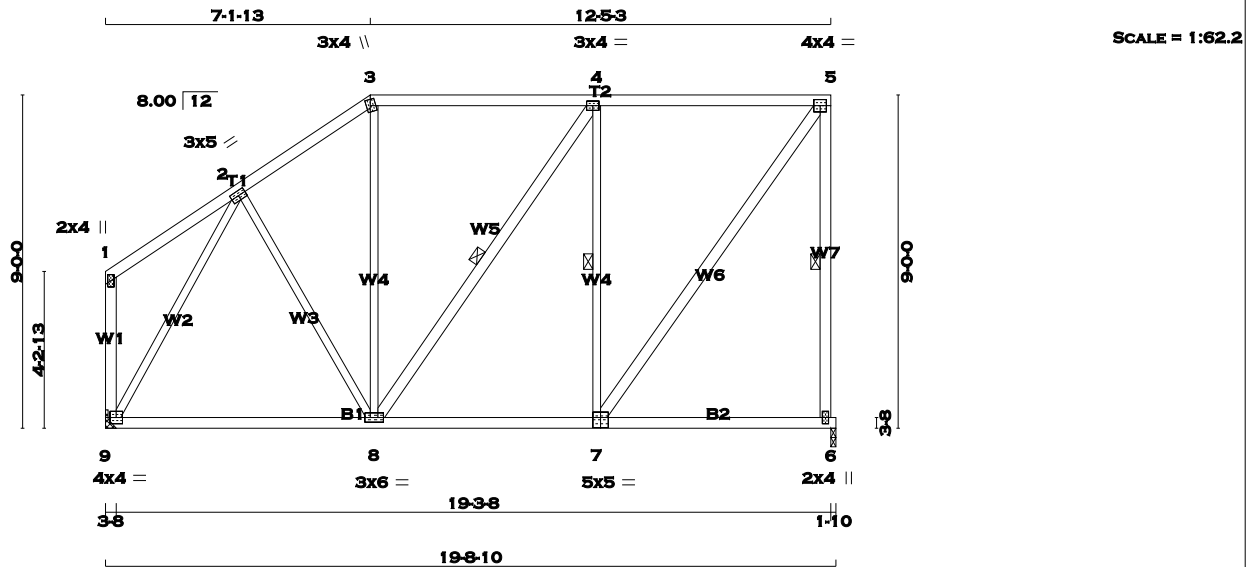
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TOTAL WEIGHT = 109 lb
[M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
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 - 7	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
8 - 4	2x4	DRY	No.2	SPF	
7 - 5	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMV+p	MT20	2.0	4.0	
2	TMVW-t	MT20	3.0	5.0	
3	TTW+m	MT20	3.0	4.0	2.00 1.25
4	TMVW-t	MT20	3.0	4.0	
5	TMVW-t	MT20	4.0	4.0	
6	BMV1+p	MT20	2.0	4.0	
7	BSWW-l	MT20	5.0	5.0	3.25 2.50
8	BMVW-t	MT20	3.0	6.0	
9	BMVW1-t	MT20	4.0	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			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	929	0	929	0	0	1-10	1-10
9	929	0	929	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 3-8							

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
9	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8, 4-7. DBS = 20-0-0 . CBF = 73 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. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 18	-77.4 -77.4	0.16 (1)	10.00	2-8	0 / 111	0.03 (4)
2-3	-613 / 0	-77.4 -77.4	0.16 (1)	6.25	8-3	0 / 72	0.02 (4)
3-4	-495 / 0	-77.4 -77.4	0.52 (1)	6.25	8-4	-19 / 13	0.01 (1)
4-5	-506 / 0	-77.4 -77.4	0.52 (1)	6.25	7-4	-583 / 0	0.31 (1)
6-5	-883 / 0	0.0 0.0	0.33 (1)	6.25	7-5	0 / 861	0.14 (1)
9-1	-108 / 0	0.0 0.0	0.03 (1)	7.81	9-2	-885 / 0	0.87 (1)
9-8	0 / 439	-17.5 -17.5	0.22 (4)	10.00			
8-7	0 / 506	-17.5 -17.5	0.23 (4)	10.00			
7-6	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

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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.52 (4-5:1) , BC=0.23 (7-8:4) , WB=0.87 (2-9:1) , SSI=0.24 (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.

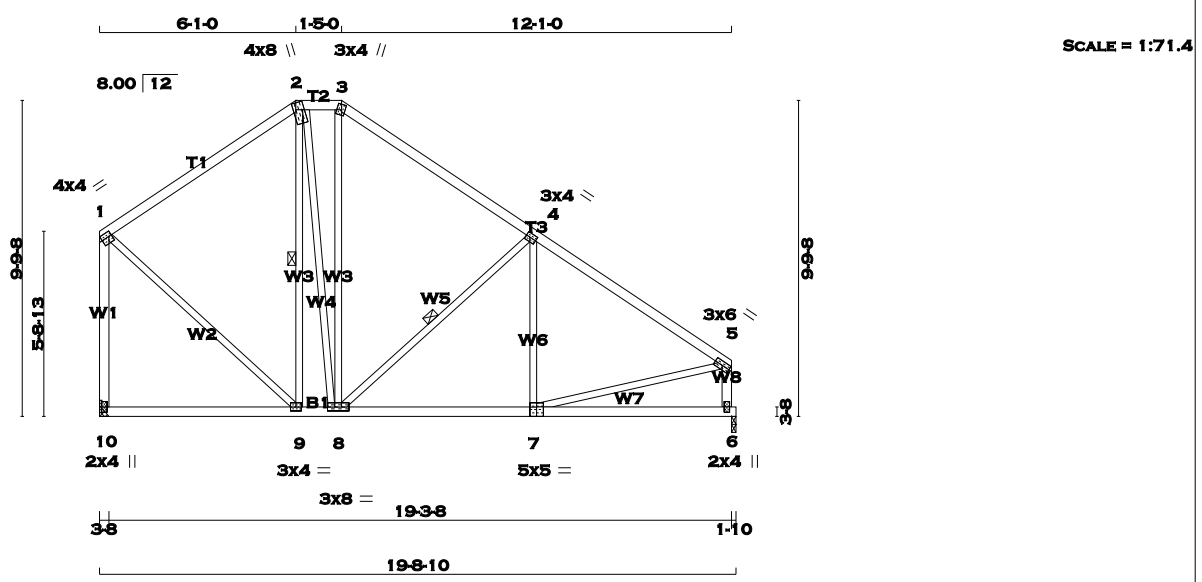
JSI GRIP= 0.90 (5) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 101 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	4.0	4.0	1.75 Edge
2	TTWW+m	MT20	4.0	8.0	2.50 1.00
3	TTWW+m	MT20	3.0	4.0	2.00 1.25
4	TMVW-t	MT20	3.0	4.0	1.50 1.50
5	TMVW-t	MT20	3.0	6.0	
6	BMV1+p	MT20	2.0	4.0	
7	BSWW-l	MT20	5.0	5.0	Edge 2.50
8	BMWW-t	MT20	3.0	8.0	
9	BMWW-t	MT20	3.0	4.0	
10	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 DOWN	REQRD BRG IN-SX			
	VERT	HORZ	DOWN	HORZ			UPLIFT	IN-SX	HANGER BY OTHERS
10	929	0	929	0	0				MIN. SEAT SIZE: 3-8
6	929	0	929	0	0	1-10	1-10		
UNFACTORED REACTIONS									
JT	1ST LCASE		MAX./MIN. LIVE		COMPONENT REACTIONS				
	COMBINED	SNOW			PERM.LIVE	WIND	DEAD	SOIL	
10	652	456 / 0	0 / 0		0 / 0	0 / 0	196 / 0	0 / 0	
6	652	456 / 0	0 / 0		0 / 0	0 / 0	196 / 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 = 5.94 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 2-9, 4-8, DBS = 20-0-0 . CBF = 57 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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)		MAX. UNBRACED LENGTH
	FR-TO	FROM TO	FR-TO	FROM TO			FR-TO	FROM TO	
1-2	-508 / 0	-77.4 -77.4	0.37 (1)	6.25	9-2	-241 / 6	0.16 (1)		
2-3	-452 / 0	-77.4 -77.4	0.02 (1)	6.25	2-8	0 / 235	0.05 (1)		
3-4	-575 / 0	-77.4 -77.4	0.37 (1)	6.25	8-3	0 / 76	0.02 (4)		
4-5	-914 / 0	-77.4 -77.4	0.39 (1)	5.94	8-4	-453 / 0	0.21 (1)		
10-1	-887 / 0	0.0 0.0	0.57 (1)	7.81	7-4	-54 / 87	0.03 (4)		
6-5	-886 / 0	0.0 0.0	0.10 (1)	7.81	1-9	0 / 561	0.13 (1)		
					7-5	0 / 807	0.18 (1)		
10-9	0 / 0	-17.5 -17.5	0.16 (4)	10.00					
9-8	0 / 420	-17.5 -17.5	0.19 (4)	10.00					
8-7	0 / 786	-17.5 -17.5	0.22 (4)	10.00					
7-6	0 / 0	-17.5 -17.5	0.17 (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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.57 (1-10:1) , BC=0.22 (7-8:4) , WB=0.21 (4-8:1) , 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.

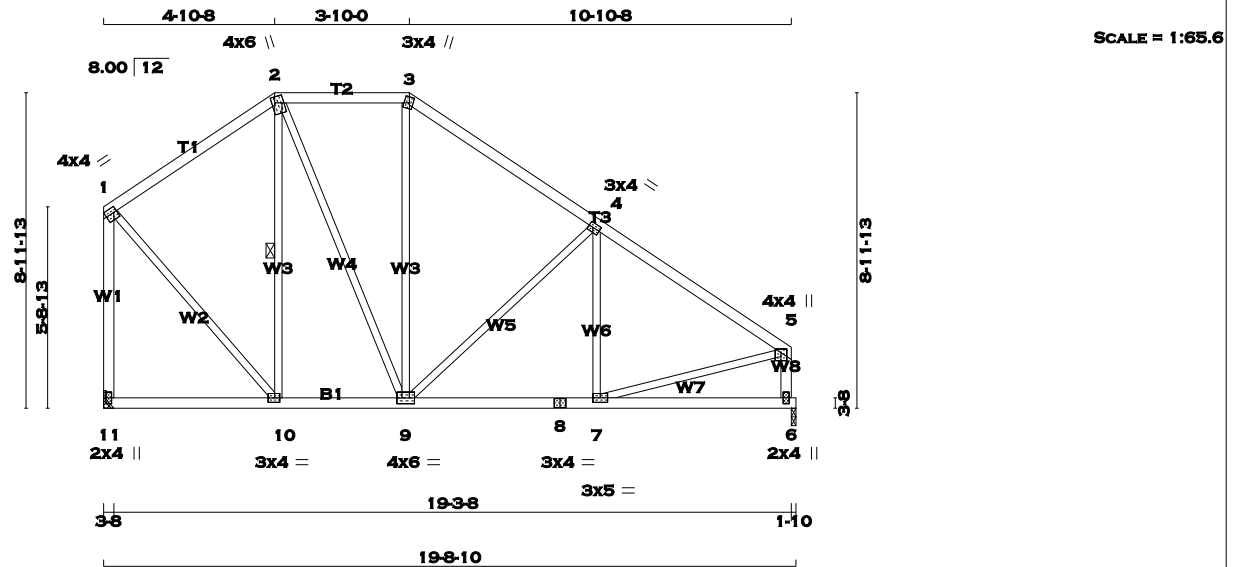
JSI GRIP= 0.88 (9) (INPUT = 0.90)
JSI METAL= 0.26 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 97 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	4.0	1.75	Edge
2	TTWW+m	MT20	4.0	6.0	2.00	1.00
3	TTWW+m	MT20	3.0	4.0	2.00	1.25
4	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW+p	MT20	4.0	4.0	1.25	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVW-t	MT20	3.0	5.0		
8	BS-t	MT20	3.0	4.0		
9	BMVW-t	MT20	4.0	6.0		
10	BMVW-t	MT20	3.0	4.0	1.50	1.75
11	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
11	929	0	929	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8
6	929	0	929	0	0	1-10	1-10

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
11	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 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 = 6.05 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 2-10. DBS = 20-0-0. CBF = 43 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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MEMB.
FR-TO		FROM TO		FR-TO			
1-2	-483 / 0	-77.4 -77.4	0.24 (1)	6.25	10-2	-348 / 0	0.18 (1)
2-3	-517 / 0	-77.4 -77.4	0.15 (1)	6.25	2-9	0 / 304	0.07 (1)
3-4	-651 / 0	-77.4 -77.4	0.30 (1)	6.25	9-3	0 / 70	0.02 (4)
4-5	-918 / 0	-77.4 -77.4	0.31 (1)	6.05	9-4	-372 / 0	0.41 (1)
11-1	-893 / 0	0.0 0.0	0.58 (1)	7.81	7-4	-90 / 67	0.04 (1)
6-5	-890 / 0	0.0 0.0	0.10 (1)	7.81	1-10	0 / 592	0.13 (1)
					7-5	0 / 813	0.18 (1)
11-10	0 / 0	-17.5 -17.5	0.09 (4)	10.00			
10-9	0 / 397	-17.5 -17.5	0.12 (4)	10.00			
9-8	0 / 787	-17.5 -17.5	0.20 (1)	10.00			
8-7	0 / 787	-17.5 -17.5	0.20 (1)	10.00			
7-6	0 / 0	-17.5 -17.5	0.13 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.58 (1-11:1), BC=0.20 (7-9:1), WB=0.41 (4-9:1), SSI=0.17 (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 (10) (INPUT = 0.90)
JSI METAL= 0.24 (5) (INPUT = 1.00)



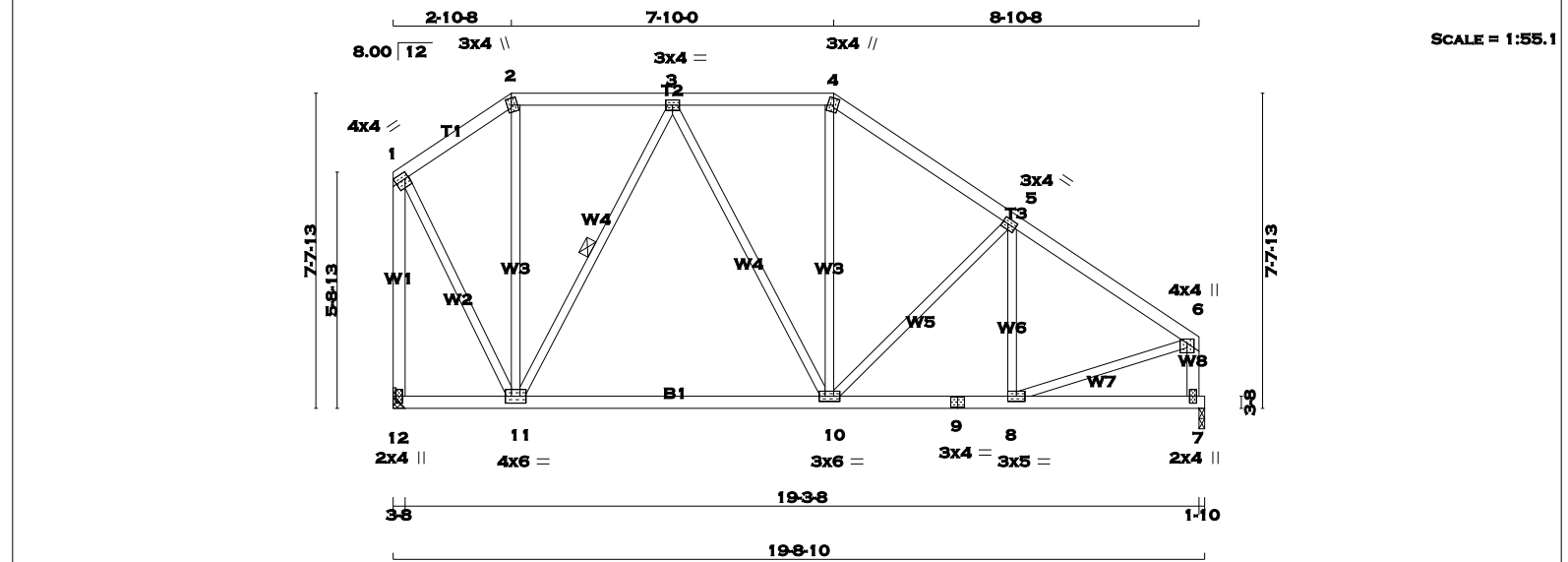
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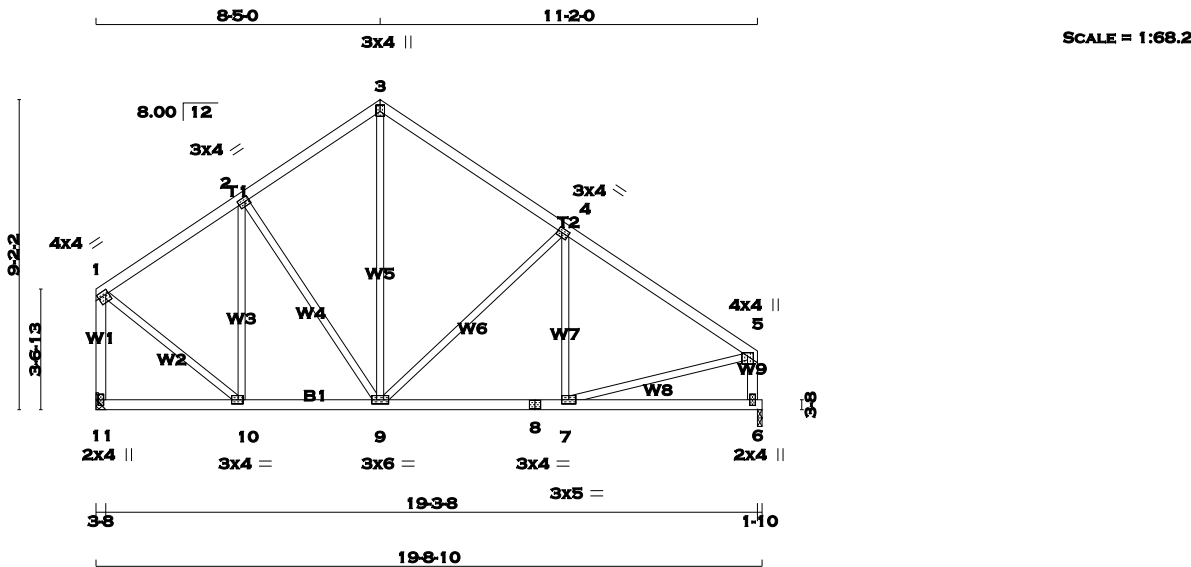
TOTAL WEIGHT = 97 lb		[M][F]		
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 2 2x4 DRY No.2 SPF 2 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 12 - 1 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF 12 - 9 2x4 DRY No.2 SPF 9 - 7 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		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 12 929 0 929 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 7 929 0 929 0 0 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 12 652 456 / 0 0 / 0 0 / 0 0 / 0 196 / 0 0 / 0 7 652 456 / 0 0 / 0 0 / 0 0 / 0 196 / 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 = 6.23 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 = 66 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. FACTORED MEMB. FORCE (LBS) (PLF) CSI (LC) UNBRAC MEMB. FORCE (LBS) MAX CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 -394 / 0 -77.4 -77.4 0.08 (1) 6.25 11-2 -8 / 45 0.02 (4) 2-3 -327 / 0 -77.4 -77.4 0.15 (1) 6.25 11-3 -531 / 0 0.25 (1) 3-4 -622 / 0 -77.4 -77.4 0.15 (1) 6.25 3-10 0 / 112 0.03 (1) 4-5 -770 / 0 -77.4 -77.4 0.20 (1) 6.25 10-4 0 / 172 0.04 (1) 5-6 -909 / 0 -77.4 -77.4 0.20 (1) 6.23 10-5 -219 / 0 0.15 (1) 12-1 -925 / 0 0.0 0.0 0.60 (1) 7.81 8-5 -170 / 13 0.06 (1) 7-6 -893 / 0 0.0 0.0 0.10 (1) 7.81 1-11 0 / 678 0.15 (1) 8-6 0 / 811 0.18 (1) 12-11 0 / 0 -17.5 -17.5 0.17 (4) 10.00 11-10 0 / 571 -17.5 -17.5 0.20 (4) 10.00 10-9 0 / 775 -17.5 -17.5 0.22 (1) 10.00 9-8 0 / 775 -17.5 -17.5 0.22 (1) 10.00 8-7 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 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 (0.65") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02") ALLOWABLE DEFL.(TL)= L/360 (0.65") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08") CSI: TC=0.60 (1-12:1) , BC=0.22 (8-10:1) , WB=0.25 (3-11:1) , SSI=0.15 (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= 0.26 (1) (INPUT = 1.00)
LICENSED PROFESSIONAL ENGINEER PAUL TREVISAN 100136551 March 20th, 2017 PROVINCE OF ONTARIO		RECEIVED TOWN OF MILTON MAR 29, 2017 17-5409 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		



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TOTAL WEIGHT = 2 X 91 = 181 lb
[M][F]

LUMBER					N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.		CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF	1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF	11 - 1	2x4	DRY	No.2	SPF
11 - 1	2x4	DRY	No.2	SPF	6 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF	11 - 8	2x4	DRY	No.2	SPF
11 - 8	2x4	DRY	No.2	SPF	8 - 6	2x4	DRY	No.2	SPF
8 - 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	4.0	4.0	1.50	1.00			
2	TMVW-t	MT20	3.0	4.0	1.50	1.50			
3	TTW+p	MT20	3.0	4.0	2.25	1.50			
4	TMVW-t	MT20	3.0	4.0	1.50	1.50			
5	TMVW+p	MT20	4.0	4.0	1.25	2.00			
6	BMV1+p	MT20	2.0	4.0					
7	BMVW-t	MT20	3.0	5.0					
8	BS-t	MT20	3.0	4.0					
9	BMVW-t	MT20	3.0	6.0					
10	BMVW-t	MT20	3.0	4.0	1.50	1.75			
11	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		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
11	929	0	929	0	0
6	929	0	929	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 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 = 6.03 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.

LOADING							
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC1) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-630 / 0	-77.4	-77.4 0.18 (1)	6.25	10-2	-328 / 0	0.22 (1)
2-3	-631 / 0	-77.4	-77.4 0.18 (1)	6.25	2-9	-63 / 0	0.07 (1)
3-4	-638 / 0	-77.4	-77.4 0.32 (1)	6.25	9-3	0 / 398	0.09 (1)
4-5	-917 / 0	-77.4	-77.4 0.33 (1)	6.03	9-4	-386 / 0	0.44 (1)
11-1	-897 / 0	0.0	0.0 0.19 (1)	7.81	7-4	-84 / 69	0.04 (1)
6-5	-888 / 0	0.0	0.0 0.10 (1)	7.81	1-10	0 / 678	0.15 (1)
					7-5	0 / 811	0.18 (1)
11-10	0 / 0	-17.5	-17.5 0.07 (4)	10.00			
10-9	0 / 541	-17.5	-17.5 0.13 (1)	10.00			
9-8	0 / 787	-17.5	-17.5 0.20 (1)	10.00			
8-7	0 / 787	-17.5	-17.5 0.20 (1)	10.00			
7-6	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

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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.33 (4-5:1) , BC=0.20 (7-9:1) , WB=0.44 (4-9:1) , 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
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.

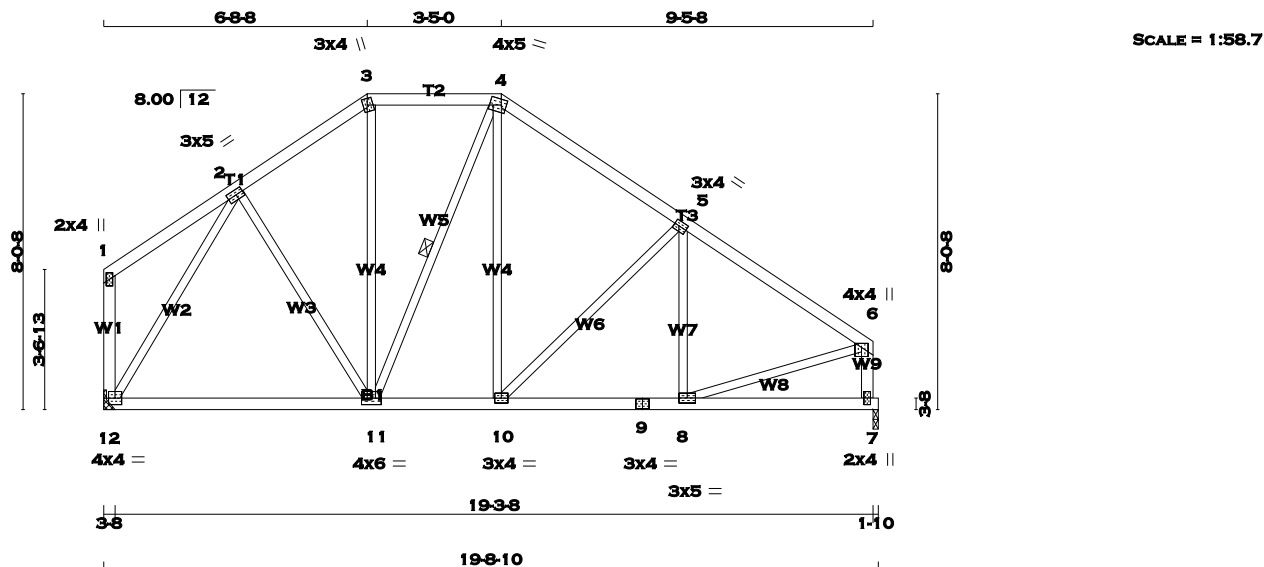
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.27 (1) (INPUT = 1.00)



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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
12 - 1	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
2	TMWW-t	MT20	3.0	5.0	1.50	2.25
3	TTW+m	MT20	3.0	4.0	2.00	1.25
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TMWW-t	MT20	3.0	4.0	1.50	1.50
6	TMV+p	MT20	4.0	4.0	1.25	2.00
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	3.0	5.0		
9	BS-t	MT20	3.0	4.0		
10	BMWW-t	MT20	3.0	4.0		
11	BMWW-t	MT20	4.0	6.0		
12	BMV1-t	MT20	4.0	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	REQRD		BRG	IN-SX
	VERT	HORZ	DOWN	HORZ		BRG	IN-SX		
12	929	0	929	0	0				
7	929	0	929	0	0				
UNFACTORED REACTIONS									
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL	PERM.LIVE	LIVE
	COMBINED	SNOW	DOWN	HORZ					
12	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0	0 / 0	0 / 0
7	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0	0 / 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 = 6.17 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 4-11. DBS = 20-0-0 . CBF = 15 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)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO					FR-TO			FR-TO	
1-2	0 / 16	-77.4	-77.4 0.14 (1)	10.00	2-11	0 / 115	0.03 (1)	10-11	0 / 115
2-3	-666 / 0	-77.4	-77.4 0.11 (1)	6.25	11-3	0 / 131	0.03 (4)	11-4	-119 / 0
3-4	-541 / 0	-77.4	-77.4 0.12 (1)	6.25	10-4	-277 / 0	0.06 (1)	10-5	0 / 236
4-5	-729 / 0	-77.4	-77.4 0.23 (1)	6.25	10-5	-277 / 0	0.05 (1)	10-6	-130 / 45
5-6	-917 / 0	-77.4	-77.4 0.23 (1)	6.17	8-5	-914 / 0	0.05 (1)	8-6	-914 / 0
12-1	-102 / 0	0.0	0.0 0.02 (1)	7.81	12-2	-914 / 0	0.66 (1)	8-6	0 / 816
7-6	-895 / 0	0.0	0.0 0.10 (1)	7.81			0.18 (1)		
12-11	0 / 478	-17.5	-17.5 0.21 (4)	10.00					
11-10	0 / 588	-17.5	-17.5 0.22 (4)	10.00					
10-9	0 / 783	-17.5	-17.5 0.18 (1)	10.00					
9-8	0 / 783	-17.5	-17.5 0.18 (1)	10.00					
8-7	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

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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.23 (5-6:1), BC=0.22 (10-11:4), WB=0.66 (2-12:1), SSI=0.15 (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.

