



TOWN OF MILTON
PLANNING AND DEVELOPMENT
BUILDING PERMIT: 17-5318

BUILDING: REVIEWED
SCOTT SHERRIFFS
PLANS EXAMINER
APR 25, 2017
DATE

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

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5318
BUILDING DIVISION



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

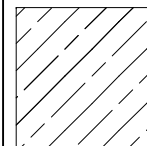
UNDERSIDE OF SOFFIT
FOR PORCHES AT
8' 6" A.F.F.

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

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

HANGER LEGEND:

▼ LUS24 ■ LJS26DS
● HGUS26 × HGUS26-2



CONVENTIONAL FRAMING BY OTHERS

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

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES TO BE 2x4 S.P.F. @ 24" O/C WITH A 2x4 VERTICAL POST TO THE TRUSS UNDERNEATH EACH CROSS POINT. VERTICAL POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINT AND BETWEEN ROWS OF BRACING DOES NOT EXCEED 6'.

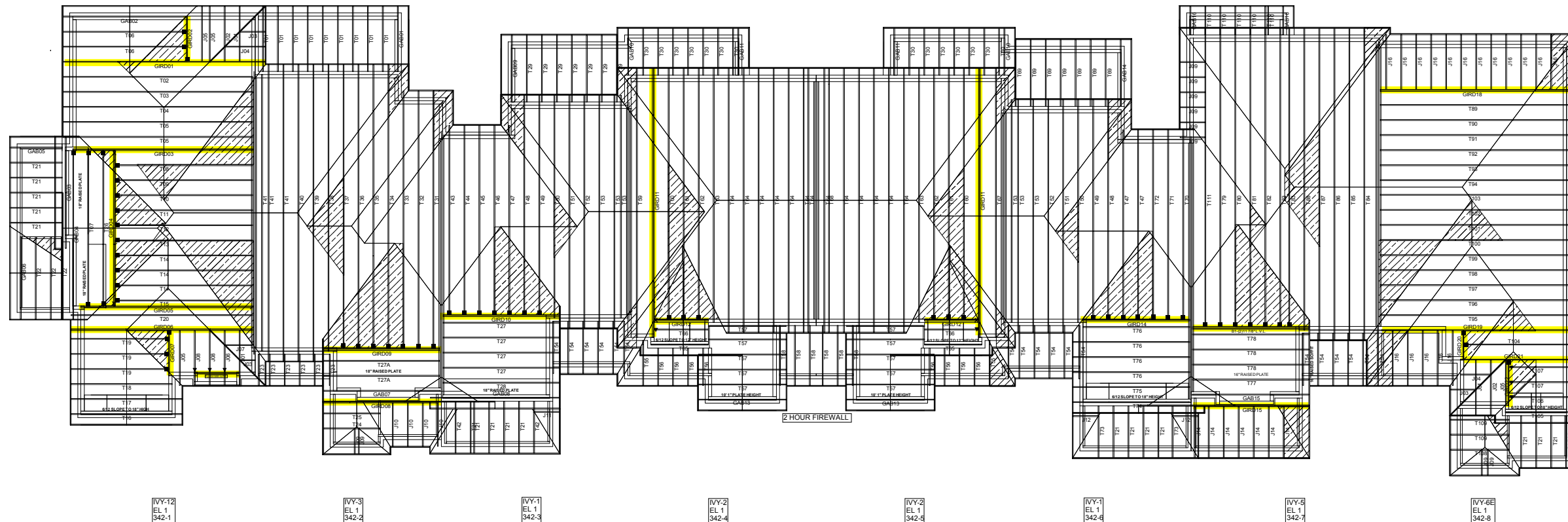
Model: **BLOCK 342**

Customer: **GREENPARK**

Project: **LECCO RIDGE**

Location: **MILTON**

Date: **3/14/2017** 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 the truss and dimensions indicated on the drawing are identical to those of the installed truss.

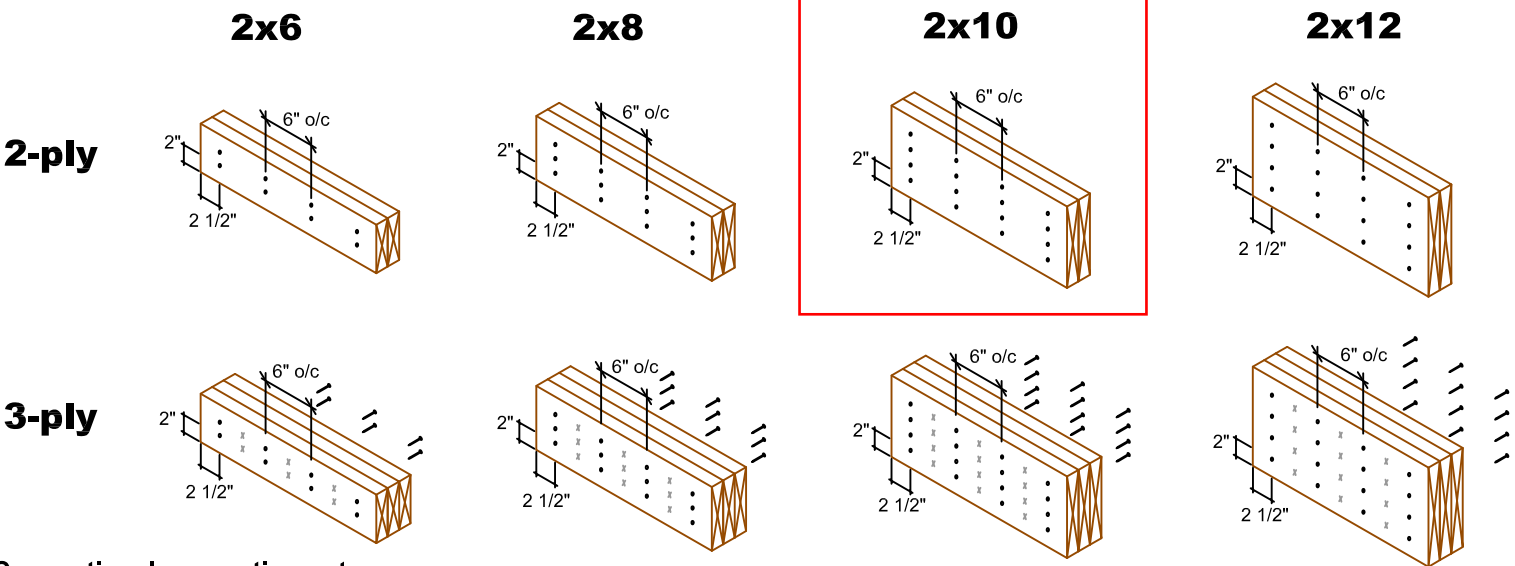
WHERE CONTINUOUS LATERAL
BRACING IS REQUIRED FOR WEBS
BUT CAN NOT BE PROVIDED
SUBSTITUTE EACH WITH ONE SPF
#2 2" X 4" T-BRACE COVERING 90%
OF WEB LENGTH AND FASTENED
TO EDGE OF WEB USING 3 1/4"
SPIRAL NAILS @ 6" C/C

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01/29/2013

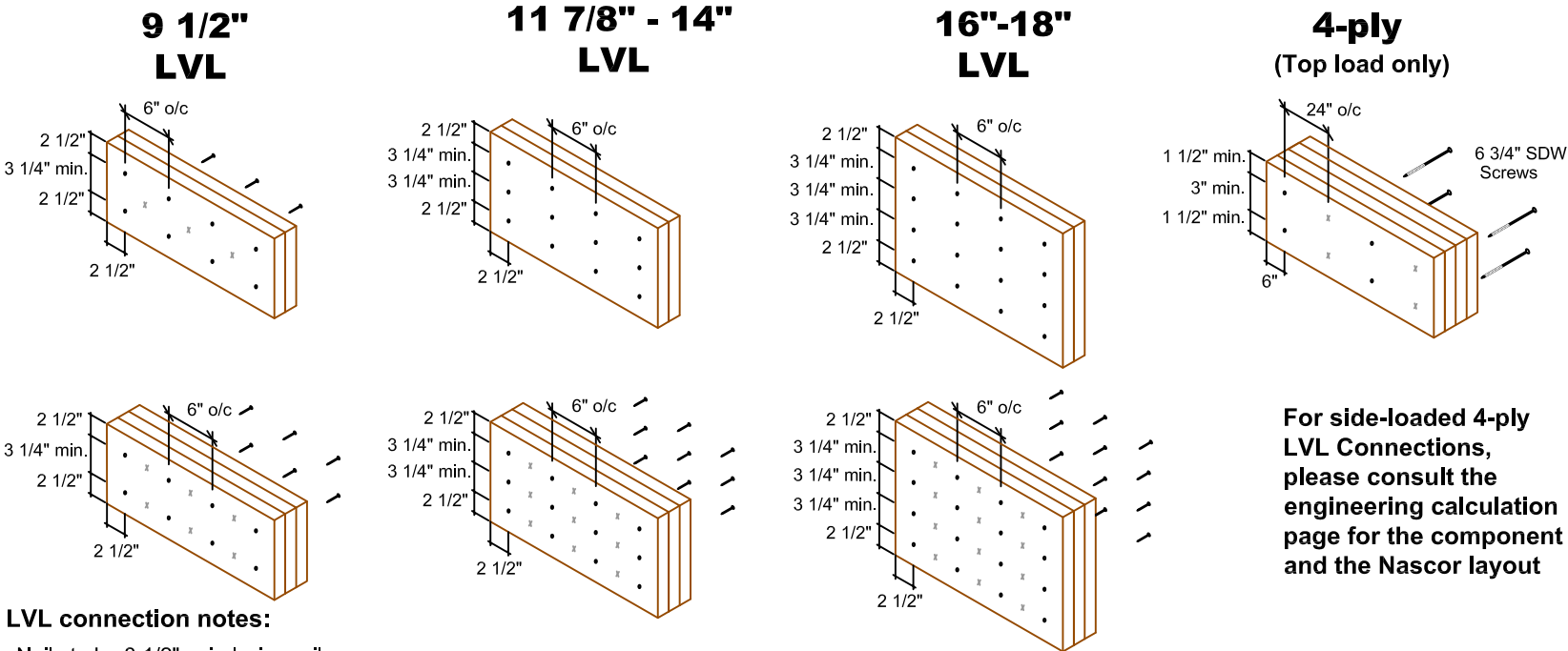
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



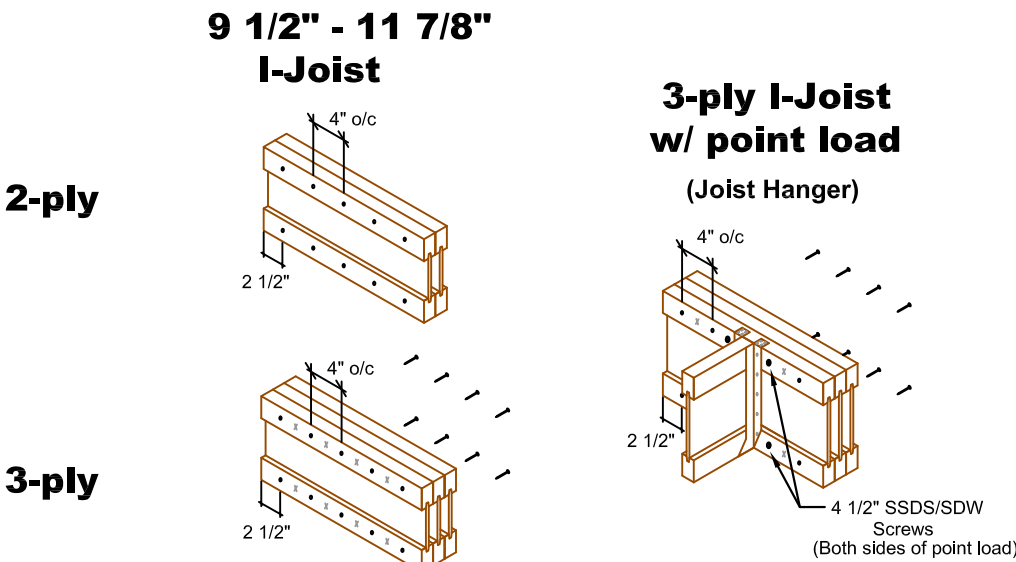
- Conventional connection notes:**
- Nails to be 3" 10d spiral wire nails.
 - Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
 - Number of rows and spacing as per details shown, unless noted otherwise.
 - "X" represents nail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

CS Beam 4.11.26.1
kmBeamEngine 4.11.26.1
Materials Database 1516**Member Data B1****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: Beam1

Application: Roof

Slope: 0.00 / 12

Building Code: OBC-2012

0.720" max. LL

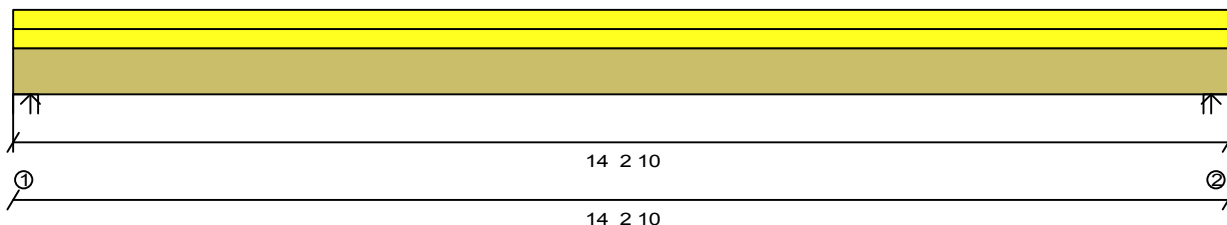
Member Weight: 11.8 PLF

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

Type (Description)	Side	Begin	End	Trib. Width	Other Start	End	Dead Start	End	Category
Additional Uniform (PLF)	Top	0' 0.00"	14' 2.63"		0		192		Live
Additional Uniform (PLF)	Top	0' 0.00"	14' 2.63"		447		0		Snow

**Bearings and Factored Reactions**

	Location	Type	Material	Input Length	Min Required	Gravity Reaction	Gravity Uplift
1	0' 0.000"	Wall	Steel	3.500"	1.872"	6815#	--
2	14' 2.625"	Wall	Steel	3.500"	1.872"	6815#	--

Maximum Unfactored Load Case Reactions

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

	Snow	Dead
1	3287#	1508#
2	3287#	1508#

Design spans

13' 9.375"

Product: 1 3/4x11 7/8 West Fraser 2.0E-3100F 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	23479.#	35386.#	66%	7.11'	Total Load 1.25D+1.00*1.5S
Shear	5836.#	16135.#	36%	13.31'	Total Load 1.25D+1.00*1.5S
Max. Reaction	6815.#	12740.#	53%	0'	Total Load 1.25D+1.00*1.5S
TL Deflection	0.6239"	0.6891"	L/265	7.11'	Total Load D+S
LL Deflection	0.4277"	0.4594"	L/386	7.11'	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: LL Deflection

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

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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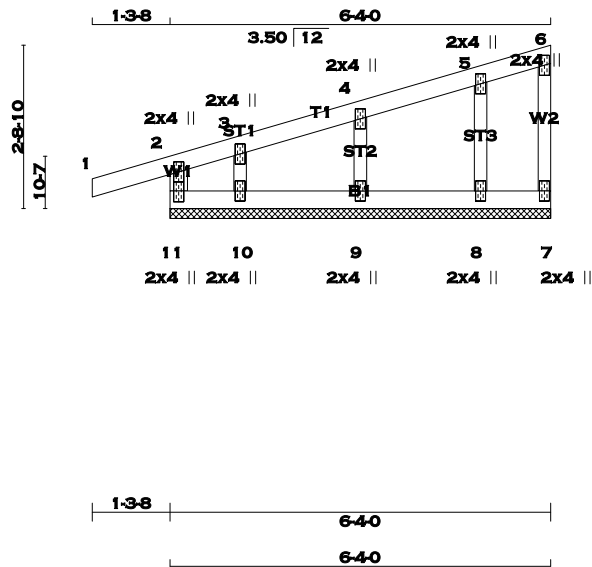


All product names are trademarks of their respective owners

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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.





SCALE = 1:38.3

TOTAL WEIGHT = 22 lb [M]

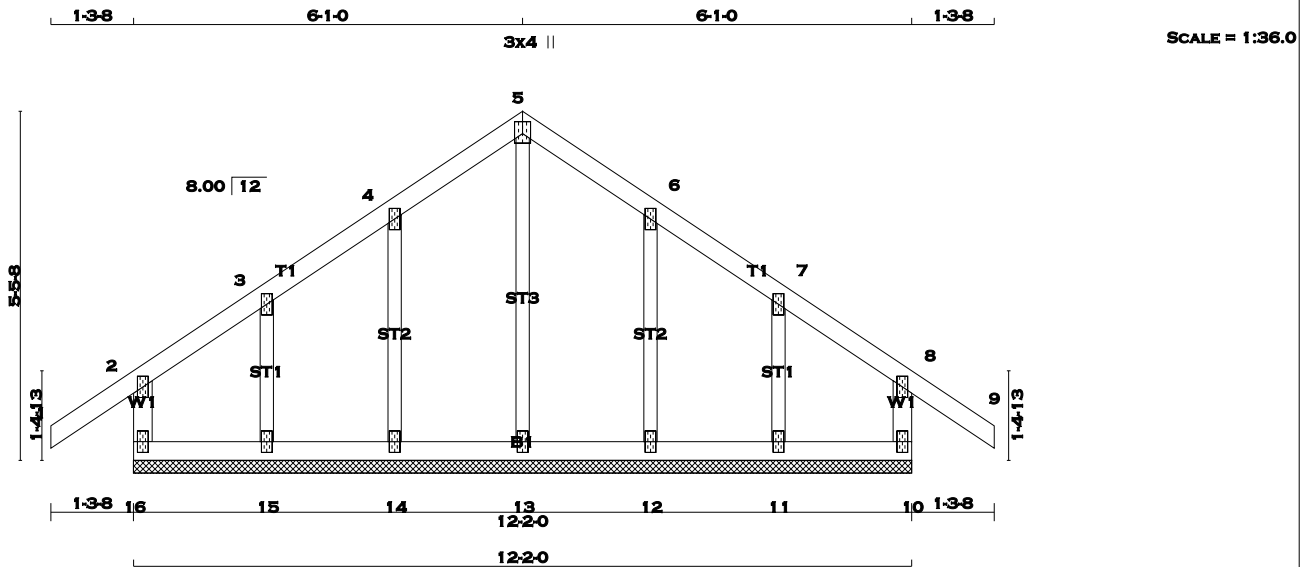
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 11- 2 2x4 DRY No.2 SPF 1 - 6 2x4 DRY No.2 SPF 7 - 6 2x3 DRY No.2 SPF 11- 7 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2-0-0 OC.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED 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="5">C H O R D S</th><th colspan="5">W E B S</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. UNBRACED LENGTH</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX CSI (LC)</th><th></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><td></td></tr><tr><td>11-2</td><td>-187 / 0</td><td>0.0</td><td>0.0 0.03 (1)</td><td>7.81</td><td>9-4</td><td>-170 / 0</td><td>0.02 (1)</td><td></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>10-3</td><td>-72 / 0</td><td>0.01 (1)</td><td></td></tr><tr><td>2-3</td><td>-21 / 0</td><td>-77.4</td><td>-77.4 0.07 (1)</td><td>6.25</td><td>8-5</td><td>-132 / 0</td><td>0.02 (1)</td><td></td></tr><tr><td>3-4</td><td>-4 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>4-5</td><td>-4 / 0</td><td>-77.4</td><td>-77.4 0.04 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>5-6</td><td>-4 / 0</td><td>-77.4</td><td>-77.4 0.02 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>7-6</td><td>-32 / 0</td><td>0.0</td><td>0.0 0.00 (1)</td><td>7.81</td><td></td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 10</td><td>-17.5</td><td>-17.5 0.03 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 7</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 2</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.01 (4)</td><td>10.00</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)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		FR-TO		FROM TO			FR-TO				11-2	-187 / 0	0.0	0.0 0.03 (1)	7.81	9-4	-170 / 0	0.02 (1)		1-2	0 / 14	-77.4	-77.4 0.10 (1)	10.00	10-3	-72 / 0	0.01 (1)		2-3	-21 / 0	-77.4	-77.4 0.07 (1)	6.25	8-5	-132 / 0	0.02 (1)		3-4	-4 / 0	-77.4	-77.4 0.04 (1)	10.00					4-5	-4 / 0	-77.4	-77.4 0.04 (1)	10.00					5-6	-4 / 0	-77.4	-77.4 0.02 (1)	10.00					7-6	-32 / 0	0.0	0.0 0.00 (1)	7.81					11-10	0 / 10	-17.5	-17.5 0.03 (1)	10.00					10-9	0 / 7	-17.5	-17.5 0.02 (4)	10.00					9-8	0 / 2	-17.5	-17.5 0.02 (4)	10.00					8-7	0 / 0	-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/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=0.02 (4-9:1) , 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)					
C H O R D S					W E B S																																																																																																																																											
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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 = 50 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
16 - 2	2x4	DRY	No.2	SPF
1 - 5	2x4	DRY	No.2	SPF
5 - 9	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
16 - 10	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2				SPF
ALL GABLE WEBS 2x3 DRY No.2				SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

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

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
 ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
16-2	-197 / 0	0.0	0.0 0.01 (1)	7.81	13-5	-149 / 0	0.06 (1)
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	14-4	-156 / 0	0.04 (1)
2-3	-22 / 0	-77.4	-77.4 0.04 (1)	6.25	15-3	-150 / 0	0.03 (1)
3-4	-15 / 0	-77.4	-77.4 0.04 (1)	6.25	12-6	-156 / 0	0.04 (1)
4-5	-11 / 0	-77.4	-77.4 0.04 (1)	6.25	11-7	-150 / 0	0.03 (1)
5-6	-11 / 0	-77.4	-77.4 0.04 (1)	6.25			
6-7	-15 / 0	-77.4	-77.4 0.04 (1)	6.25			
7-8	-22 / 0	-77.4	-77.4 0.04 (1)	6.25			
8-9	0 / 29	-77.4	-77.4 0.10 (1)	10.00			
10-8	-197 / 0	0.0	0.0 0.01 (1)	7.81			
16-15	0 / 18	-17.5	-17.5 0.02 (4)	10.00			
15-14	0 / 13	-17.5	-17.5 0.02 (4)	10.00			
14-13	0 / 9	-17.5	-17.5 0.02 (4)	10.00			
13-12	0 / 9	-17.5	-17.5 0.02 (4)	10.00			
12-11	0 / 13	-17.5	-17.5 0.02 (4)	10.00			
11-10	0 / 18	-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 (10-11:4), WB=0.06 (5-13:1), 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.

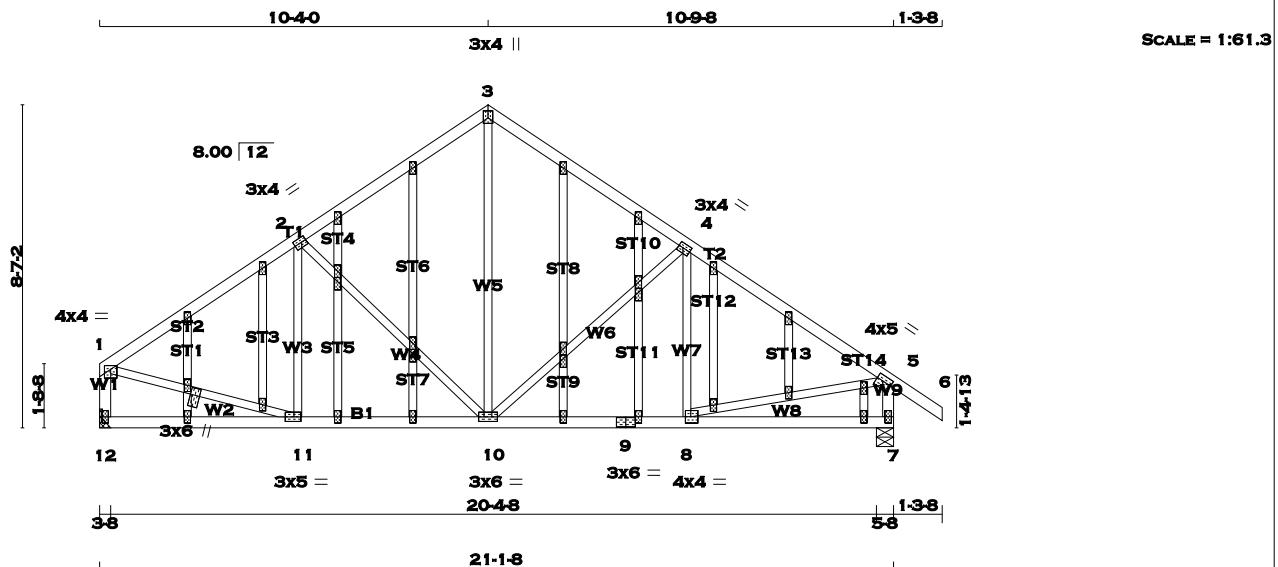
JSI GRIP= 0.14 (8) (INPUT = 0.90)
 JSI METAL= 0.06 (5) (INPUT = 1.00)



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 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 121 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 6	2x4	DRY	No.2
12 - 1	2x4	DRY	No.2
7 - 5	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2
EXCEPT

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

GABLE STUDS SPACED AT 2'-0" OC.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	4.0	1.25	2.00
2	TMWW-t	MT20	3.0	4.0	1.50	1.50
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMWW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW-t	MT20	4.0	5.0	1.75	2.00
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	4.0	4.0	2.00	1.75
9	BS-t	MT20	3.0	6.0		
10	BMWWW-t	MT20	3.0	6.0		
11	BMWW-t	MT20	3.0	5.0	1.50	2.25
12	BMV1+p	MT20	2.0	4.0		
13	NP+w	MT20	2.0	4.0	1.50	1.00
13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35						
13	NP+w	MT20	2.0	4.0		
16	NP+w	MT20	2.0	4.0	1.50	1.00
21	NP+t	MT20	3.0	6.0	2.25	0.25
26	NP+w	MT20	2.0	4.0	1.25	1.00
29	NP+w	MT20	2.0	4.0	1.25	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	REQRD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
12	1002	0	1002	0	0
7	1108	0	1108	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
12	703	492	0	0	0	0	211
7	775	556	0	0	0	0	219

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.69 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)	MAX UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
1-2	-1017 / 0	-77.4	-77.4	0.28 (1)	5.88	11-2	-129 / 48	0.05 (1)	
2-3	-800 / 0	-77.4	-77.4	0.27 (1)	6.25	2-10	-312 / 0	0.29 (1)	
3-4	-802 / 0	-77.4	-77.4	0.30 (1)	6.25	10-3	0 / 558	0.13 (1)	
4-5	-1085 / 0	-77.4	-77.4	0.31 (1)	5.69	10-4	-379 / 0	0.37 (1)	
5-6	0 / 29	-77.4	-77.4	0.10 (1)	10.00	8-4	-77 / 67	0.03 (1)	
12-1	-963 / 0	0.0	0.0	0.10 (1)	7.81	1-11	0 / 897	0.20 (1)	
7-5	-1068 / 0	0.0	0.0	0.11 (1)	7.63	8-5	0 / 943	0.21 (1)	
12-11	0 / 0	-17.5	-17.5	0.11 (4)	10.00				
11-10	0 / 868	-17.5	-17.5	0.19 (1)	10.00				
10-9	0 / 925	-17.5	-17.5	0.21 (1)	10.00				
9-8	0 / 925	-17.5	-17.5	0.21 (1)	10.00				
8-7	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

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 (0.70")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.70")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.31 (4-5:1) , BC=0.21 (8-10:1) , WB=0.37 (4-10:1) , 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.

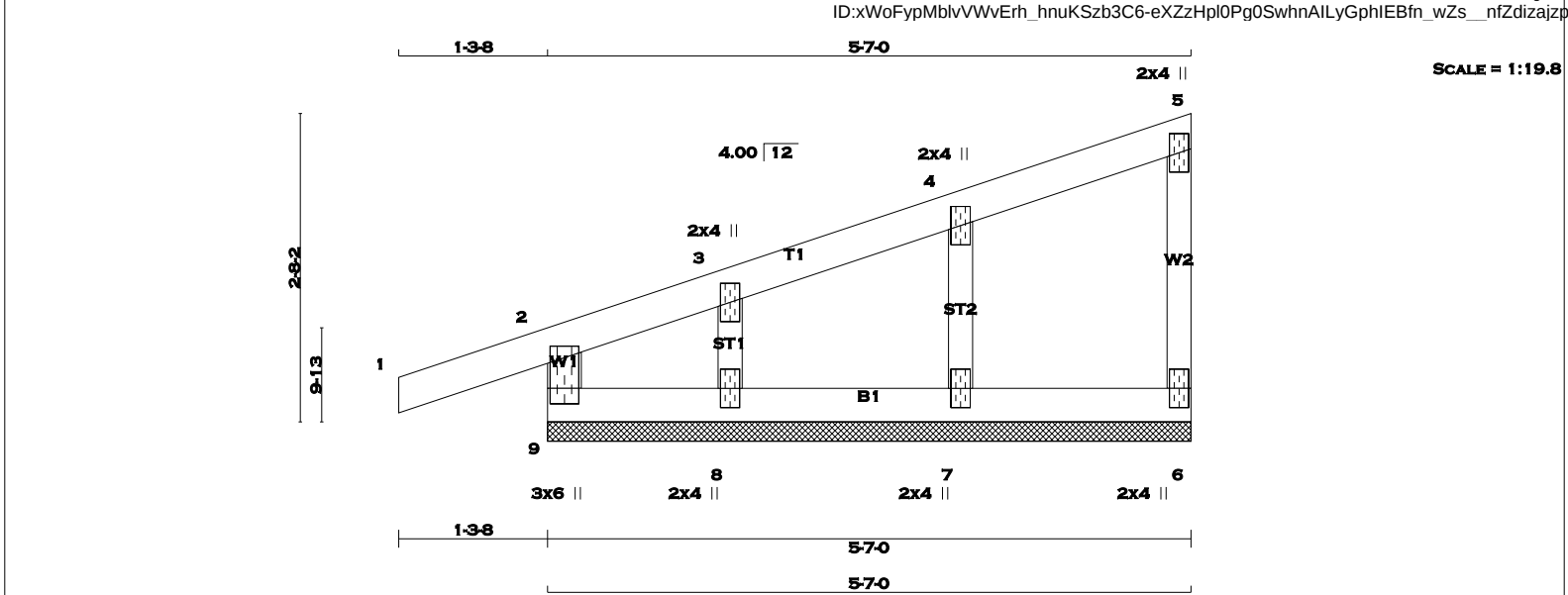
JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.38 (5) (INPUT = 1.00)



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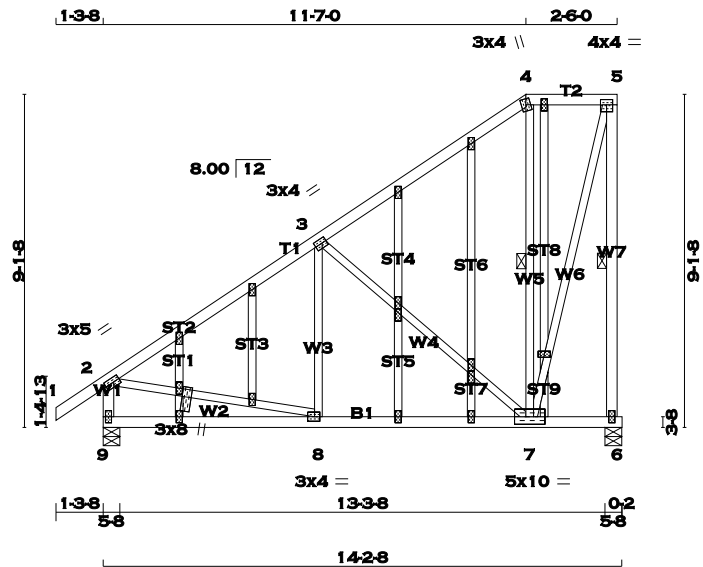
TOTAL WEIGHT = 2 X 19 = 37 lb							[M]
LUMBER N. L. G. A. RULES CHORDS SIZE							



Professional Engineer Seal for P. M. Trevisan, License No. 100136551, Province of Ontario, dated March 15th, 2017.

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SCALE = 1:63.1

TOTAL WEIGHT = 98 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
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	SPF
EXCEPT				
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	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	4.0	4.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		
7, 7, 11						
7	NP-p	MT20	2.0	4.0	0.75	2.00
7	BMVWW-t	MT20	5.0	10.0		
8	BMVW-t	MT20	3.0	4.0	1.50	1.75
9	BMV1+p	MT20	2.0	4.0		
10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22						
10	NP+w	MT20	2.0	4.0		
14	NP+w	MT20	2.0	4.0	1.25	1.00
17	NP+w	MT20	2.0	4.0	1.25	1.00
20	NP-t	MT20	3.0	8.0	3.25	0.25

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	BRG	IN-SX	BRG	IN-SX
6	668	0	668	0	0	5-8	5-8	5-8	5-8
9	774	0	774	0	0	5-8	5-8	5-8	5-8

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 4-7. DBS = 20-0-0 . CBF = 82 LBS.

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

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

LOADING				TOTAL LOAD CASES: (4)			
C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	8-3	0 / 105	0.04 (4)
2-3	-611 / 0	-77.4 -77.4	0.35 (1)	6.25	3-7	-502 / 0	0.60 (1)
3-4	-216 / 0	-77.4 -77.4	0.34 (1)	6.25	7-4	-159 / 3	0.09 (1)
4-5	-152 / 0	-77.4 -77.4	0.06 (1)	6.25	7-5	0 / 580	0.13 (1)
6-5	-656 / 0	0.0 0.0	0.25 (1)	6.25	2-8	0 / 542	0.12 (1)
9-2	-733 / 0	0.0 0.0	0.08 (1)	7.81			
9-8	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
8-7	0 / 533	-17.5 -17.5	0.19 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.07 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 12.00/12

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=0.35 (2-3:1) , BC=0.19 (7-8:4) , WB=0.60 (3-7:1) , SSI=0.18 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

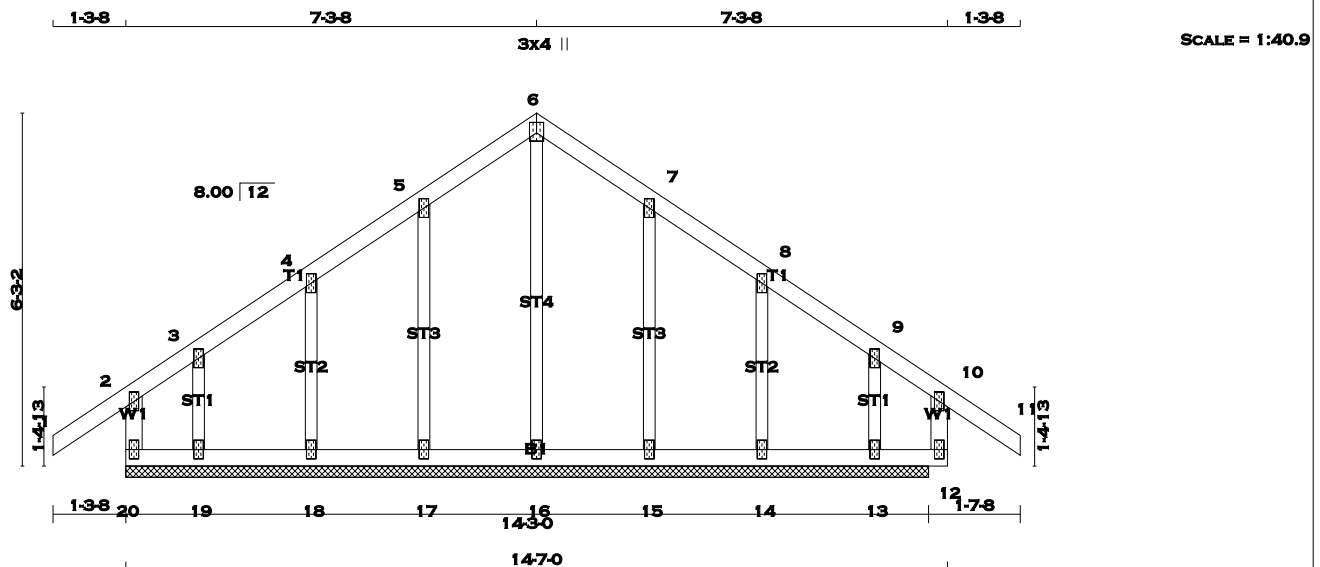
JSI GRIP= 0.82 (8) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 62 lb [M]

LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 20 - 2 2x4 DRY No.2 SPF 1 - 6 2x4 DRY No.2 SPF 6 - 11 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 20 - 12 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 = 10.00 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. LOADING TOTAL LOAD CASES: (4)					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=0.07 (13-14:1) , WB=0.18 (6-16:1) , SSI=0.07 (2-20:1) 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= 0.20 (6) (INPUT = 0.90) JSI METAL= 0.08 (6) (INPUT = 1.00)																																																																																																																																																																																																																																																													
PLATES (table is in inches) <table><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr><tr><td>2</td><td>TMV+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>3, 4, 5, 7, 8, 9</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>TMW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>6</td><td>TTW+p</td><td>MT20</td><td>3.0</td><td>4.0</td><td>2.25</td><td>1.50</td></tr><tr><td>10</td><td>TMV+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>12</td><td>BMV+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>13, 14, 15, 16, 17, 18, 19</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>13</td><td>BMW1+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>20</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 MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					JT	TYPE	PLATES	W	LEN	Y	X	2	TMV+p	MT20	2.0	4.0			3, 4, 5, 7, 8, 9							3	TMW+w	MT20	2.0	4.0			6	TTW+p	MT20	3.0	4.0	2.25	1.50	10	TMV+p	MT20	2.0	4.0			12	BMV+p	MT20	2.0	4.0			13, 14, 15, 16, 17, 18, 19							13	BMW1+w	MT20	2.0	4.0			20	BMV1+p	MT20	2.0	4.0			<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. UNBRACED LENGTH</th><th>MEMB.</th><th>MAX. 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FACTORED FORCE (LBS)	MAX CSI (LC)	FR-TO		FROM TO			FR-TO			20-2	-81 / 0	0.0	0.0 0.09 (1)	7.81	16-6	-291 / 0	0.18 (1)	1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	17-5	-164 / 0	0.06 (1)	2-3	0 / 118	-77.4	-77.4 0.05 (1)	10.00	18-4	-152 / 0	0.03 (1)	3-4	0 / 121	-77.4	-77.4 0.05 (1)	10.00	19-3	-128 / 0	0.02 (1)	4-5	0 / 125	-77.4	-77.4 0.06 (1)	10.00	15-7	-168 / 0	0.06 (1)	5-6	0 / 124	-77.4	-77.4 0.06 (1)	10.00	14-8	-130 / 0	0.03 (1)	6-7	0 / 124	-77.4	-77.4 0.06 (1)	10.00	13-9	-169 / 0	0.03 (1)	7-8	0 / 127	-77.4	-77.4 0.06 (1)	10.00				8-9	0 / 111	-77.4	-77.4 0.09 (1)	10.00				9-10	0 / 130	-77.4	-77.4 0.09 (1)	10.00				10-11	0 / 29	-77.4	-77.4 0.10 (1)	10.00				12-10	-58 / 0	0.0	0.0 0.09 (1)	7.81				20-19	-94 / 0	-17.5	-17.5 0.05 (1)	6.25				19-18	-99 / 0	-17.5	-17.5 0.02 (1)	6.25				18-17	-103 / 0	-17.5	-17.5 0.01 (4)	6.25				17-16	-106 / 0	-17.5	-17.5 0.01 (4)	6.25				16-15	-106 / 0	-17.5	-17.5 0.01 (4)	6.25				15-14	-103 / 0	-17.5	-17.5 0.01 (4)	6.25				14-13	-100 / 0	-17.5	-17.5 0.07 (1)	6.25				13-12	-92 / 0	-17.5	-17.5 0.07 (1)	6.25			
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A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

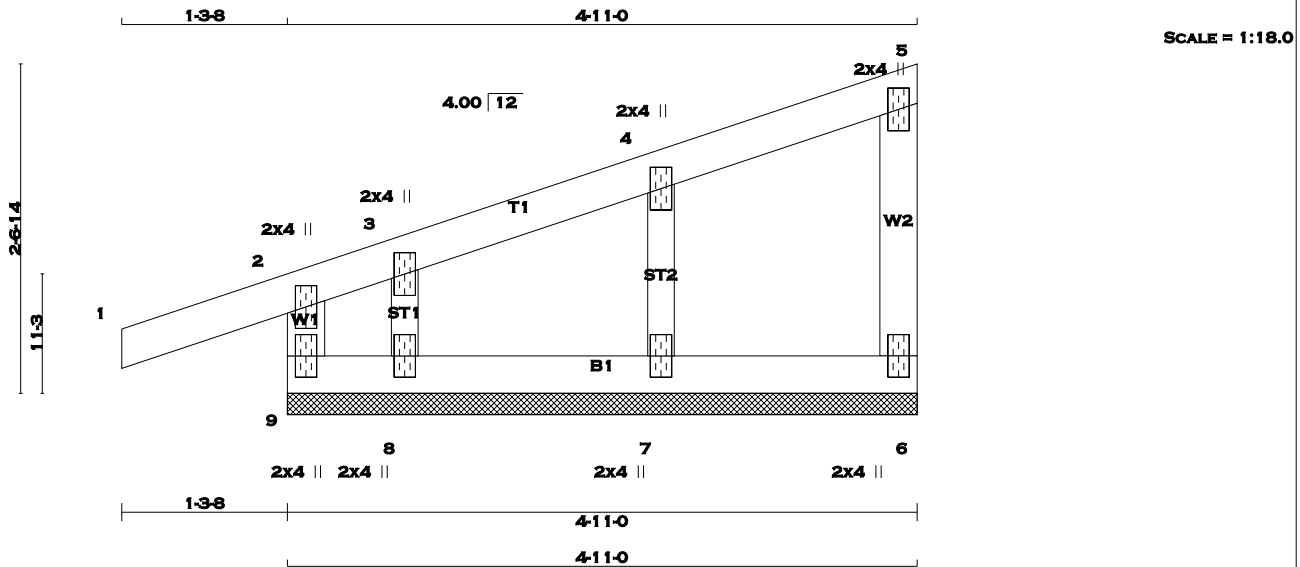
CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO			FR-TO			
11-2	-195 / 0	0.0	0.0	0.03 (1)	7.81	8-5	-164 / 0	0.03 (1)
1-2	0 / 14	-77.4	-77.4	0.10 (1)	10.00	9-4	-161 / 0	0.02 (1)
2-3	-25 / 0	-77.4	-77.4	0.07 (1)	6.25	10-3	-100 / 0	0.01 (1)
3-4	-10 / 0	-77.4	-77.4	0.04 (1)	6.25			
4-5	-8 / 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	0.01 (1)	7.81			
11-10	0 / 16	-17.5	-17.5	0.03 (1)	10.00			
10-9	0 / 12	-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			

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



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TOTAL WEIGHT = 4 X 18 = 70 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 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	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMW+w	MT20	2.0	4.0	
4	TMW+w	MT20	2.0	4.0	
5	TMV+p	MT20	2.0	4.0	
6	BMV1+p	MT20	2.0	4.0	
7	BMV1+w	MT20	2.0	4.0	
8	BMV1+w	MT20	2.0	4.0	
9	BMV1+p	MT20	2.0	4.0	

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				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH
FR-TO		FROM TO		FR-TO
1-2	0 / 16	-77.4 -77.4	0.10 (1)	10.00
2-3	-31 / 0	-77.4 -77.4	0.08 (1)	6.25
3-4	-8 / 0	-77.4 -77.4	0.04 (1)	10.00
4-5	-10 / 0	-77.4 -77.4	0.04 (1)	10.00
6-5	-66 / 0	0.0 0.0	0.01 (1)	7.81
9-2	-194 / 0	0.0 0.0	0.03 (1)	7.81
9-8	0 / 13	-17.5 -17.5	0.03 (1)	10.00
8-7	0 / 11	-17.5 -17.5	0.02 (4)	10.00
7-6	0 / 6	-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

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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

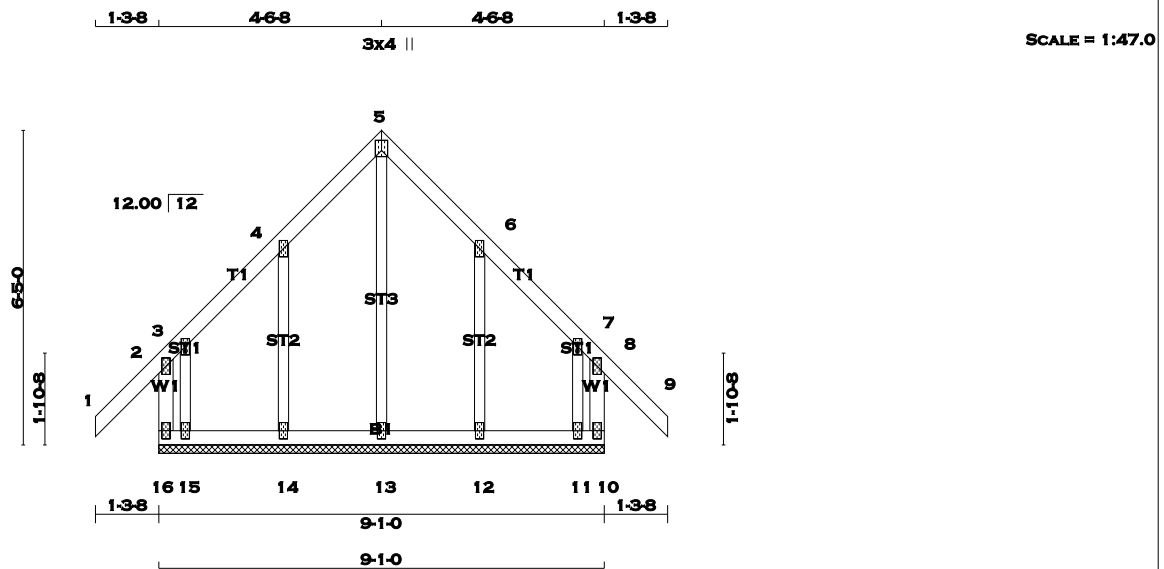
JSI GRIP= 0.11 (2) (INPUT = 0.90)
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TOTAL WEIGHT = 2 X 47 = 94 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
16 - 2	2x4	DRY	No.2	SPF
1 - 5	2x4	DRY	No.2	SPF
5 - 9	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
16 - 10	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2				SPF
ALL GABLE WEBS 2x3 DRY No.2				SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3, 4, 6, 7					
3	TMW+w	MT20	2.0	4.0	Edge
5	TTW+p	MT20	3.0	4.0	
8	TMV+p	MT20	2.0	4.0	
10	BMV1+p	MT20	2.0	4.0	
11, 12, 13, 14, 15					
11	BMW1+w	MT20	2.0	4.0	
16	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
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 = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH (LC)	MAX. FACTORED LC1 (LC)
FR-TO		FROM TO		FR-TO			
16-2	-197 / 0	0.0	0.0 0.03 (1)	7.81	13-5	-189 / 0	0.12 (1)
1-2	0 / 38	-77.4	-77.4 0.11 (1)	10.00	14-4	-160 / 0	0.05 (1)
2-3	-44 / 0	-77.4	-77.4 0.08 (1)	6.25	15-3	-7 / 0	0.00 (1)
3-4	0 / 18	-77.4	-77.4 0.04 (1)	10.00	12-6	-160 / 0	0.05 (1)
4-5	0 / 20	-77.4	-77.4 0.04 (1)	10.00	11-7	-7 / 0	0.00 (1)
5-6	0 / 20	-77.4	-77.4 0.04 (1)	10.00			
6-7	0 / 18	-77.4	-77.4 0.04 (1)	10.00			
7-8	-44 / 0	-77.4	-77.4 0.08 (1)	6.25			
8-9	0 / 38	-77.4	-77.4 0.11 (1)	10.00			
10-8	-197 / 0	0.0	0.0 0.03 (1)	7.81			
16-15	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			
15-14	-11 / 0	-17.5	-17.5 0.01 (4)	6.25			
14-13	-15 / 0	-17.5	-17.5 0.01 (4)	6.25			
13-12	-15 / 0	-17.5	-17.5 0.01 (4)	6.25			
12-11	-11 / 0	-17.5	-17.5 0.01 (4)	6.25			
11-10	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.11 (8-9:1) , BC=0.01 (13-14:4) , WB=0.12 (5-13:1) , 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 MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

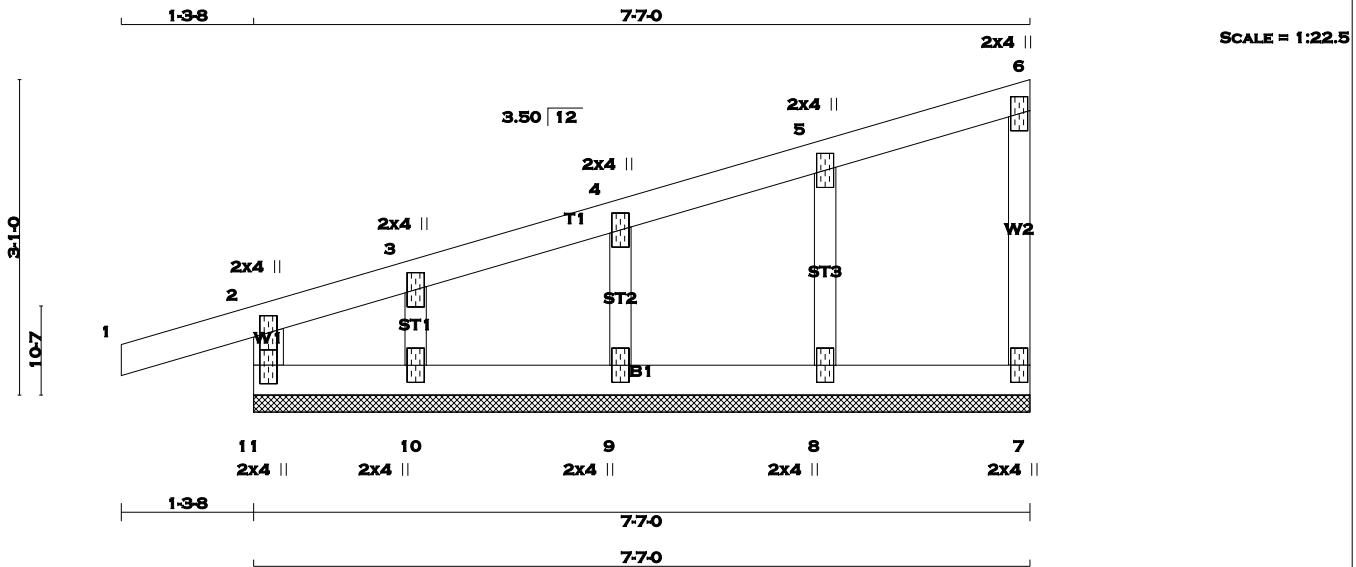
JSI GRIP= 0.30 (5) (INPUT = 0.90)
JSI METAL= 0.06 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 25 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
11 - 2	2x4	DRY	No.2		SPF
1 - 6	2x4	DRY	No.2		SPF
7 - 6	2x3	DRY	No.2		SPF
11 - 7	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2					SPF
ALL GABLE WEBS 2x3 DRY No.2					SPF
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 4, 5						
3	TMW+w	MT20	2.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8, 9, 10						
8	BMW1+w	MT20	2.0	4.0		
11	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

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

LOADING
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)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
11-2	-194 / 0	0.0	0.0 0.03 (1)	7.81	8-5	-168 / 0	0.03 (1)
1-2	0 / 14	-77.4	-77.4 0.10 (1)	10.00	9-4	-160 / 0	0.02 (1)
2-3	-22 / 0	-77.4	-77.4 0.07 (1)	6.25	10-3	-101 / 0	0.01 (1)
3-4	-8 / 0	-77.4	-77.4 0.04 (1)	10.00			
4-5	-6 / 0	-77.4	-77.4 0.04 (1)	10.00			
5-6	-6 / 0	-77.4	-77.4 0.04 (1)	10.00			
7-6	-66 / 0	0.0	0.0 0.02 (1)	7.81			
11-10	0 / 14	-17.5	-17.5 0.03 (1)	10.00			
10-9	0 / 10	-17.5	-17.5 0.01 (4)	10.00			
9-8	0 / 6	-17.5	-17.5 0.02 (4)	10.00			
8-7	0 / 3	-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
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.

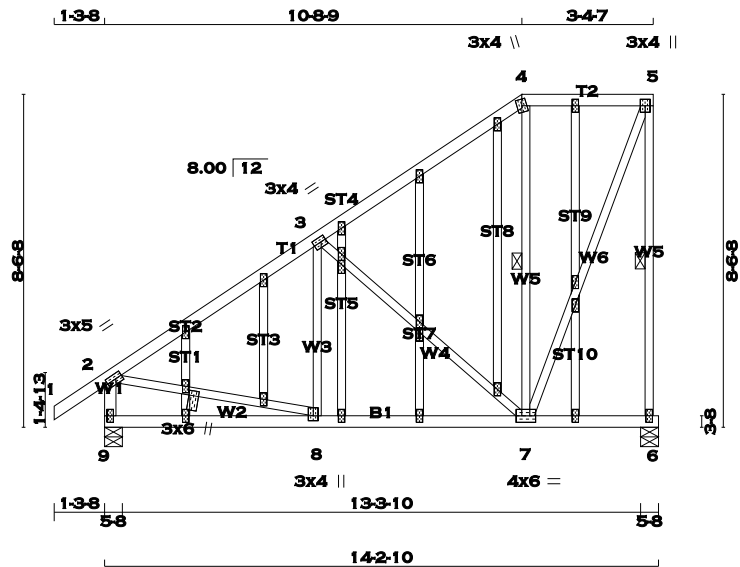
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JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 96 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 5	2x4	DRY	No.2		SPF
6 - 5	2x3	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
ALL GABLE WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER.					SPF
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	5.0	1.50	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW+p	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	4.0	6.0		
8	BMVW+t	MT20	3.0	4.0	1.50	1.50
9	BMV1+p	MT20	2.0	4.0		
10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25						
10	NP+w	MT20	2.0	4.0		
17	NP+w	MT20	2.0	4.0	1.25	1.00
18	NP+w	MT20	2.0	4.0	1.25	1.00
23	NP+t	MT20	3.0	6.0	1.50	0.25

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
6	668	0	668	0	0	5-8	5-8	5-8	5-8
9	774	0	774	0	0	5-8	5-8	5-8	5-8

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 4-7. DBS = 20-0-0 . CBF = 81 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. FACTORED HORIZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	8-3	0 / 91	0.03 (4)
2-3	-623 / 0	-77.4 -77.4	0.29 (1)	6.25	3-7	-447 / 0	0.44 (1)
3-4	-277 / 0	-77.4 -77.4	0.29 (1)	6.25	7-4	-144 / 12	0.07 (1)
4-5	-205 / 0	-77.4 -77.4	0.11 (1)	6.25	7-5	0 / 556	0.13 (1)
6-5	-646 / 0	0.0 0.0	0.30 (1)	6.25	2-8	0 / 552	0.12 (1)
9-2	-736 / 0	0.0 0.0	0.08 (1)	7.81			
9-8	0 / 0	-17.5 -17.5	0.13 (4)	10.00			
8-7	0 / 542	-17.5 -17.5	0.17 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.07 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 12.00/12

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=0.30 (5-6:1) , BC=0.17 (7-8:4) , WB=0.44 (3-7:1) , 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.

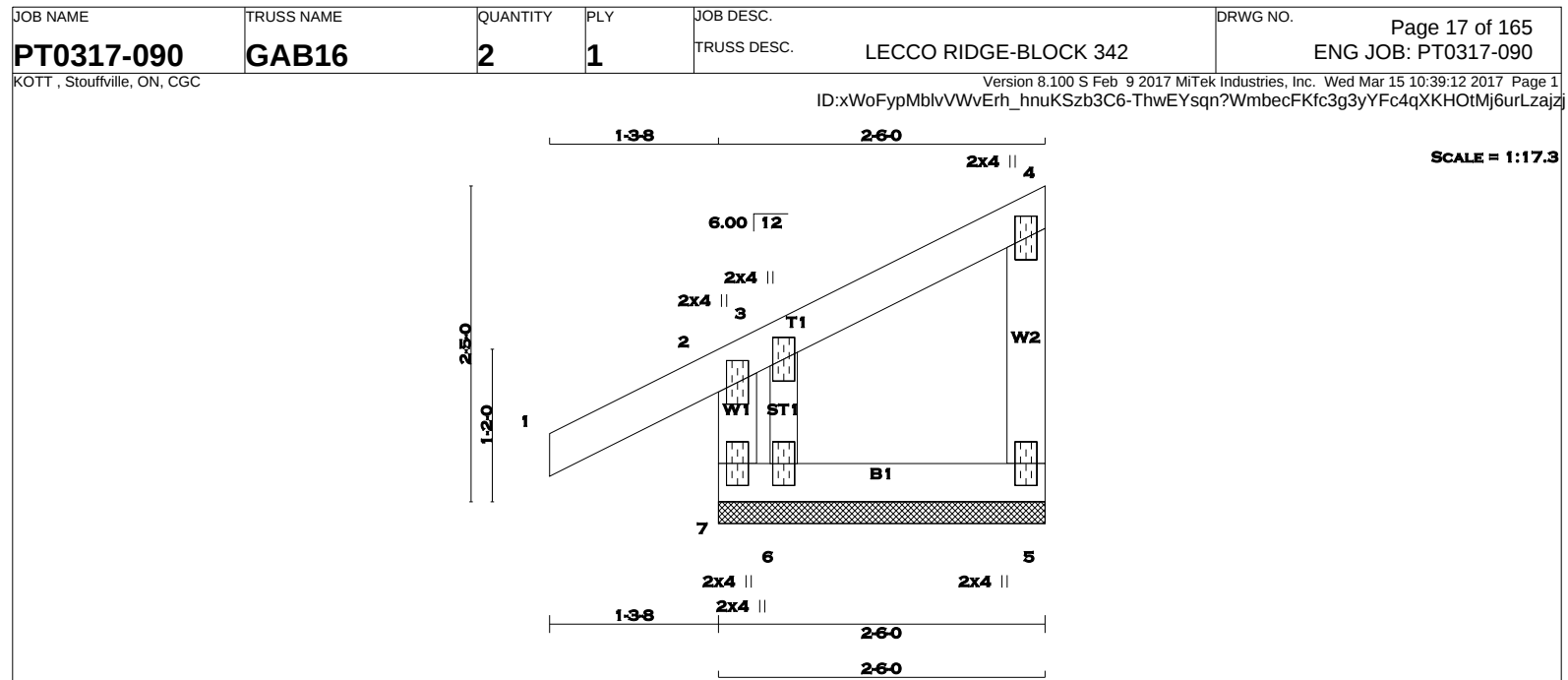
JSI GRIP= 0.86 (8) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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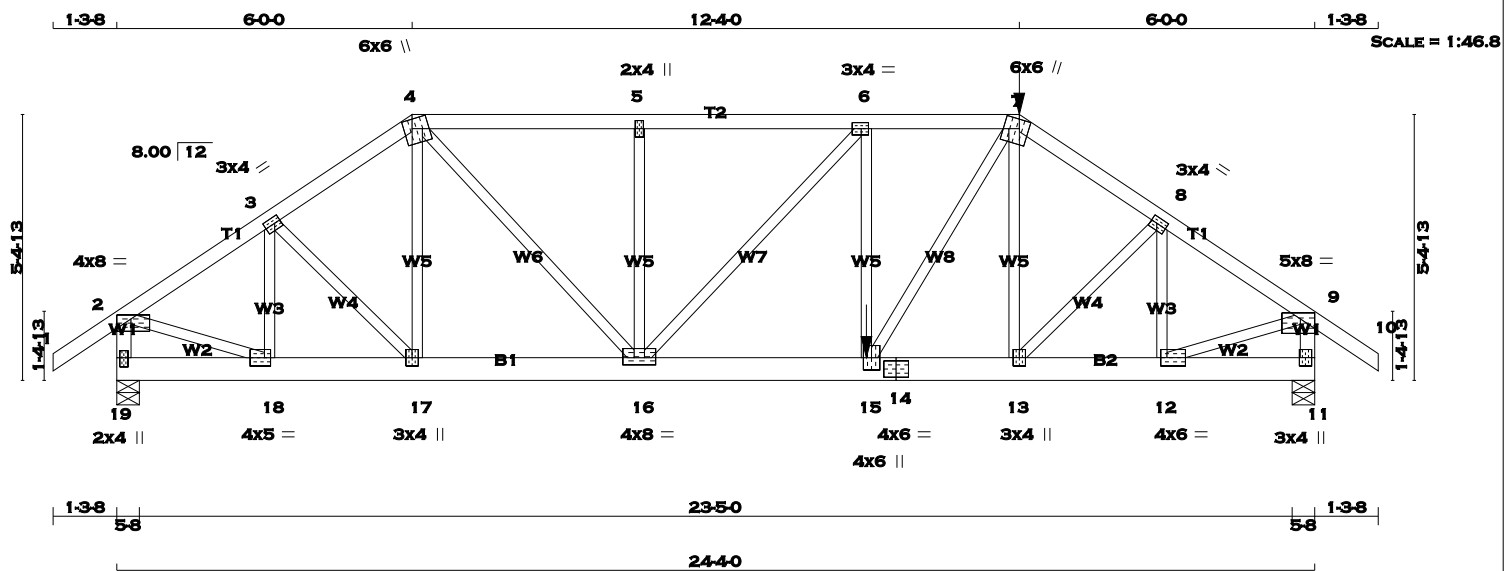
TOTAL WEIGHT = 2 X 11 = 23 lb										[M]																																																																																							
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 7 - 2 2x4 DRY No.2 SPF 1 - 4 2x4 DRY No.2 SPF 5 - 4 2x4 DRY No.2 SPF 7 - 5 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2-0-0 OC.						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. <u>PROVIDE ANCHORAGE AT BEARING JOINT 6 FOR 150 LBS FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).</u> 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) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>LC1 MAX (LC)</th><th>MEMB.</th><th>FORCE (LBS)</th><th>FACTORED UNBRAC LENGTH</th><th>LC1 MAX (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>7- 2</td><td>-219 / 0</td><td>0.0</td><td>0.0</td><td>0.02 (5)</td><td>7.81</td><td>6- 3</td><td>-16 / 103</td></tr><tr><td>1- 2</td><td>0 / 23</td><td>-77.4</td><td>-77.4</td><td>0.10 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>2- 3</td><td>-48 / 0</td><td>-77.4</td><td>-77.4</td><td>0.09 (1)</td><td>6.25</td><td></td><td></td></tr><tr><td>3- 4</td><td>-12 / 0</td><td>-77.4</td><td>-77.4</td><td>0.03 (1)</td><td>6.25</td><td></td><td></td></tr><tr><td>5- 4</td><td>-70 / 0</td><td>0.0</td><td>0.0</td><td>0.02 (1)</td><td>7.81</td><td></td><td></td></tr><tr><td>7- 6</td><td>-7 / 9</td><td>-17.5</td><td>-17.5</td><td>0.02 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>6- 5</td><td>-1 / 8</td><td>-17.5</td><td>-17.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td></tr></table> <u>CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN</u>						CHORDS				WEBS				MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	FACTORED UNBRAC LENGTH	LC1 MAX (LC)	FR-TO		FROM	TO	FR-TO				7- 2	-219 / 0	0.0	0.0	0.02 (5)	7.81	6- 3	-16 / 103	1- 2	0 / 23	-77.4	-77.4	0.10 (1)	10.00			2- 3	-48 / 0	-77.4	-77.4	0.09 (1)	6.25			3- 4	-12 / 0	-77.4	-77.4	0.03 (1)	6.25			5- 4	-70 / 0	0.0	0.0	0.02 (1)	7.81			7- 6	-7 / 9	-17.5	-17.5	0.02 (1)	10.00			6- 5	-1 / 8	-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 (6-7:1) , WB=0.02 (3-6:5) , SSI=0.08 (2-3:5) 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)					
CHORDS				WEBS																																																																																													
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	FACTORED UNBRAC LENGTH	LC1 MAX (LC)																																																																																										
FR-TO		FROM	TO	FR-TO																																																																																													
7- 2	-219 / 0	0.0	0.0	0.02 (5)	7.81	6- 3	-16 / 103																																																																																										
1- 2	0 / 23	-77.4	-77.4	0.10 (1)	10.00																																																																																												
2- 3	-48 / 0	-77.4	-77.4	0.09 (1)	6.25																																																																																												
3- 4	-12 / 0	-77.4	-77.4	0.03 (1)	6.25																																																																																												
5- 4	-70 / 0	0.0	0.0	0.02 (1)	7.81																																																																																												
7- 6	-7 / 9	-17.5	-17.5	0.02 (1)	10.00																																																																																												
6- 5	-1 / 8	-17.5	-17.5	0.01 (4)	10.00																																																																																												



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





LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
7 - 10	2x4	DRY	No.2	SPF
19 - 2	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
19 - 14	2x6	DRY	No.2	SPF
14 - 11	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
2	TMVW-p	MT20	4.0	8.0	1.00	3.50
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW+m	MT20	6.0	6.0	2.25	2.00
5	TMVW+w	MT20	2.0	4.0		
6	TMVW-t	MT20	3.0	4.0	1.50	1.75
7	TTWW+m	MT20	6.0	6.0	2.25	2.25
8	TMVW-t	MT20	3.0	4.0	1.50	1.50
9	TMVW-p	MT20	5.0	8.0	1.50	3.50
11	BMV1+p	MT20	3.0	4.0	2.00	0.25
12	BMVW-t	MT20	4.0	6.0	2.00	1.50
13	BMVW+t	MT20	3.0	4.0		
14	BS-t	MT20	4.0	6.0		
15	BMVW+t	MT20	4.0	6.0		
16	BMVWVW-t	MT20	4.0	8.0	1.75	4.00
17	BMVWVW+t	MT20	3.0	4.0		
18	BMVW-t	MT20	4.0	5.0	2.00	1.50
19	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.

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 18-4-0 ON TOP CHORD, AND 1188.4 lbs FACTORED DOWN AT 15-2-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
19	1883	0	1883	0	0
11	2528	0	2528	0	0

UNFACTORED REACTIONS						
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS		
19	1318	940 / 0	LIVE	PERM.LIVE	WIND	DEAD
11	1774	1242 / 0	0 / 0	0 / 0	0 / 0	532 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.11 (1)	10.00	18-3	-536 / 0	0.11 (1)
2-3	-1973 / 0	-77.4 -77.4	0.16 (1)	4.64	3-17	0 / 210	0.05 (1)
3-4	-2180 / 0	-77.4 -77.4	0.17 (1)	4.44	17-4	-34 / 40	0.02 (4)
4-5	-2719 / 0	-77.4 -77.4	0.38 (1)	3.83	4-16	0 / 1360	0.34 (1)
5-6	-2719 / 0	-77.4 -77.4	0.38 (1)	3.83	16-5	-390 / 0	0.16 (1)
6-7	-3204 / 0	-145.9 -145.9	0.33 (1)	3.58	16-6	-717 / 0	0.61 (1)
7-8	-3047 / 0	-77.4 -77.4	0.23 (1)	3.79	15-6	0 / 108	0.04 (4)
8-9	-2721 / 0	-77.4 -77.4	0.21 (1)	4.01	15-7	0 / 1302	0.32 (1)
9-10	0 / 29	-77.4 -77.4	0.11 (1)	10.00	13-7	-56 / 83	0.03 (4)
19-2	-1835 / 0	0.0 0.0	0.20 (1)	6.13	13-8	0 / 351	0.09 (1)
11-9	-2452 / 0	0.0 0.0	0.27 (1)	5.41	12-8	-701 / 0	0.15 (1)
					2-18	0 / 1735	0.43 (1)
					12-9	0 / 2388	0.59 (1)
19-18	0 / 0	-17.5 -17.5	0.05 (1)	10.00			
18-17	0 / 1651	-17.5 -17.5	0.26 (1)	10.00			
17-16	0 / 1798	-17.5 -17.5	0.27 (1)	10.00			
16-15	0 / 3204	-17.5 -17.5	0.49 (1)	10.00			
15-14	0 / 2518	-33.0 -33.0	0.39 (1)	10.00			
14-13	0 / 2518	-33.0 -33.0	0.39 (1)	10.00			
13-12	0 / 2274	-33.0 -33.0	0.35 (1)	10.00			
12-11	0 / 0	-33.0 -33.0	0.06 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE DIR.
7	18-4-0	-348	-348	---	FRONT VERT
15	15-2-12	-1188	-1188	---	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

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-1-4 OF SPAN
MEASURED FROM THE RIGHT.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.81")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.81")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.38 (5-6-1) , BC=0.49 (15-16-1) , WB=0.61 (6-16-1) , SSI=0.23 (6-7-1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg



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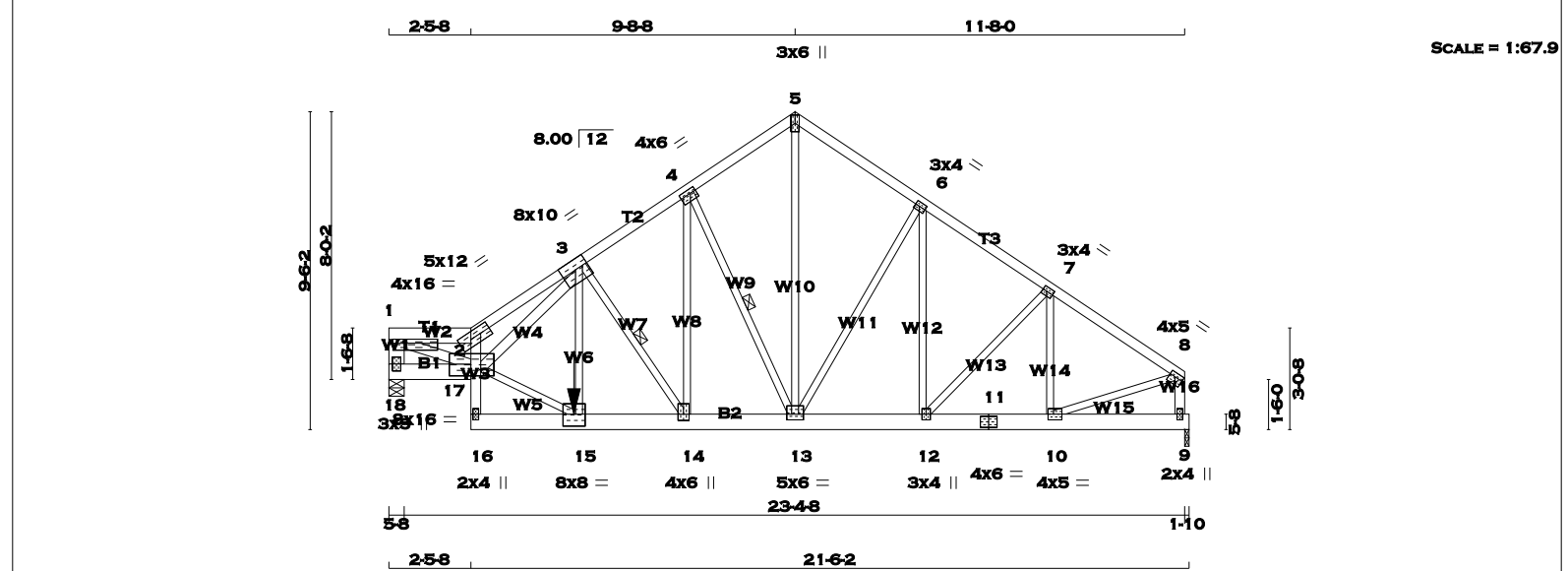
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



TOTAL WEIGHT = 33 lb

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

**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 140 = 279 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
18 - 1	2x6	DRY No.2	SPF
1 - 2	2x6	DRY No.2	SPF
2 - 5	2x4	DRY No.2	SPF
5 - 8	2x4	DRY No.2	SPF
9 - 8	2x4	DRY No.2	SPF
18 - 17	2x6	DRY 2100F 1.8E	SPF
16 - 11	2x6	DRY 2100F 1.8E	SPF
11 - 9	2x6	DRY 2100F 1.8E	SPF

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
1 - 17	2x4	DRY	1650F 1.5E	SPF
17 - 3	2x4	DRY	No.2	SPF
16 - 2	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
1- 2	2	12
2- 5	1	12
5- 8	1	12
9- 8	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
18- 17	2	12
16- 11	2	12
11- 9	2	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.

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	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
18	7062	0	7062	0	5-8
9	2607	0	2607	0	1-10

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
18	4956	3468 / 0	0 / 0
9	1829	1280 / 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 = 1.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

MAX. UNBRACED INTERIOR CHORD LENGTH = 2.74 FT.

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

1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14. DBS = 6-0-0 . CBF = 173 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-13. DBS = 4-0-0 . 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		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
18-1	-6491 / 0	18-1	0 / 15600
1-2	-14299 / 0	1-2	0 / 3068
2-3	-15705 / 0	2-3	-4622 / 0
3-4	-4859 / 0	3-4	0 / 3624
4-5	-3205 / 0	4-5	-3277 / 0
5-6	-3207 / 0	5-6	0 / 3310
6-7	-3216 / 0	6-7	-25 / 0
7-8	-2916 / 0	7-8	-276 / 0
9-8	-2559 / 0	9-8	0 / 338
18-17	0 / 0	10-7	-740 / 0
16-15	0 / 882	10-8	0 / 2568
15-14	0 / 6658	17-15	0 / 6348
14-13	0 / 4042	17-3	0 / 9167
13-12	0 / 2672	16-17	0 / 791
12-11	0 / 2439	17-2	-8859 / 0
11-10	0 / 2439		
10-9	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)		LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
JT	15	5-6-8	-4944	-4944	---	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**

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 20-8-0
END DISTANCE = 5-6-8
END SPAN CARRIED = 20-8-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

(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 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/ 835 (0.34")

CSI: TC=0.93 (2-3:1) , BC=0.23 (14-15:1) ,
WB=1.00 (1-17:1) , SSI=0.48 (2-17:1)

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

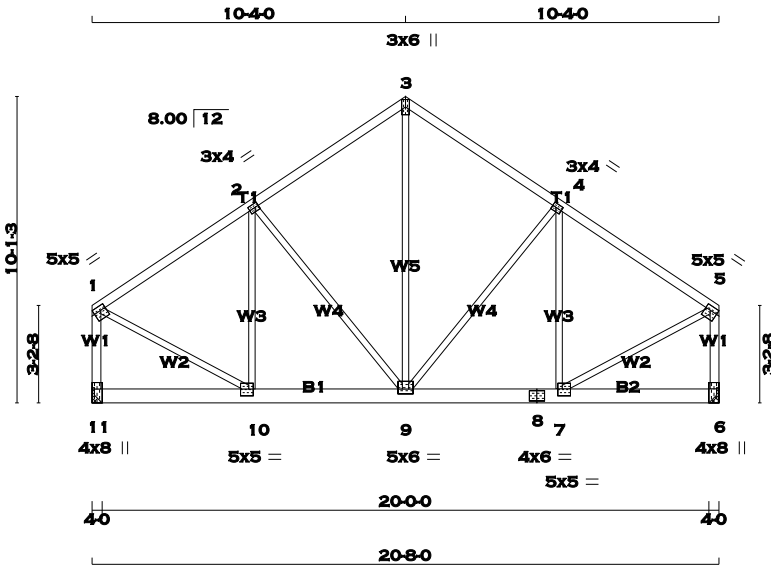
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (PSI) (PLI) = 90
JSI METAL= 0.83 (PSI) (PLI) = 100



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IN THE DESIGN OF THIS COMPONENT.