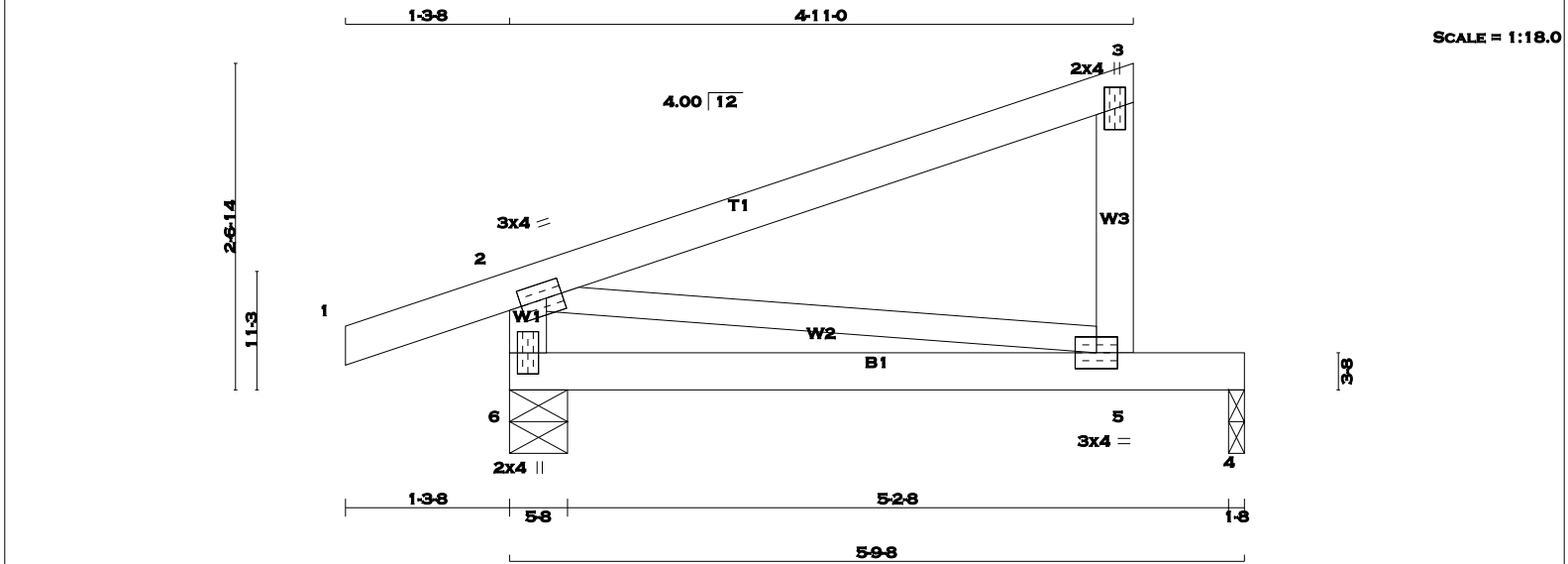
JSI GRIP= 0.87 (3) (INPUT = 0.90)
JSI METAL= 0.25 (2) (INPUT = 1.00)



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

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
6	373	0	0	373	0	0	5-8	5-8	
4	212	0	0	212	0	0	1-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
6	260	194 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0
4	150	97 / 0	0 / 0	0 / 0	0 / 0	53 / 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				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 / 16	-77.4 -77.4	0.10 (1)	2-5	0 / 0	0.00 (1)	
2-3	0 / 0	-77.4 -77.4	0.32 (1)				
5-3	-190 / 0	0.0 0.0	0.02 (1)				
6-2	-294 / 0	0.0 0.0	0.03 (1)				
6-5	0 / 0	-17.5 -17.5	0.25 (1)				
5-4	0 / 0	-17.5 -17.5	0.24 (1)				

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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 586 (0.12")

CSI: TC=0.32 (2-3:1) , BC=0.25 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.17 (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.

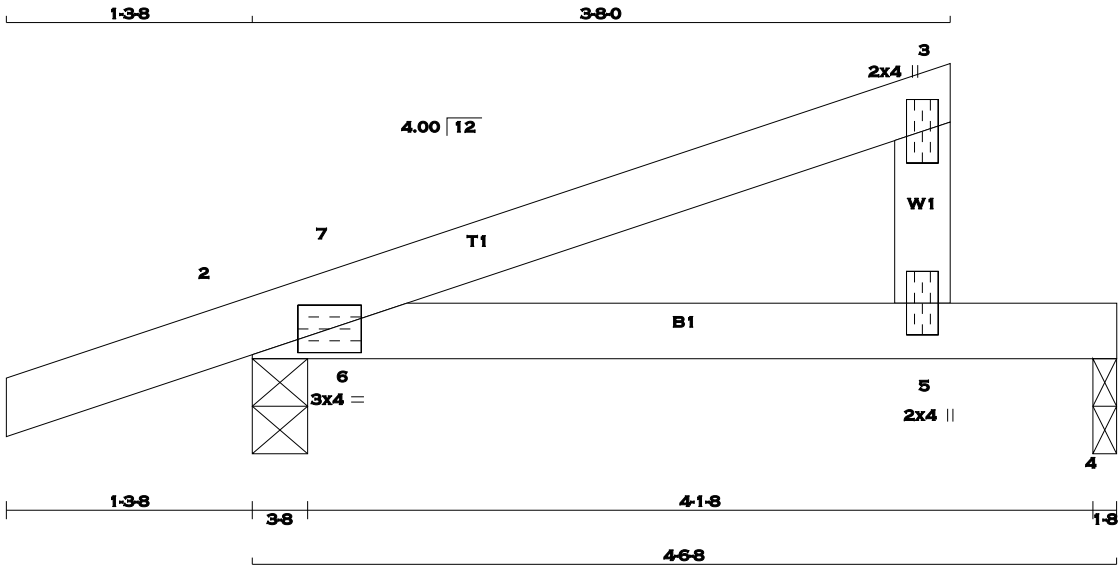
JSI GRIP= 0.27 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 10 X 12 = 123 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS SIZE

1 - 3 2x4 DRY No.2

5 - 3 2x4 DRY No.2

2 - 4 2x4 DRY No.2

LUMBER

DESCR.

SPF

SPF

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 TMBV+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.

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
2	312	0	312	0	0	3-8	3-8
4	154	0	154	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2	217	164 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
4	110	69 / 0	0 / 0	0 / 0	0 / 0	41 / 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: (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	0 / 15	-77.4 -77.4	0.10 (1)	10.00	6-7	-46 / 43	0.00 (1)
2-7	-28 / 0	-77.4 -77.4	0.07 (1)	6.25			
7-3	0 / 5	-77.4 -77.4	0.16 (1)	10.00			
5-3	-134 / 0	0.0 0.0	0.01 (1)	7.81			
2-6	0 / 0	-17.5 -17.5	0.08 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.18 (1)	10.00			
5-4	0 / 0	-17.5 -17.5	0.17 (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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 978 (0.06")

CSI: TC=0.16 (3-7:1) , BC=0.18 (5-6:1) , WB=0.00 (6-7:1) , SSI=0.12 (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= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



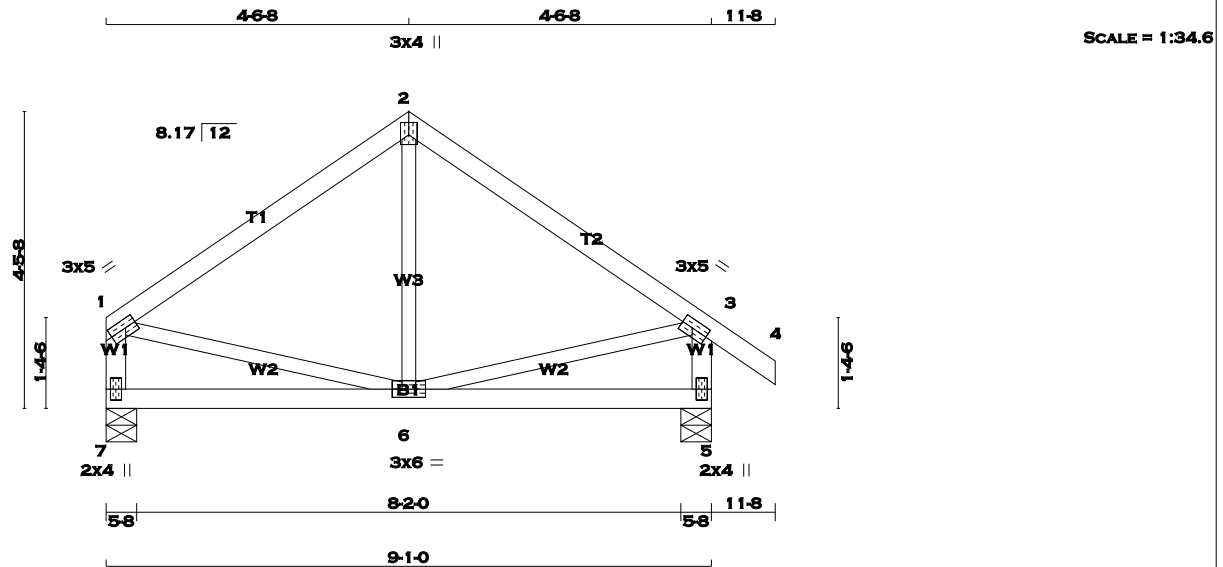
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TOTAL WEIGHT = 6 X 37 = 221 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 2	2x4	DRY	No.2		SPF
2 - 4	2x4	DRY	No.2		SPF
7 - 1	2x4	DRY	No.2		SPF
5 - 3	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)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	5.0	1.50	2.00
2	TTW+p	MT20	3.0	4.0	2.25	1.50
3	TMVW-t	MT20	3.0	5.0	1.50	2.00
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		GROSS REACTION		GROSS REACTION		BRG		BRG	
7	431	0	431	0	0	5-8	5-8	5-8	5-8
5	511	0	511	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
7	302	212 / 0	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	357	260 / 0	0 / 0	0 / 0	0 / 0	91 / 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)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED MAX CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	-298 / 0	-77.4 -77.4	0.20 (1)	6.25	6-2	-16 / 73	0.03 (4)
2-3	-298 / 0	-77.4 -77.4	0.20 (1)	6.25	1-6	0 / 253	0.06 (1)
3-4	0 / 23	-77.4 -77.4	0.06 (1)	10.00	6-3	0 / 253	0.06 (1)
7-1	-400 / 0	0.0 0.0	0.04 (1)	7.81			
5-3	-481 / 0	0.0 0.0	0.05 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.10 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.10 (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 (0.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.30")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.20 (1-2:1) , BC=0.10 (5-6:4) , WB=0.06 (3-6:1) , SSI=0.11 (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.

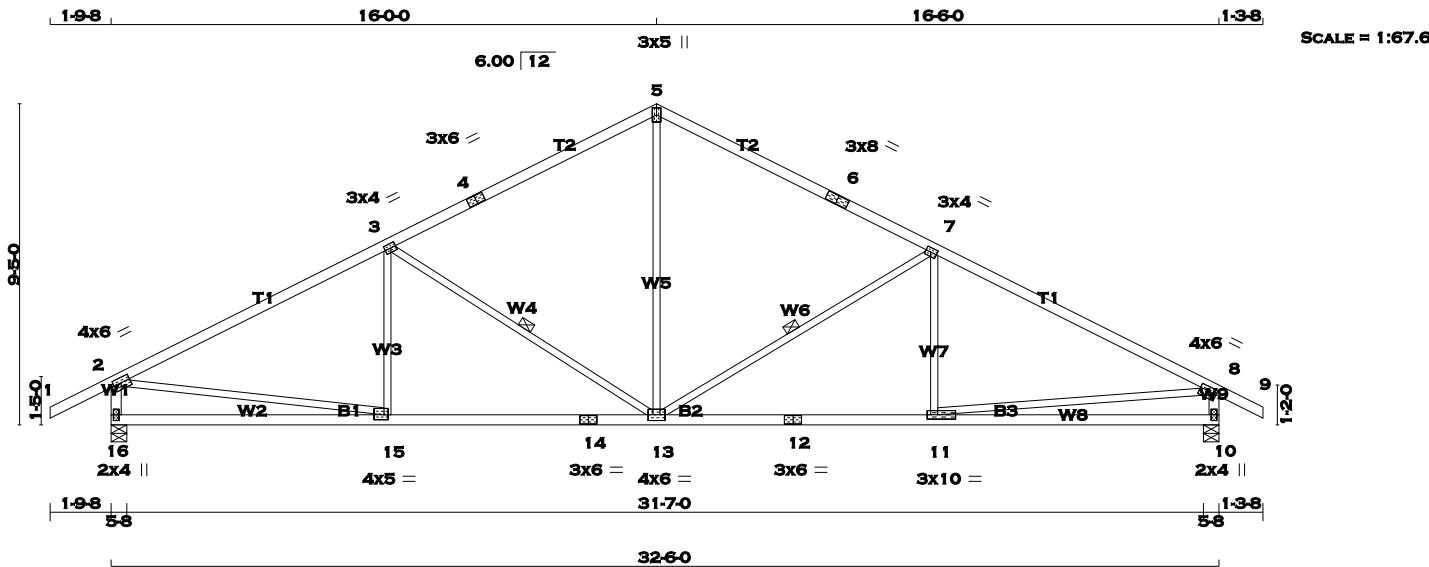
JSI GRIP= 0.46 (6) (INPUT = 0.90)
JSI METAL= 0.13 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 16 X 127 = 2040 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 - 6	2x4	DRY	No.2
6 - 9	2x4	DRY	No.2
16 - 2	2x4	DRY	No.2
10 - 8	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 12	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.75	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	8.0		
7	TMVW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	3.0	10.0	1.50	3.75
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	4.0	6.0		
14	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	4.0	5.0	1.75	1.50
16	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	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
16	1685	0	1685	0	0	5-8	5-8	5-8	5-8
10	1646	0	1646	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
16	1179	843 / 0	0 / 0	0 / 0	0 / 0	336 / 0	0 / 0
10	1153	820 / 0	0 / 0	0 / 0	0 / 0	333 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.38 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 3-13. DBS = 20-0-0 . CBF = 85 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-13. DBS = 18-0-0 . 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. LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 32	-77.4 -77.4	0.19 (1)	10.00	15-3	-113 / 99	0.05 (1)
2-3	-2151 / 0	-77.4 -77.4	0.88 (1)	3.60	3-13	-680 / 0	0.43 (1)
3-4	-1582 / 0	-77.4 -77.4	0.76 (1)	4.22	13-5	0 / 918	0.21 (1)
4-5	-1582 / 0	-77.4 -77.4	0.76 (1)	4.22	13-7	-781 / 0	0.51 (1)
5-6	-1583 / 0	-77.4 -77.4	0.81 (1)	4.09	11-7	-50 / 122	0.04 (4)
6-7	-1583 / 0	-77.4 -77.4	0.81 (1)	4.09	2-15	0 / 1972	0.44 (1)
7-8	-2256 / 0	-77.4 -77.4	0.97 (1)	3.38	11-8	0 / 2060	0.46 (1)
8-9	0 / 23	-77.4 -77.4	0.10 (1)	10.00			
16-2	-1627 / 0	0.0 0.0	0.17 (1)	6.48			
10-8	-1586 / 0	0.0 0.0	0.16 (1)	6.55			
16-15	0 / 0	-17.5 -17.5	0.27 (4)	10.00			
15-14	0 / 1953	-17.5 -17.5	0.45 (1)	10.00			
14-13	0 / 1953	-17.5 -17.5	0.45 (1)	10.00			
13-12	0 / 2049	-17.5 -17.5	0.48 (1)	10.00			
12-11	0 / 2049	-17.5 -17.5	0.48 (1)	10.00			
11-10	0 / 0	-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/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.08")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.97 (7-8:1) , BC=0.48 (11-13:1) , WB=0.51 (7-13:1) , SSI=0.28 (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.

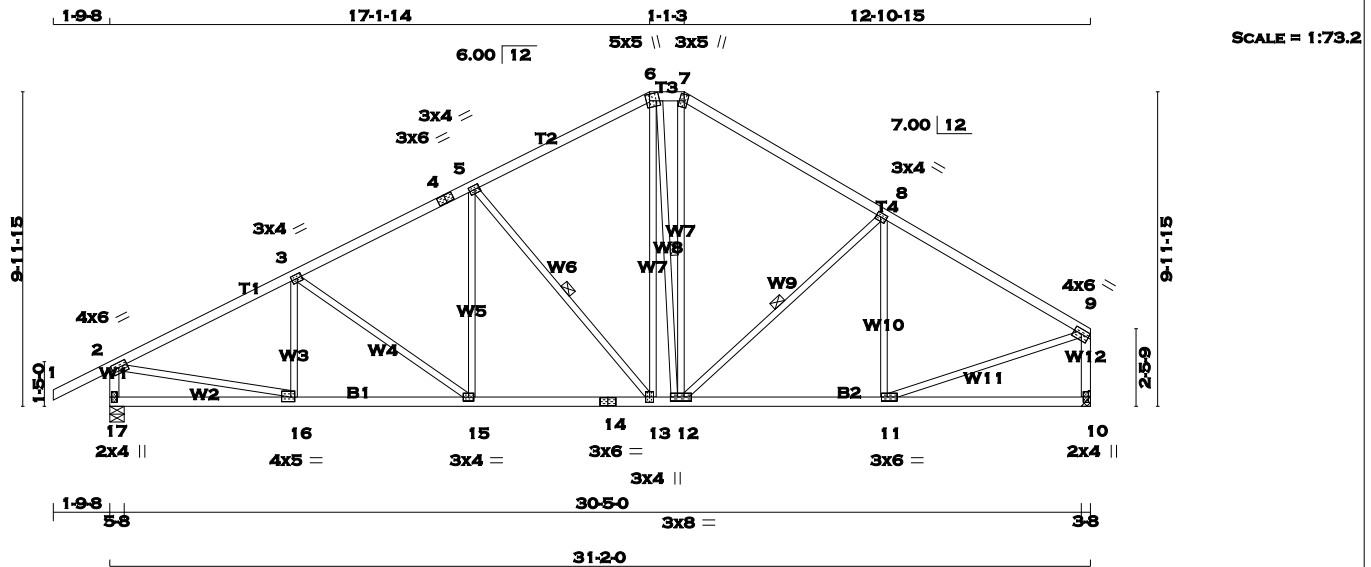
JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.62 (12) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 147 = 294 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 - 6	2x4	DRY	No.2	SPF			
6 - 7	2x4	DRY	No.2	SPF			
7 - 9	2x4	DRY	No.2	SPF			
17 - 2	2x4	DRY	No.2	SPF			
10 - 9	2x4	DRY	No.2	SPF			
17 - 14	2x4	DRY	No.2	SPF			
14 - 10	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	6.0	1.75	2.75
3, 5, 8						
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
6	TTWW+m	MT20	5.0	5.0	2.50	1.25
7	TTWW+m	MT20	3.0	5.0	2.50	1.25
9	TMVW-t	MT20	4.0	6.0	1.75	Edge
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	3.0	6.0	1.50	2.25
12	BMVW-t	MT20	3.0	8.0		
13	BMVW-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	3.0	4.0		
16	BMVW-t	MT20	4.0	5.0	1.75	1.50
17	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	COMBINED	SNOW	LIVE	DOWN	HORZ	UPLIFT	IN-SX	BRG	BRG	BRG	BRG	DOWN	HORZ	UPLIFT	IN-SX	BRG	BRG	BRG	BRG
17	1622	0	1622	0	0	5-8	5-8												
10	1478	0	1478	0	0	0	0												

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
17	1135	812 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0
10	1037	726 / 0	0 / 0	0 / 0	0 / 0	312 / 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 = 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 5-13, 6-12, 8-12. DBS = 20-0-0. 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)

C H O R D S					W E B S			
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	MAX. FACTORED	MEMB.	MAX. FACTORED	FACTORED	
	FORCE (LBS)	(PLF)	LC1	CSI (LC)	UNBRAC	FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO		
1-2	0 / 32	-77.4	-77.4	0.19 (1)	10.00	16-3	-237 / 24	0.07 (1)
2-3	-2008 / 0	-77.4	-77.4	0.39 (1)	4.42	3-15	-254 / 0	0.23 (1)
3-4	-1796 / 0	-77.4	-77.4	0.32 (1)	4.70	15-5	0 / 256	0.06 (1)
4-5	-1796 / 0	-77.4	-77.4	0.32 (1)	4.70	5-13	-677 / 0	0.38 (1)
5-6	-1329 / 0	-77.4	-77.4	0.31 (1)	5.27	13-6	0 / 495	0.11 (1)
6-7	-1163 / 0	-77.4	-77.4	0.03 (1)	5.90	6-12	-124 / 0	0.08 (1)
7-8	-1374 / 0	-77.4	-77.4	0.46 (1)	5.00	12-7	0 / 448	0.10 (1)
8-9	-1541 / 0	-77.4	-77.4	0.49 (1)	4.75	12-8	-271 / 0	0.14 (1)
17-2	-1578 / 0	0.0	0.0	0.16 (1)	6.57	11-8	-323 / 14	0.21 (1)
10-9	-1430 / 0	0.0	0.0	0.19 (1)	6.82	2-16	0 / 1844	0.42 (1)
						11-9	0 / 1428	0.32 (1)
17-16	0 / 0	-17.5	-17.5	0.13 (4)	10.00			
16-15	0 / 1812	-17.5	-17.5	0.36 (1)	10.00			
15-14	0 / 1606	-17.5	-17.5	0.32 (1)	10.00			
14-13	0 / 1606	-17.5	-17.5	0.32 (1)	10.00			
13-12	0 / 1176	-17.5	-17.5	0.29 (1)	10.00			
12-11	0 / 1357	-17.5	-17.5	0.32 (1)	10.00			
11-10	0 / 0	-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

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 (1.04")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.49 (8-9:1), BC=0.36 (15-16:1), WB=0.42 (2-16:1), SSI=0.21 (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.

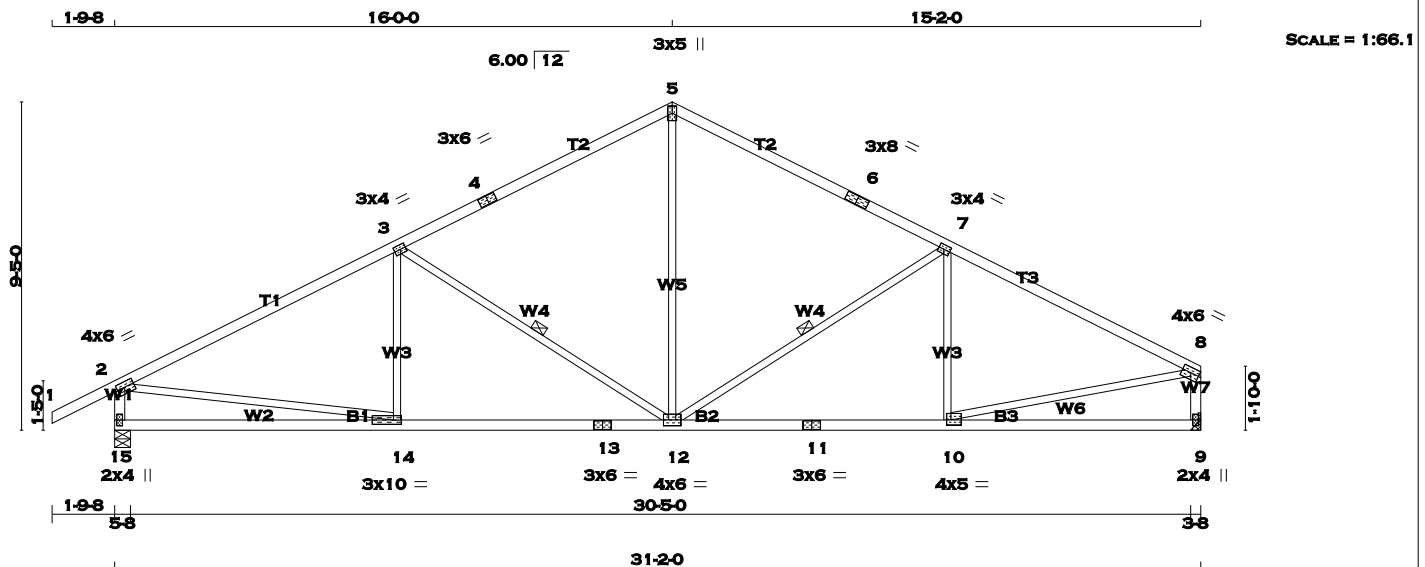
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.54 (16) (INPUT = 1.00)



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TOTAL WEIGHT = 8 X 123 = 980 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 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
15 - 2	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
15 - 13	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2
11 - 9	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	6.0	1.75 2.75
3	TMWW-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	8.0	
7	TMWW-t	MT20	3.0	4.0	1.50 1.75
8	TMVW-t	MT20	4.0	6.0	1.75 Edge
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	5.0	1.75 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWWW-t	MT20	4.0	6.0	
13	BS-t	MT20	3.0	6.0	
14	BMWW-t	MT20	3.0	10.0	1.50 2.75
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					
BEARINGS					
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	JT	HORZ	DOWN	UP
15	1622	0	1622	0	5-8
9	1478	0	1478	0	5-8
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
15	1135	812 / 0	0 / 0	0 / 0	0 / 0	323 / 0	0 / 0
9	1037	726 / 0	0 / 0	0 / 0	0 / 0	312 / 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 = 3.70 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 3-12, 7-12. DBS = 20-0-0 . CBF = 87 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 / 32	-77.4	-77.4	0.19 (1)	10.00	14-3	-99 / 103	0.04 (1)	
2-3	-2040 / 0	-77.4	-77.4	0.85 (1)	3.70	3-12	-694 / 0	0.44 (1)	
3-4	-1458 / 0	-77.4	-77.4	0.74 (1)	4.37	12-5	0 / 807	0.18 (1)	
4-5	-1458 / 0	-77.4	-77.4	0.74 (1)	4.37	12-7	-533 / 0	0.34 (1)	
5-6	-1454 / 0	-77.4	-77.4	0.70 (1)	4.49	10-7	-215 / 61	0.10 (1)	
6-7	-1454 / 0	-77.4	-77.4	0.70 (1)	4.49	2-14	0 / 1872	0.42 (1)	
7-8	-1889 / 0	-77.4	-77.4	0.69 (1)	4.07	10-8	0 / 1757	0.40 (1)	
15-2	-1564 / 0	0.0	0.0	0.16 (1)	6.59				
9-8	-1427 / 0	0.0	0.0	0.16 (1)	6.84				
15-14	0 / 0	-17.5	-17.5	0.27 (4)	10.00				
14-13	0 / 1854	-17.5	-17.5	0.44 (1)	10.00				
13-12	0 / 1854	-17.5	-17.5	0.44 (1)	10.00				
12-11	0 / 1720	-17.5	-17.5	0.40 (1)	10.00				
11-10	0 / 1720	-17.5	-17.5	0.40 (1)	10.00				
10-9	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

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 (1.04")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.04")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.85 (2-3:1) , BC=0.44 (12-14:1) , WB=0.44 (3-12:1) , SSI=0.27 (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.

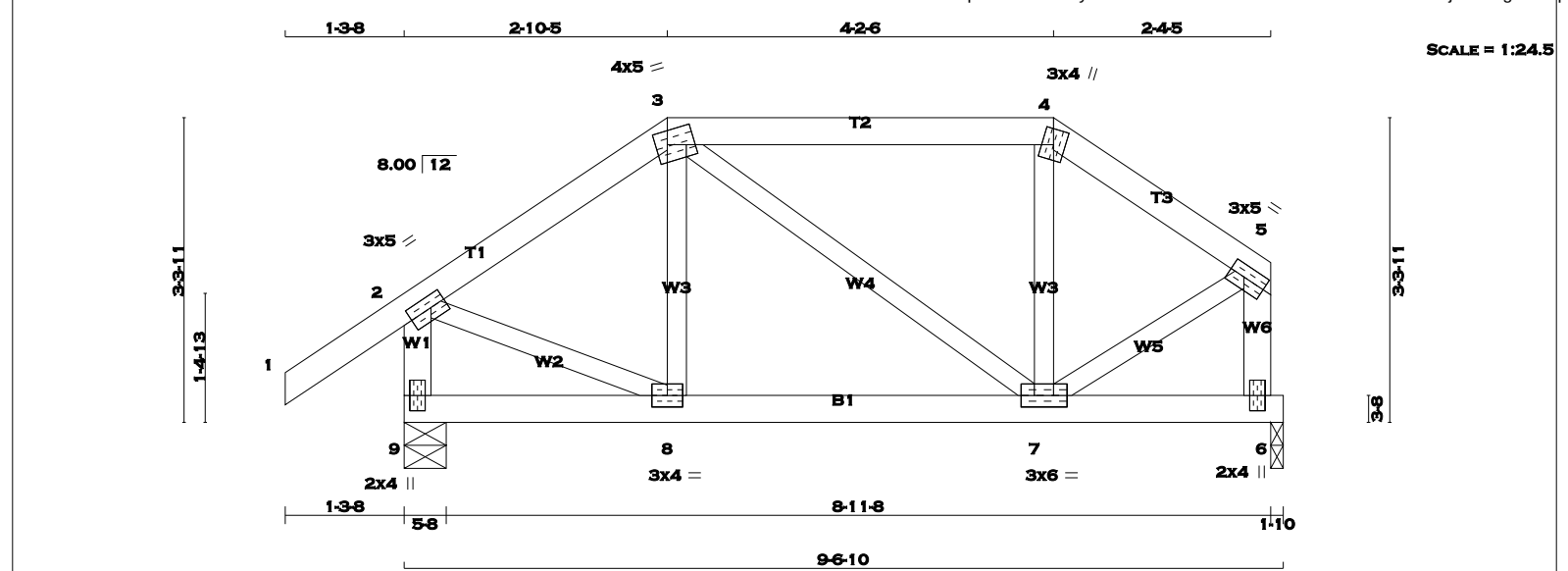
JSI GRIP= 0.89 (14) (INPUT = 0.90)
JSI METAL= 0.56 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 40 = 80 lb

[M][F]

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 - 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	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
9	553	0	553	0	0	5-8	5-8	5-8	5-8
6	447	0	447	0	0	1-10	1-10	1-10	1-10

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9	386	283 / 0	0 / 0	0 / 0	0 / 0	0 / 0	102 / 0
6	313	219 / 0	0 / 0	0 / 0	0 / 0	0 / 0	94 / 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		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	-77.4	-77.4 0.10 (1)	10.00	8-3	-44 / 42	0.01 (4)
2-3	-368 / 0	-77.4	-77.4 0.08 (1)	6.25	3-7	-41 / 0	0.02 (1)
3-4	-271 / 0	-77.4	-77.4 0.17 (1)	6.25	7-4	-70 / 30	0.01 (1)
4-5	-329 / 0	-77.4	-77.4 0.06 (1)	6.25	2-8	0 / 325	0.07 (1)
9-2	-533 / 0	0.0	0.0 0.05 (1)	7.81	7-5	0 / 315	0.07 (1)
6-5	-432 / 0	0.0	0.0 0.05 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.05 (4)	10.00			
8-7	0 / 304	-17.5	-17.5 0.07 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.04 (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 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.17 (3-4:1), BC=0.07 (7-8:1), WB=0.07 (2-8:1), SSI=0.13 (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.

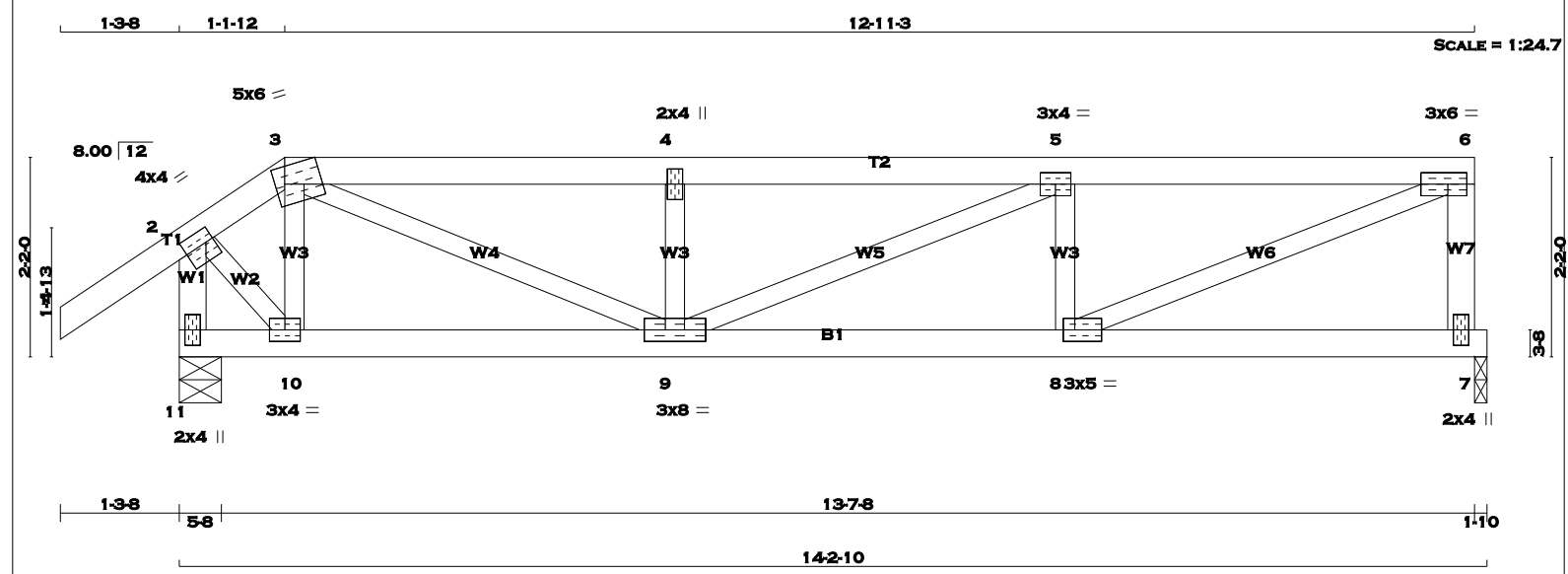
JSI GRIP= 0.57 (7) (INPUT = 0.90)
JSI METAL= 0.15 (2) (INPUT = 1.00)



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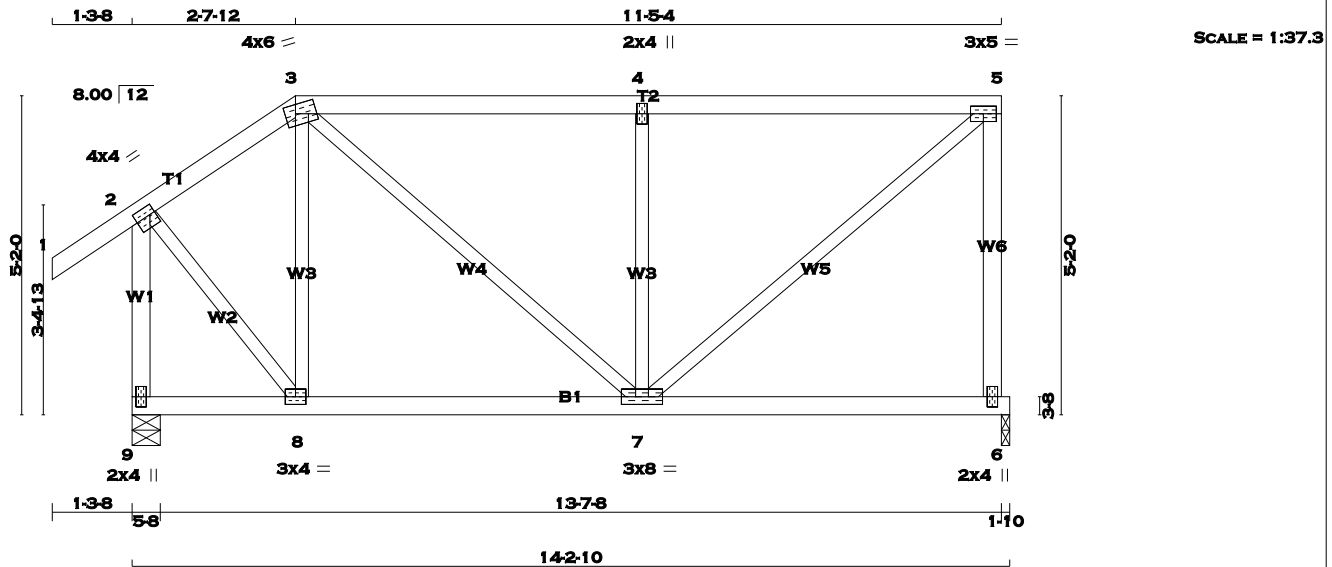
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 6 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF 11- 2 2x4 DRY No.2 SPF 11- 7 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">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>HORZ</th><th>UPLIFT</th><th>IN-SX</th></tr><tr><td>7</td><td>663</td><td>0</td><td>663</td><td>0</td><td>0</td><td>1-10</td></tr><tr><td>11</td><td>779</td><td>0</td><td>779</td><td>0</td><td>0</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th colspan="6">MAX./MIN. COMPONENT REACTIONS</th></tr><tr><th></th><th></th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>7</td><td>465</td><td>325 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>140 / 0</td><td>0 / 0</td></tr><tr><td>11</td><td>544</td><td>395 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>149 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 11 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.56 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. 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 UNBRACED LENGTH</th><th>FACTORED VERT. LOAD (PLF)</th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td>FROM</td><td>TO</td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>10-3</td><td>-243 / 0</td><td>0.04 (1)</td><td></td></tr><tr><td>2-3</td><td>-492 / 0</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>6-25</td><td>3-9</td><td>0 / 939</td><td>0.21 (1)</td></tr><tr><td>3-4</td><td>-1224 / 0</td><td>-77.4</td><td>-77.4 0.19 (1)</td><td>5-58</td><td>9-4</td><td>-348 / 0</td><td>0.05 (1)</td></tr><tr><td>4-5</td><td>-1224 / 0</td><td>-77.4</td><td>-77.4 0.20 (1)</td><td>5-56</td><td>9-5</td><td>0 / 80</td><td>0.02 (1)</td></tr><tr><td>5-6</td><td>-1151 / 0</td><td>-77.4</td><td>-77.4 0.20 (1)</td><td>5-69</td><td>8-5</td><td>-401 / 0</td><td>0.06 (1)</td></tr><tr><td>7-6</td><td>-628 / 0</td><td>0.0</td><td>0.0 0.07 (1)</td><td>7-81</td><td>8-6</td><td>0 / 1249</td><td>0.28 (1)</td></tr><tr><td>11-2</td><td>-796 / 0</td><td>0.0</td><td>0.0 0.08 (1)</td><td>7-81</td><td>2-10</td><td>0 / 498</td><td>0.11 (1)</td></tr><tr><td>11-10</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.05 (4)</td><td>10-10</td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 364</td><td>-17.5</td><td>-17.5 0.11 (1)</td><td>10-10</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 1151</td><td>-17.5</td><td>-17.5 0.23 (1)</td><td>10-10</td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.07 (4)</td><td>10-10</td><td></td><td></td><td></td></tr></table>											FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	7	663	0	663	0	0	1-10	11	779	0	779	0	0	5-8	JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS								SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	7	465	325 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0	11	544	395 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH	FACTORED VERT. LOAD (PLF)	FR-TO		FROM	TO	FR-TO		FROM	TO	1-2	0 / 29	-77.4	-77.4 0.10 (1)	10-3	-243 / 0	0.04 (1)		2-3	-492 / 0	-77.4	-77.4 0.10 (1)	6-25	3-9	0 / 939	0.21 (1)	3-4	-1224 / 0	-77.4	-77.4 0.19 (1)	5-58	9-4	-348 / 0	0.05 (1)	4-5	-1224 / 0	-77.4	-77.4 0.20 (1)	5-56	9-5	0 / 80	0.02 (1)	5-6	-1151 / 0	-77.4	-77.4 0.20 (1)	5-69	8-5	-401 / 0	0.06 (1)	7-6	-628 / 0	0.0	0.0 0.07 (1)	7-81	8-6	0 / 1249	0.28 (1)	11-2	-796 / 0	0.0	0.0 0.08 (1)	7-81	2-10	0 / 498	0.11 (1)	11-10	0 / 0	-17.5	-17.5 0.05 (4)	10-10				10-9	0 / 364	-17.5	-17.5 0.11 (1)	10-10				9-8	0 / 1151	-17.5	-17.5 0.23 (1)	10-10				8-7	0 / 0	-17.5	-17.5 0.07 (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/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 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 (0.47") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.47") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08") CSI: TC=0.20 (5-6:1), BC=0.23 (8-9:1), WB=0.28 (6-8:1), 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 (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 (9) (INPUT = 0.90) JSI METAL= 0.34 (8) (INPUT = 1.00)					
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG																																																																																																																																																																																											
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TOTAL WEIGHT = 2 X 66 = 131 lb
[M]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	
9 - 2	2x4	DRY	No.2	SPF	
9 - 6	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-t	MT20	4.0	4.0	1.75	1.00
3	TTWW-m	MT20	4.0	6.0	1.75	2.00
4	TMW+w	MT20	2.0	4.0		
5	TMVW-t	MT20	3.0	5.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	3.0	8.0		
8	BMWW-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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
6	668	0	668	0	0	1-10	1-10	1-10	1-10
9	774	0	774	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6	469	328 / 0	0 / 0	0 / 0	0 / 0	0 / 0	141 / 0
9	541	392 / 0	0 / 0	0 / 0	0 / 0	0 / 0	149 / 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 = 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)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	8-3	-266 / 0	0.11 (1)
2-3	-372 / 0	-77.4	-77.4 0.09 (1)	6.25	3-7	0 / 316	0.07 (1)
3-4	-542 / 0	-77.4	-77.4 0.43 (1)	6.25	7-4	-548 / 0	0.22 (1)
4-5	-542 / 0	-77.4	-77.4 0.44 (1)	6.25	7-5	0 / 707	0.16 (1)
6-5	-626 / 0	0.0	0.0 0.29 (1)	7.81	2-8	0 / 463	0.10 (1)
9-2	-761 / 0	0.0	0.0 0.15 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.07 (4)	10.00			
8-7	0 / 303	-17.5	-17.5 0.17 (4)	10.00			
7-6	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

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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.44 (4-5:1), BC=0.17 (7-8:4), WB=0.22 (4-7:1), SSI=0.22 (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= 0.82 (5) (INPUT = 0.90)
JSI METAL= 0.18 (2) (INPUT = 1.00)



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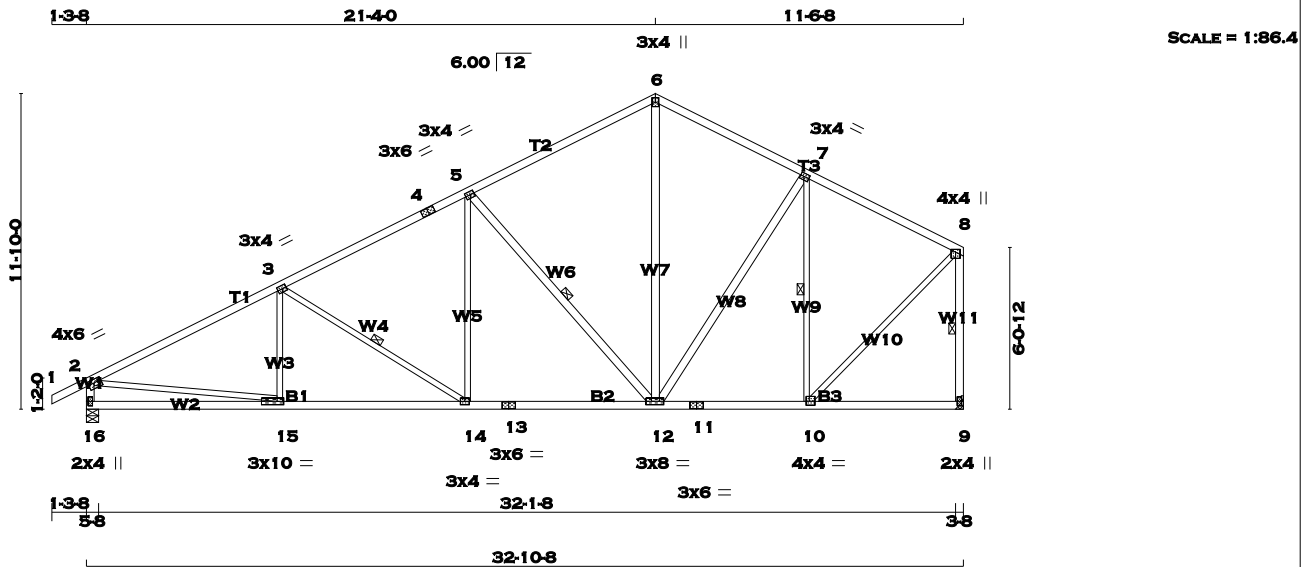
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 20 08:15:07 2017 Page 1

ID:Mn2zxnCa6NqoASkSkmLJtyfhri-HEBuTdHWIM1STCImoDq_sz8TP2BUdMy0ivGUNYzZ6co



TOTAL WEIGHT = 2 X 160 = 319 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	No.2
CHORDS	SIZE				
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 - 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	
5 - 12	2x4	DRY	No.2	SPF	
12 - 6	2x4	DRY	No.2	SPF	
12 - 7	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 2.75
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TMWW-t	MT20	3.0	4.0	1.50 1.75
6	TTW+p	MT20	3.0	4.0	
7	TMWW-t	MT20	3.0	4.0	1.50 1.50
8	TMVW+p	MT20	4.0	4.0	1.25 2.00
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	4.0	1.75 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWWW-t	MT20	3.0	8.0	1.50 2.50
13	BS-t	MT20	3.0	6.0	
14	BMWW-t	MT20	3.0	4.0	
15	BMWW-t	MT20	3.0	10.0	1.50 3.00
16	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			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
16	1664	0	1664	0	0	5-8	5-8
9	1559	0	1559	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	JT	SNOW	JT	LIVE	JT	WIND	JT	DEAD	JT	SOIL
16	1166	829 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0	0 / 0	0 / 0
9	1094	766 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14. DBS = 20-0-0. CBF = 65 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-12. DBS = 16-0-0. CBF = 93 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-10. DBS = 18-0-0. CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-9. DBS = 8-0-0. CBF = 76 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)		MAX. FACTORED VERT. LOAD (PLF)		MAX. FACTORED UNBRAC LENGTH FR-TO	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.4	-77.4	0.10 (1)	10.00	15-3	-108 / 85
2-3	-2288 / 0	-77.4	-77.4	0.66 (1)	3.89	3-14	-519 / 0
3-4	-1822 / 0	-77.4	-77.4	0.51 (1)	4.46	14-5	0 / 403
4-5	-1822 / 0	-77.4	-77.4	0.51 (1)	4.46	5-12	-925 / 0
5-6	-1162 / 0	-77.4	-77.4	0.49 (1)	5.27	12-6	0 / 636
6-7	-1163 / 0	-77.4	-77.4	0.35 (1)	5.48	12-7	0 / 202
7-8	-991 / 0	-77.4	-77.4	0.35 (1)	5.83	10-7	-779 / 0
16-2	-1611 / 0	0.0	0.0	0.16 (1)	6.52	2-15	0 / 2082
9-8	-1517 / 0	0.0	0.0	0.27 (1)	5.33	10-8	0 / 1271
16-15	0 / 0	-17.5	-17.5	0.21 (4)	10.00		
15-14	0 / 2067	-17.5	-17.5	0.43 (1)	10.00		
14-13	0 / 1630	-17.5	-17.5	0.35 (1)	10.00		
13-12	0 / 1630	-17.5	-17.5	0.35 (1)	10.00		
12-11	0 / 908	-17.5	-17.5	0.22 (1)	10.00		
11-10	0 / 908	-17.5	-17.5	0.22 (1)	10.00		
10-9	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

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 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.66 (2-3:1), BC=0.43 (14-15:1), WB=0.56 (5-12:1), 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.

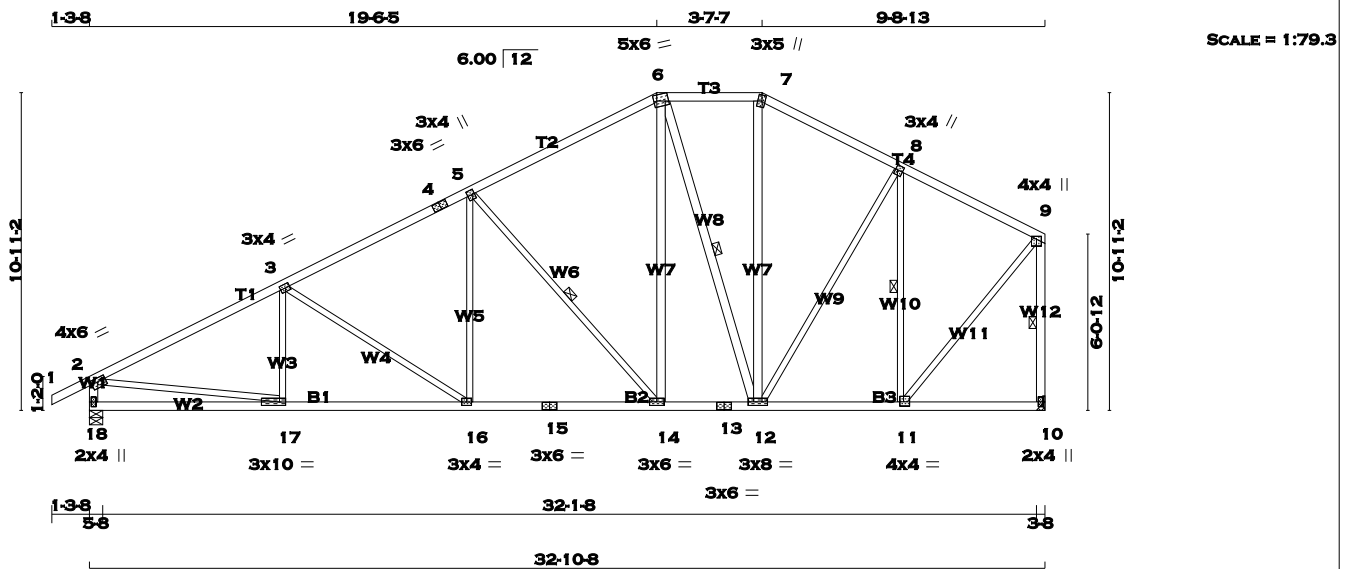
JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.61 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 172 = 344 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	
6 - 7	2x4	DRY	No.2	SPF	
7 - 9	2x4	DRY	No.2	SPF	
18 - 2	2x4	DRY	No.2	SPF	
10 - 9	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 EXCEPT	2x3	DRY	No.2	SPF	
6 - 12	2x4	DRY	No.2	SPF	
12 - 7	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	2.75
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TMWW+t	MT20	3.0	4.0	2.00	0.75
6	TTWW-m	MT20	5.0	6.0	Edge	4.75
7	TTW+m	MT20	3.0	5.0	2.50	1.25
8	TMWW+t	MT20	3.0	4.0	2.00	0.75
9	TMVW+p	MT20	4.0	4.0	1.25	2.00
10	BMV1+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	4.0	1.75	1.50
12	BMWWW-t	MT20	3.0	8.0		
13	BS-t	MT20	3.0	6.0		
14	BMWW-t	MT20	3.0	6.0		
15	BS-t	MT20	3.0	6.0		
16	BMWW-t	MT20	3.0	4.0		
17	BMWW-t	MT20	3.0	10.0	1.50	2.50
18	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG DOWN	REQRD BRG IN-SX
JT	VERT				
18	1664	0	1664	0	5-8
10	1559	0	1559	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
18	1166	829 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0
10	1094	766 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0

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

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 5-14. DBS = 18-0-0 . CBF = 93 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-12. DBS = 20-0-0 . CBF = 62 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-11. DBS = 16-0-0 . CBF = 86 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-10. DBS = 8-0-0 . CBF = 76 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	-77.4	-77.4 0.10 (1)	10.00	17-3	-144 / 64	0.04 (1)	
2-3	-2290 / 0	-77.4	-77.4 0.54 (1)	4.03	3-16	-426 / 0	0.51 (1)	
3-4	-1912 / 0	-77.4	-77.4 0.43 (1)	4.47	16-5	0 / 349	0.08 (1)	
4-5	-1912 / 0	-77.4	-77.4 0.43 (1)	4.47	5-14	-831 / 0	0.58 (1)	
5-6	-1317 / 0	-77.4	-77.4 0.42 (1)	5.16	14-6	0 / 711	0.11 (1)	
6-7	-1014 / 0	-77.4	-77.4 0.14 (1)	6.07	6-12	-495 / 0	0.34 (1)	
7-8	-1151 / 0	-77.4	-77.4 0.25 (1)	5.65	12-7	0 / 229	0.04 (1)	
8-9	-909 / 0	-77.4	-77.4 0.24 (1)	6.18	12-8	0 / 352	0.08 (1)	
18-2	-1615 / 0	0.0	0.0 0.16 (1)	6.51	11-8	-861 / 0	0.40 (1)	
10-9	-1525 / 0	0.0	0.0 0.28 (1)	5.32	2-17	0 / 2084	0.47 (1)	
					11-9	0 / 1271	0.29 (1)	
18-17	0 / 0	-17.5	-17.5 0.17 (4)	10.00				
17-16	0 / 2067	-17.5	-17.5 0.41 (1)	10.00				
16-15	0 / 1710	-17.5	-17.5 0.35 (1)	10.00				
15-14	0 / 1710	-17.5	-17.5 0.35 (1)	10.00				
14-13	0 / 1168	-17.5	-17.5 0.24 (1)	10.00				
13-12	0 / 1168	-17.5	-17.5 0.24 (1)	10.00				
12-11	0 / 831	-17.5	-17.5 0.19 (1)	10.00				
11-10	0 / 0	-17.5	-17.5 0.11 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.54 (2-3:1), BC=0.41 (16-17:1), WB=0.58 (5-14:1), SSI=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.