TOTAL WEIGHT = 2 X 111 = 221 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 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	2x6	DRY	No.2	SPF
8 - 6	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- 3	12	TOP
3- 5	12	TOP
11- 1	12	TOP
6- 5	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
11- 8	12	SIDE(191.8)
8- 6	12	SIDE(191.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	5.0	5.0	1.75 Edge
2	TMWW-t	MT20	3.0	4.0	1.50 1.50
3	TTW+p	MT20	3.0	6.0	
4	TMWW-t	MT20	3.0	4.0	1.50 1.50
5	TMVW-t	MT20	5.0	5.0	1.75 Edge
6	BMV1+t	MT20	4.0	8.0	Edge 0.50
7	BMWW-t	MT20	5.0	5.0	2.75 1.75
8	BS-t	MT20	4.0	6.0	

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

BEARINGS					
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		REQRD BRG
	VERT	HORZ	DOWN	HORZ	
11	4945	0	4945	0	0
6	4945	0	4945	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
11	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	3470	2428 / 0	0 / 0	0 / 0	0 / 0	1042 / 0	0 / 0
6	3470	2428 / 0	0 / 0	0 / 0	0 / 0	1042 / 0	0 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.58 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	VERT.	FACTORED 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	-3905 / 0	-77.4	-77.4	0.28 (1)	4.58	9-3	0 / 3310	0.41 (1)	
2-3	-3282 / 0	-77.4	-77.4	0.24 (1)	4.93	9-4	-892 / 0	0.61 (1)	
3-4	-3282 / 0	-77.4	-77.4	0.24 (1)	4.93	7-4	0 / 583	0.07 (1)	
4-5	-3905 / 0	-77.4	-77.4	0.28 (1)	4.58	2-9	-892 / 0	0.61 (1)	
11-1	-4080 / 0	0.0	0.0	0.36 (1)	5.87	10-2	0 / 583	0.07 (1)	
6-5	-4080 / 0	0.0	0.0	0.36 (1)	5.87	1-10	0 / 3702	0.46 (1)	
						7-5	0 / 3702	0.46 (1)	
11-10	0 / 0	-401.1	-401.1	0.37 (1)	10.00				
10-9	0 / 3269	-401.1	-401.1	0.59 (1)	10.00				
9-8	0 / 3269	-401.1	-401.1	0.59 (1)	10.00				
8-7	0 / 3269	-401.1	-401.1	0.59 (1)	10.00				
7-6	0 / 0	-401.1	-401.1	0.37 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 18-3-10
END DISTANCE = 20-8-0
END SPAN CARRIED = 18-3-10
END WALL WIDTH = 1-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.69")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.69")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.36 (5-6:1) , BC=0.59 (9-10:1) , WB=0.61 (2-9:1) , SSI=0.41 (10-11:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

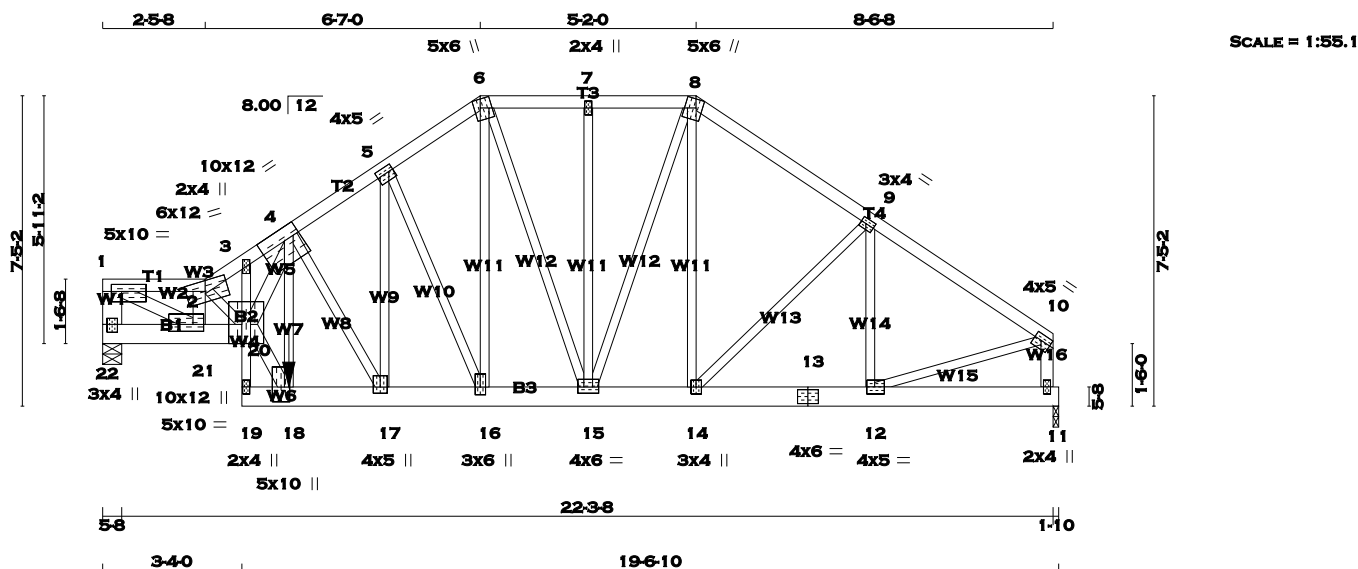
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (5) (INPUT = 0.90)
JSI METAL= 0.60 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 138 = 277 lb [M]

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE
22 - 1	2x6	DRY	No.2	SPF	
1 - 2	2x4	DRY	1650F 1.5E	SPF	
2 - 6	2x4	DRY	1650F 1.5E	SPF	
6 - 8	2x4	DRY	1650F 1.5E	SPF	
8 - 10	2x4	DRY	1650F 1.5E	SPF	
11 - 10	2x4	DRY	No.2	SPF	
22 - 20	2x6	DRY	2100F 1.8E	SPF	
19 - 3	2x3	DRY	No.2	SPF	
19 - 13	2x6	DRY	2100F 1.8E	SPF	
13 - 11	2x6	DRY	2100F 1.8E	SPF	
ALL WEBS				2x3	DRY
EXCEPT				No.2	SPF
1 - 21	2x4	DRY	1650F 1.5E	SPF	
21 - 2	2x4	DRY	No.2	SPF	
20 - 18	2x4	DRY	1650F 1.5E	SPF	
20 - 4	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		
22- 1	2	12
1- 2	1	12
2- 6	1	12
6- 8	1	12
8- 10	1	12
11- 10	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
22- 20	2	12
19- 13	2	12
13- 11	2	12
3- 19	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	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION		DOWN	HORZ	BRG	BRG
JT	VERT	DOWN	HORZ	UPLIFT	IN-SX
22	6835	0	6835	0	5-8
11	2241	0	2241	0	1-10

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE
22	4797	3356 / 0	0 / 0	0 / 0
11	1573	1100 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.61 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. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO	FROM	TO	FROM
22-1	-5663 / 0	0.0	0.0
1-2	-11185 / 0	-77.4	-77.4
2-3	-13505 / 0	-77.4	-77.4
3-4	-12950 / 0	-77.4	-77.4
4-5	-5027 / 0	-77.4	-77.4
5-6	-3702 / 0	-77.4	-77.4
6-7	-2730 / 0	-77.4	-77.4
7-8	-2730 / 0	-77.4	-77.4
8-9	-2717 / 0	-77.4	-77.4
9-10	-2526 / 0	-77.4	-77.4
11-10	-2189 / 0	0.0	0.0
22-21	0 / 0	-460.2	-460.2
21-20	0 / 12047	-460.2	-460.2
19-20	-372 / 0	0.0	0.0
20-3	0 / 794	0.0	0.0
19-18	0 / 146	-460.2	-460.2
18-17	0 / 6534	-17.5	-17.5
17-16	0 / 4191	-17.5	-17.5
16-15	0 / 3110	-17.5	-17.5
15-14	0 / 2238	-17.5	-17.5
14-13	0 / 2119	-17.5	-17.5
13-12	0 / 2119	-17.5	-17.5
12-11	0 / 0	-17.5	-17.5

FACTORED CONCENTRATED LOADS (LBS)		LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
JT	18	4-5-8	-4944	-4944	---	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	PSF
		DL	=	3.0
		PSF		
		BOT CH.	LL	0.0
		DL	=	7.0
		PSF		
		TOTAL LOAD	=	33.3

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 20-8-0
END DISTANCE = 4-5-8
END SPAN CARRIED = 20-8-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

(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 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.54 (2-3:1) , BC=0.61 (20-21:1) , WB=0.88 (5-16:1) , SSI=0.52 (20-21:1)

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 (PSI) PLI = 90 (PLI)
JSI METAL= 0.90 (PSI) PLI = 90 (PLI)

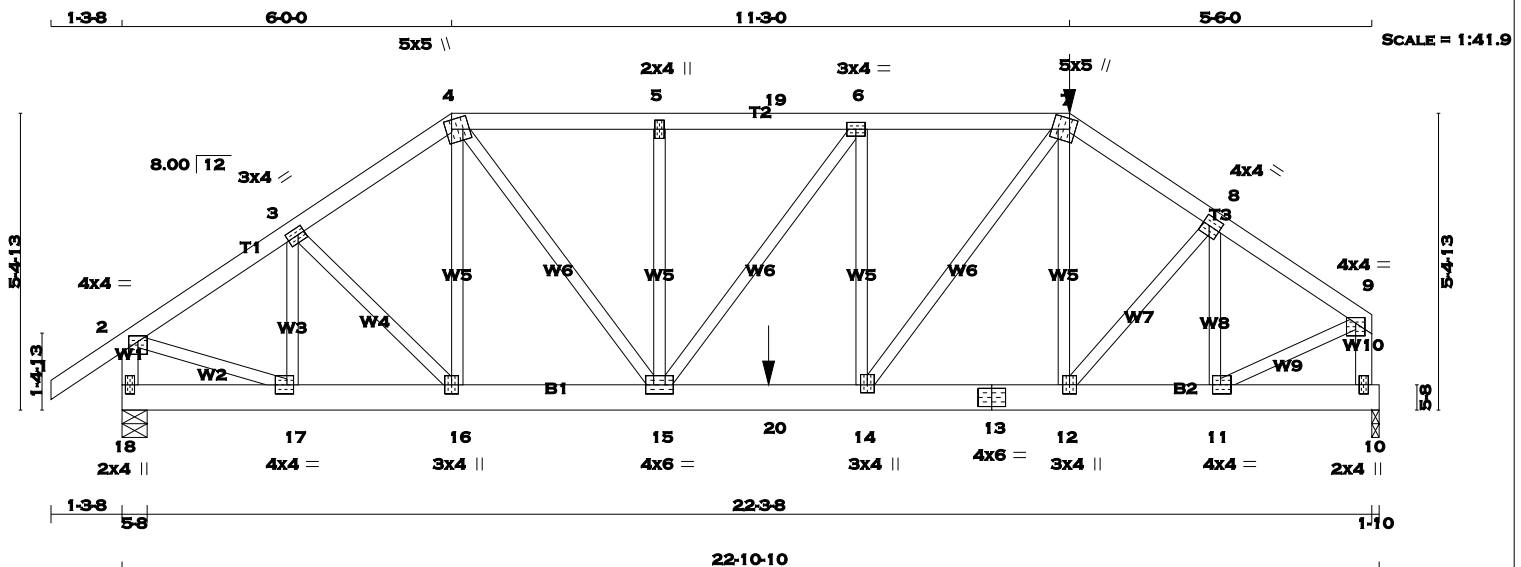


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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 18 - 2 2x4 DRY No.2 SPF 10 - 9 2x4 DRY No.2 SPF 18 - 13 2x6 DRY No.2 SPF 13 - 10 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 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 1-4 1 12 TOP 4-7 1 12 SIDE(34.2) 7-9 1 12 SIDE(0.0) 18-2 1 12 TOP 10-9 1 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 18-13 2 12 SIDE(8.7) 13-10 2 12 SIDE(8.7) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 NAILS TO BE DRIVEN FROM ONE SIDE ONLY. GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS. TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY. 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 2 TMVW-p MT20 4.0 4.0 1.25 2.00 3 TMWW-t MT20 3.0 4.0 1.50 1.50 4 TTWW+m MT20 5.0 5.0 2.00 1.25										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 18 1890 0 1890 0 0 5-8 5-8 10 2183 0 2183 0 0 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 18 1324 944 / 0 0 / 0 0 / 0 380 / 0 0 / 0 10 1534 1063 / 0 0 / 0 0 / 0 471 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.28 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS MAX. FACTORED MEMB. FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. CSI (LC) WEBS MAX. FACTORED MEMB. FORCE (LBS) MAX. CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 29 -77.4 -77.4 0.06 (1) 10.00 17-3 -512 / 0 0.05 (1) 2-3 -1986 / 0 -77.4 -77.4 0.07 (1) 6.18 3-16 0 / 190 0.02 (1) 3-4 -2177 / 0 -77.4 -77.4 0.07 (1) 5.97 16-4 -118 / 8 0.02 (1) 4-5 -2626 / 0 -77.4 -77.4 0.10 (1) 5.52 4-15 0 / 1382 0.17 (1) 5-19 -2627 / 0 -77.4 -77.4 0.16 (1) 5.44 15-5 -301 / 0 0.06 (1) 19-6 -2627 / 0 -145.9 -145.9 0.16 (1) 5.44 15-6 -341 / 0 0.11 (1) 6-7 -2828 / 0 -145.9 -145.9 0.17 (1) 5.28 14-6 -291 / 14 0.06 (1) 7-8 -2499 / 0 -77.4 -77.4 0.06 (1) 5.67 14-7 0 / 1277 0.16 (1) 8-9 -2149 / 0 -77.4 -77.4 0.06 (1) 6.01 12-7 -279 / 25 0.06 (1) 18-2 -1846 / 0 0.0 0.0 0.10 (1) 7.81 12-8 0 / 413 0.05 (1) 10-9 -2126 / 0 0.0 0.0 0.12 (1) 7.61 11-8 -758 / 0 0.08 (1) 2-17 0 / 1747 0.22 (1) 11-9 0 / 1982 0.25 (1) 18-17 0 / 0 -17.5 -17.5 0.02 (1) 10.00 17-16 0 / 1663 -17.5 -17.5 0.13 (1) 10.00 16-15 0 / 1794 -17.5 -17.5 0.19 (1) 10.00 15-20 0 / 2828 -17.5 -17.5 0.43 (1) 10.00 20-14 0 / 2828 -33.0 -33.0 0.43 (1) 10.00 14-13 0 / 2058 -33.0 -33.0 0.22 (1) 10.00 13-12 0 / 2058 -33.0 -33.0 0.22 (1) 10.00 12-11 0 / 1797 -33.0 -33.0 0.14 (1) 10.00 11-10 0 / 0 -33.0 -33.0 0.02 (4) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 7 17-3-0 -327 -327 --- FRONT VERT TOTAL 20 11-9-4 -943 -943 --- FRONT VERT TOTAL										DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 GIRDER TYPE: CPrimeHip LEFT SETBACK = 6-0-0 RIGHT SETBACK = 5-7-10 END SETBACK = 6-0-0 END WALL WIDTH = 5-8 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 11-0-8 OF SPAN MEASURED FROM THE RIGHT. *** NON STANDARD GIRDER *** ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.76") CALCULATED VERT. DEFL.(LL) = L/999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.76") CALCULATED VERT. DEFL.(TL) = L/999 (0.08") CSI: TC=0.17 (6-7:1) , BC=0.43 (14-15:1) , WB=0.25 (9-11:1) , SSI=0.20 (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 = 0.500 degrees									
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

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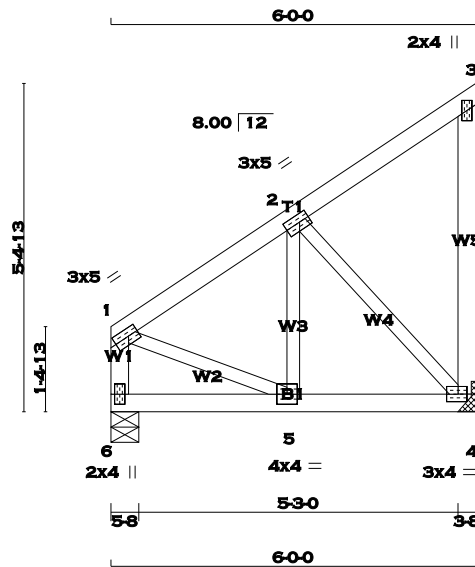


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KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 10:39:16 2017 Page 1
ID:xWoFypMblvVWvErh_hnuKSzb3C6-LSAINetI3IG17EY5uS8cDojxGh4bG1wSHL45_7zajzf



SCALE = 1:37.9

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	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	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	4.0	1.50	1.75
5	BMVW-t	MT20	4.0	4.0		
6	BMV1+p	MT20	2.0	4.0		

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

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	IN-SX	IN-SX
4	943	0	943	0	0	5-8	5-8	5-8	5-8
6	943	0	943	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	662	463 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0
6	662	463 / 0	0 / 0	0 / 0	0 / 0	199 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-662 / 0	-77.4	-77.4 0.12 (1)	6.25	5-2	0 / 670	0.17 (1)
2-3	-14 / 0	-77.4	-77.4 0.11 (1)	6.25	2-4	-807 / 0	0.25 (1)
4-3	-91 / 0	0.0	0.0 0.05 (1)	7.81	1-5	0 / 598	0.15 (1)
6-1	-669 / 0	0.0	0.0 0.08 (1)	7.81			
6-5	0 / 0	-236.9	-236.9 0.36 (1)	10.00			
5-4	0 / 563	-236.9	-236.9 0.46 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-8-8
END DISTANCE = 6-0-0
END SPAN CARRIED = 11-8-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.12 (1-2:1), BC=0.46 (4-5:1), WB=0.25 (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.

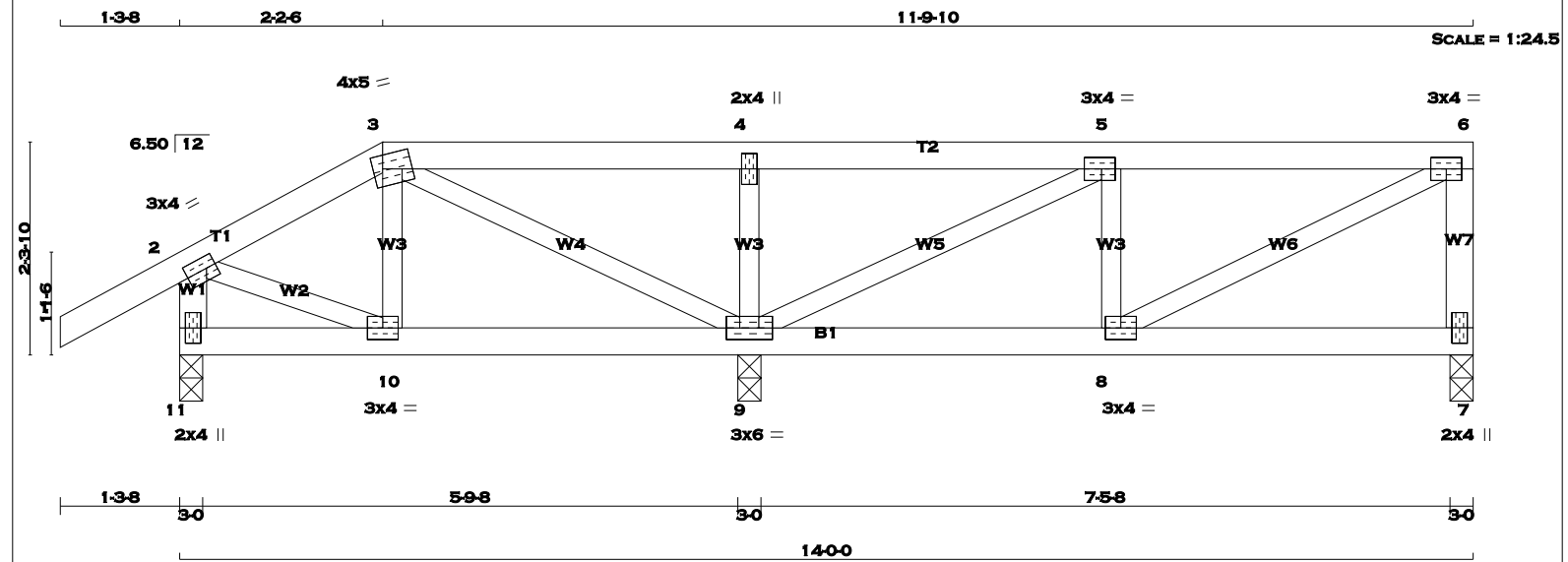
JSI GRIP= 0.90 (2) (INPUT = 0.90)
JSI METAL= 0.22 (5) (INPUT = 1.00)



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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 EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TMVW-w	MT20	2.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.75
6	TMVW-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8	BMVW-t	MT20	3.0	4.0		
9	BMVWV1-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	4.0		
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		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		514	0	514	0	0	3-0	3-0	
11		318	0	318	0	0	3-0	3-0	
9		1012	0	1012	0	0	3-0	3-0	

UNFACTORED REACTIONS							
JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	361	251 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
11	221	166 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
9	710	500 / 0	0 / 0	0 / 0	0 / 0	210 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 11, 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 (LBS)	FACTORED LC1 (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-2	0 / 25	-77.4	-77.4	0.11 (1)	10.00	10-3	0 / 45	0.02 (4)	
2-3	-139 / 0	-77.4	-77.4	0.07 (1)	6.25	3-9	-297 / 0	0.10 (1)	
3-4	0 / 143	-77.4	-77.4	0.26 (1)	10.00	9-4	-425 / 0	0.07 (1)	
4-5	0 / 143	-120.1	-120.1	0.28 (1)	10.00	9-5	-763 / 0	0.26 (1)	
5-6	-535 / 0	-120.1	-120.1	0.27 (1)	6.25	8-5	-170 / 48	0.03 (1)	
7-6	-466 / 0	0.0	0.0	0.06 (1)	7.81	8-6	0 / 602	0.15 (1)	
11-2	-299 / 0	0.0	0.0	0.03 (1)	7.81	2-10	0 / 129	0.03 (1)	
11-10	0 / 0	-17.5	-17.5	0.03 (4)	10.00				
10-9	0 / 122	-17.5	-17.5	0.10 (4)	10.00				
9-8	0 / 535	-27.2	-27.2	0.17 (1)	10.00				
8-7	0 / 0	-27.2	-27.2	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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-2-6
RIGHT SETBACK = 0-0
END SETBACK = 4-5-8
END WALL WIDTH = 3-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 7-7-12 OF SPAN MEASURED FROM THE RIGHT.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.28 (4-5:1), BC=0.17 (8-9:1), WB=0.26 (5-9:1), SSI=0.24 (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)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	MAX MIN	
MT20	618	354	1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

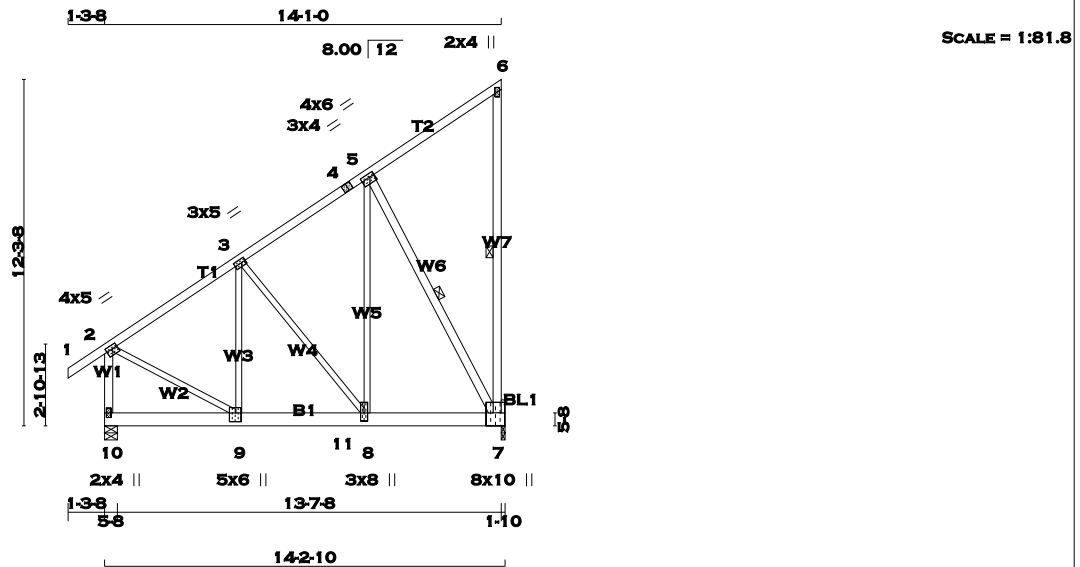
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (6) (INPUT = 0.90)
JSI METAL= 0.25 (5) (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 = 3 X 94 = 283 lb

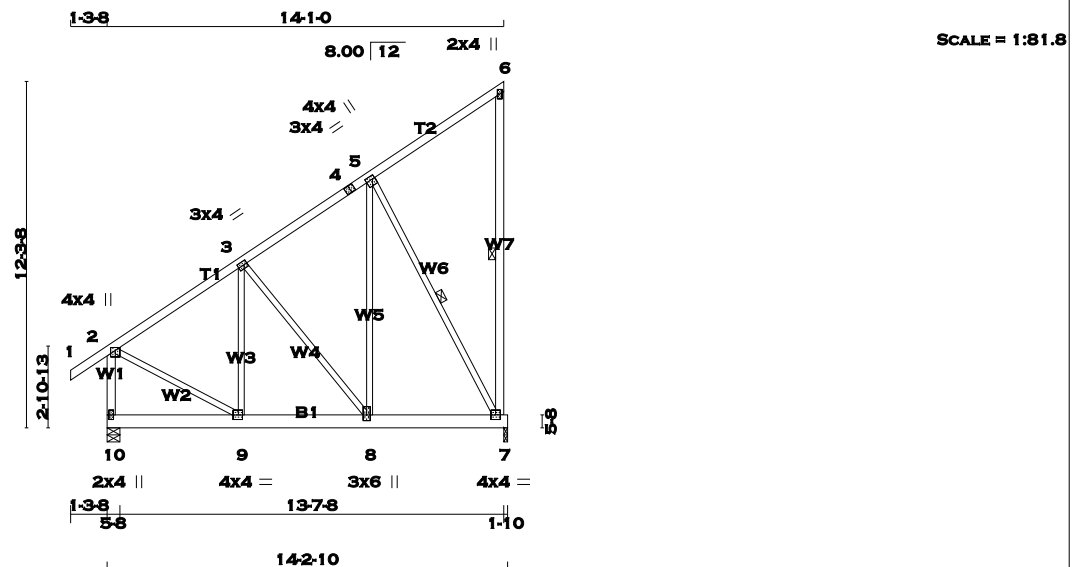
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF 10- 2 2x4 DRY No.2 SPF 10- 7 2x6 DRY 2100F 1.8E SPF BEARING BLOCKS BL1 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 5 - 7 2x4 DRY No.2 SPF DRY: SEASONED LUMBER. DESIGN CONSISTS OF <u>3</u> TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS: CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF) TOP CHORDS : (0.122"x3") SPIRAL NAILS 1- 4 1 12 TOP 4- 6 1 12 TOP 6- 7 1 12 TOP 10- 2 1 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 10- 7 2 5 SIDE(536.2) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 2x4 1 6 STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES. TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY. SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP. PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 4.0 5.0 1.50 2.00 3 TMWW-t MT20 3.0 5.0 1.50 1.75					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></tr><tr><td>7</td><td>5900</td><td>0</td><td>5900</td><td>0</td></tr><tr><td>10</td><td>6275</td><td>0</td><td>6275</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>COMBINED</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>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>10</td><td>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) 7, 10 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.31 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 20-0-0 . CBF = 18 LBS. 1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-7. DBS = 6-0-0 . CBF = 184 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) <table><tr><th>CHORDS</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED VERT. LOAD (PLF)</th></tr><tr><td>FR-TO</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1- 2</td><td>0 / 29</td><td>-77.4</td><td>-77.4</td><td>0.03 (1)</td><td>10.00</td><td>9- 3</td><td>0 / 2274</td></tr><tr><td>2- 3</td><td>-4408 / 0</td><td>-77.4</td><td>-77.4</td><td>0.12 (1)</td><td>5.31</td><td>3- 8</td><td>-2204 / 0</td></tr><tr><td>3- 4</td><td>-2752 / 0</td><td>-77.4</td><td>-77.4</td><td>0.10 (1)</td><td>6.25</td><td>8- 5</td><td>0 / 5452</td></tr><tr><td>4- 5</td><td>-2752 / 0</td><td>-77.4</td><td>-77.4</td><td>0.10 (1)</td><td>6.25</td><td>5- 7</td><td>-4909 / 0</td></tr><tr><td>5- 6</td><td>-20 / 0</td><td>-77.4</td><td>-77.4</td><td>0.09 (1)</td><td>6.25</td><td>2- 9</td><td>0 / 4152</td></tr><tr><td>7- 6</td><td>-146 / 0</td><td>0.0</td><td>0.0</td><td>0.04 (1)</td><td>6.25</td><td></td><td></td></tr><tr><td>10- 2</td><td>-4647 / 0</td><td>0.0</td><td>0.0</td><td>0.22 (1)</td><td>6.61</td><td></td><td></td></tr><tr><td>10- 9</td><td>0 / 0</td><td>-821.8</td><td>-821.8</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>9-11</td><td>0 / 3678</td><td>-821.8</td><td>-821.8</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>11- 8</td><td>0 / 3678</td><td>-738.8</td><td>-738.8</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td></tr><tr><td>8- 7</td><td>0 / 2298</td><td>-738.8</td><td>-738.8</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td></tr></table>						FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD	JT	VERT	HORZ	DOWN	HORZ	7	5900	0	5900	0	10	6275	0	6275	0	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	7	4140	2898 / 0	0 / 0	0 / 0	0 / 0	1242 / 0	0 / 0	10	4401	3092 / 0	0 / 0	0 / 0	0 / 0	1309 / 0	0 / 0	CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	FR-TO								1- 2	0 / 29	-77.4	-77.4	0.03 (1)	10.00	9- 3	0 / 2274	2- 3	-4408 / 0	-77.4	-77.4	0.12 (1)	5.31	3- 8	-2204 / 0	3- 4	-2752 / 0	-77.4	-77.4	0.10 (1)	6.25	8- 5	0 / 5452	4- 5	-2752 / 0	-77.4	-77.4	0.10 (1)	6.25	5- 7	-4909 / 0	5- 6	-20 / 0	-77.4	-77.4	0.09 (1)	6.25	2- 9	0 / 4152	7- 6	-146 / 0	0.0	0.0	0.04 (1)	6.25			10- 2	-4647 / 0	0.0	0.0	0.22 (1)	6.61			10- 9	0 / 0	-821.8	-821.8	0.20 (1)	10.00			9-11	0 / 3678	-821.8	-821.8	0.25 (1)	10.00			11- 8	0 / 3678	-738.8	-738.8	0.25 (1)	10.00			8- 7	0 / 2298	-738.8	-738.8	0.20 (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 = 36-4-8 END DISTANCE = 8-2-8 END SPAN CARRIED = 36-4-8 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CStdGirder START DISTANCE = 8-2-8 START SPAN CARRIED = 32-10-8 END DISTANCE = 14-2-10 END SPAN CARRIED = 32-10-8 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.46") CALCULATED VERT. DEFL.(LL)= L/999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.46") CALCULATED VERT. DEFL.(TL)= L/999 (0.08") CSI: TC=0.22 (2-10:1) , BC=0.25 (8-9:1) , WB=0.80 (5-7:1) , SSI=0.46 (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 (9) (INPUT = 0.90) JSI METAL= 0.46 (2) (INPUT = 1.00)				
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD																																																																																																																																																														
JT	VERT	HORZ	DOWN	HORZ																																																																																																																																																														
7	5900	0	5900	0																																																																																																																																																														
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10	4401	3092 / 0	0 / 0	0 / 0	0 / 0	1309 / 0	0 / 0																																																																																																																																																											
CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)																																																																																																																																																											
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10- 2	-4647 / 0	0.0	0.0	0.22 (1)	6.61																																																																																																																																																													
10- 9	0 / 0	-821.8	-821.8	0.20 (1)	10.00																																																																																																																																																													
9-11	0 / 3678	-821.8	-821.8	0.25 (1)	10.00																																																																																																																																																													
11- 8	0 / 3678	-738.8	-738.8	0.25 (1)	10.00																																																																																																																																																													
8- 7	0 / 2298	-738.8	-738.8	0.20 (1)	10.00																																																																																																																																																													



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TOTAL WEIGHT = 3 X 91 = 273 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-4	12	TOP
4-6	12	TOP
6-7	12	TOP
10-2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
10-7	6	SIDE(401.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW+p	MT20	4.0	4.0	1.25	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.25
4	TS-t	MT20	3.0	4.0		
5	TMVW+t	MT20	4.0	4.0	1.50	1.00
6	TMV+p	MT20	2.0	4.0		
7	BMVW1-t	MT20	4.0	4.0		
8	BMVW+t	MT20	3.0	6.0	2.50	1.50
9	BMVW-t	MT20	4.0	4.0	2.00	1.75
10	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
7	4321	0	4321	0	0	1-10	1-10	1-10	1-10
10	4726	0	4726	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
7	3032	2121 / 0	0 / 0	0 / 0	0 / 0	0 / 0	911 / 0
10	3314	2332 / 0	0 / 0	0 / 0	0 / 0	0 / 0	982 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 10

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.98 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 20-0-0 . CBF = 18 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-7. DBS = 4-0-0 . CBF = 89 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				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	0.03 (1)	10.00	9-3	0 / 1539	0.12 (1)
2-3	-3242 / 0	-77.4 -77.4	0.10 (1)	5.98	3-8	-1599 / 0	0.54 (1)
3-4	-2046 / 0	-77.4 -77.4	0.09 (1)	6.25	8-5	0 / 3852	0.29 (1)
4-5	-2046 / 0	-77.4 -77.4	0.09 (1)	6.25	5-7	-3559 / 0	0.81 (1)
5-6	-20 / 0	-77.4 -77.4	0.08 (1)	6.25	2-9	0 / 3059	0.23 (1)
7-6	-148 / 0	0.0 0.0	0.04 (1)	6.25			
10-2	-3490 / 0	0.0 0.0	0.17 (1)	7.39			
10-9	0 / 0	-620.3 -620.3	0.27 (1)	10.00			
9-8	0 / 2709	-525.4 -525.4	0.36 (1)	10.00			
8-7	0 / 1708	-525.4 -525.4	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

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

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

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

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

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

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

CSI: TC=0.17 (2-10:1) , BC=0.36 (8-9:1) , WB=0.81 (5-7:1) , SSI=0.35 (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

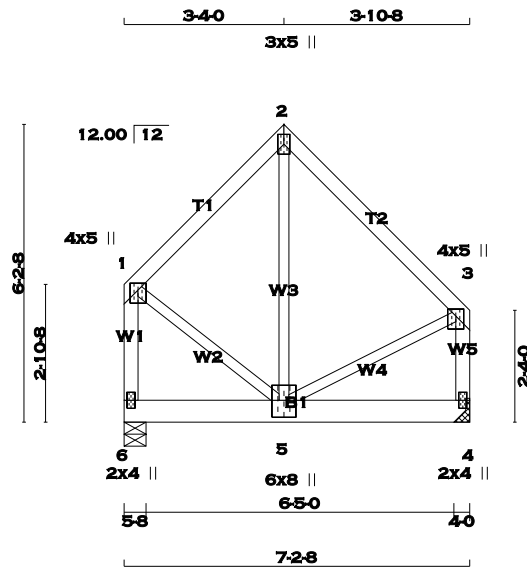
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.34 (9) (INPUT = 1.00)



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SCALE: 1/4"=1'

TOTAL WEIGHT = 4 X 40 = 162 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
6 - 1	2x4	DRY	No.2	SPF
4 - 3	2x4	DRY	No.2	SPF
6 - 4	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	12	TOP
2-3	12	TOP
6-1	12	TOP
4-3	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
6-4	8	SIDE(350.8)
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	5.0	1.75	2.00
2	TTW+p	MT20	3.0	5.0		
3	TMVW+p	MT20	4.0	5.0	1.75	2.00
4	BMV1+p	MT20	2.0	4.0		
5	BMWWW+t	MT20	6.0	8.0	4.25	3.00
6	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	DOWN	UP
6		2870	0	2870	0
4		2870	0	2870	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
JT		COMBINED	SNOW	LIVE
6		2015	1409 / 0	0 / 0
4		2015	1409 / 0	0 / 0

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

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

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

LOADING		CHORDS	FACTORED	MAX.	FACTORED	MEMB.	FORCE	VERT. LOAD	LC1	MAX	FACTORED	MEMB.	FORCE	MAX	FACTORED
TOTAL LOAD CASES: (4)		FR-TO	MAX. FORCE (LBS)	FROM	TO	FR-TO	MAX. FORCE (LBS)	FROM	TO	FR-TO	MAX. FORCE (LBS)	FR-TO	MAX. FORCE (LBS)	FROM	TO
		1-2	-1511 / 0	-77.4	-77.4	0.09 (1)	6.25	5-2	0 / 1858	0.23 (1)					
		2-3	-1511 / 0	-77.4	-77.4	0.12 (1)	6.25	1-5	0 / 1324	0.16 (1)					
		6-1	-1979 / 0	0.0	0.0	0.15 (1)	7.81	5-3	0 / 1190	0.15 (1)					
		4-3	-1741 / 0	0.0	0.0	0.11 (1)	7.81								
		6-5	0 / 0	-719.1	-719.1	0.38 (1)	10.00								
		5-4	0 / 0	-719.1	-719.1	0.38 (1)	10.00								

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 32-0-8
END DISTANCE = 7-2-8
END SPAN CARRIED = 32-0-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.15 (1-6:1) , BC=0.38 (5-6:1) , WB=0.23 (2-5:1) , SSI=0.55 (4-5:1)

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)
				MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

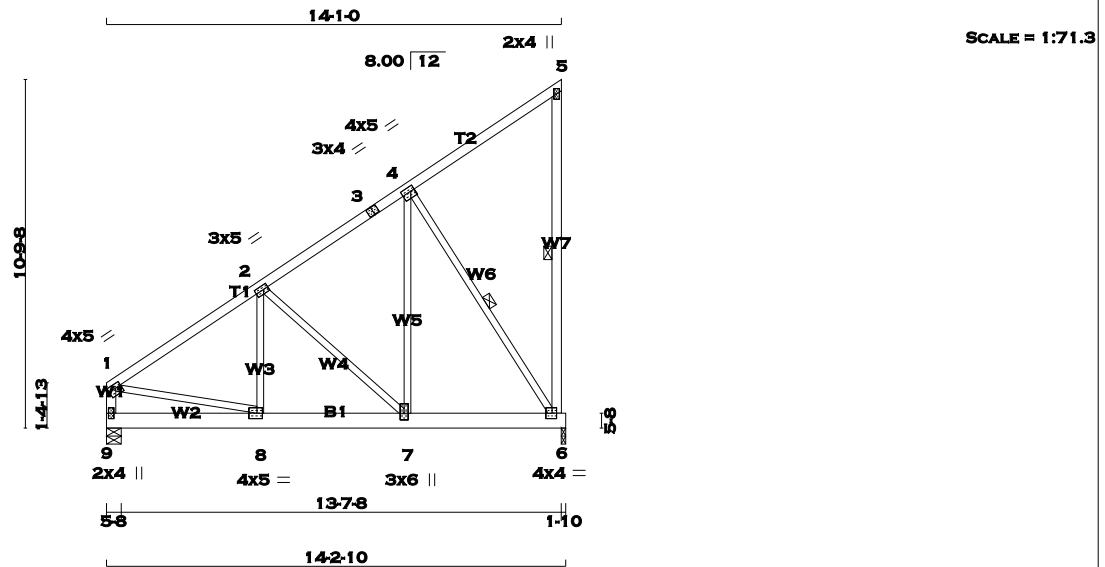
JSI GRIP= 0.87 (5) (INPUT = 0.90)
JSI METAL= 0.19 (5) (INPUT = 1.00)



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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 - 1	2x4	DRY	No.2
9 - 6	2x6	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-5	12	TOP
5-6	12	TOP
9-1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
9-6	6	SIDE(401.8)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.00
2	TMVW-t	MT20	3.0	5.0	1.50	1.75
3	TS-t	MT20	3.0	4.0		
4	TMVW-t	MT20	4.0	5.0	1.75	1.50
5	TMV+p	MT20	2.0	4.0		
6	BMVW1-t	MT20	4.0	4.0	2.00	1.75
7	BMVW-t	MT20	3.0	6.0	2.50	1.50
8	BMVW-t	MT20	4.0	5.0	2.00	2.00
9	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	DOWN	IN-SX
6		4321	0	4321	0
9		4620	0	4620	0

UNFACTORED REACTIONS						
JT	1ST LCASE	MAX. MIN.	COMPONENT REACTIONS			
6	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6		3032	2121 / 0	0 / 0	0 / 0	911 / 0
9		3242	2268 / 0	0 / 0	0 / 0	974 / 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 = 5.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 18 LBS.
1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 6-0-0 . CBF = 141 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 LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	-4390 / 0	-77.4 -77.4	0.12 (1)	5.32	8-2	0 / 2157	0.16 (1)
2-3	-2476 / 0	-77.4 -77.4	0.09 (1)	6.25	2-7	-2165 / 0	0.47 (1)
3-4	-2476 / 0	-77.4 -77.4	0.09 (1)	6.25	7-4	0 / 4094	0.31 (1)
4-5	-20 / 0	-77.4 -77.4	0.08 (1)	6.25	4-6	-3749 / 0	0.61 (1)
6-5	-147 / 0	0.0 0.0	0.03 (1)	6.25	1-8	0 / 3743	0.28 (1)
9-1	-3370 / 0	0.0 0.0	0.11 (1)	7.48			
9-8	0 / 0	-620.3 -620.3	0.28 (1)	10.00			
8-7	0 / 3664	-525.4 -525.4	0.39 (1)	10.00			
7-6	0 / 2067	-525.4 -525.4	0.31 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
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=0.12 (1-2:1) , BC=0.39 (7-8:1) , WB=0.61 (4-6:1) , SSI=0.34 (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

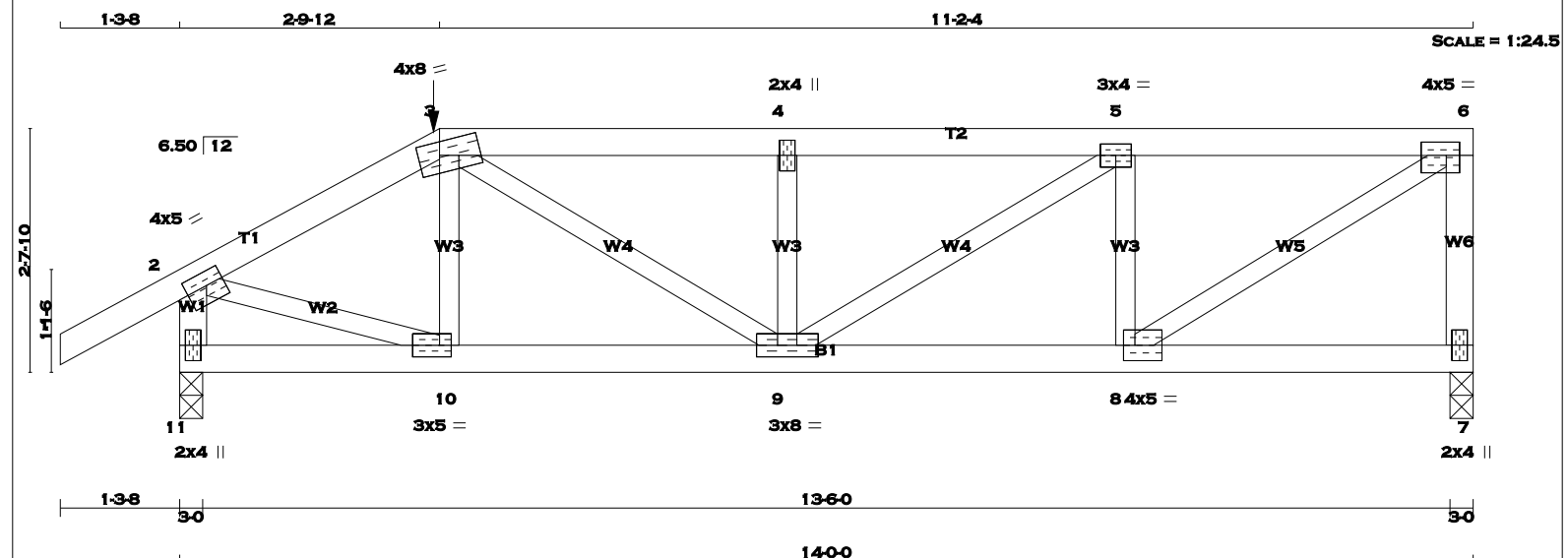
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (7) (INPUT = 0.90)
JSI METAL= 0.45 (1) (INPUT = 1.00)



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

1 - 3	2x4	DRY	No.2	SPF
3 - 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.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMWV-t	MT20	4.0	5.0	1.75	2.25
3	TTWW-m	MT20	4.0	8.0	1.75	2.75
4	TMWV-w	MT20	2.0	4.0		
5	TMWV-t	MT20	3.0	4.0		
6	TMWV-t	MT20	4.0	5.0	1.75	1.75
7	BMV1-p	MT20	2.0	4.0		
8	BMWV-t	MT20	4.0	5.0	2.00	1.50
9	BMWVW-t	MT20	3.0	8.0		
10	BMWV-t	MT20	3.0	5.0	1.50	1.50
11	BMV1-p	MT20	2.0	4.0		

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

HANGERS NOTES
 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 143.5 lbs FACTORED DOWN AT 2-9-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
7	1208	0	0	3-0
11	1260	0	0	3-0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
7	847	594 / 0	0 / 0	0 / 0	0 / 0	253 / 0	0 / 0
11	883	625 / 0	0 / 0	0 / 0	0 / 0	257 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 11

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.50 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
 TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (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 / 25	-77.4	-77.4 0.11 (1)	10-3	-218 / 31	0.04 (1)	
2-3	-1403 / 0	-77.4	-77.4 0.14 (1)	5-32	3-9	0 / 785	0.19 (1)
3-4	-1889 / 0	-139.4	-139.4 0.32 (1)	4-51	9-4	-555 / 0	0.10 (1)
4-5	-1889 / 0	-139.4	-139.4 0.32 (1)	4-50	9-5	0 / 454	0.11 (1)
5-6	-1507 / 0	-139.4	-139.4 0.30 (1)	4-96	8-5	-810 / 0	0.14 (1)
7-6	-1156 / 0	0.0	0.0 0.16 (1)	7-37	8-6	0 / 1776	0.44 (1)
11-2	-1224 / 0	0.0	0.0 0.14 (1)	7-22	2-10	0 / 1277	0.32 (1)
11-10	0 / 0	-31.5	-31.5 0.08 (4)	10-00			
10-9	0 / 1222	-31.5	-31.5 0.27 (1)	10-00			
9-8	0 / 1507	-31.5	-31.5 0.32 (1)	10-00			
8-7	0 / 0	-31.5	-31.5 0.11 (4)	10-00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	2-9-12	-144	-144	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 2-9-12
 RIGHT SETBACK = 0-0
 END SETBACK = 5-5-8
 END WALL WIDTH = 3-0
 CORNER FRAMING TYPE: CONVENTIONAL
 END JACK TYPE: CONVENTIONAL
 APPLIED TO FRONT SIDE
 - ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, 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 (0.05")
 ALLOWABLE DEFL.(TL)= L/360 (0.47")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.32 (4-5:1), BC=0.32 (8-9:1), WB=0.44 (6-8:1), SSI=0.26 (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 (PSI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

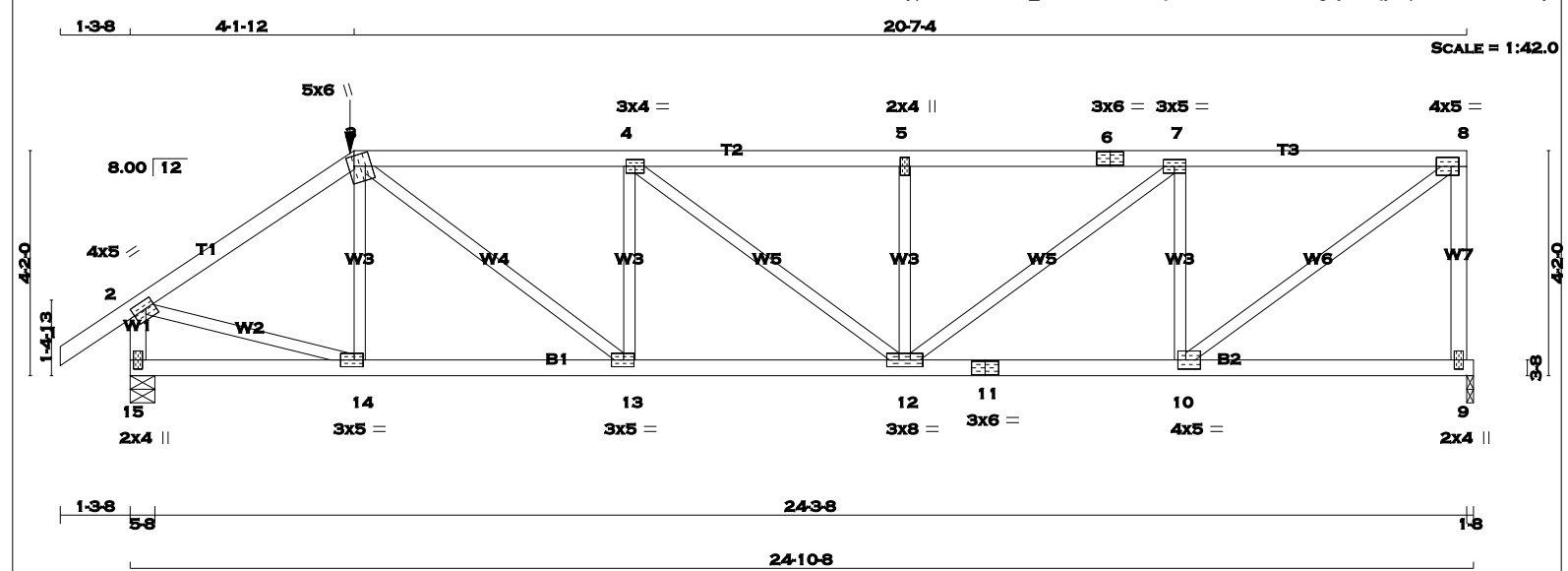
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (8) (INPUT = 0.90)
 JSI METAL= 0.45 (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.





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 6

2x4

DRY

No.2

SPF

6 - 8

2x4

DRY

No.2

SPF

9 - 8

2x4

DRY

No.2

SPF

15 - 2

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.

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

CHORDS #ROWS

SURFACE SPACING (IN)

LOAD(PLF)

TOP CHORDS : (0.122"x3") SPIRAL NAILS

1-3

1

12

SIDE(0.0)

3-6

1

12

SIDE(34.2)

6-8

1

12

SIDE(34.2)

8-9

1

12

TOP

15-2

1

12

TOP

BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS

15-11

1

12

SIDE(8.7)

11-9

1

12

SIDE(8.7)

WEBS : (0.122"x3") SPIRAL NAILS

2x3

1

6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

2

TMWW-t

MT20

4.0

5.0

1.75

2.00

3

TTWW+m

MT20

5.0

6.0

2.25

1.25

4

TMWW-t

MT20

3.0

4.0

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

2230

0

2230

0

0

1-8

1-8

15

2259

0

2259

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

9

1565

1097 / 0

0 / 0

0 / 0

0 / 0

468 / 0

0 / 0

15

1585

1114 / 0

0 / 0

0 / 0

0 / 0

470 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 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

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

CS

LC

UNBRAC

LENGTH

FR-TO

MEMB.

FORCE

(LBS)

(PLF)

(LC)

(LC)

(LBS)

(LBS)

(LC)

1-2

0 / 29

-77.4

-77.4

0.06

(1)

10.00

14-3

-362 / 33

0.05

(1)

2-3

-2524 / 0

-77.4

-77.4

0.16

(1)

5.54

3-13

0 / 1755

0.22

(1)

3-4

-3486 / 0

-145.9

-145.9

0.37

(1)

4.63

13-4

-894 / 0

0.12

(1)

4-5

-3563 / 0

-145.9

-145.9

0.37

(1)

4.58

4-12

0 / 97

0.01

(1)

5-6

-3563 / 0

-145.9

-145.9

0.39

(1)

4.55

12-5

-685 / 0

0.09

(1)

6-7

-3563 / 0

-145.9

-145.9

0.39

(1)

4.55

12-7

0 / 1299

0.16

(1)

7-8

-2529 / 0

-145.9

-145.9

0.36

(1)

5.26

10-7

-1653 / 0

0.23

(1)

9-8

-2157 / 0

0.0

0.0

0.30

(1)

7.57

10-8

0 / 3131

0.39

(1)

15-2

-2205 / 0

0.0

0.0

0.12

(1)

7.51

2-14

0 / 2164

0.27

(1)

15-14

0 / 0

-33.0

-33.0

0.09

(4)

10.00

14-13

0 / 2087

-33.0

-33.0

0.23

(1)

10.00

13-12

0 / 3486

-33.0

-33.0

0.35

(1)

10.00

12-11

0 / 2529

-33.0

-33.0

0.28

(1)

10.00

11-10

0 / 2529

-33.0

-33.0

0.28

(1)

10.00

10-9

0 / 0

-33.0

-33.0

0.12

(4)

10.00

FACTORED CONCENTRATED LOADS (LBS)

JT

LOC.

LC1

MAX-

MAX+

FACE

DIR.

TYPE

3

4-1-12

-241

-241

FRONT

VERT

TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP

CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT

CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip

LEFT SETBACK = 4-1-12

RIGHT SETBACK = 0-0

END SETBACK = 6-0-0

END WALL WIDTH = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.83")

CALCULATED VERT. DEFL.(LL)= L/999 (0.08")

ALLOWABLE DEFL.(TL)= L/360 (0.83")

CALCULATED VERT. DEFL.(TL)= L/999 (0.15")

CSI: TC=0.39 (5-7:1) , BC=0.35 (12-13:1) , WB=0.39 (8-10:1) , SSI=0.20 (7-8:1)

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 (14) (INPUT = 0.90)

JSI METAL= 0.40 (2) (INPUT = 1.00)



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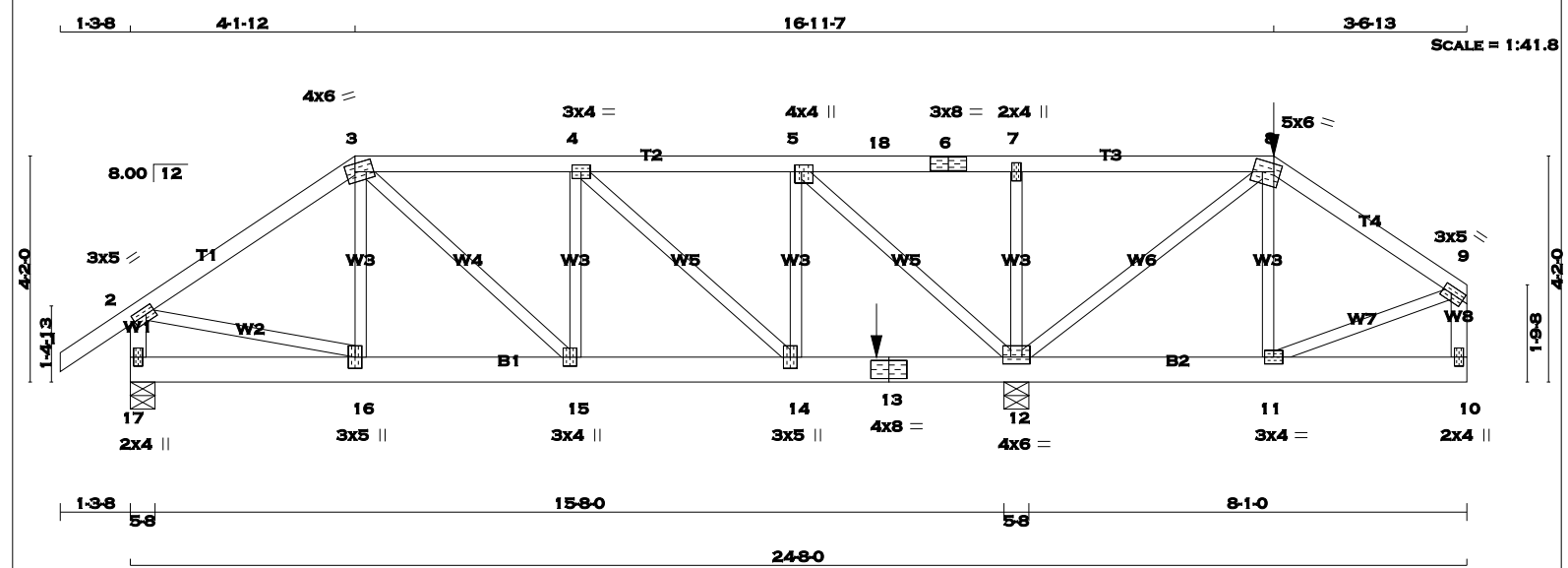
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MAR 29, 2017

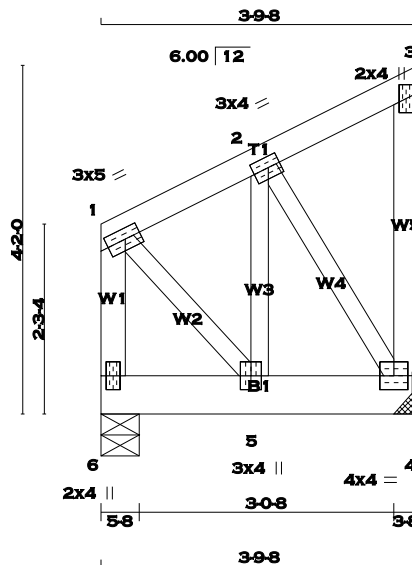
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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



LUMBER		N. L. G. A. RULES				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER		DESIGN CRITERIA			
CHORDS		SIZE		LUMBER		DESCR.					
1 - 3	2x4	DRY	No.2			SPF		*** SPECIAL LOADS ANALYSIS ***			
3 - 6	2x4	DRY	No.2			SPF		GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.			
6 - 8	2x4	DRY	No.2			SPF		LOADS WERE DERIVED FROM USER INPUT			
8 - 9	2x4	DRY	No.2			SPF		NO FURTHER MODIFICATIONS WERE MADE			
17 - 2	2x4	DRY	No.2			SPF					
10 - 9	2x4	DRY	No.2			SPF		SPECIFIED LOADS:			
17 - 13	2x6	DRY	No.2			SPF		TOP CH. LL = 23.3 PSF			
13 - 10	2x6	DRY	No.2			SPF		DL = 3.0 PSF			
ALL WEBS		2x3	DRY	No.2		SPF		BOT CH. LL = 0.0 PSF			
EXCEPT								DL = 7.0 PSF			
DRY: SEASONED LUMBER.								TOTAL LOAD = 33.3 PSF			
PLATES (table is in inches)								SPACING = 24.0 IN.C/C			
JT	TYPE	PLATES	W	LEN	Y	X			LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12		
2	TMVW-t	MT20	3.0	5.0	1.50	2.00			GIRDER TYPE: CPrimeHip		
3	TTWW-m	MT20	4.0	6.0	1.75	2.00			LEFT SETBACK = 4-1-12		
4	TMWW-t	MT20	3.0	4.0					RIGHT SETBACK = 3-6-13		
5	TMWW+t	MT20	4.0	4.0	1.50	1.50			END SETBACK = 6-0-0		
6	TS-t	MT20	3.0	8.0					END WALL WIDTH = 5-8		
7	TMW+w	MT20	2.0	4.0					CORNER FRAMING TYPE: CONVENTIONAL		
8	TTWW-m	MT20	5.0	6.0	1.75	1.50			END JACK TYPE: CONVENTIONAL		
9	TMVW-t	MT20	3.0	5.0	1.50	2.00			APPLIED TO FRONT SIDE		
10	BMV+p	MT20	2.0	4.0					- ADDT'L LOADS BASED ON 55 % OF GSL.		
11	BMWW-t	MT20	3.0	4.0					LOADS APPLIED TO FIRST 10-10-12 OF SPAN		
12	BMWWW1-t	MT20	4.0	6.0	1.50	3.00			MEASURED FROM THE RIGHT.		
13	BS-t	MT20	4.0	8.0					*** NON STANDARD GIRDER ***		
14	BMWW+t	MT20	3.0	5.0					ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.		
15	BMWW+t	MT20	3.0	4.0					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
16	BMWW+t	MT20	3.0	5.0					THIS DESIGN COMPLIES WITH:		
17	BMV1+p	MT20	2.0	4.0					- PART 9 OF OBC 2012, BCBC 2012, ABC 2014		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.										- CSA 086-09	
HANGERS NOTES										- TPIC 2011	
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 207.0 lbs FACTORED DOWN AT 21-1-3 ON TOP CHORD, AND 685.4 lbs FACTORED DOWN AT 13-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD	
										ALLOWABLE DEFL.(LL)= L/360 (0.55")	
										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")	
										ALLOWABLE DEFL.(TL)= L/360 (0.55")	
										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")	
										CANTILEVER DEFLECTION:	
										ALLOWABLE DEFL.(LL)= L/120 (0.83")	
										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")	
										ALLOWABLE DEFL.(TL)= L/120 (0.83")	
										CALCULATED VERT. DEFL.(TL) = L/ 927 (0.11")	
										CSI: TC=0.75 (7-8:1), BC=0.34 (12-14:1), WB=0.91 (8-12:5), SSI=0.36 (7-8:1)	
										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 .	
										KOTT	



SCALE = 1:27.5

TOTAL WEIGHT = 24 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 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	2.25
2	TMVW-t	MT20	3.0	4.0	1.50	1.75
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
4		686	0	686	0	0	0	HANGER BY OTHERS	
6		686	0	686	0	0	0	MIN. SEAT SIZE: 3-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED												
4	481	337 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0	145 / 0	0 / 0	0 / 0	0 / 0
6	481	337 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0	145 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MAX. LC1 MAX. (LC)		MAX. UNBRACED LENGTH		WEBS		MAX. FACTORED FORCE (LBS)		MAX. LC1 MAX. (LC)	
MEMB.										MEMB.					
FR-TO										FR-TO					
1-2	-279 / 0	-77.4	-77.4	0.04 (1)	6.25	5-2	0 / 334	0.08 (1)		2-4	-459 / 0	0.10 (1)			
2-3	-6 / 0	-77.4	-77.4	0.04 (1)	10.00	1-5	0 / 360	0.09 (1)							
4-3	-59 / 0	0.0	0.0	0.02 (1)	7.81										
6-1	-440 / 0	0.0	0.0	0.06 (1)	7.81										
6-5	0 / 0	-284.3	-284.3	0.08 (1)	10.00										
5-4	0 / 255	-284.3	-284.3	0.11 (1)	10.00										

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 13-8-8
END DISTANCE = 3-9-8
END SPAN CARRIED = 13-8-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
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=0.06 (1-6:1) , BC=0.11 (4-5:1) , WB=0.10 (2-4:1) , SSI=0.19 (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.

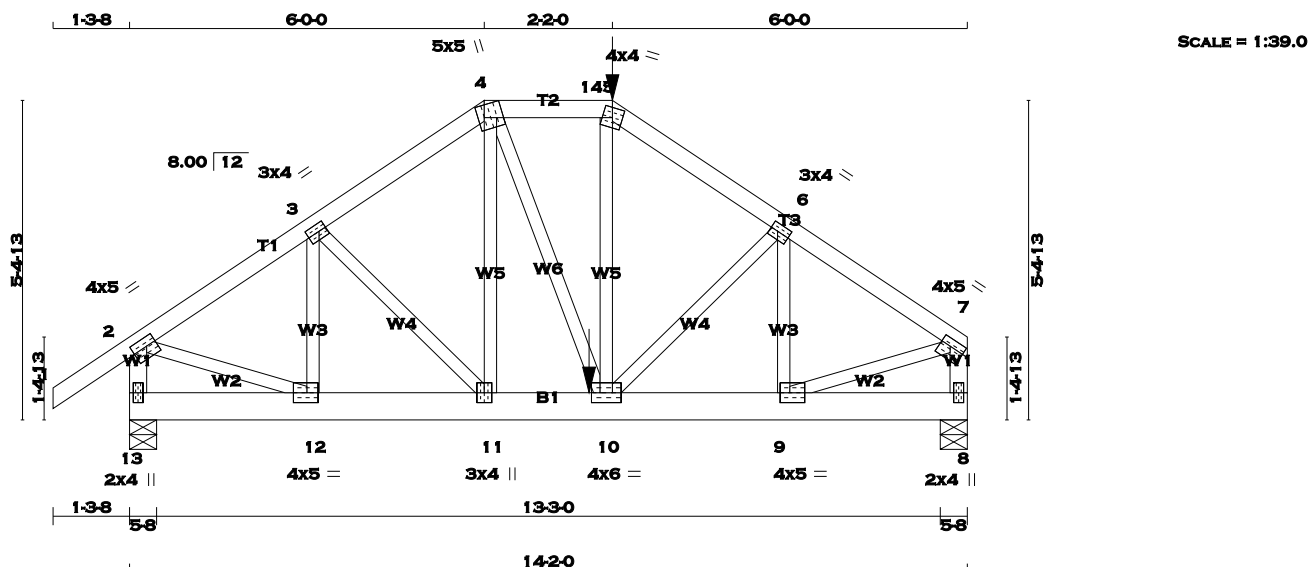
JSI GRIP= 0.75 (1) (INPUT = 0.90)
JSI METAL= 0.14 (5) (INPUT = 1.00)



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ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
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CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 75 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
13- 2	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
13- 8	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMWw-t	MT20	4.0	5.0	1.75	2.00
3	TMWw-t	MT20	3.0	4.0	1.50	1.50
4	TTWw+m	MT20	5.0	5.0	Edge	3.75
5	TW-w	MT20	4.0	4.0		
6	BMWw-t	MT20	3.0	4.0	1.50	1.50
7	TMVW-t	MT20	4.0	5.0	1.50	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMWw-t	MT20	4.0	5.0	2.00	2.00
10	BMWwW-t	MT20	4.0	6.0		
11	BMWw+t	MT20	3.0	4.0		
12	BMWw-t	MT20	4.0	5.0	2.00	2.25
13	BMV1+p	MT20	2.0	4.0		

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

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 8-2-0 ON TOP CHORD, AND 658.3 lbs FACTORED DOWN AT 7-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
13	1241	0	1241	0	0	5-8	5-8
8	1337	0	1337	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	867	629 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0
8	941	644 / 0	0 / 0	0 / 0	0 / 0	297 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.26 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				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)		UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
1-2	0 / 29	-77.4	-77.4	0.11 (1)	10.00	12-3	-306 / 0	0.06 (1)	
2-3	-1204 / 0	-77.4	-77.4	0.14 (1)	5.66	3-11	0 / 16	0.00 (1)	
3-4	-1248 / 0	-77.4	-77.4	0.14 (1)	5.58	11-4	0 / 91	0.02 (1)	
4-14	-1200 / 0	-77.4	-77.4	0.09 (1)	5.72	4-10	0 / 459	0.11 (1)	
14-5	-1200 / 0	-145.9	-145.9	0.09 (1)	5.72	10-5	0 / 259	0.06 (1)	
5-6	-1453 / 0	-77.4	-77.4	0.14 (1)	5.26	10-6	-33 / 0	0.01 (4)	
6-7	-1428 / 0	-77.4	-77.4	0.14 (1)	5.30	9-6	279 / 9	0.06 (1)	
13-2	-1202 / 0	0.0	0.0	0.13 (1)	7.26	2-12	0 / 1064	0.26 (1)	
8-7	-1281 / 0	0.0	0.0	0.14 (1)	7.09	9-7	0 / 1259	0.31 (1)	

13-12	0/0	-17.5	-17.5	0.03 (1)	10.00
12-11	0/1013	-17.5	-17.5	0.16 (1)	10.00
11-10	0/1026	-17.5	-17.5	0.16 (1)	10.00
10-9	0/1199	-33.0	-33.0	0.20 (1)	10.00
9-8	0/0	-33.0	-33.0	0.04 (4)	10.00

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
5	8-2-0	-348	-348	---	FRONT	VERT	TOTAL
10	7-9-4	-658	-658	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-4-12 OF SPAN
MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO
ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
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=0.14 (7-8:1), BC=0.20 (9-10:1), WB=0.31 (7-9:1), SSI=0.10 (2-3:1)

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. 5.06



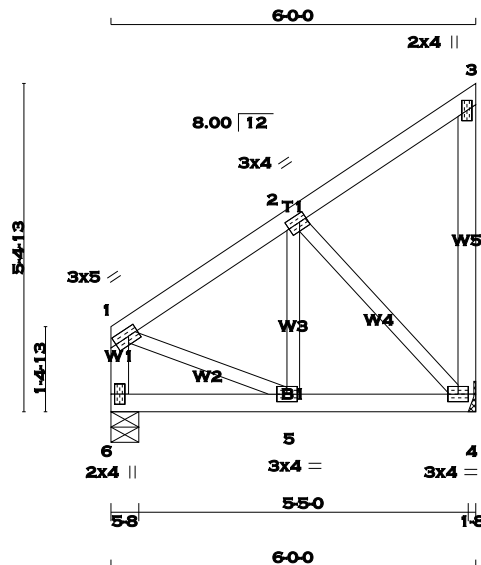
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IN THE DESIGN OF THIS COMPONENT.**

PLATE ROTATION TOL. 5.06

 **KOTT**

CONTINUED ON PAGE 2



SCALE = 1:37.9

TOTAL WEIGHT = 29 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
6 - 1	2x4	DRY	No.2		SPF
1 - 3	2x4	DRY	No.2		SPF
4 - 3	2x4	DRY	No.2		SPF
6 - 4	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY					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	TMVW-t	MT20	3.0	4.0	1.50	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 MI TEK 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
6	658	0	658	0	0	5-8	5-8
4	658	0	658	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 1-8							

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.	LIVE	WIND	DEAD	SOIL	
6	462	323 / 0	0 / 0	0 / 0	0 / 0	0 / 0	139 / 0	0 / 0	
4	462	323 / 0	0 / 0	0 / 0	0 / 0	0 / 0	139 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED				WEBS			
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. (LC)	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX	(LC)
FR-TO		FROM TO				FR-TO			
6-1	-493 / 0	0.0	0.0	0.06 (1)	7.81	1-5	0 / 418	0.10 (1)	
1-2	-458 / 0	-77.4	-77.4	0.12 (1)	6.25	5-2	0 / 381	0.09 (1)	
2-3	-15 / 0	-77.4	-77.4	0.12 (1)	6.25	2-4	-563 / 0	0.17 (1)	
4-3	-90 / 0	0.0	0.0	0.05 (1)	7.81				
6-5	0 / 0	-142.0	-142.0	0.22 (1)	10.00				
5-4	0 / 393	-142.0	-142.0	0.29 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 7-8-8
END DISTANCE = 6-0-0
END SPAN CARRIED = 7-8-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.12 (1-2:1), BC=0.29 (4-5:1), WB=0.17 (2-4:1), SSI=0.22 (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.

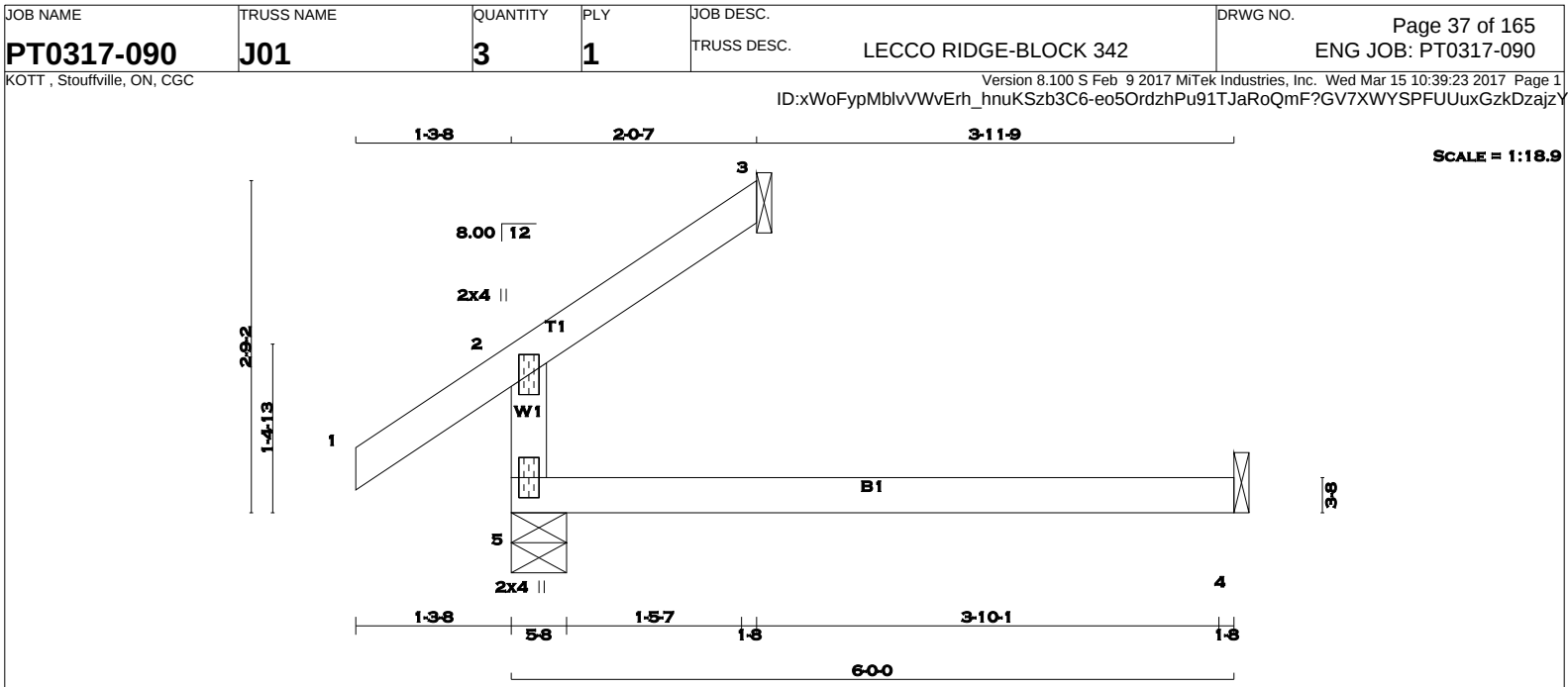
JSI GRIP= 0.76 (5) (INPUT = 0.90)
JSI METAL= 0.16 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 13 = 38 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	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	265	0	265	0
3	60	0	60	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. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
5	188	123 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 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, 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: (4)

MEMB.	CHORDS	FACTORED	FACTORED	FACTORED	FACTORED	FACTORED	FACTORED
	MAX. FACTORED	VERT. LOAD	LC1	MAX. UNBRAC	MEMB.	MAX. FACTORED	FACTORED
	FORCE (LBS)	(PLF)	CSI (LC)	LENGTH		FORCE (LBS)	CSI (LC)
FR-TO		FROM	TO		FR-TO		
5-2	-204 / 0	0.0	0.0	0.12 (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	0.13 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	PSF
	DL	=	3.0

BOT

CH.	LL	PSF
DL	=	0.0

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=0.12 (2-5:4), BC=0.13 (4-5:4), WB=0.00 (n/a:0), SSI=0.08 (4-5:4)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (2) (INPUT = 0.90)

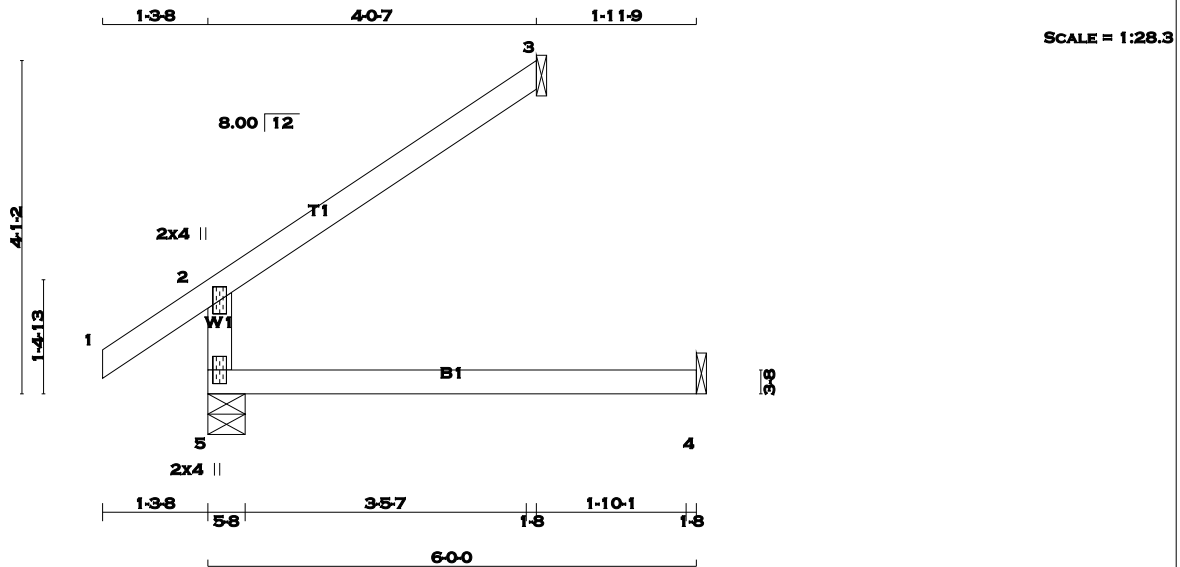
JSI METAL= 0.05 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 15 = 31 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	UPLIFT IN-SX	IN-SX
5	362	0	362	0	0	5-8
3	117	0	117	0	0	1-8
4	44	0	49	0	0	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	254	181 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
3	80	71 / 0	0 / 0	0 / 0	0 / 0	9 / 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, 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: (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			
5-2	-301 / 0	0.0	0.0	0.12 (4)	7.81				
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00				
2-3	-22 / 0	-77.4	-77.4	0.21 (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=0.21 (2-3:1) , BC=0.13 (4-5:4) , WB=0.00 (n/a:0) , 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.

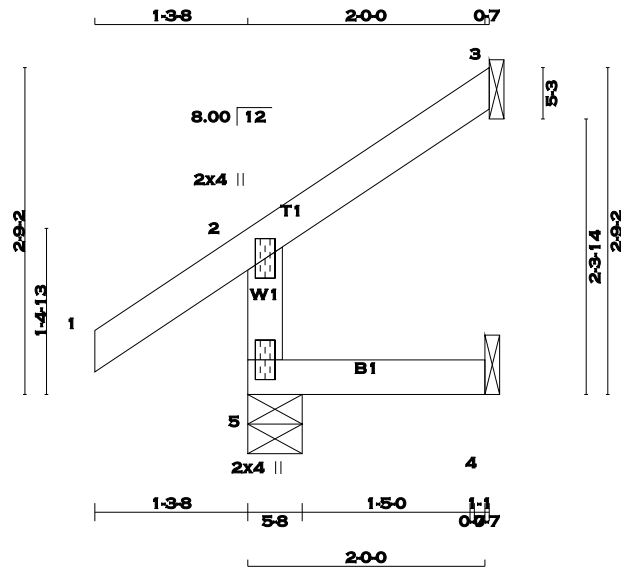
JSI GRIP= 0.19 (2) (INPUT = 0.90)
JSI METAL= 0.07 (2) (INPUT = 1.00)



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SCALE = 1:19.4

TOTAL WEIGHT = 3 X 8 = 24 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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG		REQRD BRG	
JT	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

1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5	154	123 / 0	0 / 0	0 / 0	0 / 0	31 / 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)

CHORDS			WEBS		
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. UNBRAC	MEMB. FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO	
5-2	-204 / 0	0.0	0.0 (4)	7.81	
1-2	0 / 29	-77.4	-77.4 (1)	10.00	
2-3	-11 / 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=0.10 (1-2:1) , BC=0.02 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

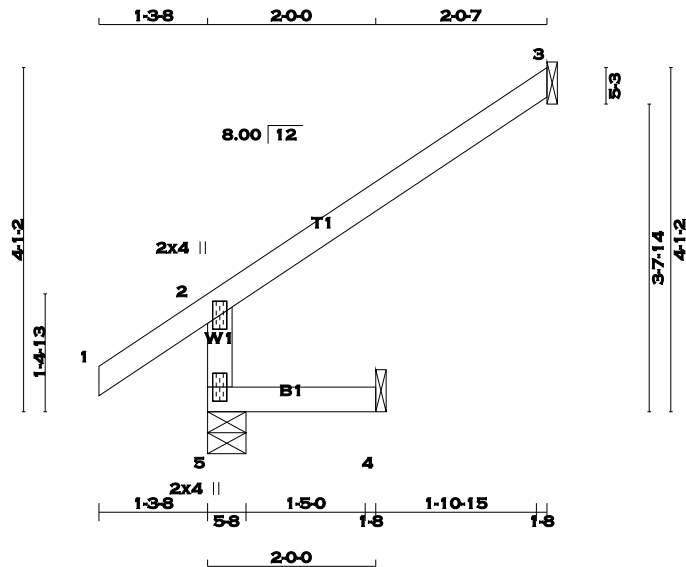
JSI GRIP= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 11 = 22 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	320	0	320	0	5-8	5-8
3	117	0	117	0	1-8	1-8
4	16	0	18	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	220	181 / 0	0 / 0	0 / 0	0 / 0	39 / 0	0 / 0
3	80	71 / 0	0 / 0	0 / 0	0 / 0	9 / 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: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)		MEMB. FORCE (LBS)	MAX. FACTORED (LC)
FR-TO			FROM	TO		FR-TO	
5-2	-301 / 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	-22 / 0		-77.4	-77.4	0.21 (1)	6.25	
5-4	0 / 0		-17.5	-17.5	0.02 (4)	10.00	

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/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=0.21 (2-3:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), 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.

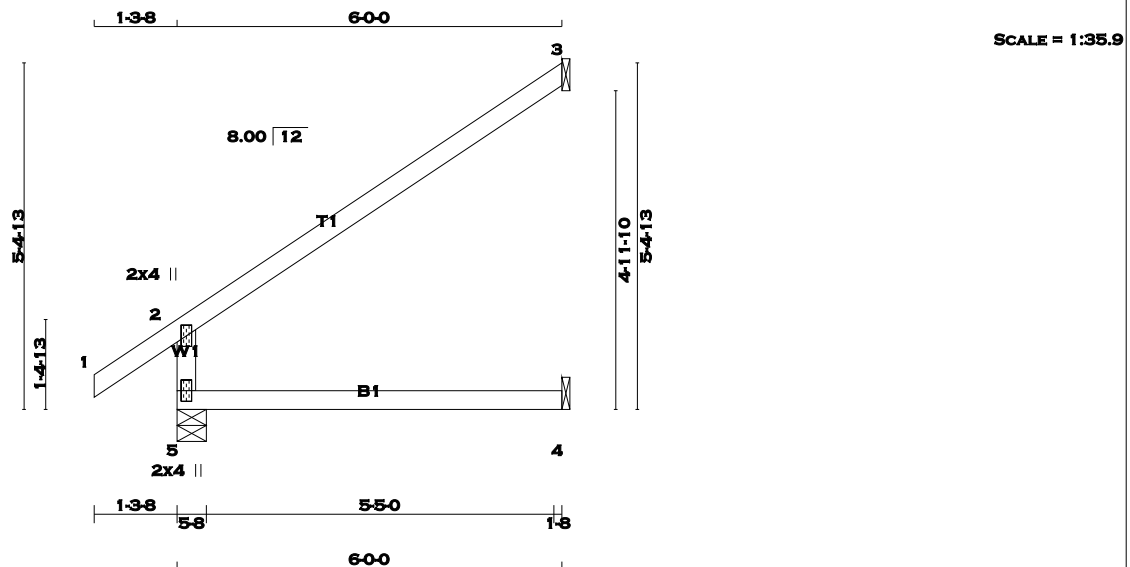
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JSI METAL= 0.07 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 18 = 73 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 IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
5	457	0	457	0	5-8	5-8
3	174	0	174	0	1-8	1-8
4	44	0	49	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	318	239 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	MEMB. FORCE (LBS)	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)			MAX. FACTORED	FORCE (LBS)
FR-TO			FROM	TO				
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		
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		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	=	3.0

BOT CH.	LL	PSF
DL	=	0.0
DL	=	7.0

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.

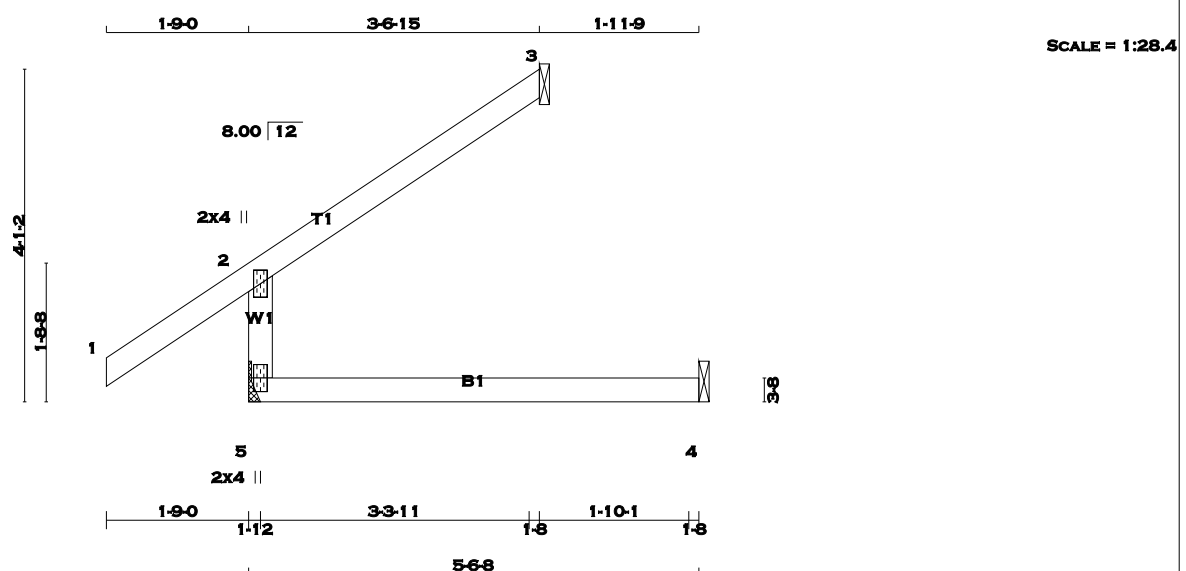
JSI GRIP= 0.25 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



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 IN THE DESIGN OF THIS COMPONENT.





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	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	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)

MEMB.	CHORDS				WEBS			
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LOAD LC1		MAX. UNBRACED LENGTH	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
			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

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.