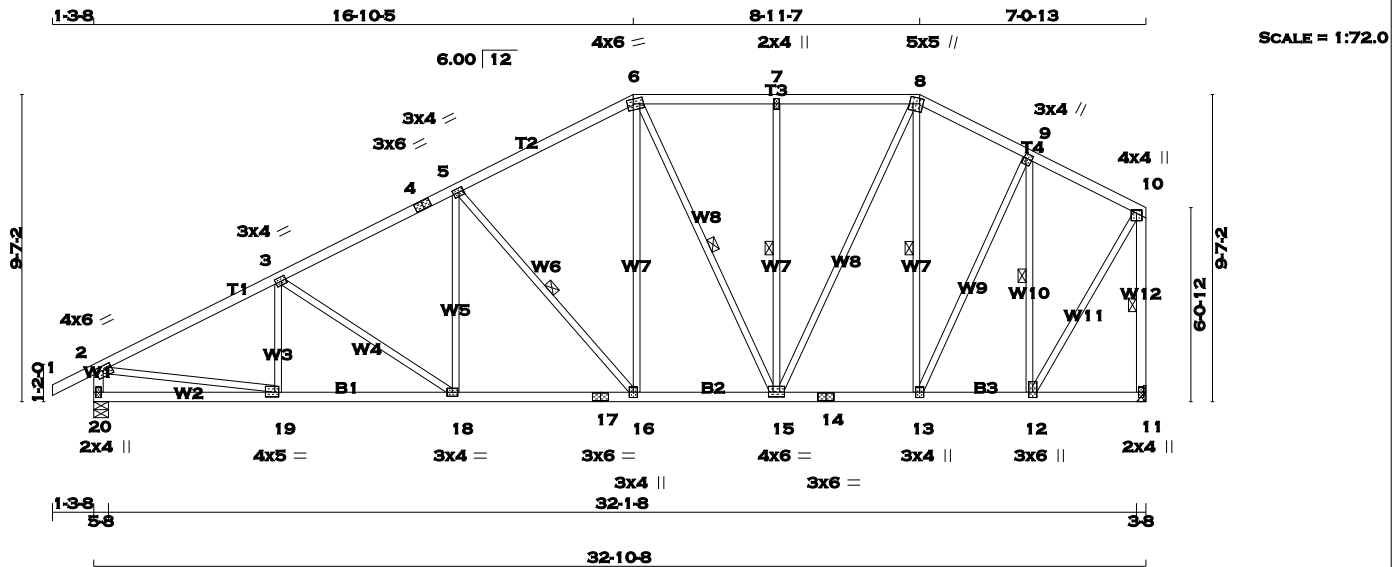
JSI GRIP= 0.90 (5) (INPUT = 0.90)
JSI METAL= 0.61 (2) (INPUT = 1.00)



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LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 6	2x4	DRY	No.2	SPF	SPF
6 - 8	2x4	DRY	No.2	SPF	SPF
8 - 10	2x4	DRY	No.2	SPF	SPF
20 - 2	2x4	DRY	No.2	SPF	SPF
11 - 10	2x4	DRY	No.2	SPF	SPF
20 - 17	2x4	DRY	No.2	SPF	SPF
17 - 14	2x4	DRY	No.2	SPF	SPF
14 - 11	2x4	DRY	No.2	SPF	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	1.50	2.75
4	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TMWW-t	MT20	3.0	4.0	1.50	1.75
6	TTWW-m	MT20	4.0	6.0	1.75	2.25
7	TMW-w	MT20	2.0	4.0		
8	TTWW+m	MT20	5.0	5.0	2.00	1.25
9	TMWW+t	MT20	3.0	4.0	1.75	0.75
10	TMVW+p	MT20	4.0	4.0	1.25	2.00
11	BMV1+p	MT20	2.0	4.0		
12	BMWW+t	MT20	3.0	6.0	2.00	1.50
13	BMWW+t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMWWW-t	MT20	4.0	6.0	1.75	3.00
16	BMWW+t	MT20	3.0	4.0		
17	BS-t	MT20	3.0	6.0		
18	BMWW-t	MT20	3.0	4.0		
19	BMWW-t	MT20	4.0	5.0	1.75	1.50
20	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	IN-SX	IN-SX		
20		1664	0	1664	0	5-8	5-8		
11		1559	0	1559	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
20	1166	829 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0
11	1094	766 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.19 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 5-16, 6-15, 7-15, 8-13. DBS = 20-0-0 . CBF = 84 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-12. DBS = 14-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-11. DBS = 8-0-0 . CBF = 77 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	19-3	-201 / 33	0.05 (1)
2-3	-2278 / 0	-77.4 -77.4	0.40 (1)	4.19	3-18	-284 / 0	0.23 (1)
3-4	-2032 / 0	-77.4 -77.4	0.32 (1)	4.47	18-5	0 / 258	0.06 (1)
4-5	-2032 / 0	-77.4 -77.4	0.32 (1)	4.47	5-16	-675 / 0	0.34 (1)
5-6	-1557 / 0	-77.4 -77.4	0.31 (1)	4.96	16-6	0 / 600	0.13 (1)
6-7	-1277 / 0	-77.4 -77.4	0.21 (1)	5.48	6-15	-243 / 0	0.19 (1)
7-8	-1277 / 0	-77.4 -77.4	0.21 (1)	5.48	15-7	-422 / 0	0.26 (1)
8-9	-1066 / 0	-77.4 -77.4	0.13 (1)	5.96	15-8	0 / 792	0.18 (1)
9-10	-751 / 0	-77.4 -77.4	0.13 (1)	6.25	13-8	-476 / 0	0.29 (1)
20-2	-1620 / 0	0.0	0.0	16.10	13-9	0 / 602	0.14 (1)
11-10	-1534 / 0	0.0	0.0	28.10	12-9	-1014 / 0	0.40 (1)
					2-19	0 / 2076	0.47 (1)
20-19	0 / 0	-17.5 -17.5	0.12 (4)	10.00	12-10	0 / 1281	0.29 (1)
19-18	0 / 2053	-17.5 -17.5	0.38 (1)	10.00			
18-17	0 / 1818	-17.5 -17.5	0.35 (1)	10.00			
17-16	0 / 1818	-17.5 -17.5	0.35 (1)	10.00			
16-15	0 / 1382	-17.5 -17.5	0.27 (1)	10.00			
15-14	0 / 933	-17.5 -17.5	0.18 (1)	10.00			
14-13	0 / 933	-17.5 -17.5	0.18 (1)	10.00			
13-12	0 / 684	-17.5 -17.5	0.14 (1)	10.00			
12-11	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

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 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.40 (2-3:1), BC=0.38 (18-19:1), WB=0.47 (2-19:1), 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

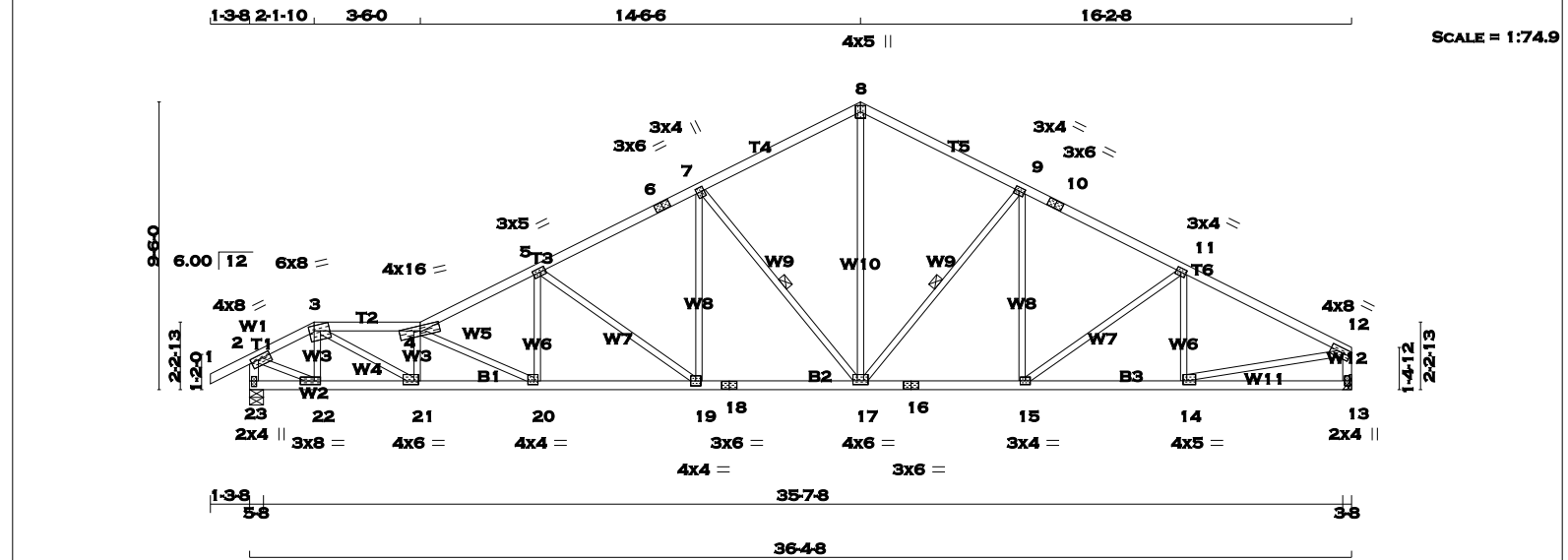
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (19) (INPUT = 0.90)
JSI METAL= 0.62 (19) (INPUT = 1.00)

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TOWN OF MILTON
MAR 29, 2017
17-5409
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 153 = 306 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	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			
10 - 12	2x4	DRY	No.2	SPF			
23 - 2	2x4	DRY	No.2	SPF			
13 - 12	2x4	DRY	No.2	SPF			
23 - 18	2x4	DRY	No.2	SPF			
18 - 16	2x4	DRY	No.2	SPF			
16 - 13	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	8.0	1.50	3.00
3	TTWW-m	MT20	6.0	8.0	2.00	2.00
4	TTWW-m	MT20	4.0	16.0	2.00	7.75
5	TMWW-t	MT20	3.0	5.0	1.50	2.00
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.75	0.75
8	TTW+p	MT20	4.0	5.0		
9	TMWW-t	MT20	3.0	4.0	1.50	1.75
10	TS-t	MT20	3.0	6.0		
11	TMWW-t	MT20	3.0	4.0	1.50	1.75
12	TMVW-t	MT20	4.0	8.0	1.75	Edge
13	BMV1+p	MT20	2.0	4.0		
14	BMWW-t	MT20	4.0	5.0	1.50	1.50
15	BMWW-t	MT20	3.0	4.0		
16	BS-t	MT20	3.0	6.0		
17	BMWWW-t	MT20	4.0	6.0	1.50	3.00
18	BS-t	MT20	3.0	6.0		
19	BMWW-t	MT20	4.0	4.0		
20	BMWW-t	MT20	4.0	4.0	1.50	1.50
21	BMWW-t	MT20	4.0	6.0	1.50	1.75
22	BMWW-t	MT20	3.0	8.0	1.50	2.50
23	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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG IN-SX	BRG IN-SX
23	1830	0	1830	0	0	5-8	5-8
13	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
23	1282	910 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
13	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) 23

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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-17. DBS = 14-0-0. CBF = 93 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-17. 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)			
C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH (LC)	MEMB.
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	22-3	-611 / 0	0.09 (1)
2-3	-2070 / 0	-77.4 -77.4	0.09 (1)	4.66	3-21	0 / 2675	0.60 (1)
3-4	-4141 / 0	-77.4 -77.4	0.31 (1)	3.25	21-4	-1320 / 0	0.20 (1)
4-5	-3538 / 0	-77.4 -77.4	0.30 (1)	3.53	4-20	-1152 / 0	0.37 (1)
5-6	-2633 / 0	-77.4 -77.4	0.36 (1)	3.98	20-5	0 / 622	0.14 (1)
6-7	-2633 / 0	-77.4 -77.4	0.36 (1)	3.98	5-19	-1011 / 0	0.80 (1)
7-8	-1911 / 0	-77.4 -77.4	0.31 (1)	4.58	19-7	0 / 682	0.15 (1)
8-9	-1909 / 0	-77.4 -77.4	0.31 (1)	4.59	7-17	-1059 / 0	0.51 (1)
9-10	-2295 / 0	-77.4 -77.4	0.32 (1)	4.26	17-8	0 / 1361	0.31 (1)
10-11	-2295 / 0	-77.4 -77.4	0.32 (1)	4.26	17-9	-569 / 0	0.27 (1)
11-12	-2403 / 0	-77.4 -77.4	0.38 (1)	4.11	15-9	0 / 171	0.04 (4)
23-2	-1828 / 0	0.0	0.0 18 (1)	6.20	15-11	-139 / 0	0.11 (1)
13-12	-1683 / 0	0.0	0.0 17 (1)	6.40	14-11	-323 / 0	0.08 (1)
					2-22	0 / 1980	0.45 (1)
					14-12	0 / 2206	0.50 (1)
23-22	0 / 0	-17.5 -17.5	0.05 (1)	10.00			
22-21	0 / 1816	-17.5 -17.5	0.39 (1)	10.00			
21-20	0 / 4212	-17.5 -17.5	0.78 (1)	10.00			
20-19	0 / 3181	-17.5 -17.5	0.56 (1)	10.00			
19-18	0 / 2362	-17.5 -17.5	0.44 (1)	10.00			
18-17	0 / 2362	-17.5 -17.5	0.44 (1)	10.00			
17-16	0 / 2052	-17.5 -17.5	0.39 (1)	10.00			
16-15	0 / 2052	-17.5 -17.5	0.39 (1)	10.00			
15-14	0 / 2165	-17.5 -17.5	0.39 (1)	10.00			
14-13	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/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 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.41")

CSI: TC=0.38 (11-12:1), BC=0.78 (20-21:1), WB=0.80 (5-19:1), SSI=0.18 (11-12:1)

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

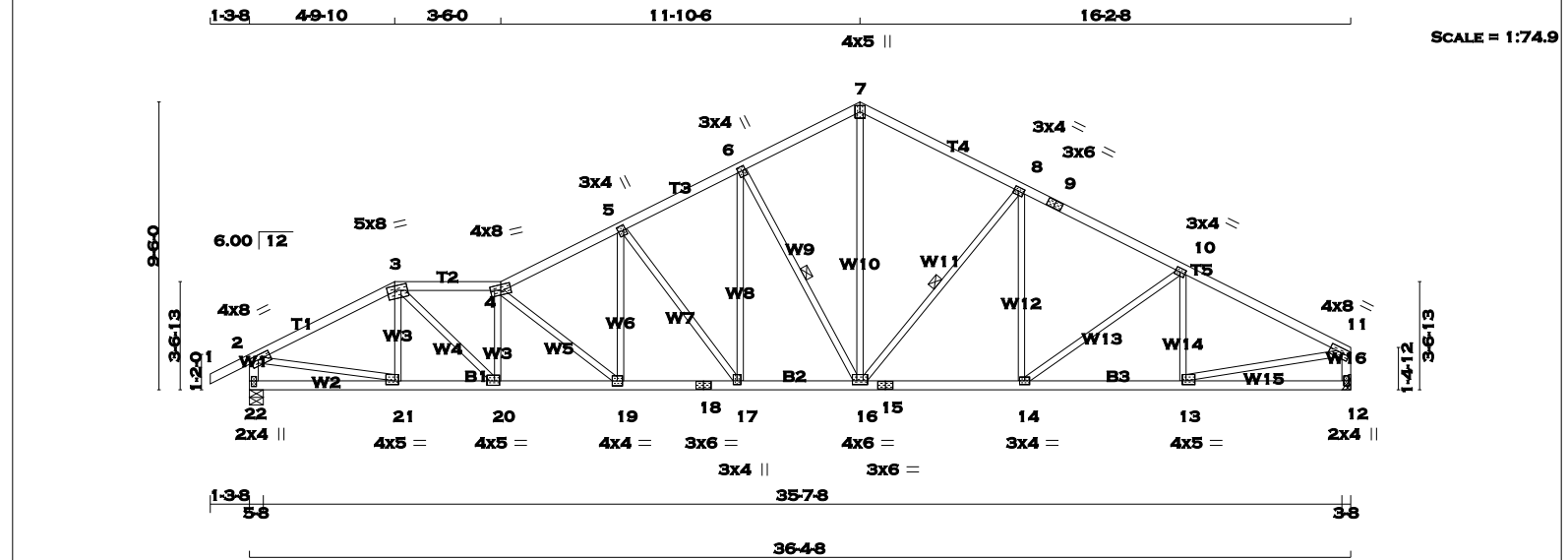
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (19) (INPUT = 0.90)
JSI METAL= 0.65 (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.



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
9 - 11	2x4	DRY	No.2
22 - 2	2x4	DRY	No.2
12 - 11	2x4	DRY	No.2
22 - 18	2x4	DRY	No.2
18 - 15	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
2	TMVW-t	MT20	4.0	8.0 1.75 3.00
3	TTWW-m	MT20	5.0	8.0 1.75 3.00
4	TTWW-m	MT20	4.0	8.0 2.25 4.00
5	TMWW+t	MT20	3.0	4.0 2.00 0.75
6	TMWW+t	MT20	3.0	4.0 1.75 0.75
7	TTW+p	MT20	4.0	5.0
8	TMWW-t	MT20	3.0	4.0 1.50 1.75
9	TS-t	MT20	3.0	6.0
10	TMWW-t	MT20	3.0	4.0 1.50 1.75
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	4.0	6.0 1.50 3.00
17	BMWW+t	MT20	3.0	4.0 1.50 1.50
18	BS-t	MT20	3.0	6.0
19	BMWW-t	MT20	4.0	4.0
20	BMWW-t	MT20	4.0	5.0 1.75 2.00
21	BMWW-t	MT20	4.0	5.0 1.50 1.50
22	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
22	1830	0	1830
12	1725	0	1725

UNFACTORED REACTIONS							
JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
22	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) 22

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 6-16. DBS = 14-0-0. CBF = 86 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)			

C H O R D S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO		FROM TO	LENGTH
1-2	0 / 23	-77.4	-77.4 0.10 (1)
2-3	-2484 / 0	-77.4	-77.4 0.32 (1)
3-4	-3343 / 0	-77.4	-77.4 0.25 (1)
4-5	-3005 / 0	-77.4	-77.4 0.24 (1)
5-6	-2420 / 0	-77.4	-77.4 0.19 (1)
6-7	-1903 / 0	-77.4	-77.4 0.18 (1)
7-8	-1909 / 0	-77.4	-77.4 0.31 (1)
8-9	-2295 / 0	-77.4	-77.4 0.32 (1)
9-10	-2295 / 0	-77.4	-77.4 0.32 (1)
10-11	-2403 / 0	-77.4	-77.4 0.38 (1)
22-2	-1793 / 0	0.0	0.0 0.18 (1)
12-11	-1683 / 0	0.0	0.0 0.17 (1)
22-21	0 / 0	-17.5	-17.5 0.09 (4)
21-20	0 / 2211	-17.5	-17.5 0.39 (1)
20-19	0 / 3376	-17.5	-17.5 0.60 (1)
19-18	0 / 2701	-17.5	-17.5 0.47 (1)
18-17	0 / 2701	-17.5	-17.5 0.47 (1)
17-16	0 / 2165	-17.5	-17.5 0.41 (1)
16-15	0 / 2052	-17.5	-17.5 0.39 (1)
15-14	0 / 2052	-17.5	-17.5 0.39 (1)
14-13	0 / 2165	-17.5	-17.5 0.39 (1)
13-12	0 / 0	-17.5	-17.5 0.12 (4)
10-10	0 / 0	10.00	10.00 21-3
13-11	0 / 2206	10.00	10.00 13-11

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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.35")

CSI: TC=0.38 (10-11:1), BC=0.60 (19-20:1), WB=0.69 (5-17:1), SSI=0.18 (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)
MT20	618	354	1667	822	2284

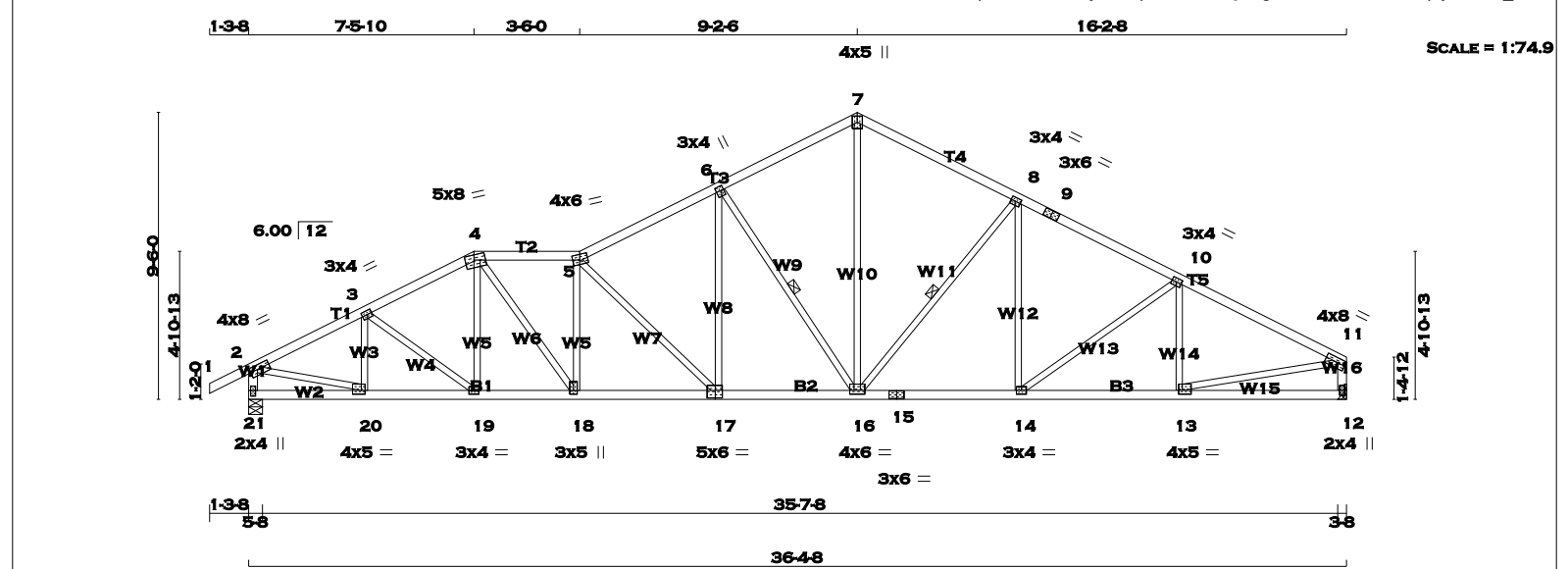
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (20) (INPUT = 0.90)
JSI METAL= 0.71 (18) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 159 = 319 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
7 - 9	2x4	DRY	No.2	SPF
9 - 11	2x4	DRY	No.2	SPF
21 - 2	2x4	DRY	No.2	SPF
12 - 11	2x4	DRY	No.2	SPF
21 - 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.

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	8.0	2.00 3.50
5	TTWW-m	MT20	4.0	6.0	2.25 2.75
6	TMWW-t	MT20	3.0	4.0	1.75 0.75
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	BMWWW-t	MT20	4.0	6.0	1.50 3.00
17	BSWW-l	MT20	5.0	6.0	3.00 2.75
18	BMWWW-t	MT20	3.0	5.0	1.50 1.50
19	BMWWW-t	MT20	3.0	4.0	
20	BMWWW-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		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
21	1830	0	1830	0	0	5-8	5-8		
12	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
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 = 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-16. DBS = 14-0-0. CBF = 89 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)			
C H O R D S				W E B S			
MEMB.	MAX. FACTORED	FACTORED	MAX.	MEMB.	MAX. FACTORED	FACTORED	MAX.
FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	FR-TO	FORCE (LBS)	MAX. UNBRAC (CSI (LC))	
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	20-3	-427 / 0	0.08 (1)
2-3	-2413 / 0	-77.4	-77.4 0.19 (1)	4.28	3-19	0 / 77	0.02 (1)
3-4	-2510 / 0	-77.4	-77.4 0.19 (1)	4.22	19-4	0 / 51	0.02 (4)
4-5	-2855 / 0	-77.4	-77.4 0.21 (1)	3.96	4-18	0 / 1050	0.24 (1)
5-6	-2506 / 0	-77.4	-77.4 0.29 (1)	4.13	18-5	-784 / 0	0.28 (1)
6-7	-1910 / 0	-77.4	-77.4 0.25 (1)	4.65	5-17	-868 / 0	0.67 (1)
7-8	-1909 / 0	-77.4	-77.4 0.31 (1)	4.59	17-6	0 / 692	0.16 (1)
8-9	-2295 / 0	-77.4	-77.4 0.32 (1)	4.26	6-16	-1022 / 0	0.48 (1)
9-10	-2295 / 0	-77.4	-77.4 0.32 (1)	4.26	16-7	0 / 1387	0.31 (1)
10-11	-2403 / 0	-77.4	-77.4 0.38 (1)	4.11	16-8	-570 / 0	0.28 (1)
21-2	-1795 / 0	0.0	0.0 0.18 (1)	6.24	14-8	0 / 172	0.04 (4)
12-11	-1683 / 0	0.0	0.0 0.17 (1)	6.40	14-10	-139 / 0	0.11 (1)
					13-10	-323 / 0	0.09 (1)
21-20	0 / 0	-17.5	-17.5 0.05 (4)	10.00	2-20	0 / 2223	0.50 (1)
20-19	0 / 2169	-17.5	-17.5 0.38 (1)	10.00	13-11	0 / 2206	0.50 (1)
19-18	0 / 2232	-17.5	-17.5 0.39 (1)	10.00			
18-17	0 / 2873	-17.5	-17.5 0.51 (1)	10.00			
17-16	0 / 2259	-17.5	-17.5 0.42 (1)	10.00			
16-15	0 / 2052	-17.5	-17.5 0.39 (1)	10.00			
15-14	0 / 2052	-17.5	-17.5 0.39 (1)	10.00			
14-13	0 / 2165	-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 (0.31")

CSI: TC=0.38 (10-11:1), BC=0.51 (17-18:1), WB=0.67 (5-17:1), SSI=0.18 (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.

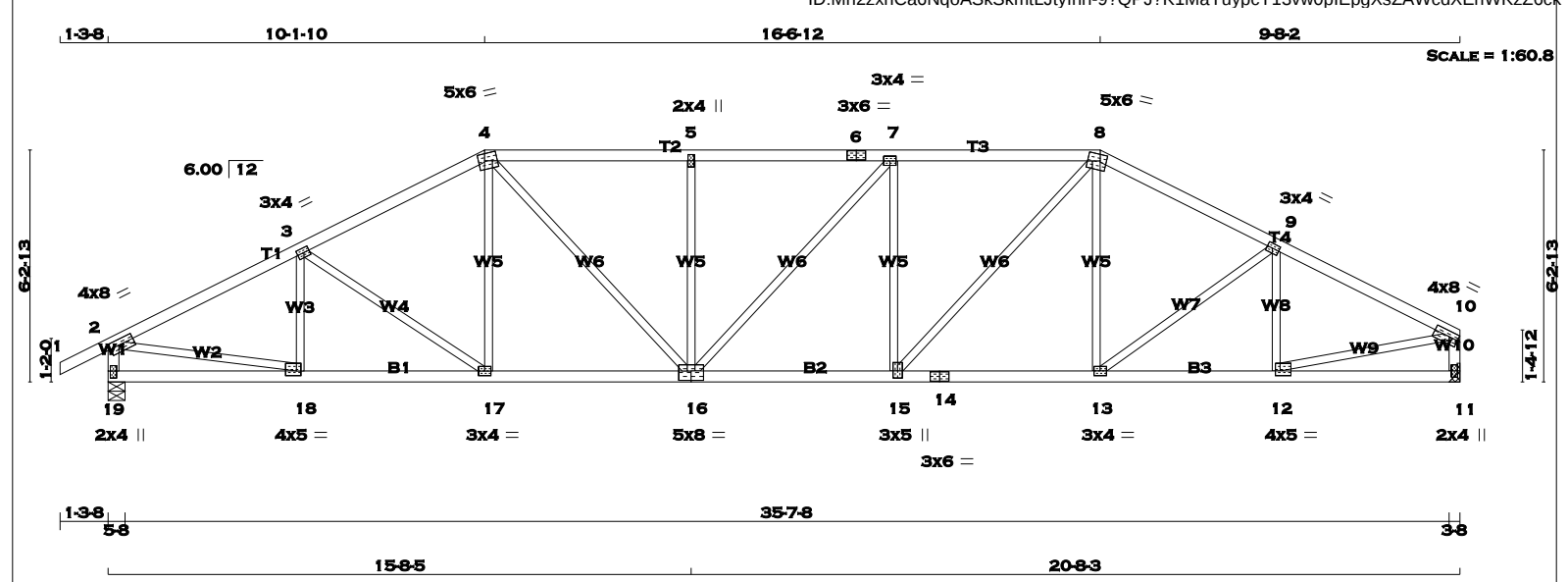
JSI GRIP= 0.89 (18) (INPUT = 0.90)
JSI METAL= 0.65 (20) (INPUT = 1.00)



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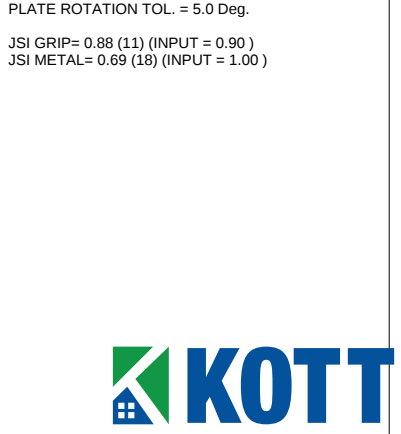


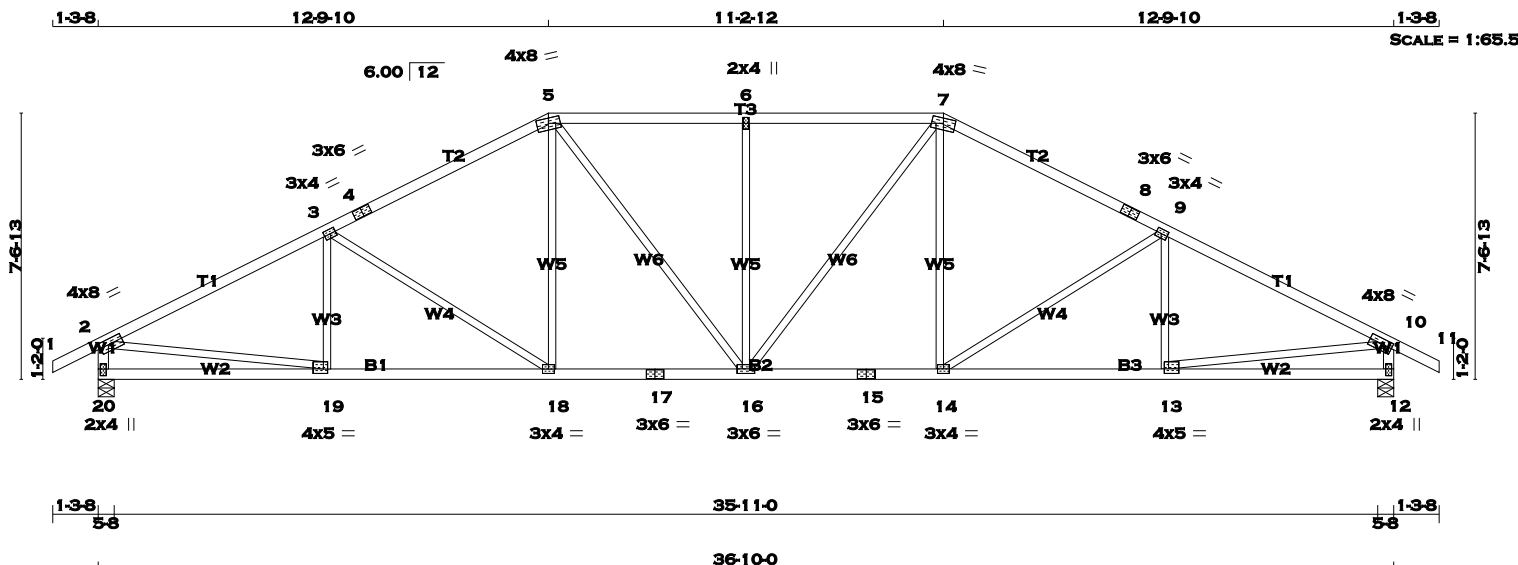
LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES																													
CHORDS					SIZE					LUMBER					DESCR.														
1 - 4					2x4					DRY					No.2					SPF					SPECIFIED LOADS:				
4 - 6					2x4					DRY					No.2					SPF					TOP CH. LL = 23.3 PSF				
6 - 8					2x4					DRY					No.2					SPF					DL = 3.0 PSF				
8 - 10					2x4					DRY					No.2					SPF					BOT CH. LL = 0.0 PSF				
19 - 2					2x4					DRY					No.2					SPF					DL = 7.0 PSF				
11 - 10					2x4					DRY					No.2					SPF					TOTAL LOAD = 33.3 PSF				
19 - 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 EXCEPT										SPF																			
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		TMWW-t		MT20		3.0		4.0		1.50		1.75																	
4		TTWW-m		MT20		5.0		6.0		2.25		2.00																	
5		TMW+w		MT20		2.0		4.0																					
6		TS-t		MT20		3.0		6.0																					
7		TMWW-t		MT20		3.0		4.0																					
8		TTWW-m		MT20		5.0		6.0		2.00		2.00																	
9		TMWW-t		MT20		3.0		4.0		1.50		1.75																	
10		TMVW-t		MT20		4.0		8.0		1.75		Edge																	
11		BMV1+p		MT20		2.0		4.0																					
12		BMWW-t		MT20		4.0		5.0		1.50		1.50																	
13		BMWW-t		MT20		3.0		4.0																					
14		BS-t		MT20		3.0		6.0																					
15		BMWW+t		MT20		3.0		5.0		2.25		1.50																	
16		BSWWW-I		MT20		5.0		8.0		3.00		4.00																	
17		BMWW-t		MT20		3.0		4.0																					
18		BMWW-t		MT20		4.0		5.0		1.50		1.50																	
19		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.																													
										UNFACTORED REACTIONS																			
										1ST LCASE MAX./MIN. COMPONENT REACTIONS																			
JT										COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL																			
19										1282 910 / 0 0 / 0 0 / 0 372 / 0 0 / 0																			
11										1211 847 / 0 0 / 0 0 / 0 364 / 0 0 / 0																			
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19																													
BRACING																													
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.95 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 VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FORCE MAX.										MEMB. FORCE MAX.																			
(LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO										(LBS) CSI (LC)																			
FR-TO FROM TO										FR-TO																			
1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 18-3 -292 / 0 0.07 (1)																													
2-3 -2544 / 0 -77.4 -77.4 0.34 (1) 4.05 3-17 -197 / 0 0.13 (1)																													
3-4 -2403 / 0 -77.4 -77.4 0.32 (1) 4.16 17-4 0 / 209 0.05 (1)																													
4-5 -2633 / 0 -77.4 -77.4 0.38 (1) 3.95 4-16 0 / 730 0.16 (1)																													
5-6 -2633 / 0 -77.4 -77.4 0.35 (1) 3.99 16-5 -461 / 0 0.28 (1)																													
6-7 -2633 / 0 -77.4 -77.4 0.35 (1) 3.99 16-7 0 / 27 0.01 (1)																													
7-8 -2614 / 0 -77.4 -77.4 0.37 (1) 3.96 15-7 -483 / 0 0.30 (1)																													
8-9 -2335 / 0 -77.4 -77.4 0.29 (1) 4.24 15-8 0 / 793 0.18 (1)																													
9-10 -2366 / 0 -77.4 -77.4 0.30 (1) 4.21 13-8 0 / 142 0.04 (4)																													
19-2 -1789 / 0 0.0 0.0 0.18 (1) 6.24 13-9 -78 / 0 0.05 (1)																													
11-10 -1686 / 0 0.0 0.0 0.17 (1) 6.39 12-9 -384 / 0 0.09 (1)																													
										2-18 0 / 2324 0.52 (1)																			
										12-10 0 / 2184 0.49 (1)																			
19-18 0 / 0 -17.5 -17.5 0.09 (4) 10.00 12-10																													
18-17 0 / 2293 -17.5 -17.5 0.43 (1) 10.00																													
17-16 0 / 2134 -17.5 -17.5 0.40 (1) 10.00																													
16-15 0 / 2614 -17.5 -17.5 0.47 (1) 10.00																													
15-14 0 / 2073 -17.5 -17.5 0.39 (1) 10.00																													
14-13 0 / 2073 -17.5 -17.5 0.39 (1) 10.00																													
13-12 0 / 2133 -17.5 -17.5 0.40 (1) 10.00																													
12-11 0 / 0 -17.5 -17.5 0.09 (4) 10.00																													
																				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									



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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 - 8	2x4	DRY	No.2
8 - 11	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
20 - 17	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2

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	4.0	8.0	1.75 3.00
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TTWW-m	MT20	4.0	8.0	1.75 4.00
6	TMW+w	MT20	2.0	4.0	
7	TTWW-m	MT20	4.0	8.0	1.75 4.00
8	TS-t	MT20	3.0	6.0	
9	TMVW-t	MT20	3.0	4.0	1.50 1.75
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	BMVW-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	BMWWW-t	MT20	3.0	6.0	
17	BS-t	MT20	3.0	6.0	
18	BMWWW-t	MT20	3.0	4.0	
19	BMVW-t	MT20	4.0	5.0	1.50 1.50
20	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		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
20	1852	0	1852	0	5-8
12	1852	0	1852	0	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
20	1297	921 / 0	LIVE	PERM.	LIVE	WIND	DEAD
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) 20, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 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.

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO		FROM	TO
1-2	0 / 23	-77.4	-77.4 0.10 (1)
2-3	-2636 / 0	-77.4	-77.4 0.58 (1)
3-4	-2276 / 0	-77.4	-77.4 0.51 (1)
4-5	-2276 / 0	-77.4	-77.4 0.51 (1)
5-6	-2255 / 0	-77.4	-77.4 0.38 (1)
6-7	-2255 / 0	-77.4	-77.4 0.38 (1)
7-8	-2276 / 0	-77.4	-77.4 0.51 (1)
8-9	-2276 / 0	-77.4	-77.4 0.51 (1)
9-10	-2636 / 0	-77.4	-77.4 0.58 (1)
10-11	0 / 23	-77.4	-77.4 0.10 (1)
20-2	-1803 / 0	0.0	0.0 0.18 (1)
12-10	-1803 / 0	0.0	0.0 0.18 (1)
20-19	0 / 0	-17.5	-17.5 0.17 (4)
19-18	0 / 2380	-17.5	-17.5 0.45 (1)
18-17	0 / 2016	-17.5	-17.5 0.39 (1)
17-16	0 / 2016	-17.5	-17.5 0.39 (1)
16-15	0 / 2016	-17.5	-17.5 0.39 (1)
15-14	0 / 2016	-17.5	-17.5 0.39 (1)
14-13	0 / 2380	-17.5	-17.5 0.45 (1)
13-12	0 / 0	-17.5	-17.5 0.17 (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 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL)= L/999 (0.27")

CSI: TC=0.58 (9-10:1), BC=0.45 (18-19:1), WB=0.55 (6-16:1), SSI=0.22 (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.

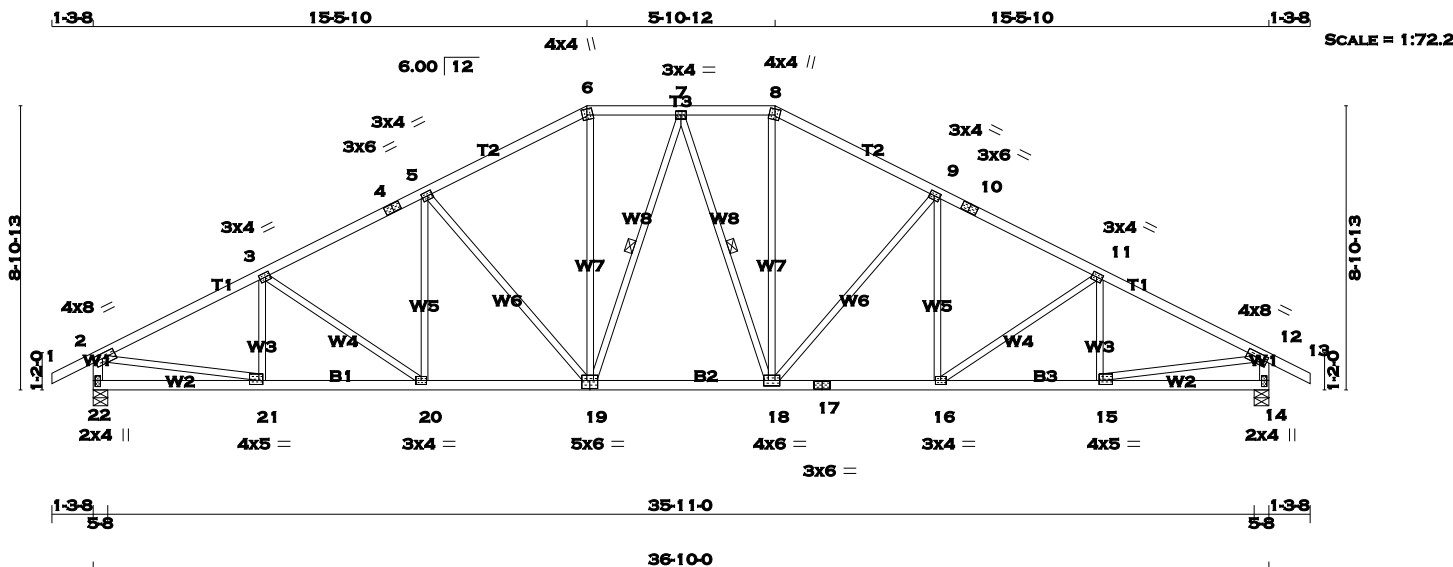
JSI GRIP= 0.87 (13) (INPUT = 0.90)
JSI METAL= 0.71 (19) (INPUT = 1.00)



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LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2	4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2	6 - 8	2x4	DRY	No.2
8 - 10	2x4	DRY	No.2	8 - 10	2x4	DRY	No.2
10 - 13	2x4	DRY	No.2	10 - 13	2x4	DRY	No.2
22 - 2	2x4	DRY	No.2	22 - 2	2x4	DRY	No.2
14 - 12	2x4	DRY	No.2	14 - 12	2x4	DRY	No.2
22 - 19	2x4	DRY	No.2	22 - 19	2x4	DRY	No.2
19 - 17	2x4	DRY	No.2	19 - 17	2x4	DRY	No.2
17 - 14	2x4	DRY	No.2	17 - 14	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				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, 5, 9, 11						
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
6	TTW+m	MT20	4.0	4.0	2.25	1.75
7	TMWW-t	MT20	3.0	4.0		
8	TTW+m	MT20	4.0	4.0	2.25	1.75
10	TS-t	MT20	3.0	6.0		
12	TMVW-t	MT20	4.0	8.0	1.75	3.00
14	BMV1+p	MT20	2.0	4.0	2.25	1.00
15	BMWW-t	MT20	4.0	5.0	1.50	1.50
16	BMWW-t	MT20	3.0	4.0		
17	BS-t	MT20	3.0	6.0		
18	BMWW-t	MT20	4.0	6.0		
19	BSWW-t	MT20	5.0	6.0	3.00	3.00
20	BMWW-t	MT20	3.0	4.0		
21	BMWW-t	MT20	4.0	5.0	1.50	1.50
22	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									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
22		1852	0	1852	0	0	5-8	5-8	
14		1852	0	1852	0	0	5-8	5-8	
UNFACTORED REACTIONS									
JT	1ST LCASE	MAX.	MIN.	COMPONENT	REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.	LIVE	WIND	DEAD	SOIL	
22	1297	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	
14	1297	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22, 14									

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.01 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 7-19, 7-18. DBS = 20-0-0 . CBF = 17 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	21-3	-281 / 3	0.06 (1)
2-3	-2578 / 0	-77.4 -77.4	0.37 (1)	4.01	3-20	-159 / 0	0.11 (1)
3-4	-2448 / 0	-77.4 -77.4	0.30 (1)	4.17	20-5	0 / 177	0.04 (4)
4-5	-2448 / 0	-77.4 -77.4	0.30 (1)	4.17	5-19	-564 / 0	0.74 (1)
5-6	-2056 / 0	-77.4 -77.4	0.29 (1)	4.47	19-6	0 / 655	0.15 (1)
6-7	-1829 / 0	-77.4 -77.4	0.11 (1)	4.88	19-7	-135 / 0	0.08 (1)
7-8	-1830 / 0	-77.4 -77.4	0.11 (1)	4.88	7-18	-134 / 0	0.08 (1)
8-9	-2055 / 0	-77.4 -77.4	0.29 (1)	4.47	18-8	0 / 654	0.15 (1)
9-10	-2448 / 0	-77.4 -77.4	0.30 (1)	4.17	18-9	-564 / 0	0.75 (1)
10-11	-2448 / 0	-77.4 -77.4	0.30 (1)	4.17	16-9	0 / 178	0.04 (4)
11-12	-2578 / 0	-77.4 -77.4	0.37 (1)	4.01	16-11	-159 / 0	0.11 (1)
12-13	0 / 23	-77.4 -77.4	0.10 (1)	10.00	15-11	-281 / 2	0.06 (1)
22-2	-1810 / 0	0.0	0.0 18 (1)	6.22	2-21	0 / 2351	0.53 (1)
14-12	-1810 / 0	0.0	0.0 18 (1)	6.22	15-12	0 / 2351	0.53 (1)
22-21	0 / 0	-17.5 -17.5	0.10 (4)	10.00			
21-20	0 / 2320	-17.5 -17.5	0.41 (1)	10.00			
20-19	0 / 2189	-17.5 -17.5	0.41 (1)	10.00			
19-18	0 / 1872	-17.5 -17.5	0.36 (1)	10.00			
18-17	0 / 2189	-17.5 -17.5	0.41 (1)	10.00			
17-16	0 / 2189	-17.5 -17.5	0.41 (1)	10.00			
16-15	0 / 2320	-17.5 -17.5	0.41 (1)	10.00			
15-14	0 / 0	-17.5 -17.5	0.10 (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 (1.23") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14") ALLOWABLE DEFL.(TL)= L/360 (1.23") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.25")			
CSI: TC=0.37 (2-3:1), BC=0.41 (20-21:1), WB=0.75 (9-18:1), SSI=0.17 (11-12:1)			
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

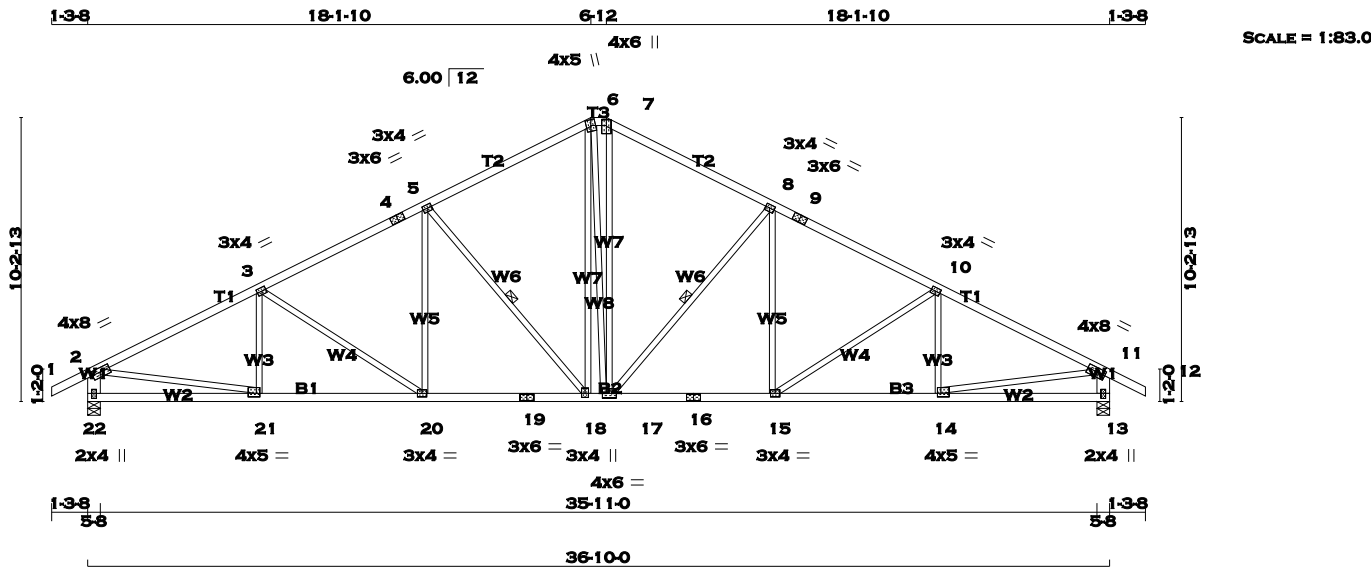
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (15) (INPUT = 0.90)
JSI METAL= 0.70 (21) (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	1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2	4 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2	6 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2	7 - 9	2x4	DRY	No.2
9 - 12	2x4	DRY	No.2	9 - 12	2x4	DRY	No.2
22 - 2	2x6	DRY	No.2	22 - 2	2x6	DRY	No.2
13 - 11	2x6	DRY	No.2	13 - 11	2x6	DRY	No.2
22 - 19	2x4	DRY	No.2	22 - 19	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2	19 - 16	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2	16 - 13	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				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	3.75	
3, 5, 8, 10							
3	TMWW-t	MT20	3.0	4.0	1.50	1.75	
4	TS-t	MT20	3.0	6.0			
6	TTWW+m	MT20	4.0	5.0			
7	TTWW+p	MT20	4.0	6.0	2.50	2.00	
9	TS-t	MT20	3.0	6.0			
11	TMVW-t	MT20	4.0	8.0	1.75	3.75	
13	BMV1+p	MT20	2.0	4.0	2.25	1.00	
14	BMWW-t	MT20	4.0	5.0	1.50	1.50	
15	BMWW-t	MT20	3.0	4.0			
16	BS-t	MT20	3.0	6.0			
17	BMWWW-t	MT20	4.0	6.0			
18	BMWW-t	MT20	3.0	4.0	1.75	1.50	
19	BS-t	MT20	3.0	6.0			
20	BMWW-t	MT20	3.0	4.0			
21	BMWW-t	MT20	4.0	5.0	1.50	1.50	
22	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									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
22	1852	0	1852	0	0	5-8	5-8	5-8	
13	1852	0	1852	0	0	5-8	5-8	5-8	

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
22	1297	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	
13	1297	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22, 13

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.86 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 5-18, 8-17. DBS = 20-0-0. CBF = 91 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	21-3	-215 / 36	0.06 (1)
2-3	-2613 / 0	-77.4 -77.4	0.50 (1)	3.86	3-20	-309 / 0	0.31 (1)
3-4	-2345 / 0	-77.4 -77.4	0.40 (1)	4.15	20-5	0 / 281	0.06 (1)
4-5	-2345 / 0	-77.4 -77.4	0.40 (1)	4.15	5-18	-728 / 0	0.42 (1)
5-6	-1840 / 0	-77.4 -77.4	0.39 (1)	4.57	18-6	0 / 527	0.12 (1)
6-7	-1627 / 0	-77.4 -77.4	0.03 (1)	5.19	17-7	0 / 611	0.14 (1)
7-8	-1847 / 0	-77.4 -77.4	0.39 (1)	4.56	17-8	-715 / 0	0.41 (1)
8-9	-2342 / 0	-77.4 -77.4	0.40 (1)	4.15	15-8	0 / 267	0.06 (1)
9-10	-2342 / 0	-77.4 -77.4	0.40 (1)	4.15	15-10	-313 / 0	0.31 (1)
10-11	-2614 / 0	-77.4 -77.4	0.50 (1)	3.86	14-10	-211 / 38	0.06 (1)
11-12	0 / 23	-77.4 -77.4	0.10 (1)	10.00	2-21	0 / 2377	0.53 (1)
22-2	-1805 / 0	0.0	0.0	7.42	14-11	0 / 2378	0.54 (1)
13-11	-1805 / 0	0.0	0.0	7.42	6-17	0 / 81	0.02 (1)

22-21	0 / 0	-17.5 -17.5	0.14 (4)	10.00
21-20	0 / 2355	-17.5 -17.5	0.45 (1)	10.00
20-19	0 / 2097	-17.5 -17.5	0.41 (1)	10.00
19-18	0 / 2097	-17.5 -17.5	0.41 (1)	10.00
18-17	0 / 1621	-17.5 -17.5	0.36 (1)	10.00
17-16	0 / 2095	-17.5 -17.5	0.44 (1)	10.00
16-15	0 / 2095	-17.5 -17.5	0.44 (1)	10.00
15-14	0 / 2356	-17.5 -17.5	0.44 (1)	10.00
14-13	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

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 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

CSI: TC=0.50 (10-11:1), BC=0.45 (20-21:1), WB=0.54 (11-14:1), SSI=0.20 (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

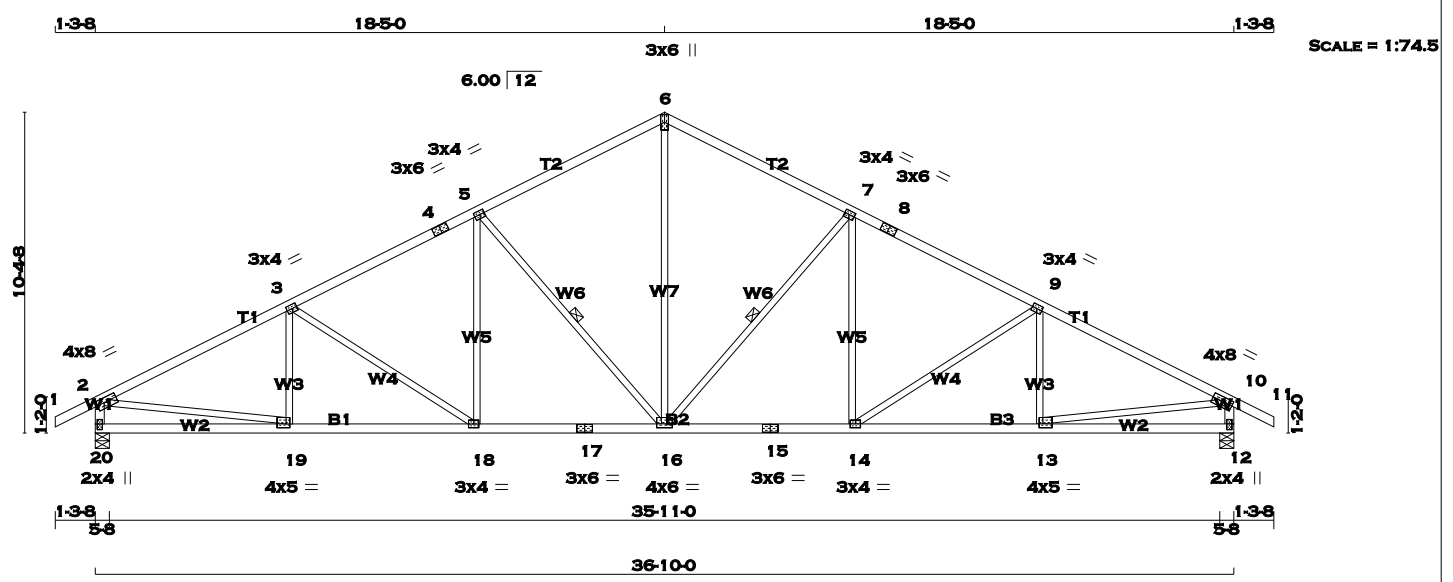
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (14) (INPUT = 0.90)
JSI METAL= 0.71 (14) (INPUT = 1.00)

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LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
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	
20 - 2	2x4	DRY	No.2	SPF	
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 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	8.0	1.75 3.00
3, 5, 7, 9					
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
6	TTW+p	MT20	3.0	6.0	
8	TS-t	MT20	3.0	6.0	
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	BMVW-t	MT20	4.0	5.0	1.50 1.50
14	BMVW-t	MT20	3.0	4.0	
15	BS-t	MT20	3.0	6.0	
16	BMVW-t	MT20	4.0	6.0	1.50 3.00
17	BS-t	MT20	3.0	6.0	
18	BMVW-t	MT20	3.0	4.0	
19	BMVW-t	MT20	4.0	5.0	1.50 1.50
20	BMV1+p	MT20	2.0	4.0	2.25 1.00

A SIZE FOR SIZE SUBSTITUTION OF MITTEK 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
20	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
20	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) 20, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 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, 5-16. DBS = 20-0-0. CBF = 92 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. FACTORED CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CS (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10-00	16-6	0 / 1225	0.28 (1)
2-3	-2616 / 0	-77.4 -77.4	0.52 (1)	3.85	16-7	-735 / 0	0.44 (1)
3-4	-2331 / 0	-77.4 -77.4	0.42 (1)	4.14	14-7	0 / 283	0.06 (1)
4-5	-2331 / 0	-77.4 -77.4	0.42 (1)	4.14	14-9	-327 / 0	0.34 (1)
5-6	-1813 / 0	-77.4 -77.4	0.40 (1)	4.58	13-9	-206 / 41	0.06 (1)
6-7	-1813 / 0	-77.4 -77.4	0.40 (1)	4.58	5-16	-735 / 0	0.44 (1)
7-8	-2331 / 0	-77.4 -77.4	0.42 (1)	4.14	18-5	0 / 283	0.06 (1)
8-9	-2331 / 0	-77.4 -77.4	0.42 (1)	4.14	3-18	-327 / 0	0.34 (1)
9-10	-2616 / 0	-77.4 -77.4	0.52 (1)	3.85	19-3	-206 / 41	0.06 (1)
10-11	0 / 23	-77.4 -77.4	0.10 (1)	10.00	2-19	0 / 2380	0.54 (1)
20-2	-1805 / 0	0.0	0.0 0.18 (1)	6.23	13-10	0 / 2380	0.54 (1)
12-10	-1805 / 0	0.0	0.0 0.18 (1)	6.23			
20-19	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
19-18	0 / 2358	-17.5 -17.5	0.44 (1)	10.00			
18-17	0 / 2084	-17.5 -17.5	0.41 (1)	10.00			
17-16	0 / 2084	-17.5 -17.5	0.41 (1)	10.00			
16-15	0 / 2084	-17.5 -17.5	0.41 (1)	10.00			
15-14	0 / 2084	-17.5 -17.5	0.41 (1)	10.00			
14-13	0 / 2358	-17.5 -17.5	0.44 (1)	10.00			
13-12	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

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 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.52 (9-10:1) , BC=0.44 (13-14:1) , WB=0.54 (10-13:1) , SSI=0.20 (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

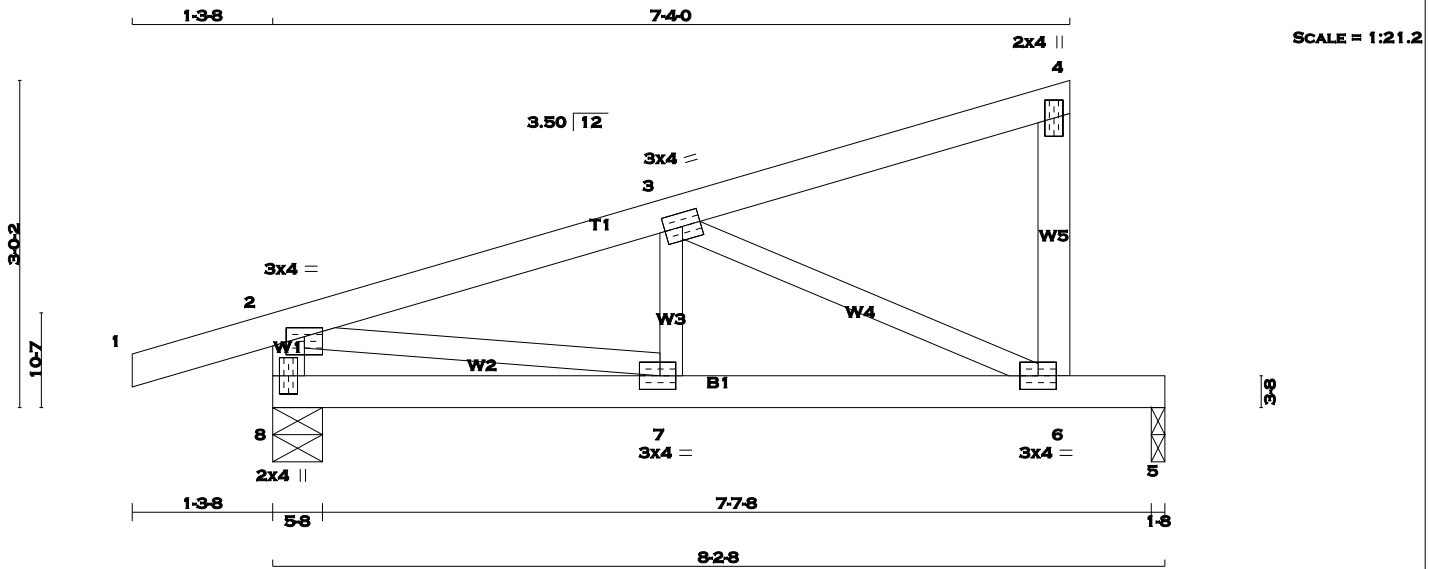
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (6) (INPUT = 0.90)
JSI METAL= 0.71 (13) (INPUT = 1.00)

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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

6 - 4

2x4

DRY

No.2

SPF

8 - 2

2x4

DRY

No.2

SPF

8 - 5

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

3.0

4.0

1.00

2.00

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

BMWW-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

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

8

489

0

489

0

0

5-8

5-8

5

325

0

325

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

8

341

251 / 0

0 / 0

0 / 0

0 / 0

90 / 0

0 / 0

5

230

153 / 0

0 / 0

0 / 0

0 / 0

77 / 0

0 / 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

MEMB.