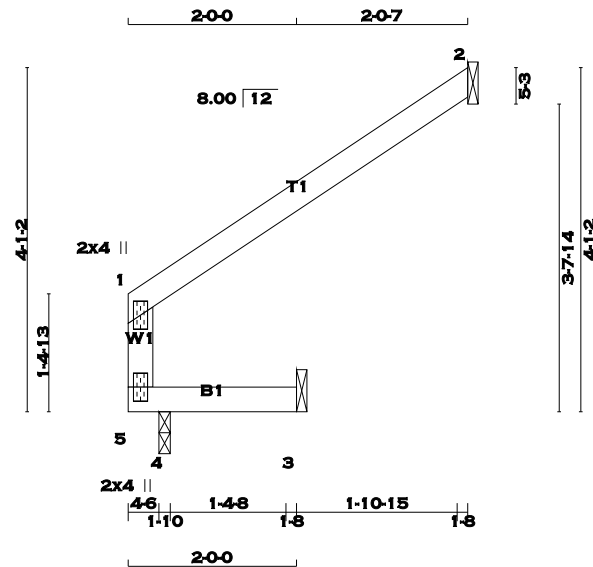
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JSI METAL= 0.08 (2) (INPUT = 1.00)



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SCALE = 1:27.4

TOTAL WEIGHT = 9 lb [M]

LUMBER
N. L. G. A. RULES

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
2	135	0	135	0	0	1-8	1-8
3	18	0	18	0	0	1-8	1-8
4	194	0	194	0	0	1-10	1-10

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 2, 3

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2	92	81/0	0/0	0/0	0/0	11/0	0/0
3	14	3/0	0/0	0/0	0/0	10/0	0/0
4	135	103/0	0/0	0/0	0/0	31/0	0/0

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 = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	MAX. UNBRAC LENGTH			MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO						FR-TO		
5-1	-177/0	0.0	0.0	0.12 (1)	7.81			
1-2	-12/0	-77.4	-77.4	0.16 (1)	6.25			
5-4	0/0	-17.5	-17.5	0.12 (1)	10.00			
4-3	0/0	-17.5	-17.5	0.01 (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 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

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

CSI: TC=0.16 (1-2:1), BC=0.12 (4-5:1), WB=0.00 (n/a:0), 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

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.

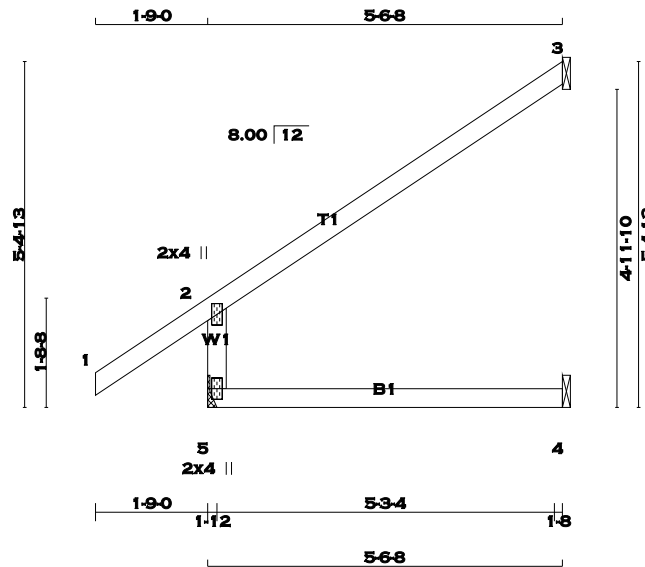
JSI GRIP= 0.11 (1) (INPUT = 0.90)
JSI METAL= 0.04 (1) (INPUT = 1.00)



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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	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	465	0	465	0	0	
3	161	0	161	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	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. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED	FACTORED	MAX. FORCE (LBS)	MAX. FACTORED
FR-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.

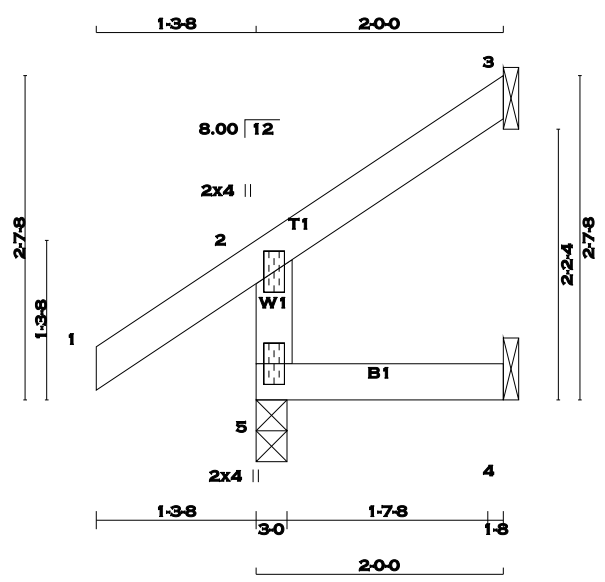
JSI GRIP= 0.26 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 10 X 8 = 80 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

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

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

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

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

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

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

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED				WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	MAX. UNBRAC	MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
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	PSF
DL	23.3	PSF
BOT CH.	LL	PSF
DL	0.0	PSF
DL	7.0	PSF
TOTAL LOAD	33.3	PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
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)	(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= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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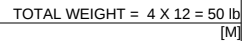
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BUILDING DIVISION

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DRY: SEASONED LUMBER.

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

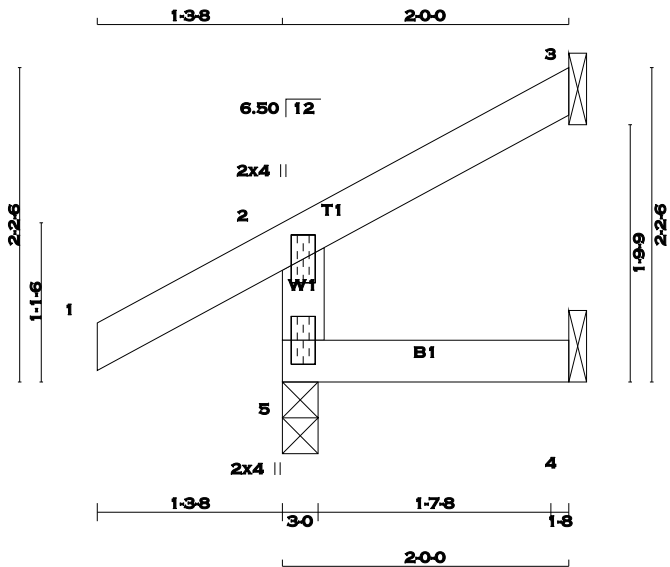
CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO			FR-TO		
1-2	0/16	-77.4	-77.4	0.10	(1)	10.00		
2-3	-14/0	-77.4	-77.4	0.26	(1)	6.25		
5-2	-319/0	0.0	0.0	0.08	(4)	7.81		
5-4	0/0	-17.5	-17.5	0.08	(4)	10.00		

JSI GRIP= 0.27 (5) (INPUT = 0.90)
JSI METAL= 0.04 (5) (INPUT = 1.00)



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SCALE: 3/4"=1'

TOTAL WEIGHT = 7 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	UPLIFT	IN-SX	IN-SX	
5	221	0	221	0	0	3-0	3-0	
3	58	0	58	0	0	1-8	1-8	
4	16	0	17	0	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. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX					
5	153	0	121 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0	0 / 0	0 / 0	0 / 0
3	40	0	35 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	0 / 0	0 / 0	0 / 0
4	12	0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		WEB S		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC (LC)	MEMB. FORCE (LBS)	MAX. FORCE (LBS)	MAX. LC1 (LC)	MAX. UNBRAC (LC)
FR-TO		FROM TO		LENGTH FR-TO				
5-2	-202 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 25	-77.4	-77.4	0.10 (1)	10.00			
2-3	-9 / 0	-77.4	-77.4	0.05 (1)	10.00			
5-4	0 / 0	-17.5	-17.5	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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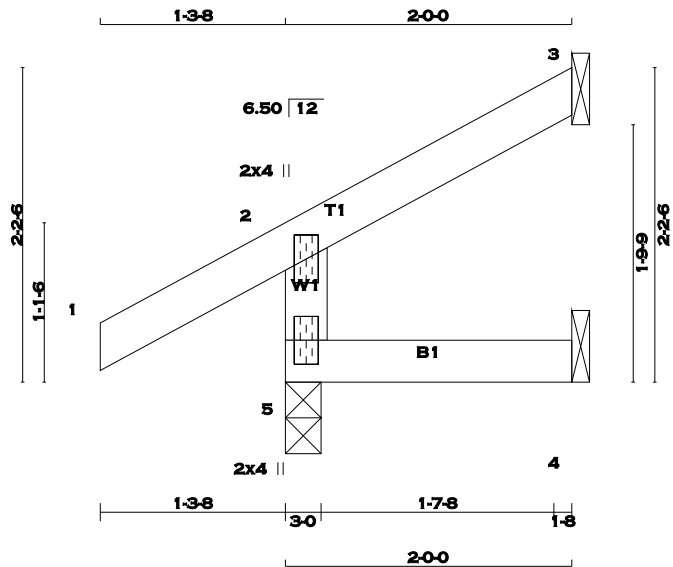
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KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 10:39:28 2017 Page 1

ID:xWoFypMblvVWvErh_hnuKSzb3C6-?muHvK0qERnKZ4TPbzLQiKD_ZXHO4Wjd2C_kPQzajzT



SCALE: 3/4"=1'

TOTAL WEIGHT = 2 X 7 = 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	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	221	0	221	0	3-0	3-0
3	58	0	58	0	1-8	1-8
4	16	0	17	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	153	121 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	12	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS		MAX. FACTORED
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	VERT. LOAD (PLF)	CSI (LC)		MEMB. FORCE (LBS)	MAX. CSI (LC)	
FR-TO			FROM	TO		LENGTH	FR-TO	
5-2	-202 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 25	-77.4	-77.4	0.10 (1)	10.00			
2-3	-9 / 0	-77.4	-77.4	0.05 (1)	10.00			
5-4	0 / 0	-17.5	-17.5	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

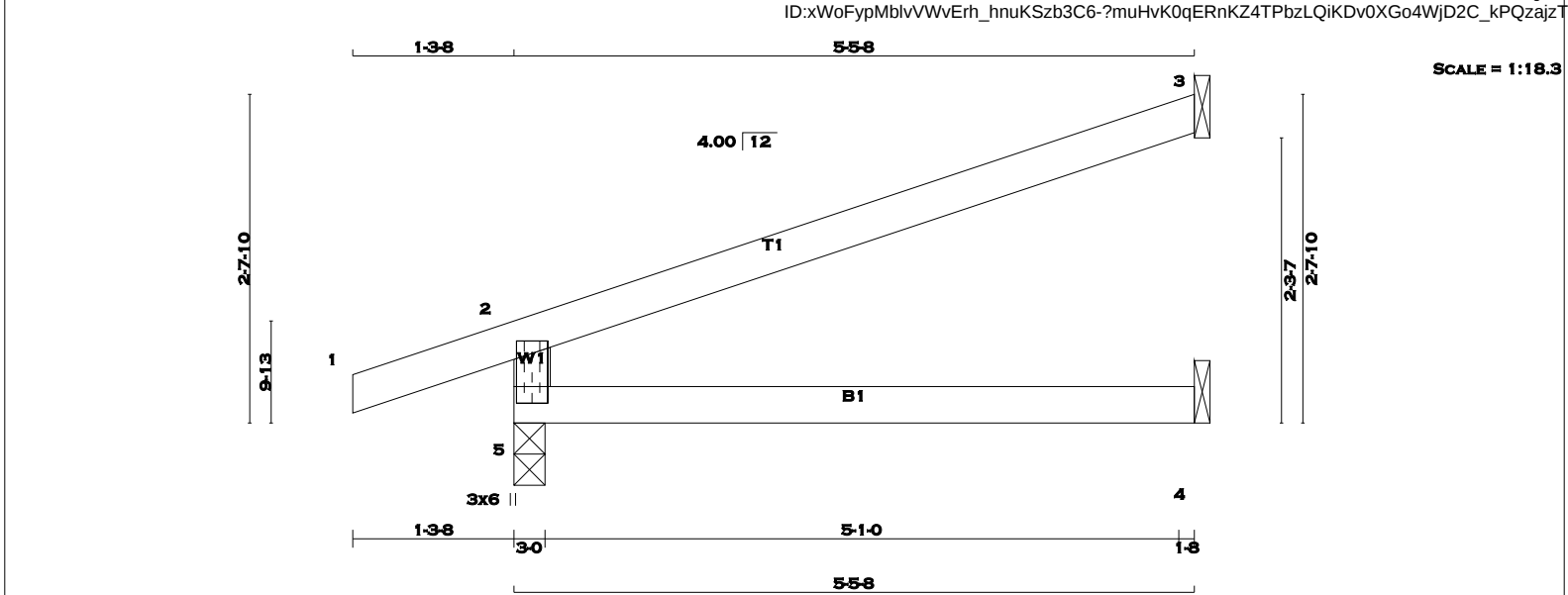
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



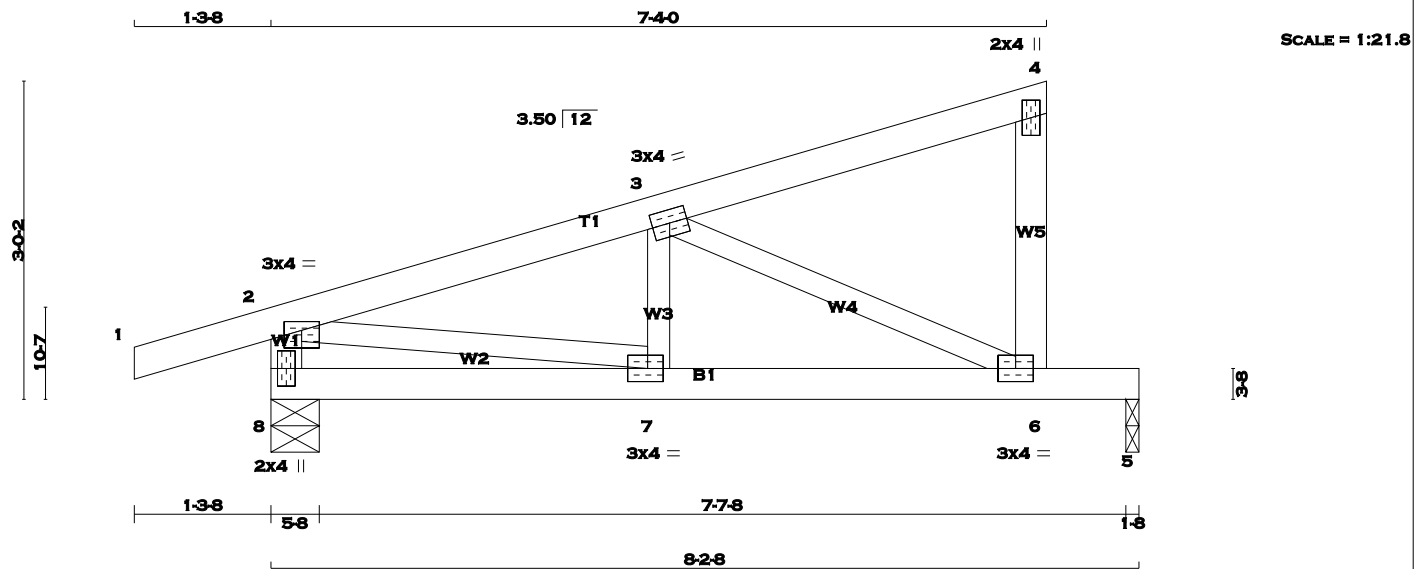
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LUMBER N. L. G. A. RULES <table><tr><td>CHORDS</td><td>SIZE</td><td></td><td>LUMBER</td><td></td><td>DESCR.</td><td></td></tr><tr><td>5 - 2</td><td>2x4</td><td>DRY</td><td>No.2</td><td></td><td>SPF</td><td></td></tr><tr><td>1 - 3</td><td>2x4</td><td>DRY</td><td>No.2</td><td></td><td>SPF</td><td></td></tr><tr><td>5 - 4</td><td>2x4</td><td>DRY</td><td>No.2</td><td></td><td>SPF</td><td></td></tr></table> DRY: SEASONED LUMBER.							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		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td colspan="2">FACTORED GROSS REACTION</td><td colspan="2">MAXIMUM FACTORED GROSS REACTION</td><td>INPUT BRG</td><td>REQRD BRG</td></tr><tr><td>JT</td><td>VERT</td><td>HORZ</td><td>DOWN</td><td>HORZ</td><td>UPLIFT IN-SX</td><td>IN-SX</td></tr><tr><td>5</td><td>424</td><td>0</td><td>424</td><td>0</td><td>3-0</td><td>3-0</td></tr><tr><td>3</td><td>158</td><td>0</td><td>158</td><td>0</td><td>1-8</td><td>1-8</td></tr><tr><td>4</td><td>38</td><td>0</td><td>43</td><td>0</td><td>1-8</td><td>1-8</td></tr></table> SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 3 , 4 UNFACTORED REACTIONS <table><tr><td></td><td>1ST LCASE</td><td colspan="6">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>5</td><td>295</td><td>221 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>74 / 0</td><td>0 / 0</td></tr><tr><td>3</td><td>108</td><td>95 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>12 / 0</td><td>0 / 0</td></tr><tr><td>4</td><td>31</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>31 / 0</td><td>0 / 0</td></tr></table> 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) <table><tr><td colspan="4">CHORDS</td><td colspan="4">WEBS</td></tr><tr><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>FACTORED VERT. LOAD (PLF)</td><td>LC1 MAX. CSI (LC)</td><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>MAX. CSI (LC)</td><td></td></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td>LENGTH</td><td></td></tr><tr><td>5-2</td><td>-367 / 0</td><td>0.0</td><td>0.0 0.12 (4)</td><td>7.81</td><td></td><td></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>10.00</td><td></td><td></td><td></td></tr><tr><td>2-3</td><td>-17 / 0</td><td>-77.4</td><td>-77.4 0.39 (1)</td><td>6.25</td><td></td><td></td><td></td></tr><tr><td>5-4</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.12 (4)</td><td>10.00</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	IN-SX	5	424	0	424	0	3-0	3-0	3	158	0	158	0	1-8	1-8	4	38	0	43	0	1-8	1-8		1ST LCASE	MAX./MIN. COMPONENT REACTIONS						JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	5	295	221 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0	3	108	95 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	4	31	0 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		FR-TO		FROM	TO	FR-TO		LENGTH		5-2	-367 / 0	0.0	0.0 0.12 (4)	7.81				1-2	0 / 16	-77.4	-77.4 0.10 (1)	10.00				2-3	-17 / 0	-77.4	-77.4 0.39 (1)	6.25				5-4	0 / 0	-17.5	-17.5 0.12 (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 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 (0.02") CSI: TC=0.39 (2-3:1) , BC=0.12 (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 <table><tr><td>PLATE</td><td>GRIP(DRY) (PSI)</td><td>SHEAR (PLI)</td><td>SECTION (PLI)</td></tr><tr><td></td><td>MAX MIN</td><td>MAX MIN</td><td>MAX MIN</td></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= 0.32 (5) (INPUT = 0.90) JSI METAL= 0.05 (5) (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) (PSI)	SHEAR (PLI)	SECTION (PLI)		MAX MIN	MAX MIN	MAX MIN	MT20	618 354	1667 822	2284 1656
CHORDS	SIZE		LUMBER		DESCR.																																																																																																																																																																																																																			
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LICENSED PROFESSIONAL ENGINEER P. J. TREVISAN 100136551 March 15th, 2017 PROVINCE OF ONTARIO RECEIVED TOWN OF MILTON MAR 29, 2017 17-5318 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																																																																																																																																																																																																																								



TOTAL WEIGHT = 9 X 30 = 266 lb
[M][F]

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 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	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

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
	VERT	HORZ	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX					
8	341		251 / 0		0 / 0		0 / 0	0 / 0	0 / 0		90 / 0		0 / 0	
5	230		153 / 0		0 / 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					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH
FR-TO		FROM TO			FR-TO		FROM 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/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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

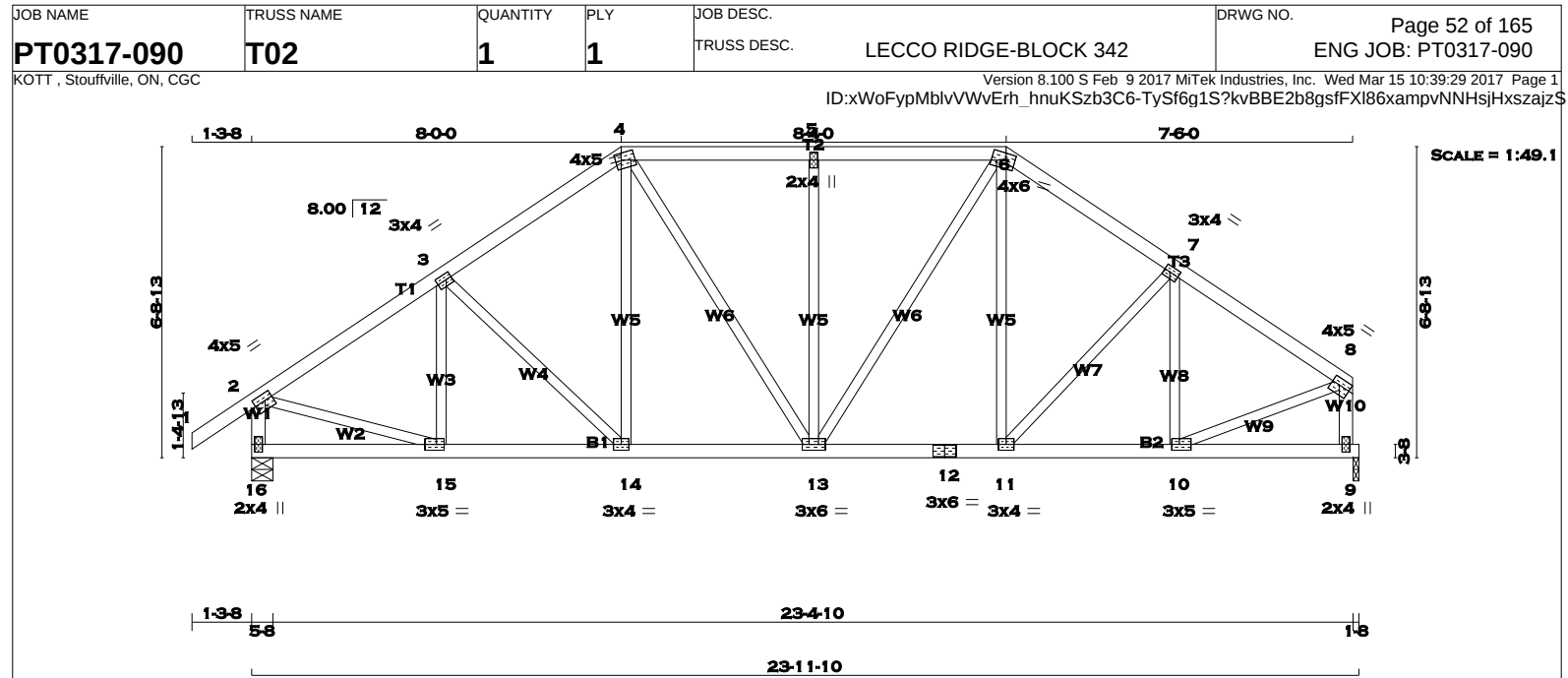
JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.22 (2) (INPUT = 1.00)



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5318
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 = 110 lb		[M][F]		
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 16 - 2 2x4 DRY No.2 SPF 9 - 8 2x4 DRY No.2 SPF 16 - 12 2x4 DRY No.2 SPF 12 - 9 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 16 1237 0 1237 0 0 5-8 5-8 9 1130 0 1130 0 0 1-8 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 16 866 619 / 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) 16, 9 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.59 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MAX. FACTORED FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00 15-3 -202 / 7 0.05 (1) 2-3 -1241 / 0 -77.4 -77.4 0.17 (1) 5.59 3-14 -155 / 0 0.08 (1) 3-4 -1147 / 0 -77.4 -77.4 0.17 (1) 5.76 14-4 0 / 180 0.04 (1) 4-5 -1072 / 0 -77.4 -77.4 0.18 (1) 5.90 4-13 0 / 245 0.06 (1) 5-6 -1072 / 0 -77.4 -77.4 0.18 (1) 5.90 13-5 -390 / 0 0.29 (1) 6-7 -1110 / 0 -77.4 -77.4 0.15 (1) 5.86 13-6 0 / 302 0.07 (1) 7-8 -1127 / 0 -77.4 -77.4 0.15 (1) 5.83 11-6 0 / 120 0.03 (4) 16-2 -1205 / 0 0.0 0.0 0.12 (1) 7.29 11-7 -68 / 0 0.03 (1) 9-8 -1101 / 0 0.0 0.0 0.12 (1) 7.54 10-7 -280 / 0 0.08 (1) 2-15 0 / 1084 0.24 (1) 16-15 0 / 0 -17.5 -17.5 0.06 (4) 10.00 10-8 0 / 1014 0.23 (1) 15-14 0 / 1048 -17.5 -17.5 0.20 (1) 10.00 14-13 0 / 939 -17.5 -17.5 0.18 (1) 10.00 13-12 0 / 908 -17.5 -17.5 0.18 (1) 10.00 12-11 0 / 908 -17.5 -17.5 0.18 (1) 10.00 11-10 0 / 952 -17.5 -17.5 0.18 (1) 10.00 10-9 0 / 0 -17.5 -17.5 0.05 (4) 10.00		DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C 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 (0.06") CSI: TC=0.18 (4-5:1) , BC=0.20 (14-15:1) , WB=0.29 (5-13:1) , SSI=0.15 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (6) (INPUT = 0.90) JSI METAL= 0.42 (2) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

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MAR 29, 2017

17-5318

BUILDING DIVISION

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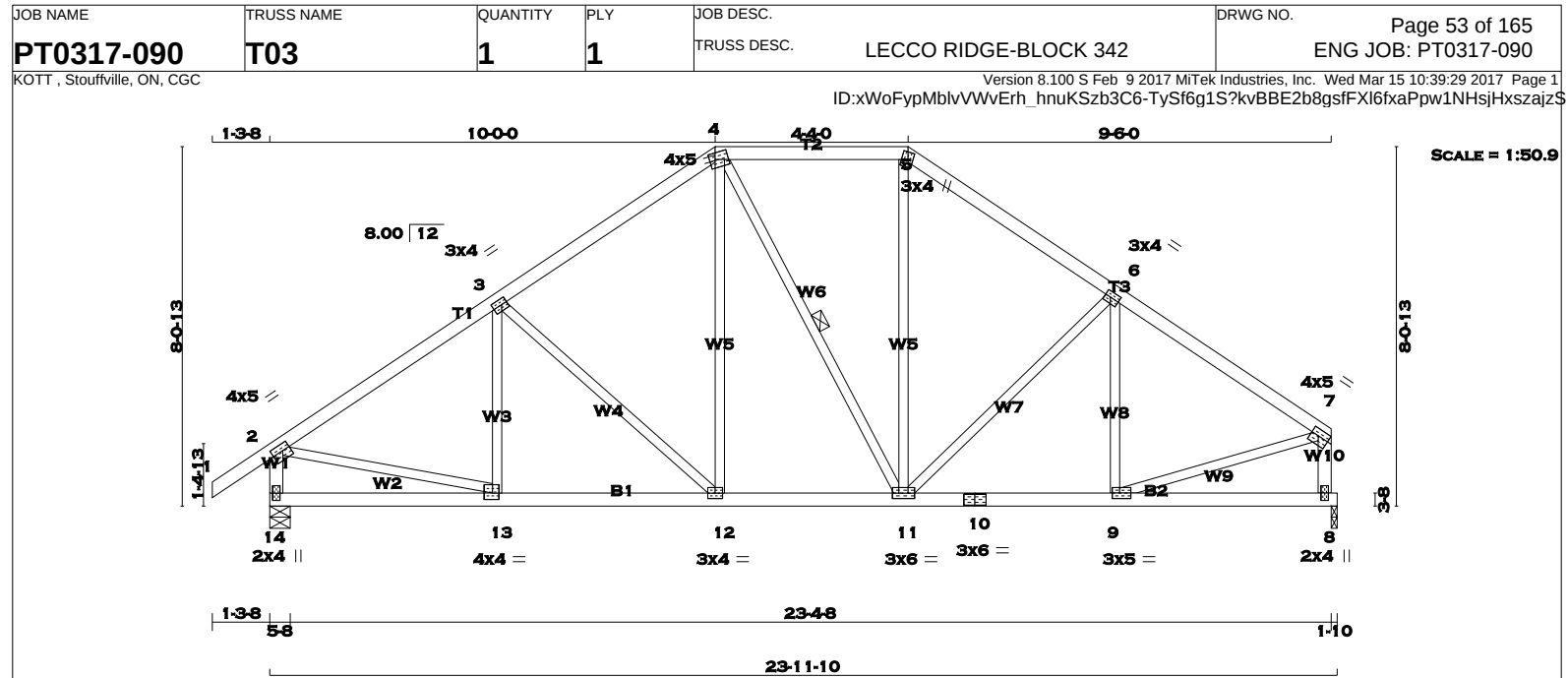
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17-5318
BUILDING DIVISION

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TOTAL WEIGHT = 108 lb		[M][F]																																																																																																																																																																																															
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 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 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>14</td><td>1237</td><td>0</td><td>1237</td><td>0</td></tr><tr><td>8</td><td>1130</td><td>0</td><td>1130</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX/MIN. SNOW</th><th>MAX/MIN. LIVE</th><th>MAX/MIN. PERM. LIVE</th><th>MAX/MIN. WIND</th><th>MAX/MIN. DEAD</th><th>MAX/MIN. SOIL</th></tr><tr><td>14</td><td>866</td><td>619 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>247 / 0</td><td>0 / 0</td></tr><tr><td>8</td><td>793</td><td>555 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>238 / 0</td><td>0 / 0</td></tr></table> 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) <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. UNBRACED LENGTH (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. UNBRACED 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>1-2</td><td>0 / 29</td><td>-77.4 -77.4</td><td>0.10 (1)</td><td>10.00</td><td>13-3</td><td>-129 / 47</td><td>0.04 (1)</td></tr><tr><td>2-3</td><td>-1262 / 0</td><td>-77.4 -77.4</td><td>0.27 (1)</td><td>5.43</td><td>3-12</td><td>-303 / 0</td><td>0.25 (1)</td></tr><tr><td>3-4</td><td>-1044 / 0</td><td>-77.4 -77.4</td><td>0.26 (1)</td><td>5.85</td><td>12-4</td><td>0 / 279</td><td>0.06 (1)</td></tr><tr><td>4-5</td><td>-836 / 0</td><td>-77.4 -77.4</td><td>0.19 (1)</td><td>6.25</td><td>4-11</td><td>-26 / 0</td><td>0.01 (1)</td></tr><tr><td>5-6</td><td>-1028 / 0</td><td>-77.4 -77.4</td><td>0.23 (1)</td><td>5.91</td><td>11-5</td><td>0 / 256</td><td>0.06 (1)</td></tr><tr><td>6-7</td><td>-1168 / 0</td><td>-77.4 -77.4</td><td>0.24 (1)</td><td>5.63</td><td>11-6</td><td>-222 / 0</td><td>0.18 (1)</td></tr><tr><td>14-2</td><td>-1199 / 0</td><td>0.0 0.0</td><td>0.12 (1)</td><td>7.30</td><td>9-6</td><td>-197 / 22</td><td>0.07 (1)</td></tr><tr><td>8-7</td><td>-1095 / 0</td><td>0.0 0.0</td><td>0.12 (1)</td><td>7.55</td><td>2-13</td><td>0 / 1095</td><td>0.25 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>9-7</td><td>0 / 1033</td><td>0.23 (1)</td></tr><tr><td>14-13</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.11 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 1071</td><td>-17.5 -17.5</td><td>0.22 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 849</td><td>-17.5 -17.5</td><td>0.17 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 992</td><td>-17.5 -17.5</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 992</td><td>-17.5 -17.5</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.10 (4)</td><td>10.00</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	14	1237	0	1237	0	8	1130	0	1130	0	JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. 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	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)	10.00	13-3	-129 / 47	0.04 (1)	2-3	-1262 / 0	-77.4 -77.4	0.27 (1)	5.43	3-12	-303 / 0	0.25 (1)	3-4	-1044 / 0	-77.4 -77.4	0.26 (1)	5.85	12-4	0 / 279	0.06 (1)	4-5	-836 / 0	-77.4 -77.4	0.19 (1)	6.25	4-11	-26 / 0	0.01 (1)	5-6	-1028 / 0	-77.4 -77.4	0.23 (1)	5.91	11-5	0 / 256	0.06 (1)	6-7	-1168 / 0	-77.4 -77.4	0.24 (1)	5.63	11-6	-222 / 0	0.18 (1)	14-2	-1199 / 0	0.0 0.0	0.12 (1)	7.30	9-6	-197 / 22	0.07 (1)	8-7	-1095 / 0	0.0 0.0	0.12 (1)	7.55	2-13	0 / 1095	0.25 (1)						9-7	0 / 1033	0.23 (1)	14-13	0 / 0	-17.5 -17.5	0.11 (4)	10.00				13-12	0 / 1071	-17.5 -17.5	0.22 (1)	10.00				12-11	0 / 849	-17.5 -17.5	0.17 (1)	10.00				11-10	0 / 992	-17.5 -17.5	0.20 (1)	10.00				10-9	0 / 992	-17.5 -17.5	0.20 (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=0.27 (2-3:1) , BC=0.22 (12-13:1) , WB=0.25 (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 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= 0.43 (2) (INPUT = 1.00)	
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																													
JT	VERT	HORZ	DOWN	HORZ																																																																																																																																																																																													
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LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

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TOWN OF MILTON

MAR 29, 2017

17-5318

BUILDING DIVISION

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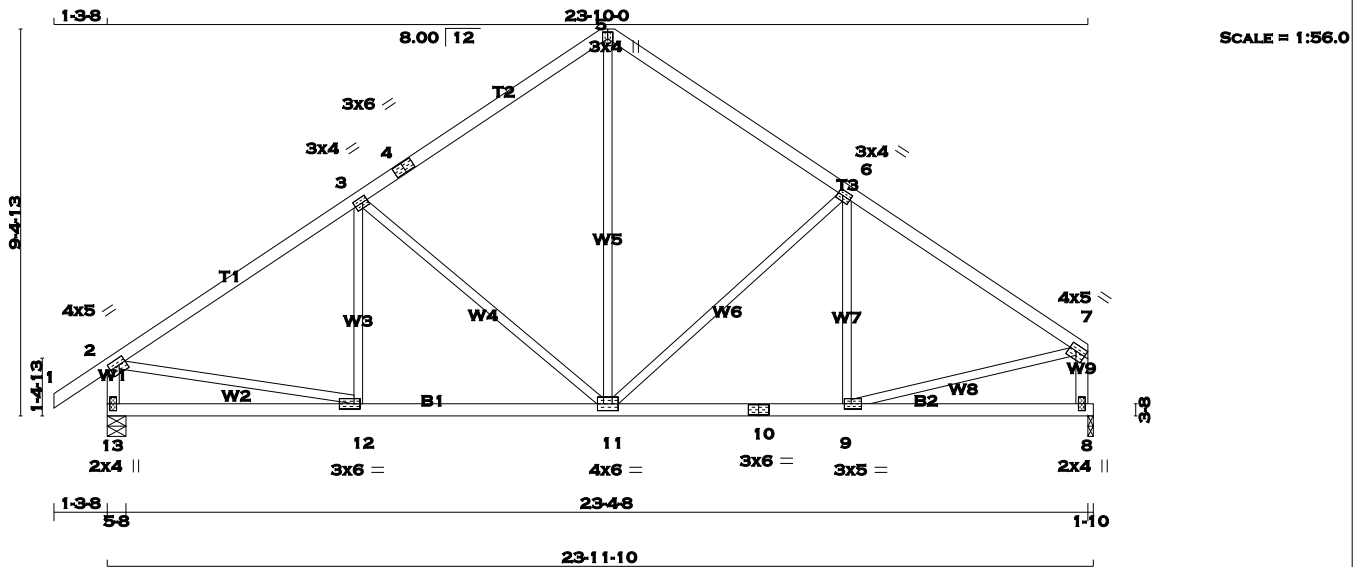
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LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 5	2x4	DRY	No.2		
5 - 7	2x4	DRY	No.2		
13 - 2	2x4	DRY	No.2		
8 - 7	2x4	DRY	No.2		
13 - 10	2x4	DRY	No.2		
10 - 8	2x4	DRY	No.2		
ALL WEBS EXCEPT	2x3	DRY	No.2		SPF
DRY: SEASONED LUMBER.					

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
13		1237	0	1237	0	0	5-8	5-8	
8		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	
13		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) 13, 8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS				WEBS			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	LC1 MAX (PLF)	LC1 MAX (LC)
FR-TO		FROM TO		LENGTH		FR-TO		LENGTH	
1-2		0 / 29	-77.4	-77.4	0.10 (1)	10.00	12-3	-72 / 80	0.03 (1)
2-3		-1261 / 0	-77.4	-77.4	0.41 (1)	5.25	3-11	-443 / 0	0.58 (1)
3-4		-918 / 0	-77.4	-77.4	0.39 (1)	5.93	11-6	-368 / 0	0.47 (1)
4-5		-918 / 0	-77.4	-77.4	0.39 (1)	5.93	9-6	-131 / 57	0.06 (1)
5-6		-917 / 0	-77.4	-77.4	0.35 (1)	5.99	2-12	0 / 1092	0.25 (1)
6-7		-1182 / 0	-77.4	-77.4	0.37 (1)	5.44	9-7	0 / 1038	0.23 (1)
13-2		-1193 / 0	0.0	0.0	0.12 (1)	7.32	11-5	0 / 636	0.14 (1)
8-7		-1088 / 0	0.0	0.0	0.12 (1)	7.57			
13-12		0 / 0	-17.5	-17.5	0.16 (4)	10.00			
12-11		0 / 1075	-17.5	-17.5	0.25 (1)	10.00			
11-10		0 / 1009	-17.5	-17.5	0.23 (1)	10.00			
10-9		0 / 1009	-17.5	-17.5	0.23 (1)	10.00			
9-8		0 / 0	-17.5	-17.5	0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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=0.41 (2-3:1) , BC=0.25 (11-12:1) , WB=0.58 (3-11:1) , SS=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)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

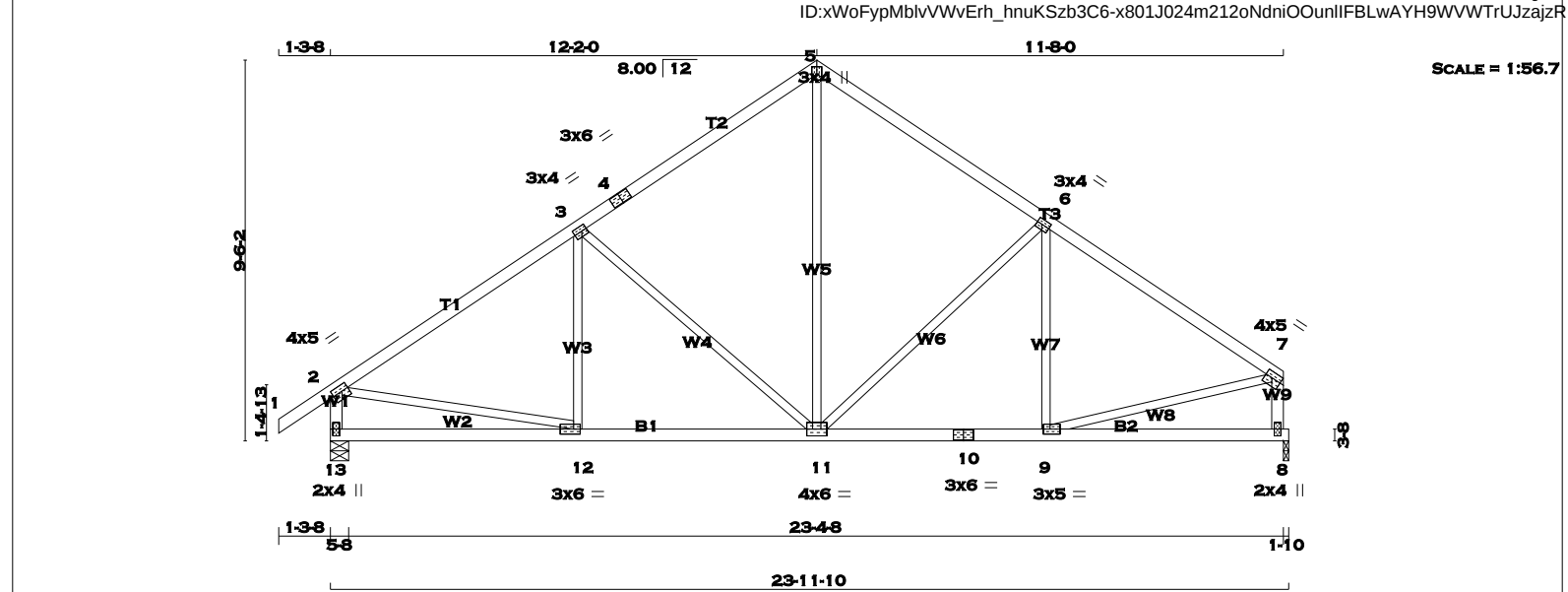
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.43 (2) (INPUT = 1.00)



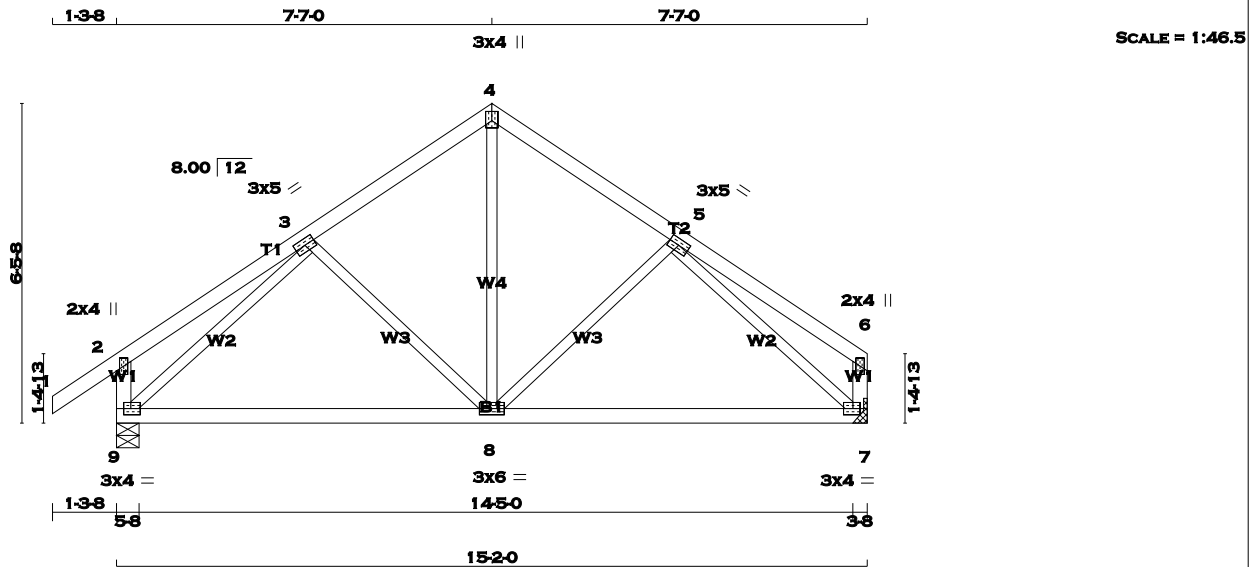
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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





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 13- 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 13- 10 2x4 DRY No.2 10- 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.			DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF		
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 4.0 5.0 1.75 2.00 3 TMVW-t MT20 3.0 4.0 1.50 1.50 4 TS-t MT20 3.0 6.0 5 TTW+p MT20 3.0 4.0 2.25 1.50 6 TMVW-t MT20 3.0 4.0 1.50 1.50 7 TMVW-t MT20 4.0 5.0 1.75 Edge 8 BMV1+p MT20 2.0 4.0 9 BMVW-t MT20 3.0 5.0 1.50 2.00 10 BS-t MT20 3.0 6.0 11 BMVW-t MT20 4.0 6.0 12 BMVW-t MT20 3.0 6.0 1.50 2.00 13 BMV1+p MT20 2.0 4.0 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD. A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.			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 (0.79") 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=0.41 (2-3:1) , BC=0.25 (11-12:1) , WB=0.58 (3-11:1) , 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 (P.S.I) (P.L.I) (P.L.I) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (12) (INPUT = 0.90) JSI METAL= 0.43 (2) (INPUT = 1.00)		
LOADING TOTAL LOAD CASES: (4) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (LBS) MAX. FACTORED HORIZ. LOAD (LBS) MAX. FACTORED TORSION (LBS) MAX. FACTORED MOMENT (LBS) MAX. FACTORED AXIAL (LBS) MAX. FACTORED SHEAR (LBS) MAX. FACTORED TENSION (LBS) MAX. FACTORED COMPRESSION (LBS) FR-TO 1-2 0 / 29 -77.4 -77.4 0.10 (1) 10.00 12-3 -69 / 81 0.03 (1) 2-3 -1258 / 0 -77.4 -77.4 0.41 (1) 5.25 3-11 -445 / 0 0.58 (1) 3-4 -918 / 0 -77.4 -77.4 0.38 (1) 5.94 11-5 0 / 644 0.14 (1) 4-5 -918 / 0 -77.4 -77.4 0.38 (1) 5.94 11-6 -370 / 0 0.47 (1) 5-6 -917 / 0 -77.4 -77.4 0.35 (1) 5.99 9-6 -127 / 59 0.06 (1) 6-7 -1181 / 0 -77.4 -77.4 0.37 (1) 5.43 2-12 0 / 1089 0.25 (1) 13-2 -1192 / 0 0.0 0.0 0.12 (1) 7.32 9-7 0 / 1036 0.23 (1) 8-7 -1087 / 0 0.0 0.0 0.12 (1) 7.58 13-12 0 / 0 -17.5 -17.5 0.16 (4) 10.00 12-11 0 / 1073 -17.5 -17.5 0.25 (1) 10.00 11-10 0 / 1008 -17.5 -17.5 0.23 (1) 10.00 10-9 0 / 1008 -17.5 -17.5 0.23 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.14 (4) 10.00			BEARINGS FACTORED GROSS REACTION JT VERT HORZ 13 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 13 866 619 / 0 0 / 0 0 / 0 247 / 0 0 / 0 8 793 555 / 0 0 / 0 0 / 0 0 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 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.		



TOTAL WEIGHT = 2 X 63 = 126 lb
[M][F]

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

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	GROSS REACTION	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
9	826	0	826	0	0
7	719	0	719	0	0

HANGER BY OTHERS
MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
9	577	417 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0	
7	505	353 / 0	0 / 0	0 / 0	0 / 0	152 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	LC1 MAX (LC)	UNBRAC LENGTH
FR-TO		FROM	TO	FR-TO		FROM	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/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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

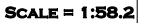
JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.23 (5) (INPUT = 1.00)



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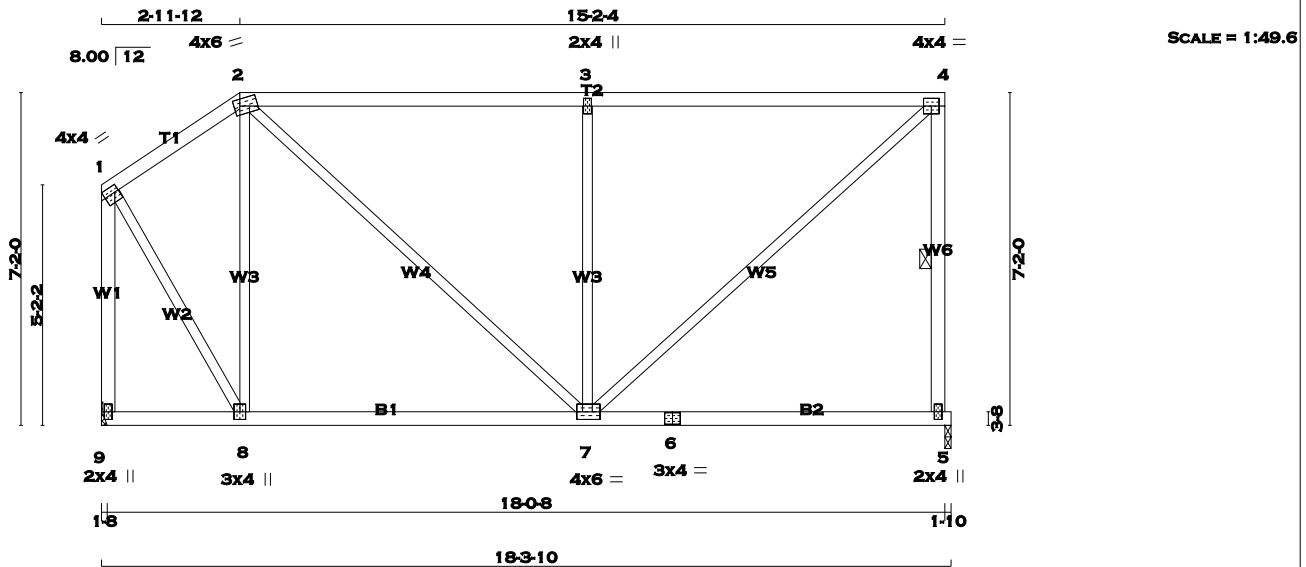
READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





[M][F]





TOTAL WEIGHT = 86 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
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	4.0	6.0	1.75	1.50
3	TMVW-w	MT20	2.0	4.0		
4	TMVW-t	MT20	4.0	4.0		
5	BMV1+p	MT20	2.0	4.0		
6	BS-t	MT20	3.0	4.0		
7	BMWWW-t	MT20	4.0	6.0	2.00	1.50
8	BMWWW-t	MT20	3.0	4.0		
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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
5	862	0	862	0	0
9	862	0	862	0	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
9	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 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 = 5.49 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 = 18-0-0 . 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

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	-395 / 0	-77.4 -77.4	0.12 (1)	6.25	8-2	-415 / 0	0.37 (1)
2-3	-650 / 0	-77.4 -77.4	0.81 (1)	5.49	2-7	0 / 446	0.10 (1)
3-4	-651 / 0	-77.4 -77.4	0.81 (1)	5.49	7-3	-730 / 0	0.65 (1)
5-4	-808 / 0	0.0 0.0	0.19 (1)	6.25	7-4	0 / 872	0.20 (1)
9-1	-851 / 0	0.0 0.0	0.42 (1)	7.81	1-8	0 / 611	0.14 (1)
9-8	0 / 0	-17.5 -17.5	0.12 (4)	10.00			
8-7	0 / 321	-17.5 -17.5	0.28 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.26 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.26 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.81 (3-4:1) , BC=0.28 (7-8:4) , WB=0.65 (3-7:1) , SSI=0.29 (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.

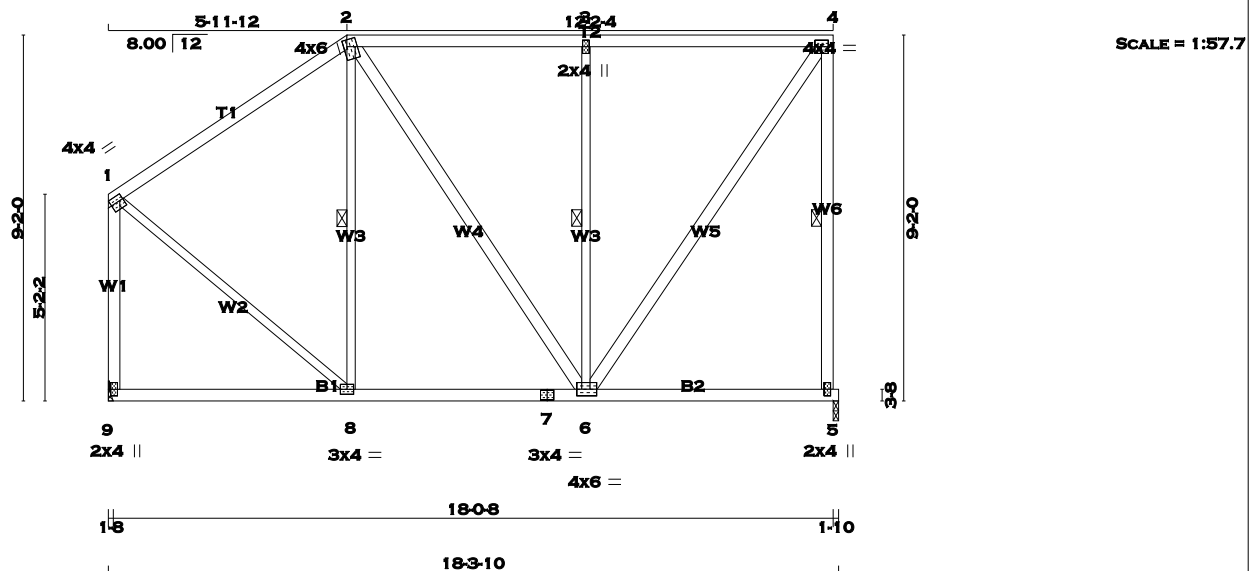
JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.24 (4) (INPUT = 1.00)



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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 = 102 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 - 7	2x4	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
2 - 6	2x4	DRY	No.2	SPF
8 - 4	2x4	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	TMW+w	MT20	2.0	4.0	
4	TMVW-t	MT20	4.0	4.0	
5	BMV1+p	MT20	2.0	4.0	
6	BMWWW-t	MT20	4.0	6.0	2.00 1.50
7	BS-t	MT20	3.0	4.0	
8	BMWW-t	MT20	3.0	4.0	
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									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	MIN. SEAT SIZE: 1-8		
5	862	0	862	0	0	1-10	1-10		
9	862	0	862	0	0				

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
5	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
9	605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-5. DBS = 18-0-0 . CBF = 92 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-8, 3-6. 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
1-2	-481 / 0	-77.4 -77.4	0.50 (1)	6.25	8-2	-204 / 30	0.11 (1)
2-3	-442 / 0	-77.4 -77.4	0.50 (1)	6.25	2-6	0 / 80	0.01 (1)
3-4	-442 / 0	-77.4 -77.4	0.50 (1)	6.25	6-3	-585 / 0	0.32 (1)
5-4	-817 / 0	0.0 0.0	0.32 (1)	6.25	6-4	0 / 773	0.12 (1)
9-1	-819 / 0	0.0 0.0	0.40 (1)	7.81	1-8	0 / 512	0.12 (1)
9-8	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
8-7	0 / 398	-17.5 -17.5	0.18 (4)	10.00			
7-6	0 / 398	-17.5 -17.5	0.18 (4)	10.00			
6-5	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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.50 (1-2:1) , BC=0.18 (6-8:4) , WB=0.32 (3-6:1) , SSI=0.23 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

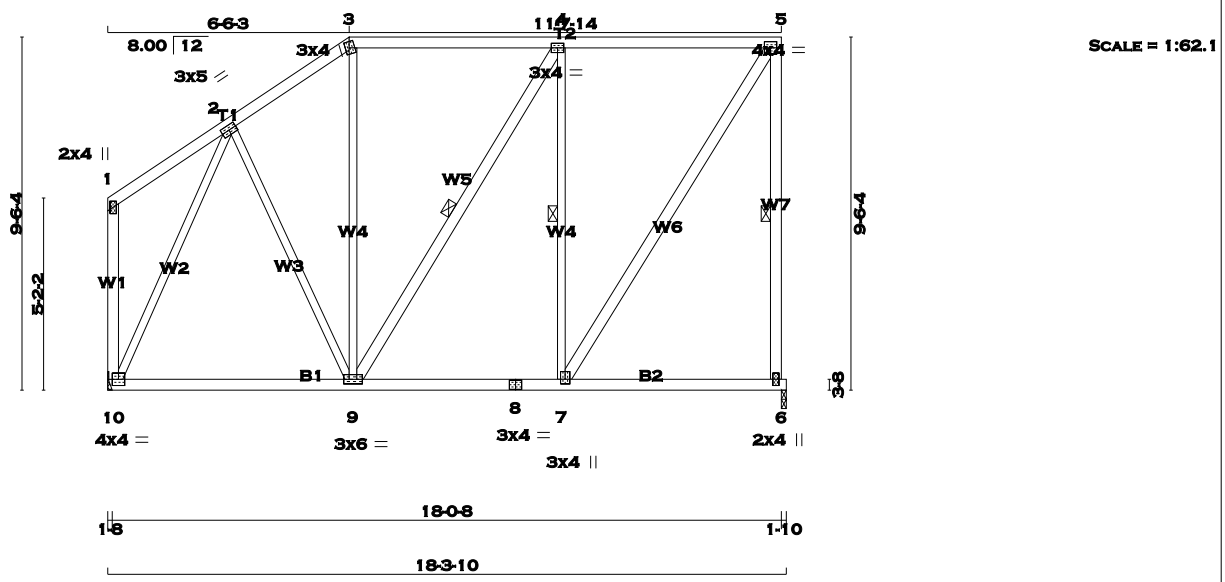
JSI GRIP= 0.88 (2) (INPUT = 0.90)
JSI METAL= 0.23 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 109 lb [M]

LUMBER					N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.					
1 - 3	2x4	DRY	No.2	SPF					
3 - 5	2x4	DRY	No.2	SPF					
6 - 5	2x4	DRY	No.2	SPF					
10 - 1	2x4	DRY	No.2	SPF					
10 - 8	2x4	DRY	No.2	SPF					
8 - 6	2x4	DRY	No.2	SPF					
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF					
9 - 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	TMWW-t	MT20	3.0	5.0		
3	TTW+m	MT20	3.0	4.0	2.00	1.25
4	TMWW-t	MT20	3.0	4.0		
5	TMVW-t	MT20	4.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMWW+t	MT20	3.0	4.0	1.50	1.50
8	BS-t	MT20	3.0	4.0		
9	BMWWW-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									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
6		862	0	862	0	0	1-10	1-10	
10		862	0	862	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6		605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 0
10		605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 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 = 18-0-0 . CBF = 92 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-9, 4-7. DBS = 20-0-0 . CBF = 67 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)	FACTORED MAX LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX LC1 (LC)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO			FR-TO				
1-2	0 / 16	-77.4 -77.4	0.13 (1)	10.00	2-9	0 / 151	0.03 (1)		
2-3	-497 / 0	-77.4 -77.4	0.13 (1)	6.25	9-3	0 / 54	0.02 (4)		
3-4	-399 / 0	-77.4 -77.4	0.45 (1)	6.25	9-4	-29 / 8	0.02 (1)		
4-5	-414 / 0	-77.4 -77.4	0.45 (1)	6.25	7-4	-536 / 0	0.32 (1)		
6-5	-819 / 0	0.0 0.0	0.35 (1)	6.25	7-5	0 / 765	0.12 (1)		
10-1	-99 / 0	0.0 0.0	0.05 (1)	7.81	10-2	-789 / 0	0.94 (1)		
10-9	0 / 334	-17.5 -17.5	0.19 (4)	10.00					
9-8	0 / 414	-17.5 -17.5	0.19 (4)	10.00					
8-7	0 / 414	-17.5 -17.5	0.19 (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

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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.45 (4-5:1) , BC=0.19 (7-9:4) , WB=0.94 (2-10:1) , 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

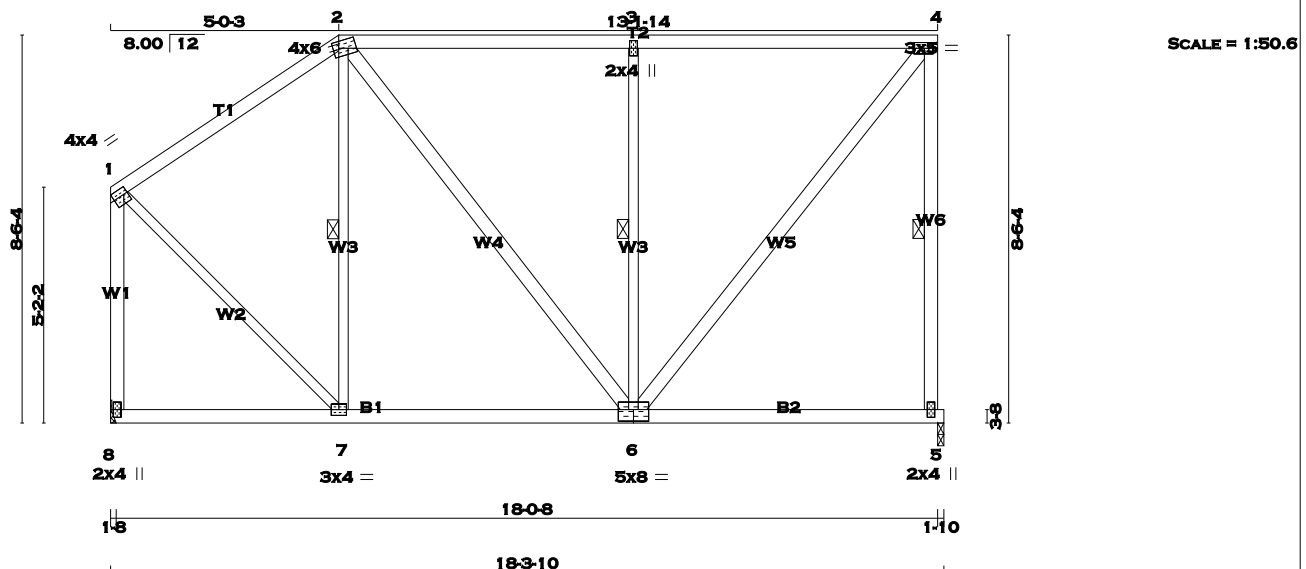
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.20 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 99 lb

<u>LUMBER</u>					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER	DESCR.	
1 - 2	2x4	DRY	No.2	SPF	
2 - 4	2x4	DRY	No.2	SPF	
5 - 4	2x4	DRY	No.2	SPF	
8 - 1	2x4	DRY	No.2	SPF	
8 - 6	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT		2x3	DRY	No.2	SPF
2 - 6	2x4	DRY	No.2	SPF	
6 - 4	2x4	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TTVW-t	MT20	4.0	4.0	1.75	Edge
2	TTVW-m	MT20	4.0	6.0	1.75	1.50
3	MTW+w	MT20	2.0	4.0		
4	MTVW-t	MT20	3.0	5.0	1.50	2.25
5	BMV1+p	MT20	2.0	4.0		
6	BSWWWW-l	MT20	5.0	8.0	3.00	4.00
7	BMWW-t	MT20	3.0	4.0		
8	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			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
JT	862	0	862	0	0	1-10	1-10
5	862	0	862	0	0	HANGER BY OTHERS	
8	862	0	862	0	0	MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
8	605	423 / 0	0 / 0	0 / 0	0 / 0	182 / 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-5. DBS = 18-0-0 . CBF = 92 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-7, 3-6. DBS = 20-0-0 . CBF = 79 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"X3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 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. UNBRAC	MEMB.	MAX. FACTORED	MAX CSI (LC)	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX CSI (LC)			FORCE (LBS)		
FR-TO		FROM	TO		LENGTH	FR-TO			
1-2	-471 / 0	-77.4	-77.4	0.35 (1)	6.25	7-2	-264 / 5	0.12 (1)	
2-3	-501 / 0	-77.4	-77.4	0.59 (1)	6.25	2-6	0 / 183	0.03 (1)	
3-4	-501 / 0	-77.4	-77.4	0.59 (1)	6.25	6-3	-633 / 0	0.29 (1)	
5-4	-814 / 0	0.0	0.0	0.27 (1)	6.25	6-4	0 / 795	0.13 (1)	
8-1	-827 / 0	0.0	0.0	0.41 (1)	7.81	1-7	0 / 539	0.12 (1)	
8-7	0 / 0	-17.5	-17.5	0.12 (4)	10.00				
7-6	0 / 388	-17.5	-17.5	0.22 (4)	10.00				
6-5	0 / 0	-17.5	-17.5	0.19 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE
OF 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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.59 (3-4:1) , BC=0.22 (6-7:4) , WB=0.29 (3-6:1) , SSI=0.25 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

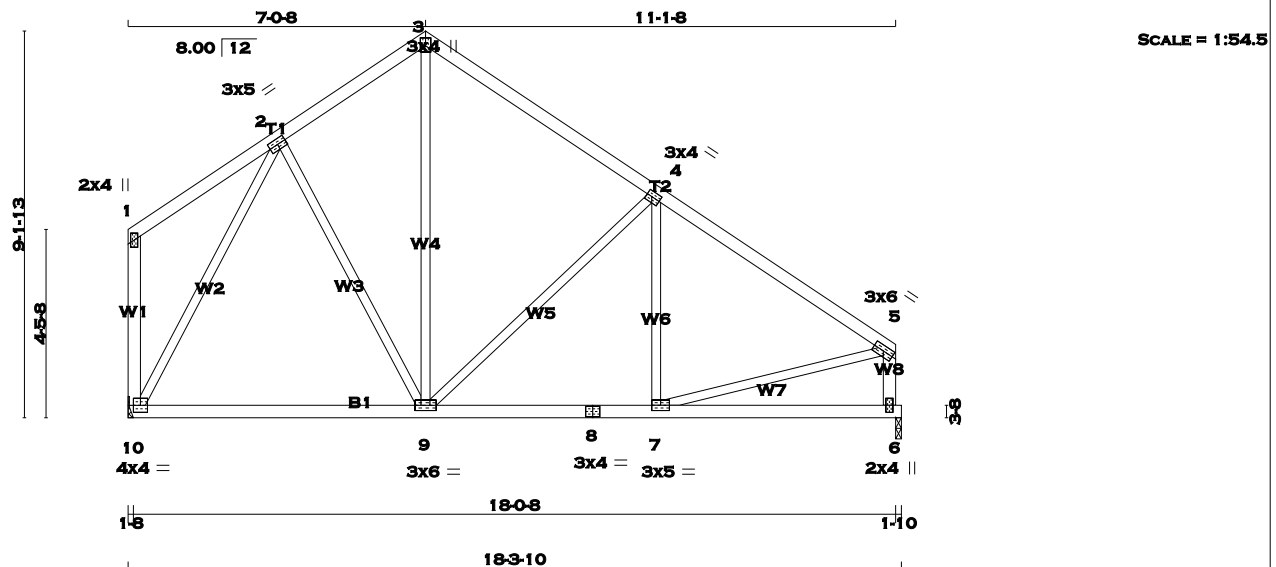
JSI GRIP= 0.88 (4) (INPUT = 0.90)
JSI METAL= 0.22 (1) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.**





TOTAL WEIGHT = 3 X 85 = 255 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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
10	862	0	862	0	0		HANGER BY OTHERS		
							MIN. SEAT SIZE: 1-8		
6	862	0	862	0	0	1-10	1-10		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0
6	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC) (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	0 / 17	-77.4	-77.4 0.15 (1)	10.00	2-9	0 / 94	0.02 (4)
2-3	-534 / 0	-77.4	-77.4 0.12 (1)	6.25	9-3	0 / 312	0.07 (1)
3-4	-546 / 0	-77.4	-77.4 0.31 (1)	6.25	9-4	-389 / 0	0.44 (1)
4-5	-826 / 0	-77.4	-77.4 0.32 (1)	6.25	7-4	-79 / 60	0.04 (1)
10-1	-107 / 0	0.0	0.0 0.04 (1)	7.81	10-2	-802 / 0	0.83 (1)
6-5	-819 / 0	0.0	0.0 0.09 (1)	7.81	7-5	0 / 733	0.16 (1)
10-9	0 / 385	-17.5	-17.5 0.21 (4)	10.00			
9-8	0 / 711	-17.5	-17.5 0.23 (4)	10.00			
8-7	0 / 711	-17.5	-17.5 0.23 (4)	10.00			
7-6	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

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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.32 (4-5:1), BC=0.23 (7-9:4), WB=0.83 (2-10:1), 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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

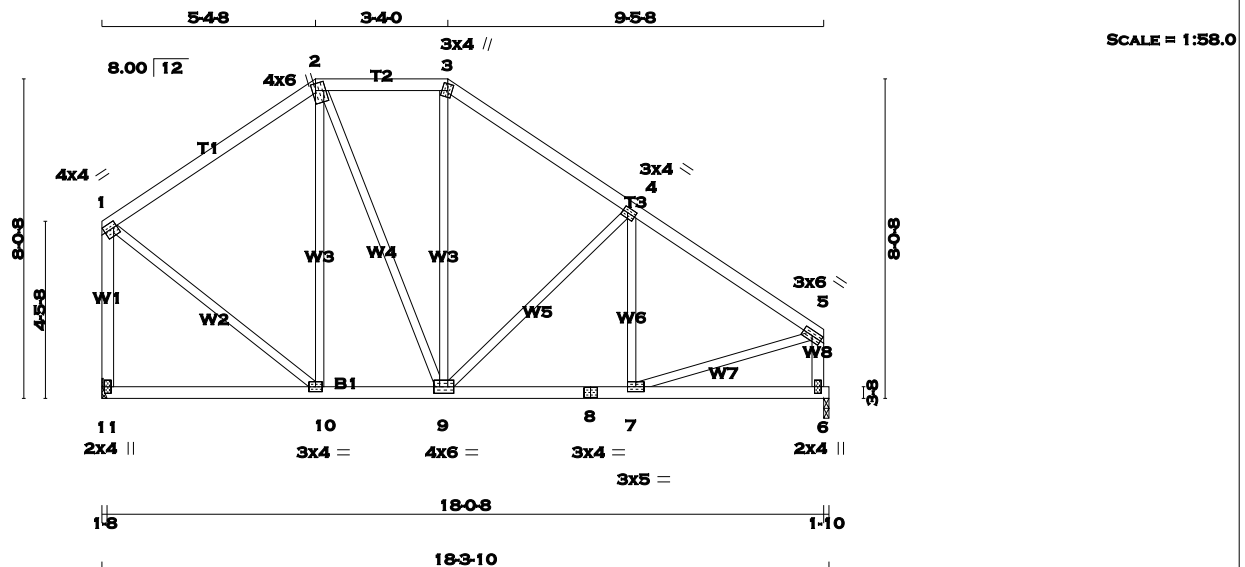
JSI GRIP= 0.88 (9) (INPUT = 0.90)
JSI METAL= 0.24 (5) (INPUT = 1.00)



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





TOTAL WEIGHT = 88 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 2	2x4	DRY	No.2	SPF	
2 - 3	2x4	DRY	No.2	SPF	
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-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	4.0	6.0		
10	BMVW-t	MT20	3.0	4.0		
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		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
11	862	0	862	0	0	HANGER BY OTHERS			
6	862	0	862	0	0	MIN. SEAT SIZE: 1-8	1-10	1-10	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
11	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0
6	605	423 / 0	0 / 0	0 / 0	0 / 0	0 / 0	182 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. (LC)	MEMB.	FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-519 / 0	-77.4	-77.4 0.29 (1)	6.25	10-2	-231 / 5	0.29 (1)
2-3	-504 / 0	-77.4	-77.4 0.11 (1)	6.25	2-9	0 / 198	0.04 (1)
3-4	-631 / 0	-77.4	-77.4 0.22 (1)	6.25	9-3	0 / 75	0.02 (4)
4-5	-833 / 0	-77.4	-77.4 0.23 (1)	6.25	9-4	-293 / 0	0.23 (1)
11-1	-822 / 0	0.0	0.0 0.28 (1)	7.81	7-4	-111 / 49	0.04 (1)
6-5	-827 / 0	0.0	0.0 0.09 (1)	7.81	1-10	0 / 540	0.12 (1)
					7-5	0 / 743	0.17 (1)
11-10	0 / 0	-17.5	-17.5 0.11 (4)	10.00			
10-9	0 / 428	-17.5	-17.5 0.14 (4)	10.00			
9-8	0 / 713	-17.5	-17.5 0.17 (1)	10.00			
8-7	0 / 713	-17.5	-17.5 0.17 (1)	10.00			
7-6	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 (0.61")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.61")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.29 (1-2:1), BC=0.17 (7-9:1), WB=0.29 (2-10:1), SSI=0.15 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

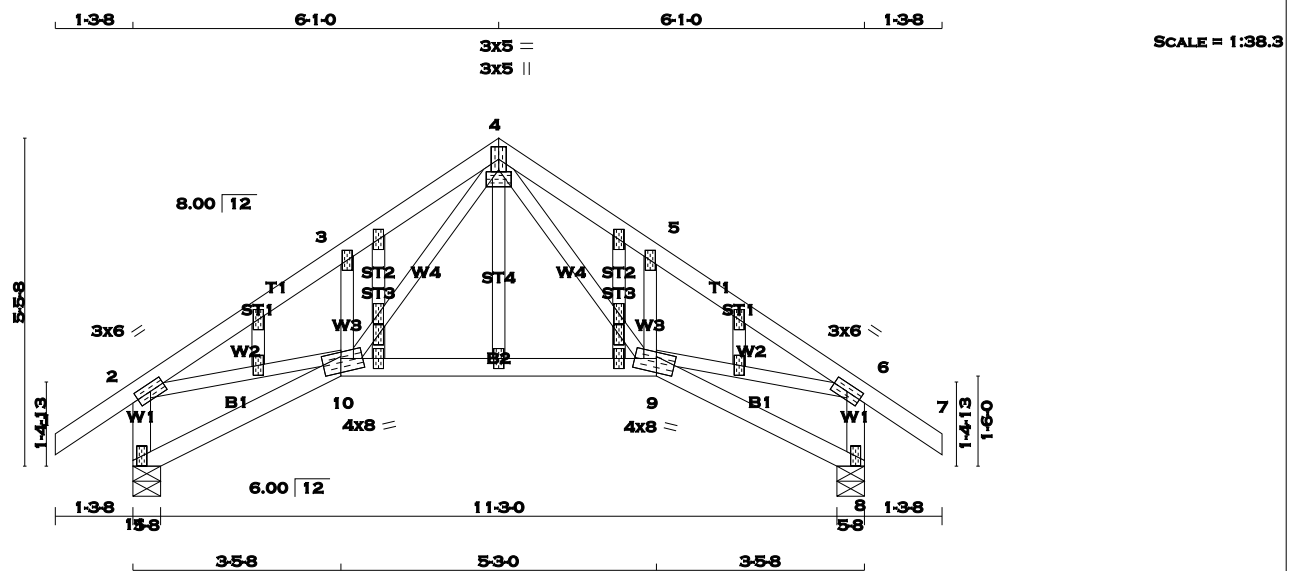
JSI GRIP= 0.88 (5) (INPUT = 0.90)
JSI METAL= 0.24 (1) (INPUT = 1.00)



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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS			DESIGN CRITERIA		
1 - 4	2x4	DRY	No.2	SPF		SPECIFIED LOADS:		
4 - 7	2x4	DRY	No.2	SPF		TOP CH.	LL =	23.3 PSF
11 - 2	2x4	DRY	No.2	SPF			DL =	3.0 PSF
8 - 6	2x4	DRY	No.2	SPF		BOT CH.	LL =	0.0 PSF
11 - 10	2x4	DRY	No.2	SPF			DL =	7.0 PSF
10 - 9	2x4	DRY	No.2	SPF		TOTAL LOAD	=	33.3 PSF
9 - 8	2x4	DRY	No.2	SPF		SPACING = 24.0 IN./C		
ALL WEBS 2x3 DRY No.2			SPF			THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
EXCEPT						THIS DESIGN COMPLIES WITH:		
ALL GABLE WEBS						- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014		
2x3 DRY No.2			SPF			- CSA 086-09		
DRY: SEASONED LUMBER.						- TPIC 2011		
GABLE STUDS SPACED AT 2-0-0 OC.						(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		
PLATES (table is in inches)						ALLOWABLE DEFL.(LL)= L/360 (0.41")		
JT TYPE	PLATES	W	LEN	Y	X	CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")		
2 TMVW-t	MT20	3.0	6.0			ALLOWABLE DEFL.(TL)= L/360 (0.41")		
3 TMW+w	MT20	2.0	4.0			CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")		
4 TTWW+p	MT20	3.0	5.0			CSI: TC=0.12 (2-3:1) , BC=0.17 (9-10:4) , WB=0.18 (2-10:1) , SSI=0.10 (2-3:1)		
4 NP-p	MT20	3.0	5.0	0.25	2.50	DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10		
5 TMW+w	MT20	2.0	4.0			COMP=1.10 SHEAR=1.10 TENS= 1.10		
6 TMVW-t	MT20	3.0	6.0			COMPANION LIVE LOAD FACTOR = 0.50		
8 BMV1+p	MT20	2.0	4.0			AUTOSOLVE HEELS OFF		
9 BBWWW-m	MT20	4.0	8.0	2.75	3.75	TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .		
10 BBWWW-m	MT20	4.0	8.0	2.75	3.75	NAIL VALUES		
11 BMV1+p	MT20	2.0	4.0			PLATE GRIP(DRY) SHEAR SECTION		
12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	MT20	2.0	4.0			(PSI) (PLI) (PLI)		
12 NP+w	MT20	2.0	4.0			MAX MIN MAX MIN MAX MIN		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						MT20 618 354 1667 822 2284 1656		
						PLATE PLACEMENT TOL. = 0.250 inches		
						PLATE ROTATION TOL. = 5.0 Deg.		
						JSI GRIP= 0.81 (4) (INPUT = 0.90)		
						JSI METAL= 0.27 (2) (INPUT = 1.00)		

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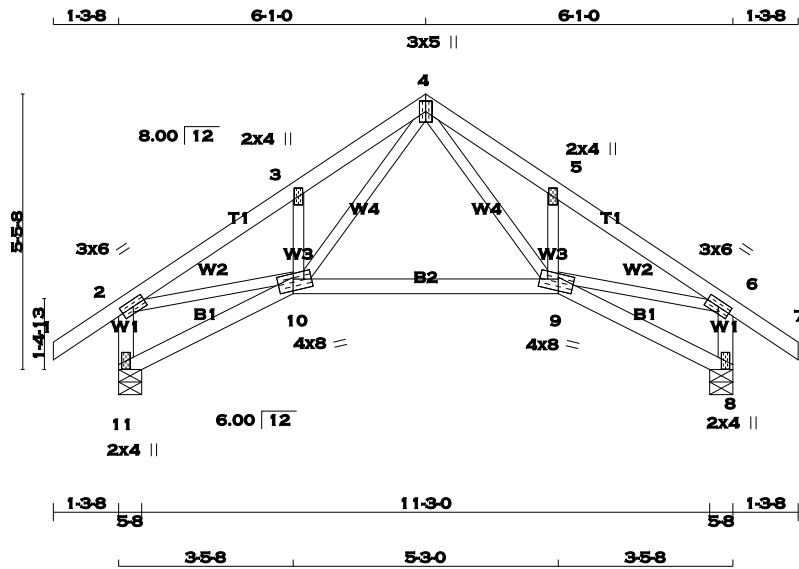
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LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
11 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	
3	TMW+w	MT20	2.0	4.0	
4	TTWW+p	MT20	3.0	5.0	
5	TMW+w	MT20	2.0	4.0	
6	TMVW-t	MT20	3.0	6.0	
8	BMV1+p	MT20	2.0	4.0	
9	BBWWW-m	MT20	4.0	8.0	2.75 3.75
10	BBWWW-m	MT20	4.0	8.0	2.75 3.75
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		MAXIMUM FACTORED		INPUT		REQRD	
JT		GROSS REACTION		GROSS REACTION		BRG		BRG	
		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
11	683	0	683	0	0	5-8	5-8	5-8	
8	683	0	683	0	0	5-8	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
11	477	347 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0		
8	477	347 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11, 8

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.24 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 / 29	-77.4 -77.4	0.10 (1)	10.00	4-9	0 / 563	0.13 (1)
2-3	-944 / 0	-77.4 -77.4	0.12 (1)	6.25	9-5	-281 / 0	0.04 (1)
3-4	-972 / 0	-77.4 -77.4	0.08 (1)	6.24	10-4	0 / 563	0.13 (1)
4-5	-972 / 0	-77.4 -77.4	0.08 (1)	6.24	10-3	-281 / 0	0.04 (1)
5-6	-944 / 0	-77.4 -77.4	0.12 (1)	6.25	2-10	0 / 800	0.18 (1)
6-7	0 / 29	-77.4 -77.4	0.10 (1)	10.00	9-6	0 / 800	0.18 (1)
11-2	-653 / 0	0.0 0.0	0.07 (1)	7.81			
8-6	-653 / 0	0.0 0.0	0.07 (1)	7.81			
11-10	0 / 0	-17.5 -17.5	0.06 (4)	10.00			
10-9	0 / 467	-17.5 -17.5	0.17 (4)	10.00			
9-8	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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.12 (2-3:1), BC=0.17 (9-10:4), WB=0.18 (2-10:1), SSI=0.10 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE 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.