MAX. FACTORED FORCE (LBS)

FACTORED VERT. LOAD (PLF)

LC1 MAX. CSI (LC)

UNBRAC LENGTH

WEBS

MEMB.

MAX. FACTORED FORCE (LBS)

MAX. CSI (LC)

FR-TO

FROM

TO

FR-TO

1- 2

0 / 14

-77.4

-77.4

0.10 (1)

10.00

7- 3

0 / 94

0.03 (4)

2- 3

-604 / 0

-77.4

-77.4

0.12 (1)

6.25

3- 6

-644 / 0

0.17 (1)

3- 4

-8 / 0

-77.4

-77.4

0.12 (1)

10.00

2- 7

0 / 595

0.13 (1)

6- 4

-112 / 0

0.0

0.0

0.02 (1)

7.81

8- 2

-478 / 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 / 588

-17.5

-17.5

0.47 (1)

10.00

6- 5

0 / 0

-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

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 (0.27")

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

ALLOWABLE DEFL.(TL)= L/360 (0.27")

CALCULATED VERT. DEFL.(TL) = L/ 921 (0.11")

CSI: TC=0.12 (2-3:1) , BC=0.47 (6-7:1) , WB=0.17 (3-6:1) , SSI=0.25 (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 (6) (INPUT = 0.90)

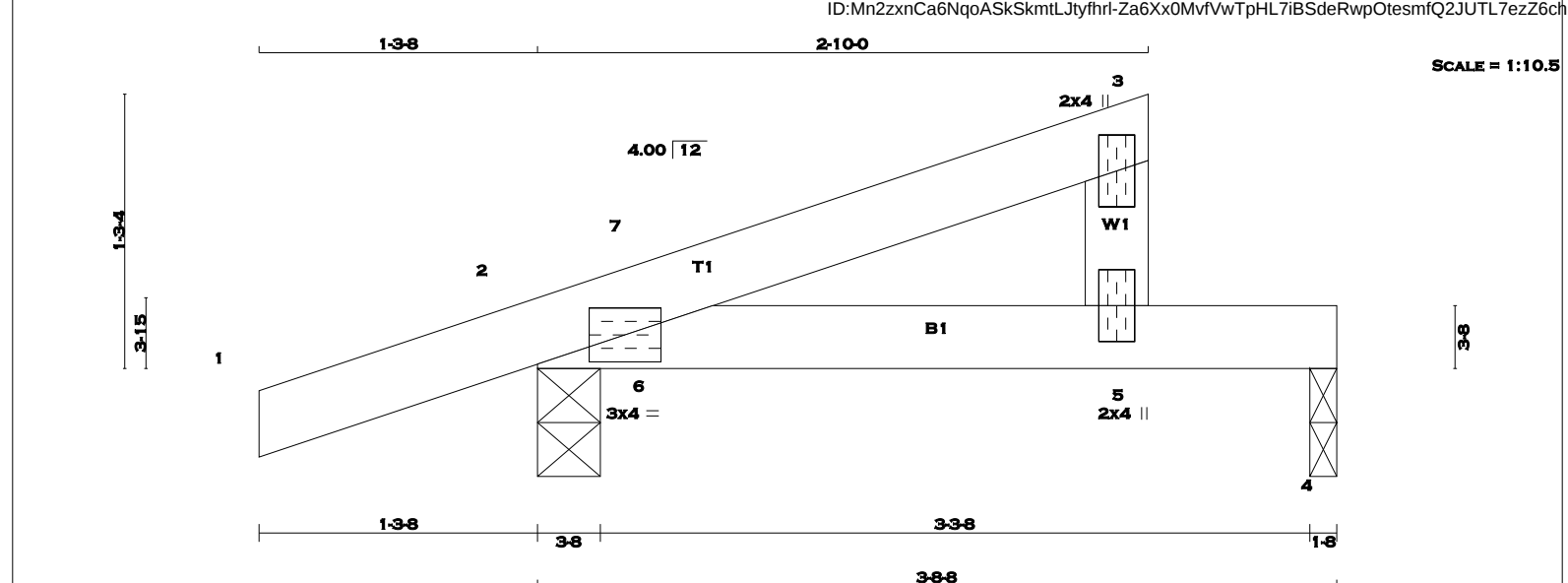
JSI METAL= 0.22 (2) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 12 X 10 = 121 lb [M]

LUMBER

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

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		
2	271	0	271	0	3-8	3-8
4	116	0	116	0	1-8	1-8

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	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			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
1-2	0 / 15	-77.4 -77.4	0.10 (1)	10.00	6-7	-18 / 32	0.00 (1)
2-7	-25 / 0	-77.4 -77.4	0.06 (1)	6.25			
7-3	0 / 6	-77.4 -77.4	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

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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.10 (3-7:1), BC=0.13 (5-6:1), WB=0.00 (6-7:1), SSI=0.09 (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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

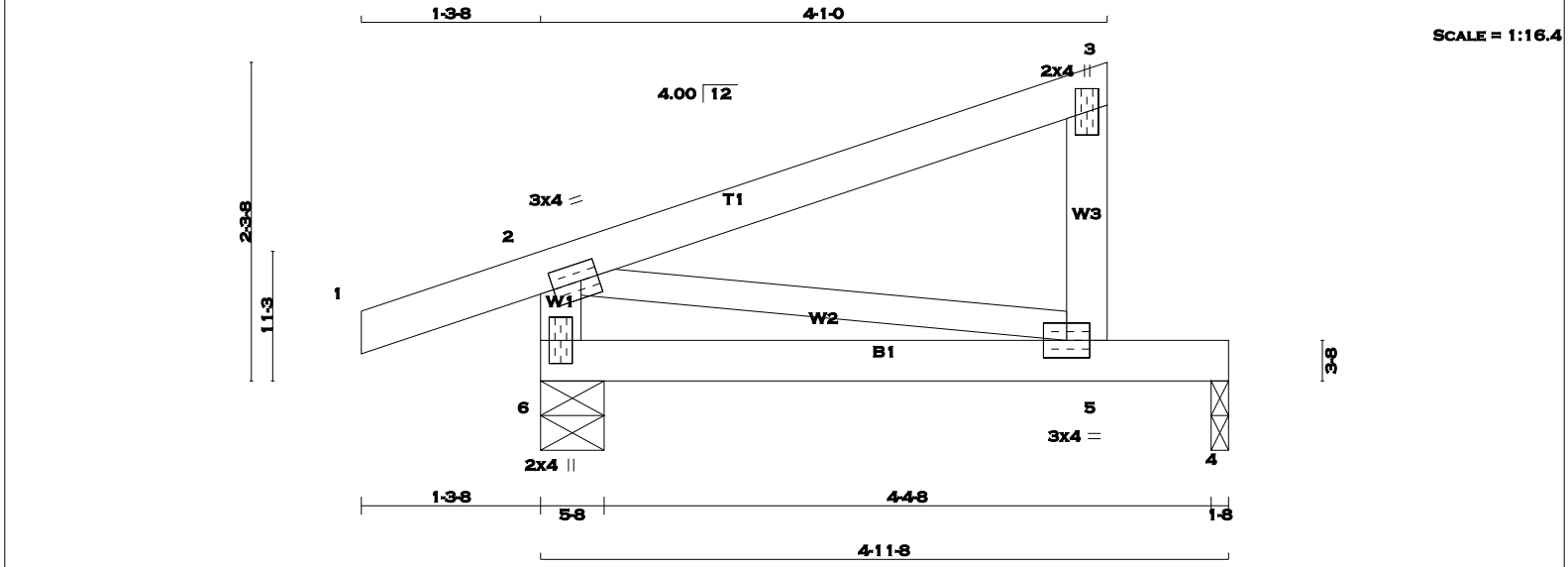
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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SCALE = 1:16.4

TOTAL WEIGHT = 5 X 18 = 88 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
5 - 3	2x4	DRY	No.2
6 - 2	2x4	DRY	No.2
6 - 4	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
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		

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
6	333 0	333 0	5-8	5-8
4	173 0	173 0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
6	231	174 / 0	0 / 0	57 / 0	0 / 0
4	123	78 / 0	0 / 0	45 / 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)

MEMB.	CHORDS			MEMB.	WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)		MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 16	-77.4 -77.4	0.10 (1)	2-5	0 / 0	0.00 (1)	
2-3	0 / 0	-77.4 -77.4	0.22 (1)				
5-3	-158 / 0	0.0 0.0	0.02 (1)				
6-2	-261 / 0	0.0 0.0	0.03 (1)				
6-5	0 / 0	-17.5 -17.5	0.20 (1)				
5-4	0 / 0	-17.5 -17.5	0.20 (1)				

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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 872 (0.07")

CSI: TC=0.22 (2-3:1), BC=0.20 (5-6:1), WB=0.00 (2-5:1), SSI=0.14 (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.

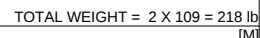
JSI GRIP= 0.24 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)

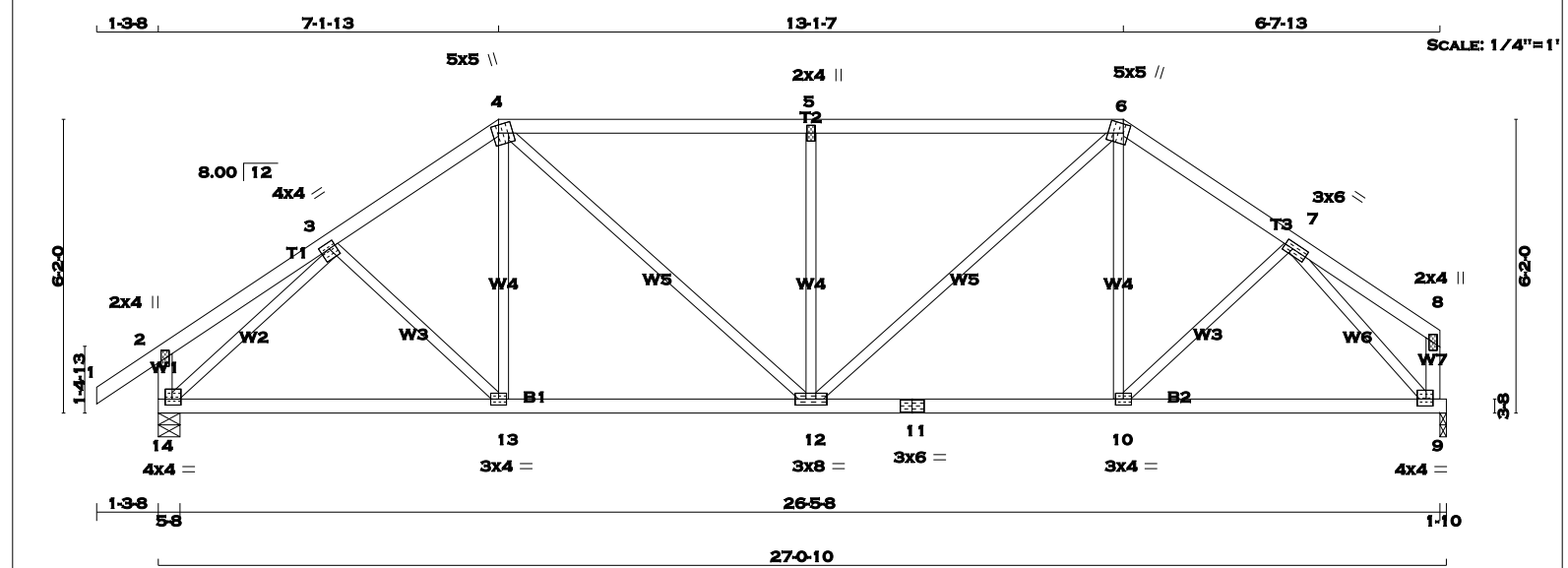


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TOTAL WEIGHT = 2 X 112 = 223 lb
[M][F]

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
14- 2	2x4	DRY	No.2		SPF
9 - 8	2x4	DRY	No.2		SPF
14- 11	2x4	DRY	No.2		SPF
11- 9	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	TMVW-t	MT20	4.0	4.0	1.50 1.75
4	TTWW+m	MT20	5.0	5.0	2.00 1.50
5	TMW+w	MT20	2.0	4.0	
6	TTWW+m	MT20	5.0	5.0	2.25 1.25
7	TMVW-t	MT20	3.0	6.0	1.50 2.25
8	TMV+p	MT20	2.0	4.0	
9	BMVW1-t	MT20	4.0	4.0	1.75 1.75
10	BMVW-t	MT20	3.0	4.0	
11	BS-t	MT20	3.0	6.0	
12	BMVW-t	MT20	3.0	8.0	
13	BMVW-t	MT20	3.0	4.0	
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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		1383	0	1383	0	0	5-8	5-8	
9		1277	0	1277	0	0	1-10	1-10	

UNFACTORED REACTIONS							
		1ST LCASE	MAX/MIN.	COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
14		968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0
9		896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.76 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	MEMB.		MAX. FACTORED	FACTORED
		FORCE	VERT. LOAD LC1			FORCE	MAX
		(LBS)	(PLF)			(LBS)	CSI (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2		0 / 29	-77.4 -77.4 0.10 (1)	10.00	3-13	0 / 51	0.02 (4)
2-3		0 / 16	-77.4 -77.4 0.14 (1)	10.00	13-4	0 / 134	0.04 (4)
3-4		-1410 / 0	-77.4 -77.4 0.13 (1)	5.37	4-12	0 / 506	0.11 (1)
4-5		-1537 / 0	-77.4 -77.4 0.47 (1)	4.76	12-5	-623 / 0	0.37 (1)
5-6		-1537 / 0	-77.4 -77.4 0.47 (1)	4.76	12-6	0 / 579	0.13 (1)
6-7		-1344 / 0	-77.4 -77.4 0.13 (1)	5.47	10-6	0 / 94	0.03 (4)
7-8		0 / 16	-77.4 -77.4 0.13 (1)	10.00	10-7	0 / 128	0.03 (1)
14-2		-215 / 0	0.0 0.0 0.02 (1)	7.81	14-3	-1604 / 0	0.63 (1)
9-8		-89 / 0	0.0 0.0 0.01 (1)	7.81	7-9	-1524 / 0	0.52 (1)
14-13		0 / 1151	-17.5 -17.5 0.30 (1)	10.00			
13-12		0 / 1160	-17.5 -17.5 0.31 (1)	10.00			
12-11		0 / 1105	-17.5 -17.5 0.29 (1)	10.00			
11-10		0 / 1105	-17.5 -17.5 0.29 (1)	10.00			
10-9		0 / 1012	-17.5 -17.5 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

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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.47 (4-5:1), BC=0.31 (12-13:1), WB=0.63 (3-14:1), SSI=0.25 (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

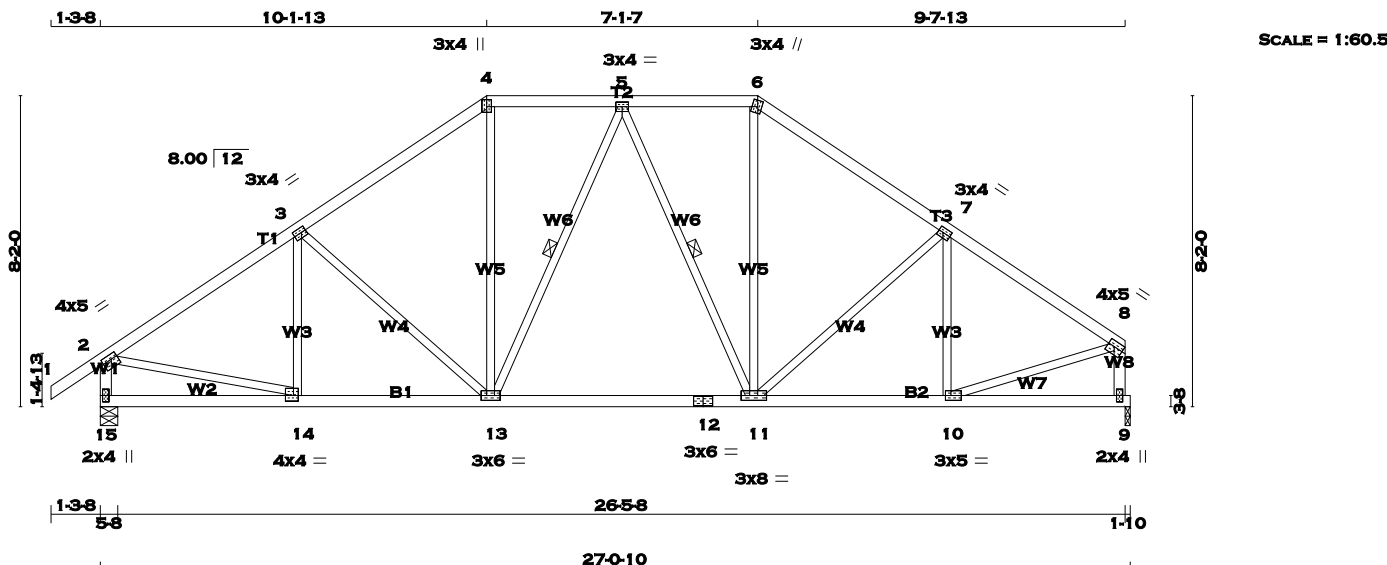
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.59 (3) (INPUT = 1.00)

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 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 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	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0		
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	5.0	1.75	Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	1.75
11	BMVW-t	MT20	3.0	8.0		
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	3.0	6.0		
14	BMVW-t	MT20	4.0	4.0	1.75	1.50
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

BEARINGS			
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT REQRD BRG
JT	VERT	HORZ	DOWN
15	1383	0	1383
9	1277	0	1277

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	COMPONENT PERM. LIVE	WIND	DEAD	SOIL
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-13, 5-11. DBS = 20-0-0. CBF = 26 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 / 29	-77.4 -77.4	0.10 (1)	10-0	-168 / 29	0.06 (1)	
2-3	-1461 / 0	-77.4 -77.4	0.29 (1)	5-12	-276 / 0	0.24 (1)	
3-4	-1267 / 0	-77.4 -77.4	0.28 (1)	5-42	0 / 434	0.10 (1)	
4-5	-1037 / 0	-77.4 -77.4	0.13 (1)	6-04	-153 / 0	0.08 (1)	
5-6	-1016 / 0	-77.4 -77.4	0.12 (1)	6-08	-205 / 0	0.10 (1)	
6-7	-1240 / 0	-77.4 -77.4	0.25 (1)	5-49	0 / 416	0.09 (1)	
7-8	-1347 / 0	-77.4 -77.4	0.25 (1)	5-32	-176 / 0	0.15 (1)	
15-2	-1343 / 0	0.0 0.0	0.14 (1)	6-99	-261 / 0	0.09 (1)	
9-8	-1241 / 0	0.0 0.0	0.13 (1)	7-20	0 / 1263	0.28 (1)	
15-14	0 / 0	-17.5 -17.5	0.10 (4)	10-00	0 / 1192	0.27 (1)	
14-13	0 / 1237	-17.5 -17.5	0.28 (1)	10-00			
13-12	0 / 1098	-17.5 -17.5	0.26 (1)	10-00			
12-11	0 / 1098	-17.5 -17.5	0.26 (1)	10-00			
11-10	0 / 1141	-17.5 -17.5	0.26 (1)	10-00			
10-9	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

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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.29 (2-3:1), BC=0.28 (13-14:1), WB=0.28 (2-14:1), 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	MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

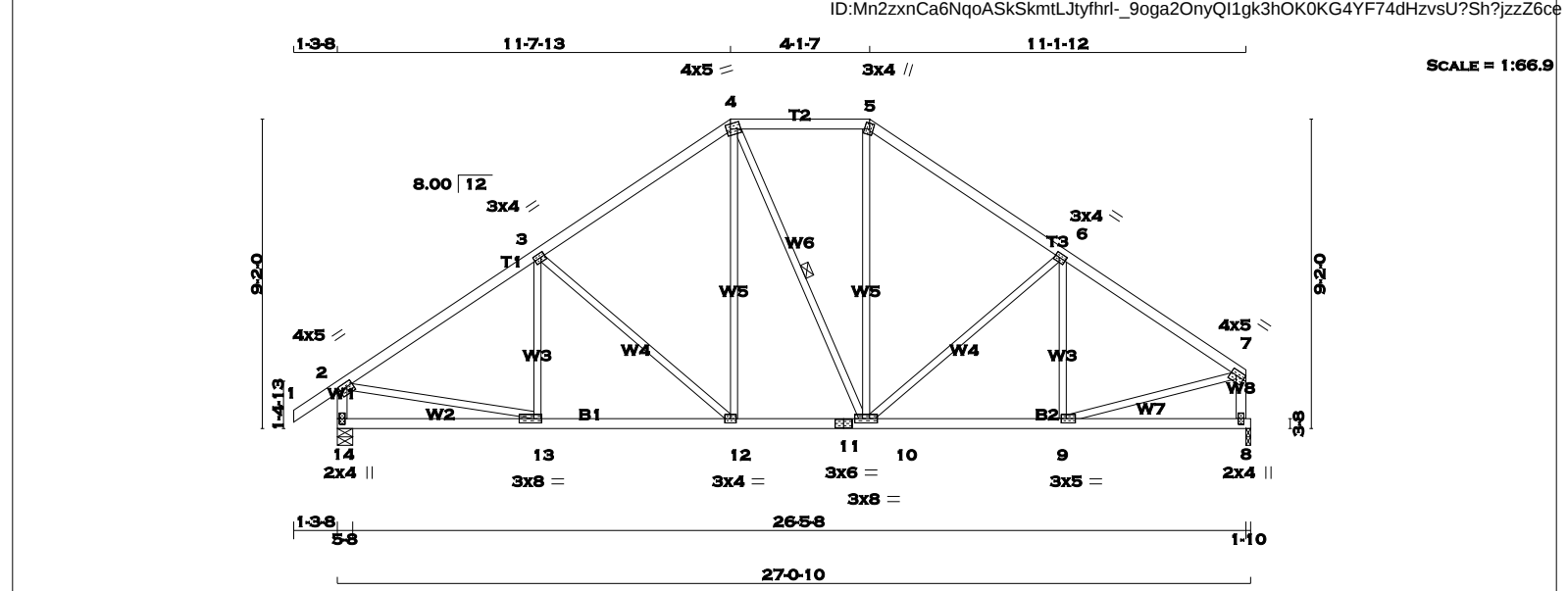
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.49 (2) (INPUT = 1.00)

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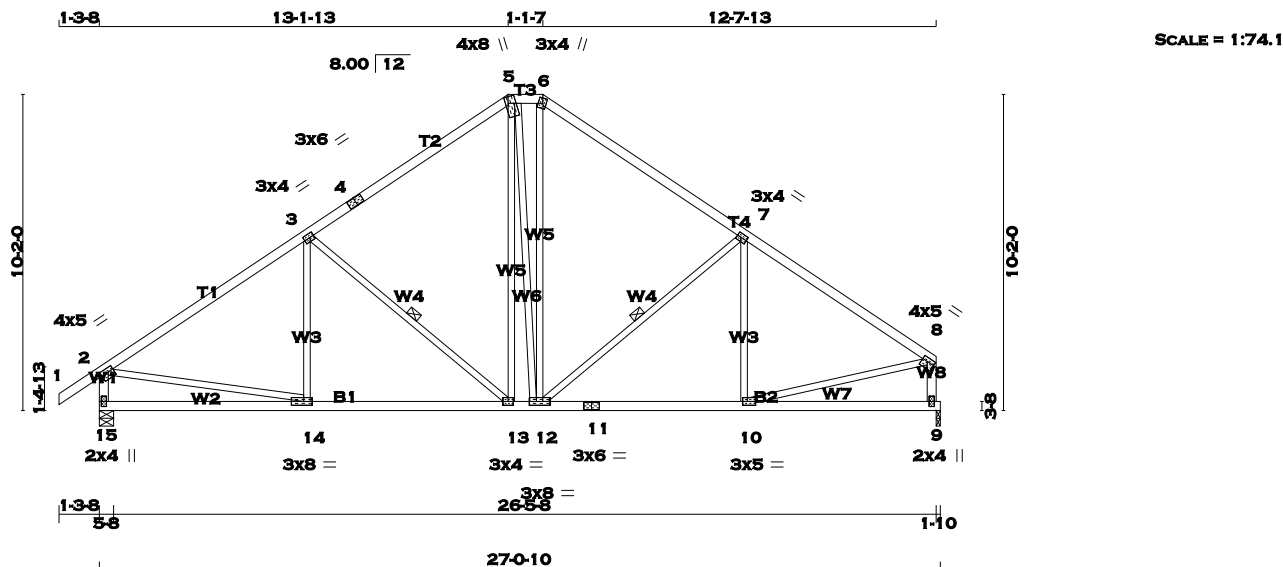
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 14 - 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 14 - 11 2x4 DRY No.2 11 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 14 1383 0 8 1277 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 14 1383 0 0 8 1277 0 0 INPUT BRG IN-SX 5-8 5-8 1-10 1-10 REQRD BRG IN-SX 5-8 5-8 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 14 968 691 / 0 0 / 0 0 / 0 277 / 0 0 / 0 8 896 627 / 0 0 / 0 0 / 0 0 / 0 269 / 0 0 / 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 = 4.99 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-10. DBS = 20-0-0 . CBF = 3 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 MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. LC1 MAX. UNBRAC LENGTH FR-TO FR-TO 1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00 2-3 -1469 / 0 -77.4 -77.4 0.39 (1) 4.99 3-4 -1176 / 0 -77.4 -77.4 0.36 (1) 5.45 4-5 -946 / 0 -77.4 -77.4 0.18 (1) 6.17 5-6 -1162 / 0 -77.4 -77.4 0.34 (1) 5.51 6-7 -1373 / 0 -77.4 -77.4 0.34 (1) 5.17 14-2 -1340 / 0 0.0 0.0 0.14 (1) 7.00 8-7 -1238 / 0 0.0 0.0 0.13 (1) 7.22 14-13 0 / 0 -17.5 -17.5 0.15 (4) 10.00 13-12 0 / 1247 -17.5 -17.5 0.28 (1) 10.00 12-11 0 / 956 -17.5 -17.5 0.20 (1) 10.00 11-10 0 / 956 -17.5 -17.5 0.20 (1) 10.00 10-9 0 / 1167 -17.5 -17.5 0.25 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.13 (4) 10.00 W E B S MEMB. MAX. FACTORED FORCE (LBS) MAX. UNBRAC LENGTH FR-TO FR-TO 13-3 -110 / 67 0.05 (1) 3-12 -390 / 0 0.47 (1) 12-4 0 / 333 0.07 (1) 4-10 -24 / 0 0.02 (1) 10-5 0 / 301 0.07 (1) 10-6 -297 / 0 0.36 (1) 9-6 -194 / 37 0.08 (1) 2-13 0 / 1267 0.29 (1) 9-7 0 / 1206 0.27 (1) W E B S MEMB. MAX. FACTORED FORCE (LBS) MAX. UNBRAC LENGTH FR-TO FR-TO 13-3 -110 / 67 0.05 (1) 3-12 -390 / 0 0.47 (1) 12-4 0 / 333 0.07 (1) 4-10 -24 / 0 0.02 (1) 10-5 0 / 301 0.07 (1) 10-6 -297 / 0 0.36 (1) 9-6 -194 / 37 0.08 (1) 2-13 0 / 1267 0.29 (1) 9-7 0 / 1206 0.27 (1)				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 (0.90") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.90") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09") CSI: TC=0.39 (2-3:1), BC=0.28 (12-13:1), WB=0.47 (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 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (10) (INPUT = 0.90) JSI METAL= 0.50 (2) (INPUT = 1.00)			
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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 2 X 128 = 256 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 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
15- 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
15- 11	2x4	DRY	No.2	SPF
11- 9	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	6.0		
5	TTWw+m	MT20	4.0	8.0	2.50	1.00
6	TTWw+m	MT20	3.0	4.0	2.00	1.25
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	5.0	1.50	2.00
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	1.75
11	BS-t	MT20	3.0	6.0		
12	BMVW-t	MT20	3.0	8.0		
13	BMVW-t	MT20	3.0	4.0		
14	BMVW-t	MT20	3.0	8.0	1.50	3.25
15	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
15	1383	0	1383	0	0	5-8	5-8
9	1277	0	1277	0	0	1-10	1-10

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 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 3-13, 7-12. DBS = 20-0-0 . CBF = 62 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 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	14-3	-67 / 92	0.04 (1)
2-3	-1464 / 0	-77.4 -77.4	0.51 (1)	4.82	3-13	-492 / 0	0.25 (1)
3-4	-1082 / 0	-77.4 -77.4	0.47 (1)	5.46	13-5	0 / 336	0.08 (1)
4-5	-1082 / 0	-77.4 -77.4	0.47 (1)	5.46	5-12	0 / 16	0.00 (4)
5-6	-875 / 0	-77.4 -77.4	0.02 (1)	6.25	12-6	0 / 348	0.08 (1)
6-7	-1081 / 0	-77.4 -77.4	0.44 (1)	5.51	12-7	-400 / 0	0.20 (1)
7-8	-1382 / 0	-77.4 -77.4	0.44 (1)	5.02	10-7	-149 / 62	0.08 (1)
15-2	-1336 / 0	0.0 0.0	0.14 (1)	7.00	2-14	0 / 1263	0.28 (1)
9-8	-1232 / 0	0.0 0.0	0.13 (1)	7.23	10-8	0 / 1208	0.27 (1)
15-14	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
14-13	0 / 1246	-17.5 -17.5	0.30 (1)	10.00			
13-12	0 / 874	-17.5 -17.5	0.23 (1)	10.00			
12-11	0 / 1178	-17.5 -17.5	0.28 (1)	10.00			
11-10	0 / 1178	-17.5 -17.5	0.28 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.17 (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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.51 (2-3:1) , BC=0.30 (13-14:1) , WB=0.28 (2-14:1) , SSI=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)	(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.

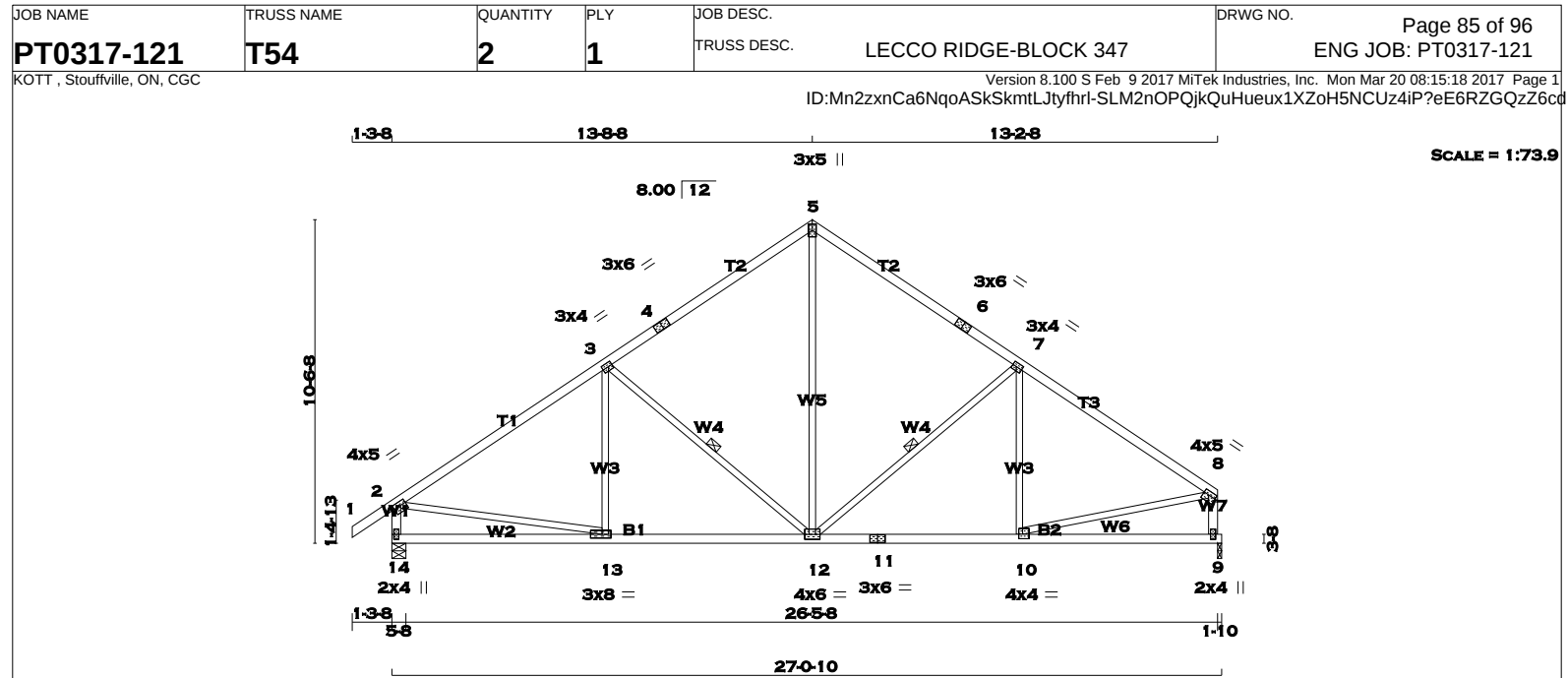
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.50 (2) (INPUT = 1.00)



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MAR 29, 2017
17-5409
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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.

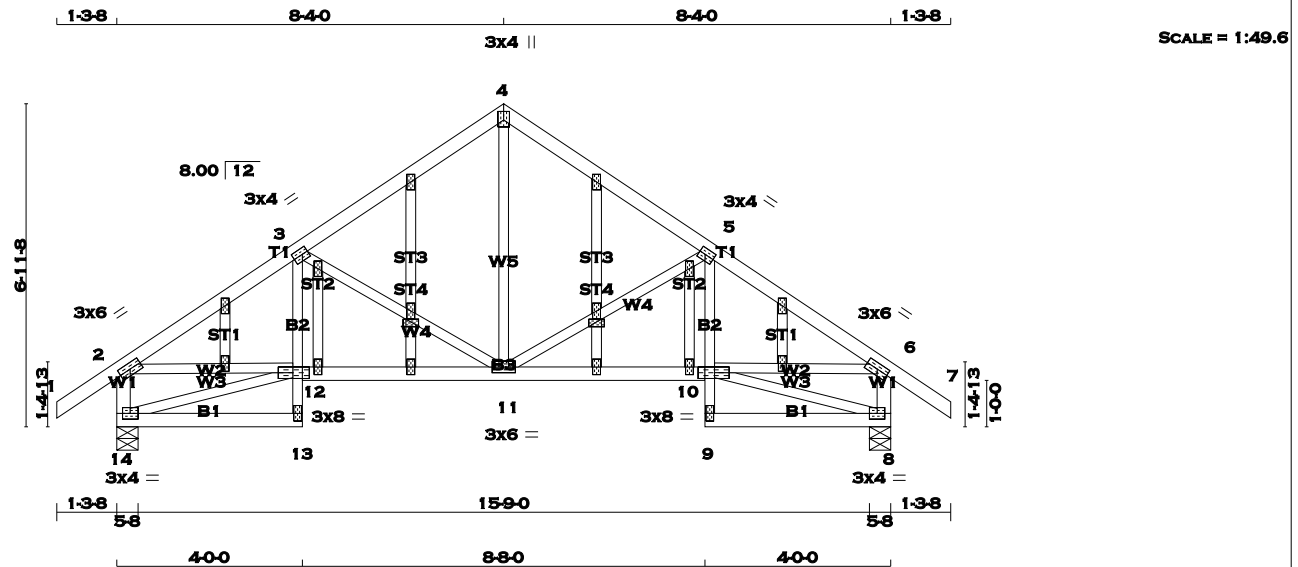




TOTAL WEIGHT = 2 X 114 = 228 lb		[M][F]																																																																																																																																																																																																																																																							
LUMBER N. L. G. A. RULES <table><tr><td>CHORDS</td><td>SIZE</td><td>LUMBER</td><td>DESCR.</td></tr><tr><td>1 - 4</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>4 - 5</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>5 - 6</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>6 - 8</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>14 - 2</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>9 - 8</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>14 - 11</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>11 - 9</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td colspan="4">SPF</td></tr><tr><td>ALL WEBS</td><td>2x3</td><td>DRY</td><td>No.2</td></tr><tr><td>EXCEPT</td><td></td><td></td><td>SPF</td></tr></table> DRY: SEASONED LUMBER.		CHORDS	SIZE	LUMBER	DESCR.	1 - 4	2x4	DRY	No.2	4 - 5	2x4	DRY	No.2	5 - 6	2x4	DRY	No.2	6 - 8	2x4	DRY	No.2	14 - 2	2x4	DRY	No.2	9 - 8	2x4	DRY	No.2	14 - 11	2x4	DRY	No.2	11 - 9	2x4	DRY	No.2	SPF				ALL WEBS	2x3	DRY	No.2	EXCEPT			SPF	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td>FACTORED</td><td>MAXIMUM FACTORED</td><td>INPUT</td><td>REQRD</td></tr><tr><td></td><td>GROSS REACTION</td><td>GROSS REACTION</td><td>BRG</td><td>BRG</td></tr><tr><td>JT</td><td>VERT</td><td>HORZ</td><td>DOWN</td><td>HORZ</td></tr><tr><td>14</td><td>1383</td><td>0</td><td>1383</td><td>0</td></tr><tr><td>9</td><td>1277</td><td>0</td><td>1277</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><td>1ST LCASE</td><td colspan="7">MAX./MIN. COMPONENT REACTIONS</td></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM.LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>14</td><td>968</td><td>691 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>277 / 0</td><td>0 / 0</td></tr><tr><td>9</td><td>896</td><td>627 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>269 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9 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 3-12, 7-12. DBS = 20-0-0 . CBF = 65 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><td colspan="3">CHORDS</td><td colspan="3">WEBS</td></tr><tr><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>FACTORED VERT. LOAD LC1 (PLF)</td><td>MAX. FACTORED UNBRACED LENGTH (LC)</td><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.4 -77.4 0.10 (1)</td><td>10.00</td><td>13-3</td><td>-60 / 96</td></tr><tr><td>2-3</td><td>-1458 / 0</td><td>-77.4 -77.4 0.56 (1)</td><td>4.75</td><td>3-12</td><td>-519 / 0</td></tr><tr><td>3-4</td><td>-1054 / 0</td><td>-77.4 -77.4 0.51 (1)</td><td>5.44</td><td>12-5</td><td>0 / 733</td></tr><tr><td>4-5</td><td>-1054 / 0</td><td>-77.4 -77.4 0.51 (1)</td><td>5.44</td><td>12-7</td><td>-437 / 0</td></tr><tr><td>5-6</td><td>-1051 / 0</td><td>-77.4 -77.4 0.48 (1)</td><td>5.49</td><td>10-7</td><td>-131 / 70</td></tr><tr><td>6-7</td><td>-1051 / 0</td><td>-77.4 -77.4 0.48 (1)</td><td>5.49</td><td>2-13</td><td>0 / 1257</td></tr><tr><td>7-8</td><td>-1383 / 0</td><td>-77.4 -77.4 0.49 (1)</td><td>4.95</td><td>10-8</td><td>0 / 1208</td></tr><tr><td>14-2</td><td>-1333 / 0</td><td>0.0 0.0 0.14 (1)</td><td>7.01</td><td></td><td></td></tr><tr><td>9-8</td><td>-1231 / 0</td><td>0.0 0.0 0.13 (1)</td><td>7.23</td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 0</td><td>-17.5 -17.5 0.20 (4)</td><td>10.00</td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 1243</td><td>-17.5 -17.5 0.30 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 1180</td><td>-17.5 -17.5 0.28 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 1180</td><td>-17.5 -17.5 0.28 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 0</td><td>-17.5 -17.5 0.18 (4)</td><td>10.00</td><td></td><td></td></tr></table>			FACTORED	MAXIMUM FACTORED	INPUT	REQRD		GROSS REACTION	GROSS REACTION	BRG	BRG	JT	VERT	HORZ	DOWN	HORZ	14	1383	0	1383	0	9	1277	0	1277	0	1ST LCASE	MAX./MIN. COMPONENT REACTIONS							JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	14	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0	9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0	CHORDS			WEBS			MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD LC1 (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FR-TO		FROM TO		FR-TO		1-2	0 / 29	-77.4 -77.4 0.10 (1)	10.00	13-3	-60 / 96	2-3	-1458 / 0	-77.4 -77.4 0.56 (1)	4.75	3-12	-519 / 0	3-4	-1054 / 0	-77.4 -77.4 0.51 (1)	5.44	12-5	0 / 733	4-5	-1054 / 0	-77.4 -77.4 0.51 (1)	5.44	12-7	-437 / 0	5-6	-1051 / 0	-77.4 -77.4 0.48 (1)	5.49	10-7	-131 / 70	6-7	-1051 / 0	-77.4 -77.4 0.48 (1)	5.49	2-13	0 / 1257	7-8	-1383 / 0	-77.4 -77.4 0.49 (1)	4.95	10-8	0 / 1208	14-2	-1333 / 0	0.0 0.0 0.14 (1)	7.01			9-8	-1231 / 0	0.0 0.0 0.13 (1)	7.23			14-13	0 / 0	-17.5 -17.5 0.20 (4)	10.00			13-12	0 / 1243	-17.5 -17.5 0.30 (1)	10.00			12-11	0 / 1180	-17.5 -17.5 0.28 (1)	10.00			11-10	0 / 1180	-17.5 -17.5 0.28 (1)	10.00			10-9	0 / 0	-17.5 -17.5 0.18 (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 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 (0.90") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.90") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10") CSI: TC=0.56 (2-3:1) , BC=0.30 (12-13:1) , WB=0.28 (2-13:1) , 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 <table><tr><td>PLATE GRIP(DRY)</td><td>SHEAR</td><td>SECTION</td></tr><tr><td>(PSI)</td><td>(PLI)</td><td>(PLI)</td></tr><tr><td>MAX MIN</td><td>MAX MIN</td><td>MAX MIN</td></tr><tr><td>MT20 618 354</td><td>1667 822</td><td>2284 1656</td></tr></table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (13) (INPUT = 0.90) JSI METAL= 0.50 (2) (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
CHORDS	SIZE	LUMBER	DESCR.																																																																																																																																																																																																																																																						
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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 = 90 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
14 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
14 - 13	2x4	DRY	No.2	SPF
13 - 3	2x3	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
9 - 5	2x3	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	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	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	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	3.0	6.0		
8	BMVW1-t	MT20	3.0	4.0		
9	BMV+p	MT20	2.0	4.0		
10	BVMWW-I	MT20	3.0	8.0	Edge	4.25
11	BMVWW-t	MT20	3.0	6.0		
12	BVMWW-I	MT20	3.0	8.0	Edge	4.25
13	BMV+p	MT20	2.0	4.0		
14	BMVW1-t	MT20	3.0	4.0		
15	NP-p	MT20	2.0	4.0	0.75	2.00
15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28	NP-p	MT20	2.0	4.0		
15	NP+w	MT20	2.0	4.0		
24	NP-p	MT20	2.0	4.0	0.75	2.00

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

FACTORED			MAXIMUM FACTORED			INPUT		REQRD	
GROSS REACTION			GROSS REACTION			BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX		IN-SX	
14	897	0	897	0	0	5-8		5-8	
8	897	0	897	0	0	5-8		5-8	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	627	452 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0
8	627	452 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 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 = 5.73 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	-77.4	-77.4 0.10 (1)	10.00	11-4	0 / 514	0.12 (1)
2-3	-1157 / 0	-77.4	-77.4 0.18 (1)	5.73	11-5	-459 / 0	0.20 (1)
3-4	-730 / 0	-77.4	-77.4 0.18 (1)	6.25	3-11	-459 / 0	0.20 (1)
4-5	-730 / 0	-77.4	-77.4 0.18 (1)	6.25	2-12	0 / 980	0.22 (1)
5-6	-1157 / 0	-77.4	-77.4 0.18 (1)	5.73	10-6	0 / 980	0.22 (1)
6-7	0 / 29	-77.4	-77.4 0.10 (1)	10.00	14-12	-10 / 0	0.00 (1)
14-2	-860 / 0	0.0	0.0 0.09 (1)	7.81	10-8	-10 / 0	0.00 (1)
8-6	-860 / 0	0.0	0.0 0.09 (1)	7.81			
14-13	0 / 9	-17.5	-17.5 0.08 (4)	10.00			
13-12	0 / 38	0.0	0.0 0.04 (1)	10.00			
12-3	0 / 101	0.0	0.0 0.05 (1)	10.00			
12-11	0 / 985	-17.5	-17.5 0.21 (1)	10.00			
11-10	0 / 985	-17.5	-17.5 0.21 (1)	10.00			
9-10	0 / 38	0.0	0.0 0.04 (1)	10.00			
10-5	0 / 101	0.0	0.0 0.05 (1)	10.00			
9-8	0 / 9	-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

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 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.18 (2-3:1), BC=0.21 (11-12:1), WB=0.22 (2-12:1), SSI=0.13 (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

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= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.32 (6) (INPUT = 1.00)



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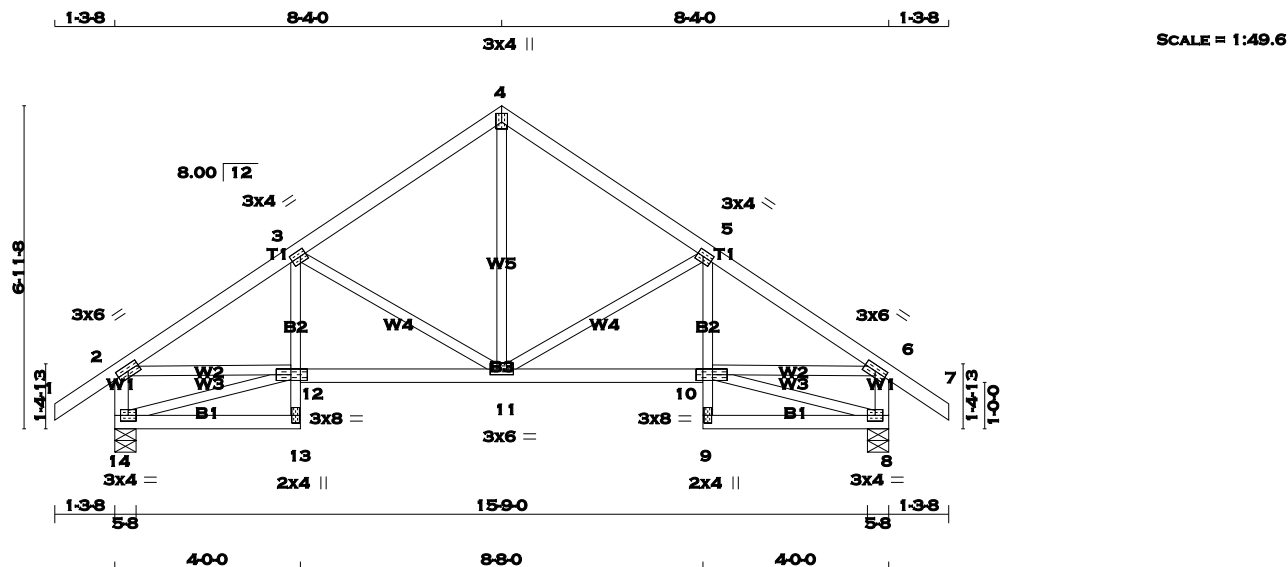
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
14 - 2	2x4	DRY	No.2
8 - 6	2x4	DRY	No.2
14 - 13	2x4	DRY	No.2
13 - 3	2x3	DRY	No.2
12 - 10	2x4	DRY	No.2
9 - 5	2x3	DRY	No.2
9 - 8	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	TMVW-t	MT20	3.0	4.0	1.50 1.50
6	TMVW-t	MT20	3.0	6.0	
8	BMVW1-t	MT20	3.0	4.0	
9	BMV+p	MT20	2.0	4.0	
10	BMVWW-I	MT20	3.0	8.0	Edge 4.25
11	BMVWW-t	MT20	3.0	6.0	
12	BMVWW-I	MT20	3.0	8.0	Edge 4.25
13	BMV+p	MT20	2.0	4.0	
14	BMVW1-t	MT20	3.0	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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	UP
14	897	0	0
8	897	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	2ND LCASE	3RD LCASE	4TH LCASE	5TH LCASE	6TH LCASE	7TH LCASE
14	627	452 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
8	627	452 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 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 = 5.73 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. MAX. FACTORED FORCE (LBS)			
VERT. LOAD LC1 MAX. (PLF)			
CSI (LC)			
UNBRAC LENGTH			
FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)
2-3	-1157 / 0	-77.4	-77.4 0.18 (1)
3-4	-730 / 0	-77.4	-77.4 0.18 (1)
4-5	-730 / 0	-77.4	-77.4 0.18 (1)
5-6	-1157 / 0	-77.4	-77.4 0.18 (1)
6-7	0 / 29	-77.4	-77.4 0.10 (1)
14-2	-860 / 0	0.0	0.0 0.09 (1)
8-6	-860 / 0	0.0	0.0 0.09 (1)
14-13	0 / 9	-17.5	-17.5 0.08 (4)
13-12	0 / 38	0.0	0.0 0.04 (1)
12-3	0 / 101	0.0	0.0 0.05 (1)
12-11	0 / 985	-17.5	-17.5 0.21 (1)
11-10	0 / 985	-17.5	-17.5 0.21 (1)
9-10	0 / 38	0.0	0.0 0.04 (1)
10-5	0 / 101	0.0	0.0 0.05 (1)
9-8	0 / 9	-17.5	-17.5 0.08 (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

(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 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.18 (2-3:1), BC=0.21 (11-12:1), WB=0.22 (2-12:1), SSI=0.13 (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

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.

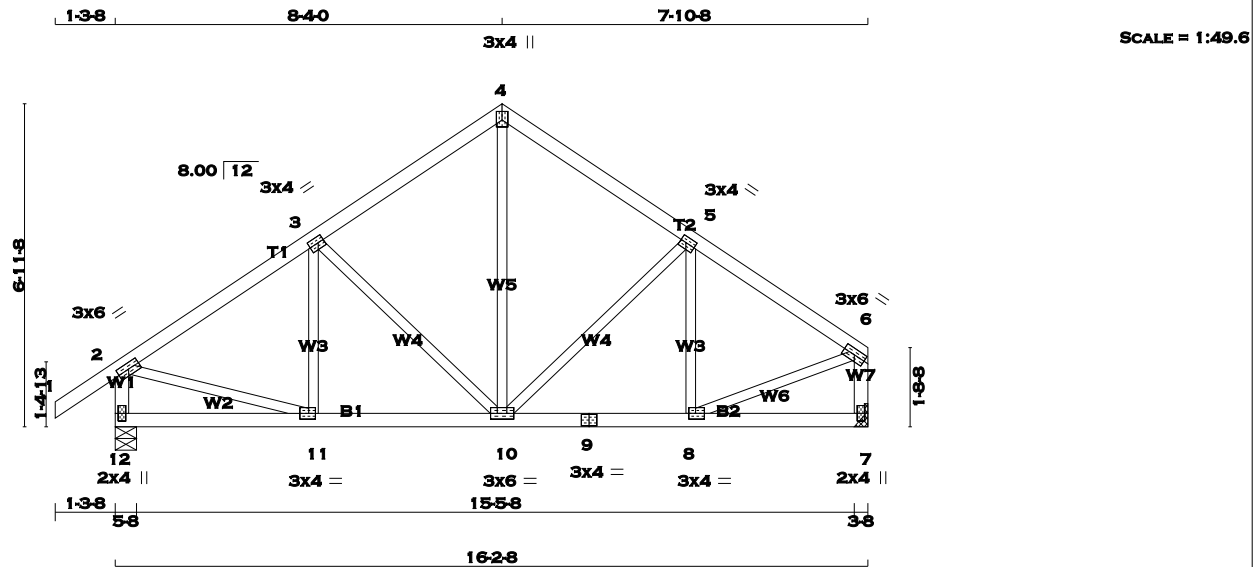
JSI GRIP= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.32 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 71 = 214 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
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 2x3 DRY No.2 EXCEPT					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	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		
8	BMVW-t	MT20	3.0	4.0	1.50	1.75
9	BS-t	MT20	3.0	4.0		
10	BMVW-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	4.0	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									
FACTORED				MAXIMUM FACTORED				INPUT	REQRD
GROSS REACTION				GROSS REACTION				BRG	BRG
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
12	875	0		875	0	0	5-8	5-8	
7	769	0		769	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
12	612	441 / 0	0 / 0	0 / 0	0 / 0	0 / 0	170 / 0	0 / 0
7	540	377 / 0	0 / 0	0 / 0	0 / 0	0 / 0	162 / 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 = 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	VERT. LOAD	MEMB.	MAX. FACTORED	FORCE	MAX
	(LBS)	(PLF)	LC1		(LBS)	(LBS)	CSI (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	11-3	-89 / 43	0.02 (1)
2-3	-775 / 0	-77.4	-77.4 0.17 (1)	6.25	3-10	-264 / 0	0.14 (1)
3-4	-589 / 0	-77.4	-77.4 0.17 (1)	6.25	10-4	0 / 389	0.09 (1)
4-5	-587 / 0	-77.4	-77.4 0.15 (1)	6.25	10-5	-194 / 0	0.10 (1)
5-6	-715 / 0	-77.4	-77.4 0.15 (1)	6.25	8-5	-149 / 21	0.04 (1)
12-2	-843 / 0	0.0	0.0 0.09 (1)	7.81	2-11	0 / 683	0.15 (1)
7-6	-741 / 0	0.0	0.0 0.08 (1)	7.81	8-6	0 / 651	0.15 (1)
12-11	0 / 0	-17.5	-17.5 0.07 (4)	10.00			
11-10	0 / 662	-17.5	-17.5 0.14 (1)	10.00			
10-9	0 / 612	-17.5	-17.5 0.13 (1)	10.00			
9-8	0 / 612	-17.5	-17.5 0.13 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.06 (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 (0.54")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.54")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.17 (2-3:1) , BC=0.14 (10-11:1) , WB=0.15 (2-11:1) , SSI=0.13 (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= 0.25 (11) (INPUT = 1.00)

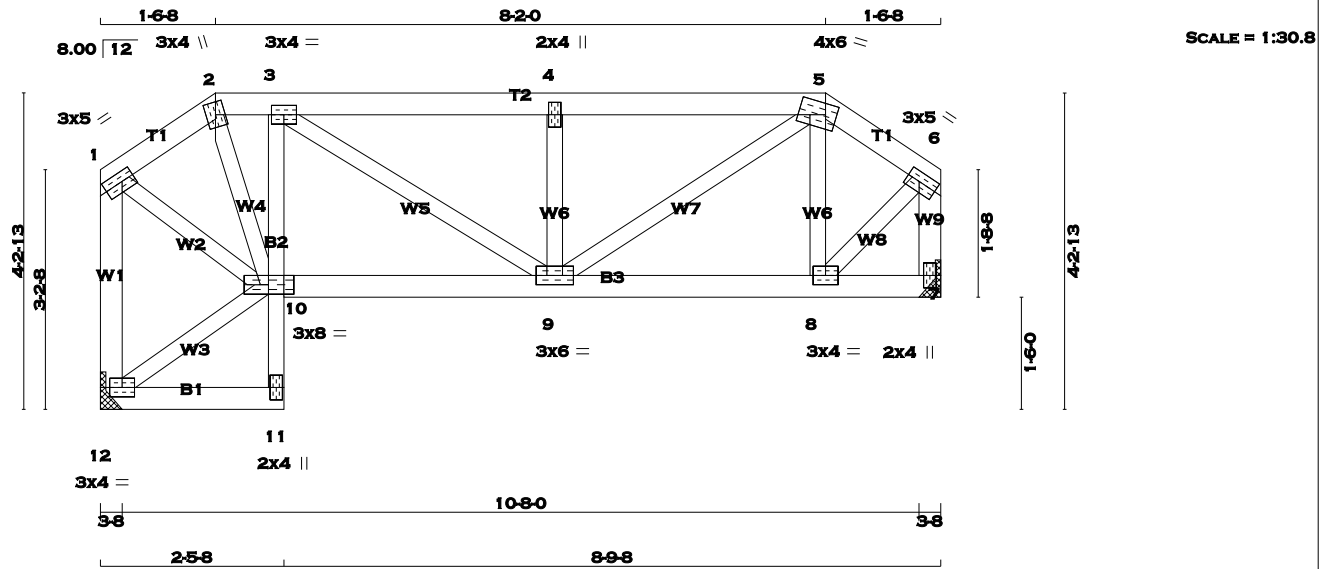


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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	1 - 2	2x4	DRY	No.2
2 - 5	2x4	DRY	No.2	2 - 5	2x4	DRY	No.2
5 - 6	2x4	DRY	No.2	5 - 6	2x4	DRY	No.2
12 - 1	2x4	DRY	No.2	12 - 1	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2	7 - 6	2x4	DRY	No.2
12 - 11	2x4	DRY	No.2	12 - 11	2x4	DRY	No.2
11 - 3	2x3	DRY	No.2	11 - 3	2x3	DRY	No.2
10 - 7	2x4	DRY	No.2	10 - 7	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			
DRY: SEASONED LUMBER.				DRY: SEASONED LUMBER.			