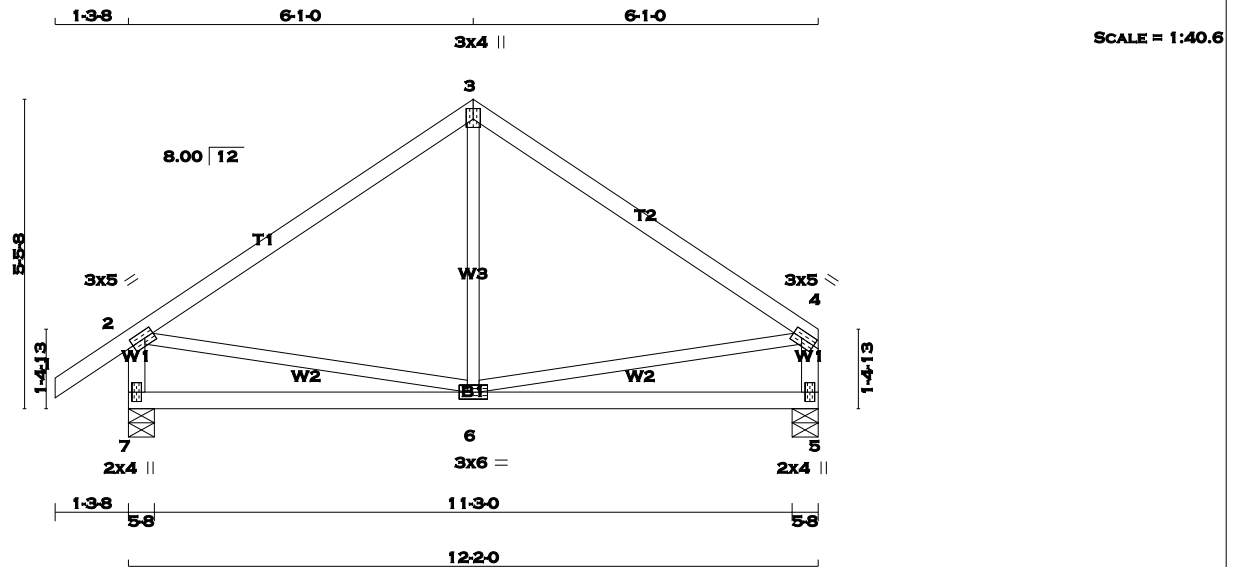
JSI GRIP= 0.81 (4) (INPUT = 0.90)
JSI METAL= 0.27 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 48 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
3 - 4	2x4	DRY	No.2		SPF
7 - 2	2x4	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
7 - 5	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2 EXCEPT					SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
7	683	0	683	0	0
5	577	0	577	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
7	477	347 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0	
5	405	283 / 0	0 / 0	0 / 0	0 / 0	122 / 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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FORCE (LBS)	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 / 106	0.04 (4)
2-3	-429 / 0	-77.4 -77.4	0.37 (1)	6.25	2-6	0 / 362	0.08 (1)
3-4	-429 / 0	-77.4 -77.4	0.37 (1)	6.25	6-4	0 / 362	0.08 (1)
7-2	-642 / 0	0.0 0.0	0.07 (1)	7.81			
5-4	-536 / 0	0.0 0.0	0.06 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.19 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.37 (2-3:1) , BC=0.19 (6-7:4) , WB=0.08 (4-6:1) , 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.

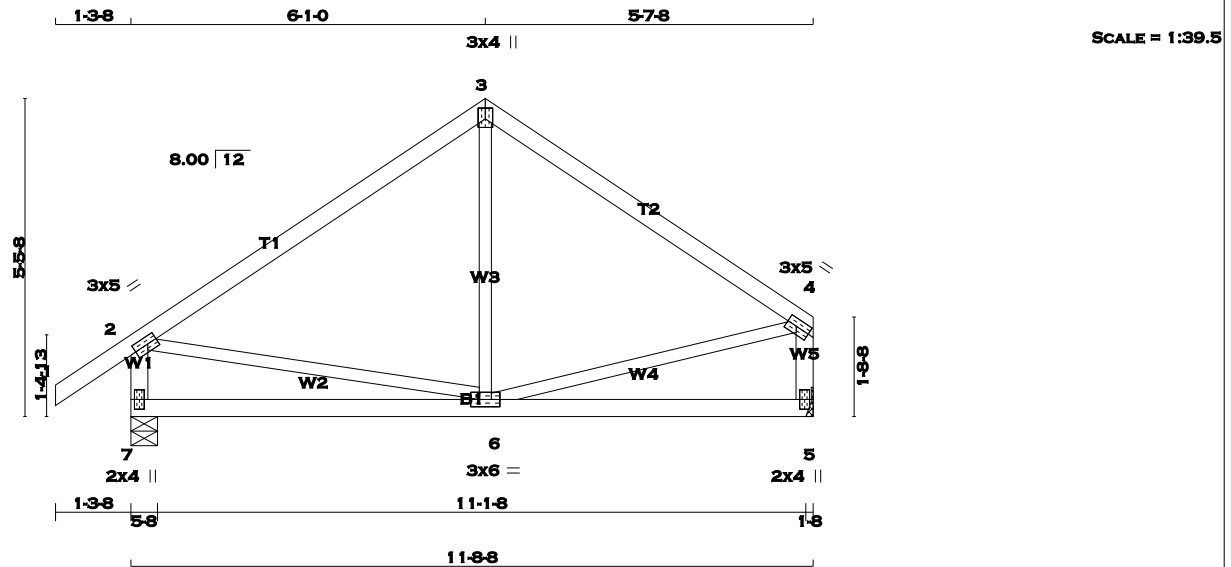
JSI GRIP= 0.78 (6) (INPUT = 0.90)
JSI METAL= 0.19 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 47 = 141 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
3 - 4	2x4	DRY	No.2		SPF
7 - 2	2x4	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
7 - 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-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT	REQRD
	VERT	HORZ	DOWN	HORZ		
7	662	0	662	0	5-8	5-8
5	555	0	555	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
7	462	337 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0
5	390	273 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	6-3	-14 / 97	0.03 (4)
2-3	-396 / 0	-77.4	-77.4 0.37 (1)	6.25	2-6	0 / 334	0.08 (1)
3-4	-395 / 0	-77.4	-77.4 0.32 (1)	6.25	6-4	0 / 340	0.08 (1)
7-2	-618 / 0	0.0	0.0 0.06 (1)	7.81			
5-4	-521 / 0	0.0	0.0 0.06 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.17 (4)	10.00			
6-5	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

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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.37 (2-3:1), BC=0.17 (6-7:4), WB=0.08 (4-6:1), 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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

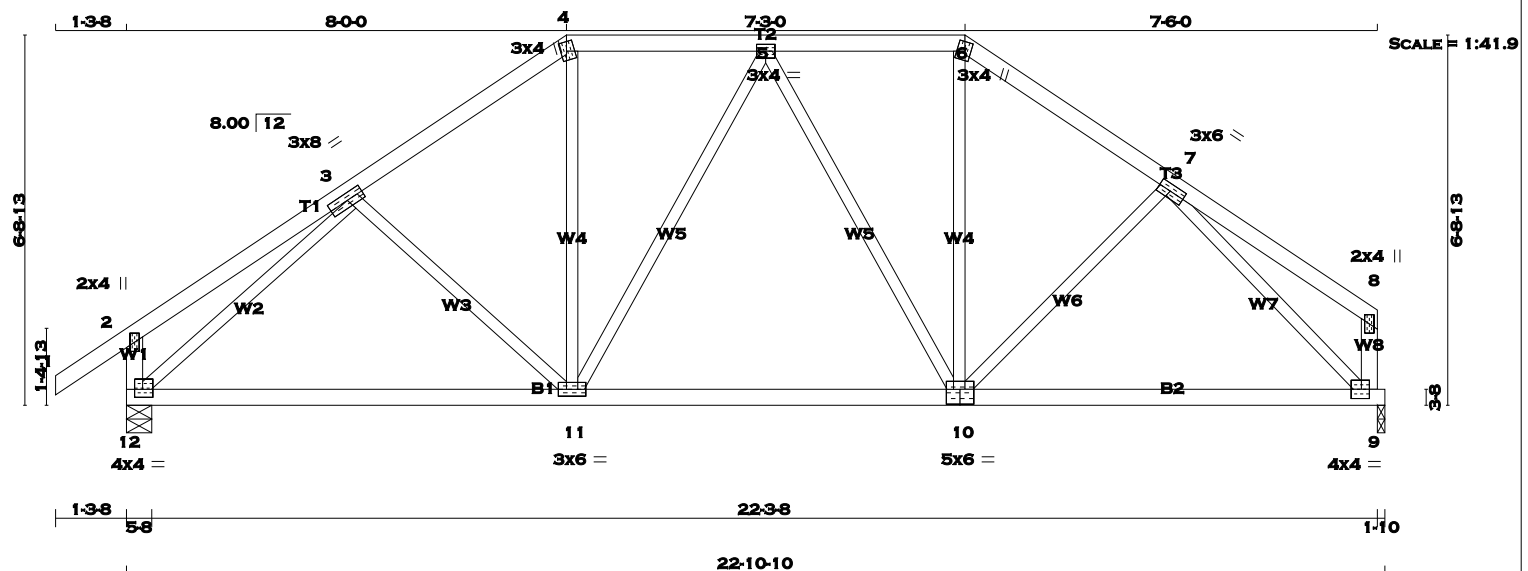
JSI GRIP= 0.72 (6) (INPUT = 0.90)
JSI METAL= 0.18 (2) (INPUT = 1.00)



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

1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
10 - 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	TMWW-t	MT20	3.0	8.0	1.50	3.75
4	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TMWW-t	MT20	3.0	4.0		
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMWW-t	MT20	3.0	6.0	1.50	2.75
8	TMV+p	MT20	2.0	4.0		
9	BMVW1-t	MT20	4.0	4.0	2.00	1.75
10	BSWWW-l	MT20	5.0	6.0	3.25	3.00
11	BMWWW-t	MT20	3.0	6.0		
12	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
12	1185	0	1185	0
9	1079	0	1079	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
12	829	594 / 0	0 / 0	0 / 0	0 / 0	236 / 0	0 / 0
9	757	530 / 0	0 / 0	0 / 0	0 / 0	228 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 9

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.90 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	3-11	-104 / 24	0.05 (1)
2-3	0 / 19	-77.4	-77.4 0.19 (1)	10.00	11-4	0 / 360	0.08 (1)
3-4	-1083 / 0	-77.4	-77.4 0.16 (1)	5.90	11-5	-163 / 0	0.17 (1)
4-5	-889 / 0	-77.4	-77.4 0.13 (1)	6.25	5-10	-221 / 0	0.24 (1)
5-6	-861 / 0	-77.4	-77.4 0.13 (1)	6.25	10-6	0 / 349	0.08 (1)
6-7	-1049 / 0	-77.4	-77.4 0.14 (1)	5.99	10-7	-24 / 43	0.01 (4)
7-8	0 / 18	-77.4	-77.4 0.17 (1)	10.00	12-3	-1317 / 0	0.64 (1)
12-2	-226 / 0	0.0	0.0 0.02 (1)	7.81	7-9	-1262 / 0	0.60 (1)
9-8	-113 / 0	0.0	0.0 0.01 (1)	7.81			
12-11	0 / 961	-17.5	-17.5 0.31 (4)	10.00			
11-10	0 / 968	-17.5	-17.5 0.31 (4)	10.00			
10-9	0 / 873	-17.5	-17.5 0.27 (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 (0.76")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
 ALLOWABLE DEFL.(TL)= L/360 (0.76")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.19 (2-3:1), BC=0.31 (10-11:4), WB=0.64 (3-12:1), 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

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.

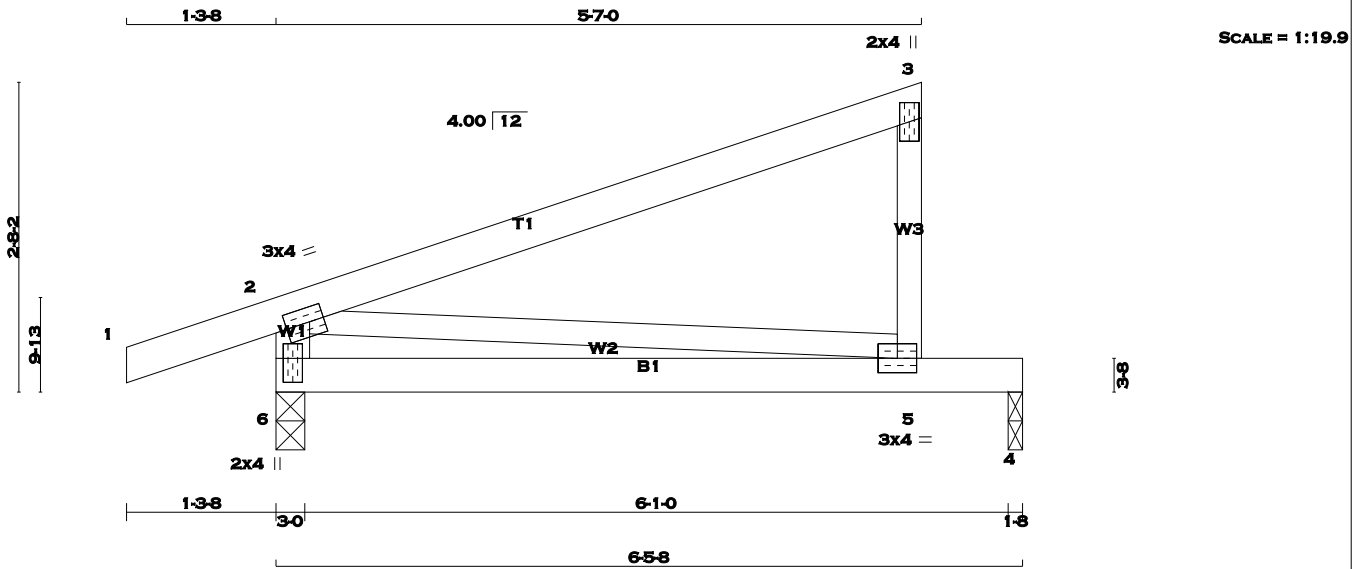
JSI GRIP= 0.89 (10) (INPUT = 0.90)
 JSI METAL= 0.36 (12) (INPUT = 1.00)



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LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
5 - 3	2x3	DRY	No.2	SPF
6 - 2	2x4	DRY	No.2	SPF
6 - 4	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY				SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TMV+p	MT20	2.0	4.0		
5	BMVW-t	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0	2.50	1.00

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
6	405	0	0	405	0	0	3-0	3-0	
4	243	0	0	243	0	0	1-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6	282	210 / 0	0 / 0	0 / 0	0 / 0	0 / 0	72 / 0
4	172	112 / 0	0 / 0	0 / 0	0 / 0	0 / 0	60 / 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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED MAX (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 0.41 (1)				
5-3	-216 / 0	0.0	0.0 0.04 (1)				
6-2	-319 / 0	0.0	0.0 0.03 (1)				
6-5	0 / 0	-17.5	-17.5 0.29 (1)				
5-4	0 / 0	-17.5	-17.5 0.28 (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 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 444 (0.17")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

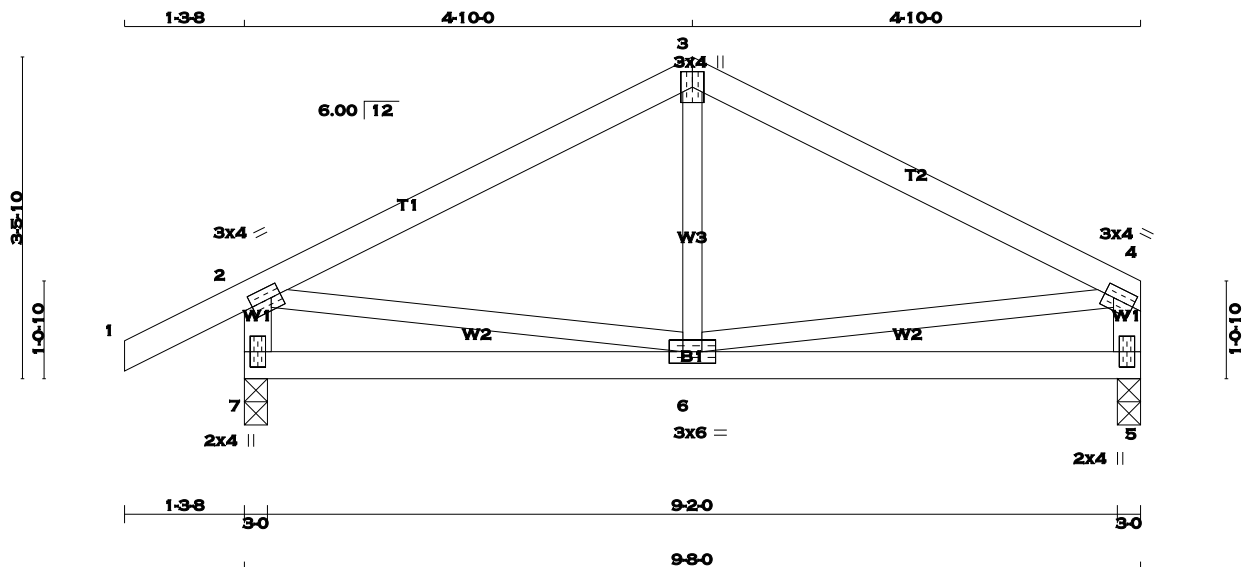
JSI GRIP= 0.29 (2) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 36 = 109 lb
[M][F]

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

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		563	0	563	0	0	3-0	3-0	
5		458	0	458	0	0	3-0	3-0	

UNFACTORED REACTIONS

JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7		393	288 / 0	0 / 0	0 / 0	0 / 0	105 / 0	0 / 0
5		322	225 / 0	0 / 0	0 / 0	0 / 0	97 / 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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4	-77.4 0.10 (1)	6-3	-10 / 80	0.03 (4)	
2-3	-407 / 0	-77.4	-77.4 0.23 (1)	2-6	0 / 369	0.08 (1)	
3-4	-407 / 0	-77.4	-77.4 0.23 (1)	6-4	0 / 369	0.08 (1)	
7-2	-530 / 0	0.0	0.0 0.05 (1)				
5-4	-425 / 0	0.0	0.0 0.04 (1)				
7-6	0 / 0	-17.5	-17.5 0.11 (4)	10.00			
6-5	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

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 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.23 (3-4:1) , BC=0.11 (6-7:4) , WB=0.08 (2-6:1) , 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.

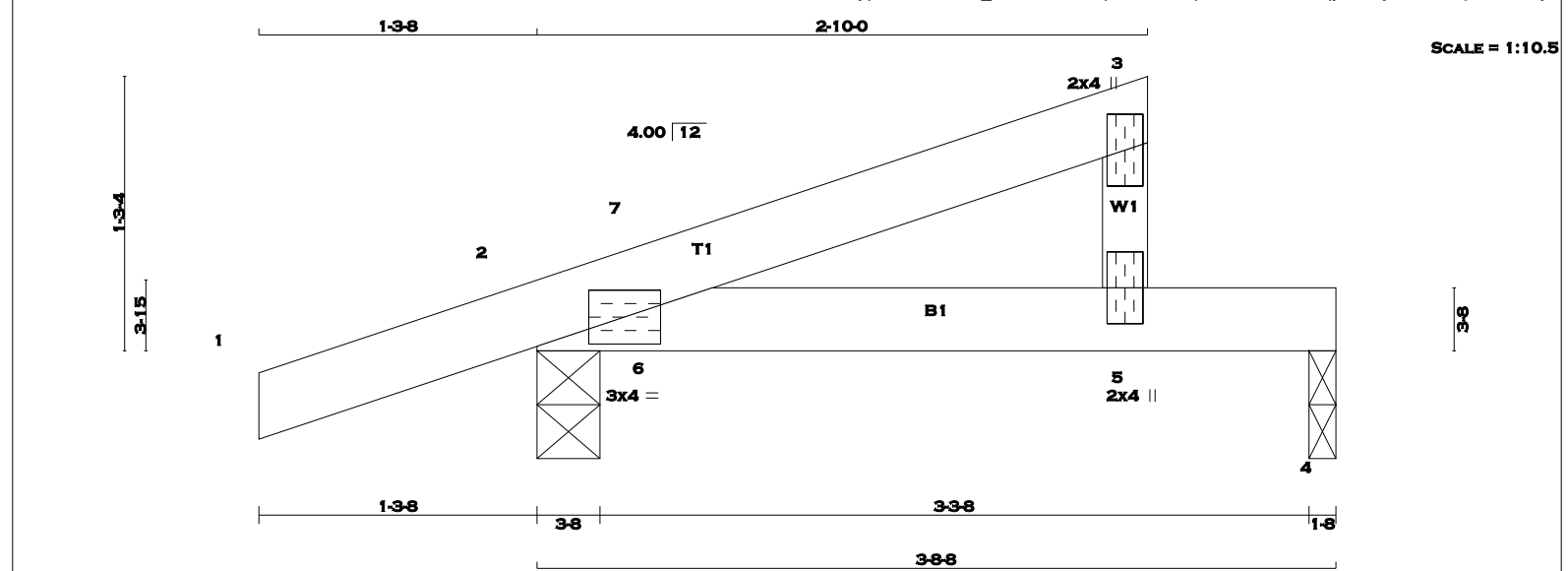
JSI GRIP= 0.89 (2) (INPUT = 0.90)
JSI METAL= 0.20 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 6 X 10 = 59 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
5 - 3	2x3	DRY	No.2	SPF
2 - 4	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMB1-I	MT20	3.0	4.0	
3	TMV+p	MT20	2.0	4.0	
5	BMV+p	MT20	2.0	4.0	

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

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

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS				
	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
2	188	144 / 0	0 / 0	0 / 0	44 / 0	0 / 0	
4	83	50 / 0	0 / 0	0 / 0	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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX CSI (LC)		
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 MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

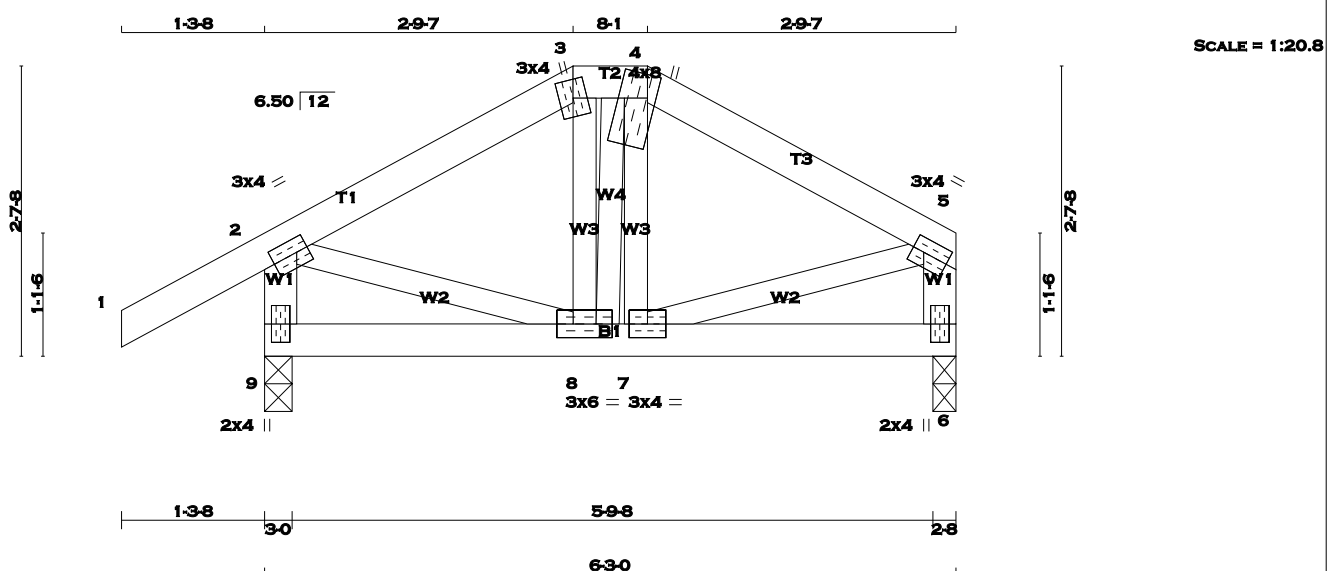
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 28 lb
[M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+m	MT20	3.0	4.0		
4	TTWW+m	MT20	4.0	8.0	2.50	1.00
5	TMVW-t	MT20	3.0	4.0	1.50	1.25
6	BMV1+p	MT20	2.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
8	BMWW-t	MT20	3.0	6.0		
9	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9		402	0	402	0	0	3-0	3-0	
6		296	0	296	0	0	2-8	2-8	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9		280	209 / 0	0 / 0	0 / 0	0 / 0	71 / 0
6		208	146 / 0	0 / 0	0 / 0	0 / 0	62 / 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)	MAX. VERT. LOAD LC1 (LC)	MEMB.		MAX. FACTORED FORCE (LBS)
FR-TO			FROM	TO	FR-TO		
1-2		0 / 25	-77.4	-77.4 0.10 (1)	10.00	8-3	-24 / 21
2-3		-230 / 0	-77.4	-77.4 0.08 (1)	6.25	8-4	-4 / 3
3-4		-201 / 0	-77.4	-77.4 0.00 (1)	6.25	7-4	-20 / 17
4-5		-231 / 0	-77.4	-77.4 0.08 (1)	6.25	2-8	0 / 210
9-2		-379 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 211
6-5		-275 / 0	0.0	0.0 0.03 (1)	7.81		
9-8		0 / 0	-17.5	-17.5 0.03 (4)	10.00		
8-7		0 / 202	-17.5	-17.5 0.05 (4)	10.00		
7-6		0 / 0	-17.5	-17.5 0.03 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

CSI: TC=0.10 (1-2:1), BC=0.05 (7-8:4), WB=0.05 (5-7:1), SSI=0.07 (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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

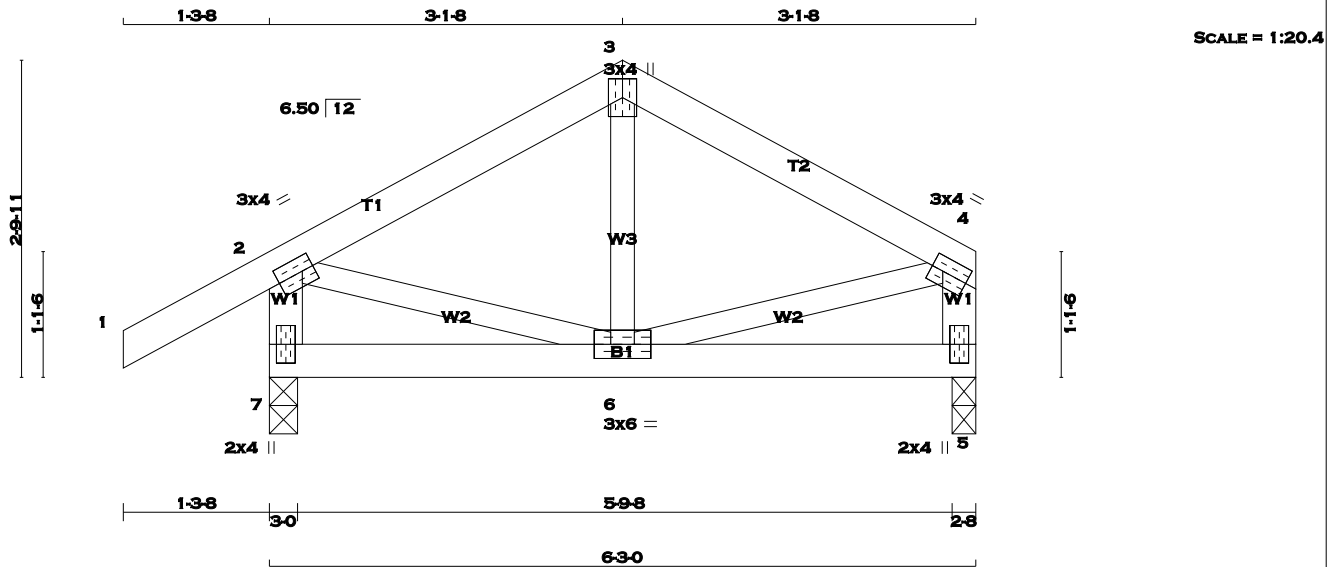
JSI GRIP= 0.52 (5) (INPUT = 0.90)
JSI METAL= 0.12 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 25 lb
[M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
7 - 2	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2 EXCEPT				SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
7	402	0	402	0	0	3-0	3-0		
5	296	0	296	0	0	2-8	2-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
7	280	209 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0		
5	208	146 / 0	0 / 0	0 / 0	0 / 0	62 / 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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 25	-77.4 -77.4	0.10 (1)	10.00	6-3	-34 / 43	0.01 (4)
2-3	-219 / 0	-77.4 -77.4	0.10 (1)	6.25	2-6	0 / 198	0.04 (1)
3-4	-219 / 0	-77.4 -77.4	0.10 (1)	6.25	6-4	0 / 198	0.04 (1)
7-2	-380 / 0	0.0 0.0	0.04 (1)	7.81			
5-4	-274 / 0	0.0 0.0	0.03 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.05 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.05 (4)	10.00			

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

CSI: TC=0.10 (1-2:1) , BC=0.05 (6-7:4) , WB=0.04 (4-6:1) , SSI=0.08 (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.

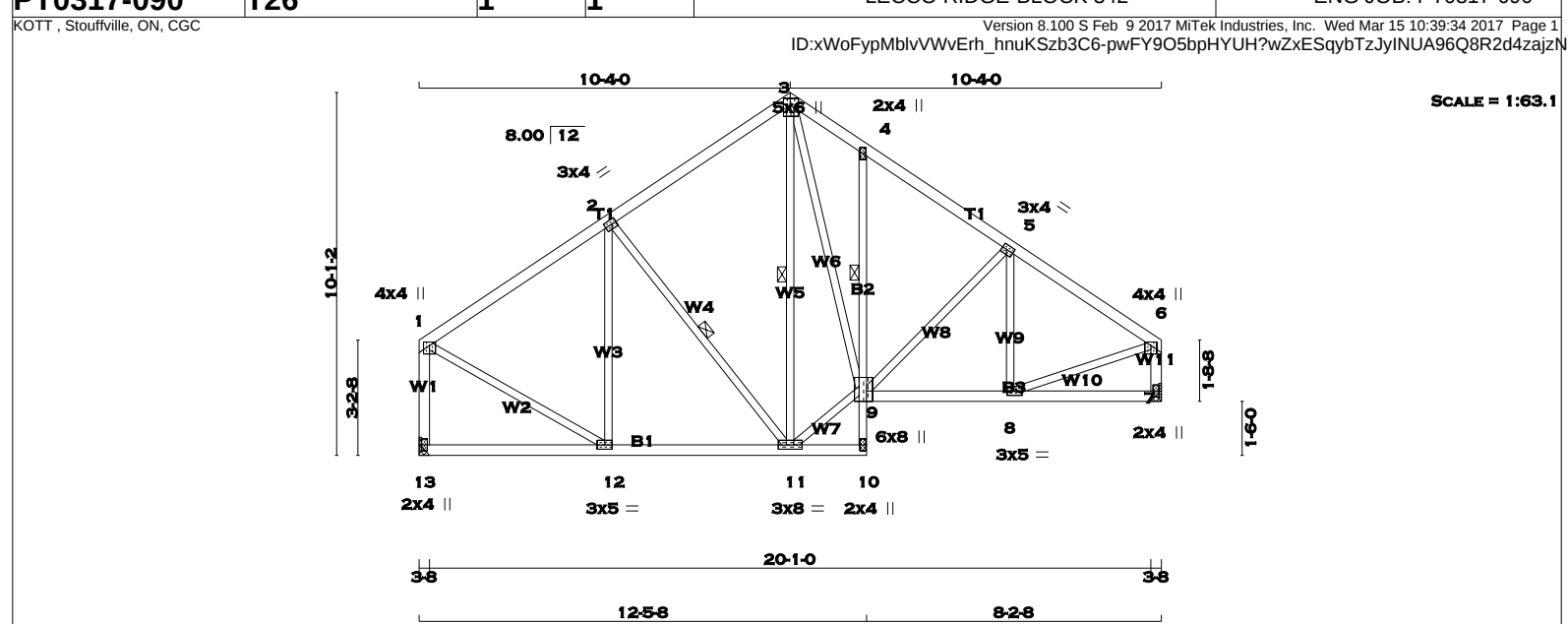
JSI GRIP= 0.49 (2) (INPUT = 0.90)
JSI METAL= 0.12 (4) (INPUT = 1.00)



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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA										
1 - 3	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:																
3 - 6	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 23.3 PSF																
13- 1	2x4	DRY	No.2	SPF	JT VERT HORZ	DOWN HORZ UPLIFT	IN-SX	IN-SX	DL = 3.0 PSF																
7 - 6	2x4	DRY	No.2	SPF	13 980 0	980 0 0	HANGER BY OTHERS			BOT CH. LL = 0.0 PSF															
13- 10	2x4	DRY	No.2	SPF			MIN. SEAT SIZE: 3-8			DL = 7.0 PSF															
10 - 4	2x3	DRY	No.2	SPF			HANGER BY OTHERS			TOTAL LOAD = 33.3 PSF															
9 - 7	2x4	DRY	No.2	SPF																					
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS										SPACING = 24.0 IN./C										
DRY: SEASONED LUMBER.					1ST LCASE MAX./MIN. COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010										
					JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	THIS DESIGN COMPLIES WITH:													
					13 688	481 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0	- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014													
					7 688	481 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0	- CSA 086-09													
															- TPIC 2011										
PLATES (table is in inches)															(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD										
JT TYPE	PLATES	W	LEN	Y	X	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.13 FT.										ALLOWABLE DEFL.(LL)= L/360 (0.69")									
1 TMVW+p	MT20	4.0	4.0	1.25	2.00	MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")									
2 TMWW-t	MT20	3.0	4.0	1.50	1.50	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										ALLOWABLE DEFL.(TL)= L/360 (0.69")									
3 TTWW+p	MT20	5.0	6.0	2.25	2.25	1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 4-9, 2-11, 3-11. DBS = 20-0-0 . CBF = 29 LBS.										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")									
4 TMV+p	MT20	2.0	4.0			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.																			
5 TMWW-t	MT20	3.0	4.0	1.50	1.50	END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW																			
6 TMVW+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	1.50	2.25																				
9 BYMWWW+I	MT20	6.0	8.0	Edge	2.00																				
10 BMV+p	MT20	2.0	4.0																						
11 BMWWW-t	MT20	3.0	8.0																						
12 BMWW-t	MT20	3.0	5.0																						
13 BMV1+p	MT20	2.0	4.0																						
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					LOADING TOTAL LOAD CASES: (4)										COMPANION LIVE LOAD FACTOR = 0.50										
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					CHORDS MAX. FACTORED										WEBS MAX. FACTORED					TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .					
					MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	NAIL VALUES														
					FR-TO	FROM	TO	CS1 (LC)	FR-TO	FROM	TO	PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)													
					1- 2	-752 / 0	-77.4	0.28 (1)	6.25	12- 2	-255 / 13	0.19 (1)	MAX MIN MAX MIN MAX MIN												
					2- 3	-655 / 0	-77.4	0.27 (1)	6.25	2-11	-202 / 0	0.09 (1)	MT20 618 354 1667 822 2284 1656												
					3- 4	-863 / 0	-77.4	0.06 (1)	6.25	11- 3	-144 / 8	0.10 (1)	PLATE PLACEMENT TOL. = 0.250 inches												
					4- 5	-869 / 0	-77.4	0.16 (1)	6.25	11- 9	0 / 643	0.14 (1)	PLATE ROTATION TOL. = 5.0 Deg.												
					5- 6	-973 / 0	-77.4	0.17 (1)	6.13	3- 9	0 / 781	0.18 (1)	JSI GRIP= 0.87 (6) (INPUT = 0.90)												
					13- 1	-942 / 0	0.0	0.17 (1)	7.81	9- 5	-162 / 0	0.10 (1)	JSI METAL= 0.25 (6) (INPUT = 1.00)												
					7- 6	-950 / 0	0.0	0.10 (1)	7.81	8- 5	-186 / 20	0.06 (1)													
					13-12	0 / 0	-17.5	0.12 (4)	10.00	1-12	0 / 738	0.17 (1)													
					12-11	0 / 648	-17.5	0.16 (4)	10.00	8- 6	0 / 869	0.20 (1)													
					11-10	0 / 6	-17.5	0.06 (4)	10.00																
					10- 9	-2 / 5	0.0	0.02 (1)	10.00																

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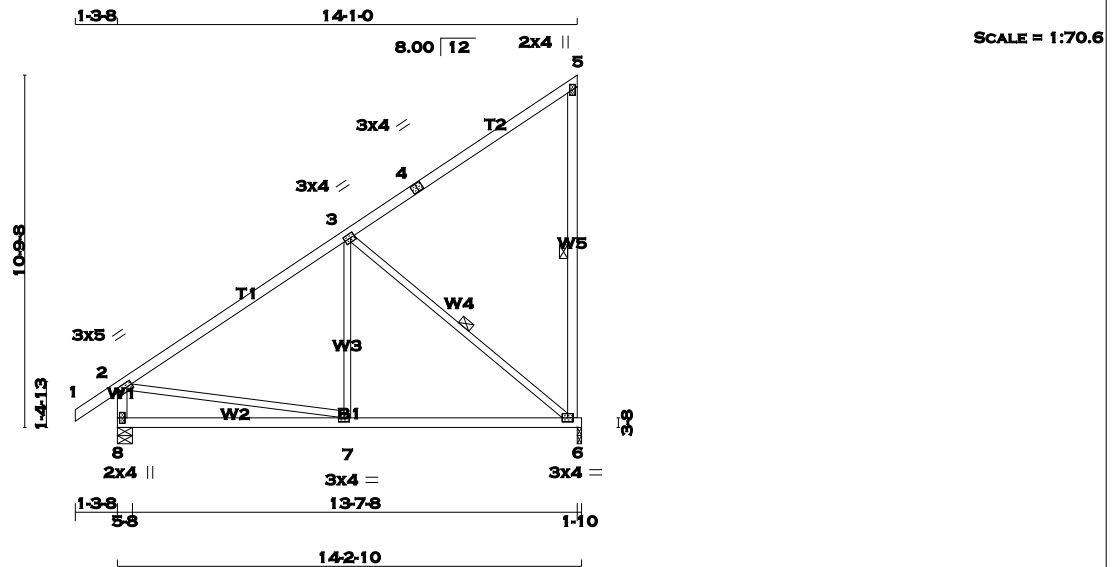
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[M][F]

DRY: SEASONED LUMBER.

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



TOTAL WEIGHT = 2 X 67 = 134 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 5	2x4	DRY	No.2		SPF
6 - 5	2x4	DRY	No.2		SPF
8 - 2	2x4	DRY	No.2		SPF
8 - 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	3.0	5.0	1.50	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
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

		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		668	0	668	0	0	1-10	1-10	
8		774	0	774	0	0	5-8	5-8	

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6		469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0	
8		541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0	

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 3-6. DBS = 20-0-0 . CBF = 82 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

		C H O R D S				W E B S			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX	LC)
FR-TO			FROM TO	CSI (LC)	LENGTH	FR-TO			
1-2		0 / 29	-77.4	-77.4	0.10 (1)	10.00	7-3	0 / 149	0.05 (4)
2-3		-572 / 0	-77.4	-77.4	0.52 (1)	6.25	3-6	-656 / 0	0.37 (1)
3-4		-37 / 0	-77.4	-77.4	0.51 (1)	6.25	2-7	0 / 513	0.12 (1)
4-5		-37 / 0	-77.4	-77.4	0.51 (1)	6.25			
6-5		-205 / 0	0.0	0.0	0.12 (1)	6.25			
8-2		-727 / 0	0.0	0.0	0.07 (1)	7.81			
8-7		0 / 0	-17.5	-17.5	0.25 (4)	10.00			
7-6		0 / 507	-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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.52 (2-3:1) , BC=0.29 (6-7:4) , WB=0.37 (3-6:1) , SSI=0.22 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

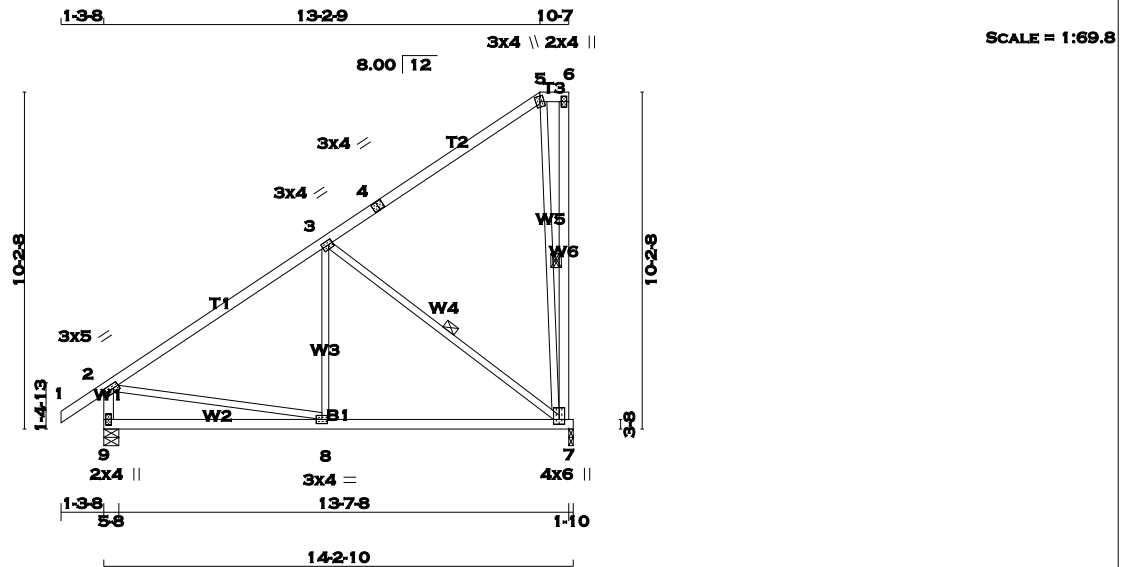
JSI GRIP= 0.87 (7) (INPUT = 0.90)
JSI METAL= 0.23 (2) (INPUT = 1.00)



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





TOTAL WEIGHT = 74 lb

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
9 - 7	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	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	4.0		
5	TTW+m	MT20	3.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMVWW1+p	MT20	4.0	6.0	1.75	2.00
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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	668	0	668	0	0	1-10	1-10
9	774	0	774	0	0	5-8	5-8

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7, 3-7, 5-7. DBS = 20-0-0 . CBF = 78 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 / 29	-77.4 -77.4	0.10 (1)	8-3	0 / 147	0.05 (4)	
2-3	-586 / 0	-77.4 -77.4	0.46 (1)	3-7	-623 / 0	0.36 (1)	
3-4	-58 / 0	-77.4 -77.4	0.44 (1)	5-7	-210 / 0	0.15 (1)	
4-5	-58 / 0	-77.4 -77.4	0.44 (1)	2-8	0 / 523	0.12 (1)	
5-6	0 / 0	-77.4 -77.4	0.01 (1)				
7-6	-34 / 0	0.0 0.0	0.02 (1)				
9-2	-731 / 0	0.0 0.0	0.08 (1)				
9-8	0 / 0	-17.5 -17.5	0.25 (4)				
8-7	0 / 516	-17.5 -17.5	0.29 (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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.46 (2-3:1) , BC=0.29 (7-8:4) , WB=0.36 (3-7:1) , 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.

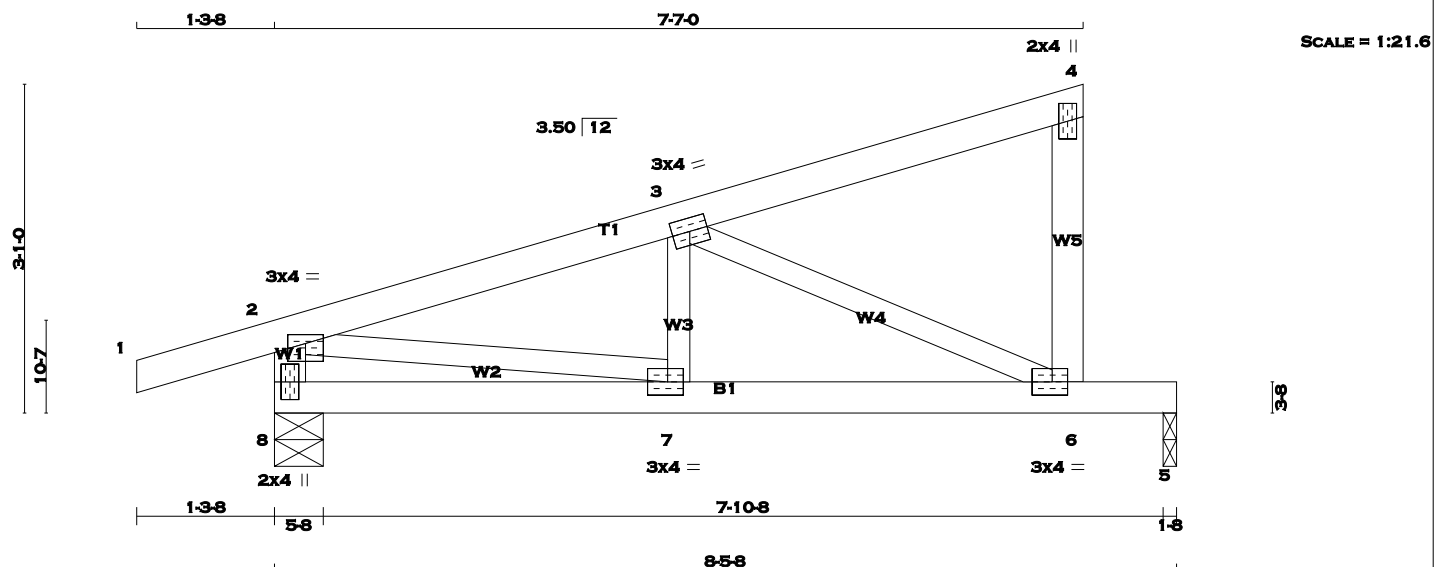
JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 7 X 30 = 213 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8	501	0	501	0	0	5-8	5-8	
5	337	0	337	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
8	349	257 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0
5	238	158 / 0	0 / 0	0 / 0	0 / 0	80 / 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				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED 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 / 97	0.03 (4)
2-3	-629 / 0	-77.4 -77.4	0.13 (1)	6.25	3-6	-670 / 0	0.18 (1)
3-4	-9 / 0	-77.4 -77.4	0.13 (1)	10.00	2-7	0 / 619	0.14 (1)
6-4	-115 / 0	0.0 0.0	0.02 (1)	7.81			
8-2	-489 / 0	0.0 0.0	0.05 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.11 (1)	10.00			
7-6	0 / 613	-17.5 -17.5	0.49 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.39 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 873 (0.12")

CSI: TC=0.13 (2-3:1), BC=0.49 (6-7:1), WB=0.18 (3-6:1), SSI=0.26 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

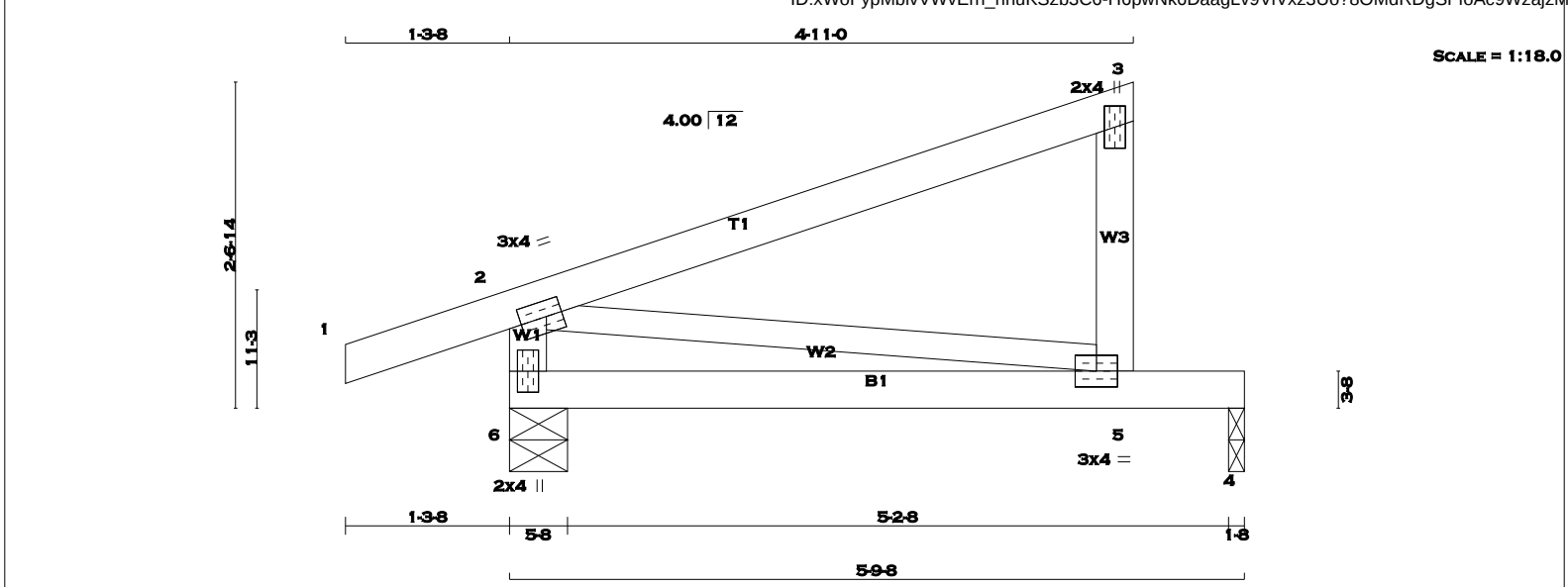
JSI GRIP= 0.83 (7) (INPUT = 0.90)
JSI METAL= 0.23 (7) (INPUT = 1.00)



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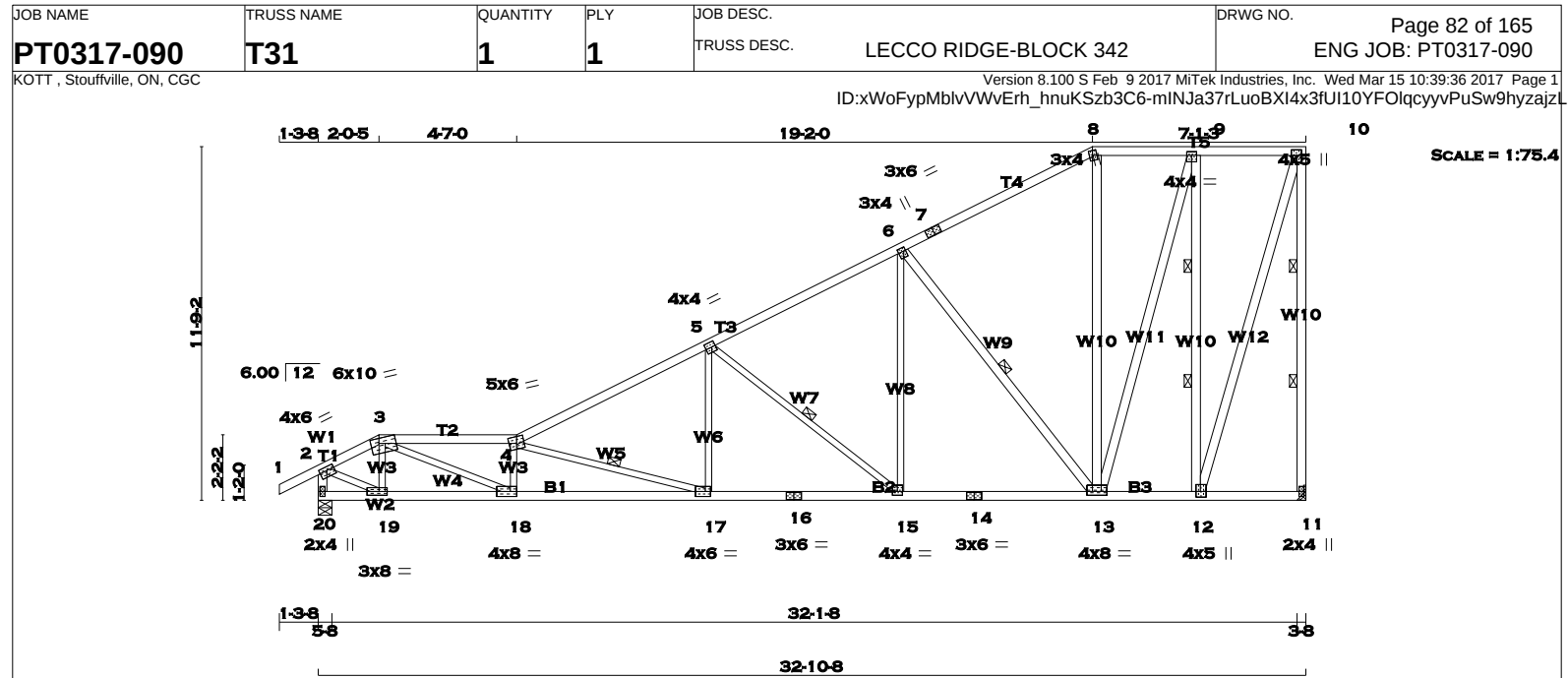




LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 3 2x4 DRY No.2 5 - 3 2x4 DRY No.2 6 - 2 2x4 DRY No.2 6 - 4 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER.										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">MAXIMUM FACTORED GROSS REACTION</th><th colspan="2">INPUT BRG</th><th colspan="2">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><th>IN-SX</th><th></th></tr><tr><td>6</td><td>373</td><td>0</td><td>373</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td><td></td></tr><tr><td>4</td><td>212</td><td>0</td><td>212</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td><td></td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX/MIN. SNOW</th><th>MAX/MIN. LIVE</th><th>MAX/MIN. PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>6</td><td>260</td><td>194 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>66 / 0</td><td>0 / 0</td></tr><tr><td>4</td><td>150</td><td>97 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>53 / 0</td><td>0 / 0</td></tr></table> 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) <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 (LC)</th><th>MAX. UNBRACED LENGTH</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. UNBRACED LENGTH</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>1- 2</td><td>0 / 16</td><td>-77.4 -77.4</td><td>0.10 (1)</td><td>10.00</td><td>2- 5</td><td>0 / 0</td><td>0.00 (1)</td></tr><tr><td>2- 3</td><td>0 / 0</td><td>-77.4 -77.4</td><td>0.32 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>5- 3</td><td>-190 / 0</td><td>0.0 0.0</td><td>0.02 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>6- 2</td><td>-294 / 0</td><td>0.0 0.0</td><td>0.03 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>6- 5</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>5- 4</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.24 (1)</td><td>10.00</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	IN-SX		6	373	0	373	0	0	5-8	5-8		4	212	0	212	0	0	1-8	1-8		JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL	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	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO		FROM TO			FR-TO			1- 2	0 / 16	-77.4 -77.4	0.10 (1)	10.00	2- 5	0 / 0	0.00 (1)	2- 3	0 / 0	-77.4 -77.4	0.32 (1)	10.00				5- 3	-190 / 0	0.0 0.0	0.02 (1)	7.81				6- 2	-294 / 0	0.0 0.0	0.03 (1)	7.81				6- 5	0 / 0	-17.5 -17.5	0.25 (1)	10.00				5- 4	0 / 0	-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 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)									
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG																																																																																																																																																										
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																										
6	373	0	373	0	0	5-8	5-8																																																																																																																																																										
4	212	0	212	0	0	1-8	1-8																																																																																																																																																										
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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																																																																																																																																																										
CHORDS				WEBS																																																																																																																																																													
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH																																																																																																																																																										
FR-TO		FROM TO			FR-TO																																																																																																																																																												
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2- 3	0 / 0	-77.4 -77.4	0.32 (1)	10.00																																																																																																																																																													
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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 - 7	2x4	DRY	No.2	SPF							
7 - 8	2x4	DRY	No.2	SPF							
8 - 10	2x4	DRY	No.2	SPF							
11 - 10	2x4	DRY	No.2	SPF							
20 - 2	2x4	DRY	No.2	SPF							
20 - 16	2x4	DRY	No.2	SPF							
16 - 14	2x4	DRY	No.2	SPF							
14 - 11	2x4	DRY	No.2	SPF							
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF							
6 - 13	2x4	DRY	No.2	SPF							
13 - 8	2x4	DRY	No.2	SPF							
13 - 9	2x4	DRY	No.2	SPF							
12 - 9	2x4	DRY	No.2	SPF							
12 - 10	2x4	DRY	No.2	SPF							

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	3.00
3	TTWW-m	MT20	6.0	10.0	Edge	6.75
4	TTWW-m	MT20	5.0	6.0	2.75	3.00
5	TMVW-t	MT20	4.0	4.0	2.00	1.50
6	TMVW-t	MT20	3.0	4.0	1.50	0.75
7	TS-t	MT20	3.0	6.0		
8	TTW+m	MT20	3.0	4.0	2.00	1.25
9	TMVW-t	MT20	4.0	4.0	1.50	2.00
10	TMVW+p	MT20	4.0	5.0	2.25	1.75
11	BMV1+p	MT20	2.0	4.0		
12	BMVW+t	MT20	4.0	5.0	2.25	1.75
13	BMVWW-t	MT20	4.0	8.0	1.50	4.00
14	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	4.0	4.0	1.50	2.00
16	BS-t	MT20	3.0	6.0		
17	BMVW-t	MT20	4.0	6.0	2.00	2.00
18	BMVW-t	MT20	4.0	8.0	2.00	2.50
19	BMVW-t	MT20	3.0	8.0	1.50	3.25
20	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		
11	1559	0	1559	0	0	HANGER BY OTHERS
20	1664	0	1664	0	0	MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. SNOW		MAX./MIN. LIVE		PERM. LIVE	WIND	DEAD	SOIL
	VERT	HORZ	DOWN	HORZ	DOWN	HORZ				
11	1094		766 / 0		0 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
20	1166		829 / 0		0 / 0	0 / 0	0 / 0	0 / 0	337 / 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 = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/3 LENGTH OF 10-11. DBS = 8-0-0 . CBF = 77 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-17. DBS = 6-0-0 . CBF = 73 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15. DBS = 12-0-0 . CBF = 91 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-13. DBS = 10-0-0 . CBF = 81 LBS.
2 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/3 LENGTH OF 9-12. DBS = 10-0-0 . 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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	MAX. UNBRACED
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	19-3	-554 / 0	0.08 (1)
2-3	-1838 / 0	-77.4 -77.4	0.08 (1)	4.90	3-18	0 / 2908	0.65 (1)
3-4	-4292 / 0	-77.4 -77.4	0.45 (1)	3.08	18-4	-1076 / 0	0.16 (1)
4-5	-2766 / 0	-77.4 -77.4	0.56 (1)	3.72	4-17	-1936 / 0	0.61 (1)
5-6	-1729 / 0	-77.4 -77.4	0.41 (1)	4.67	17-5	0 / 682	0.15 (1)
6-7	-858 / 0	-77.4 -77.4	0.38 (1)	6.09	5-15	-1209 / 0	0.54 (1)
7-8	-858 / 0	-77.4 -77.4	0.38 (1)	6.09	15-6	0 / 864	0.19 (1)
8-9	-748 / 0	-77.4 -77.4	0.12 (1)	6.25	6-13	-1289 / 0	0.76 (1)
9-10	-452 / 0	-77.4 -77.4	0.11 (1)	6.25	13-8	0 / 78	0.02 (4)
11-10	-1531 / 0	0.0 0.0	0.48 (1)	5.32	13-9	0 / 1071	0.17 (1)
20-2	-1672 / 0	0.0 0.0	0.17 (1)	6.42	12-9	-1360 / 0	0.43 (1)
					12-10	0 / 1488	0.24 (1)
					2-19	0 / 1770	0.40 (1)
20-19	0 / 0	-17.5 -17.5	0.08 (1)	10.00			
19-18	0 / 1611	-17.5 -17.5	0.34 (1)	10.00			
18-17	0 / 4352	-17.5 -17.5	0.83 (1)	10.00			
17-16	0 / 2494	-17.5 -17.5	0.50 (1)	10.00			
16-15	0 / 2494	-17.5 -17.5	0.50 (1)	10.00			
15-14	0 / 1547	-17.5 -17.5	0.32 (1)	10.00			
14-13	0 / 1547	-17.5 -17.5	0.32 (1)	10.00			
13-12	0 / 452	-17.5 -17.5	0.14 (4)	10.00			
12-11	0 / 0	-17.5 -17.5	0.05 (4)	10.00			

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DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.27")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 792 (0.50")

CSI: TC=0.56 (4-5:1), BC=0.83 (17-18:1), WB=0.76 (6-13:1), SSI=0.21 (6-8:1)

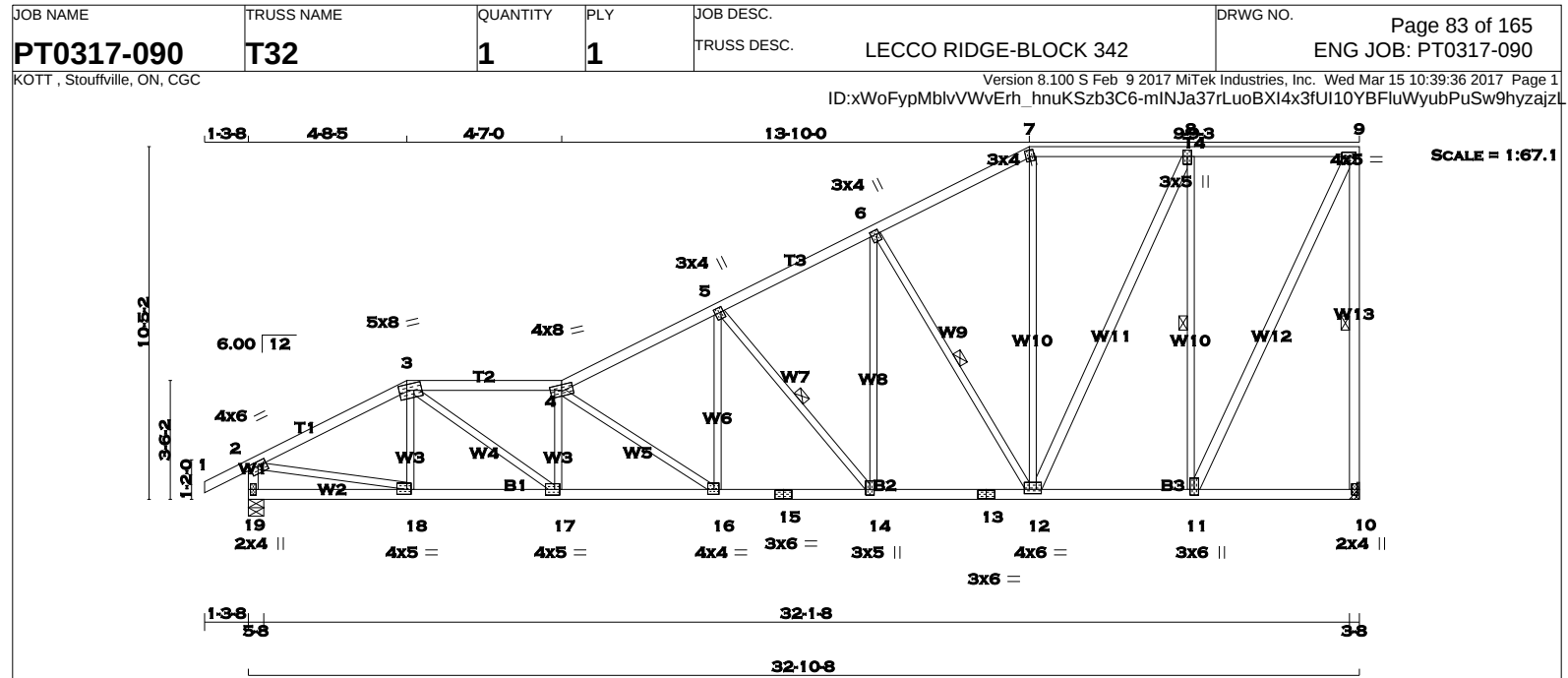
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

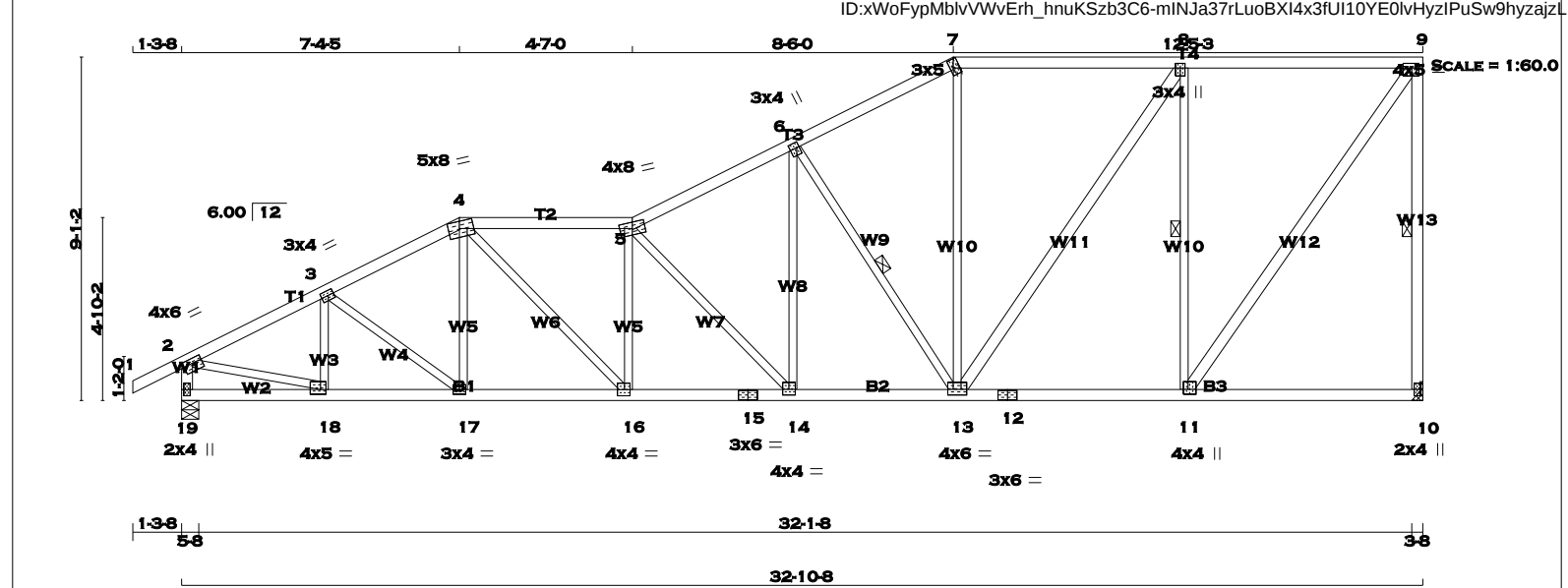
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
</			

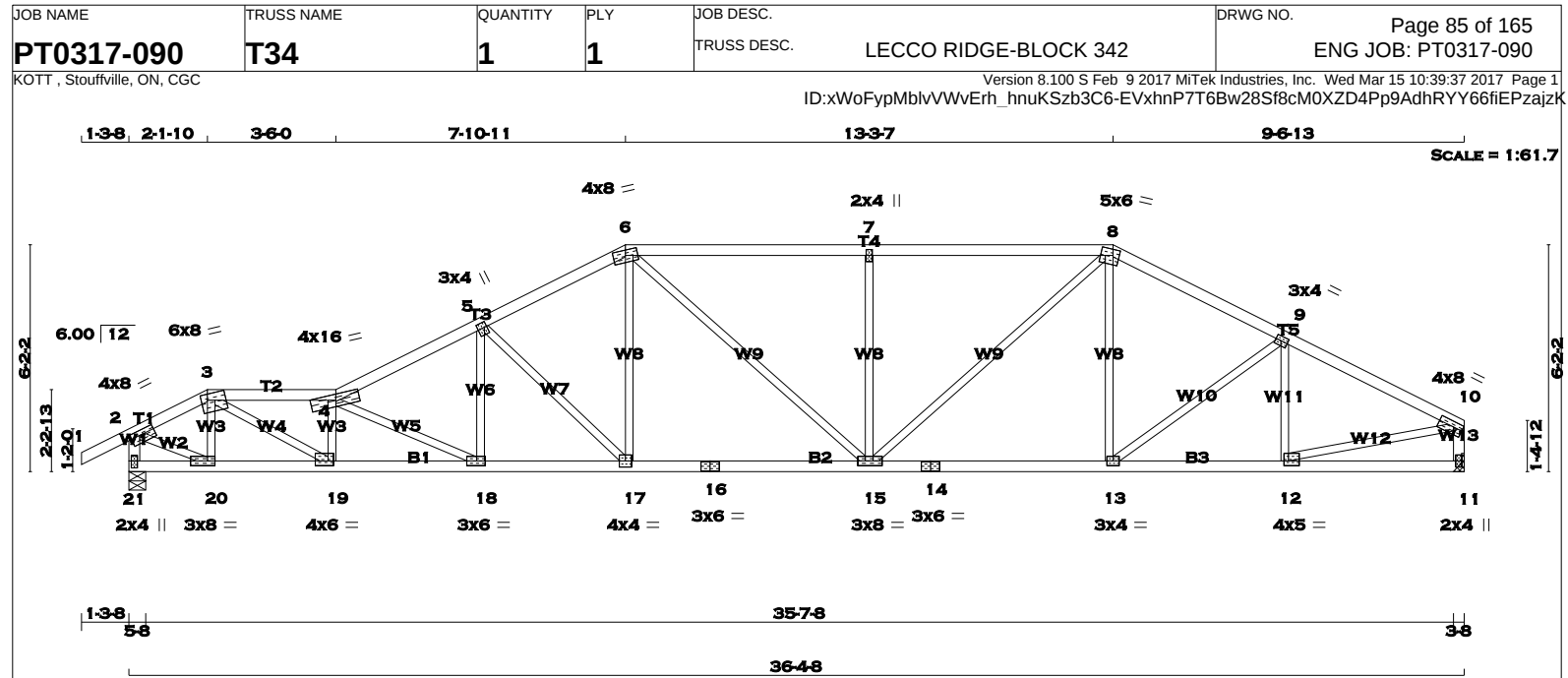


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA				
1 - 3	2x4	DRY	No.2	SPF	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	SPECIFIED LOADS:										
3 - 4	2x4	DRY	No.2	SPF	JT VERT	JT HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	TOP CH.	LL	=	23.3	PSF			
4 - 7	2x4	DRY	No.2	SPF	10 1559	0	1559	0	0	HANGER BY OTHERS		BOT CH.	LL	=	0.0	PSF			
7 - 9	2x4	DRY	No.2	SPF							MIN. SEAT SIZE: 3-8		DL	=	7.0	PSF			
10 - 9	2x4	DRY	No.2	SPF	19 1664	0	1664	0	0	5-8	5-8	TOTAL LOAD = 33.3 PSF							
19 - 2	2x4	DRY	No.2	SPF															
19 - 15	2x4	DRY	No.2	SPF															
15 - 13	2x4	DRY	No.2	SPF															
13 - 10	2x4	DRY	No.2	SPF															
ALL WEBS 2x3 DRY No.2 SPF					UNFACTORED REACTIONS														
EXCEPT					1ST LCASE MAX./MIN. COMPONENT REACTIONS														
12 - 8	2x4	DRY	No.2	SPF	JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12							
11 - 9	2x4	DRY	No.2	SPF	10 1094	766 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010							
					19 1166	829 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0	THIS DESIGN COMPLIES WITH:							
DRY: SEASONED LUMBER.					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19														
					BRACING														
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.65 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 9-10. DBS = 8-0-0 . CBF = 76 LBS.														
					1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14. DBS = 14-0-0 . CBF = 91 LBS.														
					1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-12. DBS = 12-0-0 . CBF = 85 LBS.														
					1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-11. DBS = 10-0-0 . CBF = 80 LBS.														
					DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.														
					END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW														
					LOADING														
					TOTAL LOAD CASES: (4)														
					CHORDS						WEBS								
					MAX. FACTORED			FACTORED			MAX. FACTORED			MAX. FACTORED					
					MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX	MEMB.	FORCE	MAX	MEMB.	FORCE		
						(LBS)		(PLF)	CSI (LC)		(LBS)	CSI (LC)		(LBS)	CSI (LC)		(LBS)		
					FR-TO		FROM TO			UNBRAC			LENGTH	FR-TO					
					1- 2	0 / 23	-77.4	-77.4	0.10 (1)	10.00	18- 3	-256 / 0	0.05 (1)						
					2- 3	-2207 / 0	-77.4	-77.4	0.29 (1)	4.35	3-17	0 / 1523	0.34 (1)						
					3- 4	-3202 / 0	-77.4	-77.4	0.34 (1)	3.65	17- 4	-825 / 0	0.17 (1)						
					4- 5	-2557 / 0	-77.4	-77.4	0.28 (1)	4.11	4-16	-1129 / 0	0.62 (1)						
					5- 6	-1830 / 0	-77.4	-77.4	0.22 (1)	4.77	16- 5	0 / 734	0.17 (1)						
					6- 7	-1189 / 0	-77.4	-77.4	0.20 (1)	5.65	5-14	-1035 / 0	0.36 (1)						
					7- 8	-1051 / 0	-77.4	-77.4	0.24 (1)	5.85	14- 6	0 / 874	0.20 (1)						
					8- 9	-676 / 0	-77.4	-77.4	0.23 (1)	6.25	6-12	-1140 / 0	0.66 (1)						
					10- 9	-1524 / 0	0.0	0.0	0.82 (1)	5.32	12- 7	0 / 242	0.05 (1)						

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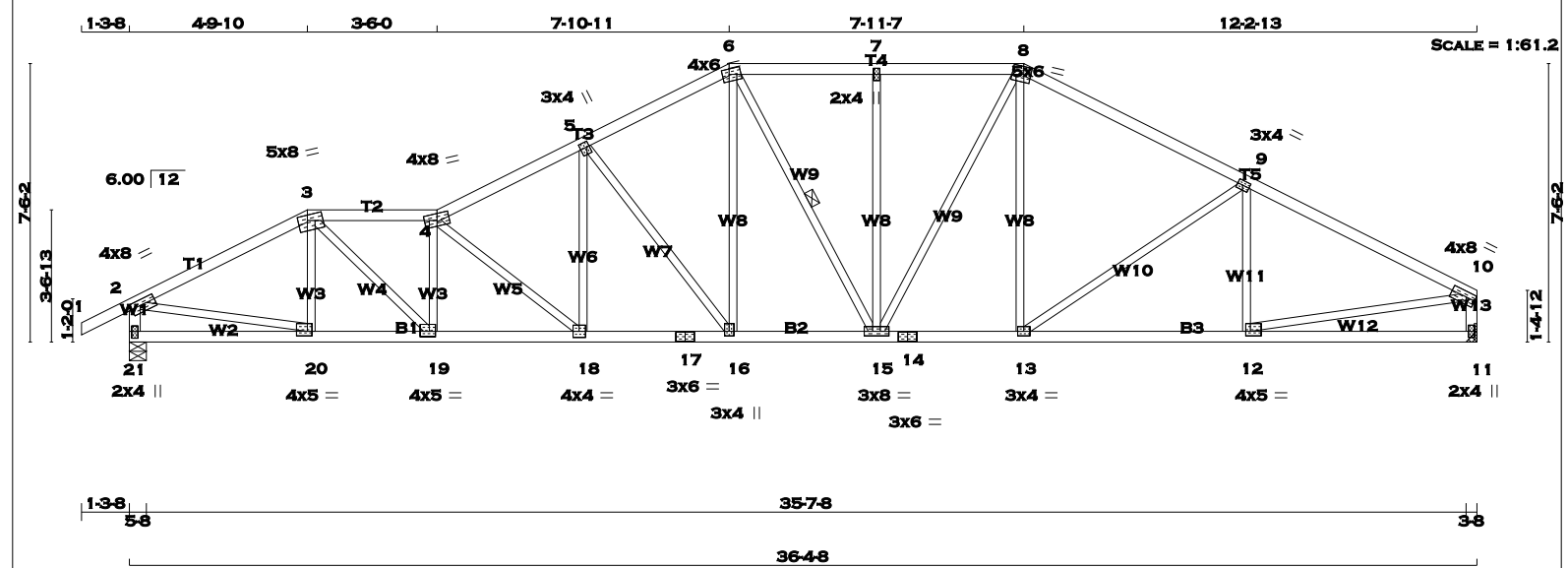
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1 - 3	2x4	DRY	No.2	SPF	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		SPECIFIED LOADS:						
3 - 4	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	TOP CH. LL = 23.3 PSF						
4 - 6	2x4	DRY	No.2	SPF	21	1830	0	1830	0	0	5-8	5-8	DL = 3.0 PSF						
6 - 8	2x4	DRY	No.2	SPF	11	1725	0	1725	0	0	HANGER BY OTHERS		BOT CH. LL = 0.0 PSF						
8 - 10	2x4	DRY	No.2	SPF	MIN. SEAT SIZE: 3-8										DL = 7.0 PSF				
21- 2	2x4	DRY	No.2	SPF											TOTAL LOAD = 33.3 PSF				
11- 10	2x4	DRY	No.2	SPF															
21- 16	2x4	DRY	No.2	SPF															
16- 14	2x4	DRY	No.2	SPF															
14- 11	2x4	DRY	No.2	SPF															
ALL WEBS 2x3 DRY No.2 SPF																			
EXCEPT																			
DRY: SEASONED LUMBER.																			

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

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

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IN THE DESIGN OF THIS COMPONENT.



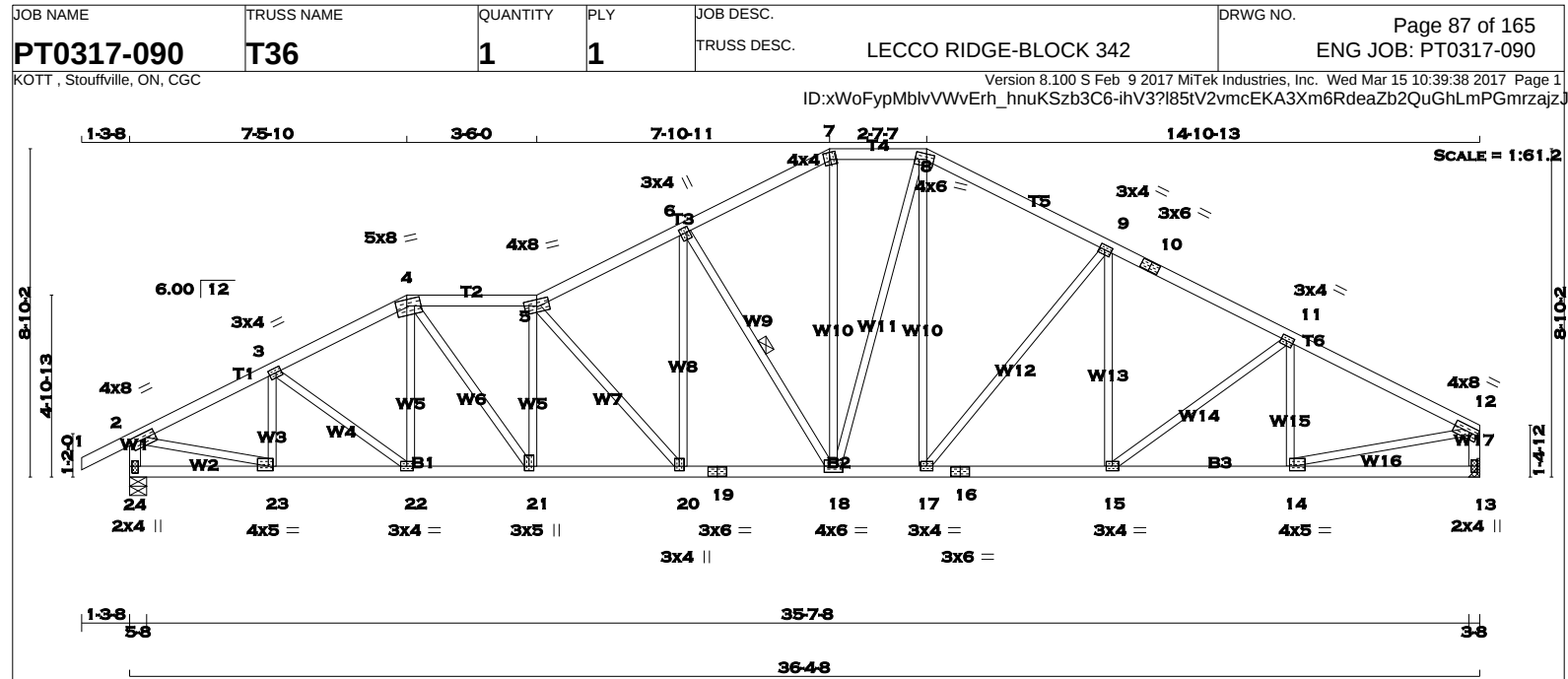
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 3 2x4 DRY No.2 3 - 4 2x4 DRY No.2 4 - 6 2x4 DRY No.2 6 - 8 2x4 DRY No.2 8 - 10 2x4 DRY No.2 21 - 2 2x4 DRY No.2 11 - 10 2x4 DRY No.2 21 - 17 2x4 DRY No.2 17 - 14 2x4 DRY No.2 14 - 11 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 21 1830 0 1830 0 0 5-8 5-8 11 1725 0 1725 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1282 910 / 0 0 / 0 0 / 0 372 / 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) 21 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.66 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-15. DBS = 20-0-0. CBF = 2 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 20-3 -297 / 0 0.06 (1) 2-3 -2484 / 0 -77.4 -77.4 0.32 (1) 4.10 3-19 0 / 1572 0.35 (1) 3-4 -3343 / 0 -77.4 -77.4 0.25 (1) 3.66 19-4 -1048 / 0 0.22 (1) 4-5 -3009 / 0 -77.4 -77.4 0.25 (1) 3.85 4-18 -870 / 0 0.38 (1) 5-6 -2411 / 0 -77.4 -77.4 0.21 (1) 4.26 18-5 0 / 631 0.14 (1) 6-7 -2168 / 0 -77.4 -77.4 0.20 (1) 4.46 5-16 -924 / 0 0.74 (1) 7-8 -2168 / 0 -77.4 -77.4 0.20 (1) 4.46 16-6 0 / 805 0.18 (1) 8-9 -2200 / 0 -77.4 -77.4 0.46 (1) 4.16 6-15 0 / 32 0.01 (1) 9-10 -2450 / 0 -77.4 -77.4 0.50 (1) 3.95 15-7 -367 / 0 0.37 (1) 21-2 -1793 / 0 0.0 0.0 0.18 (1) 6.24 15-8 0 / 455 0.10 (1) 11-10 -1679 / 0 0.0 0.0 0.17 (1) 6.41 13-8 0 / 276 0.06 (1) 13-9 -326 / 0 0.35 (1) 12-9 -269 / 25 0.08 (1) 2-20 0 / 2254 0.51 (1) 12-10 0 / 2246 0.51 (1) 21-20 0 / 0 -17.5 -17.5 0.09 (4) 10.00 20-19 0 / 2211 -17.5 -17.5 0.39 (1) 10.00 19-18 0 / 3377 -17.5 -17.5 0.60 (1) 10.00 18-17 0 / 2707 -17.5 -17.5 0.46 (1) 10.00 17-16 0 / 2707 -17.5 -17.5 0.46 (1) 10.00 16-15 0 / 2153 -17.5 -17.5 0.38 (1) 10.00 15-14 0 / 1948 -17.5 -17.5 0.37 (1) 10.00 14-13 0 / 1948 -17.5 -17.5 0.37 (1) 10.00 13-12 0 / 2213 -17.5 -17.5 0.42 (1) 10.00 12-11 0 / 0 -17.5 -17.5 0.16 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - 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 (0.19") ALLOWABLE DEFL.(TL)= L/360 (1.21") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33") CSI: TC=0.50 (9-10:1) , BC=0.60 (18-19:1) , WB=0.74 (5-16:1) , SSI=0.21 (9-10:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (19) (INPUT = 0.90) JSI METAL= 0.70 (17) (INPUT = 1.00)				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 1.75 0.75 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 6.0 2.50 2.25 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 8.0 16 BMWW+t MT20 3.0 4.0 1.50 1.50 17 BS-t MT20 3.0 6.0 18 BMWW-t MT20 4.0 4.0 19 BMWW-t MT20 4.0 5.0 1.75 2.00 20 BMWW-t MT20 4.0 5.0 1.50 1.50 21 BMV1+p MT20 2.0 4.0 2.25 1.00 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD. A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.			
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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 = 169 lb [M][F]

LUMBER

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 - 10	2x4	DRY	No.2
10 - 12	2x4	DRY	No.2
24 - 2	2x4	DRY	No.2
13 - 12	2x4	DRY	No.2
24 - 19	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 13	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	8.0	1.75	3.00
3, 9, 11						
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	8.0		
6	TMWW-t	MT20	3.0	4.0	1.75	0.75
7	TTWW-m	MT20	4.0	4.0	2.25	1.75
8	TTWW-m	MT20	4.0	6.0	1.75	2.25
10	TS-t	MT20	3.0	6.0		
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, 17, 22						
15	BMWW-t	MT20	3.0	4.0		
16	BS-t	MT20	3.0	6.0		
18	BMWWW-t	MT20	4.0	6.0		
19	BS-t	MT20	3.0	6.0		
20	BMWW-t	MT20	3.0	4.0	1.50	1.50
21	BMWW-t	MT20	3.0	5.0	1.50	1.50
23	BMWW-t	MT20	4.0	5.0	1.50	1.50
24	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
	VERT	HORZ	DOWN	UPLIFT
JT				
24	1830	0	1830	0
13	1725	0	1725	0

BRG IN-SX 5-8 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
24	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) 24

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 6-18. DBS = 14-0-0. CBF = 85 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	23-3	-428 / 0	0.08 (1)
2-3	-2413 / 0	-77.4	-77.4 0.19 (1)	4.28	3-22	0 / 77	0.02 (1)
3-4	-2510 / 0	-77.4	-77.4 0.19 (1)	4.22	22-4	0 / 54	0.02 (4)
4-5	-2854 / 0	-77.4	-77.4 0.21 (1)	3.96	4-21	0 / 1047	0.24 (1)
5-6	-2592 / 0	-77.4	-77.4 0.23 (1)	4.12	21-5	-789 / 0	0.28 (1)
6-7	-2060 / 0	-77.4	-77.4 0.20 (1)	4.57	5-20	-825 / 0	0.53 (1)
7-8	-1835 / 0	-77.4	-77.4 0.10 (1)	4.88	20-6	0 / 694	0.16 (1)
8-9	-2000 / 0	-77.4	-77.4 0.27 (1)	4.55	6-18	-968 / 0	0.39 (1)
9-10	-2335 / 0	-77.4	-77.4 0.27 (1)	4.27	18-7	0 / 698	0.16 (1)
10-11	-2335 / 0	-77.4	-77.4 0.27 (1)	4.27	18-8	0 / 200	0.05 (1)
11-12	-2372 / 0	-77.4	-77.4 0.32 (1)	4.19	17-9	0 / 443	0.10 (1)
24-2	-1795 / 0	0.0	0.0 0.18 (1)	6.24	17-8	-497 / 0	0.64 (1)
13-12	-1685 / 0	0.0	0.0 0.17 (1)	6.39	15-9	0 / 124	0.04 (4)
					15-11	-58 / 0	0.04 (1)
					14-11	-364 / 0	0.09 (1)
24-23	0 / 0	-17.5	-17.5 0.06 (4)	10.00	2-23	0 / 2223	0.50 (1)
23-22	0 / 2169	-17.5	-17.5 0.38 (1)	10.00	14-12	0 / 2183	0.49 (1)
22-21	0 / 2232	-17.5	-17.5 0.39 (1)	10.00			
21-20	0 / 2872	-17.5	-17.5 0.51 (1)	10.00			
20-19	0 / 2335	-17.5	-17.5 0.42 (1)	10.00			
19-18	0 / 2335	-17.5	-17.5 0.42 (1)	10.00			
18-17	0 / 1779	-17.5	-17.5 0.33 (1)	10.00			
17-16	0 / 2089	-17.5	-17.5 0.38 (1)	10.00			
16-15	0 / 2089	-17.5	-17.5 0.38 (1)	10.00			
15-14	0 / 2135	-17.5	-17.5 0.38 (1)	10.00			
14-13	0 / 0	-17.5	-17.5 0.09 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL	PSF
	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 (0.29")

CSI: TC=0.32 (11-12:1), BC=0.51 (20-21:1), WB=0.64 (9-17:1), SSI=0.16 (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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

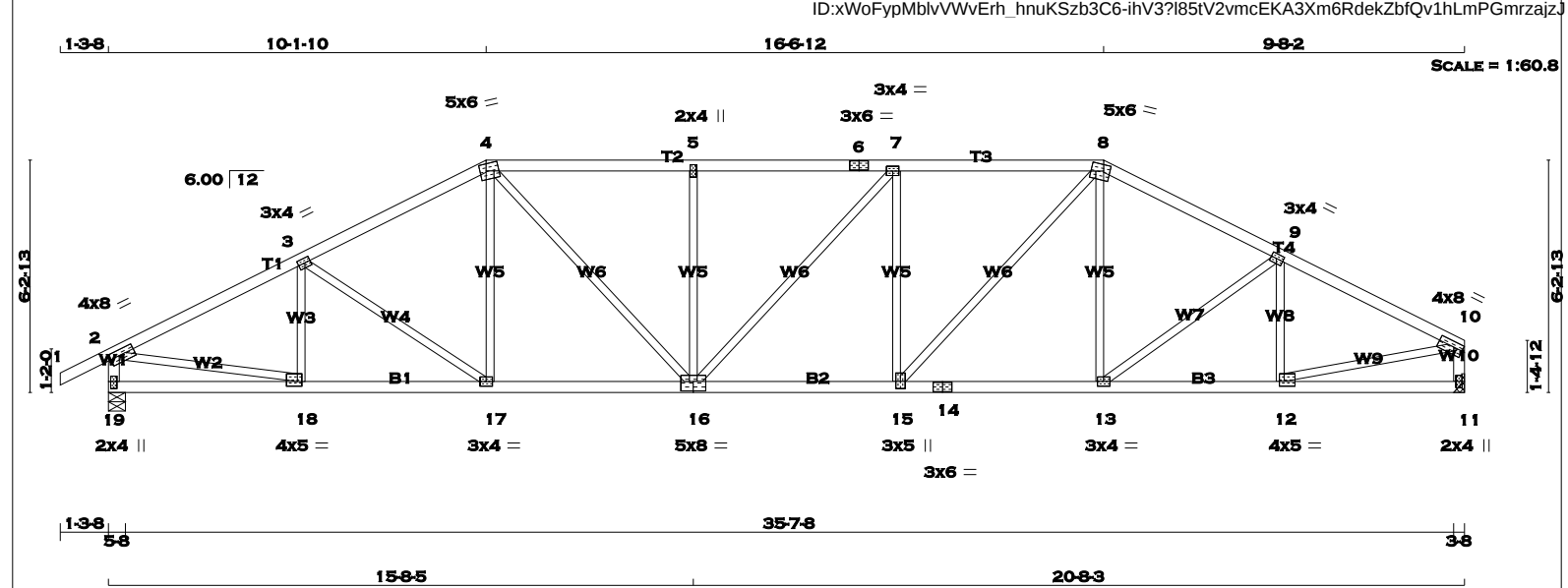
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (21) (INPUT = 0.90)
JSI METAL= 0.65 (23) (INPUT = 1.00)

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TOTAL WEIGHT = 149 lb
[M][F]

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
8 - 10	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 11	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	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.					



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
<u>BEARINGS</u>							
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
19	1830	0	1830	0	0	5-8	5-8
11	1725	0	1725	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 3-8							

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	1282	910 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
11	1211	847 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO	
1-2	0 / 23	-77.4 -77.4	0.10 (1) 10.00
2-3	-2544 / 0	-77.4 -77.4	0.34 (1) 4.05
3-4	-2403 / 0	-77.4 -77.4	0.32 (1) 4.16
4-5	-2633 / 0	-77.4 -77.4	0.38 (1) 3.95
5-6	-2633 / 0	-77.4 -77.4	0.35 (1) 3.99
6-7	-2633 / 0	-77.4 -77.4	0.35 (1) 3.99
7-8	-2614 / 0	-77.4 -77.4	0.37 (1) 3.96
8-9	-2335 / 0	-77.4 -77.4	0.29 (1) 4.24
9-10	-2366 / 0	-77.4 -77.4	0.30 (1) 4.21
19-2	-1789 / 0	0.0 0.0	0.18 (1) 6.24
11-10	-1686 / 0	0.0 0.0	0.17 (1) 6.39
19-18	0 / 0	-17.5 -17.5	0.09 (4) 10.00
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
WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FR-TO	
18-3	-292 / 0	0.07 (1)	
3-17	-197 / 0	0.13 (1)	
17-4	0 / 209	0.05 (1)	
4-16	0 / 730	0.16 (1)	
16-5	-461 / 0	0.28 (1)	
16-7	0 / 27	0.01 (1)	
15-7	-483 / 0	0.30 (1)	
15-8	0 / 793	0.18 (1)	
13-8	0 / 142	0.04 (4)	
13-9	-78 / 0	0.05 (1)	
12-9	-384 / 0	0.09 (1)	
2-18	0 / 2324	0.52 (1)	
12-10	0 / 2184	0.49 (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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.29")

CSI: TC=0.38 (4-5:1), BC=0.47 (15-16:1), WB=0.52 (2-18:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

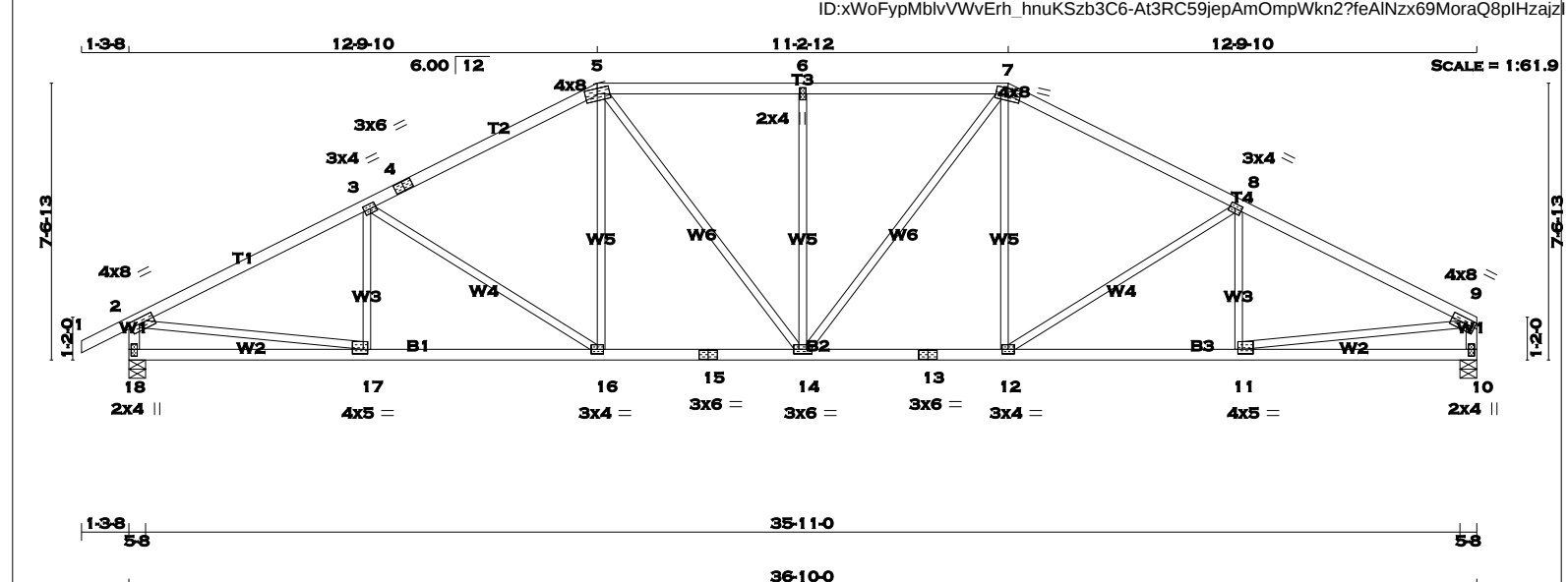
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.69 (18) (INPUT = 1.00)

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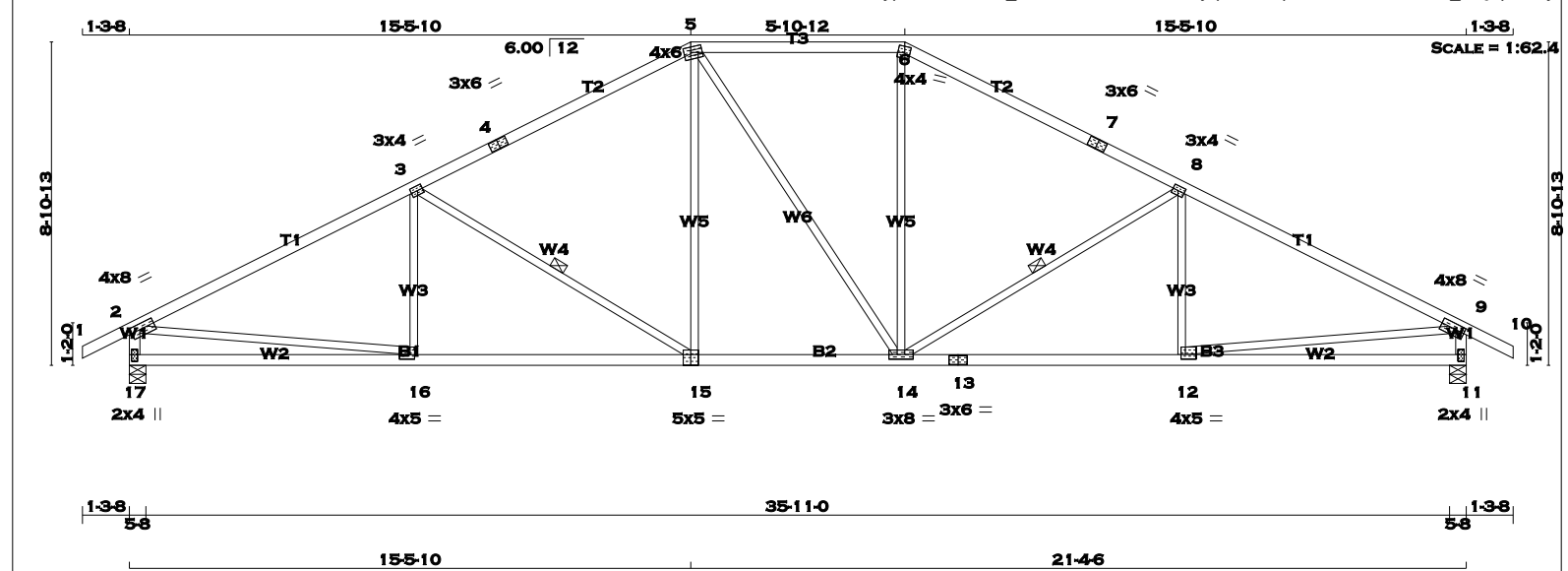
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 5 2x4 DRY No.2 SPF 5 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 18 - 2 2x4 DRY No.2 SPF 10 - 9 2x4 DRY No.2 SPF 18 - 15 2x4 DRY No.2 SPF 15 - 13 2x4 DRY No.2 SPF 13 - 10 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: 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 18 1852 0 1852 0 0 5-8 5-8 10 1747 0 1747 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 18 1297 921 / 0 0 / 0 0 / 0 376 / 0 0 / 0 10 1226 858 / 0 0 / 0 0 / 0 368 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 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 MAX. 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 / 23 -77.4 -77.4 0.10 (1) 10.00 17-3 -193 / 51 0.06 (1) 2-3 -2636 / 0 -77.4 -77.4 0.58 (1) 3.75 3-16 -439 / 0 0.51 (1) 3-4 -2276 / 0 -77.4 -77.4 0.51 (1) 4.05 16-5 0 / 345 0.08 (1) 4-5 -2276 / 0 -77.4 -77.4 0.51 (1) 4.05 5-14 0 / 392 0.09 (1) 5-6 -2255 / 0 -77.4 -77.4 0.38 (1) 4.19 14-6 -531 / 0 0.55 (1) 6-7 -2255 / 0 -77.4 -77.4 0.38 (1) 4.19 14-7 0 / 392 0.09 (1) 7-8 -2276 / 0 -77.4 -77.4 0.51 (1) 4.05 12-7 0 / 345 0.08 (1) 8-9 -2635 / 0 -77.4 -77.4 0.57 (1) 3.75 12-8 -439 / 0 0.51 (1) 18-2 -1803 / 0 0.0 0.0 0.18 (1) 6.23 11-8 -193 / 51 0.06 (1) 10-9 -1698 / 0 0.0 0.0 0.17 (1) 6.38 2-17 0 / 2401 0.54 (1) 11-9 0 / 2401 0.54 (1) 18-17 0 / 0 -17.5 -17.5 0.17 (4) 10.00 17-16 0 / 2380 -17.5 -17.5 0.45 (1) 10.00 16-15 0 / 2016 -17.5 -17.5 0.39 (1) 10.00 15-14 0 / 2016 -17.5 -17.5 0.39 (1) 10.00 14-13 0 / 2016 -17.5 -17.5 0.39 (1) 10.00 13-12 0 / 2016 -17.5 -17.5 0.39 (1) 10.00 12-11 0 / 2380 -17.5 -17.5 0.45 (1) 10.00 11-10 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 (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 (2-3:1), BC=0.45 (16-17:1) , WB=0.55 (6-14:1) , SSI=0.22 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.87 (11) (INPUT = 0.90) JSI METAL= 0.71 (17) (INPUT = 1.00)	
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TOTAL WEIGHT = 149 lb										[M][F]																																																																																																																																																																																																																																												
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 6 2x4 DRY No.2 6 - 7 2x4 DRY No.2 7 - 10 2x4 DRY No.2 17 - 2 2x4 DRY No.2 11 - 9 2x4 DRY No.2 17 - 15 2x4 DRY No.2 15 - 13 2x4 DRY No.2 13 - 11 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 <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>17</td><td>1852</td><td>0</td><td>1852</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>11</td><td>1852</td><td>0</td><td>1852</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX/MIN.</th><th>COMPONENT REACTIONS</th></tr><tr><th></th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>17</td><td>1297</td><td>921 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>376 / 0</td><td>0 / 0</td></tr><tr><td>11</td><td>1297</td><td>921 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>376 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17, 11 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-15, 8-14. DBS = 20-0-0 . CBF = 84 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) <table><tr><th colspan="4">C H O R D S</th><th colspan="4">W E B S</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX 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</td><td>TO</td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 23</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>10.00</td><td>16-3</td><td>-109 / 99</td><td>0.04 (1)</td></tr><tr><td>2-3</td><td>-2644 / 0</td><td>-77.4</td><td>-77.4 0.90 (1)</td><td>3.33</td><td>3-15</td><td>-669 / 0</td><td>0.39 (1)</td></tr><tr><td>3-4</td><td>-2073 / 0</td><td>-77.4</td><td>-77.4 0.77 (1)</td><td>3.82</td><td>15-5</td><td>0 / 464</td><td>0.10 (1)</td></tr><tr><td>4-5</td><td>-2073 / 0</td><td>-77.4</td><td>-77.4 0.77 (1)</td><td>3.82</td><td>5-14</td><td>0 / 0</td><td>0.00 (1)</td></tr><tr><td>5-6</td><td>-1830 / 0</td><td>-77.4</td><td>-77.4 0.40 (1)</td><td>4.54</td><td>14-6</td><td>0 / 465</td><td>0.10 (1)</td></tr><tr><td>6-7</td><td>-2074 / 0</td><td>-77.4</td><td>-77.4 0.77 (1)</td><td>3.82</td><td>14-8</td><td>-668 / 0</td><td>0.39 (1)</td></tr><tr><td>7-8</td><td>-2074 / 0</td><td>-77.4</td><td>-77.4 0.77 (1)</td><td>3.82</td><td>12-8</td><td>-110 / 99</td><td>0.04 (1)</td></tr><tr><td>8-9</td><td>-2644 / 0</td><td>-77.4</td><td>-77.4 0.90 (1)</td><td>3.33</td><td>2-16</td><td>0 / 2408</td><td>0.54 (1)</td></tr><tr><td>9-10</td><td>0 / 23</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>10.00</td><td>12-9</td><td>0 / 2408</td><td>0.54 (1)</td></tr><tr><td>17-2</td><td>-1796 / 0</td><td>0.0</td><td>0.0 0.18 (1)</td><td>6.24</td><td></td><td></td><td></td></tr><tr><td>11-9</td><td>-1795 / 0</td><td>0.0</td><td>0.0 0.18 (1)</td><td>6.24</td><td></td><td></td><td></td></tr><tr><td>17-16</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.26 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>16-15</td><td>0 / 2394</td><td>-17.5</td><td>-17.5 0.51 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>15-14</td><td>0 / 1830</td><td>-17.5</td><td>-17.5 0.38 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 2393</td><td>-17.5</td><td>-17.5 0.51 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 2393</td><td>-17.5</td><td>-17.5 0.51 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.26 (4)</td><td>10.00</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	IN-SX	17	1852	0	1852	0	0	5-8	5-8	11	1852	0	1852	0	0	5-8	5-8	JT	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	17	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	11	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0	C H O R D S				W E B S				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	FR-TO		FROM	TO		FR-TO			1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	16-3	-109 / 99	0.04 (1)	2-3	-2644 / 0	-77.4	-77.4 0.90 (1)	3.33	3-15	-669 / 0	0.39 (1)	3-4	-2073 / 0	-77.4	-77.4 0.77 (1)	3.82	15-5	0 / 464	0.10 (1)	4-5	-2073 / 0	-77.4	-77.4 0.77 (1)	3.82	5-14	0 / 0	0.00 (1)	5-6	-1830 / 0	-77.4	-77.4 0.40 (1)	4.54	14-6	0 / 465	0.10 (1)	6-7	-2074 / 0	-77.4	-77.4 0.77 (1)	3.82	14-8	-668 / 0	0.39 (1)	7-8	-2074 / 0	-77.4	-77.4 0.77 (1)	3.82	12-8	-110 / 99	0.04 (1)	8-9	-2644 / 0	-77.4	-77.4 0.90 (1)	3.33	2-16	0 / 2408	0.54 (1)	9-10	0 / 23	-77.4	-77.4 0.10 (1)	10.00	12-9	0 / 2408	0.54 (1)	17-2	-1796 / 0	0.0	0.0 0.18 (1)	6.24				11-9	-1795 / 0	0.0	0.0 0.18 (1)	6.24				17-16	0 / 0	-17.5	-17.5 0.26 (4)	10.00				16-15	0 / 2394	-17.5	-17.5 0.51 (1)	10.00				15-14	0 / 1830	-17.5	-17.5 0.38 (1)	10.00				14-13	0 / 2393	-17.5	-17.5 0.51 (1)	10.00				13-12	0 / 2393	-17.5	-17.5 0.51 (1)	10.00				12-11	0 / 0	-17.5	-17.5 0.26 (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 (0.15") ALLOWABLE DEFL.(TL)= L/360 (1.23") CALCULATED VERT. DEFL.(TL) = L/999 (0.29") CSI: TC=0.90 (2-3:1) , BC=0.51 (15-16:1) , WB=0.54 (2-16:1) , SSI=0.26 (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= 0.87 (16) (INPUT = 0.90) JSI METAL= 0.72 (16) (INPUT = 1.00)									
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																																																																																		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																																																																															
17	1852	0	1852	0	0	5-8	5-8																																																																																																																																																																																																																																															
11	1852	0	1852	0	0	5-8	5-8																																																																																																																																																																																																																																															
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17	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0																																																																																																																																																																																																																																															
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FR-TO		FROM	TO		FR-TO																																																																																																																																																																																																																																																	
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5-6	-1830 / 0	-77.4	-77.4 0.40 (1)	4.54	14-6	0 / 465	0.10 (1)																																																																																																																																																																																																																																															
6-7	-2074 / 0	-77.4	-77.4 0.77 (1)	3.82	14-8	-668 / 0	0.39 (1)																																																																																																																																																																																																																																															
7-8	-2074 / 0	-77.4	-77.4 0.77 (1)	3.82	12-8	-110 / 99	0.04 (1)																																																																																																																																																																																																																																															
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17-2	-1796 / 0	0.0	0.0 0.18 (1)	6.24																																																																																																																																																																																																																																																		
11-9	-1795 / 0	0.0	0.0 0.18 (1)	6.24																																																																																																																																																																																																																																																		
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14-13	0 / 2393	-17.5	-17.5 0.51 (1)	10.00																																																																																																																																																																																																																																																		
13-12	0 / 2393	-17.5	-17.5 0.51 (1)	10.00																																																																																																																																																																																																																																																		
12-11	0 / 0	-17.5	-17.5 0.26 (4)	10.00																																																																																																																																																																																																																																																		

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

RECEIVED

TOWN OF MILTON

MAR 29, 2017

17-5318

BUILDING DIVISION

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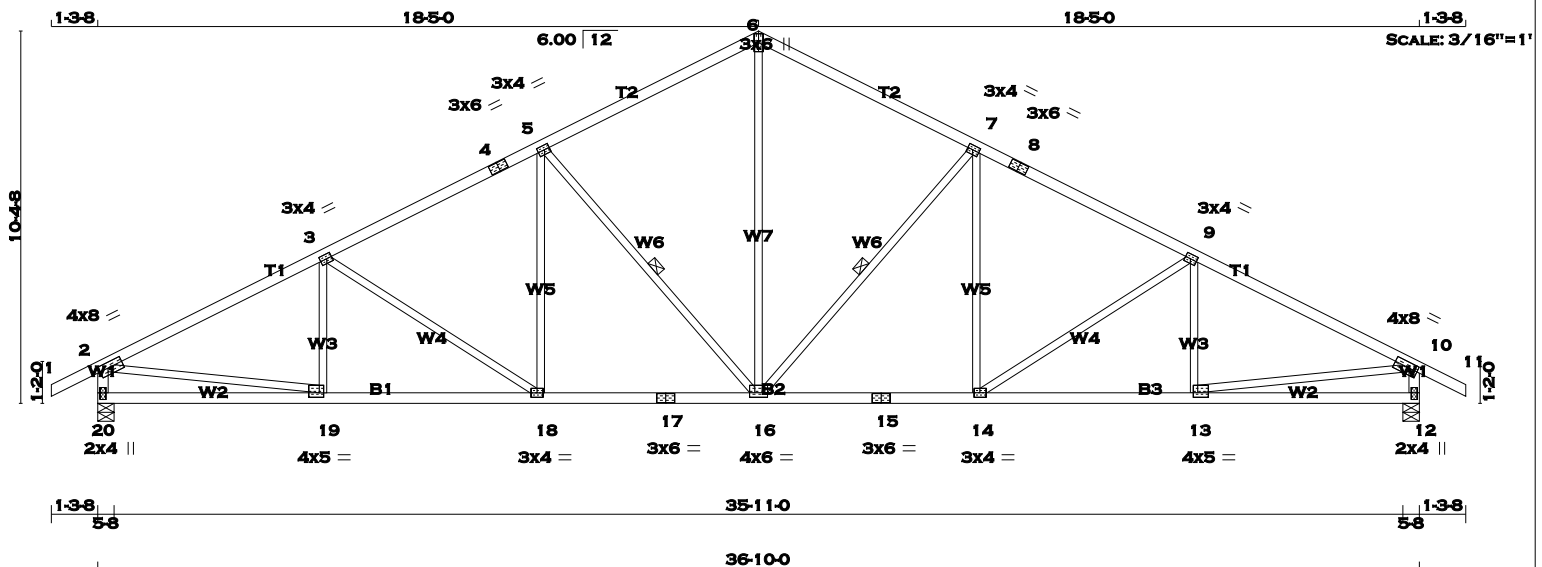


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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 11	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
20 - 17	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2
ALL WEBS EXCEPT	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 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	HORZ
20	1852	0	1852
12	1852	0	1852

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. 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	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/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 (2-3:1), BC=0.44 (18-19:1), WB=0.54 (2-19:1), SSI=0.20 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR 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.

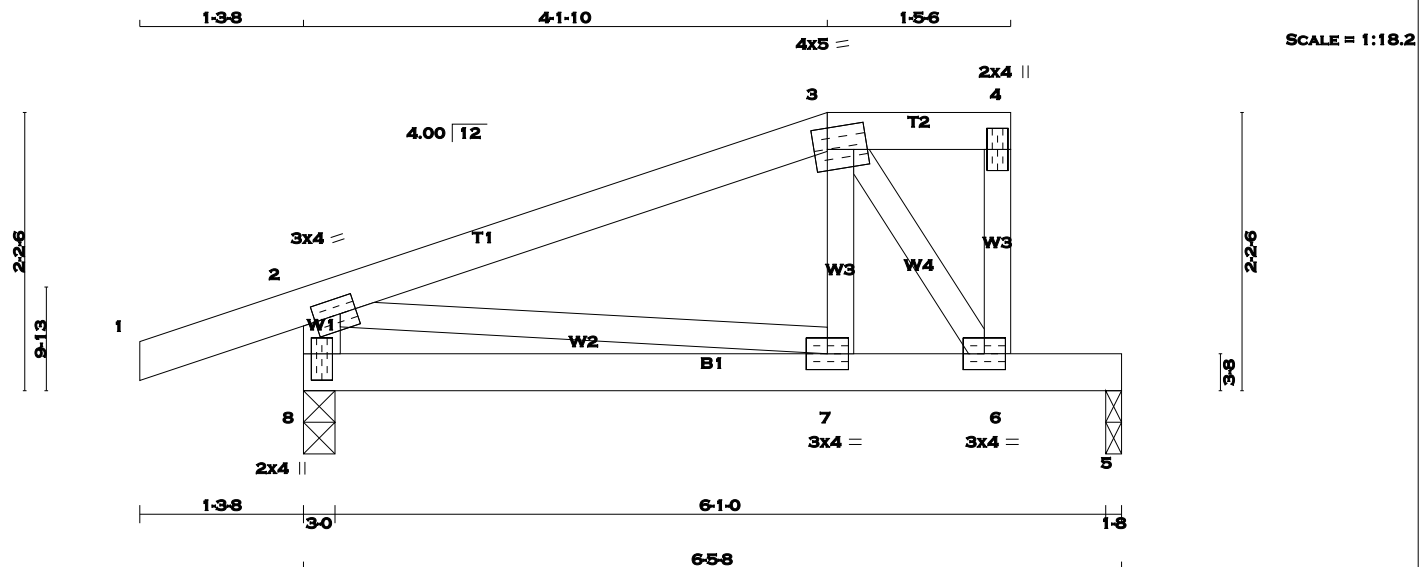
JSI GRIP= 0.90 (6) (INPUT = 0.90)
JSI METAL= 0.71 (13) (INPUT = 1.00)



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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS				DESIGN CRITERIA			
1 - 3	2x4	DRY	No.2	SPF	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:		
3 - 4	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL =	23.3	PSF
6 - 4	2x3	DRY	No.2	SPF	JT VERT	DOWN	HORZ	UPLIFT	DL =	3.0	PSF
8 - 2	2x4	DRY	No.2	SPF	8 410	0	410	0	BOT CH. LL =	0.0	PSF
8 - 5	2x4	DRY	No.2	SPF	5 306	0	306	0	DL =	7.0	PSF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS				TOTAL LOAD =	33.3	PSF
DRY: SEASONED LUMBER.					1ST LCASE	MAX/MIN.	COMPONENT REACTIONS		SPACING =	24.0	IN. C/C
					JT COMBINED	SNOW	LIVE	PERM.LIVE	LOADING IN FLAT SECTION BASED ON A SLOPE		
					8 285	213 / 0	0 / 0	0 / 0	OF 6.00/12		
					5 215	150 / 0	0 / 0	0 / 0	THIS TRUSS IS DESIGNED FOR RESIDENTIAL		
									OR SMALL BUILDING REQUIREMENTS OF		
									PART 9, NBCC 2010		
									THIS DESIGN COMPLIES WITH:		
									- PART 9 OF OBC 2012, BCBC 2012, ABC 2014		
									- CSA 086-09		
									- TPIC 2011		
									(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F.		
									RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED		
									ROOF LIVE LOAD		
									ALLOWABLE DEFL.(LL)=	L/360 (0.22")	
									CALCULATED VERT. DEFL.(LL) =	L/ 999 (0.02")	
									ALLOWABLE DEFL.(TL)=	L/360 (0.22")	
									CALCULATED VERT. DEFL.(TL) =	L/ 999 (0.03")	
									CSI: TC=0.23 (2-3:1), BC=0.36 (6-7:1), WB=0.07		
									(3-6:1), SSI=0.24 (5-6:1)		
									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=	0.64 (3) (INPUT = 0.90)	
									JSI METAL=	0.16 (3) (INPUT = 1.00)	



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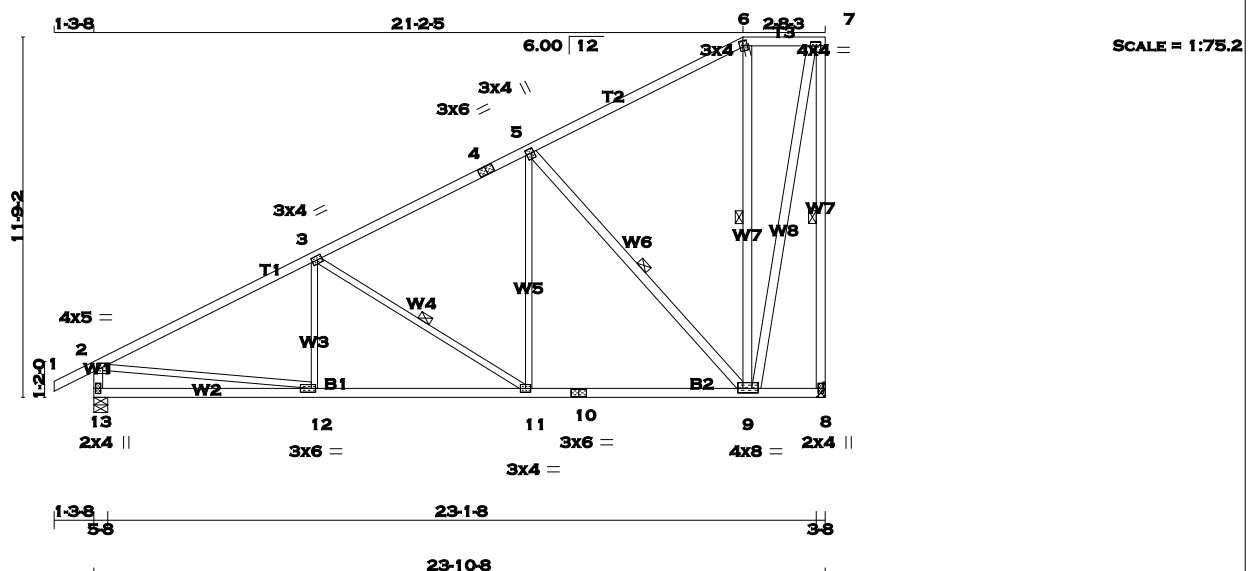
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LUMBER N. L. G. A. RULES CHORDS SIZE				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA							
LUMBER				DESCR.		BEARINGS										SPECIFIED LOADS:					
1 - 4				2x4	DRY	No.2	SPF	FACTORED			MAXIMUM FACTORED			INPUT		REQRD		TOP CH. LL = 23.3 PSF			
4 - 6				2x4	DRY	No.2	SPF	GROSS REACTION			GROSS REACTION			BRG		BRG		DL = 3.0 PSF			
6 - 7				2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF					
8 - 7				2x4	DRY	No.2	SPF	8	1132	0	1132	0	0	HANGER BY OTHERS			DL = 7.0 PSF				
13 - 2				2x4	DRY	No.2	SPF							MIN. SEAT SIZE: 3-8			TOTAL LOAD = 33.3 PSF				
13 - 10				2x4	DRY	No.2	SPF	13	1237	0	1237	0	0	5-8	5-8						
10 - 8				2x4	DRY	No.2	SPF														
ALL WEBS EXCEPT				2x3	DRY	No.2	SPF	UNFACTORED REACTIONS										SPACING = 24.0 IN./C			
5 - 9				2x4	DRY	No.2	SPF	JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS								LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12		
9 - 6				2x4	DRY	No.2	SPF	8	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL						
9 - 7				2x4	DRY	No.2	SPF	8	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0						
								13	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0						
																		THIS TRUSS IS DESIGNED FOR RESIDENTIAL			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-p	MT20	4.0	5.0	1.50 2.25
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TMVW+t	MT20	3.0	4.0	1.75 0.75
6	TTW+m	MT20	3.0	4.0	2.00 1.25
7	TMVW-t	MT20	4.0	4.0	1.50 1.75
8	BMV1+p	MT20	2.0	4.0	
9	BMVW+t	MT20	4.0	8.0	1.75 2.00
10	BS-t	MT20	3.0	6.0	
11	BMVW-t	MT20	3.0	4.0	
12	BMVW-t	MT20	3.0	6.0	1.50 1.75
13	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1 MAX	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1 MAX
FR-TO	FORCE (LBS)	(PLF)	FROM TO	CSI (LC)	FR-TO	FORCE (LBS)	(PLF)	FROM TO	CSI (LC)
1-2	0 / 23	-77.4	-77.4	0.10 (1)	10.00	12-3	-29 / 107	0.04 (4)	
2-3	-1519 / 0	-77.4	-77.4	0.55 (1)	4.69	3-11	-598 / 0	0.28 (1)	
3-4	-979 / 0	-77.4	-77.4	0.43 (1)	5.74	11-5	0 / 450	0.10 (1)	
4-5	-979 / 0	-77.4	-77.4	0.43 (1)	5.74	5-9	-968 / 0	0.59 (1)	
5-6	-280 / 0	-77.4	-77.4	0.45 (1)	6.25	9-6	-207 / 0	0.15 (1)	
6-7	-226 / 0	-77.4	-77.4	0.07 (1)	6.25	9-7	0 / 1048	0.17 (1)	
8-7	-1126 / 0	0.0	0.0	0.84 (1)	5.98	2-12	0 / 1390	0.31 (1)	
13-2	-1185 / 0	0.0	0.0	0.12 (1)	7.34				
13-12	0 / 0	-17.5	-17.5	0.21 (4)	10.00				
12-11	0 / 1380	-17.5	-17.5	0.33 (1)	10.00				
11-10	0 / 876	-17.5	-17.5	0.24 (1)	10.00				
10-9	0 / 876	-17.5	-17.5	0.24 (1)	10.00				
9-8	0 / 0	-17.5	-17.5	0.13 (4)	10.00				

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

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.12")

CSI: TC=0.84 (7-8:1) , BC=0.33 (11-12:1) , WB=0.59 (5-9:1) , 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.

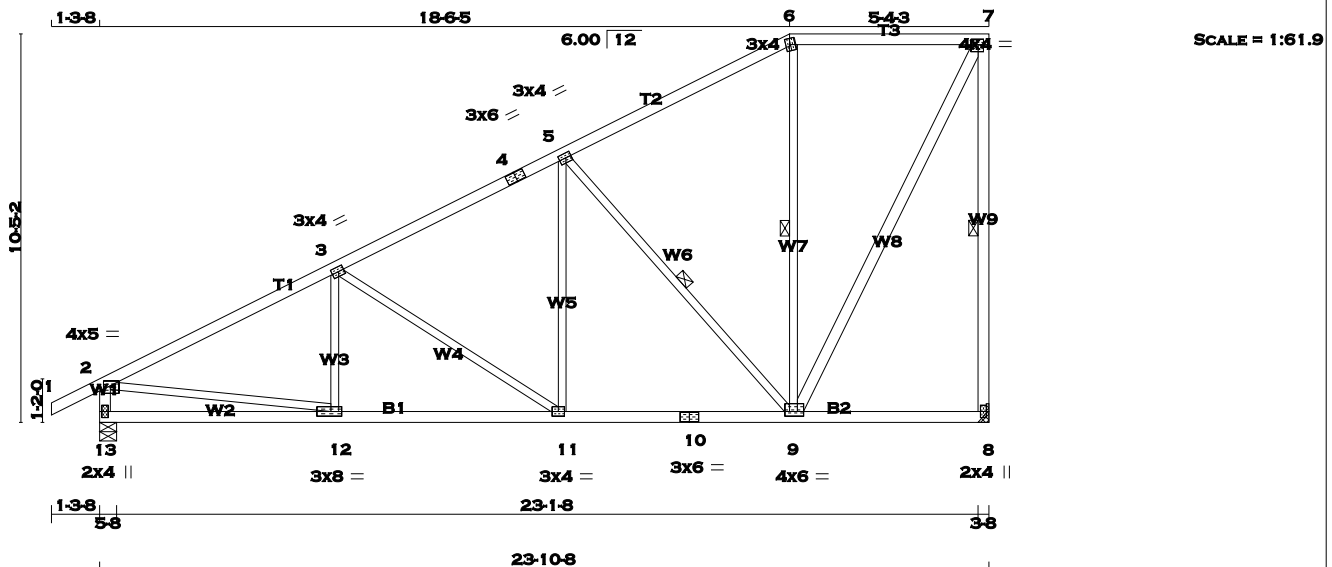
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JSI METAL= 0.40 (2) (INPUT = 1.00)

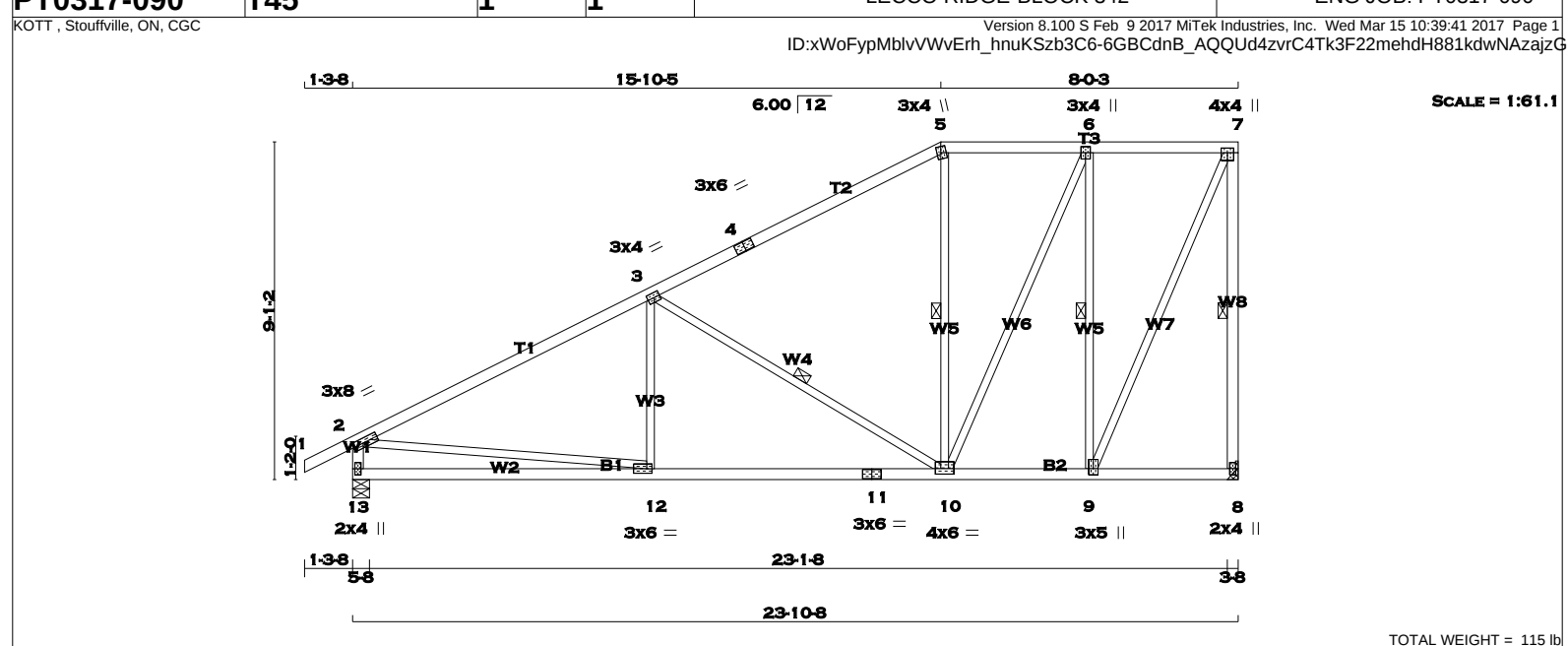


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LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
1 - 4	2x4	DRY	No.2	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	TOP CH.	LL = 23.3	PSF	
4 - 5	2x4	DRY	No.2	JT VERT	DOWN	HORZ	UPLIFT	DL = 3.0	PSF		
5 - 7	2x4	DRY	No.2	8 1132	0	1132	0	BOT CH.	LL = 0.0	PSF	
8 - 7	2x4	DRY	No.2	13 1237	0	1237	0	DL = 7.0	PSF		
13 - 2	2x4	DRY	No.2					TOTAL LOAD = 33.3	PSF		
13 - 11	2x4	DRY	No.2								
11 - 8	2x4	DRY	No.2								
ALL WEBS EXCEPT	2x3	DRY	No.2	UNFACTORED REACTIONS				SPACING = 24.0 IN./C			
DRY: SEASONED LUMBER.				1ST LCASE	MAX./MIN.	COMPONENT REACTIONS		LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
				JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
				8 795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	
				13 866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.30 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 83 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-10. DBS = 18-0-0 . CBF = 92 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-10. DBS = 20-0-0 . CBF = 6 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-9. DBS = 16-0-0 . 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 (LBS)	LC1 MAX (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM TO			FR-TO		
1- 2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	12- 3	0 / 139	0.05 (4)
2- 3	-1513 / 0	-77.4 -77.4	0.76 (1)	4.30	3-10	-819 / 0	0.50 (1)
3- 4	-801 / 0	-77.4 -77.4	0.67 (1)	5.62	10- 5	-4 / 65	0.02 (4)
4- 5	-801 / 0	-77.4 -77.4	0.67 (1)	5.62	10- 6	0 / 589	0.13 (1)
5- 6	-686 / 0	-77.4 -77.4	0.15 (1)	6.25	9- 6	-918 / 0	0.49 (1)
6- 7	-447 / 0	-77.4 -77.4	0.15 (1)	6.25	9- 7	0 / 1079	0.24 (1)
8- 7	-1101 / 0	0.0 0.0	0.42 (1)	6.03	2-12	0 / 1391	0.31 (1)
13- 2	-1181 / 0	0.0 0.0	0.12 (1)	7.34			
13-12	0 / 0	-17.5 -17.5	0.28 (4)	10.00			
12-11	0 / 1383	-17.5 -17.5	0.38 (4)	10.00			
11-10	0 / 1383	-17.5 -17.5	0.38 (4)	10.00			
10- 9	0 / 447	-17.5 -17.5	0.17 (4)	10.00			
9- 8	0 / 0	-17.5 -17.5	0.06 (4)	10.00			

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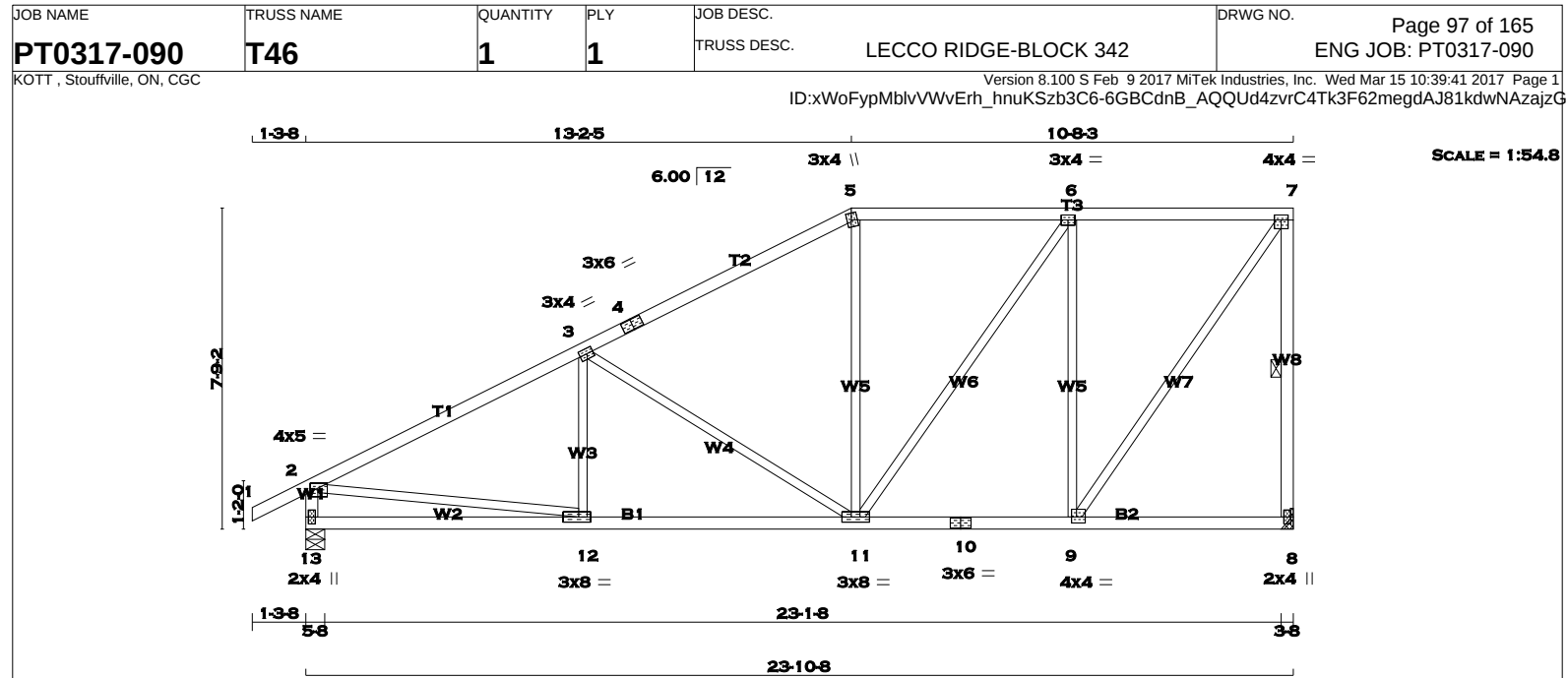
TOWN OF MILTON

MAR 29, 2017

17-5318

BUILDING DIVISION

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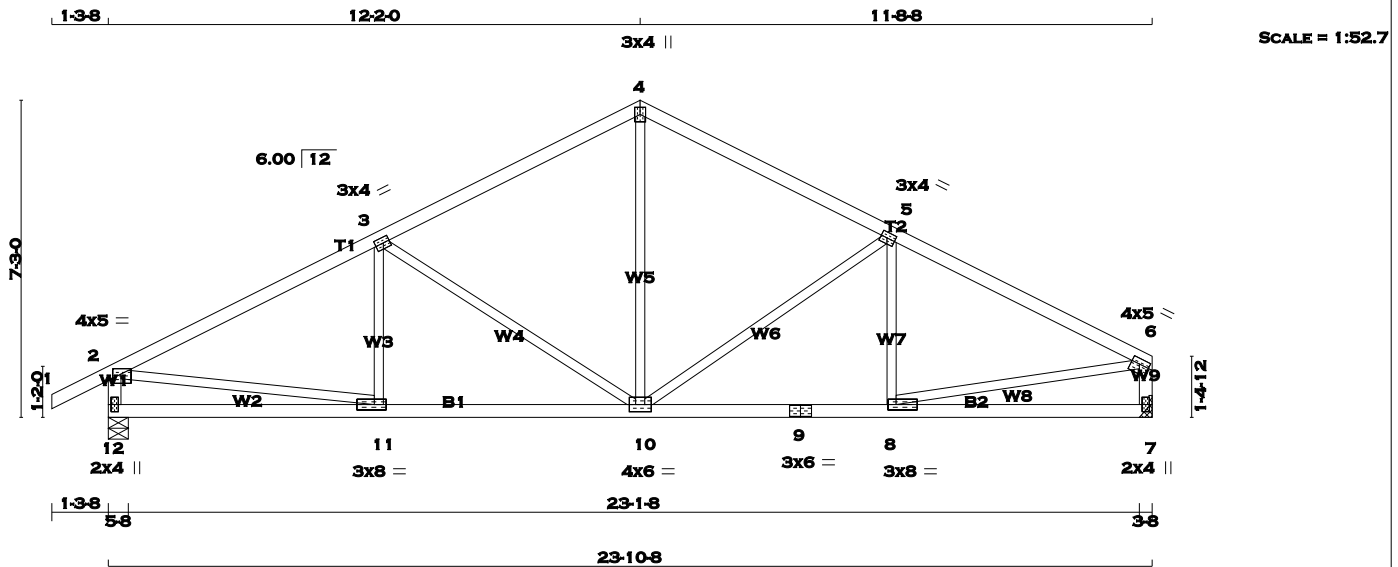
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 8 - 7 2x4 DRY No.2 13 - 2 2x4 DRY No.2 13 - 10 2x4 DRY No.2 10 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 8 1132 0 13 1237 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1132 0 0 1237 0 0 INPUT BRG IN-SX 5-8 5-8 REQRD BRG IN-SX HANGER BY OTHERS MIN. SEAT SIZE: 3-8			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.80") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.80") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12") CSI: TC=0.50 (2-3:1), BC=0.32 (11-12:1), WB=0.94 (6-9:1), SSI=0.22 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (7) (INPUT = 0.90) JSI METAL= 0.40 (2) (INPUT = 1.00)
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-p MT20 4.0 5.0 1.50 2.25 3 TMVW-t MT20 3.0 4.0 1.50 1.75 4 TS-t MT20 3.0 6.0 5 TTW+m MT20 3.0 4.0 2.00 1.25 6 TMVW-t MT20 3.0 4.0 7 TMVW-t MT20 4.0 4.0 1.50 2.00 8 BMV1+p MT20 2.0 4.0 9 BMVW-t MT20 4.0 4.0 1.75 1.50 10 BS-t MT20 3.0 6.0 11 BMVW-t MT20 3.0 8.0 12 BMVW-t MT20 3.0 8.0 1.50 3.50 13 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.			UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 8 795 556 / 0 0 / 0 0 / 0 239 / 0 0 / 0 13 866 619 / 0 0 / 0 0 / 0 247 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.72 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS. 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 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD LC1 MAX. FACTORED (PLF) CSI (LC) UNBRAC LENGTH FR-TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 12-3 -50 / 97 0.03 (4) 2-3 -1550 / 0 -77.4 -77.4 0.50 (1) 4.72 3-11 -609 / 0 0.77 (1) 3-4 -1031 / 0 -77.4 -77.4 0.45 (1) 5.57 11-5 0 / 103 0.03 (4) 4-5 -1031 / 0 -77.4 -77.4 0.45 (1) 5.57 11-6 0 / 397 0.09 (1) 5-6 -898 / 0 -77.4 -77.4 0.29 (1) 6.13 9-6 -836 / 0 0.94 (1) 6-7 -670 / 0 -77.4 -77.4 0.29 (1) 6.25 9-7 0 / 1152 0.26 (1) 8-7 -1094 / 0 0.0 0.0 0.30 (1) 6.05 2-12 0 / 1422 0.32 (1) 13-2 -1189 / 0 0.0 0.0 0.12 (1) 7.32 13-12 0 / 0 -17.5 -17.5 0.19 (4) 10.00 12-11 0 / 1410 -17.5 -17.5 0.32 (1) 10.00 11-10 0 / 670 -17.5 -17.5 0.17 (1) 10.00 10-9 0 / 670 -17.5 -17.5 0.17 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.11 (4) 10.00			W E B S MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC) MEMB. VERT. LOAD LC1 MAX. FACTORED (PLF) CSI (LC) UNBRAC LENGTH FR-TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 12-3 -50 / 97 0.03 (4) 2-3 -1550 / 0 -77.4 -77.4 0.50 (1) 4.72 3-11 -609 / 0 0.77 (1) 3-4 -1031 / 0 -77.4 -77.4 0.45 (1) 5.57 11-5 0 / 103 0.03 (4) 4-5 -1031 / 0 -77.4 -77.4 0.45 (1) 5.57 11-6 0 / 397 0.09 (1) 5-6 -898 / 0 -77.4 -77.4 0.29 (1) 6.13 9-6 -836 / 0 0.94 (1) 6-7 -670 / 0 -77.4 -77.4 0.29 (1) 6.25 9-7 0 / 1152 0.26 (1) 8-7 -1094 / 0 0.0 0.0 0.30 (1) 6.05 2-12 0 / 1422 0.32 (1) 13-2 -1189 / 0 0.0 0.0 0.12 (1) 7.32 13-12 0 / 0 -17.5 -17.5 0.19 (4) 10.00 12-11 0 / 1410 -17.5 -17.5 0.32 (1) 10.00 11-10 0 / 670 -17.5 -17.5 0.17 (1) 10.00 10-9 0 / 670 -17.5 -17.5 0.17 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.11 (4) 10.00



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

PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Y	X			
2	TMVW-p	MT20	4.0	5.0	1.50	2.25			
3	TMVW-t	MT20	3.0	4.0	1.50	1.75			
4	TTW+p	MT20	3.0	4.0					
5	TMVW-t	MT20	3.0	4.0	1.50	1.75			
6	TMVW-t	MT20	4.0	5.0	1.50	2.25			
7	BMV1+p	MT20	2.0	4.0					
8	BMVW-t	MT20	3.0	8.0	1.50	2.25			
9	BS-t	MT20	3.0	6.0					
10	BMVW-t	MT20	4.0	6.0					
11	BMVW-t	MT20	3.0	8.0	1.50	3.25			
12	BMV1+p	MT20	2.0	4.0					

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



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
12	1237	0	1237	0	0
7	1132	0	1132	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
12	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
7	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

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 / 23	-77.4	-77.4 0.10 (1)	10.00	11-3	-80 / 78	0.03 (4)
2-3	-1555 / 0	-77.4	-77.4 0.42 (1)	4.83	3-10	-519 / 0	0.51 (1)
3-4	-1121 / 0	-77.4	-77.4 0.38 (1)	5.51	10-4	0 / 639	0.14 (1)
4-5	-1120 / 0	-77.4	-77.4 0.36 (1)	5.55	10-5	-434 / 0	0.41 (1)
5-6	-1468 / 0	-77.4	-77.4 0.38 (1)	4.99	8-5	-133 / 58	0.04 (1)
12-2	-1192 / 0	0.0	0.0 0.12 (1)	7.32	2-11	0 / 1427	0.32 (1)
7-6	-1088 / 0	0.0	0.0 0.11 (1)	7.57	8-6	0 / 1357	0.31 (1)
12-11	0 / 0	-17.5	-17.5 0.15 (4)	10.00			
11-10	0 / 1413	-17.5	-17.5 0.30 (1)	10.00			
10-9	0 / 1335	-17.5	-17.5 0.28 (1)	10.00			
9-8	0 / 1335	-17.5	-17.5 0.28 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

CSI: TC=0.42 (2-3:1), BC=0.30 (10-11:1), WB=0.51 (3-10:1), SS=0.21 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

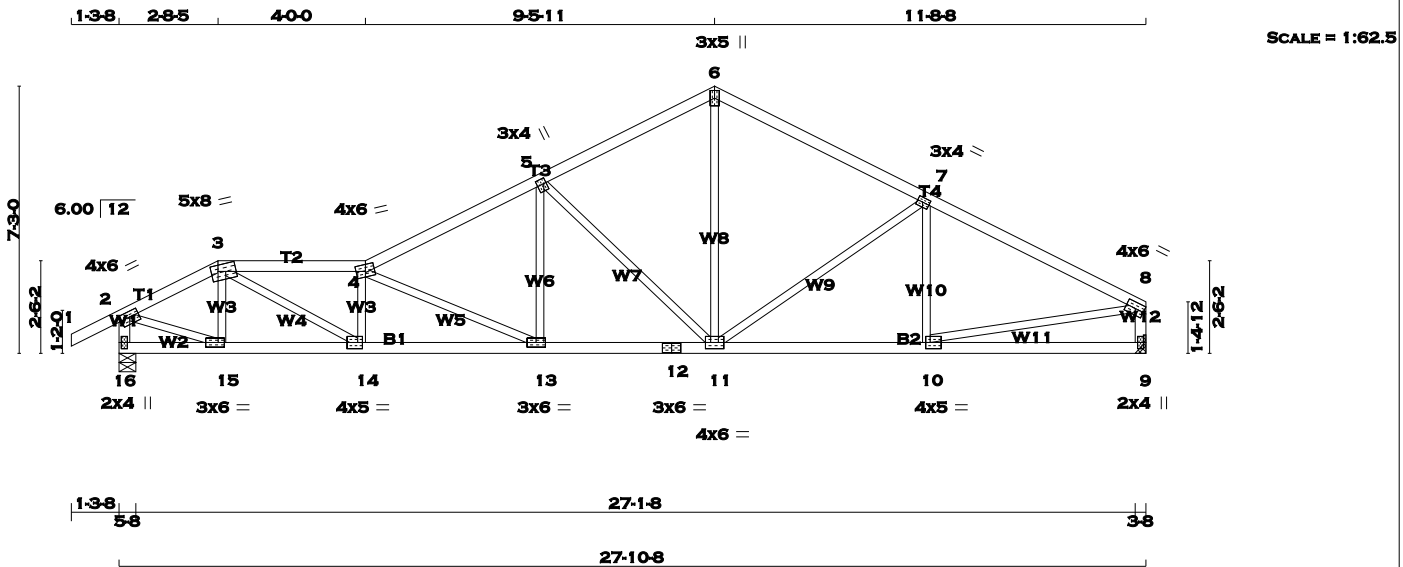
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.47 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 111 = 221 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			
16 - 2	2x4	DRY	No.2	SPF			
9 - 8	2x4	DRY	No.2	SPF			
16 - 12	2x4	DRY	No.2	SPF			
12 - 9	2x4	DRY	No.2	SPF			
ALL WEBS	2x3	DRY	No.2	SPF			
EXCEPT							
DRY: SEASONED LUMBER.							

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMVW-t	MT20	4.0	6.0	1.75	3.00	
3	TTWW-m	MT20	5.0	8.0	2.00	2.25	
4	TTWW-m	MT20	4.0	6.0	2.25	3.00	
5	TMWW-t	MT20	3.0	4.0	1.75	0.75	
6	TTW+p	MT20	3.0	5.0			
7	TMWW-t	MT20	3.0	4.0	1.50	1.75	
8	TMVW-t	MT20	4.0	6.0		Edge	
9	BMV1+p	MT20	2.0	4.0			
10	BMWW-t	MT20	4.0	5.0	2.00	1.50	
11	BMWWW-t	MT20	4.0	6.0			
12	BS-t	MT20	3.0	6.0			
13	BMWW-t	MT20	3.0	6.0			
14	BMWW-t	MT20	4.0	5.0	2.00	1.50	
15	BMWW-t	MT20	3.0	6.0	1.50	2.00	
16	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			
				GROSS REACTION				GROSS REACTION				BRG				BRG			
				JT				DOWN				IN-SX				IN-SX			
16	1427	0		1427	0	0		5-8	5-8										
9	1322	0		1322	0	0		HANGER BY OTHERS				MIN. SEAT SIZE: 3-8							

UNFACTORED REACTIONS							
1ST LCASE				MAX./MIN. COMPONENT REACTIONS			
JT				COMBINED			
16	999	712 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
9	928	649 / 0	0 / 0	0 / 0	0 / 0	287 / 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 = 3.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.				MEMB.			
MAX. FACTORED				MAX. FACTORED			
FORCE (LBS)				FORCE (LBS)			
VERT. LOAD				UNBRAC			
(PLF)				LENGTH			
CSI (LC)				FR-TO			
FR-TO				FROM TO			
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	15-3	-376 / 0	0.06 (1)
2-3	-1662 / 0	-77.4	-77.4 0.10 (1)	5.07	3-14	0 / 1750	0.39 (1)
3-4	-2989 / 0	-77.4	-77.4 0.26 (1)	3.83	14-4	-814 / 0	0.13 (1)
4-5	-2216 / 0	-77.4	-77.4 0.29 (1)	4.34	4-13	-1133 / 0	0.53 (1)
5-6	-1472 / 0	-77.4	-77.4 0.24 (1)	5.15	13-5	0 / 572	0.13 (1)
6-7	-1477 / 0	-77.4	-77.4 0.37 (1)	4.99	5-11	-975 / 0	0.77 (1)
7-8	-1778 / 0	-77.4	-77.4 0.40 (1)	4.61	11-6	0 / 991	0.22 (1)
16-2	-1412 / 0	0.0	0.0 0.14 (1)	6.86	11-7	-383 / 0	0.36 (1)
9-8	-1278 / 0	0.0	0.0 0.13 (1)	7.13	10-7	-183 / 44	0.05 (1)
					2-15	0 / 1553	0.35 (1)
					10-8	0 / 1638	0.37 (1)
16-15	0 / 0	-17.5	-17.5 0.04 (4)	10.00			
15-14	0 / 1467	-17.5	-17.5 0.28 (1)	10.00			
14-13	0 / 3027	-17.5	-17.5 0.56 (1)	10.00			
13-12	0 / 2001	-17.5	-17.5 0.38 (1)	10.00			
12-11	0 / 2001	-17.5	-17.5 0.38 (1)	10.00			
11-10	0 / 1612	-17.5	-17.5 0.32 (1)	10.00			
10-9	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 ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (0.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")

CSI: TC=0.40 (7-8:1), BC=0.56 (13-14:1), WB=0.77 (5-11:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

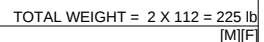
JSI GRIP= 0.89 (10) (INPUT = 0.90)
JSI METAL= 0.49 (12) (INPUT = 1.00)

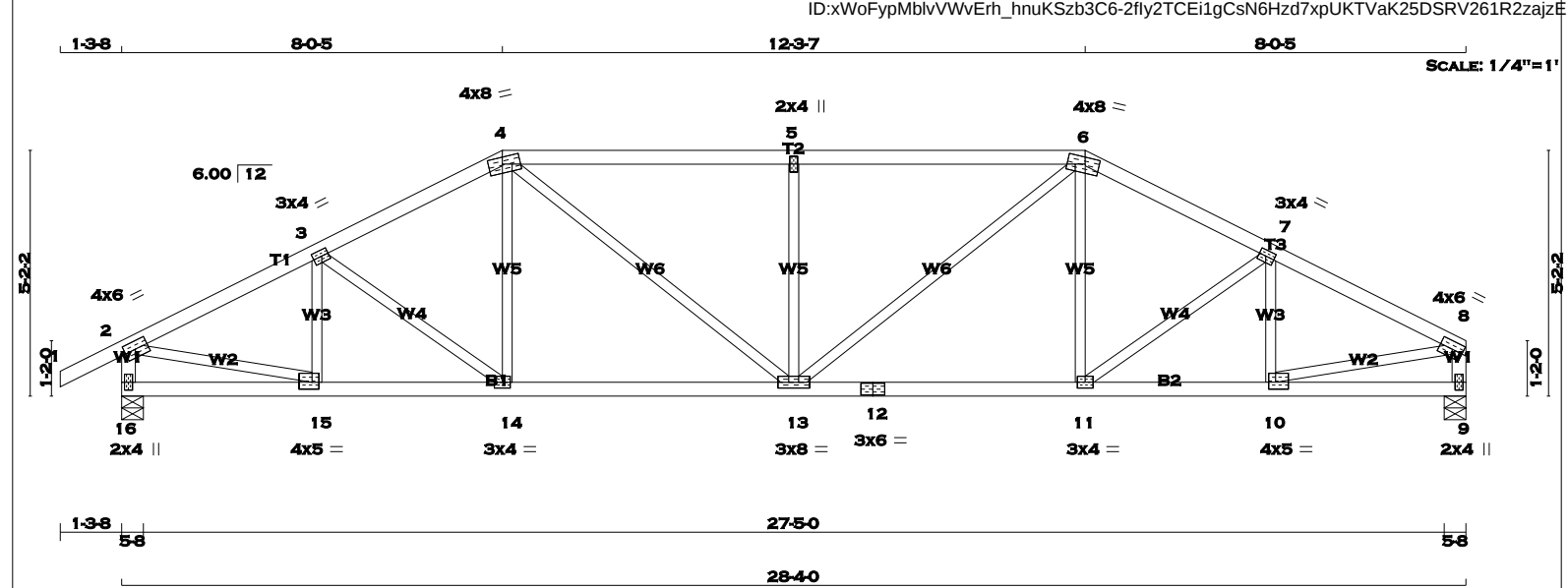


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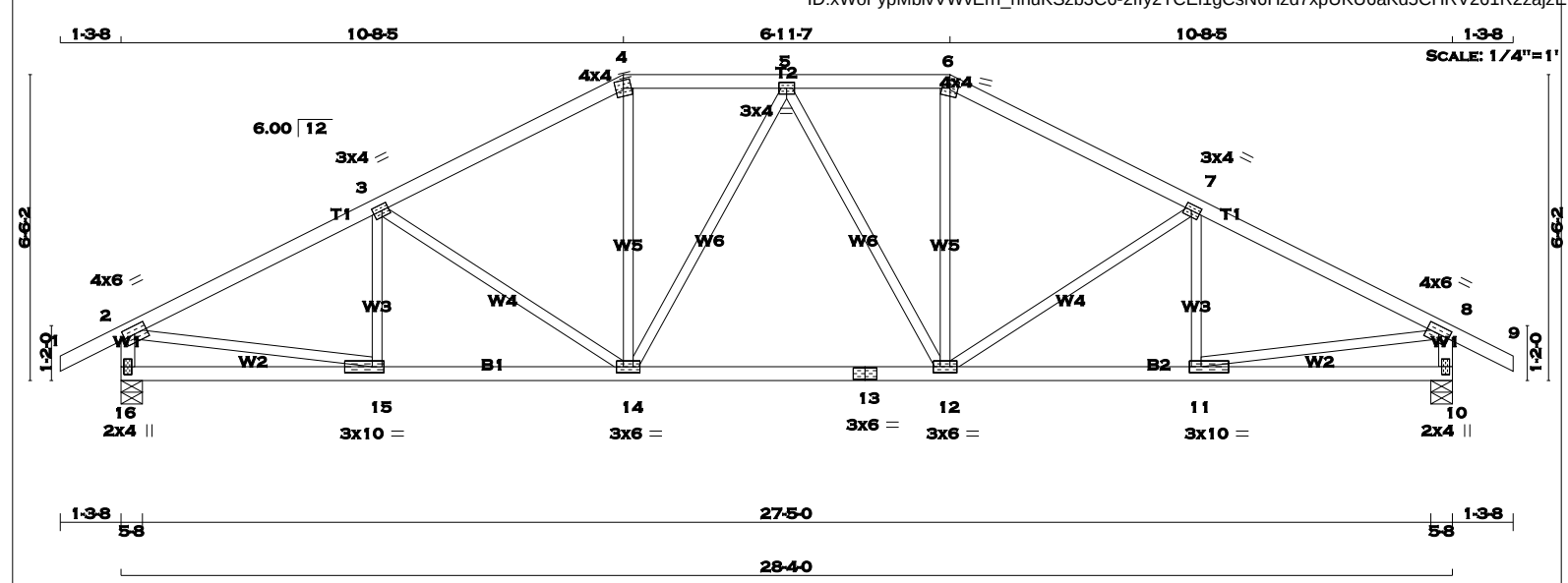
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 16 - 2 2x4 DRY No.2 SPF 9 - 8 2x4 DRY No.2 SPF 16 - 12 2x4 DRY No.2 SPF 12 - 9 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 16 1449 0 1449 0 0 5-8 5-8 9 1344 0 1344 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 16 1014 723 / 0 0 / 0 0 / 0 291 / 0 0 / 0 9 943 660 / 0 0 / 0 0 / 0 0 / 0 283 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 9 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.31 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 15-3 -286 / 0 0.05 (1) 2-3 -1850 / 0 -77.4 -77.4 0.19 (1) 4.78 3-14 -95 / 0 0.04 (1) 3-4 -1796 / 0 -77.4 -77.4 0.18 (1) 4.84 14-4 0 / 154 0.04 (4) 4-5 -2028 / 0 -77.4 -77.4 0.44 (1) 4.31 4-13 0 / 554 0.12 (1) 5-6 -2028 / 0 -77.4 -77.4 0.44 (1) 4.31 13-5 -583 / 0 0.23 (1) 6-7 -1796 / 0 -77.4 -77.4 0.18 (1) 4.84 13-6 0 / 554 0.12 (1) 7-8 -1850 / 0 -77.4 -77.4 0.19 (1) 4.78 11-6 0 / 154 0.04 (4) 16-2 -1413 / 0 0.0 0.0 0.14 (1) 6.86 11-7 -95 / 0 0.04 (1) 9-8 -1308 / 0 0.0 0.0 0.13 (1) 7.06 10-7 -286 / 0 0.05 (1) 2-15 0 / 1704 0.38 (1) 10-8 0 / 1704 0.38 (1) 16-15 0 / 0 -17.5 -17.5 0.07 (4) 10.00 15-14 0 / 1668 -17.5 -17.5 0.33 (1) 10.00 14-13 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 13-12 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 12-11 0 / 1594 -17.5 -17.5 0.32 (1) 10.00 11-10 0 / 1668 -17.5 -17.5 0.33 (1) 10.00 10-9 0 / 0 -17.5 -17.5 0.07 (4) 10.00			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.94") CALCULATED VERT. DEFL.(LL) = L/999 (0.09") ALLOWABLE DEFL.(TL)= L/360 (0.94") CALCULATED VERT. DEFL.(TL) = L/999 (0.17") CSI: TC=0.44 (4-5:1), BC=0.33 (14-15:1), WB=0.38 (8-10:1), SSI=0.23 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (2) (INPUT = 0.90) JSI METAL= 0.50 (10) (INPUT = 1.00)		
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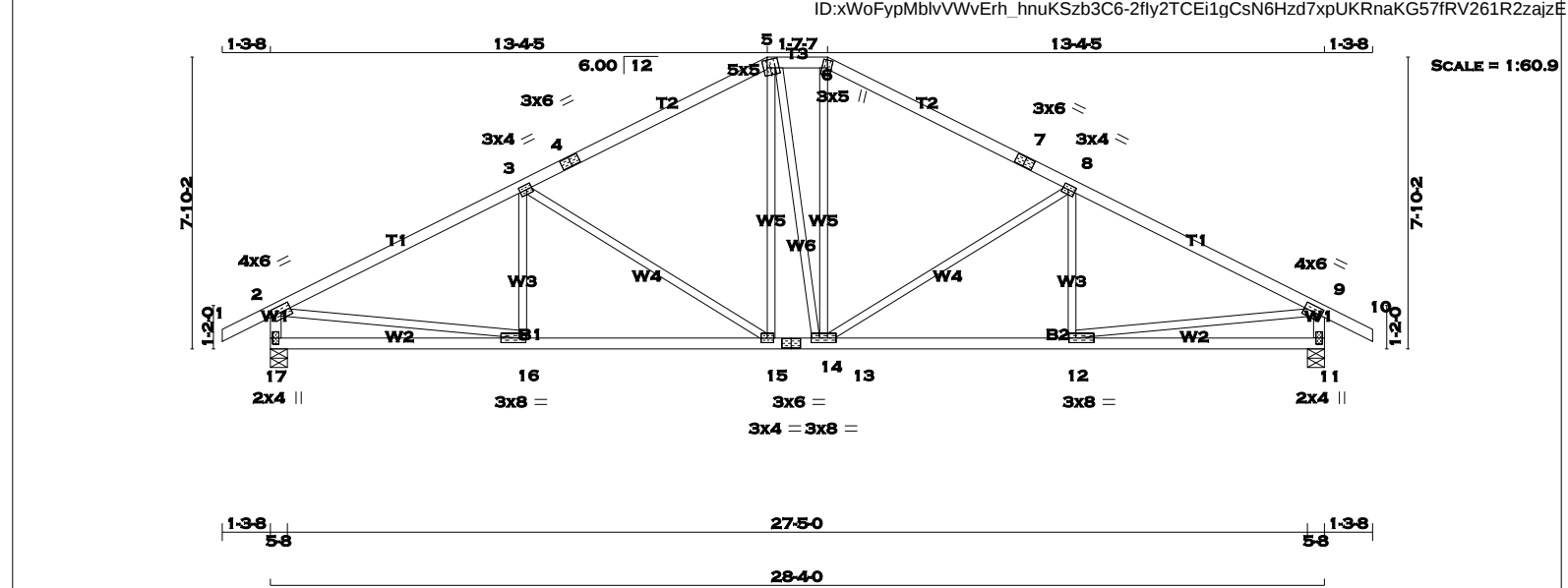
LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 4 2x4 DRY No.2 SPF
4 - 6 2x4 DRY No.2 SPF
6 - 9 2x4 DRY No.2 SPF
16 - 2 2x4 DRY No.2 SPF
10 - 8 2x4 DRY No.2 SPF
16 - 13 2x4 DRY No.2 SPF
13 - 10 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED MAXIMUM FACTORED INPUT REQRD
GROSS REACTION GROSS REACTION BRG BRG
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
16 1449 0 1449 0 0 5-8 5-8
10 1449 0 1449 0 0 5-8 5-8
UNFACTORED REACTIONS
1ST LCASE MAX./MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
16 1014 723 / 0 0 / 0 0 / 0 291 / 0 0 / 0
10 1014 723 / 0 0 / 0 0 / 0 291 / 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 = 4.55 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 MAX. FACTORED
MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED
(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)
FR-TO FROM TO LENGTH FR-TO
1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 15-3 -178 / 32 0.04 (1)
2-3 -1914 / 0 -77.4 -77.4 0.34 (1) 4.55 3-14 -343 / 0 0.26 (1)
3-4 -1639 / 0 -77.4 -77.4 0.31 (1) 4.86 14-4 0 / 462 0.10 (1)
4-5 -1453 / 0 -77.4 -77.4 0.13 (1) 5.31 14-5 -182 / 0 0.17 (1)
5-6 -1453 / 0 -77.4 -77.4 0.13 (1) 5.31 5-12 -182 / 0 0.17 (1)
6-7 -1639 / 0 -77.4 -77.4 0.31 (1) 4.86 12-6 0 / 462 0.10 (1)
7-8 -1914 / 0 -77.4 -77.4 0.34 (1) 4.55 12-7 -343 / 0 0.26 (1)
8-9 0 / 23 -77.4 -77.4 0.10 (1) 10.00 11-7 -178 / 32 0.04 (1)
16-2 -1406 / 0 0.0 0.0 0.14 (1) 6.87 2-15 0 / 1752 0.39 (1)
10-8 -1406 / 0 0.0 0.0 0.14 (1) 6.87 11-8 0 / 1752 0.39 (1)
16-15 0 / 0 -17.5 -17.5 0.11 (4) 10.00
15-14 0 / 1730 -17.5 -17.5 0.35 (1) 10.00
14-13 0 / 1539 -17.5 -17.5 0.32 (1) 10.00
13-12 0 / 1539 -17.5 -17.5 0.32 (1) 10.00
12-11 0 / 1730 -17.5 -17.5 0.35 (1) 10.00
11-10 0 / 0 -17.5 -17.5 0.11 (4) 10.00

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN. C/C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010
THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")
CSI: TC=0.34 (7-8:1), BC=0.35 (14-15:1), WB=0.39 (2-15:1), SSI=0.18 (7-8:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10
COMPANION LIVE LOAD FACTOR = 0.50
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.51 (2) (INPUT = 1.00)

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IN THE DESIGN OF THIS COMPONENT.