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
1	TMVW-t	MT20	3.0	5.0	1.50	2.00	
2	TTW+m	MT20	3.0	4.0			
3	TMVW-t	MT20	3.0	4.0			
4	TMW+w	MT20	2.0	4.0			
5	TTWW-m	MT20	4.0	6.0	1.75	1.75	
6	TMVW-t	MT20	3.0	5.0	1.50	2.00	
7	BMV1+p	MT20	2.0	4.0			
8	BMWW-t	MT20	3.0	4.0			
9	BMWWW-t	MT20	3.0	6.0			
10	BMWWW-I	MT20	3.0	8.0	Edge	5.50	
11	BMV+p	MT20	2.0	4.0			
12	BMVW1-t	MT20	3.0	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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
7	534	0		534	0			HANGER BY OTHERS	
12	534	0		534	0			HANGER BY OTHERS	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
7	374	262 / 0		0 / 0	0 / 0	0 / 0	112 / 0	0 / 0	
12	374	262 / 0		0 / 0	0 / 0	0 / 0	112 / 0	0 / 0	
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 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	FACTORED		MAX. FACTORED	FACTORED			
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)		
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2	-431 / 0	-77.4	-77.4	0.03 (1)	6.25	2-10	0 / 227	0.05 (1)	
2-3	-428 / 0	-77.4	-77.4	0.08 (1)	6.25	3-9	0 / 270	0.06 (1)	
3-4	-657 / 0	-77.4	-77.4	0.15 (1)	6.25	9-4	-322 / 0	0.05 (1)	
4-5	-657 / 0	-77.4	-77.4	0.15 (1)	6.25	9-5	0 / 429	0.10 (1)	
5-6	-373 / 0	-77.4	-77.4	0.03 (1)	6.25	8-5	-204 / 0	0.03 (1)	
12-1	-511 / 0	0.0	0.0	0.09 (1)	7.81	8-6	0 / 404	0.09 (1)	
7-6	-529 / 0	0.0	0.0	0.06 (1)	7.81	12-10	-3 / 0	0.00 (1)	
12-11	0 / 2	-17.5	-17.5	0.03 (4)	10.00	1-10	0 / 414	0.09 (1)	
11-10	0 / 23	0.0	0.0	0.01 (1)	10.00				
10-3	-377 / 0	0.0	0.0	0.02 (1)	7.81				
10-9	0 / 431	-17.5	-17.5	0.10 (1)	10.00				
9-8	0 / 300	-17.5	-17.5	0.08 (4)	10.00				
8-7	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/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 (0.37")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")									
ALLOWABLE DEFL.(TL)= L/360 (0.37")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")									
CSI: TC=0.15 (3-4:1), BC=0.10 (9-10:1), WB=0.10 (5-9:1), SSI=0.13 (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									
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= 0.86 (6) (INPUT = 0.90)									
JSI METAL= 0.20 (10) (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.



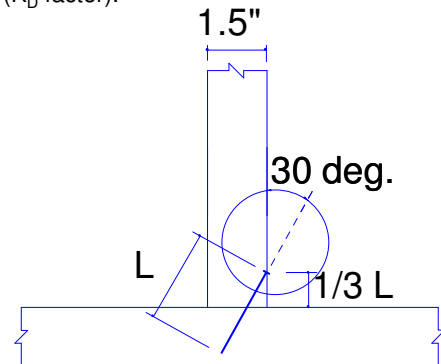
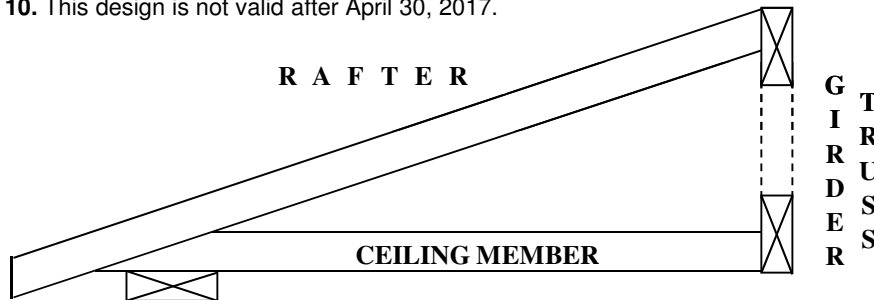
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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



MiTek Canada Inc
100 Industrial Rd.
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April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

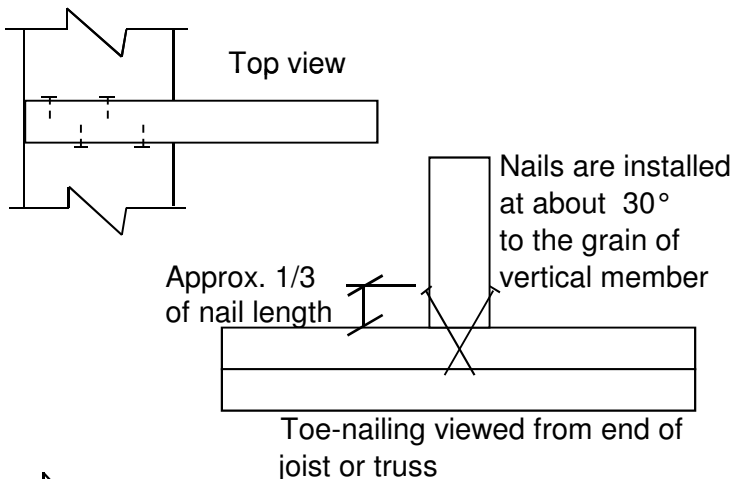
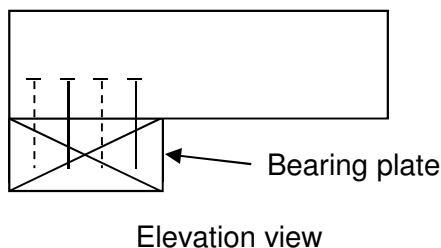
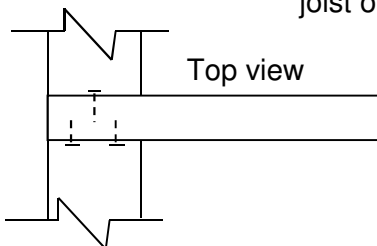
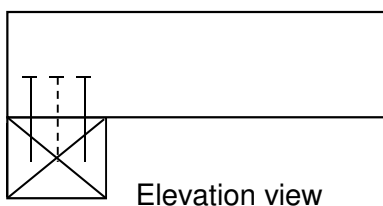
B37579H2

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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100 Industrial Rd.
Bradford, Ontario L3Z 3G7

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April 24, 2015

JOB NAME DETAILS

JOB DESC.

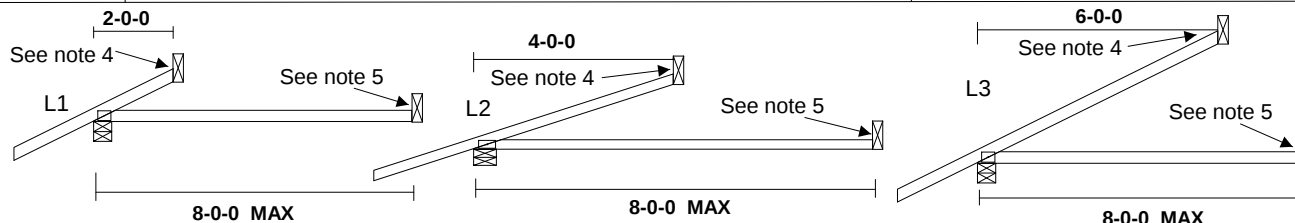
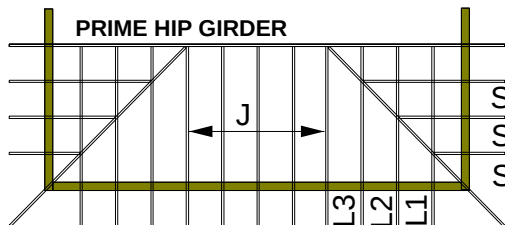
HIP END FRAMING

TOO BRIDGE-BLOCK 347

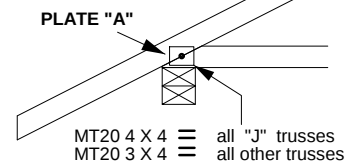
DRAWING NO.

B37579J

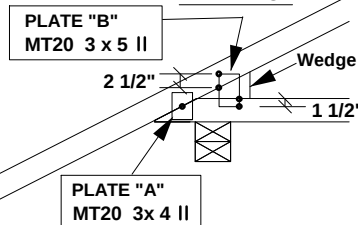
EMC JOB # 10317-121



DETAIL "A"



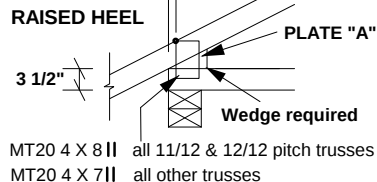
DETAIL "C"



CANTILEVER DETAIL "C"

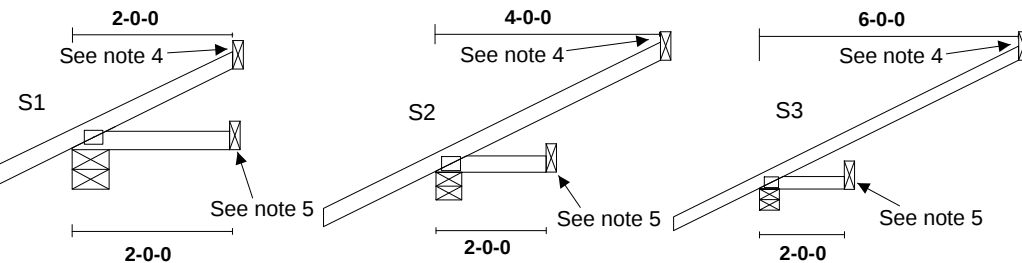
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

DETAIL "B"

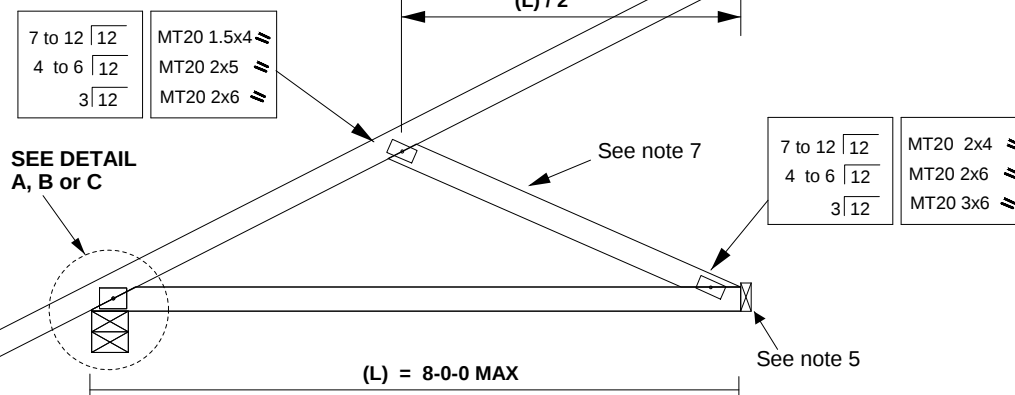


NOTES:

- 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"



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

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April 24, 2015

CS Beam 4.11.26.1
kmBeamEngine 4.11.26.1
Materials Database 1516**Member Data B1****Description:**

Member Type: Beam

Application: Roof

Top Lateral Bracing: Continuous

Slope: 0.00 / 12

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

Building Code: OBC-2012

Standard Load:

Snow Load: 30 PLF

Deflection Criteria: L/360 live, L/240 total

0.720" max. LL

Dead Load: 15 PLF

Deck Connection: Nailed

Member Weight: 5.0 PLF

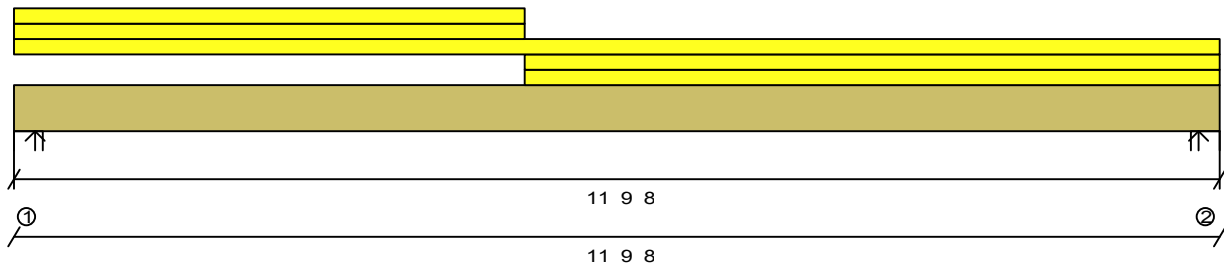
Filename: Beam2

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

Type (Description)	Side	Begin	End	Trib. Width	Other Start	End	Dead Start	End	Category
Additional Uniform (PLF)	Top	0' 0.00"	5' 0.00"		0		41		Live
Additional Uniform (PLF)	Top	0' 0.00"	5' 0.00"		95		0		Snow
Additional Uniform (PLF)	Top	0' 0.00"	11' 9.50"		0		10		Live
Additional Uniform (PLF)	Top	5' 0.00"	11' 9.50"		0		50		Live
Additional Uniform (PLF)	Top	5' 0.00"	11' 9.50"		139		0		Snow

**Bearings and Factored Reactions**

	Location	Type	Material	Input Length	Min Required	Gravity Reaction	Grav Upl
1	0' 0.000"	Wall	Steel	3.500"	1.500"	1715#	--
2	11' 9.500"	Wall	Steel	3.500"	1.500"	1929#	--

Maximum Unfactored Load Case Reactions

Used for applying point loads (or line loads) to carrying members

	Snow	Dead
1	793#	420#
2	915#	445#

Design spans
11' 4.250"**Product: S-P-F No1/No2 2x10 2 ply****PASSES DESIGN CHECKS**Design assumes continuous lateral bracing along the top chord.
Design assumes continuous lateral bracing along the bottom chord.**Limit States Design**

	Actual	Limit	Capacity	Location	Loading
Positive Moment	5255.#	6042.#	86%	5.9'	Total Load 1.25D+1.00*1.5S
Shear	1657.#	2656.#	62%	11.01'	Total Load 1.25D+1.00*1.5S
Max. Reaction	1929.#	6457.#	29%	11.79'	Total Load 1.25D+1.00*1.5S
TL Deflection	0.3093"	0.5677"	L/440	5.9'	Total Load D+S
LL Deflection	0.2058"	0.3785"	L/661	5.9'	Total Load S

(Actual is factored load effects, Limit is design resistance)

Bearing length from point load of top loads beams assumed to be 3.50"

Control: Positive Moment

Manufacturer's installation guide MUST be consulted for multi-ply connection details and alternatives

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READ ALL NOTES ON THIS PAGE AND ON THE
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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.

All product names are trademarks of their respective owners

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**Passing is defined as when the member, floor joist, beam or girder, shown on this drawing meets applicable design criteria for Loads, Loading Conditions, and Spans listed on this sheet. The design must be reviewed by a qualified designer or design professional as required for approval. This design assumes product installation according to the manufacturer's specifications.

Engineering Note Page (ENP-2)

REVISION 2009-10-09

Please read all notes prior to installation of the component**DESIGN INFORMATION**

This building component is certified as an individual component for the loads and conditions shown on the calculation and drawing page.

The responsibility of the undersigned engineer is only limited to the calculation of this building component for the loads and conditions shown on this drawing.

The responsibility of the undersigned is limited to the verification of the structural capacity of the NASCOR floor joists and LVL beams based on placement as shown on the layout. The loads applied are limited to the gravity effects of the specified loads. The structural integrity of the building and the effect of wind, uplift, seismic, lateral or other forces, calculation of adequate support and anchorage of components, as well as the dimensions and design loads used to calculate components are the responsibility of the overall building designer.

Floor joists and OSB rim board are designed to carry uniformly distributed loads only. Point loads should be transferred through the floor cavity with squash blocks. Structural elements such as walls, posts, connectors, and squash blocks are the responsibility of the overall building designer.

The undersigned engineer disclaims any responsibility for damages as a result of being furnished faulty or incorrect information, specifications and/or designs.

Installation of NASCOR joists is to be carried out in accordance with the current edition of the manufacturer's approved literature available at <http://www.nascor.ca>.

CODE

This building component is designed in accordance with the National Building Code of Canada, the Ontario Building Code, CCMC and Canadian Standards Association guidelines.

COMPONENT

1. The building component used in construction must be the same as indicated on the drawings.
2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
3. Members consisting of multiple plies must be connected as per the document "Multi-ply Connection Details".
4. Pass-thru squash block framing is required at all point loads over bearings.

HANDLING AND INSTALLATION

Do not drill any hole, cut or notch a certified building component without a written pre-authorization.



CS Beam 4.11.26.1
kmBeamEngine 4.11.26.1
Materials Database 1516**Member Data B2****Description:****Standard Load:**

Snow Load: 30 PLF

Dead Load: 15 PLF

Member Type: Beam

Top Lateral Bracing: Continuous

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

Deflection Criteria: L/360 live, L/240 total

Deck Connection: Nailed

Filename: Beam3

Application: Roof

Slope: 0.00 / 12

Building Code: OBC-2012

0.720" max. LL

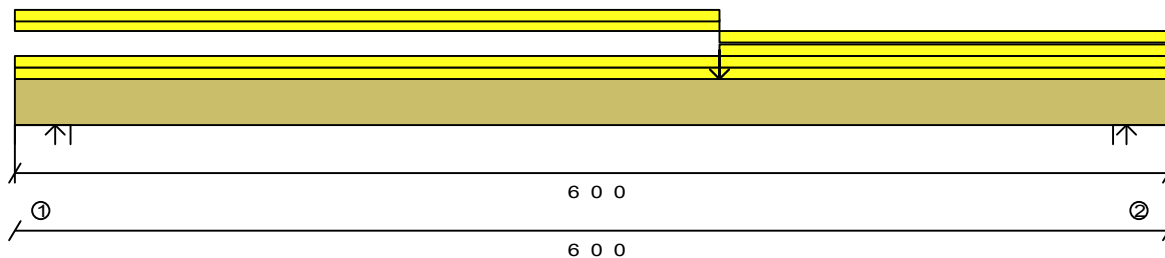
Member Weight: 5.0 PLF

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

Type (Description)	Side	Begin	End	Trib. Width	Other Start	End	Dead Start	End	Category
Point (LBS)	Top	3' 8.00"			0		420		Live
Point (LBS)	Top	3' 8.00"			793		0		Snow
Additional Uniform (PLF)	Top	0' 0.00"	3' 8.00"		0		16		Live
Additional Uniform (PLF)	Top	0' 0.00"	3' 8.00"		61		0		Snow
Additional Uniform (PLF)	Top	3' 8.00"	6' 0.00"		0		59		Live
Additional Uniform (PLF)	Top	3' 8.00"	6' 0.00"		139		0		Snow
Additional Uniform (PLF)	Top	0' 0.00"	6' 0.00"		0		10		Live
Additional Uniform (PLF)	Top	0' 0.00"	6' 0.00"		23		0		Live

**Bearings and Factored Reactions**

	Location	Type	Material	Input Length	Min Required	Gravity Reaction	Gravi Uplift
1	0' 0.000"	Wall	Steel	3.500"	1.500"	1292#	--
2	6' 0.000"	Wall	Steel	3.500"	1.500"	1927#	--

Maximum Unfactored Load Case Reactions

Used for applying point loads (or line loads) to carrying members

	Live	Snow	Dead
1	65#	586#	305#
2	65#	878#	462#

Design spans

5' 6.750"

**Product: S-P-F No1/No2 2x10 2 ply****PASSES DESIGN CHECKS**

Design assumes continuous lateral bracing along the top chord.

Design assumes continuous lateral bracing along the bottom chord.

Limit States Design

	Actual	Limit	Capacity	Location	Loading
Positive Moment	3234.#	6042.#	53%	3.67'	Total Load 1.25D+1.00*1.5S+0.5L
Shear	1637.#	2656.#	61%	5.22'	Total Load 1.25D+1.00*1.5S+0.5L
Max. Reaction	1927.#	6457.#	29%	6'	Total Load 1.25D+1.00*1.5S+0.5L
TL Deflection	0.0395"	0.2781"	L/999+	3.28'	Total Load D+S+0.5L
LL Deflection	0.0262"	0.1854"	L/999+	3.28'	Total Load S+0.5L

(Actual is factored load effects, Limit is design resistance)

Bearing length from point load of top loads beams assumed to be 3.50"

Control: Shear

Manufacturer's installation guide MUST be consulted for multi-ply connection details and alternatives

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STANDARD GABLE END DETAIL

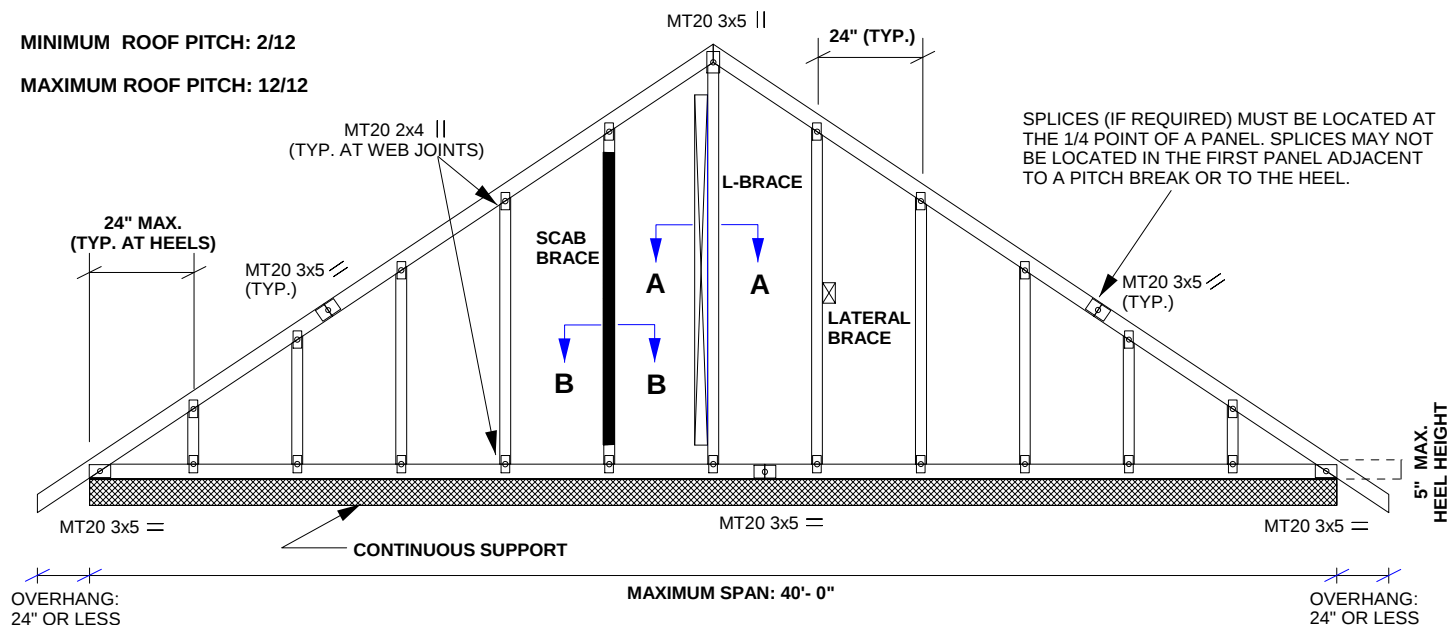
LECCO RIDGE-BLOCK 347

DRAWING NO.: B37579K

ENR 108 PTO 017-121

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

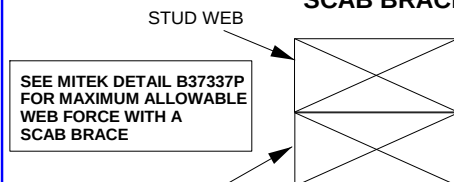
TOTAL LOAD = 73.0 PSF OR LESS

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:

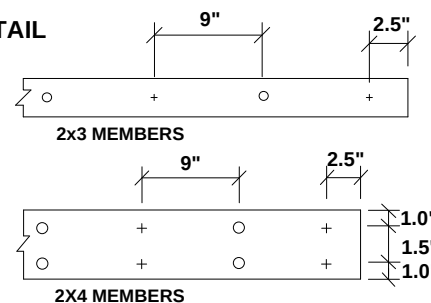
WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

SCAB BRACE DETAIL



No. 2 DRY SPF OR D. Fir SCAB BRACE, SAME SIZE AS WEB

SECTION B-B



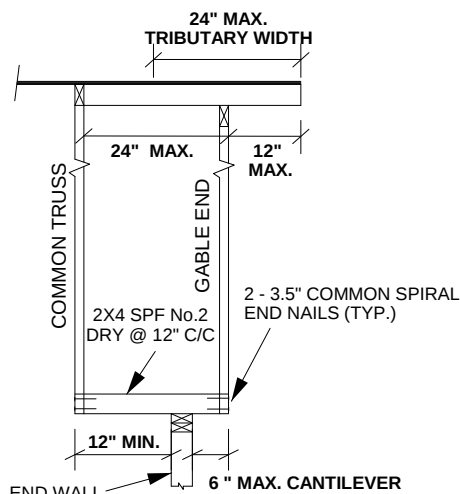
2X4 MEMBERS

+ NAIL FROM FRONT FACE
 o NAIL FROM BACK FACE

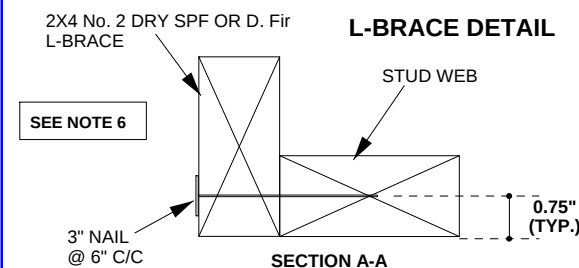
FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

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.

PEO
 Certificate No. 10889485



RECEIVED
 TOWN OF MILTON
 MAR 29, 2017
 17-5409
 BUILDING DIVISION

April 24, 2015



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