TOTAL WEIGHT = 2 X 121 = 241 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 - 7	2x4	DRY	No.2
7 - 10	2x4	DRY	No.2
17 - 2	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
17 - 14	2x4	DRY	No.2
14 - 11	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	2.00	2.75
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW+m	MT20	5.0	5.0	2.50	1.25
6	TTW+m	MT20	3.0	5.0	2.50	1.25
7	TS-t	MT20	3.0	6.0		
8	TMWW-t	MT20	3.0	4.0	1.50	1.75
9	TMVW-t	MT20	4.0	6.0	2.00	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMWW-t	MT20	3.0	8.0	1.50	2.25
13	BMWWW-t	MT20	3.0	8.0		
14	BS-t	MT20	3.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	3.0	8.0	1.50	2.25
17	BMV1+p	MT20	2.0	4.0		

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

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

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
17	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0
11	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS					
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		FROM	TO
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	16-3	-88 / 88	0.03 (4)
2-3	-1924 / 0	-77.4	-77.4 0.55 (1)	4.28	3-15	-579 / 0	0.75 (1)
3-4	-1435 / 0	-77.4	-77.4 0.49 (1)	4.87	15-5	0 / 364	0.08 (1)
4-5	-1435 / 0	-77.4	-77.4 0.49 (1)	4.87	5-13	0 / 12	0.00 (1)
5-6	-1265 / 0	-77.4	-77.4 0.04 (1)	5.69	13-6	0 / 378	0.08 (1)
6-7	-1437 / 0	-77.4	-77.4 0.49 (1)	4.87	13-8	-575 / 0	0.75 (1)
7-8	-1437 / 0	-77.4	-77.4 0.49 (1)	4.87	12-8	-91 / 87	0.03 (4)
8-9	-1923 / 0	-77.4	-77.4 0.55 (1)	4.28	2-16	0 / 1760	0.40 (1)
9-10	0 / 23	-77.4	-77.4 0.10 (1)	10.00	12-9	0 / 1759	0.40 (1)
17-2	-1400 / 0	0.0	0.0 0.14 (1)	6.88			
11-9	-1399 / 0	0.0	0.0 0.14 (1)	6.88			
17-16	0 / 0	-17.5	-17.5 0.20 (4)	10.00			
16-15	0 / 1746	-17.5	-17.5 0.38 (1)	10.00			
15-14	0 / 1262	-17.5	-17.5 0.28 (1)	10.00			
14-13	0 / 1262	-17.5	-17.5 0.28 (1)	10.00			
13-12	0 / 1745	-17.5	-17.5 0.37 (1)	10.00			
12-11	0 / 0	-17.5	-17.5 0.19 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

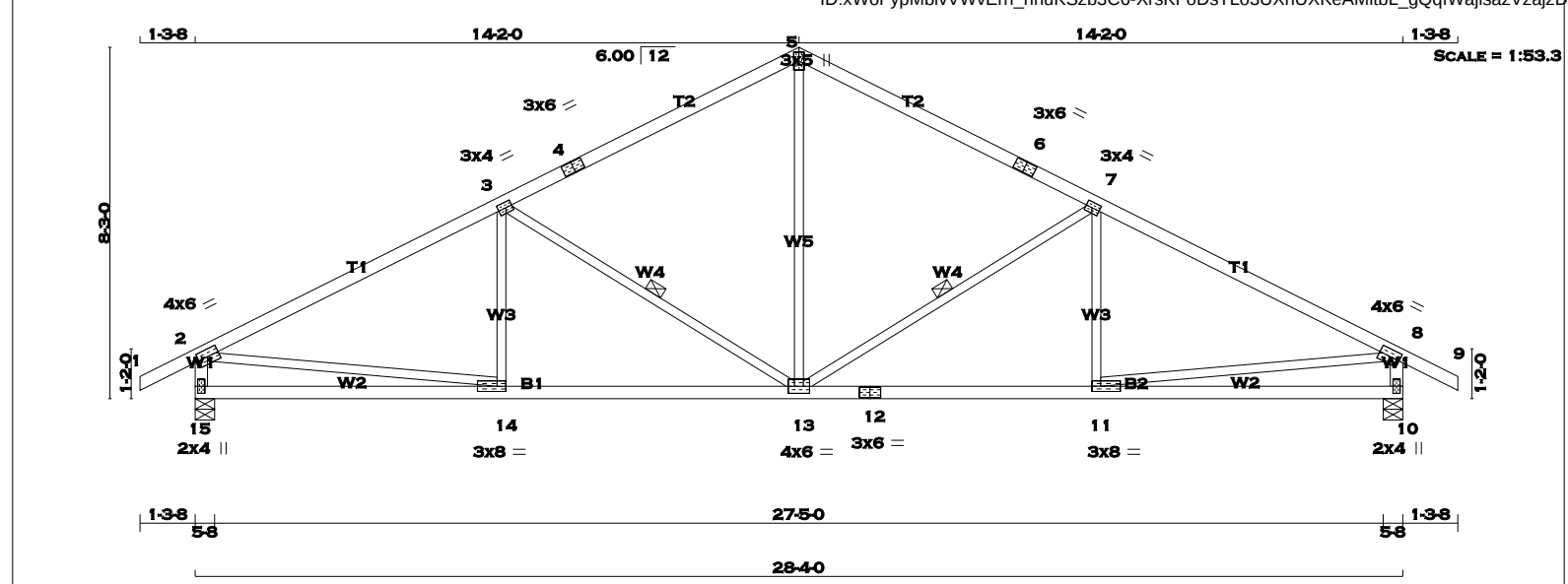
JSI GRIP= 0.89 (16) (INPUT = 0.90)
JSI METAL= 0.52 (2) (INPUT = 1.00)



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

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
6 - 9	2x4	DRY	No.2	SPF
15 - 2	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
15 - 12	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	2.00	2.75
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	5.0		
6	TS-t	MT20	3.0	6.0		
7	TMVW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	2.00	2.75
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	3.0	8.0	1.50	2.50
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	4.0	6.0		
14	BMVW-t	MT20	3.0	8.0	1.50	2.50
15	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
15	1449	0	1449	0	0	5-8	5-8	5-8	5-8
10	1449	0	1449	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
15	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0
10	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-13, 3-13. DBS = 20-0-0 . CBF = 79 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 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 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	13-5	0 / 801	0.18 (1)
2-3	-1918 / 0	-77.4 -77.4	0.62 (1)	4.17	13-7	-633 / 0	0.30 (1)
3-4	-1379 / 0	-77.4 -77.4	0.55 (1)	4.84	11-7	-72 / 96	0.03 (4)
4-5	-1379 / 0	-77.4 -77.4	0.55 (1)	4.84	3-13	-633 / 0	0.30 (1)
5-6	-1379 / 0	-77.4 -77.4	0.55 (1)	4.84	14-3	-72 / 96	0.03 (4)
6-7	-1379 / 0	-77.4 -77.4	0.55 (1)	4.84	2-14	0 / 1753	0.39 (1)
7-8	-1918 / 0	-77.4 -77.4	0.62 (1)	4.17	11-8	0 / 1753	0.39 (1)
8-9	0 / 23	-77.4 -77.4	0.10 (1)	10.00			
15-2	-1396 / 0	0.0 0.0	0.14 (1)	6.89			
10-8	-1396 / 0	0.0 0.0	0.14 (1)	6.89			
15-14	0 / 0	-17.5 -17.5	0.21 (4)	10.00			
14-13	0 / 1741	-17.5 -17.5	0.38 (1)	10.00			
13-12	0 / 1741	-17.5 -17.5	0.38 (1)	10.00			
12-11	0 / 1741	-17.5 -17.5	0.38 (1)	10.00			
11-10	0 / 0	-17.5 -17.5	0.21 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.62 (7-8:1) , BC=0.38 (11-13:1) , WB=0.39 (8-11:1) , SSI=0.24 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

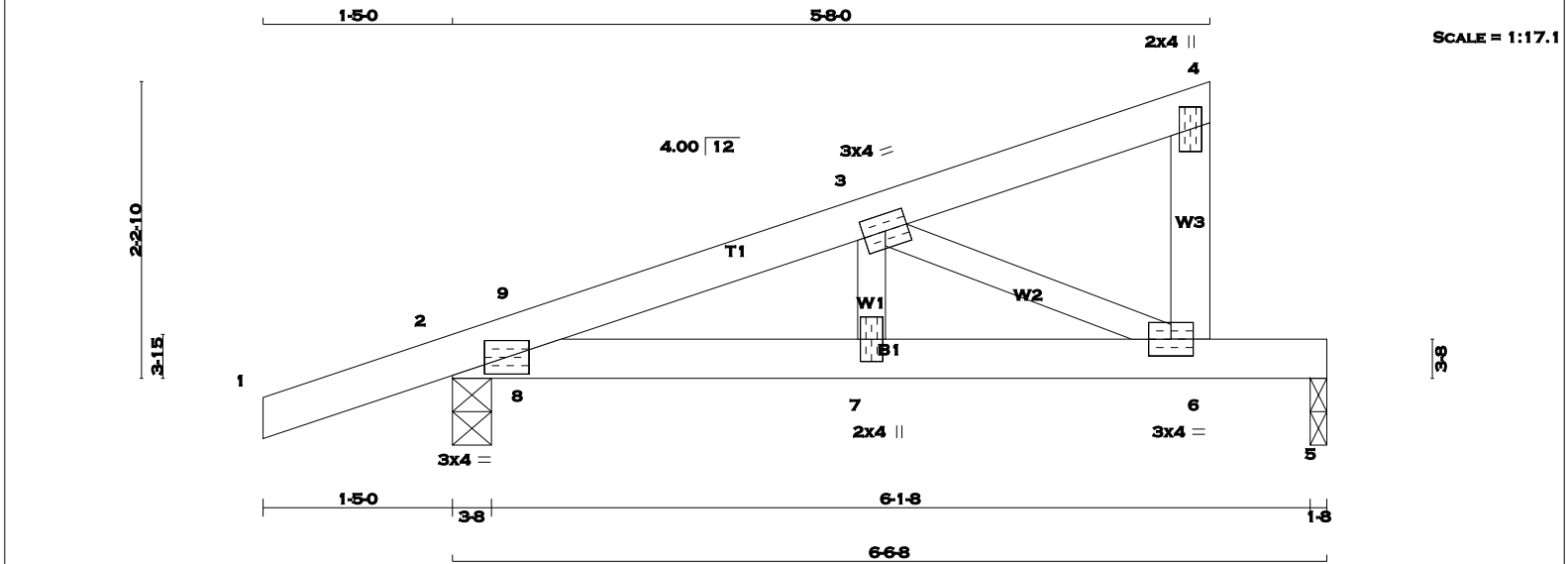
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.52 (8) (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

2 - 5

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMB1-I

MT20

3.0

4.0

3

TMVW-t

MT20

3.0

4.0

4

TMV+p

MT20

2.0

4.0

6

BMVW-t

MT20

3.0

4.0

7

BMW+w

MT20

2.0

4.0

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
2	419	0	419	0	0	3-8	3-8	
5	247	0	247	0	0	1-8	1-8	

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

2

292

218 / 0

0 / 0

0 / 0

0 / 0

74 / 0

0 / 0

5

175

114 / 0

0 / 0

0 / 0

0 / 0

61 / 0

0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 17	-77.4 -77.4	0.12 (1)	10.00	7-3	0 / 185	0.04 (1)
2-9	-580 / 0	-77.4 -77.4	0.01 (4)	6.25	3-6	-590 / 0	0.10 (1)
9-3	-568 / 0	-77.4 -77.4	0.05 (1)	6.25	8-9	-83 / 4	0.00 (1)
3-4	-5 / 0	-77.4 -77.4	0.05 (1)	10.00			
6-4	-82 / 0	0.0 0.0	0.01 (1)	7.81			
2-8	0 / 543	-17.5 -17.5	0.15 (1)	10.00			
8-7	0 / 543	-17.5 -17.5	0.16 (1)	10.00			
7-6	0 / 543	-17.5 -17.5	0.37 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.29 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.12 (1-2:1) , BC=0.37 (6-7:1) , WB=0.10 (3-6:1) , SSI=0.19 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (6) (INPUT = 0.90)
JSI METAL= 0.20 (6) (INPUT = 1.00)

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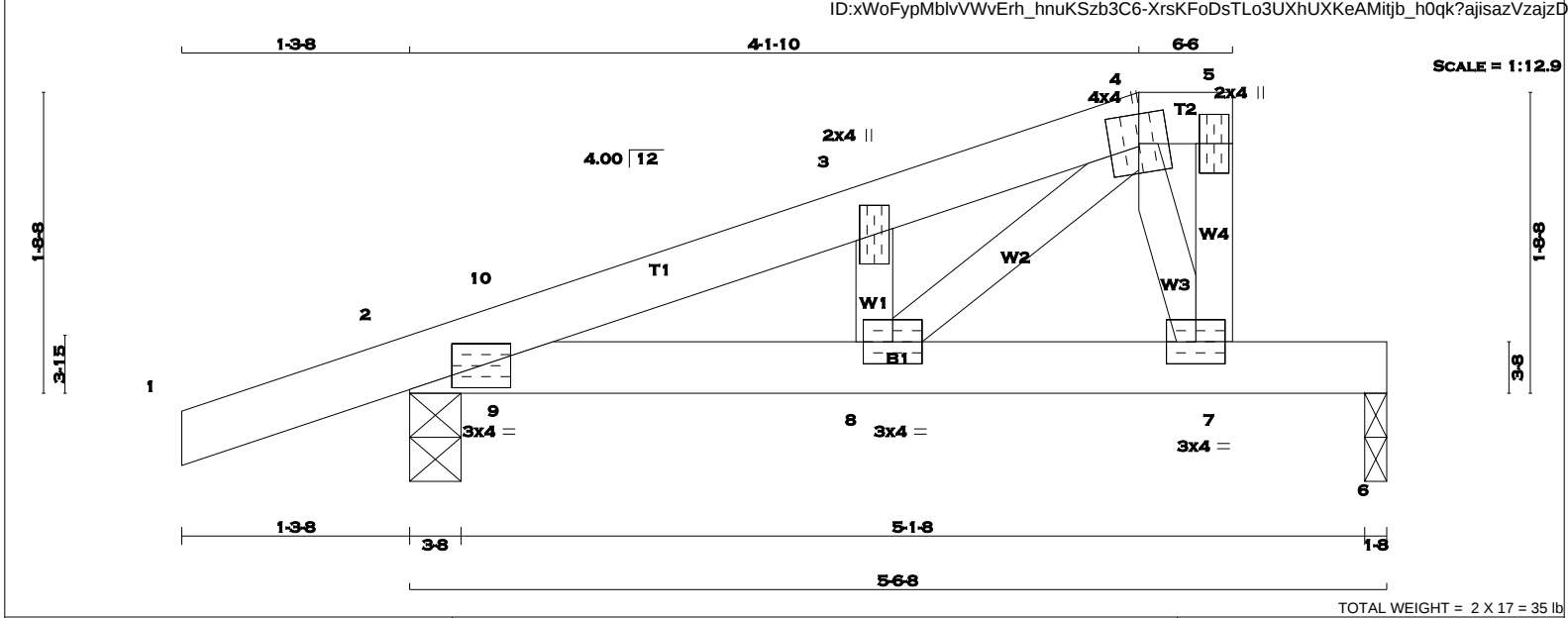
MAR 29, 2017

17-5318

BUILDING DIVISION

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





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 5

2x4

DRY

No.2

SPF

7 - 5

2x3

DRY

No.2

SPF

2 - 6

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMB1-I

MT20

3.0

4.0

3

TMW+w

MT20

2.0

4.0

4

TTWW+m

MT20

4.0

4.0

5

TMV+p

MT20

2.0

4.0

7

BMVW-t

MT20

3.0

4.0

8

BMWW-t

MT20

3.0

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

2

366

0

366

0

0

3-8

3-8

6

263

0

263

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

2

255

191 / 0

0 / 0

0 / 0

0 / 0

63 / 0

0 / 0

6

184

129 / 0

0 / 0

0 / 0

0 / 0

55 / 0

0 / 0

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

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

FORCE

MAX

FR-TO

FROM

TO

LENGTH

FR-TO

FROM

TO

LENGTH

1-2

0 / 15

-77.4

-77.4

0.10

(1)

10.00

8-3

-138 / 0

0.02

(1)

2-10

-484 / 0

-77.4

-77.4

0.01

(4)

6.25

8-4

0 / 479

0.11

(1)

10-3

-477 / 0

-77.4

-77.4

0.05

(1)

6.25

4-7

-275 / 0

0.04

(1)

3-4

-471 / 0

-77.4

-77.4

0.03

(1)

6.25

9-10

-80 / 0

0.00

(1)

4-5

0 / 0

-77.4

-77.4

0.00

(1)

10.00

7-5

-21 / 0

0.0

0.0

0.00

(1)

7.81

2-9

0 / 453

-17.5

-17.5

0.13

(1)

10.00

9-8

0 / 453

-17.5

-17.5

0.13

(1)

10.00

8-7

0 / 97

-17.5

-17.5

0.28

(1)

10.00

7-6

0 / 0

-94.9

-94.9

0.26

(1)

10.00

WEBS

MAX. FACTORED

MEMB.

FORCE

MAX

MEMB.

FORCE

MAX

FR-TO

FROM

TO

LENGTH

FR-TO

FROM

TO

LENGTH

1-2

0 / 15

-77.4

-77.4

0.10

(1)

10.00

8-3

-138 / 0

0.02

(1)

2-10

-484 / 0

-77.4

-77.4

0.01

(4)

6.25

8-4

0 / 479

0.11

(1)

10-3

-477 / 0

-77.4

-77.4

0.05

(1)

6.25

4-7

-275 / 0

0.04

(1)

3-4

-471 / 0

-77.4

-77.4

0.03

(1)

6.25

9-10

-80 / 0

0.00

(1)

4-5

0 / 0

-77.4

-77.4

0.00

(1)

10.00

7-5

-21 / 0

0.0

0.0

0.00

(1)

7.81

2-9

0 / 453

-17.5

-17.5

0.13

(1)

10.00

9-8

0 / 453

-17.5

-17.5

0.13

(1)

10.00

8-7

0 / 97

-17.5

-17.5

0.28

(1)

10.00

7-6

0 / 0

-94.9

-94.9

0.26

(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 (0.19")

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

ALLOWABLE DEFL.(TL)= L/360 (0.19")

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

CSI: TC=0.10 (1-2:1), BC=0.28 (7-8:1), WB=0.11 (4-8:1), SSI=0.21 (6-7:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (4) (INPUT = 0.90)

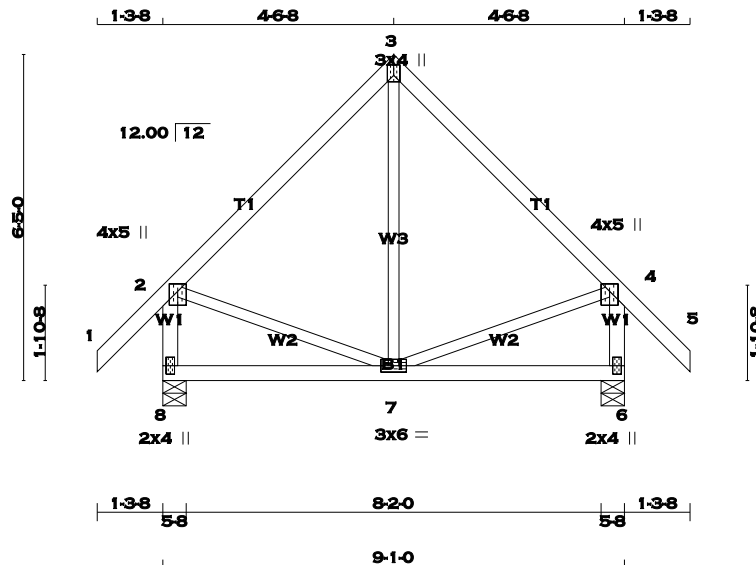
JSI METAL= 0.17 (2) (INPUT = 1.00)



[M]

DRY: SEASONED LUMBER.

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



TOTAL WEIGHT = 10 X 45 = 450 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
8 - 2	2x4	DRY	No.2		SPF
6 - 4	2x4	DRY	No.2		SPF
8 - 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+p	MT20	4.0	5.0	1.75	2.00
3	TTW+p	MT20	3.0	4.0	Edge	
4	TMVW+p	MT20	4.0	5.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		

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
8	539	0	539	0	0
6	539	0	539	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
8	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	376	276 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0
6	376	276 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0

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

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

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

LOADING									
TOTAL Load CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED MAX (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	0 / 38	-77.4	-77.4	0.11 (1)	10.00	7-3	-15 / 73	0.03 (4)	
2-3	-238 / 0	-77.4	-77.4	0.20 (1)	6.25	2-7	0 / 177	0.04 (1)	
3-4	-238 / 0	-77.4	-77.4	0.20 (1)	6.25	7-4	0 / 177	0.04 (1)	
4-5	0 / 38	-77.4	-77.4	0.11 (1)	10.00				
8-2	-508 / 0	0.0	0.0	0.06 (1)	7.81				
6-4	-508 / 0	0.0	0.0	0.06 (1)	7.81				
8-7	0 / 0	-17.5	-17.5	0.10 (4)	10.00				
7-6	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

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 (2-3:1), BC=0.10 (7-8:4), WB=0.04 (4-7:1), 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.

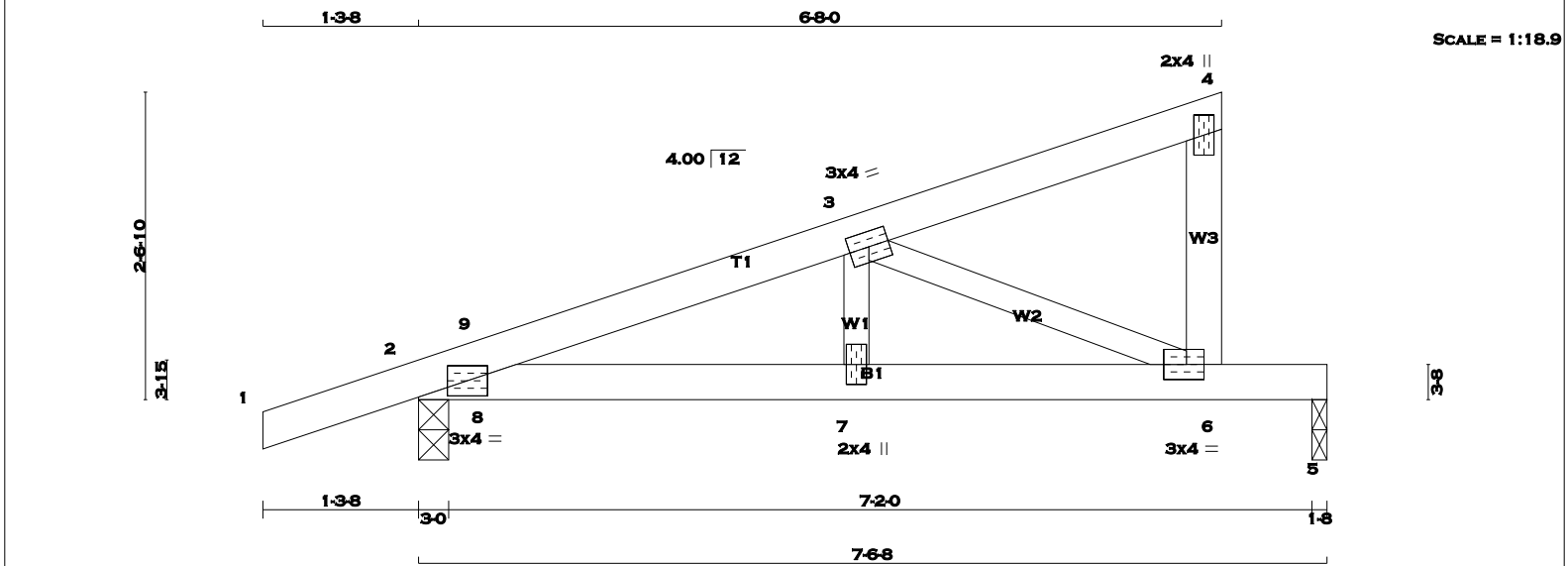
JSI GRIP= 0.36 (3) (INPUT = 0.90)
JSI METAL= 0.09 (6) (INPUT = 1.00)



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





TOTAL WEIGHT = 6 X 24 = 142 lb [M][F]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	SPF	SPF
1 - 4	2x4	DRY	No.2	SPF	SPF
6 - 4	2x4	DRY	No.2	SPF	SPF
2 - 5	2x4	DRY	No.2	SPF	SPF
ALL WEBS	2x3	DRY	No.2	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	TMVW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0	1.50	1.75
7	BMV+w	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
2	457	0	457	0	0	3-0	3-0	3-0	3-0
5	294	0	294	0	0	1-8	1-8	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	DEAD	SOIL
2	319	236 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0	0 / 0	0 / 0
5	208	137 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
1-2	0 / 15	-77.4 -77.4	0.10 (1)	10.00	7-3	0 / 201	0.05 (1)
2-9	-682 / 0	-77.4 -77.4	0.01 (1)	6.25	3-6	-693 / 0	0.14 (1)
9-3	-670 / 0	-77.4 -77.4	0.07 (1)	6.25	8-9	-101 / 6	0.00 (1)
3-4	-7 / 0	-77.4 -77.4	0.07 (1)	10.00			
6-4	-96 / 0	0.0 0.0	0.01 (1)	7.81			
2-8	0 / 641	-17.5 -17.5	0.18 (1)	10.00			
8-7	0 / 641	-17.5 -17.5	0.20 (1)	10.00			
7-6	0 / 641	-17.5 -17.5	0.44 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.34 (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 (0.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.10 (1-2:1) , BC=0.44 (6-7:1) , WB=0.14 (3-6:1) , SSI=0.23 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

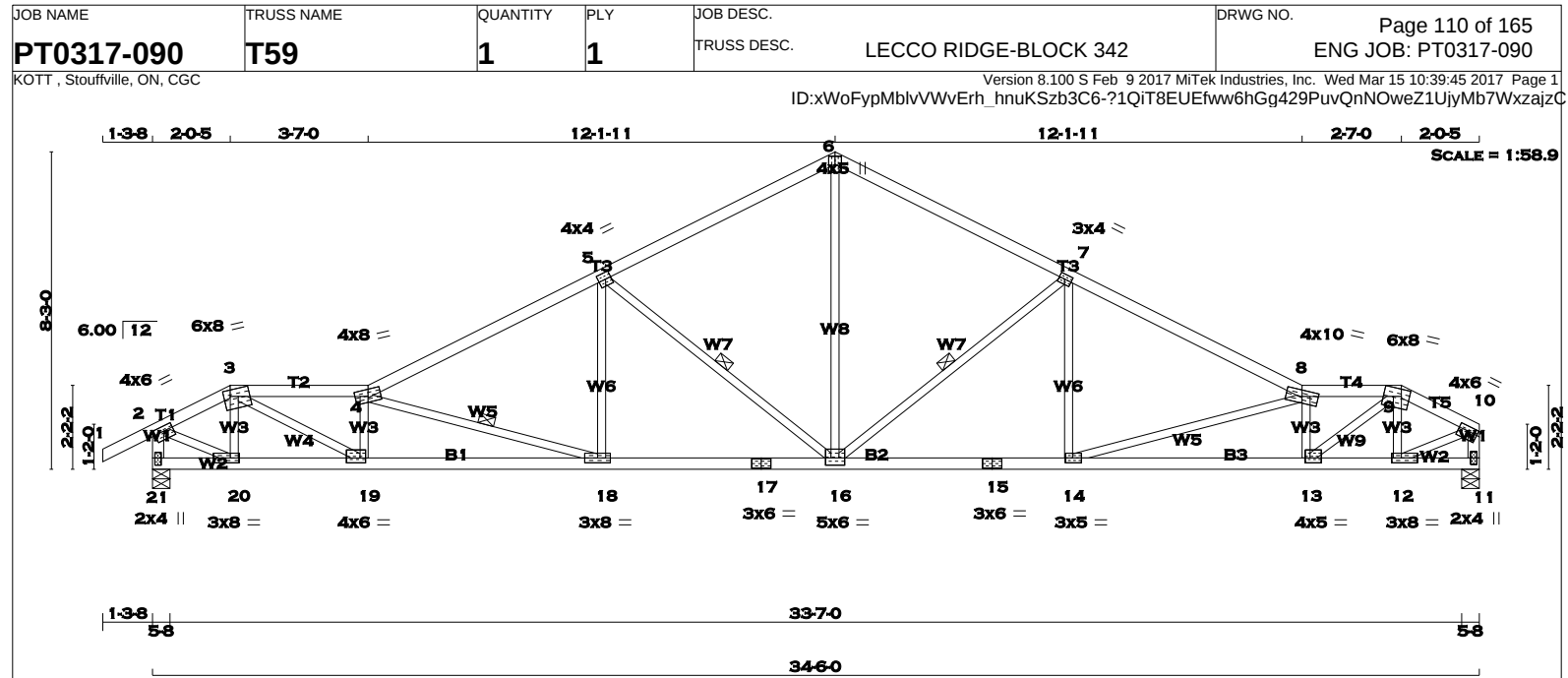
JSI GRIP= 0.82 (6) (INPUT = 0.90)
JSI METAL= 0.24 (6) (INPUT = 1.00)



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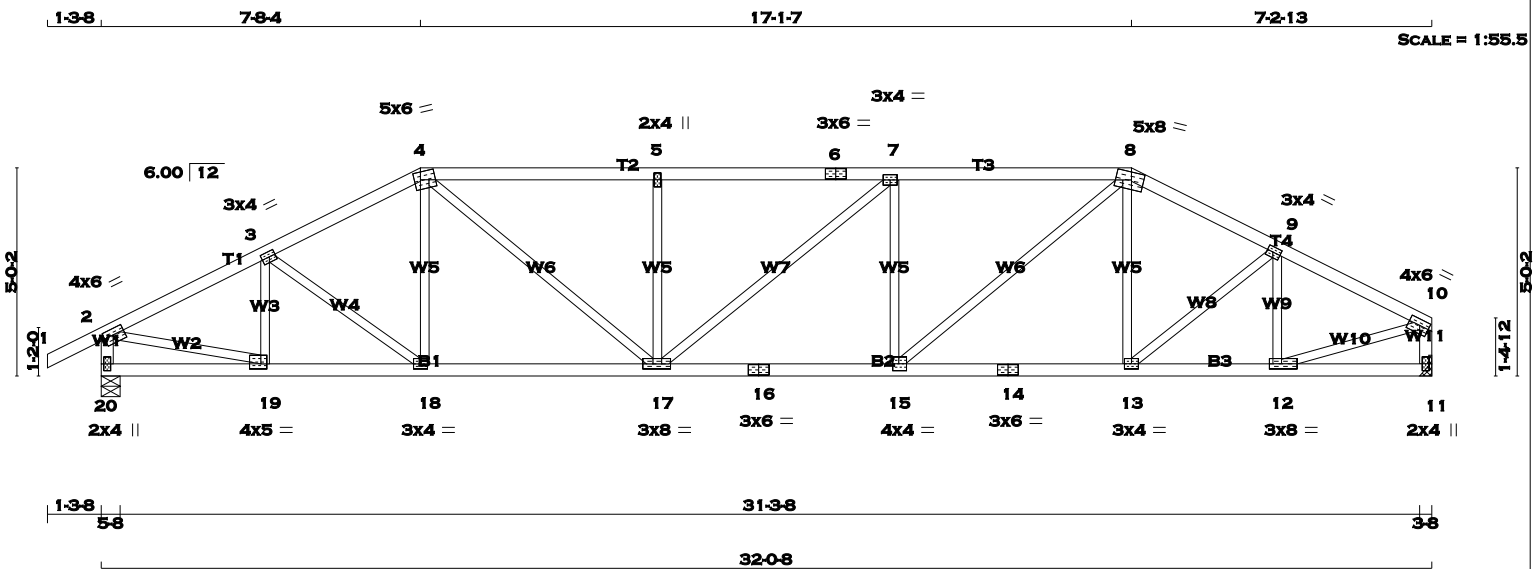
LUMBER				N. L. G. A. RULES				LUMBER				DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS				SIZE												BEARINGS				SPECIFIED LOADS:			
1 - 3				2x4				DRY				No.2				SPF				TOP CH. LL = 23.3 PSF			
3 - 4				2x4				DRY				No.2				SPF				DL = 3.0 PSF			
4 - 6				2x4				DRY				No.2				SPF				BOT CH. LL = 0.0 PSF			
6 - 8				2x4				DRY				No.2				SPF				DL = 7.0 PSF			
8 - 9				2x4				DRY				No.2				SPF				TOTAL LOAD = 33.3 PSF			
9 - 10				2x4				DRY				No.2				SPF							
21 - 2				2x4				DRY				No.2				SPF							
11 - 10				2x4				DRY				No.2				SPF							
21 - 17				2x4				DRY				No.2				SPF							
17 - 15				2x4				DRY				No.2				SPF							
15 - 11				2x4				DRY				No.2				SPF							
ALL WEBS				2x3				DRY				No.2				SPF				SPACING = 24.0 IN./C			
EXCEPT																				LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12			
DRY: SEASONED LUMBER.																BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 11							
																BRACING							
																TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.31 FT.							
																MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.							
																ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.							
																1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-18. DBS = 10-0-0. CBF = 92 LBS.							
																1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-16. DBS = 12-0-0. CBF = 85 LBS.							
																1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 14-0-0. CBF = 85 LBS.							
																DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.							
																END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW							
																LOADING							
																TOTAL LOAD CASES: (4)							
																CHORDS							
																MEMB. MAX. FACTORED FORCE (LBS)							
																FACTORED VERT. LOAD (PLF)							
																MAX. UNBRACED LENGTH							
																FR-TO							
																1-2							
																2-3							
																3-4							
																4-5							
																5-6							
																6-7							
																7-8							
																8-9							
																9-10							
																21-2							
																11-10							
																21-20							
																20-19							
																19-18							
																18-17							
																17-16							
																16-15							
																15-14							
																14-13							
																13-12							
																12-11							
																13-9							
																12-9							
																2-20							
																12-10							



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TOTAL WEIGHT = 2 X 128 = 255 lb
[M]

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
8 - 10	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
20 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 11	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	TTWW-m	MT20	5.0	6.0	2.25 1.75
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	8.0	2.25 3.50
9	TMWW-t	MT20	3.0	4.0	1.50 1.75
10	TMVW-t	MT20	4.0	6.0	1.75 2.75
11	BMV1+p	MT20	2.0	4.0	
12	BMWW-t	MT20	3.0	8.0	1.50 3.50
13	BMWW-t	MT20	3.0	4.0	
14	BS-t	MT20	3.0	6.0	
15	BMWW-t	MT20	4.0	4.0	2.00 1.75
16	BS-t	MT20	3.0	6.0	
17	BMWW-t	MT20	3.0	8.0	1.50 3.00
18	BMWW-t	MT20	3.0	4.0	
19	BMWW-t	MT20	4.0	5.0	1.50 1.75
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	
JT	VERT	DOWN	HORZ
20	1625	0	1625
11	1520	0	1520

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1138	809 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
11	1067	746 / 0	0 / 0	0 / 0	0 / 0	320 / 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 = 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.

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS			
MEMB. MAX. FACTORED FORCE (LBS)			
FR-TO	FROM	TO	LENGTH
1-2	0 / 23	-77.4 -77.4	0.10 (1)
2-3	-2109 / 0	-77.4 -77.4	0.23 (1)
3-4	-2132 / 0	-77.4 -77.4	0.23 (1)
4-5	-2567 / 0	-77.4 -77.4	0.49 (1)
5-6	-2567 / 0	-77.4 -77.4	0.50 (1)
6-7	-2567 / 0	-77.4 -77.4	0.50 (1)
7-8	-2542 / 0	-77.4 -77.4	0.49 (1)
8-9	-2044 / 0	-77.4 -77.4	0.20 (1)
9-10	-1922 / 0	-77.4 -77.4	0.20 (1)
20-2	-1589 / 0	0.0 0.0	0.16 (1)
11-10	-1486 / 0	0.0 0.0	0.15 (1)
20-19	0 / 0	-17.5 -17.5	0.06 (4)
19-18	0 / 1898	-17.5 -17.5	0.36 (1)
18-17	0 / 1895	-17.5 -17.5	0.36 (1)
17-16	0 / 2542	-17.5 -17.5	0.46 (1)
16-15	0 / 2542	-17.5 -17.5	0.46 (1)
15-14	0 / 1815	-17.5 -17.5	0.34 (1)
14-13	0 / 1815	-17.5 -17.5	0.34 (1)
13-12	0 / 1730	-17.5 -17.5	0.33 (1)
12-11	0 / 0	-17.5 -17.5	0.05 (4)
WEBS			
MEMB. MAX. FACTORED FORCE (LBS)			
10-00	19-3	-356 / 0	0.07 (1)
4-47	3-18	-7 / 8	0.00 (4)
18-4	0 / 99	0.03 (4)	
4-17	0 / 872	0.20 (1)	
17-5	-479 / 0	0.18 (1)	
17-7	0 / 32	0.01 (1)	
15-7	-501 / 0	0.19 (1)	
15-8	0 / 943	0.21 (1)	
13-8	0 / 68	0.02 (4)	
13-9	0 / 109	0.02 (1)	
12-9	-453 / 0	0.09 (1)	
2-19	0 / 1942	0.44 (1)	
12-10	0 / 1803	0.41 (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 (1.07")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")

CSI: TC=0.50 (5-7:1), BC=0.46 (15-17:1), WB=0.44 (2-19:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
(PSI)	(PLI)	(PLI)	(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.

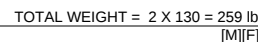
JSI GRIP= 0.89 (4) (INPUT = 0.90)
JSI METAL= 0.71 (16) (INPUT = 1.00)



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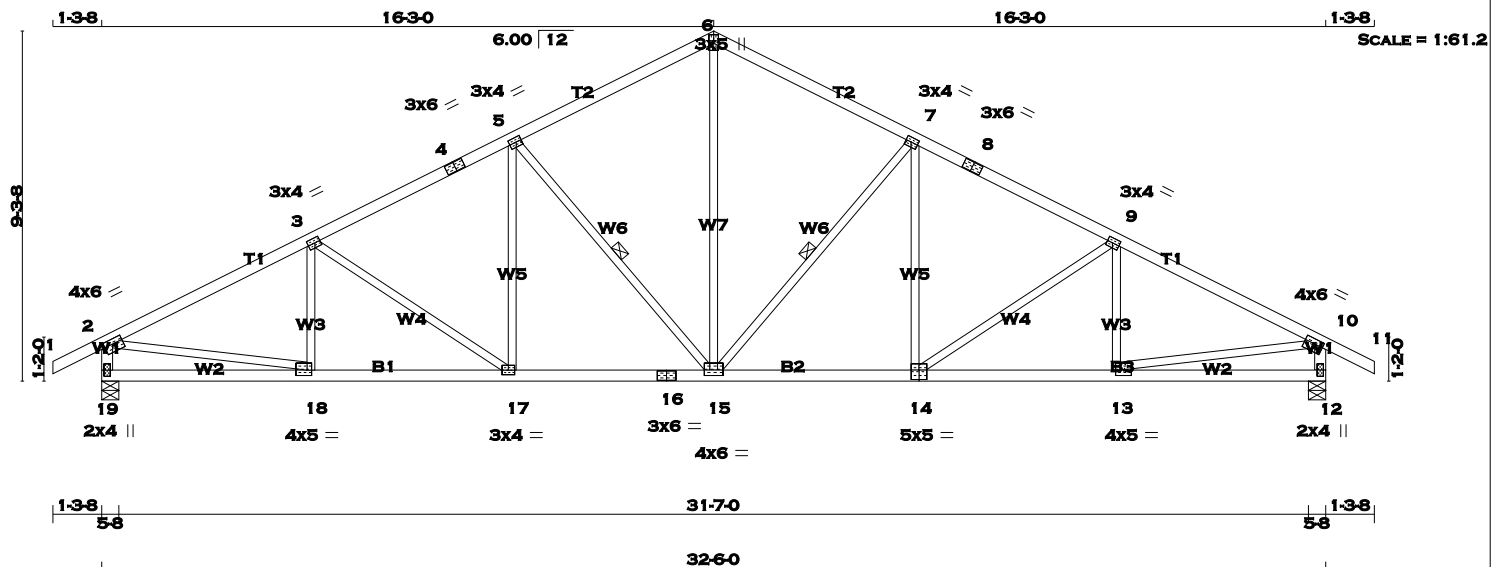




JSI GRIP= 0.89 (10) (INPUT = 0.90)
JSI METAL= 0.60 (16) (INPUT = 1.00)







TOTAL WEIGHT = 14 X 138 = 1926 lb
[M][F]

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
8 - 11	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 12	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	1.50 2.75
3, 5, 7, 9	TS-t	MT20	3.0	6.0	
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	5.0	2.75 1.50
8	TS-t	MT20	3.0	6.0	
10	TMVW-t	MT20	4.0	6.0	1.50 2.75
12	BMV1+p	MT20	2.0	4.0	
13	BMVW-t	MT20	4.0	5.0	1.75 1.50
14	BSVW-t	MT20	5.0	5.0	3.00 2.50
15	BMVW-t	MT20	4.0	6.0	1.75 3.00
16	BS-t	MT20	3.0	6.0	
17	BMVW-t	MT20	3.0	4.0	
18	BMVW-t	MT20	4.0	5.0	1.75 1.50
19	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	DOWN	HORZ
19	1646	0	1646
12	1646	0	1646

UNFACTORED REACTIONS							
1ST LCASE		MAX/MIN. COMPONENT REACTIONS		INPUT		REQRD	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	1153	820 / 0	0 / 0	0 / 0	0 / 0	333 / 0	0 / 0
12	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) 19, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.25 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 7-15, 5-15. DBS = 20-0-0 . CBF = 79 LBS.

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

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	15-6	0 / 1064	0.24 (1)
2-3	-2242 / 0	-77.4 -77.4	0.37 (1)	4.25	15-7	-633 / 0	0.29 (1)
3-4	-2022 / 0	-77.4 -77.4	0.30 (1)	4.50	14-7	0 / 235	0.05 (1)
4-5	-2022 / 0	-77.4 -77.4	0.30 (1)	4.50	14-9	-257 / 0	0.19 (1)
5-6	-1582 / 0	-77.4 -77.4	0.29 (1)	4.96	13-9	-210 / 28	0.05 (1)
6-7	-1582 / 0	-77.4 -77.4	0.29 (1)	4.96	5-15	-633 / 0	0.29 (1)
7-8	-2022 / 0	-77.4 -77.4	0.30 (1)	4.50	17-5	0 / 235	0.05 (1)
8-9	-2022 / 0	-77.4 -77.4	0.30 (1)	4.50	3-17	-257 / 0	0.19 (1)
9-10	-2242 / 0	-77.4 -77.4	0.37 (1)	4.25	18-3	-210 / 28	0.05 (1)
10-11	0 / 23	-77.4 -77.4	0.10 (1)	10.00	2-18	0 / 2045	0.46 (1)
19-2	-1604 / 0	0.0 0.0	0.16 (1)	6.52	13-10	0 / 2045	0.46 (1)
12-10	-1604 / 0	0.0 0.0	0.16 (1)	6.52			

19-18	0 / 0	-17.5 -17.5	0.12 (4)	10.00
18-17	0 / 2021	-17.5 -17.5	0.37 (1)	10.00
17-16	0 / 1809	-17.5 -17.5	0.35 (1)	10.00
16-15	0 / 1809	-17.5 -17.5	0.35 (1)	10.00
15-14	0 / 1809	-17.5 -17.5	0.35 (1)	10.00
14-13	0 / 2021	-17.5 -17.5	0.37 (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

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 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.37 (2-3:1) , BC=0.37 (17-18:1) , WB=0.46 (2-18:1) , 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.

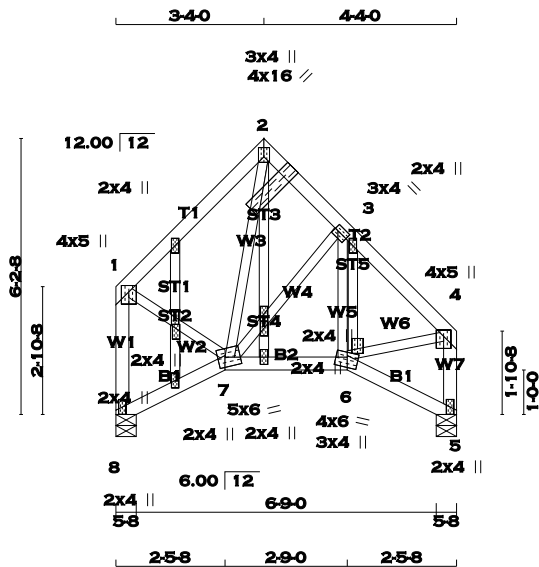
JSI GRIP= 0.88 (13) (INPUT = 0.90)
JSI METAL= 0.61 (18) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 48 = 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			
8 - 1	2x4 DRY	No.2	SPF			
5 - 4	2x4 DRY	No.2	SPF			
8 - 7	2x4 DRY	No.2	SPF			
7 - 6	2x4 DRY	No.2	SPF			
6 - 5	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
1	TMVW+p	MT20	4.0	5.0	1.75	2.00
2	TTW+p	MT20	3.0	4.0	Edge	
2	NP+t	MT20	4.0	16.0	Edge	4.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.00
3, 9, 10, 11, 12, 13						
3	NP+w	MT20	2.0	4.0		
4	TMVW+p	MT20	4.0	5.0	1.75	2.00
5	BMV1+p	MT20	2.0	4.0		
6	BBWW-m	MT20	4.0	6.0	2.75	3.00
6	NP+w	MT20	3.0	4.0	0.75	1.00
7	BBWWW-m	MT20	5.0	6.0	2.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	NP+w	MT20	2.0	4.0	2.00	1.00
11	NP+w	MT20	2.0	4.0	1.75	
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 GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
8	364	0	364	0	0	5-8	5-8
5	364	0	364	0	0	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	255	179 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
5	255	179 / 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)									
MEMB.	CHORDS		WEBS		FACTORED		FACTORED		
	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)	VERT. LOAD (LBS)	MAX. FORCE (LBS)
FR-TO			FROM				LENGTH		
1-2	-187 / 0	-77.4	-77.4	0.11 (1)	6.25	7-2	0 / 79	0.02 (4)	
2-3	-185 / 0	-77.4	-77.4	0.05 (1)	6.25	7-3	-149 / 0	0.04 (1)	
3-4	-292 / 0	-77.4	-77.4	0.05 (1)	6.25	6-3	0 / 38	0.01 (4)	
8-1	-342 / 0	0.0	0.0	0.06 (1)	7.81	1-7	0 / 155	0.03 (1)	
5-4	-342 / 0	0.0	0.0	0.04 (1)	7.81	6-4	0 / 220	0.05 (1)	
8-7	0 / 0	-17.5	-17.5	0.03 (4)	10.00				
7-6	0 / 215	-17.5	-17.5	0.06 (1)	10.00				
6-5	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

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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.11 (1-2:1), BC=0.06 (6-7:1), WB=0.05 (4-6:1), 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

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.

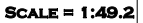
JSI GRIP= 0.30 (6) (INPUT = 0.90)
JSI METAL= 0.08 (4) (INPUT = 1.00)



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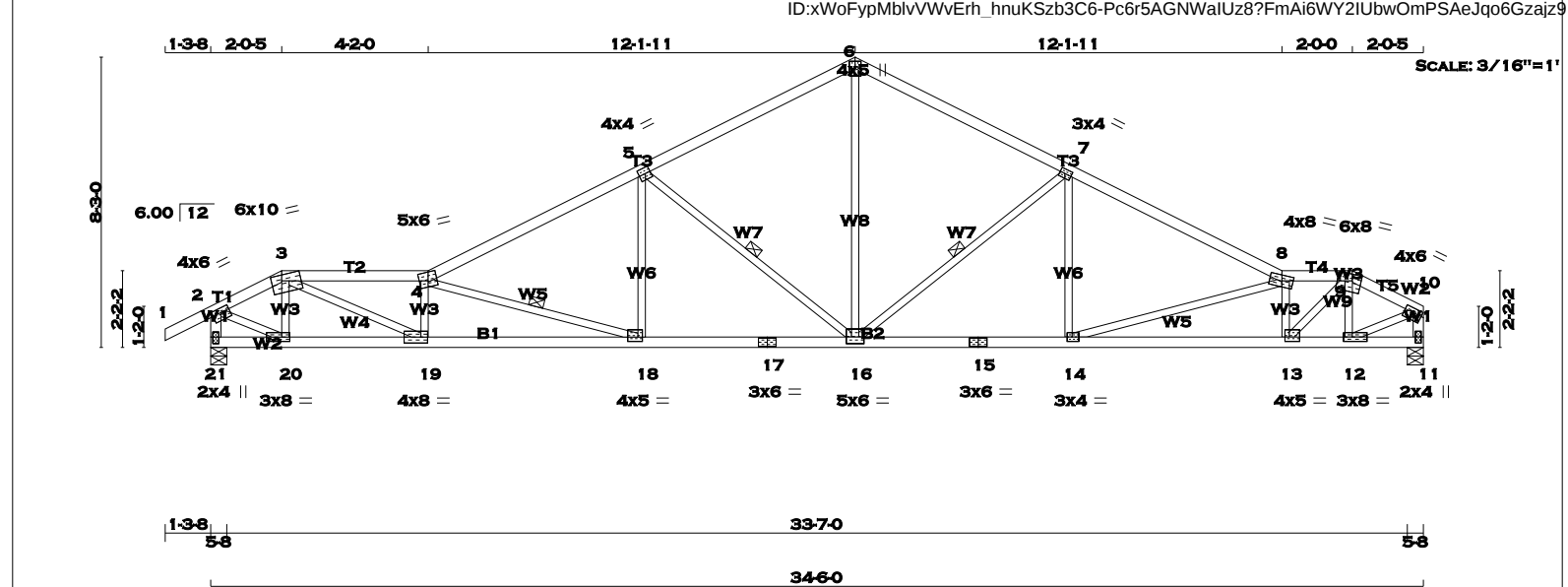
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[M][F]





TOTAL WEIGHT = 136 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 9	2x4	DRY	No.2
9 - 10	2x4	DRY	No.2
21 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
21 - 17	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 11	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	6.0	1.50 3.00
3	TTWW-m	MT20	6.0	10.0	2.00 3.50
4	TTWW-m	MT20	5.0	6.0	3.00 3.00
5	TMVW-t	MT20	4.0	4.0	2.00 1.75
6	TTW+p	MT20	4.0	5.0	
7	TMVW-t	MT20	3.0	4.0	1.50 1.75
8	TTWW-m	MT20	4.0	8.0	2.00 3.75
9	TTWW-m	MT20	6.0	8.0	2.25 3.00
10	TMVW-t	MT20	4.0	6.0	1.50 3.00
11	BMV1+p	MT20	2.0	4.0	
12	BMVW-t	MT20	3.0	8.0	1.50 3.00
13	BMVW-t	MT20	4.0	5.0	1.50 1.50
14	BMVW-t	MT20	3.0	4.0	1.50 1.75
15	BS-t	MT20	3.0	6.0	
16	BMVW-t	MT20	5.0	6.0	2.25 3.00
17	BS-t	MT20	3.0	6.0	
18	BMVW-t	MT20	4.0	5.0	1.50 1.50
19	BMVW-t	MT20	4.0	8.0	2.00 2.25
20	BMVW-t	MT20	3.0	8.0	1.50 2.75
21	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	
JT	VERT	DOWN	HORZ
21	1741	0	1741
11	1636	0	1636

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN	COMPONENT	REACTIONS	1ST LCASE	MAX/MIN	COMPONENT
21	1220	867 / 0	0 / 0	0 / 0	1220	867 / 0	0 / 0
11	1148	803 / 0	0 / 0	0 / 0	1148	803 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.11 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 4-18. DBS = 8-0-0. CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-16. DBS = 12-0-0. CBF = 91 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. 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)

C H O R D S				W E B S			
MEMB.		FACTORED		MEMB.		FACTORED	
		FORCE (LBS)	VERT. LOAD (PLF)			FORCE (LBS)	VERT. LOAD (PLF)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	20-3	-592 / 0	0.09 (1)
2-3	-1929 / 0	-77.4	-77.4 0.08 (1)	4.80	3-19	0 / 2907	0.65 (1)
3-4	-4328 / 0	-77.4	-77.4 0.40 (1)	3.11	19-4	-1180 / 0	0.18 (1)
4-5	-3014 / 0	-77.4	-77.4 0.55 (1)	3.56	4-18	-1752 / 0	0.51 (1)
5-6	-2011 / 0	-77.4	-77.4 0.44 (1)	4.33	18-5	0 / 648	0.15 (1)
6-7	-2011 / 0	-77.4	-77.4 0.44 (1)	4.34	5-16	-1213 / 0	0.50 (1)
7-8	-2727 / 0	-77.4	-77.4 0.52 (1)	3.76	16-6	0 / 1419	0.32 (1)
8-9	-3014 / 0	-77.4	-77.4 0.13 (1)	3.94	16-7	-883 / 0	0.36 (1)
9-10	-1904 / 0	-77.4	-77.4 0.08 (1)	4.83	14-7	0 / 313	0.07 (1)
21-2	-1746 / 0	0.0	0.0 0.18 (1)	6.31	14-8	-652 / 0	0.50 (1)
11-10	-1621 / 0	0.0	0.0 0.16 (1)	6.50	13-8	-1294 / 0	0.19 (1)
					13-9	0 / 1900	0.43 (1)
21-20	0 / 0	-17.5	-17.5 0.07 (1)	10.00	12-9	-636 / 0	0.10 (1)
20-19	0 / 1690	-17.5	-17.5 0.35 (1)	10.00	2-20	0 / 1857	0.42 (1)
19-18	0 / 4393	-17.5	-17.5 0.83 (1)	10.00	12-10	0 / 1833	0.41 (1)
18-17	0 / 2720	-17.5	-17.5 0.53 (1)	10.00			
17-16	0 / 2720	-17.5	-17.5 0.53 (1)	10.00			
16-15	0 / 2463	-17.5	-17.5 0.47 (1)	10.00			
15-14	0 / 2463	-17.5	-17.5 0.47 (1)	10.00			
14-13	0 / 3086	-17.5	-17.5 0.59 (1)	10.00			
13-12	0 / 1665	-17.5	-17.5 0.29 (1)	10.00			
12-11	0 / 0	-17.5	-17.5 0.02 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/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 (1.15")
CALCULATED VERT. DEFL.(LL)= L/999 (0.27")
ALLOWABLE DEFL.(TL)= L/360 (1.15")
CALCULATED VERT. DEFL.(TL)= L/829 (0.50")

CSI: TC=0.55 (4-5:1), BC=0.83 (18-19:1), WB=0.65 (3-19:1), SSI=0.20 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

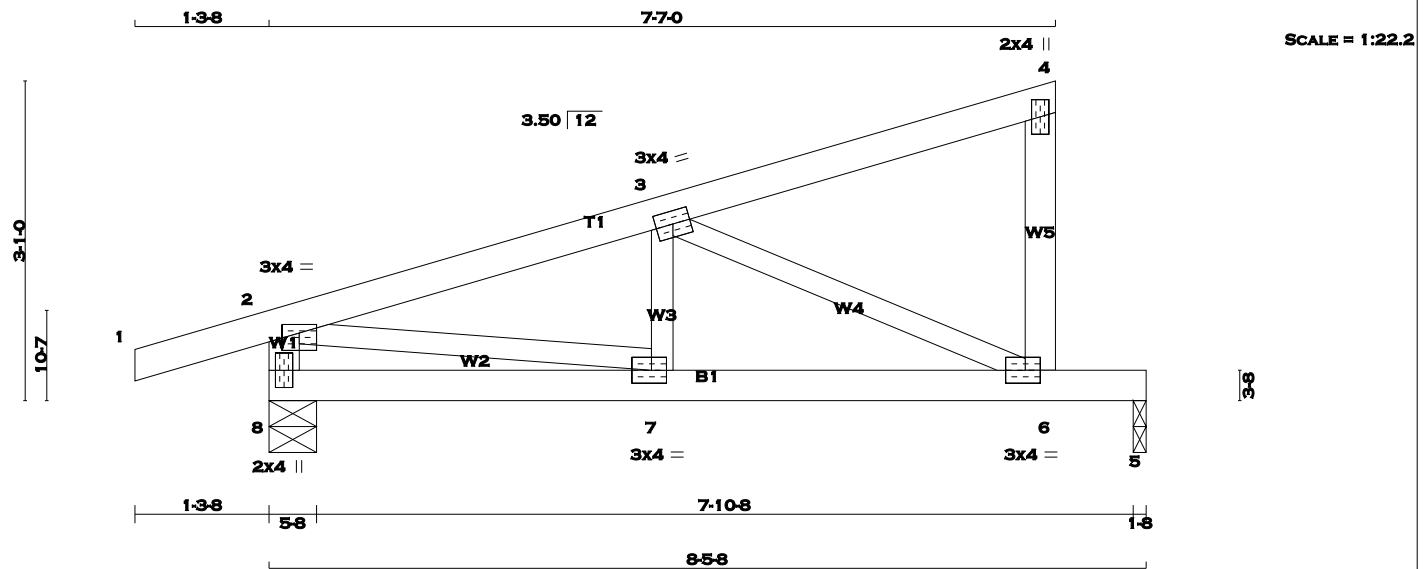
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (19) (INPUT = 0.90)
JSI METAL= 0.72 (17) (INPUT = 1.00)

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TOTAL WEIGHT = 7 X 30 = 213 lb
[M][F]

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	TMVW-t	MT20	3.0	4.0	
4	TMV+p	MT20	2.0	4.0	
6	BMVW-t	MT20	3.0	4.0	1.50 1.75
7	BMVW-t	MT20	3.0	4.0	1.50 1.75
8	BMV1+p	MT20	2.0	4.0	

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

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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8		501	0	501	0	0	5-8	5-8	
5		337	0	337	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8	349	257 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0	
5	238	158 / 0	0 / 0	0 / 0	0 / 0	80 / 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				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	0 / 14	-77.4 -77.4	0.10 (1)	10.00	7-3	0 / 97	0.03 (4)
2-3	-629 / 0	-77.4 -77.4	0.13 (1)	6.25	3-6	-670 / 0	0.18 (1)
3-4	-9 / 0	-77.4 -77.4	0.13 (1)	10.00	2-7	0 / 619	0.14 (1)
6-4	-115 / 0	0.0 0.0	0.02 (1)	7.81			
8-2	-489 / 0	0.0 0.0	0.05 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.11 (1)	10.00			
7-6	0 / 613	-17.5 -17.5	0.49 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.39 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/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 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 873 (0.12")

CSI: TC=0.13 (2-3:1) , BC=0.49 (6-7:1) , WB=0.18 (3-6:1) , SSI=0.26 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

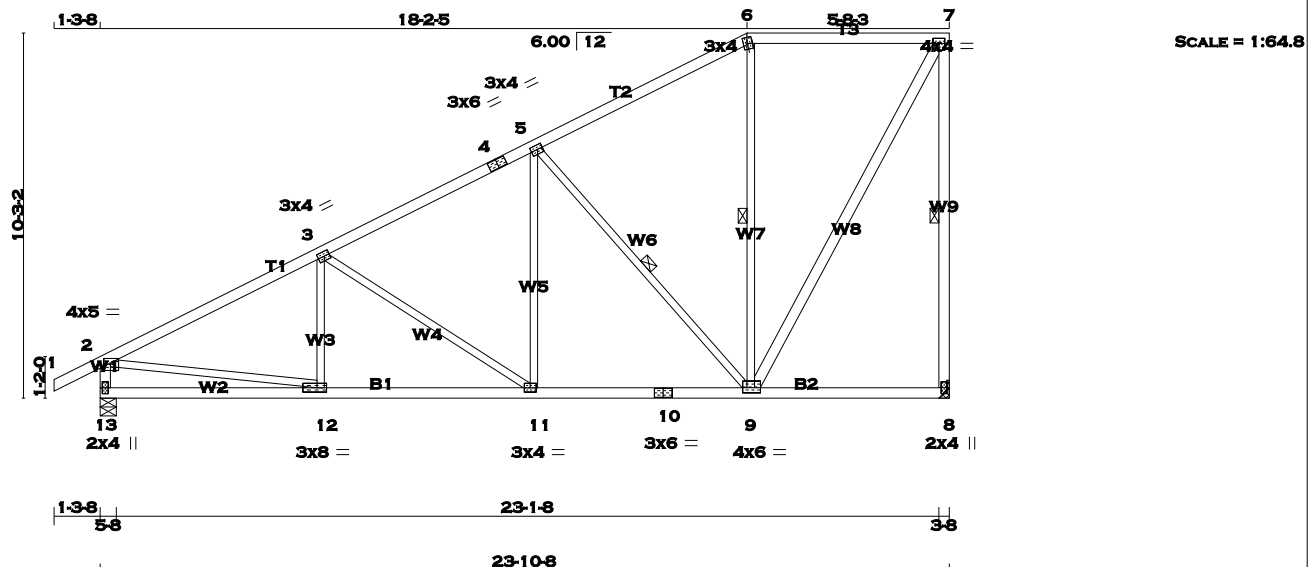
JSI GRIP= 0.83 (7) (INPUT = 0.90)
JSI METAL= 0.23 (7) (INPUT = 1.00)



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





TOTAL WEIGHT = 117 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 - 7	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
13 - 2	2x4	DRY	No.2	SPF
13 - 10	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
9 - 7	2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.75
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMVW-t	MT20	4.0	4.0	1.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVWV-t	MT20	4.0	6.0	1.75	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	4.0		
12	BMVW-t	MT20	3.0	8.0	1.50	3.25
13	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
8	1132	0		1132	0	0			
13	1237	0		1237	0	0			

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
8	795	556 / 0	0 / 0	0 / 0	0 / 0	0 / 0	239 / 0
13	866	619 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 18-0-0 . CBF = 90 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-9. DBS = 20-0-0 . CBF = 20 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. UNBRAC LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	12-3	-76 / 78	0.03 (4)
2-3	-1542 / 0	-77.4 -77.4	0.40 (1)	4.88	3-11	-455 / 0	0.45 (1)
3-4	-1137 / 0	-77.4 -77.4	0.32 (1)	5.59	11-5	0 / 353	0.08 (1)
4-5	-1137 / 0	-77.4 -77.4	0.32 (1)	5.59	5-9	-797 / 0	0.48 (1)
5-6	-570 / 0	-77.4 -77.4	0.32 (1)	6.25	9-6	-160 / 31	0.12 (1)
6-7	-490 / 0	-77.4 -77.4	0.32 (1)	6.25	9-7	0 / 1003	0.16 (1)
8-7	-1094 / 0	0.0 0.0	0.57 (1)	6.04	2-12	0 / 1410	0.32 (1)
13-2	-1192 / 0	0.0 0.0	0.12 (1)	7.32			
13-12	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
12-11	0 / 1397	-17.5 -17.5	0.30 (1)	10.00			
11-10	0 / 1017	-17.5 -17.5	0.24 (1)	10.00			
10-9	0 / 1017	-17.5 -17.5	0.24 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.57 (7-8:1), BC=0.30 (11-12:1), WB=0.48 (5-9:1), SSI=0.20 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

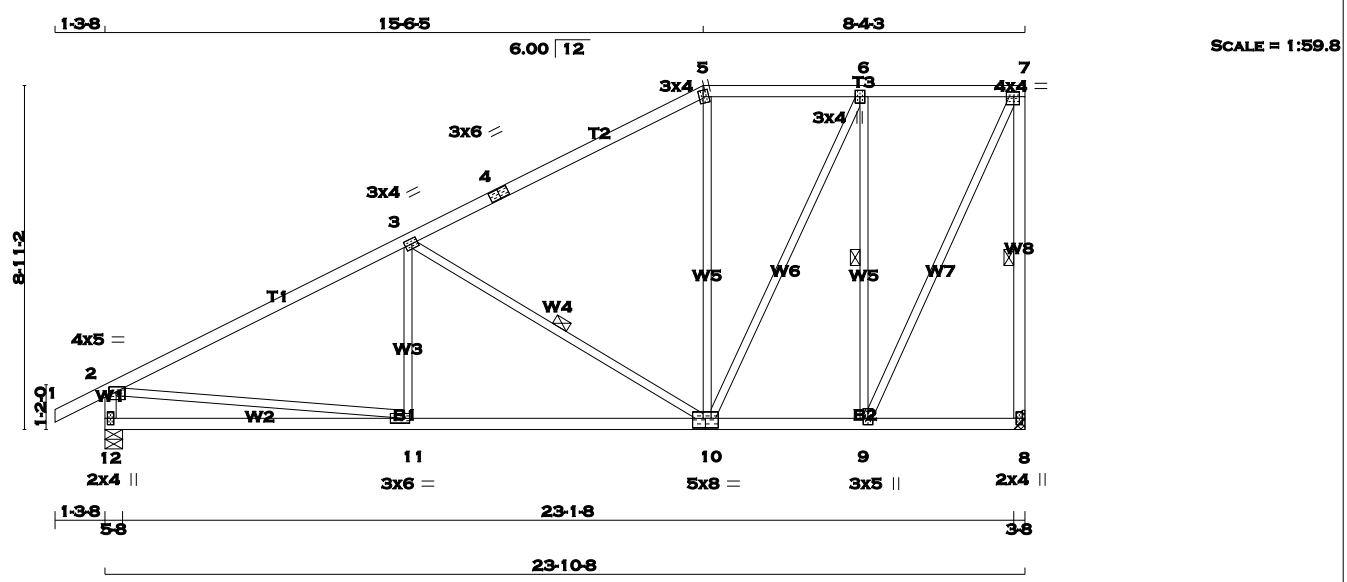
JSI GRIP= 0.89 (7) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 114 lb
[M][F]

LUMBER			N. L. G. A. RULES		
CHORDS	SIZE	LUMBER	DESCR.		
1 - 4	2x4	DRY	No.2	SPF	
4 - 5	2x4	DRY	No.2	SPF	
5 - 7	2x4	DRY	No.2	SPF	
8 - 7	2x4	DRY	No.2	SPF	
12 - 2	2x4	DRY	No.2	SPF	
12 - 10	2x4	DRY	No.2	SPF	
10 - 8	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTW+m	MT20	3.0	4.0	2.00	1.25
6	TMVW+t	MT20	3.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMVW+t	MT20	3.0	5.0	2.00	1.50
10	BSWWW-l	MT20	5.0	8.0	3.00	4.00
11	BMVW-t	MT20	3.0	6.0	1.50	1.75
12	BMV1+p	MT20	2.0	4.0		

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8		1132	0	1132	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 3-8									
12		1237	0	1237	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	
12		866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 83 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-10. DBS = 18-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-9. DBS = 16-0-0 . 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)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	11-3	0 / 134	0.05 (4)		
2-3	-1519 / 0	-77.4 -77.4	0.72 (1)	4.37	3-10	-791 / 0	0.46 (1)		
3-4	-833 / 0	-77.4 -77.4	0.64 (1)	5.62	10-5	0 / 69	0.02 (4)		
4-5	-833 / 0	-77.4 -77.4	0.64 (1)	5.62	10-6	0 / 566	0.13 (1)		
5-6	-715 / 0	-77.4 -77.4	0.17 (1)	6.25	9-6	-907 / 0	0.47 (1)		
6-7	-472 / 0	-77.4 -77.4	0.17 (1)	6.25	9-7	0 / 1085	0.24 (1)		
8-7	-1101 / 0	0.0 0.0	0.41 (1)	6.03	2-11	0 / 1396	0.31 (1)		
12-2	-1182 / 0	0.0 0.0	0.12 (1)	7.34					
12-11	0 / 0	-17.5 -17.5	0.27 (4)	10.00					
11-10	0 / 1388	-17.5 -17.5	0.37 (4)	10.00					
10-9	0 / 472	-17.5 -17.5	0.16 (4)	10.00					
9-8	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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.72 (2-3:1) , BC=0.37 (10-11:4) , WB=0.47 (6-9:1) , SSI=0.26 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

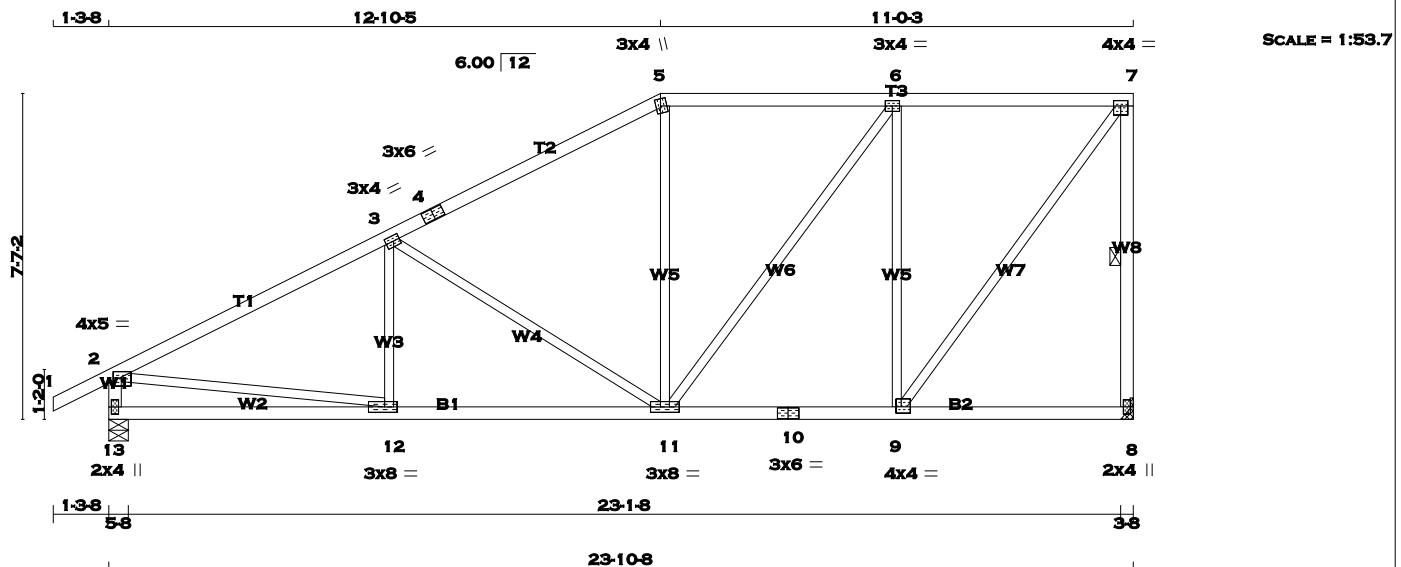
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 107 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 5	2x4	DRY	No.2		SPF
5 - 7	2x4	DRY	No.2		SPF
8 - 7	2x4	DRY	No.2		SPF
13 - 2	2x4	DRY	No.2		SPF
13 - 10	2x4	DRY	No.2		SPF
10 - 8	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2 EXCEPT					SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTW+m	MT20	3.0	4.0	2.00	1.25
6	TMVW-t	MT20	3.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.50	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	4.0	4.0	1.75	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	8.0		
12	BMVW-t	MT20	3.0	8.0	1.50	3.50
13	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8	1132	0		1132	0	0	HANGER BY OTHERS		
13	1237	0		1237	0	0	MIN. SEAT SIZE: 3-8		

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT		COMBINED	SNOW	LIVE									
8	795	556 / 0		0 / 0		0 / 0	0 / 0	0 / 0	239 / 0		0 / 0		
13	866	619 / 0		0 / 0		0 / 0	0 / 0	0 / 0	247 / 0		0 / 0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.

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. (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	12-3	-59 / 91	0.03 (4)
2-3	-1552 / 0	-77.4 -77.4	0.47 (1)	4.75	3-11	-582 / 0	0.69 (1)
3-4	-1058 / 0	-77.4 -77.4	0.43 (1)	5.56	11-5	0 / 115	0.03 (4)
4-5	-1058 / 0	-77.4 -77.4	0.43 (1)	5.56	11-6	0 / 371	0.08 (1)
5-6	-923 / 0	-77.4 -77.4	0.31 (1)	6.04	9-6	-826 / 0	0.87 (1)
6-7	-702 / 0	-77.4 -77.4	0.30 (1)	6.25	9-7	0 / 1167	0.26 (1)
8-7	-1093 / 0	0.0 0.0	0.28 (1)	6.05	2-12	0 / 1424	0.32 (1)
13-2	-1190 / 0	0.0 0.0	0.12 (1)	7.32			
13-12	0 / 0	-17.5 -17.5	0.18 (4)	10.00			
12-11	0 / 1412	-17.5 -17.5	0.31 (1)	10.00			
11-10	0 / 702	-17.5 -17.5	0.18 (1)	10.00			
10-9	0 / 702	-17.5 -17.5	0.18 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.12 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.47 (2-3:1) , BC=0.31 (11-12:1) , WB=0.87 (6-9:1) , SSI=0.22 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

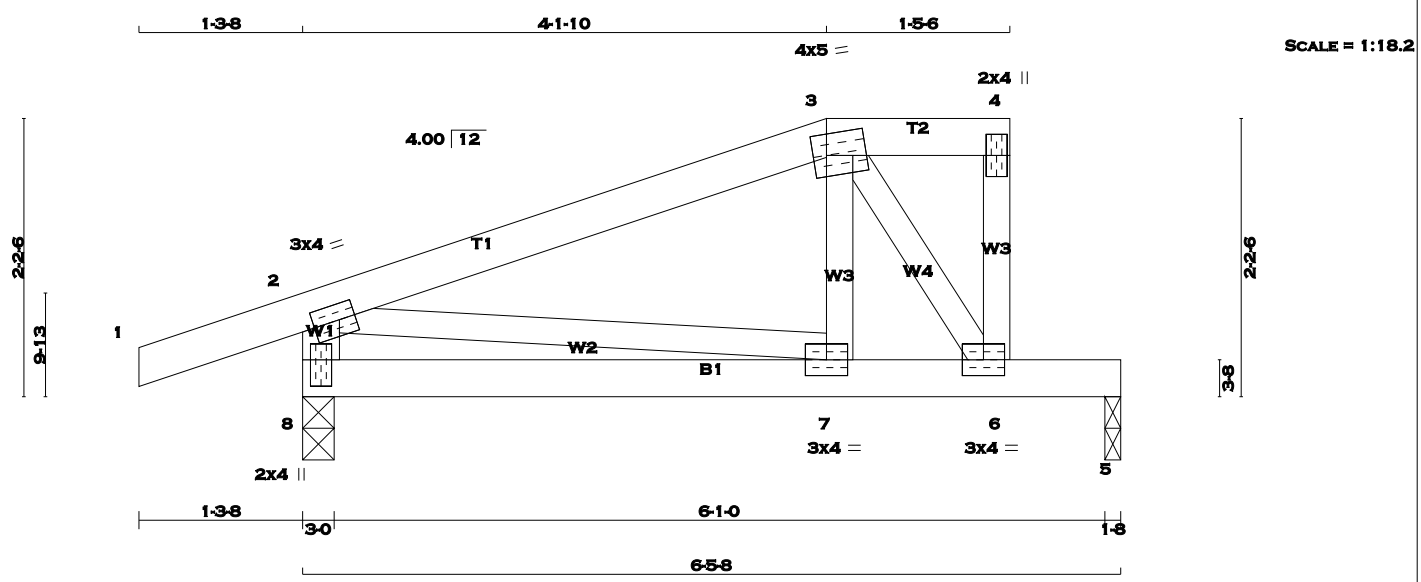
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



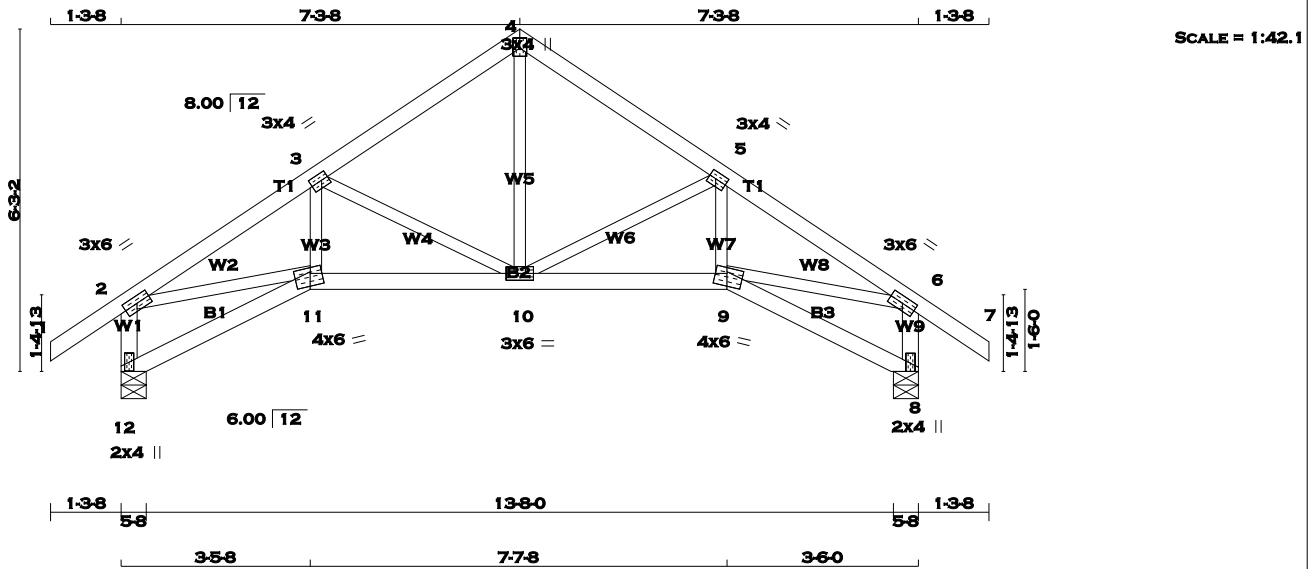
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LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS					SPECIFIED LOADS:				
1 - 3	2x4	DRY	No.2	SPF	FACTORED					TOP CH. LL = 23.3 PSF				
3 - 4	2x4	DRY	No.2	SPF	GROSS REACTION					DL = 3.0 PSF				
6 - 4	2x3	DRY	No.2	SPF	DOWN					BOT CH. LL = 0.0 PSF				
8 - 2	2x4	DRY	No.2	SPF	UP					DL = 7.0 PSF				
8 - 5	2x4	DRY	No.2	SPF	BRG					TOTAL LOAD = 33.3 PSF				
ALL WEBS	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS					SPACING = 24.0 IN. C/C				
EXCEPT					1ST LCASE					LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12				
DRY: SEASONED LUMBER.					MAX./MIN. COMPONENT REACTIONS					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010				
					JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL					THIS DESIGN COMPLIES WITH:				
					8 285 213 / 0 0 / 0 0 / 0 0 / 0 73 / 0 0 / 0					- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014				
					5 215 150 / 0 0 / 0 0 / 0 0 / 0 65 / 0 0 / 0					- CSA 086-09				
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5					- TPIC 2011				
					BRACING					(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				
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.					ALLOWABLE DEFL.(LL)= L/360 (0.22")				
					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.					CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")				
					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.					ALLOWABLE DEFL.(TL)= L/ 360 (0.22")				
					LOADING					CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")				
					TOTAL LOAD CASES: (4)					CSI: TC=0.23 (2-3:1) , BC=0.36 (6-7:1) , WB=0.07 (3-6:1) , SSI=0.24 (5-6:1)				
					CHORDS					DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10				
					MEMB. MAX. FORCE (LBS)					COMPANION LIVE LOAD FACTOR = 0.50				
					VERT. LOAD LC1 MAX					TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .				
					FROM TO					NAIL VALUES				
					FR-TO					PLATE GRIP(DRY) SHEAR SECTION				
					1-2 0 / 16					(PSI) (PLI) (PLI)				
					2-3 -277 / 0					MAX MIN MAX MIN MAX MIN				
					3-4 0 / 0					MT20 618 354 1667 822 2284 1656				
					6-4 -56 / 0					PLATE PLACEMENT TOL. = 0.250 inches				
					8-2 -383 / 0					PLATE ROTATION TOL. = 5.0 Deg.				
					8-7 0 / 0					JSI GRIP= 0.64 (3) (INPUT = 0.90)				
					7-6 0 / 275					JSI METAL= 0.16 (3) (INPUT = 1.00)				
					6-5 0 / 0									



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	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	BMV1+p	MT20	2.0	4.0	Edge
9	BBWW-m	MT20	4.0	6.0	2.75 2.50
10	BBWW-t	MT20	3.0	6.0	
11	BBWW-m	MT20	4.0	6.0	2.75 2.50
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		798	0	798	0	0	5-8	5-8	
8		798	0	798	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
12		558	404 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0	
8		558	404 / 0	0 / 0	0 / 0	0 / 0	154 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.70 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.

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	MAX. 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	11-3	0 / 185	0.04 (1)
2-3		-1208 / 0	-77.4	-77.4	0.13 (1)	5.70	3-10	-491 / 0	0.15 (1)
3-4		-706 / 0	-77.4	-77.4	0.12 (1)	6.25	10-4	0 / 535	0.12 (1)
4-5		-706 / 0	-77.4	-77.4	0.12 (1)	6.25	10-5	-486 / 0	0.14 (1)
5-6		-1200 / 0	-77.4	-77.4	0.13 (1)	5.71	9-5	0 / 183	0.04 (1)
6-7		0 / 29	-77.4	-77.4	0.10 (1)	10.00	2-11	0 / 1027	0.23 (1)
12-2		-768 / 0	0.0	0.0	0.08 (1)	7.81	9-6	0 / 1019	0.23 (1)
8-6		-767 / 0	0.0	0.0	0.08 (1)	7.81			
12-11		0 / 0	-17.5	-17.5	0.06 (4)	10.00			
11-10		0 / 1009	-17.5	-17.5	0.20 (1)	10.00			
10-9		0 / 1002	-17.5	-17.5	0.20 (1)	10.00			
9-8		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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.49")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.13 (5-6:1) , BC=0.20 (10-11:1) , WB=0.23 (2-11:1) , SSI=0.11 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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.

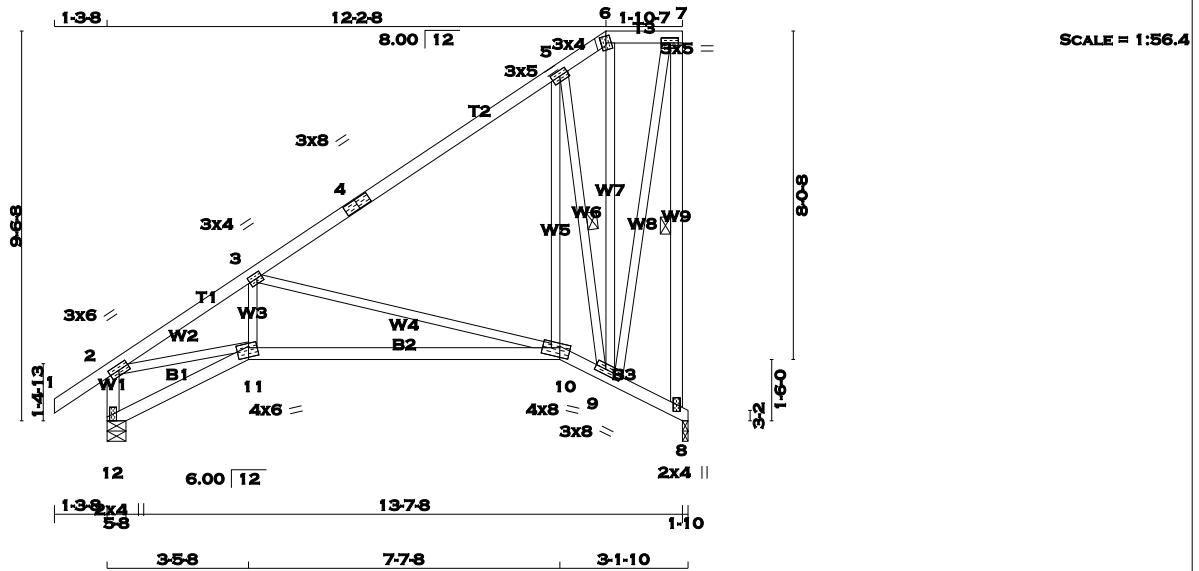
JSI GRIP= 0.81 (11) (INPUT = 0.90)
JSI METAL= 0.34 (2) (INPUT = 1.00)



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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	6.0		
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	8.0		
5	TMVW-t	MT20	3.0	5.0		
6	TTW+m	MT20	3.0	4.0		
7	TMVW-t	MT20	3.0	5.0	1.50	2.25
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	8.0	1.50	2.00
10	BBWW-m	MT20	4.0	8.0	2.75	3.00
11	BBWW-m	MT20	4.0	6.0	2.75	2.50
12	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
8	668	0	668	0	0	1-10	1-10		
12	774	0	774	0	0	5-8	5-8		

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
8	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0
12	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.40 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 20-0-0 . CBF = 84 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 14-0-0 . CBF = 85 LBS.

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

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

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	11-3	0 / 229	0.05 (1)
2-3	-1237 / 0	-77.4 -77.4	0.31 (1)	5.40	3-10	-807 / 0	0.98 (1)
3-4	-323 / 0	-77.4 -77.4	0.40 (1)	6.25	10-5	0 / 385	0.09 (1)
4-5	-323 / 0	-77.4 -77.4	0.40 (1)	6.25	5-9	-970 / 0	0.39 (1)
5-6	-342 / 0	-77.4 -77.4	0.36 (1)	6.25	9-6	0 / 300	0.07 (1)
6-7	-133 / 0	-77.4 -77.4	0.03 (1)	6.25	9-7	0 / 611	0.14 (1)
8-7	-668 / 0	0.0 0.0	0.29 (1)	6.25	2-11	0 / 1074	0.24 (1)
12-2	-744 / 0	0.0 0.0	0.08 (1)	7.81			
12-11	0 / 0	-17.5 -17.5	0.06 (4)	10.00			
11-10	0 / 1054	-17.5 -17.5	0.37 (4)	10.00			
10-9	0 / 287	-17.5 -17.5	0.09 (1)	10.00			
9-8	0 / 7	-17.5 -17.5	0.04 (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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/823 (0.21")

CSI: TC=0.40 (3-5:1), BC=0.37 (10-11:4), WB=0.98 (3-10:1), SSI=0.24 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

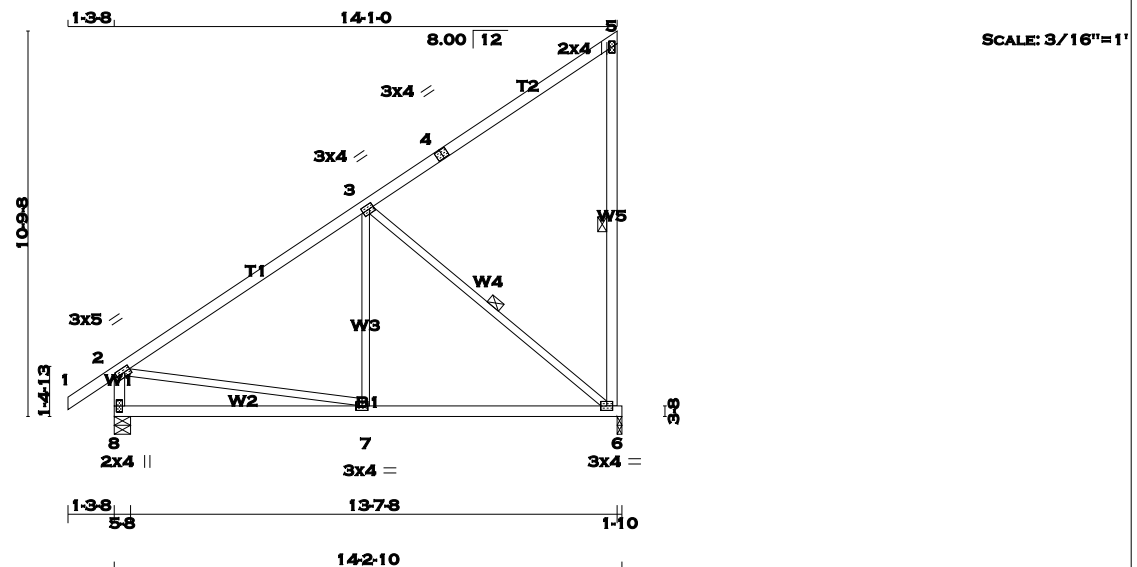
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.37 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 67 = 269 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 5	2x4	DRY	No.2		SPF
6 - 5	2x4	DRY	No.2		SPF
8 - 2	2x4	DRY	No.2		SPF
8 - 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	3.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMVW-t	MT20	3.0	4.0		
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	
JT		GROSS	REACTION	GROSS	REACTION	BRG		BRG	
		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6	668	0		668	0	0	1-10	1-10	
8	774	0		774	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6	469	328 / 0		0 / 0	0 / 0	0 / 0	141 / 0	0 / 0	
8	541	392 / 0		0 / 0	0 / 0	0 / 0	149 / 0	0 / 0	

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 3-6. DBS = 20-0-0 . CBF = 82 LBS.

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

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

LOADING		TOTAL LOAD CASES: (4)							
C H O R D S		M A X. F A C T O R E D		F A C T O R E D		W E B S		M A X. F A C T O R E D	
MEMB.		FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	LC1 MAX (CSI (LC)	MEMB.		FORCE (LBS)	LC1 MAX (CSI (LC)
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00	7-3	0 / 149	0.05 (4)	
2-3	-572 / 0	-77.4	-77.4	0.52 (1)	6.25	3-6	-656 / 0	0.37 (1)	
3-4	-37 / 0	-77.4	-77.4	0.51 (1)	6.25	2-7	0 / 513	0.12 (1)	
4-5	-37 / 0	-77.4	-77.4	0.51 (1)	6.25				
6-5	-205 / 0	0.0	0.0	0.12 (1)	6.25				
8-2	-727 / 0	0.0	0.0	0.07 (1)	7.81				
8-7	0 / 0	-17.5	-17.5	0.25 (4)	10.00				
7-6	0 / 507	-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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.52 (2-3:1) , BC=0.29 (6-7:4) , WB=0.37 (3-6:1) , SSI=0.22 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

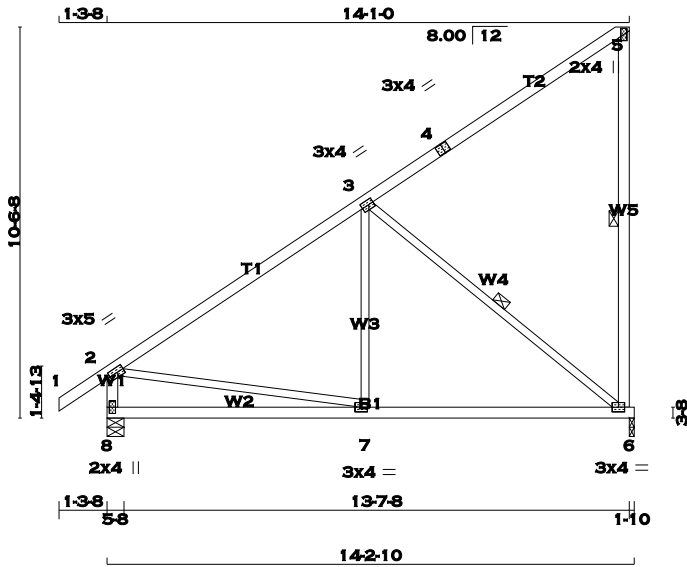
JSI GRIP= 0.87 (7) (INPUT = 0.90)
JSI METAL= 0.23 (2) (INPUT = 1.00)



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





TOTAL WEIGHT = 67 lb

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
8 - 2	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	X
2	TMVW-t	MT20	3.0	5.0	1.50 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TS-t	MT20	3.0	4.0	
5	TMV+p	MT20	2.0	4.0	
6	BMVW1-t	MT20	3.0	4.0	
7	BMVW-t	MT20	3.0	4.0	
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	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
6	668	0	668	0	0	1-10	1-10		
8	774	0	774	0	0	5-8	5-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
6	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0		
8	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0		

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 3-6. DBS = 20-0-0 . CBF = 82 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S		FACTORED		W E B S		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	MAX. UNBRAC	MAX. FACTORED
FR-TO		FROM TO	CSI (LC)	FR-TO		LENGTH	CSI (LC)
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	7-3	0 / 148	0.05 (4)
2-3	-577 / 0	-77.4 -77.4	0.52 (1)	6.25	3-6	-656 / 0	0.37 (1)
3-4	-37 / 0	-77.4 -77.4	0.52 (1)	6.25	2-7	0 / 518	0.12 (1)
4-5	-37 / 0	-77.4 -77.4	0.52 (1)	6.25			
6-5	-209 / 0	0.0 0.0	0.12 (1)	6.25			
8-2	-728 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.25 (4)	10.00			
7-6	0 / 512	-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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.52 (2-3:1) , BC=0.29 (6-7:4) , WB=0.37 (3-6:1) , SSI=0.22 (3-5:1)

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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (7) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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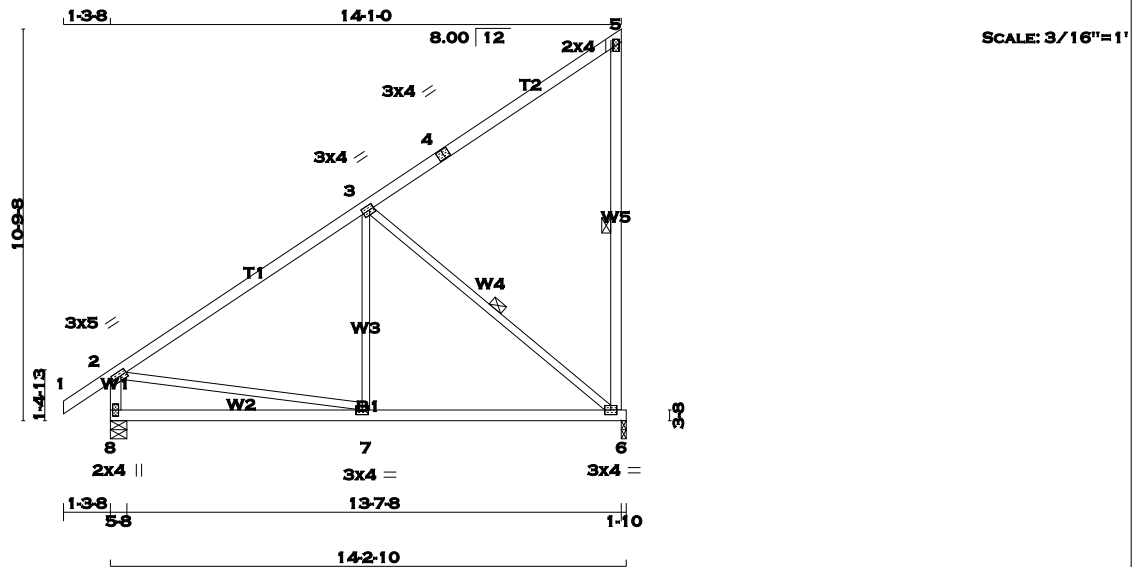
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



KOTT , Stouffville, ON, CGC

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TOTAL WEIGHT = 3 X 67 = 202 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
6 - 5	2x4	DRY	No.2	SPF
8 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
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	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
6	668	0	668	0	0	1-10	1-10		
8	774	0	774	0	0	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
8	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, 8

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 3-6. DBS = 20-0-0 . CBF = 82 LBS.

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

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

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)	10.00	7-3	0 / 149	0.05 (4)
2-3	-572 / 0	-77.4 -77.4	0.52 (1)	6.25	3-6	-656 / 0	0.37 (1)
3-4	-37 / 0	-77.4 -77.4	0.51 (1)	6.25	2-7	0 / 513	0.12 (1)
4-5	-37 / 0	-77.4 -77.4	0.51 (1)	6.25			
6-5	-205 / 0	0.0 0.0	0.12 (1)	6.25			
8-2	-727 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.25 (4)	10.00			
7-6	0 / 507	-17.5 -17.5	0.29 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.52 (2-3:1) , BC=0.29 (6-7:4) , WB=0.37 (3-6:1) , SSI=0.22 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

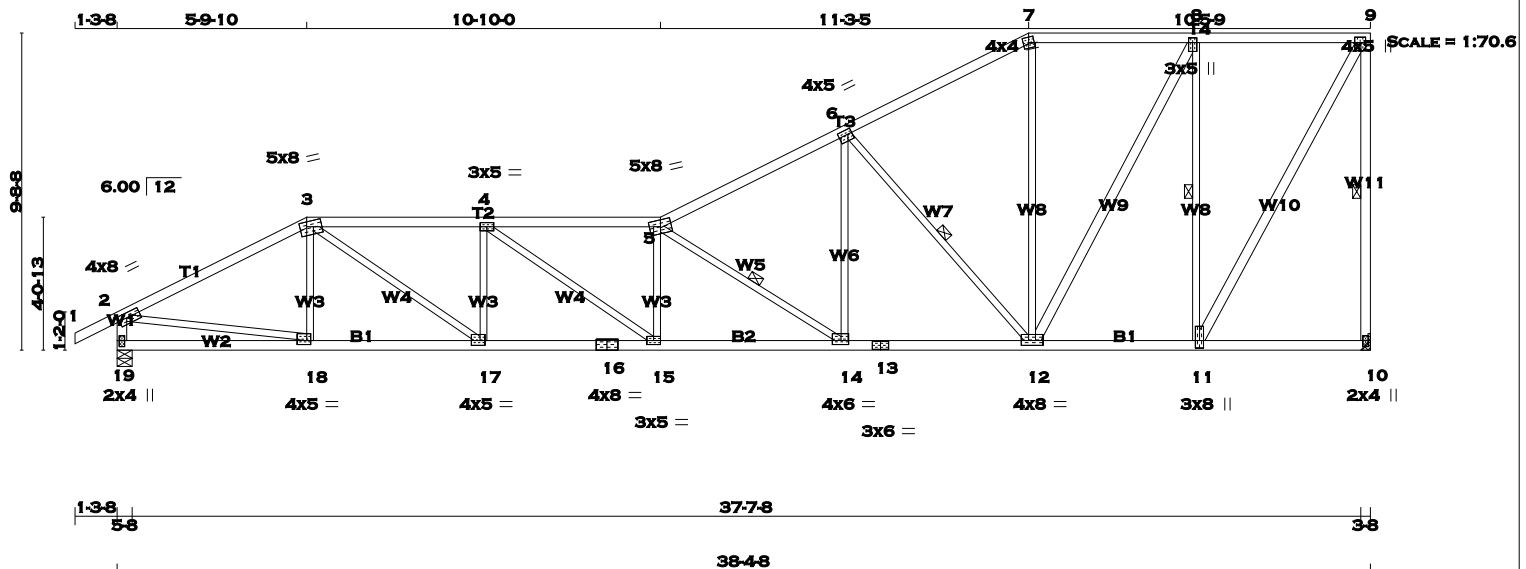
JSI GRIP= 0.87 (7) (INPUT = 0.90)
JSI METAL= 0.23 (2) (INPUT = 1.00)



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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
10 - 9	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
12 - 8	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2

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 2.50
4	TMVW-t	MT20	3.0	5.0	
5	TTWW-m	MT20	5.0	8.0	
6	TMVW-t	MT20	4.0	5.0	1.75 1.50
7	TTW-m	MT20	4.0	4.0	
8	TMVW+t	MT20	3.0	5.0	1.75 1.50
9	TMVW+p	MT20	4.0	5.0	2.00 1.75
10	BMV1+p	MT20	2.0	4.0	2.25 1.00
11	BMVW+t	MT20	3.0	8.0	2.75 1.50
12	BMVW+t	MT20	4.0	8.0	1.75 4.00
13	BS-t	MT20	3.0	6.0	
14	BMVW-t	MT20	4.0	6.0	1.50 2.75
15	BMVW-t	MT20	3.0	5.0	
16	BS-t	MT20	4.0	8.0	
17	BMVW-t	MT20	4.0	5.0	1.75 1.75
18	BMVW-t	MT20	4.0	5.0	1.50 1.50
19	BMV1+p	MT20	2.0	4.0	2.25 1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOOK 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
10	1820	0	1820	0	0	HANGER BY OTHERS	
19	1925	0	1925	0	0	5-8	5-8

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	1277	894 / 0	0 / 0	0 / 0	0 / 0	384 / 0	0 / 0
19	1349	957 / 0	0 / 0	0 / 0	0 / 0	392 / 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 = 2.72 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 9-10, 6-12, 8-11. DBS = 8-0-0 . CBF = 89 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14. DBS = 6-0-0 . CBF = 86 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

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 / 23	-77.4 -77.4 0.10 (1)	10.00	18-3	-237 / 22	0.06 (1)	
2-3	-2685 / 0	-77.4 -77.4 0.70 (1)	3.56	3-17	0 / 1834	0.41 (1)	
3-4	-3900 / 0	-77.4 -77.4 0.67 (1)	3.03	17-4	-957 / 0	0.24 (1)	
4-5	-4543 / 0	-77.4 -77.4 0.77 (1)	2.72	4-15	0 / 790	0.18 (1)	
5-6	-2924 / 0	-77.4 -77.4 0.68 (1)	3.47	15-5	-370 / 0	0.09 (1)	
6-7	-1658 / 0	-77.4 -77.4 0.51 (1)	4.56	5-14	-2304 / 0	0.74 (1)	
7-8	-1465 / 0	-77.4 -77.4 0.40 (1)	4.93	14-6	0 / 1388	0.31 (1)	
8-9	-920 / 0	-77.4 -77.4 0.37 (1)	5.91	6-12	-1789 / 0	0.94 (1)	
10-9	-1782 / 0	0.0 0.0 0.80 (1)	5.00	12-7	0 / 415	0.09 (1)	
19-2	-1882 / 0	0.0 0.0 0.19 (1)	6.12	12-8	0 / 1160	0.19 (1)	
				11-8	-1521 / 0	0.96 (1)	
19-18	0 / 0	-17.5 -17.5 0.13 (4)	10.00	11-9	0 / 1865	0.30 (1)	
18-17	0 / 2394	-17.5 -17.5 0.45 (1)	10.00	2-18	0 / 2426	0.55 (1)	
17-16	0 / 3900	-17.5 -17.5 0.69 (1)	10.00				
16-15	0 / 3900	-17.5 -17.5 0.69 (1)	10.00				
15-14	0 / 4554	-17.5 -17.5 0.80 (1)	10.00				
14-13	0 / 2638	-17.5 -17.5 0.48 (1)	10.00				
13-12	0 / 2638	-17.5 -17.5 0.48 (1)	10.00				
12-11	0 / 920	-17.5 -17.5 0.21 (1)	10.00				
11-10	0 / 0	-17.5 -17.5 0.11 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

LOADING IN 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 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.34")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 757 (0.61")

CSI: TC=0.80 (9-10:1), BC=0.80 (14-15:1), WB=0.96 (8-11:1), SSI=0.20 (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.

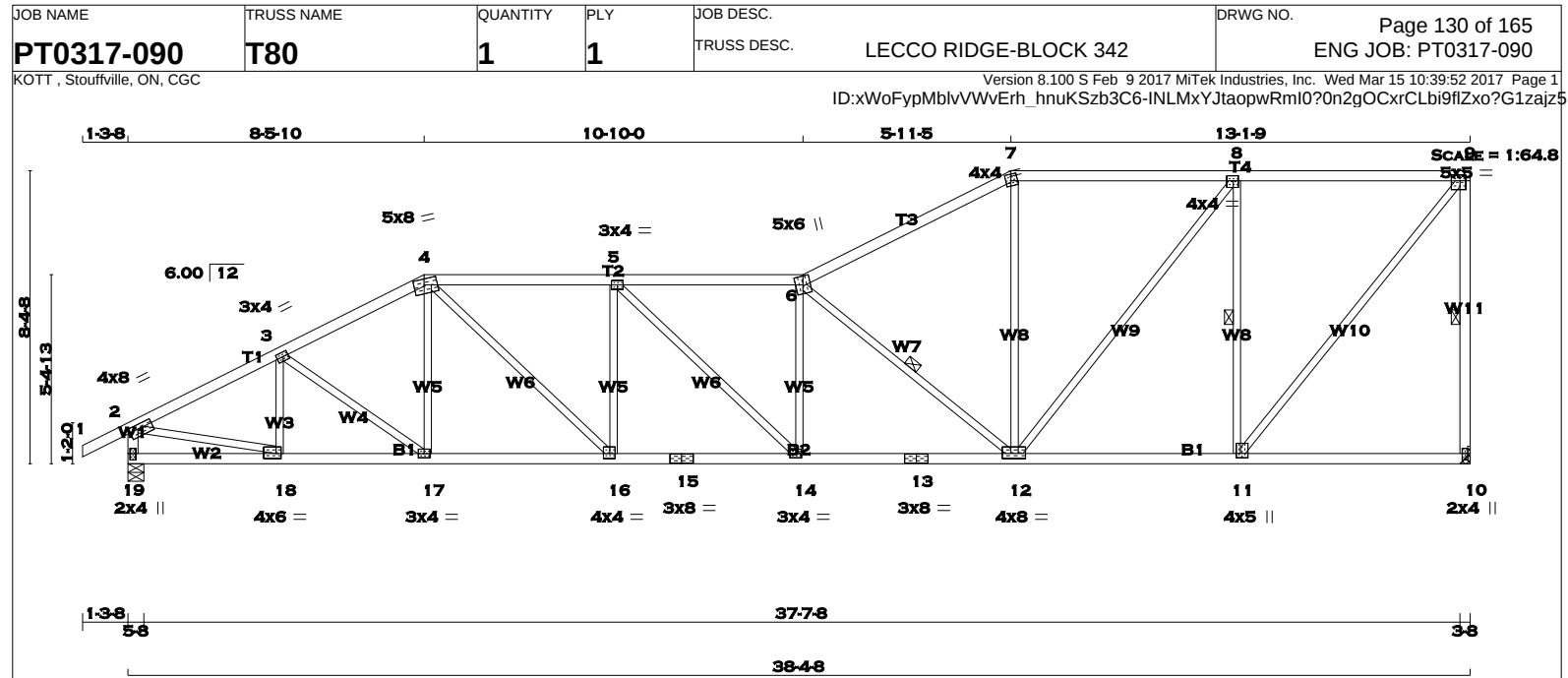
JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.77 (16) (INPUT = 1.00)

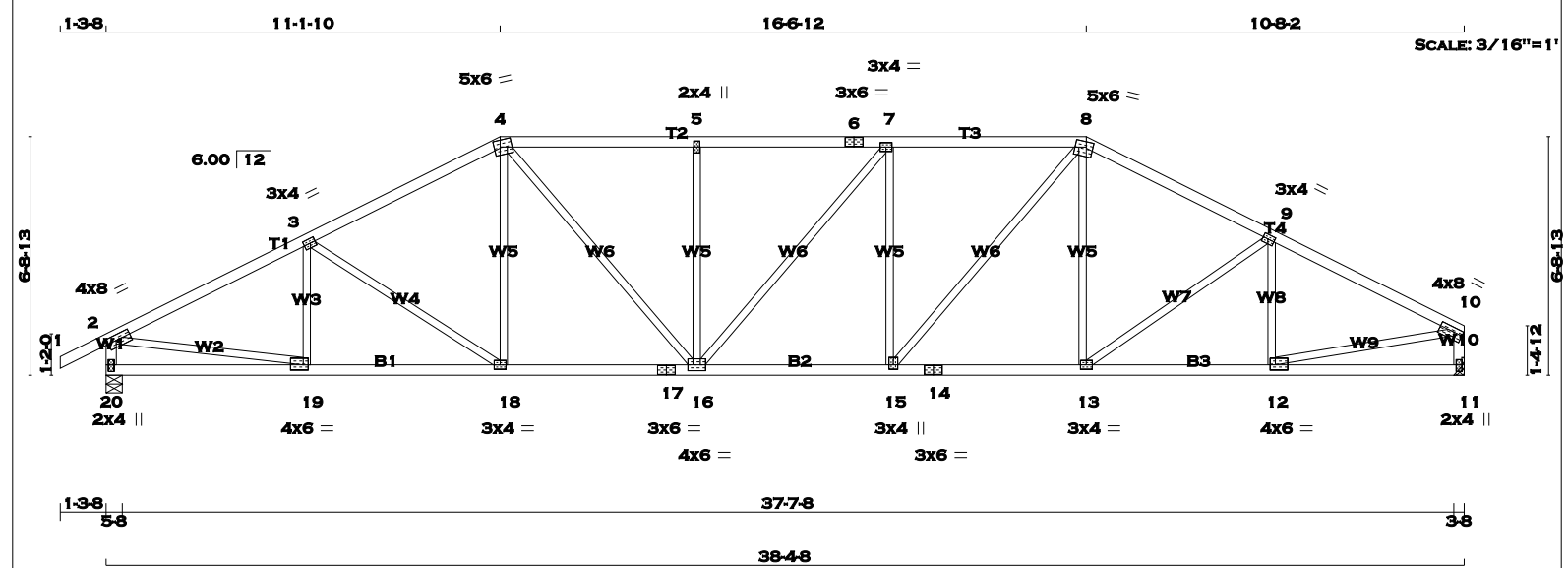


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TOTAL WEIGHT = 159 lb
[M][F]

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
8 - 10	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
20 - 17	2x4	DRY	No.2
17 - 14	2x4	DRY	No.2
14 - 11	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	8.0	1.75 3.00
3	TMVW-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	TMVW-t	MT20	3.0	4.0	
8	TTWW-m	MT20	5.0	6.0	1.75 2.25
9	TMVW-t	MT20	3.0	4.0	1.50 1.75
10	TMVW-t	MT20	4.0	8.0	1.50 3.00
11	BMV1+p	MT20	2.0	4.0	2.25 1.00
12	BMVW-t	MT20	4.0	6.0	1.75 1.75
13	BMVW-t	MT20	3.0	4.0	
14	BS-t	MT20	3.0	6.0	
15	BMVW+t	MT20	3.0	4.0	1.50 1.50
16	BMVWVW-t	MT20	4.0	6.0	
17	BS-t	MT20	3.0	6.0	
18	BMVW-t	MT20	3.0	4.0	
19	BMVW-t	MT20	4.0	6.0	1.75 1.75
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	IN-SX	IN-SX
20	1925	0	1925	0	0	5-8	5-8
11	1820	0	1820	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
20		1349	957 / 0	0 / 0	0 / 0	0 / 0	392 / 0
11		1277	894 / 0	0 / 0	0 / 0	0 / 0	384 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.84 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC1)	MEMB.	FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	19-3	-272 / 12	0.07 (1)
2-3	-2733 / 0	-77.4 -77.4	0.43 (1)	3.84	3-18	-269 / 0	0.22 (1)
3-4	-2528 / 0	-77.4 -77.4	0.40 (1)	4.00	18-4	0 / 251	0.06 (1)
4-5	-2704 / 0	-77.4 -77.4	0.38 (1)	3.90	4-16	0 / 703	0.16 (1)
5-6	-2704 / 0	-77.4 -77.4	0.35 (1)	3.94	16-5	-461 / 0	0.35 (1)
6-7	-2704 / 0	-77.4 -77.4	0.35 (1)	3.94	16-7	0 / 26	0.01 (1)
7-8	-2687 / 0	-77.4 -77.4	0.38 (1)	3.91	15-7	-483 / 0	0.37 (1)
8-9	-2466 / 0	-77.4 -77.4	0.37 (1)	4.07	15-8	0 / 764	0.17 (1)
9-10	-2557 / 0	-77.4 -77.4	0.38 (1)	4.00	13-8	0 / 185	0.04 (4)
20-2	-1881 / 0	0.0 0.0	0.19 (1)	6.12	13-9	-149 / 0	0.12 (1)
11-10	-1778 / 0	0.0 0.0	0.18 (1)	6.26	12-9	-364 / 0	0.09 (1)
					2-19	0 / 2492	0.56 (1)
					12-10	0 / 2351	0.53 (1)
20-19	0 / 0	-17.5 -17.5	0.12 (4)	10.00			
19-18	0 / 2464	-17.5 -17.5	0.46 (1)	10.00			
18-17	0 / 2244	-17.5 -17.5	0.42 (1)	10.00			
17-16	0 / 2244	-17.5 -17.5	0.42 (1)	10.00			
16-15	0 / 2687	-17.5 -17.5	0.48 (1)	10.00			
15-14	0 / 2187	-17.5 -17.5	0.41 (1)	10.00			
14-13	0 / 2187	-17.5 -17.5	0.41 (1)	10.00			
13-12	0 / 2306	-17.5 -17.5	0.43 (1)	10.00			
12-11	0 / 0	-17.5 -17.5	0.11 (4)	10.00			

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

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.43 (2-3:1), BC=0.48 (15-16:1), WB=0.56 (2-19:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

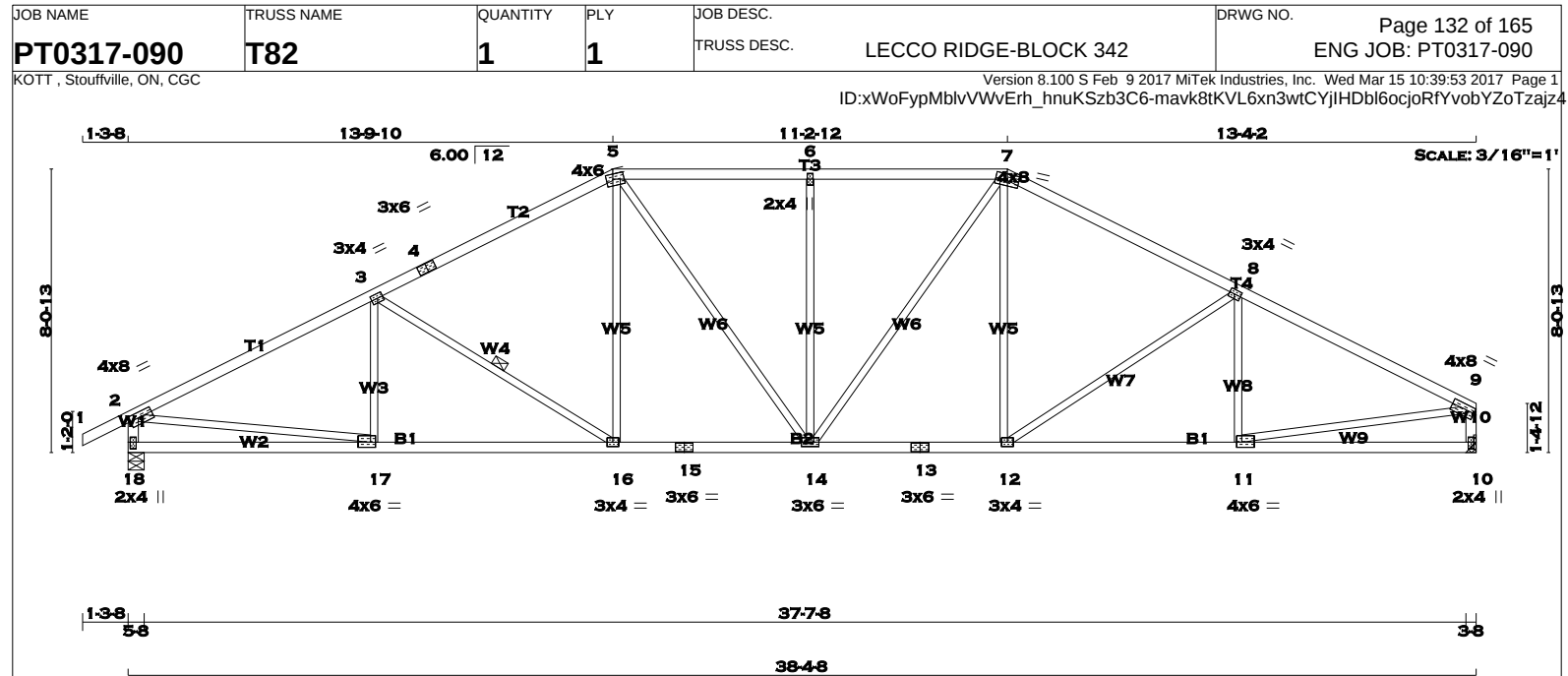
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (15) (INPUT = 0.90)
JSI METAL= 0.62 (19) (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.





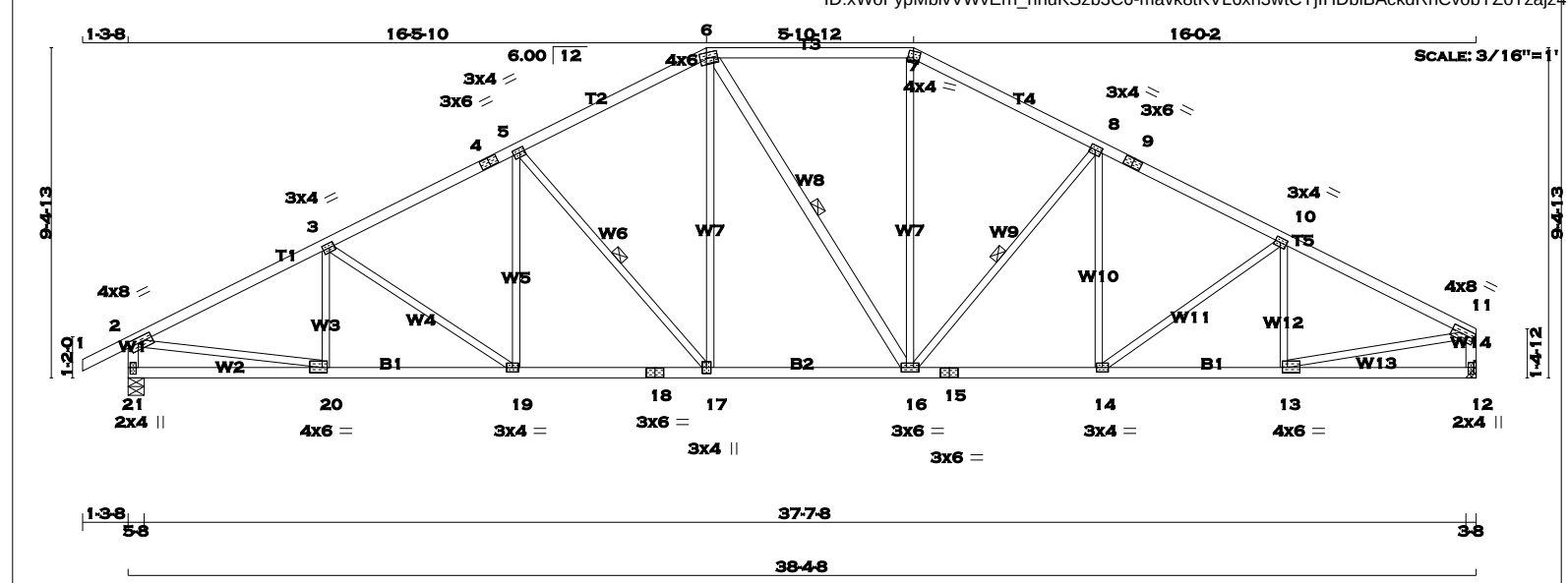
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 5 2x4 DRY No.2 SPF 5 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 18 - 2 2x4 DRY No.2 SPF 10 - 9 2x4 DRY No.2 SPF 18 - 15 2x4 DRY No.2 SPF 15 - 13 2x4 DRY No.2 SPF 13 - 10 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 18 1925 0 1925 0 0 5-8 5-8 10 1820 0 1820 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 18 1349 957 / 0 0 / 0 0 / 0 0 / 0 392 / 0 0 / 0 10 1277 894 / 0 0 / 0 0 / 0 0 / 0 384 / 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 = 3.53 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-16. DBS = 20-0-0. CBF = 64 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 LC1 MAX. UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC) FR-TO FROM TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 17-3 -174 / 65 0.06 (1) 2-3 -2774 / 0 -77.4 -77.4 0.71 (1) 3.53 3-16 -511 / 0 0.23 (1) 3-4 -2349 / 0 -77.4 -77.4 0.62 (1) 3.87 16-5 0 / 385 0.09 (1) 4-5 -2349 / 0 -77.4 -77.4 0.62 (1) 3.87 5-14 0 / 354 0.08 (1) 5-6 -2287 / 0 -77.4 -77.4 0.39 (1) 4.16 14-6 -531 / 0 0.66 (1) 6-7 -2287 / 0 -77.4 -77.4 0.39 (1) 4.16 14-7 0 / 409 0.09 (1) 7-8 -2313 / 0 -77.4 -77.4 0.57 (1) 3.96 12-7 0 / 332 0.07 (1) 8-9 -2628 / 0 -77.4 -77.4 0.63 (1) 3.69 12-8 -400 / 0 0.54 (1) 18-2 -1873 / 0 0.0 0.0 0.19 (1) 6.13 11-8 -253 / 38 0.09 (1) 10-9 -1770 / 0 0.0 0.0 0.18 (1) 6.27 2-17 0 / 2525 0.57 (1) 11-9 0 / 2405 0.54 (1) 18-17 0 / 0 -17.5 -17.5 0.20 (4) 10.00 17-16 0 / 2506 -17.5 -17.5 0.49 (1) 10.00 16-15 0 / 2079 -17.5 -17.5 0.41 (1) 10.00 15-14 0 / 2079 -17.5 -17.5 0.41 (1) 10.00 14-13 0 / 2047 -17.5 -17.5 0.40 (1) 10.00 13-12 0 / 2047 -17.5 -17.5 0.40 (1) 10.00 12-11 0 / 2375 -17.5 -17.5 0.47 (1) 10.00 11-10 0 / 0 -17.5 -17.5 0.19 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.28") CALCULATED VERT. DEFL.(LL) = L/999 (0.16") ALLOWABLE DEFL.(TL)= L/360 (1.28") CALCULATED VERT. DEFL.(TL) = L/999 (0.28") CSI: TC=0.71 (2-3:1), BC=0.49 (16-17:1), WB=0.66 (6-14:1), 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= 0.87 (9) (INPUT = 0.90) JSI METAL= 0.63 (17) (INPUT = 1.00)			
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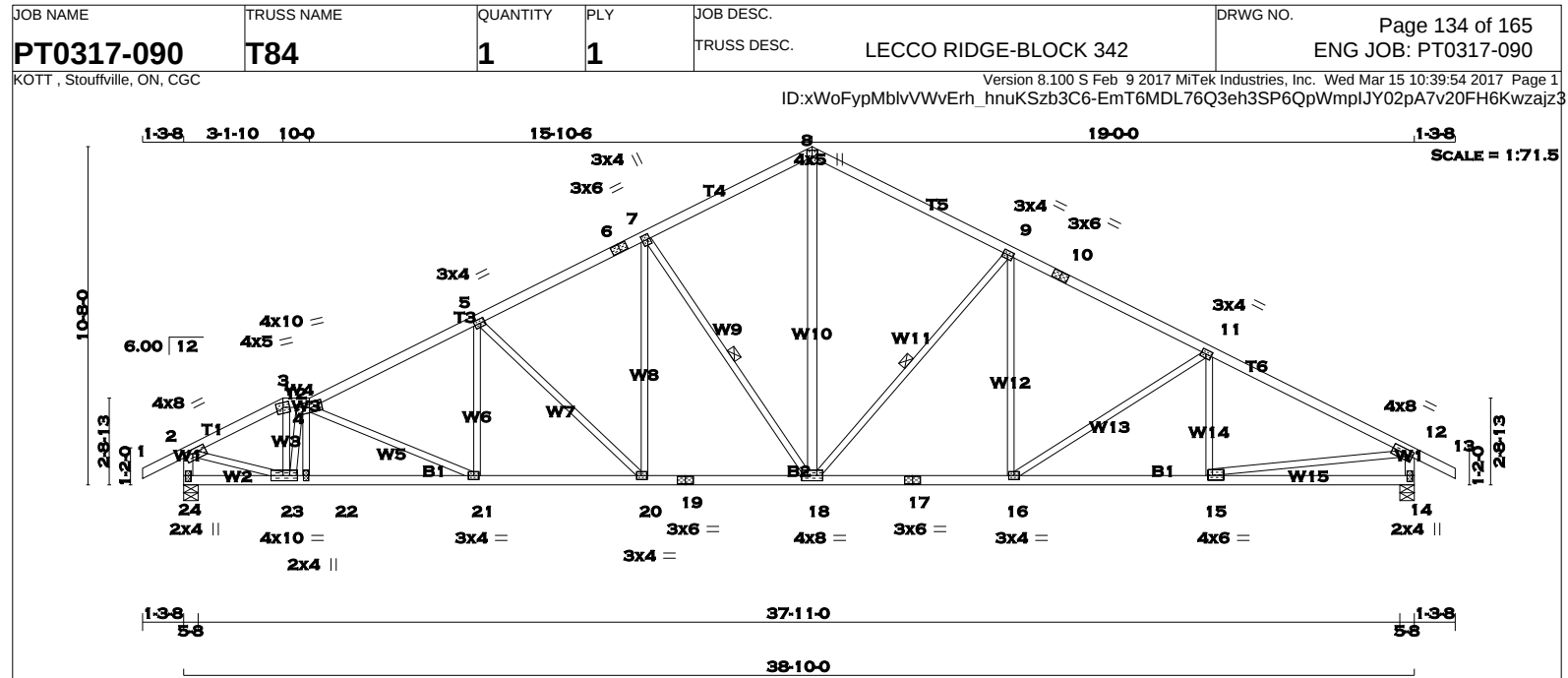
LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 4 2x4 DRY No.2 SPF
4 - 6 2x4 DRY No.2 SPF
6 - 7 2x4 DRY No.2 SPF
7 - 9 2x4 DRY No.2 SPF
9 - 11 2x4 DRY No.2 SPF
21 - 2 2x4 DRY No.2 SPF
12 - 11 2x4 DRY No.2 SPF
21 - 18 2x4 DRY No.2 SPF
18 - 15 2x4 DRY No.2 SPF
15 - 12 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
6 - 16 2x4 DRY No.2 SPF
DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED MAXIMUM FACTORED INPUT REQ'D
GROSS REACTION GROSS REACTION BRG BRG
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
21 1925 0 1925 0 0 5-8 5-8
12 1820 0 1820 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 1349 957 / 0 0 / 0 0 / 0 0 / 0 392 / 0 0 / 0
12 1277 894 / 0 0 / 0 0 / 0 0 / 0 384 / 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 = 3.87 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, 6-16, 8-16. DBS = 20-0-0. 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) LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE (LBS) MAX. (LC)

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 (1.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")
CSI: TC=0.43 (2-3:1), BC=0.44 (19-20:1), WB=0.56 (2-20:1), 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 (11) (INPUT = 0.90)
JSI METAL= 0.61 (20) (INPUT = 1.00)

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, 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 6.0 1.75 2.25 7 TTW-m MT20 4.0 4.0 2.25 2.00 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 2.25 1.00 13 BMWW-t MT20 4.0 6.0 1.75 1.75 14 BMWW-t MT20 3.0 4.0 15 BS-t MT20 3.0 6.0 16 BMWW-t MT20 3.0 6.0 17 BMWW-t MT20 3.0 4.0 18 BS-t MT20 3.0 6.0 19 BMWW-t MT20 3.0 4.0 20 BMWW-t MT20 4.0 6.0 1.75 1.75 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.	RECEIVED TOWN OF MILTON MAR 29, 2017 17-5318 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.
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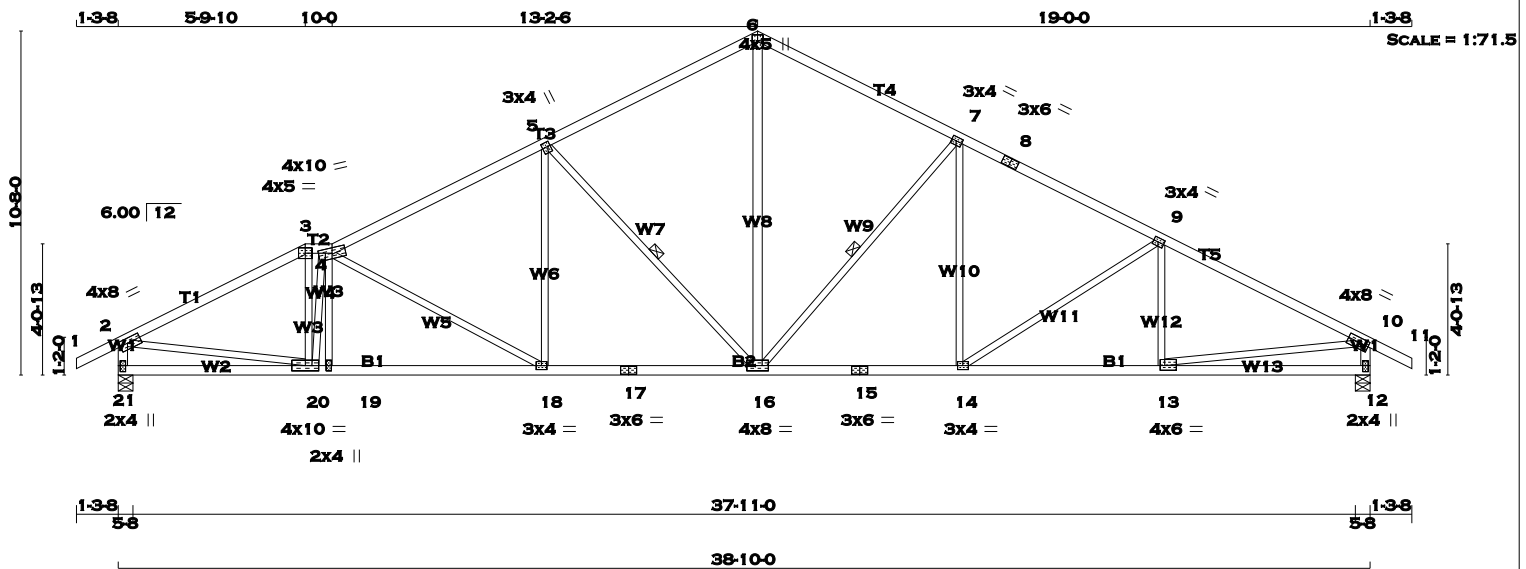
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 10 2x4 DRY No.2 SPF 10 - 13 2x4 DRY No.2 SPF 24 - 2 2x4 DRY No.2 SPF 14 - 12 2x4 DRY No.2 SPF 24 - 19 2x4 DRY No.2 SPF 19 - 17 2x4 DRY No.2 SPF 17 - 14 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 18 - 8 2x4 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 REQRD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 24 1947 0 1947 0 0 5-8 5-8 14 1947 0 1947 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL 24 1364 968 / 0 0 / 0 0 / 0 396 / 0 0 / 0 14 1364 968 / 0 0 / 0 0 / 0 396 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 24, 14 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 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 7-18. DBS = 16-0-0. CBF = 83 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-18. DBS = 18-0-0. 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) CHORDS MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX (PLF) CSI (LC) UNBRAC LENGTH FR-TO FROM TO FR-TO FROM TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 23-3 0 / 959 0.22 (1) 2-3 -2474 / 0 -77.4 -77.4 0.17 (1) 4.26 23-4 -1514 / 0 0.25 (1) 3-4 -2251 / 0 -77.4 -77.4 0.06 (1) 4.53 22-4 -14 / 57 0.02 (4) 4-5 -2900 / 0 -77.4 -77.4 0.39 (1) 3.80 4-21 -84 / 0 0.05 (1) 5-6 -2462 / 0 -77.4 -77.4 0.33 (1) 4.13 21-5 0 / 145 0.04 (4) 6-7 -2462 / 0 -77.4 -77.4 0.33 (1) 4.13 5-20 -566 / 0 0.59 (1) 7-8 -1953 / 0 -77.4 -77.4 0.31 (1) 4.55 20-7 0 / 473 0.11 (1) 8-9 -1956 / 0 -77.4 -77.4 0.44 (1) 4.40 7-18 -833 / 0 0.51 (1) 9-10 -2492 / 0 -77.4 -77.4 0.46 (1) 3.99 18-8 0 / 1370 0.22 (1) 10-11 -2492 / 0 -77.4 -77.4 0.46 (1) 3.99 18-9 -760 / 0 0.49 (1) 11-12 -2787 / 0 -77.4 -77.4 0.58 (1) 3.69 16-9 0 / 292 0.07 (1) 12-13 0 / 23 -77.4 -77.4 0.10 (1) 10.00 16-11 -337 / 0 0.38 (1) 24-2 -1923 / 0 0.0 0.0 0.19 (1) 6.07 15-11 -213 / 41 0.06 (1) 14-12 -1898 / 0 0.0 0.0 0.19 (1) 6.10 2-23 0 / 2287 0.51 (1) 15-12 0 / 2533 0.57 (1) 24-23 0 / 0 -17.5 -17.5 0.04 (4) 10.00 23-22 0 / 2686 -17.5 -17.5 0.46 (1) 10.00 22-21 0 / 2687 -17.5 -17.5 0.51 (1) 10.00 21-20 0 / 2610 -17.5 -17.5 0.48 (1) 10.00 20-19 0 / 2202 -17.5 -17.5 0.43 (1) 10.00 19-18 0 / 2202 -17.5 -17.5 0.43 (1) 10.00 18-17 0 / 2229 -17.5 -17.5 0.44 (1) 10.00 17-16 0 / 2229 -17.5 -17.5 0.44 (1) 10.00 16-15 0 / 2511 -17.5 -17.5 0.47 (1) 10.00 15-14 0 / 0 -17.5 -17.5 0.16 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN 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 (1.29") CALCULATED VERT. DEFL.(LL)= L/999 (0.17") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL)= L/999 (0.31") CSI: TC=0.58 (11-12:1), BC=0.51 (21-22:1), WB=0.59 (5-20:1), SSI=0.21 (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= 0.89 (20) (INPUT = 0.90) JSI METAL= 0.96 (4) (INPUT = 1.00)			
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17-5318
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 = 170 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 - 6	2x4	DRY	No.2	SPF			
6 - 8	2x4	DRY	No.2	SPF			
8 - 11	2x4	DRY	No.2	SPF			
21 - 2	2x4	DRY	No.2	SPF			
12 - 10	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 EXCEPT				2x3	DRY	No.2	SPF
16 - 6				2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.							

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMVW-t	MT20	4.0	8.0	1.75	3.00	
3	TTW-I	MT20	4.0	5.0			
4	TTWWW-m	MT20	4.0	10.0			
5	TMWWW-t	MT20	3.0	4.0	1.75	0.75	
6	TTW+p	MT20	4.0	5.0			
7	TMWW-t	MT20	3.0	4.0	1.50	1.75	
8	TS-t	MT20	3.0	6.0			
9	TMWW-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	BMWW-t	MT20	4.0	6.0	1.75	1.75	
14	BMWW-t	MT20	3.0	4.0			
15	BS-t	MT20	3.0	6.0			
16	BMWWW-t	MT20	4.0	8.0			
17	BS-t	MT20	3.0	6.0			
18	BMWW-t	MT20	3.0	4.0			
19	BMW+w	MT20	2.0	4.0			
20	BMWWW-t	MT20	4.0	10.0			
21	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									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT	REQRD			
	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	BRG		
21	1947	0	1947	0	0	5-8	5-8		
12	1947	0	1947	0	0	5-8	5-8		
UNFACTORED REACTIONS									
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS							
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
21	1364	968 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0		
12	1364	968 / 0	0 / 0	0 / 0	0 / 0	396 / 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 = 3.69 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. DBS = 16-0-0. CBF = 90 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 18-0-0. 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 FORCE (LBS)		MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)		MAX. UNBRACED LENGTH
	VERT.	LC1			VERT.	LC1	
FR-TO	FROM	TO		FR-TO	FROM	TO	
1-2	0 / 23	-77.4	-77.4 0.10 (1)	10.00	20-3	0 / 972	0.22 (1)
2-3	-2738 / 0	-77.4	-77.4 0.48 (1)	3.78	20-4	-1143 / 0	0.29 (1)
3-4	-2501 / 0	-77.4	-77.4 0.07 (1)	4.33	19-4	-69 / 9	0.02 (1)
4-5	-2592 / 0	-77.4	-77.4 0.60 (1)	3.74	4-18	-398 / 0	0.48 (1)
5-6	-1964 / 0	-77.4	-77.4 0.53 (1)	4.26	18-5	0 / 324	0.07 (1)
6-7	-1957 / 0	-77.4	-77.4 0.44 (1)	4.40	5-16	-897 / 0	0.59 (1)
7-8	-2492 / 0	-77.4	-77.4 0.46 (1)	3.99	16-6	0 / 1343	0.22 (1)
8-9	-2492 / 0	-77.4	-77.4 0.46 (1)	3.99	16-7	-759 / 0	0.49 (1)
9-10	-2787 / 0	-77.4	-77.4 0.58 (1)	3.69	14-7	0 / 291	0.07 (1)
10-11	0 / 23	-77.4	-77.4 0.10 (1)	10.00	14-9	-338 / 0	0.38 (1)
21-2	-1906 / 0	0.0	0.0 0.19 (1)	6.09	13-9	-213 / 42	0.06 (1)
12-10	-1898 / 0	0.0	0.0 0.19 (1)	6.10	2-20	0 / 2472	0.56 (1)
					13-10	0 / 2533	0.57 (1)
21-20	0 / 0	-17.5	-17.5 0.16 (4)	10.00			
20-19	0 / 2688	-17.5	-17.5 0.53 (1)	10.00			
19-18	0 / 2690	-17.5	-17.5 0.52 (1)	10.00			
18-17	0 / 2344	-17.5	-17.5 0.47 (1)	10.00			
17-16	0 / 2344	-17.5	-17.5 0.47 (1)	10.00			
16-15	0 / 2229	-17.5	-17.5 0.44 (1)	10.00			
15-14	0 / 2229	-17.5	-17.5 0.44 (1)	10.00			
14-13	0 / 2511	-17.5	-17.5 0.47 (1)	10.00			
13-12	0 / 0	-17.5	-17.5 0.16 (4)	10.00			

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL	=	23.3 PSF
	DL	=	3.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.0 PSF
TOTAL LOAD = 33.3 PSF			
SPACING = 24.0 IN. C/C			

LOADING IN 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 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.60 (4-5:1), BC=0.53 (19-20:1), WB=0.59 (5-16:1), 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

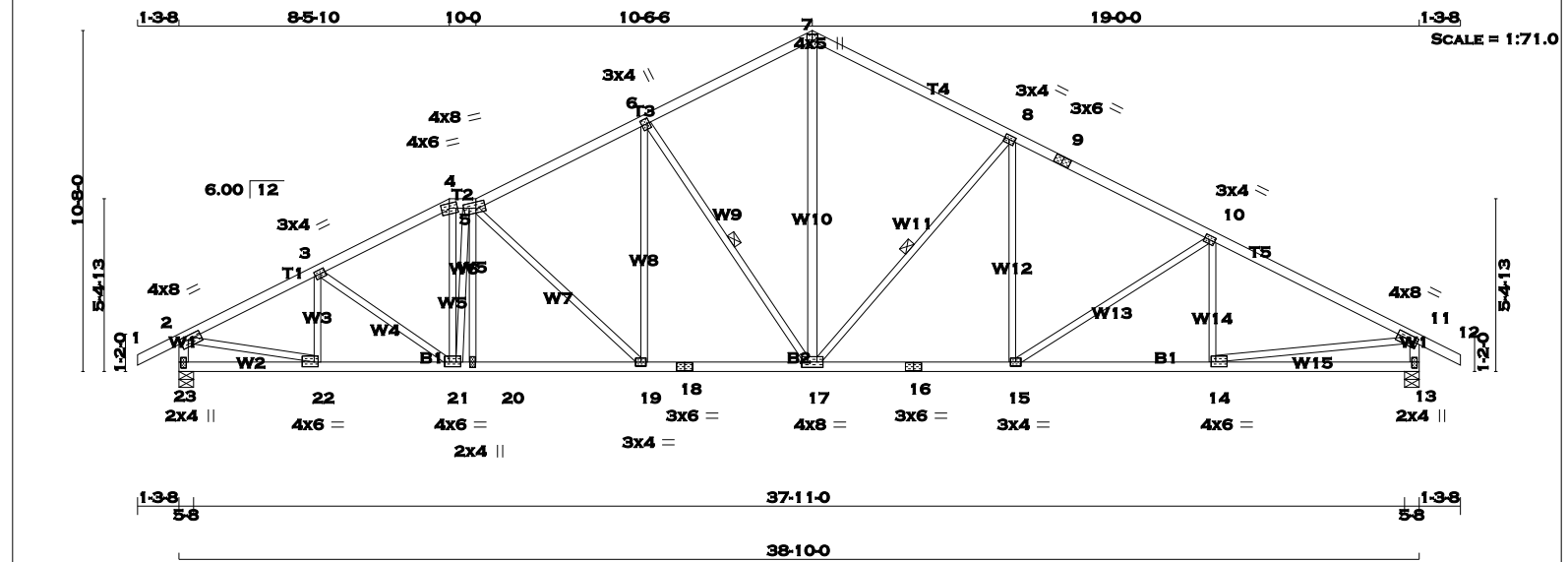
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (2) (INPUT = 0.90)
JSI METAL= 0.87 (4) (INPUT = 1.00)

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MAR 29, 2017
17-5318
BUILDING DIVISION

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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 - 5	2x4	DRY	No.2	4 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2	5 - 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
23 - 2	2x4	DRY	No.2	23 - 2	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2	13 - 11	2x4	DRY	No.2
23 - 18	2x4	DRY	No.2	23 - 18	2x4	DRY	No.2
18 - 16	2x4	DRY	No.2	18 - 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			
17 - 7	2x4	DRY	No.2	17 - 7	2x4	DRY	No.2

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, 8, 10						
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TTW-m	MT20	4.0	6.0	1.75	3.00
5	TTWWW-m	MT20	4.0	8.0	2.25	3.50
6	TMVW-t	MT20	3.0	4.0	2.00	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	3.00
13	BMV1+p	MT20	2.0	4.0	2.25	1.00
14	BMVW-t	MT20	4.0	6.0	1.75	1.75
15	BMVW-t	MT20	3.0	4.0		
16	BS-t	MT20	3.0	6.0		
17	BMVW-t	MT20	4.0	8.0		
18	BS-t	MT20	3.0	6.0		
19	BMVW-t	MT20	3.0	4.0		
20	BMVW-t	MT20	2.0	4.0		
21	BMVW-t	MT20	4.0	6.0	1.75	3.00
22	BMVW-t	MT20	4.0	6.0	1.75	1.50
23	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			
JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN
23	1947	0	1947	0	0	0	5-8
13	1947	0	1947	0	0	0	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
23	1364	968 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0
13	1364	968 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 23, 13

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 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 6-17. DBS = 16-0-0. CBF = 85 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-17. DBS = 18-0-0. CBF = 86 LBS.

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. 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	22-3	-415 / 0	0.08 (1)	
2-3	-2657 / 0	-77.4 -77.4 0.25 (1)	4.06	3-21	0 / 16	0.00 (1)	
3-4	-2703 / 0	-77.4 -77.4 0.24 (1)	4.03	21-4	0 / 1048	0.24 (1)	
4-5	-2424 / 0	-77.4 -77.4 0.07 (1)	4.39	21-5	-890 / 0	0.39 (1)	
5-6	-2446 / 0	-77.4 -77.4 0.37 (1)	4.08	20-5	-75 / 35	0.03 (1)	
6-7	-1957 / 0	-77.4 -77.4 0.33 (1)	4.51	5-19	-477 / 0	0.51 (1)	
7-8	-1956 / 0	-77.4 -77.4 0.44 (1)	4.40	19-6	0 / 432	0.10 (1)	
8-9	-2492 / 0	-77.4 -77.4 0.46 (1)	3.99	6-17	-848 / 0	0.52 (1)	
9-10	-2492 / 0	-77.4 -77.4 0.46 (1)	3.99	17-7	0 / 1380	0.22 (1)	
10-11	-2787 / 0	-77.4 -77.4 0.58 (1)	3.69	17-8	-761 / 0	0.49 (1)	
11-12	0 / 23	-77.4 -77.4 0.10 (1)	10.00	15-8	0 / 293	0.07 (1)	
23-2	-1907 / 0	0.0 0.0 0.19 (1)	6.09	15-10	-337 / 0	0.38 (1)	
13-11	-1898 / 0	0.0 0.0 0.19 (1)	6.10	14-10	-213 / 41	0.06 (1)	
				2-22	0 / 2435	0.55 (1)	
				14-11	0 / 2533	0.57 (1)	
23-22	0 / 0	-17.5 -17.5 0.07 (4)	10.00				
22-21	0 / 2389	-17.5 -17.5 0.47 (1)	10.00				
21-20	0 / 2550	-17.5 -17.5 0.49 (1)	10.00				
20-19	0 / 2551	-17.5 -17.5 0.48 (1)	10.00				
19-18	0 / 2208	-17.5 -17.5 0.43 (1)	10.00				
18-17	0 / 2208	-17.5 -17.5 0.43 (1)	10.00				
17-16	0 / 2229	-17.5 -17.5 0.43 (1)	10.00				
16-15	0 / 2229	-17.5 -17.5 0.43 (1)	10.00				
15-14	0 / 2511	-17.5 -17.5 0.47 (1)	10.00				
14-13	0 / 0	-17.5 -17.5 0.16 (4)	10.00				

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

SPACING = 24.0 IN. C/C

LOADING IN 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 (1.29")
CALCULATED VERT. DEFL.(LL)= L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL)= L/999 (0.32")

CSI: TC=0.58 (10-11:1), BC=0.49 (20-21:1), WB=0.57 (11-14:1), SSI=0.21 (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

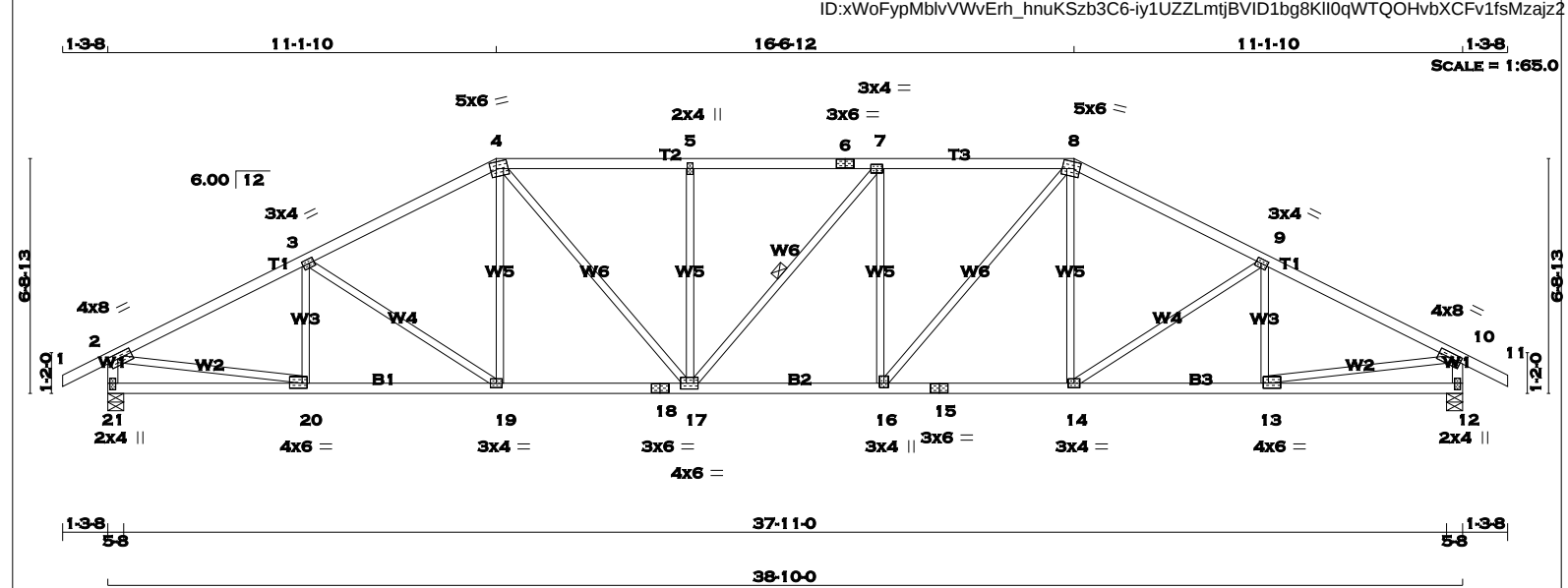
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.77 (5) (INPUT = 1.00)

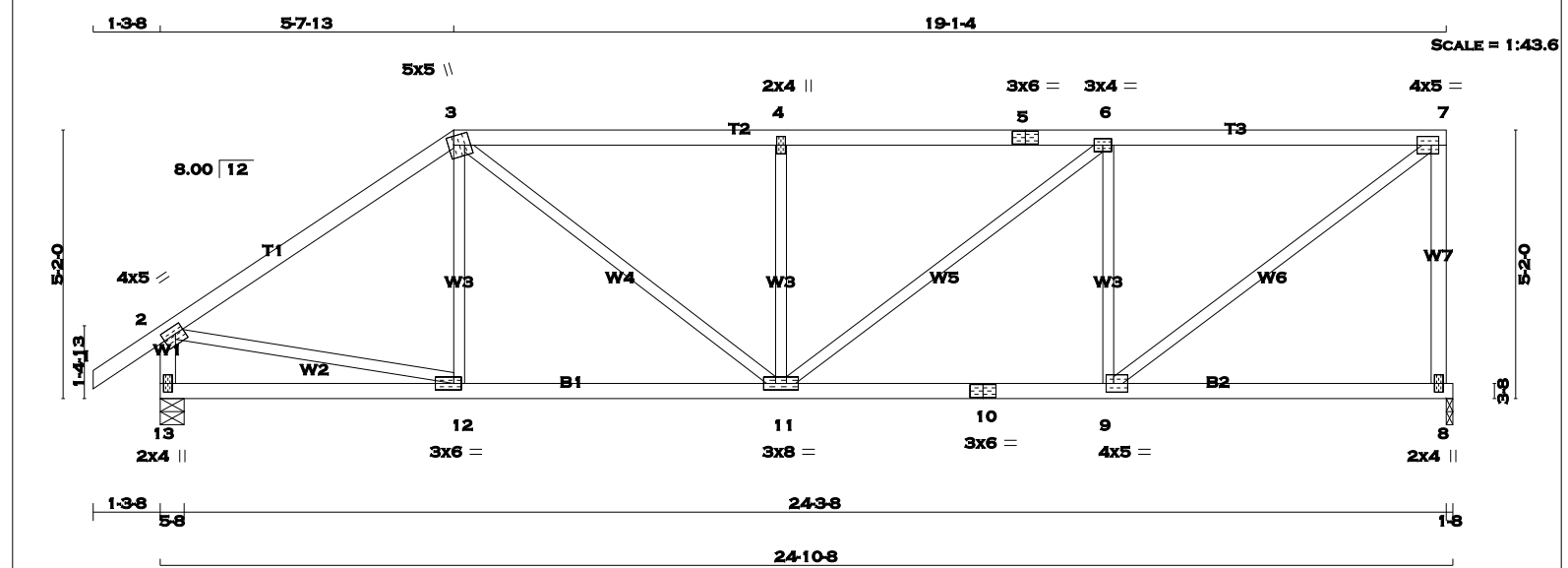
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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 161 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 8 - 11 2x4 DRY No.2 SPF 21- 2 2x4 DRY No.2 SPF 12- 10 2x4 DRY No.2 SPF 21- 18 2x4 DRY No.2 SPF 18- 15 2x4 DRY No.2 SPF 15- 12 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 21 1947 0 1947 0 0 5-8 5-8 12 1947 0 1947 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1364 968 / 0 0 / 0 0 / 0 396 / 0 0 / 0 12 1364 968 / 0 0 / 0 0 / 0 396 / 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 = 3.81 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 = 20-0-0 . CBF = 0 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1- 2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 20- 3 -277 / 11 0.07 (1) 2- 3 -2770 / 0 -77.4 -77.4 0.44 (1) 3.81 3-19 -263 / 0 0.22 (1) 3- 4 -2570 / 0 -77.4 -77.4 0.40 (1) 3.97 19- 4 0 / 248 0.06 (1) 4- 5 -2760 / 0 -77.4 -77.4 0.39 (1) 3.86 4-17 0 / 732 0.16 (1) 5- 6 -2760 / 0 -77.4 -77.4 0.36 (1) 3.89 17- 5 -461 / 0 0.35 (1) 6- 7 -2760 / 0 -77.4 -77.4 0.36 (1) 3.89 17- 7 -2 / 0 0.00 (1) 7- 8 -2761 / 0 -77.4 -77.4 0.39 (1) 3.86 16- 7 -461 / 0 0.35 (1) 8- 9 -2570 / 0 -77.4 -77.4 0.40 (1) 3.97 16- 8 0 / 734 0.17 (1) 9-10 -2770 / 0 -77.4 -77.4 0.44 (1) 3.81 14- 8 0 / 247 0.06 (1) 10-11 0 / 23 -77.4 -77.4 0.10 (1) 10.00 14- 9 -264 / 0 0.22 (1) 21- 2 -1902 / 0 0.0 0.0 0.19 (1) 6.09 13- 9 -277 / 11 0.07 (1) 12-10 -1902 / 0 0.0 0.0 0.19 (1) 6.09 2-20 0 / 2525 0.57 (1) 13-10 0 / 2525 0.57 (1) 21-20 0 / 0 -17.5 -17.5 0.12 (4) 10.00 20-19 0 / 2497 -17.5 -17.5 0.46 (1) 10.00 19-18 0 / 2282 -17.5 -17.5 0.43 (1) 10.00 18-17 0 / 2282 -17.5 -17.5 0.43 (1) 10.00 17-16 0 / 2761 -17.5 -17.5 0.49 (1) 10.00 16-15 0 / 2281 -17.5 -17.5 0.43 (1) 10.00 15-14 0 / 2281 -17.5 -17.5 0.43 (1) 10.00 14-13 0 / 2497 -17.5 -17.5 0.46 (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/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 (1.29") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.34") CSI: TC=0.44 (9-10:1) , BC=0.49 (16-17:1) , WB=0.57 (10-13:1) , SSI=0.20 (7-8:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (10) (INPUT = 0.90) JSI METAL= 0.62 (13) (INPUT = 1.00)			
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 2.25 2.00 9 TMWW-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 BMWW-t MT20 4.0 6.0 1.75 1.75 14 BMWW-t MT20 3.0 4.0 15 BS-t MT20 3.0 6.0 16 BMWW+t MT20 3.0 4.0 1.50 1.50 17 BMWWW-t MT20 4.0 6.0 2.00 2.00 18 BS-t MT20 3.0 6.0 19 BMWW-t MT20 3.0 4.0 20 BMWW-t MT20 4.0 6.0 1.75 1.75 21 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.		RECEIVED TOWN OF MILTON MAR 29, 2017 17-5318 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 = 100 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 - 7	2x4	DRY	No.2
8 - 7	2x4	DRY	No.2
13 - 2	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
10 - 8	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TTWW+m	MT20	5.0	5.0	2.00	1.25
4	TMW+w	MT20	2.0	4.0		
5	TS-t	MT20	3.0	6.0		
6	TMVW-t	MT20	3.0	4.0		
7	TMVW-t	MT20	4.0	5.0	2.00	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	4.0	5.0	2.00	1.75
10	BS-t	MT20	3.0	6.0		
11	BMVWVW-t	MT20	3.0	8.0		
12	BMVW-t	MT20	3.0	6.0	1.50	1.75
13	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						



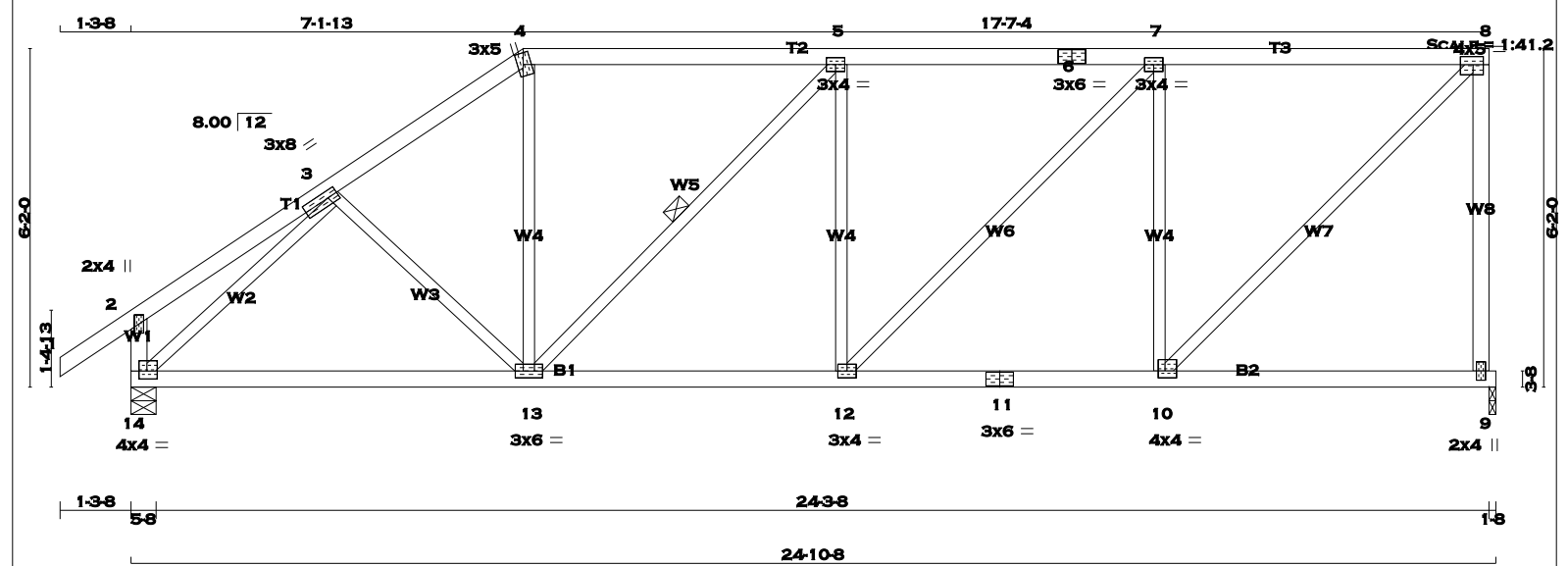
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8		1174	0	1174	0	0	1-8	1-8	
13		1280	0	1280	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0	
13		896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 13									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.64 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS			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			FR-TO		LENGTH		
1-2		0 / 29	-77.4	-77.4 0.10 (1)	10.00	12-3	-82 / 71	0.03 (1)	
2-3		-1286 / 0	-77.4	-77.4 0.51 (1)	5.04	3-11	0 / 618	0.14 (1)	
3-4		-1556 / 0	-77.4	-77.4 0.50 (1)	4.70	11-4	-526 / 0	0.21 (1)	
4-5		-1556 / 0	-77.4	-77.4 0.53 (1)	4.64	11-6	0 / 408	0.09 (1)	
5-6		-1556 / 0	-77.4	-77.4 0.53 (1)	4.64	9-6	-797 / 0	0.31 (1)	
6-7		-1233 / 0	-77.4	-77.4 0.50 (1)	5.11	9-7	0 / 1541	0.35 (1)	
8-7		-1128 / 0	0.0	0.0 0.51 (1)	7.48	2-12	0 / 1087	0.24 (1)	
13-2		-1241 / 0	0.0	0.0 0.13 (1)	7.21				
13-12		0 / 0	-17.5	-17.5 0.15 (4)	10.00				
12-11		0 / 1067	-17.5	-17.5 0.26 (1)	10.00				
11-10		0 / 1233	-17.5	-17.5 0.29 (1)	10.00				
10-9		0 / 1233	-17.5	-17.5 0.29 (1)	10.00				
9-8		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/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 (0.83")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")									
ALLOWABLE DEFL.(TL)= L/360 (0.83")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")									
CSI: TC=0.53 (4-6:1), BC=0.29 (9-11:1), WB=0.35 (7-9:1), SSI=0.23 (6-7:1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
COMP=1.10 SHEAR=1.10 TENS=1.10									
COMPANION LIVE LOAD FACTOR = 0.50									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
NAIL VALUES									
PLATE GRIP(DRY)	SHEAR	SECTION							
(PSI)	(PLI)	(PLI)							
MAX MIN	MAX MIN	MAX MIN							
MT20	618	354	1667	822	2284	1656			
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (12) (INPUT = 0.90)									
JSI METAL= 0.44 (2) (INPUT = 1.00)									

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





TOTAL WEIGHT = 108 lb [M]

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
9 - 8	2x4	DRY	No.2
14 - 2	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	TMWW-t	MT20	3.0	8.0	1.50 2.25
4	TTW+m	MT20	3.0	5.0	2.50 1.25
5	TMWW-t	MT20	3.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TMWW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	5.0	1.75 2.25
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	4.0	1.50 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWW-t	MT20	3.0	4.0	
13	BMWWW-t	MT20	3.0	6.0	
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	
JT	VERT	DOWN	HORIZ
9	1174	0	1174
14	1280	0	1280

UNFACTORED REACTIONS			
1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE
9	824	576 / 0	0 / 0
14	896	640 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-13. DBS = 20-0-0 . CBF = 44 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			
MAX. FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX
FR-TO		FROM TO	CSI (LC)
1-2	0 / 29	-77.4	-77.4 0.10 (1)
2-3	0 / 16	-77.4	-77.4 0.14 (1)
3-4	-1257 / 0	-77.4	-77.4 0.17 (1)
4-5	-1038 / 0	-77.4	-77.4 0.38 (1)
5-6	-1280 / 0	-77.4	-77.4 0.42 (1)
6-7	-1280 / 0	-77.4	-77.4 0.42 (1)
7-8	-965 / 0	-77.4	-77.4 0.40 (1)
9-8	-1132 / 0	0.0	0.0 0.84 (1)
14-2	-215 / 0	0.0	0.0 0.02 (1)
14-13	0 / 1045	-17.5	-17.5 0.28 (1)
13-12	0 / 1280	-17.5	-17.5 0.32 (1)
12-11	0 / 965	-17.5	-17.5 0.24 (1)
11-10	0 / 965	-17.5	-17.5 0.24 (1)
10-9	0 / 0	-17.5	-17.5 0.16 (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 (0.83")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.84 (8-9:1) , BC=0.32 (12-13:1) , WB=0.57 (3-14:1) , SSI=0.22 (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

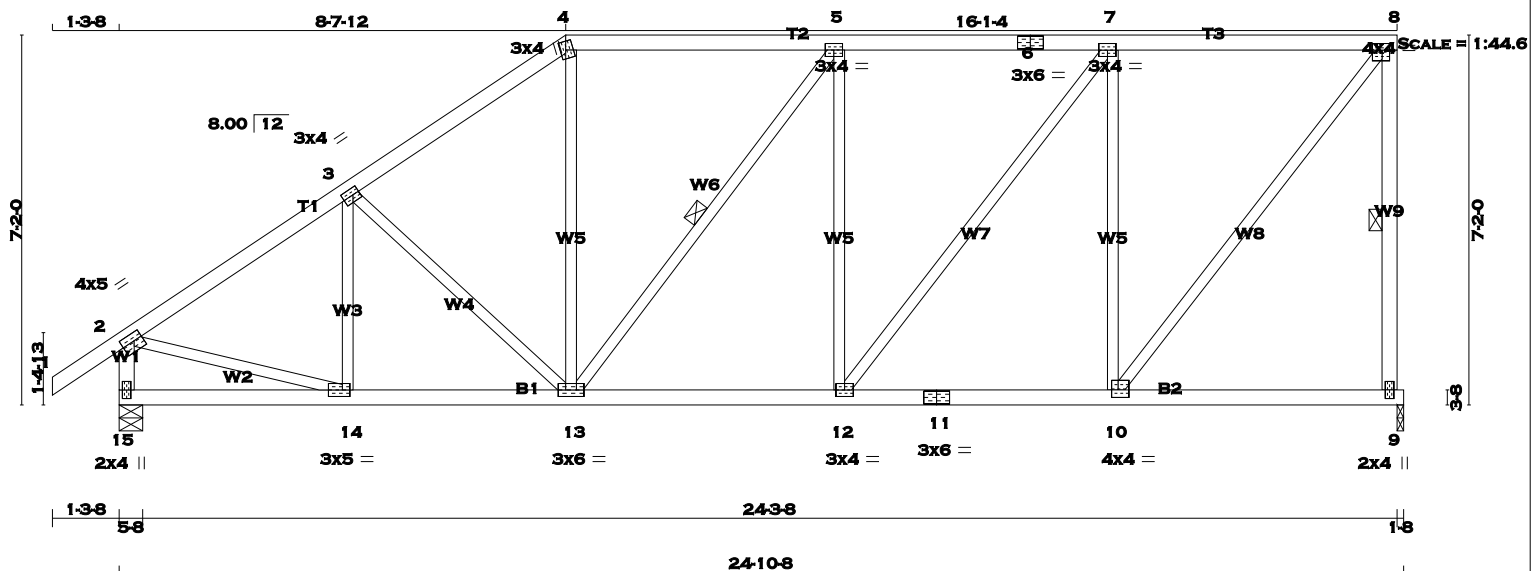
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.39 (14) (INPUT = 1.00)

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BUILDING DIVISION

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9		1174	0	1174	0	0	1-8	1-8	
15		1280	0	1280	0	0	5-8	5-8	
UNFACTORED REACTIONS									
JT	1ST LCASE	MAX. MIN.	COMPONENT	REACTIONS					
9	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0	0 / 0	
15	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.34 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-9. DBS = 12-0-0 . CBF = 85 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-13. DBS = 20-0-0 . CBF = 21 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MEMB.
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	14-3	-191 / 13	0.05 (1)
2-3	-1307 / 0	-77.4 -77.4	0.27 (1)	5.34	3-13	-192 / 0	0.12 (1)
3-4	-1184 / 0	-77.4 -77.4	0.26 (1)	5.55	13-4	0 / 355	0.08 (1)
4-5	-970 / 0	-77.4 -77.4	0.31 (1)	5.90	13-5	-172 / 0	0.09 (1)
5-6	-1074 / 0	-77.4 -77.4	0.34 (1)	5.64	12-5	-306 / 0	0.27 (1)
6-7	-1074 / 0	-77.4 -77.4	0.34 (1)	5.64	12-7	0 / 496	0.11 (1)
7-8	-771 / 0	-77.4 -77.4	0.33 (1)	6.25	10-7	-855 / 0	0.77 (1)
9-8	-1135 / 0	0.0 0.0	0.26 (1)	5.96	10-8	0 / 1233	0.28 (1)
15-2	-1246 / 0	0.0 0.0	0.13 (1)	7.20	2-14	0 / 1138	0.26 (1)
15-14	0 / 0	-17.5 -17.5	0.07 (4)	10.00			
14-13	0 / 1105	-17.5 -17.5	0.22 (1)	10.00			
13-12	0 / 1074	-17.5 -17.5	0.22 (1)	10.00			
12-11	0 / 771	-17.5 -17.5	0.19 (1)	10.00			
11-10	0 / 771	-17.5 -17.5	0.19 (1)	10.00			
10-9	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 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 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.34 (5-7:1) , BC=0.22 (13-14:1) , WB=0.77 (7-10:1) , SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

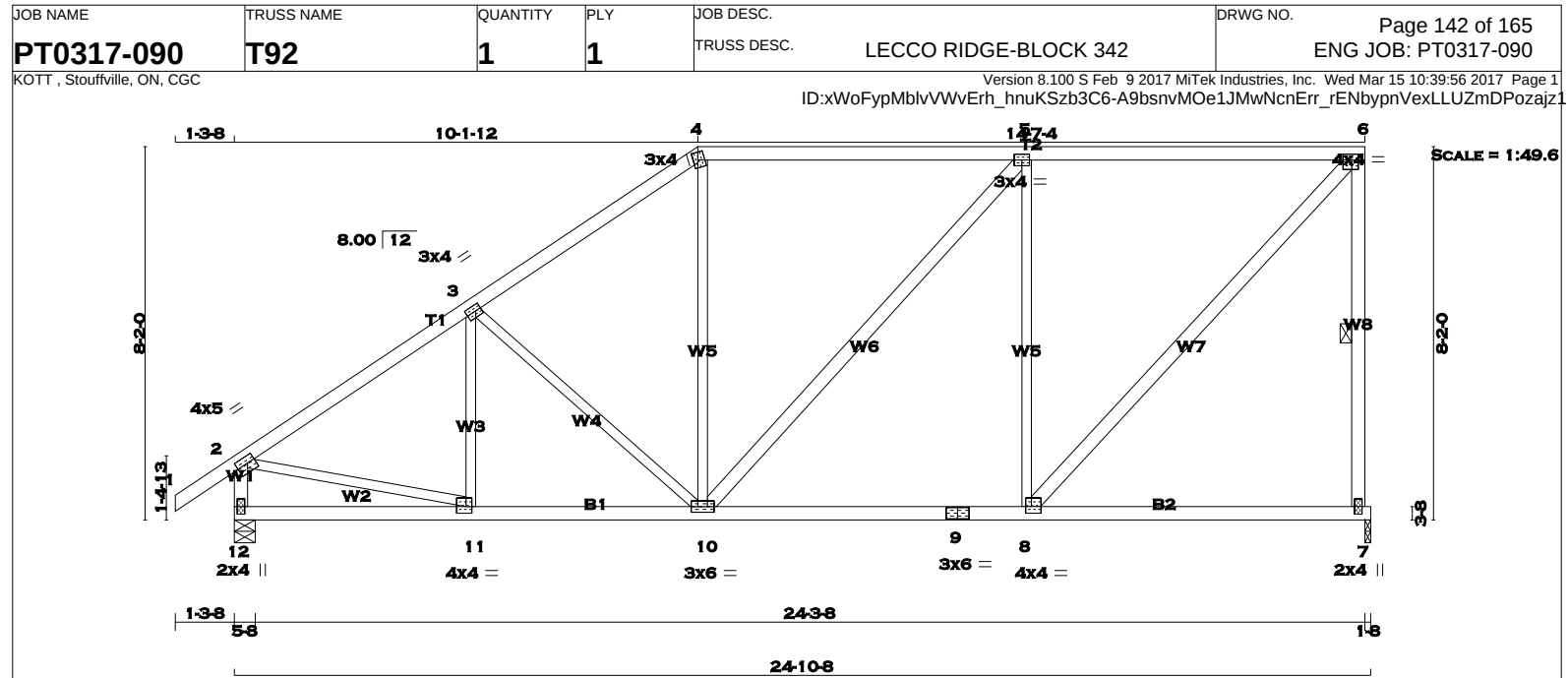
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.44 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 119 lb										[M]																																																																																																																								
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.																																																																																																																																		
1 - 4	2x4	DRY	No.2	SPF																																																																																																																														
4 - 6	2x4	DRY	No.2	SPF																																																																																																																														
7 - 6	2x4	DRY	No.2	SPF																																																																																																																														
12 - 2	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																																																																																																																																		
10 - 5	2x4	DRY	No.2	SPF																																																																																																																														
8 - 6	2x4	DRY	No.2	SPF																																																																																																																														
DRY: SEASONED LUMBER.																																																																																																																																		
PLATES (table is in inches)																																																																																																																																		
JT	TYPE	PLATES	W	LEN	Y	X																																																																																																																												
2	TMVW-t	MT20	4.0	5.0	1.75	2.00																																																																																																																												
3	TMVW-t	MT20	3.0	4.0	1.50	1.50																																																																																																																												
4	TTW+m	MT20	3.0	4.0	2.00	1.25																																																																																																																												
5	TMVW-t	MT20	3.0	4.0																																																																																																																														
6	TMVW-t	MT20	4.0	4.0	1.50	1.75																																																																																																																												
7	BMV1+p	MT20	2.0	4.0																																																																																																																														
8	BMVW-t	MT20	4.0	4.0	1.75	1.50																																																																																																																												
9	BS-t	MT20	3.0	6.0																																																																																																																														
10	BMVW-t	MT20	3.0	6.0																																																																																																																														
11	BMVW-t	MT20	4.0	4.0	1.75	1.50																																																																																																																												
12	BMV1+p	MT20	2.0	4.0																																																																																																																														
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.																																																																																																																																		
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER																																																																																																																																		
BEARINGS																																																																																																																																		
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																														
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																											
7	1174	0	1174	0	0	1-8	1-8																																																																																																																											
12	1280	0	1280	0	0	5-8	5-8																																																																																																																											
UNFACTORED REACTIONS																																																																																																																																		
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS																																																																																																																																
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																											
7	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0																																																																																																																											
12	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0																																																																																																																											
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 12																																																																																																																																		
BRACING																																																																																																																																		
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1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 84 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.																																																																																																																																		
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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 LC1 (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.4</td><td>-77.4 0.10 (1)</td><td>10-11</td><td>-140 / 40</td><td>0.05 (1)</td><td></td></tr><tr><td>2-3</td><td>-1321 / 0</td><td>-77.4</td><td>-77.4 0.39 (1)</td><td>5.16</td><td>3-10</td><td>-300 / 0</td><td>0.26 (1)</td></tr><tr><td>3-4</td><td>-1106 / 0</td><td>-77.4</td><td>-77.4 0.37 (1)</td><td>5.54</td><td>10-4</td><td>0 / 247</td><td>0.06 (1)</td></tr><tr><td>4-5</td><td>-900 / 0</td><td>-77.4</td><td>-77.4 0.78 (1)</td><td>5.04</td><td>10-5</td><td>0 / 74</td><td>0.01 (1)</td></tr><tr><td>5-6</td><td>-851 / 0</td><td>-77.4</td><td>-77.4 0.77 (1)</td><td>5.16</td><td>8-5</td><td>-757 / 0</td><td>0.98 (1)</td></tr><tr><td>7-6</td><td>-1122 / 0</td><td>0.0</td><td>0.0 0.34 (1)</td><td>5.99</td><td>8-6</td><td>0 / 1242</td><td>0.20 (1)</td></tr><tr><td>12-2</td><td>-1241 / 0</td><td>0.0</td><td>0.0 0.13 (1)</td><td>7.20</td><td>2-11</td><td>0 / 1145</td><td>0.26 (1)</td></tr><tr><td>12-11</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.10 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 1120</td><td>-17.5</td><td>-17.5 0.24 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 851</td><td>-17.5</td><td>-17.5 0.30 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 851</td><td>-17.5</td><td>-17.5 0.30 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.24 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED LC1 (LC)	FR-TO		FROM TO		FR-TO				1-2	0 / 29	-77.4	-77.4 0.10 (1)	10-11	-140 / 40	0.05 (1)		2-3	-1321 / 0	-77.4	-77.4 0.39 (1)	5.16	3-10	-300 / 0	0.26 (1)	3-4	-1106 / 0	-77.4	-77.4 0.37 (1)	5.54	10-4	0 / 247	0.06 (1)	4-5	-900 / 0	-77.4	-77.4 0.78 (1)	5.04	10-5	0 / 74	0.01 (1)	5-6	-851 / 0	-77.4	-77.4 0.77 (1)	5.16	8-5	-757 / 0	0.98 (1)	7-6	-1122 / 0	0.0	0.0 0.34 (1)	5.99	8-6	0 / 1242	0.20 (1)	12-2	-1241 / 0	0.0	0.0 0.13 (1)	7.20	2-11	0 / 1145	0.26 (1)	12-11	0 / 0	-17.5	-17.5 0.10 (4)	10.00				11-10	0 / 1120	-17.5	-17.5 0.24 (1)	10.00				10-9	0 / 851	-17.5	-17.5 0.30 (4)	10.00				9-8	0 / 851	-17.5	-17.5 0.30 (4)	10.00				8-7	0 / 0	-17.5	-17.5 0.24 (4)	10.00			
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SPECIFIED LOADS:																																																																																																																																		
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		DL	=	3.0	PSF																																																																																																																													
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TOTAL	LOAD	=	33.3	PSF																																																																																																																														
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	(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 (10) (INPUT = 0.90)																																																																																																																																		
JSI METAL= 0.45 (2) (INPUT = 1.00)																																																																																																																																		



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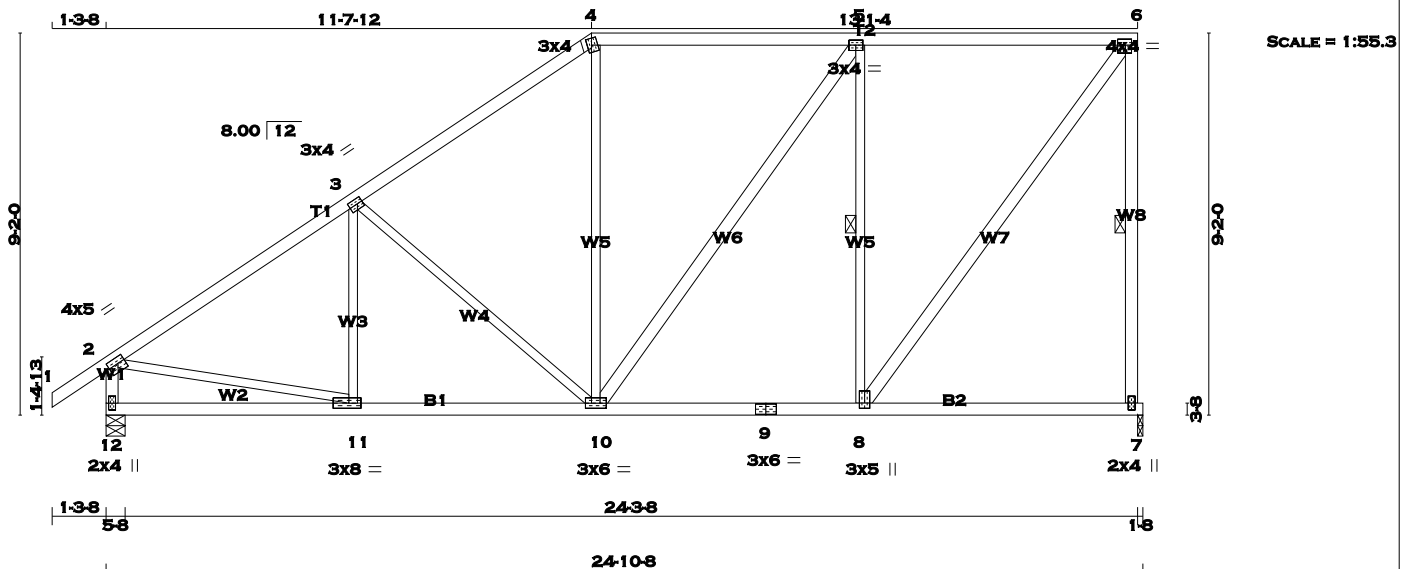
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KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 10:39:57 2017 Page 1

ID:xWoFypMblvVWvErh_hnuKSzb3C6-eL8F_FN0PLRDYXB_nZNDNRwpND8UNWGUjDWmxFzajz0



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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	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	TMVW-t	MT20	4.0	4.0	1.75	1.75
7	BMV1+p	MT20	2.0	4.0		
8	BMVW+t	MT20	3.0	5.0	1.50	1.50
9	BS-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	8.0	1.50	3.50
12	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		1174	0	1174	0	0	1-8	1-8	
12		1280	0	1280	0	0	5-8	5-8	

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

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 85 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-8. DBS = 18-0-0 . CBF = 90 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)	10.00	11-3	-92 / 70	0.04 (1)
2-3	-1323 / 0	-77.4 -77.4	0.54 (1)	4.96	3-10	-406 / 0	0.49 (1)
3-4	-1015 / 0	-77.4 -77.4	0.50 (1)	5.51	10-4	0 / 194	0.04 (1)
4-5	-820 / 0	-77.4 -77.4	0.60 (1)	5.68	10-5	0 / 210	0.03 (1)
5-6	-698 / 0	-77.4 -77.4	0.60 (1)	6.04	8-5	-800 / 0	0.44 (1)
6-7	-1127 / 0	0.0 0.0	0.44 (1)	5.98	8-6	0 / 1164	0.19 (1)
12-2	-1237 / 0	0.0 0.0	0.13 (1)	7.22	2-11	0 / 1144	0.26 (1)
12-11	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
11-10	0 / 1125	-17.5 -17.5	0.25 (1)	10.00			
10-9	0 / 698	-17.5 -17.5	0.24 (4)	10.00			
9-8	0 / 698	-17.5 -17.5	0.24 (4)	10.00			
8-7	0 / 0	-17.5 -17.5	0.19 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.60 (4-5:1), BC=0.25 (10-11:1), WB=0.49 (3-10:1), 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
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= 0.45 (2) (INPUT = 1.00)



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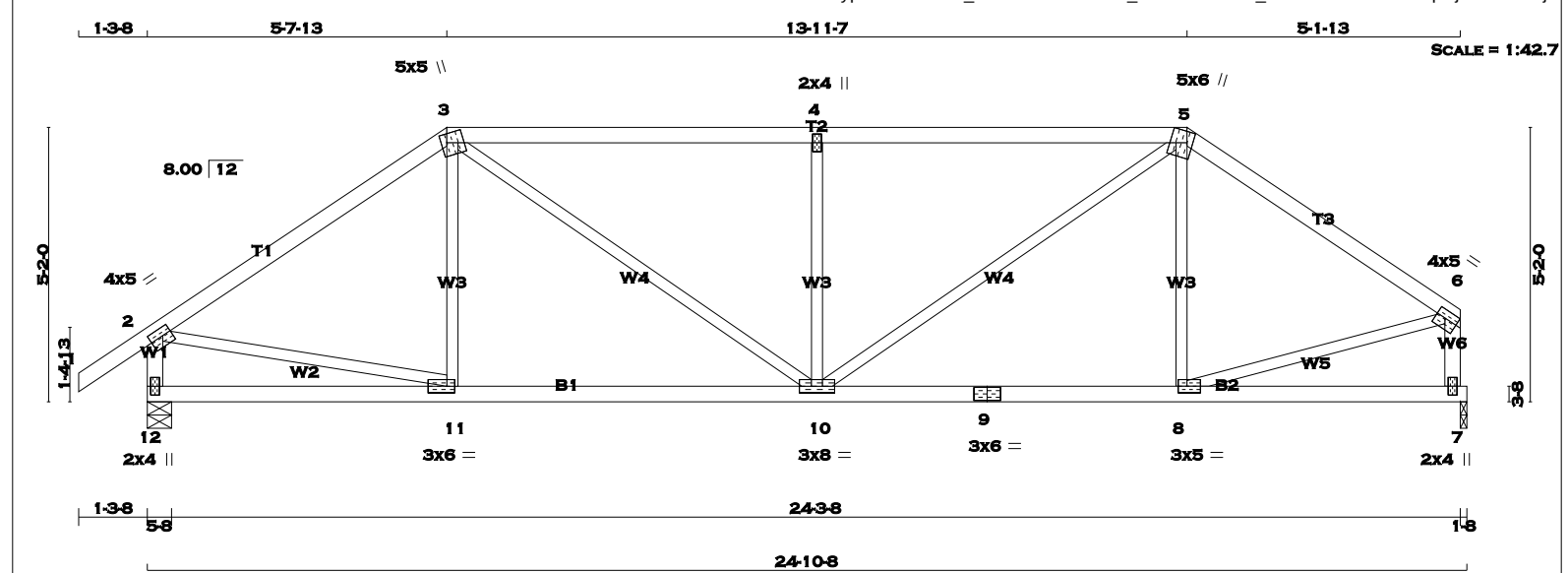
DRY: SEASONED LUMBER.

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

TOTAL LOAD CASES: (4)

JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)





TOTAL WEIGHT = 97 lb [M]

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

DESCR. SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	5.0	1.75 2.00
3	TTWW+m	MT20	5.0	5.0	2.00 1.25
4	TMW+w	MT20	2.0	4.0	
5	TTWW+m	MT20	5.0	6.0	Edge 3.75
6	TMVW-t	MT20	4.0	5.0	1.75 Edge
7	BMV1+p	MT20	2.0	4.0	
8	BMWW-t	MT20	3.0	5.0	1.50 2.00
9	BS-t	MT20	3.0	6.0	
10	BMWWW-t	MT20	3.0	8.0	
11	BMWW-t	MT20	3.0	6.0	1.50 1.75
12	BMV1+p	MT20	2.0	4.0	

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-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
12	1280	0	1280	0	0
7	1174	0	1174	0	0

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS		FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MEMB.
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	11-3	-77 / 76	0.03 (1)
2-3	-1287 / 0	-77.4	-77.4 0.51 (1)	5.04	3-10	0 / 641	0.14 (1)
3-4	-1594 / 0	-77.4	-77.4 0.78 (1)	4.14	10-4	-664 / 0	0.26 (1)
4-5	-1594 / 0	-77.4	-77.4 0.78 (1)	4.14	10-5	0 / 725	0.16 (1)
5-6	-1206 / 0	-77.4	-77.4 0.41 (1)	5.31	8-5	-150 / 50	0.06 (1)
12-2	-1242 / 0	0.0	0.0 0.13 (1)	7.20	2-11	0 / 1089	0.24 (1)
7-6	-1140 / 0	0.0	0.0 0.12 (1)	7.45	8-6	0 / 1038	0.23 (1)
12-11	0 / 0	-17.5	-17.5 0.16 (4)	10.00			
11-10	0 / 1068	-17.5	-17.5 0.26 (1)	10.00			
10-9	0 / 999	-17.5	-17.5 0.25 (1)	10.00			
9-8	0 / 999	-17.5	-17.5 0.25 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.83")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.78 (4-5:1), BC=0.26 (10-11:1), WB=0.26 (4-10:1), SSI=0.26 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

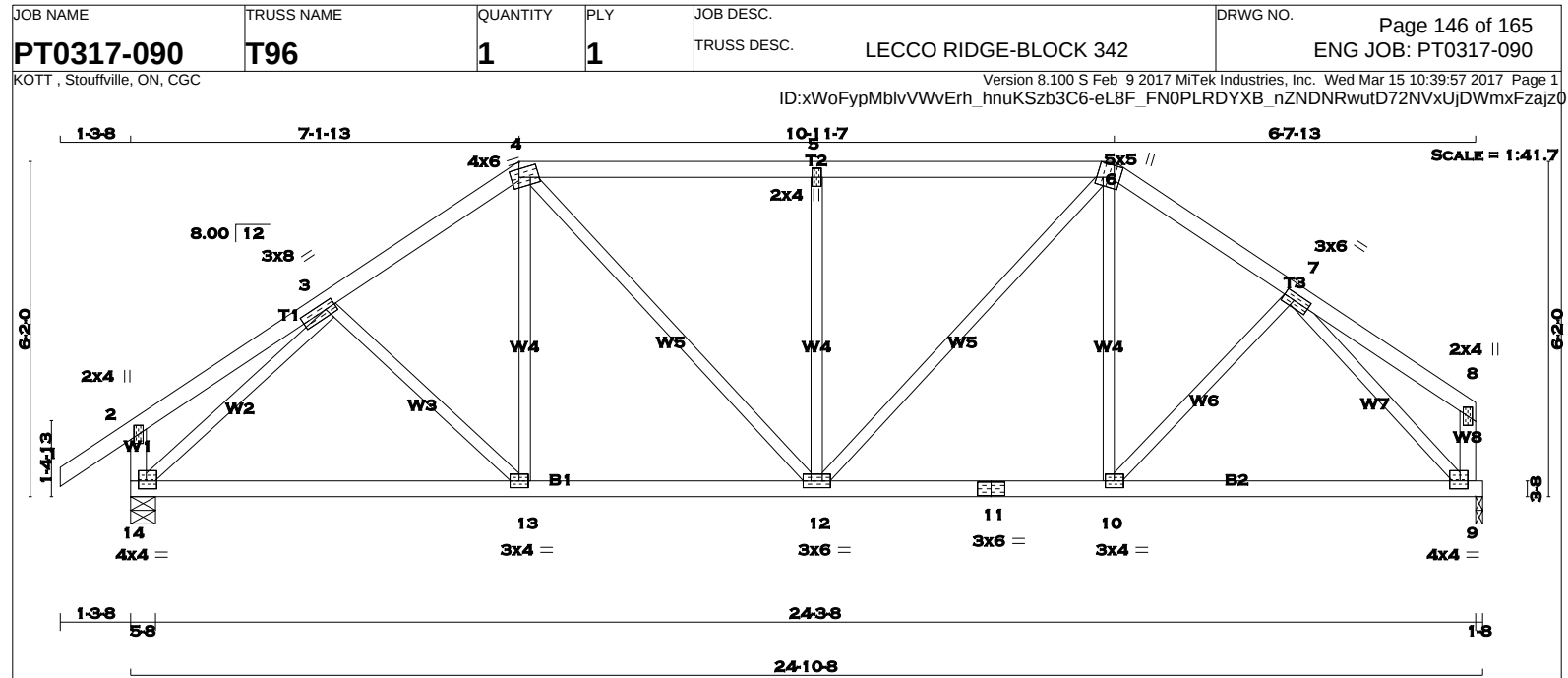
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.44 (2) (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																				TOTAL WEIGHT = 106 LB									
CHORDS SIZE																				[M][F]									
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									
14 - 2 2x4 DRY No.2										SPF										BOT CH. LL = 0.0 PSF									
9 - 8 2x4 DRY No.2										SPF										DL = 7.0 PSF									
14 - 11 2x4 DRY No.2										SPF										TOTAL LOAD = 33.3 PSF									
11 - 9 2x4 DRY No.2										SPF																			
ALL WEBS 2x3 DRY No.2										SPF										SPACING = 24.0 IN. C/C									
EXCEPT																				LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12									
DRY: SEASONED LUMBER.																				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010									
PLATES (table is in inches)																				THIS DESIGN COMPLIES WITH:									
JT TYPE PLATES W LEN Y X																				- PART 9 OF OBC 2012, BCBC 2012, ABC 2014									
2 TMV+p MT20 2.0 4.0																				- CSA 086-09									
3 TMWW-t MT20 3.0 8.0 1.50 2.25																				- TPIC 2011									
4 TTWW-m MT20 4.0 6.0 1.75 1.75																				(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									
5 TMW+w MT20 2.0 4.0																				ALLOWABLE DEFL.(LL)= L/360 (0.83")									
6 TTWW+m MT20 5.0 5.0 Edge 3.75																				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")									
7 TMWW-t MT20 3.0 6.0 1.50 2.50																				ALLOWABLE DEFL.(TL)= L/360 (0.83")									
8 TMV+p MT20 2.0 4.0																				CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")									
9 BMVW1-t MT20 4.0 4.0 1.75 1.75																				CSI: TC=0.32 (4-5:1), BC=0.28 (12-13:4), WB=0.57 (3-14:1), SSI=0.20 (4-5:1)									
10 BMWW-t MT20 3.0 4.0																				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
11 BS-t MT20 3.0 6.0																				COMP=1.10 SHEAR=1.10 TENS= 1.10									
12 BMWWW-t MT20 3.0 6.0																				COMPANION LIVE LOAD FACTOR = 0.50									
13 BMWW-t MT20 3.0 4.0																				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
14 BMVW1-t MT20 4.0 4.0 1.75 1.75																				NAIL VALUES									
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																				PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)									
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.																				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 (14) (INPUT = 0.90)									
																				JSI METAL= 0.39 (14) (INPUT = 1.00)									

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

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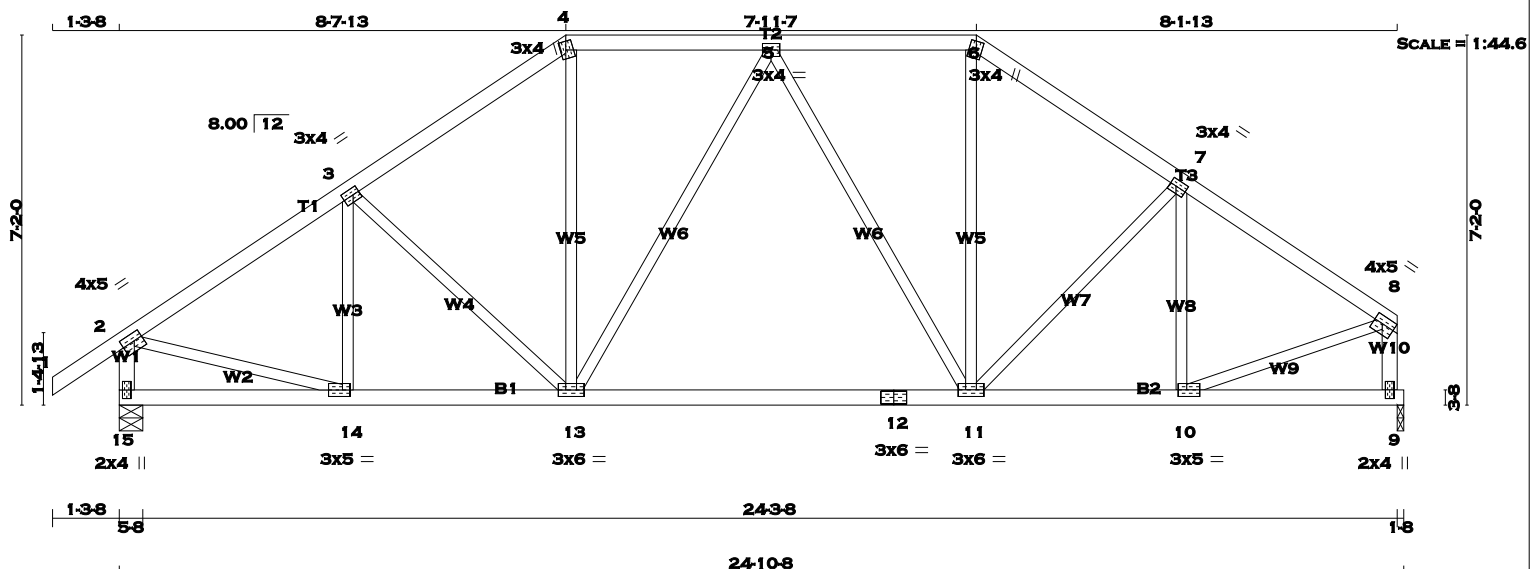


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KOTT, Stouffville, ON, CGC Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 10:39:58 2017 Page 1 ID:xWoFypMblvVWvErh_hnuKSzb3C6-6XidCbOeAeZ49hmALGuSwfS4QdTP60HextFKThzajz?



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS

JT	TYPE	SIZE	W	LEN	Y	X
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			

DRY: SEASONED LUMBER.

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	BMVW-t	MT20	3.0	6.0		
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	3.0	6.0		
14	BMVW-t	MT20	3.0	5.0	1.50	1.75
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.



JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	REQRD
15	1280	0	1280	0	0	5-8	5-8	
9	1174	0	1174	0	0	1-8	1-8	

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

BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.45 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.

FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH
1-2		0/29	-77.4	-77.4	0.10 (1)	10.00	14-3	-203/0	0.06 (1)		
2-3		-1305/0	-77.4	-77.4	0.20 (1)	5.45	3-13	-181/0	0.11 (1)		
3-4		-1190/0	-77.4	-77.4	0.20 (1)	5.65	13-4	0/405	0.09 (1)		
4-5		-976/0	-77.4	-77.4	0.16 (1)	6.13	13-5	-186/0	0.24 (1)		
5-6		-949/0	-77.4	-77.4	0.16 (1)	6.19	5-11	-240/0	0.31 (1)		
6-7		-1157/0	-77.4	-77.4	0.17 (1)	5.74	11-6	0/395	0.09 (1)		
7-8		-1192/0	-77.4	-77.4	0.18 (1)	5.67	11-7	-93/0	0.05 (1)		
15-2		-1244/0	0.0	0.0	0.13 (1)	7.20	10-7	-282/0	0.09 (1)		
9-8		-1140/0	0.0	0.0	0.12 (1)	7.45	2-14	0/1135	0.26 (1)		
15-14		0/0	-17.5	-17.5	0.08 (4)	10.00	10-8	0/1065	0.24 (1)		
14-13		0/1103	-17.5	-17.5	0.27 (1)	10.00					
13-12		0/1068	-17.5	-17.5	0.27 (1)	10.00					
12-11		0/1068	-17.5	-17.5	0.27 (1)	10.00					
11-10		0/1009	-17.5	-17.5	0.26 (1)	10.00					
10-9		0/0	-17.5	-17.5	0.07 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.83") CALCULATED VERT. DEFL.(LL) = L/999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.83") CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.20 (2-3:1), BC=0.27 (13-14:1), WB=0.31 (5-11:1), SSI=0.15 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

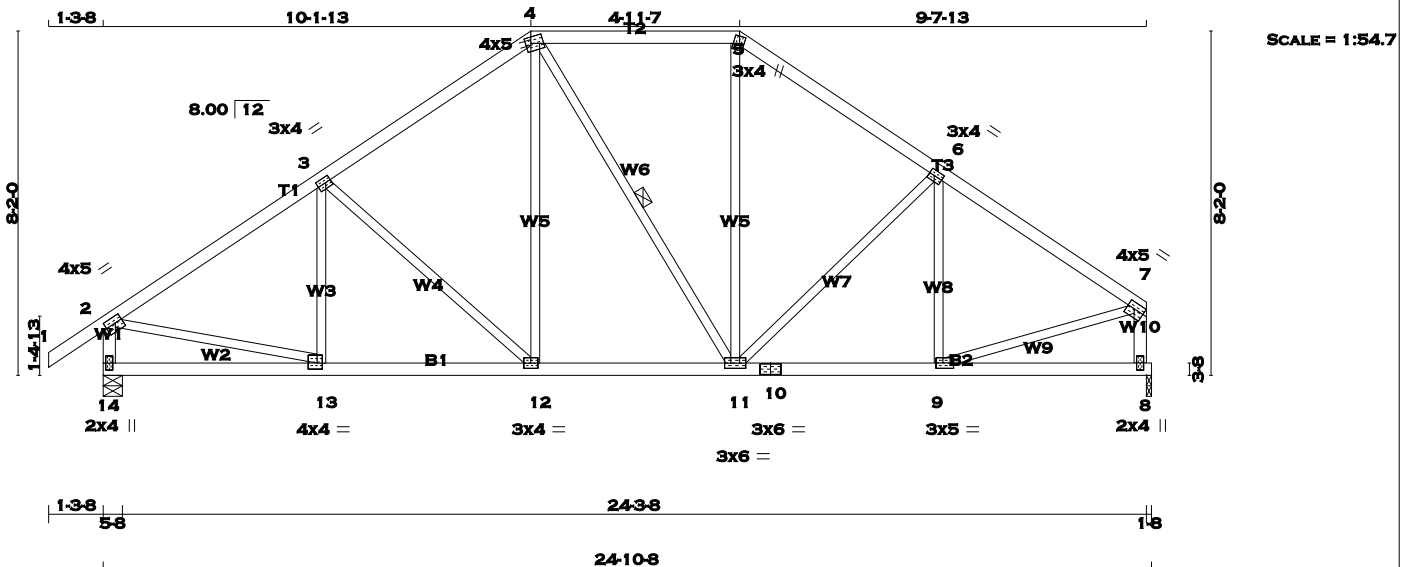
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (14) (INPUT = 0.90) JSI METAL= 0.44 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 111 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2	SPF	
4 - 5	2x4	DRY	No.2	SPF	
5 - 7	2x4	DRY	No.2	SPF	
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	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	1.50
14	BMV1+p	MT20	2.0	4.0		

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

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

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

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0
8	824	576 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 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)			
C H O R D S				W E B S			
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD (LC)	MAX. UNBRACED LENGTH	MEMB.	
FR-TO			FROM TO	CSI (LC)		FR-TO	
1-2		0 / 29	-77.4	-77.4 0.10 (1)	10.00	13-3	
2-3		-1322 / 0	-77.4	-77.4 0.28 (1)	5.33	3-12	
3-4		-1104 / 0	-77.4	-77.4 0.27 (1)	5.71	12-4	
4-5		-884 / 0	-77.4	-77.4 0.25 (1)	6.22	4-11	
5-6		-1085 / 0	-77.4	-77.4 0.24 (1)	5.79	11-5	
6-7		-1224 / 0	-77.4	-77.4 0.25 (1)	5.52	11-6	
14-2		-1242 / 0	0.0	0.0 0.13 (1)	7.20	9-6	
8-7		-1137 / 0	0.0	0.0 0.12 (1)	7.45	2-13	
						9-7	
14-13		0 / 0	-17.5	-17.5 0.11 (4)	10.00		
13-12		0 / 1121	-17.5	-17.5 0.23 (1)	10.00		
12-11		0 / 899	-17.5	-17.5 0.19 (1)	10.00		
11-10		0 / 1039	-17.5	-17.5 0.21 (1)	10.00		
10-9		0 / 1039	-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 (0.83")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.28 (2-3:1) , BC=0.23 (12-13:1) , WB=0.26 (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 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.

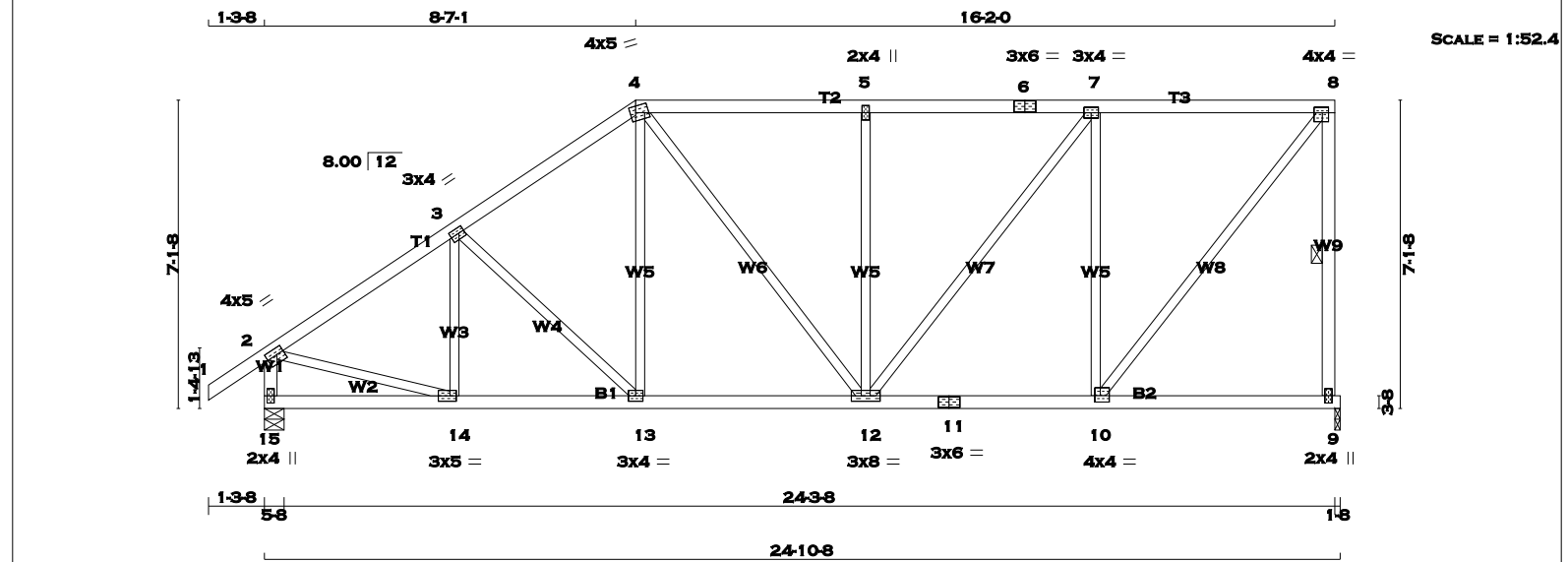
JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 116 lb [M]

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
9 - 8	2x4	DRY	No.2
15 - 2	2x4	DRY	No.2
15 - 11	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
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	TMW+w	MT20	2.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TMVW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	4.0	1.50 1.75
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	4.0	4.0	1.75 1.50
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	5.0	1.50 1.75
15	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	HORZ
9	1174	0	1174
15	1280	0	1280

UNFACTORED REACTIONS			
1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE
9	824	576 / 0	0 / 0
15	896	640 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.35 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-9. DBS = 12-0-0 . 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

C H O R D S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)
FR-TO		FROM TO	
1-2	0 / 29	-77.4 -77.4	0.10 (1)
2-3	-1306 / 0	-77.4 -77.4	0.27 (1)
3-4	-1187 / 0	-77.4 -77.4	0.26 (1)
4-5	-1081 / 0	-77.4 -77.4	0.32 (1)
5-6	-1081 / 0	-77.4 -77.4	0.34 (1)
6-7	-1081 / 0	-77.4 -77.4	0.34 (1)
7-8	-778 / 0	-77.4 -77.4	0.33 (1)
9-8	-1135 / 0	0.0 0.0	0.26 (1)
15-2	-1246 / 0	0.0 0.0	0.13 (1)
15-14	0 / 0	-17.5 -17.5	0.07 (4)
14-13	0 / 1104	-17.5 -17.5	0.22 (1)
13-12	0 / 971	-17.5 -17.5	0.20 (1)
12-11	0 / 778	-17.5 -17.5	0.19 (1)
11-10	0 / 778	-17.5 -17.5	0.19 (1)
10-9	0 / 0	-17.5 -17.5	0.13 (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 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.34 (5-7:1), BC=0.22 (13-14:1), WB=0.75 (7-10:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

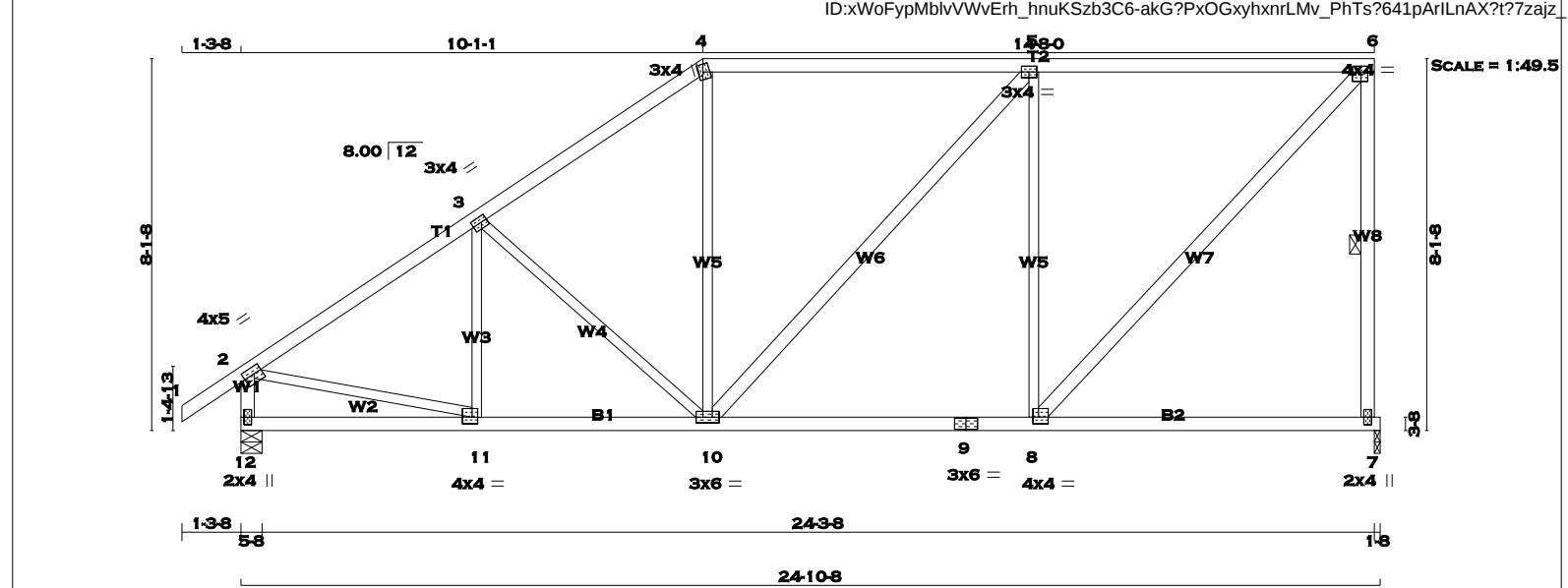
JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.44 (2) (INPUT = 1.00)



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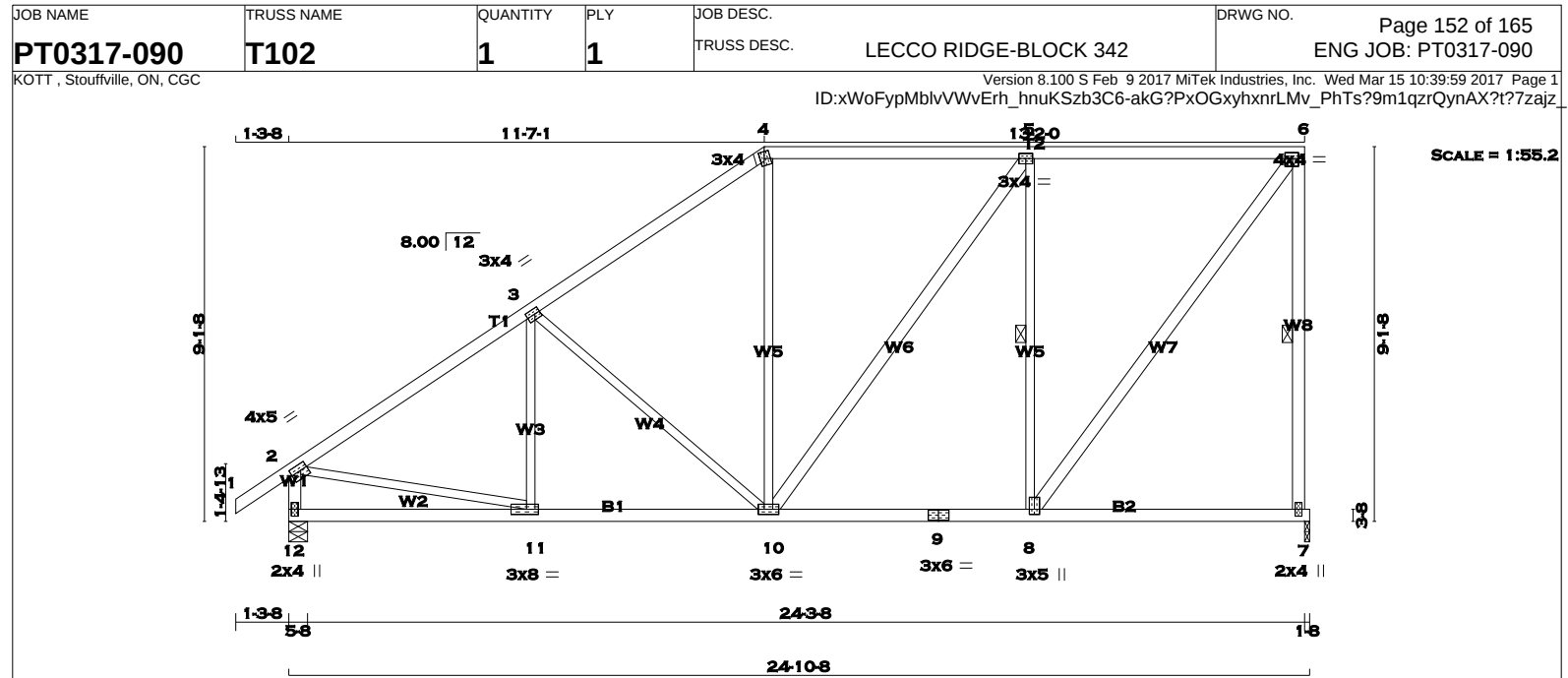
LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA				
N. L. G. A. RULES										TOTAL WEIGHT = 119 lb				
CHORDS SIZE										[M]				
LUMBER					DESCR.									
1 - 4					2x4 DRY No.2					SPF				
4 - 6					2x4 DRY No.2					SPF				
7 - 6					2x4 DRY No.2					SPF				
12 - 2					2x4 DRY No.2					SPF				
12 - 9					2x4 DRY No.2					SPF				
9 - 7					2x4 DRY No.2					SPF				
ALL WEBS EXCEPT					2x3 DRY No.2					SPF				
10 - 5					2x4 DRY No.2					SPF				
8 - 6					2x4 DRY No.2					SPF				
DRY: SEASONED LUMBER.														
PLATES (table is in inches)														
JT TYPE PLATES W LEN Y X														
2 TMVW-t MT20 4.0 5.0 1.75 2.00														
3 TMVW-t MT20 3.0 4.0 1.50 1.50														
4 TTW+m MT20 3.0 4.0 2.00 1.25														
5 TMVW-t MT20 3.0 4.0														
6 TMVW-t MT20 4.0 4.0 1.50 1.75														
7 BMV1+p MT20 2.0 4.0														
8 BMVW-t MT20 4.0 4.0 1.75 1.50														
9 BS-t MT20 3.0 6.0														
10 BMVW-t MT20 3.0 6.0														
11 BMVW-t MT20 4.0 4.0 1.75 1.50														
12 BMV1+p MT20 2.0 4.0														
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.														



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





LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES																													
CHORDS SIZE																													
LUMBER										DESCR.																			
1 - 4										2x4 DRY No.2										SPF									
4 - 6										2x4 DRY No.2										SPF									
7 - 6										2x4 DRY No.2										SPF									
12 - 2										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																													
10 - 5										2x4 DRY No.2										SPF									
8 - 6										2x4 DRY No.2										SPF									
DRY: SEASONED LUMBER.																													
PLATES (table is in inches)																													
JT TYPE PLATES W LEN Y X																													
1 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 TMVW-t MT20 4.0 4.0 1.75 1.75																													
7 BMV1+p MT20 2.0 4.0																													
8 BMWW+t MT20 3.0 5.0 1.50 1.50																													
9 BS-t MT20 3.0 6.0																													
10 BMWWW-t MT20 3.0 6.0																													
11 BMWW-t MT20 3.0 8.0 1.50 3.50																													
12 BMV1+p MT20 2.0 4.0																													
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.																													
										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 12																			
										BRACING																			
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 FT.																			
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.																			
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.																			
										1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 85 LBS.																			
										1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-8. DBS = 18-0-0 . CBF = 90 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 FORCE (LBS)										MAX. FACTORED FORCE (LBS)									
										FACTORED VERT. LOAD (PLF)										FACTORED VERT. LOAD (PLF)									
										MAX LC1 CSI (LC)										MAX UNBRACED LENGTH									
										FR-TO										FR-TO									
										1-2 0 / 29										10-11 -93 / 68									
										2-3 -1323 / 0										3-10 -402 / 0									
										3-4 -1019 / 0										10-4 0 / 196									
										4-5 -824 / 0										10-5 0 / 205									
										5-6 -704 / 0										8-5 -799 / 0									
										7-6 -1127 / 0										8-6 0 / 1166									
										12-2 -1237 / 0										2-11 0 / 1144									
										12-11 0 / 0																			
										11-10 0 / 1125																			
										10-9 0 / 704																			
										9-8 0 / 704																			
										8-7 0 / 0																			
																				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 (0.83")									
																				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")									
																				ALLOWABLE DEFL.(TL)= L/360 (0.83")									
																				CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")									
																				CSI: TC=0.61 (4-5:1), BC=0.25 (10-11:1), WB=0.48 (3-10:1), 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= 0.88 (11) (INPUT = 0.90)									
																				JSI METAL= 0.45 (2) (INPUT = 1.00)									

LICENSED PROFESSIONAL ENGINEER

P. J. TREVISAN

100136551

March 15th, 2017

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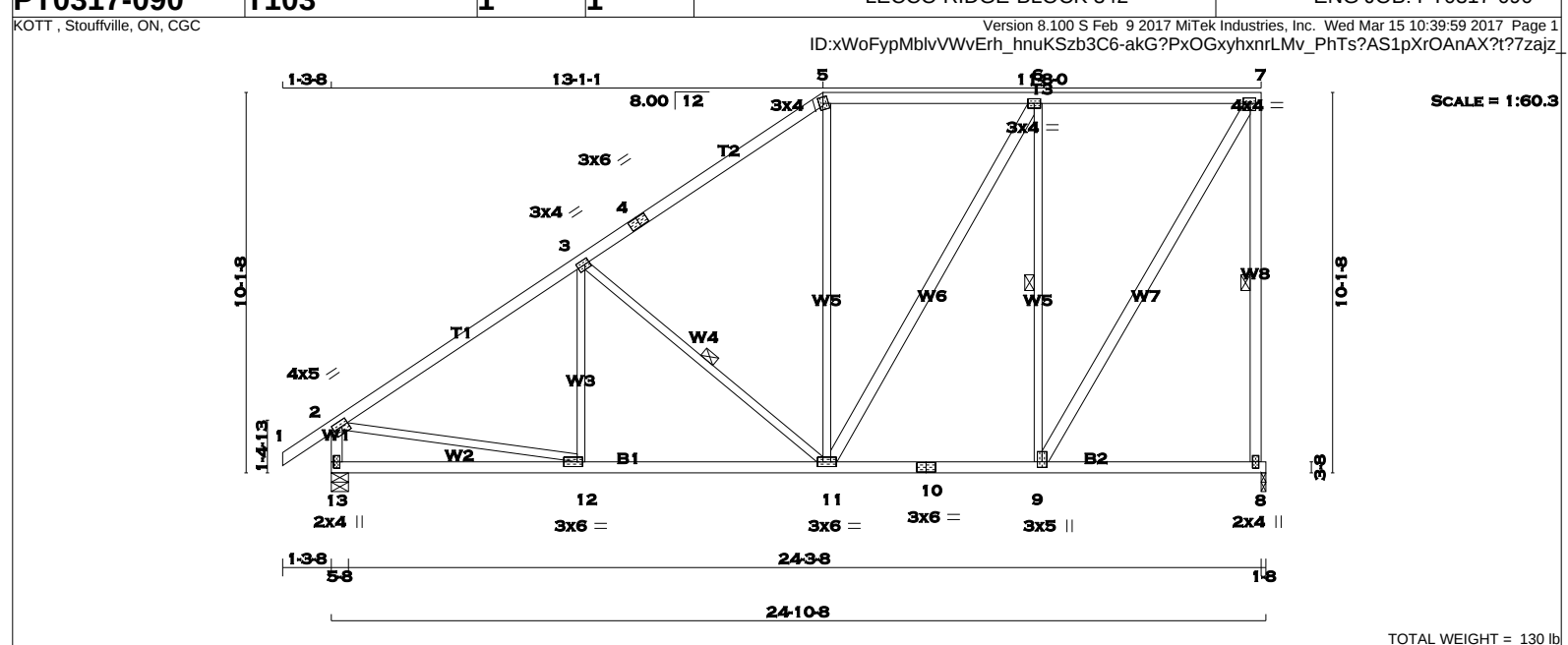
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17-5318

BUILDING DIVISION

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KOTT



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								DESIGN CRITERIA				[M][F]
N. L. G. A. RULES					BEARINGS					SPECIFIED LOADS:							
CHORDS					GROSS REACTION					TOP CH. LL = 23.3 PSF							
SIZE					DOWN					DL = 3.0 PSF							
LUMBER					UPLIFT					BOT CH. LL = 0.0 PSF							
DESCR.					IN-SX					DL = 7.0 PSF							
1 - 4					8					TOTAL LOAD = 33.3 PSF							
2x4					13												
DRY																	
No.2																	
SPF																	
4 - 5																	
2x4																	
DRY																	
No.2																	
SPF																	
5 - 7																	
2x4																	
DRY																	
No.2																	
SPF																	
8 - 7																	
2x4																	
DRY																	
No.2																	
SPF																	
13 - 2																	
2x4																	
DRY																	
No.2																	
SPF																	
13 - 10																	
2x4																	
DRY																	
No.2																	
SPF																	
10 - 8																	
2x4																	
DRY																	
No.2																	
SPF																	
ALL WEBS					UNFACTORED REACTIONS					SPACING = 24.0 IN. C/C							
EXCEPT					1ST LCASE					LOADING IN FLAT SECTION BASED ON A SLOPE							
11 - 6					MAX./MIN. COMPONENT REACTIONS					OF 6.00/12							
2x4					JT COMBINED					THIS TRUSS IS DESIGNED FOR RESIDENTIAL							
DRY					SNOW												
No.2					LIVE												
SPF					PERM.LIVE												
9 - 7					WIND												
2x4					DEAD												
DRY					SOIL												
No.2																	
SPF																	
DRY: SEASONED LUMBER.					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 13												

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	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	6.0		
5	TTW+m	MT20	3.0	4.0	2.00	1.25
6	TMWW-t	MT20	3.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.75	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMWW+t	MT20	3.0	5.0	1.75	1.50
10	BS-t	MT20	3.0	6.0		
11	BMWWW-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	6.0	1.50	1.75
13	BMV1+p	MT20	2.0	4.0		

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

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. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	12-3	-51 / 95	0.03 (4)
2-3	-1315 / 0	-77.4 -77.4	0.49 (1)	5.04	3-11	-503 / 0	0.25 (1)
3-4	-922 / 0	-77.4 -77.4	0.45 (1)	5.81	11-5	0 / 140	0.04 (4)
4-5	-922 / 0	-77.4 -77.4	0.45 (1)	5.81	11-6	0 / 326	0.05 (1)
5-6	-739 / 0	-77.4 -77.4	0.34 (1)	6.25	9-6	-842 / 0	0.59 (1)
6-7	-577 / 0	-77.4 -77.4	0.34 (1)	6.25	9-7	0 / 1117	0.18 (1)
8-7	-1132 / 0	0.0 0.0	0.57 (1)	5.97	2-12	0 / 1137	0.26 (1)
13-2	-1233 / 0	0.0 0.0	0.13 (1)	7.23			
13-12	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
12-11	0 / 1122	-17.5 -17.5	0.28 (1)	10.00			
11-10	0 / 577	-17.5 -17.5	0.18 (4)	10.00			
10-9	0 / 577	-17.5 -17.5	0.18 (4)	10.00			
9-8	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

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LICENSED PROFESSIONAL ENGINEER

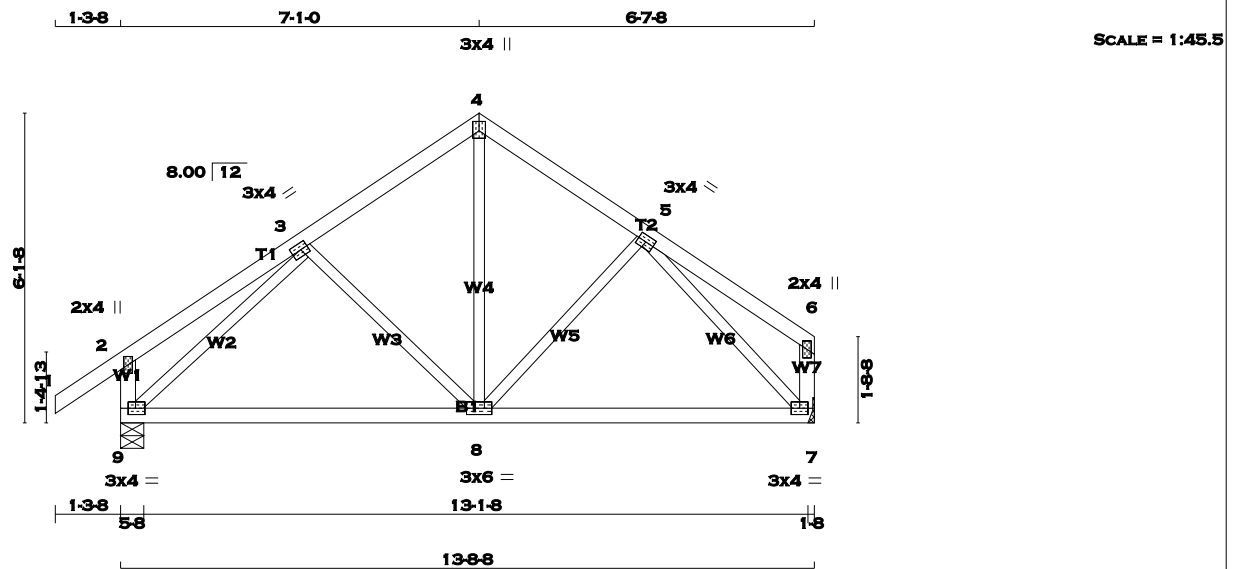
PAUL TREVISAN

100136551

March 15th, 2017

PROVINCE OF ONTARIO

KOTT



TOTAL WEIGHT = 58 lb
[M][F]

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

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	DOWN	UP
9		756	0	756	0
7		650	0	650	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	
JT		COMBINED	SNOW	LIVE	PERM.LIVE
9		528	383 / 0	0 / 0	0 / 0
7		456	319 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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)				WEBS			
MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CS1 (LC)
FR-TO						FR-TO			
1-2		0 / 29	-77.4	-77.4	0.10 (1)	10.00	3-8	-153 / 4	0.06 (1)
2-3		0 / 17	-77.4	-77.4	0.15 (1)	10.00	8-4	0 / 328	0.07 (1)
3-4		-498 / 0	-77.4	-77.4	0.12 (1)	6.25	8-5	-100 / 15	0.04 (1)
4-5		-497 / 0	-77.4	-77.4	0.10 (1)	6.25	9-3	-712 / 0	0.28 (1)
5-6		0 / 16	-77.4	-77.4	0.13 (1)	10.00	5-7	-690 / 0	0.26 (1)
9-2		-212 / 0	0.0	0.0	0.02 (1)	7.81			
7-6		-100 / 0	0.0	0.0	0.01 (1)	7.81			
9-8		0 / 510	-17.5	-17.5	0.27 (4)	10.00			
8-7		0 / 468	-17.5	-17.5	0.27 (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 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.15 (2-3:1), BC=0.27 (8-9:4), WB=0.28 (3-9:1), SSI=0.11 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (5) (INPUT = 0.90)
JSI METAL= 0.25 (3) (INPUT = 1.00)



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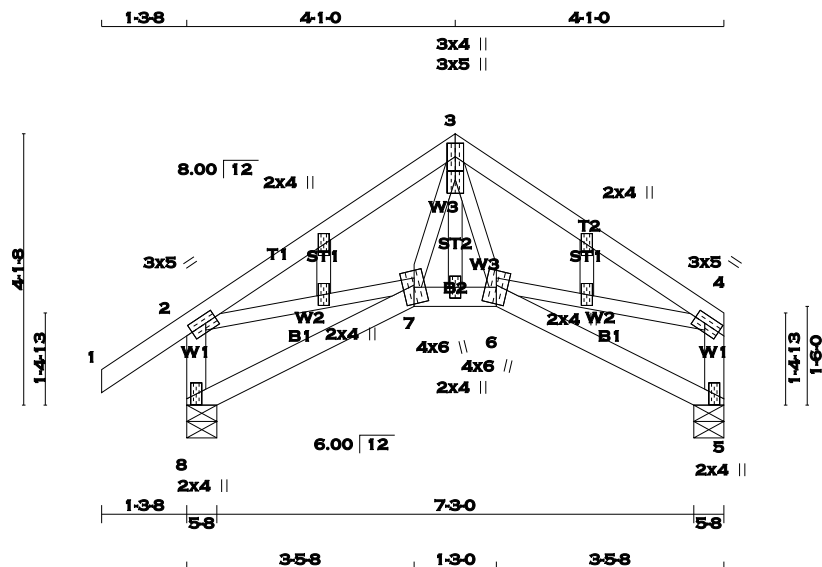
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KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 10:40:00 2017 Page 1

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TOTAL WEIGHT = 38 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2	SPF	
3 - 4	2x4	DRY	No.2	SPF	
8 - 2	2x4	DRY	No.2	SPF	
5 - 4	2x4	DRY	No.2	SPF	
8 - 7	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	
ALL WEBS 2x3 DRY No.2				SPF	
EXCEPT					
ALL GABLE WEBS 2x3 DRY No.2				SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

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+p	MT20	3.0	5.0	
3	NP+p	MT20	3.0	4.0	1.50 1.50
4	TMVW-t	MT20	3.0	5.0	1.50 2.00
5	BMV1+p	MT20	2.0	4.0	
6	BBWW+m	MT20	4.0	6.0	
7	BBWW+m	MT20	4.0	6.0	
8	BMV1+p	MT20	2.0	4.0	
9, 10, 11, 12, 13					
9	NP+w	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
8	494	0	494	0	0
5	387	0	387	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN. COMPONENT REACTIONS	2ND LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
8	344	254 / 0	0 / 0	0 / 0	90 / 0
5	272	190 / 0	0 / 0	0 / 0	82 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	FACTORED FORCE (LBS)	MEMB.	FACTORED FORCE (LBS)
FR-TO		FR-TO	
1-2	0 / 29	3-6	0 / 90
2-3	-441 / 0	7-3	0 / 90
3-4	-441 / 0	2-7	0 / 370
8-2	-463 / 0	6-4	0 / 370
5-4	-357 / 0		
8-7	0 / 0		
7-6	0 / 343		
6-5	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

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=0.17 (2-3:1), BC=0.06 (5-6:4), WB=0.08 (4-6:1), SSI=0.10 (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
MT20	618	354	1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

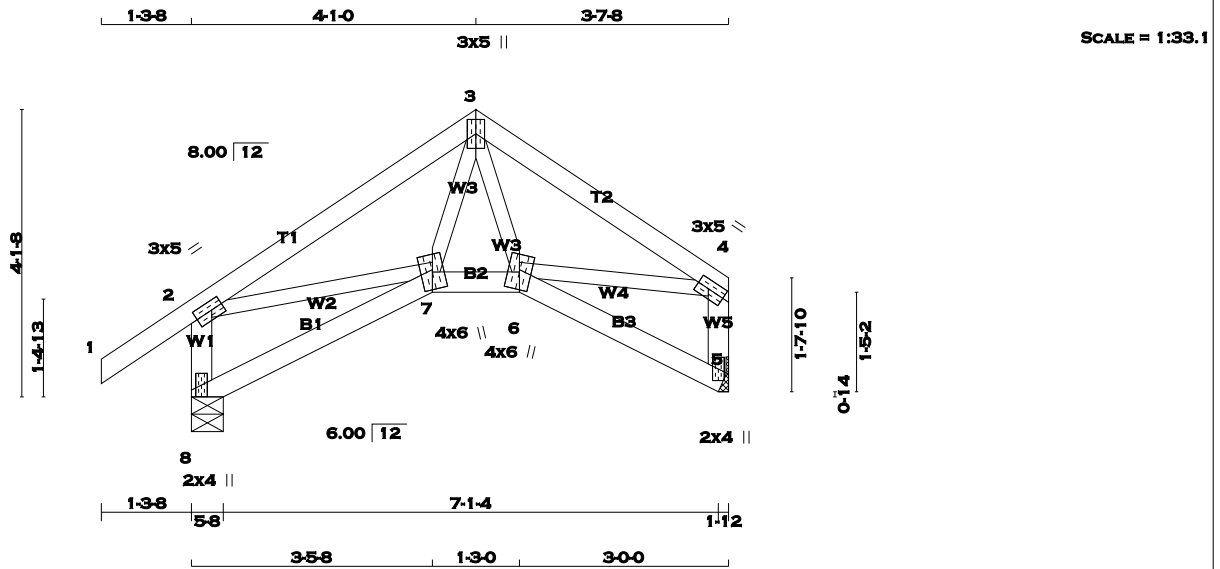
JSI GRIP= 0.52 (7) (INPUT = 0.90)
JSI METAL= 0.18 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 34 lb
[M][F]

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	SPF	
1 - 3	2x4	DRY	No.2	SPF	
3 - 4	2x4	DRY	No.2	SPF	
8 - 2	2x4	DRY	No.2	SPF	
5 - 4	2x4	DRY	No.2	SPF	
8 - 7	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
6 - 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-t	MT20	3.0	5.0	1.50	2.00
3	TTWW+p	MT20	3.0	5.0		
4	TMVW-t	MT20	3.0	5.0	1.50	2.00
5	BMV1+p	MT20	2.0	4.0		
6	BBWW+m	MT20	4.0	6.0		
7	BBWW+m	MT20	4.0	6.0		
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	472	0		472	0	0	5-8	5-8	
5	366	0		366	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-12									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
8	COMBINED	243 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
5		180 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	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	7-3	0 / 85	0.02 (4)
2-3	-393 / 0	-77.4	-77.4 0.17 (1)	6.25	3-6	0 / 52	0.02 (4)
3-4	-383 / 0	-77.4	-77.4 0.13 (1)	6.25	2-7	0 / 329	0.07 (1)
8-2	-442 / 0	0.0	0.0 0.05 (1)	7.81	6-4	0 / 319	0.07 (1)
5-4	-339 / 0	0.0	0.0 0.04 (1)	7.81			
8-7	0 / 0	-17.5	-17.5 0.06 (4)	10.00			
7-6	0 / 305	-17.5	-17.5 0.05 (1)	10.00			
6-5	0 / 0	-17.5	-17.5 0.05 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.17 (2-3:1) , BC=0.06 (7-8:4) , WB=0.07 (2-7:1) , SSI=0.10 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE 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
MT20	618	354	1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

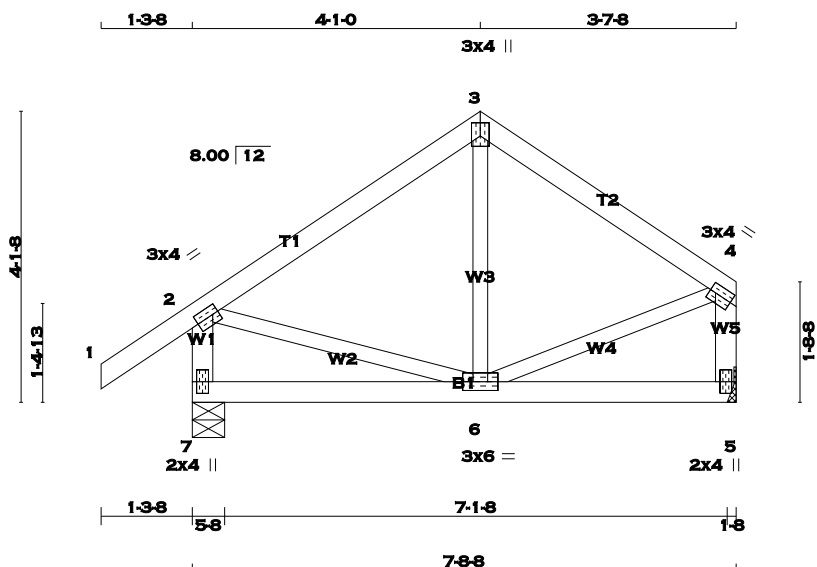
JSI GRIP= 0.47 (7) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 33 = 66 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
7 - 2	2x4	DRY	No.2 SPF
5 - 4	2x4	DRY	No.2 SPF
7 - 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-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
7	472	0	472	0	5-8	5-8
5	366	0	366	0	5-8	5-8

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
7	329	243 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
5	257	180 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00	6-3	-42 / 53	0.02 (4)	
2-3	-231 / 0	-77.4	-77.4	0.17 (1)	6.25	2-6	0 / 199	0.04 (1)	
3-4	-231 / 0	-77.4	-77.4	0.13 (1)	6.25	6-4	0 / 206	0.05 (1)	
7-2	-443 / 0	0.0	0.0	0.05 (1)	7.81				
5-4	-342 / 0	0.0	0.0	0.04 (1)	7.81				
7-6	0 / 0	-17.5	-17.5	0.07 (4)	10.00				
6-5	0 / 0	-17.5	-17.5	0.07 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.17 (2-3:1), BC=0.07 (6-7:4), WB=0.05 (4-6:1), 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.

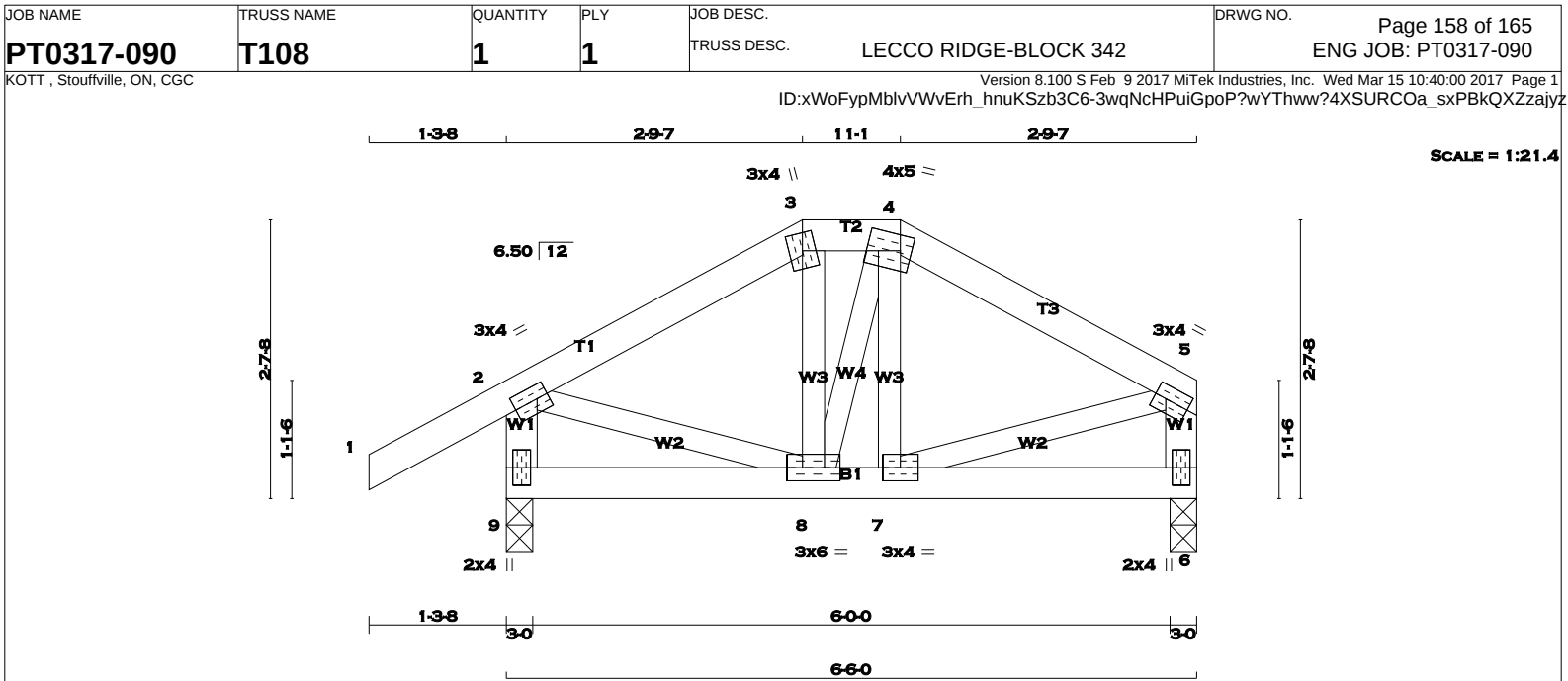
JSI GRIP= 0.67 (4) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)



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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.





LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+m	MT20	3.0	4.0		
4	TTWW-m	MT20	4.0	5.0	1.75	1.25
5	TMVW-t	MT20	3.0	4.0	1.50	1.25
6	BMV1+p	MT20	2.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
8	BMWW-t	MT20	3.0	6.0		
9	BMV1+p	MT20	2.0	4.0		

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

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

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9	288	215 / 0	0 / 0	0 / 0	0 / 0	0 / 0	73 / 0
6	216	151 / 0	0 / 0	0 / 0	0 / 0	0 / 0	65 / 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		MEMB.		WEBS		MEMB.	
FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	FR-TO	MAX. FACTORED FORCE (LBS)	MAX (LC)
1-2	0 / 25	-77.4	-77.4 0.10 (1)	10.00	8-3	-26 / 21	0.01 (4)
2-3	-246 / 0	-77.4	-77.4 0.08 (1)	6.25	8-4	-2 / 2	0.00 (4)
3-4	-215 / 0	-77.4	-77.4 0.01 (1)	6.25	7-4	-23 / 20	0.01 (4)
4-5	-247 / 0	-77.4	-77.4 0.08 (1)	6.25	2-8	0 / 224	0.05 (1)
9-2	-391 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 225	0.05 (1)
6-5	-286 / 0	0.0	0.0 0.03 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.03 (4)	10.00			
8-7	0 / 216	-17.5	-17.5 0.05 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.03 (4)	10.00			

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

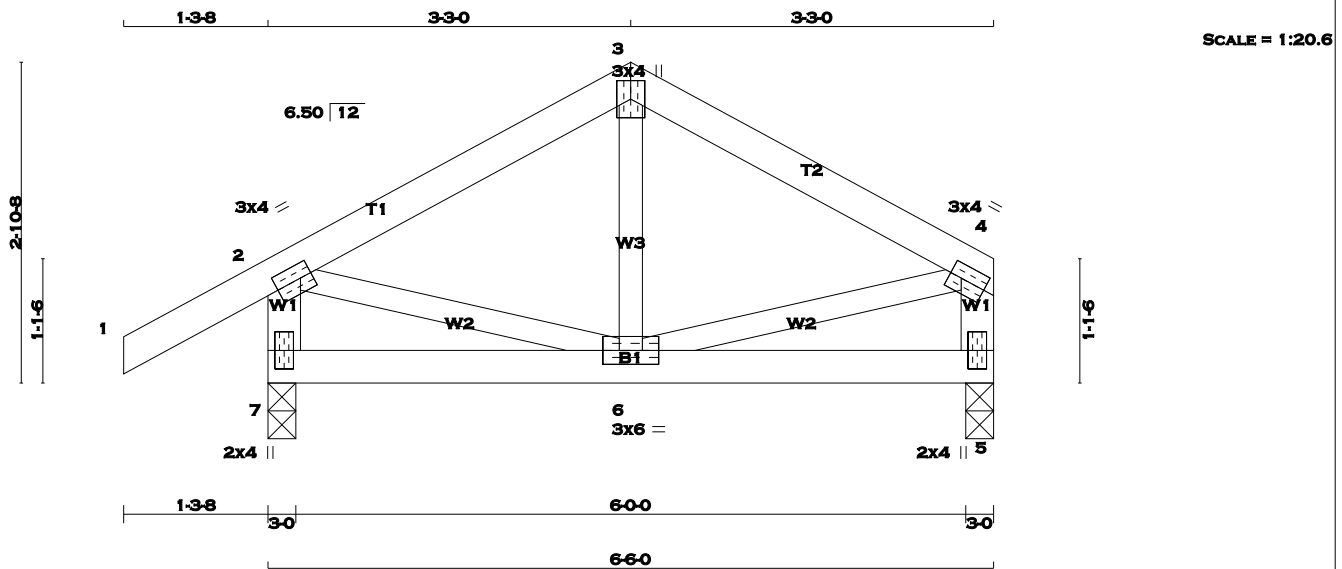
JSI GRIP= 0.56 (5) (INPUT = 0.90)
JSI METAL= 0.13 (2) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

7 - 2

2x4

DRY

No.2

SPF

5 - 4

2x4

DRY

No.2

SPF

7 - 5

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25
5	BMV1+p	MT20	2.0	4.0		
6	BMWWW-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			
	GROSS REACTION	GROSS REACTION	BRG	BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	414	0	414	0	0	3-0	3-0
5	308	0	308	0	0	3-0	3-0

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED		
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)		FORCE (LBS)	MAX UNBRAC LENGTH (FR-TO)	LC1 MAX CSI (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 25	-77.4	-77.4 0.10 (1)	10.00	6-3	-32 / 45	0.02 (4)
2-3	-230 / 0	-77.4	-77.4 0.10 (1)	6.25	2-6	0 / 209	0.05 (1)
3-4	-230 / 0	-77.4	-77.4 0.10 (1)	6.25	6-4	0 / 209	0.05 (1)
7-2	-391 / 0	0.0	0.0 0.04 (1)	7.81			
5-4	-285 / 0	0.0	0.0 0.03 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.05 (4)	10.00			
6-5	0 / 0	-17.5	-17.5 0.05 (4)	10.00			

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 (0.22")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")

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

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (3-4:1), BC=0.05 (6-7:4), WB=0.05 (2-6:1), SSI=0.09 (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= 0.52 (2) (INPUT = 0.90)

JSI METAL= 0.13 (2) (INPUT = 1.00)

TOTAL WEIGHT = 2 X 26 = 52 lb

[M][F]



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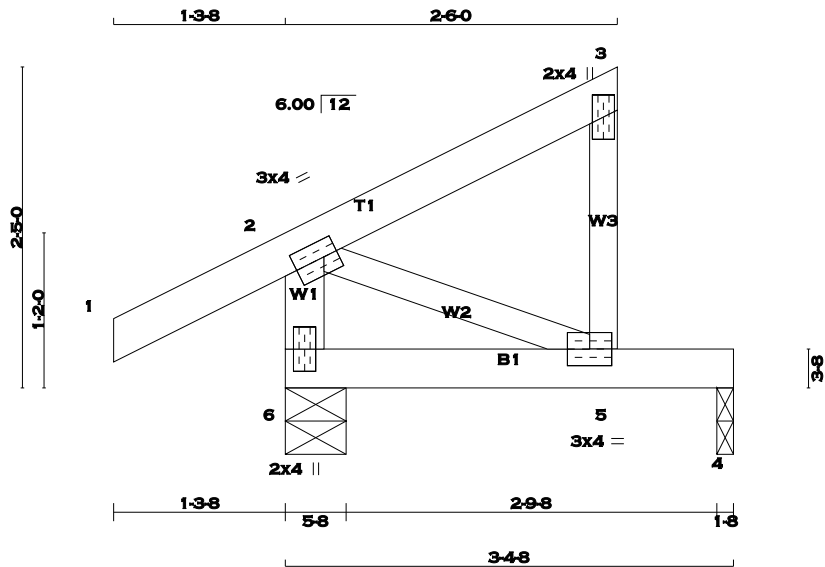
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TOTAL WEIGHT = 6 X 13 = 77 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
5 - 3	2x3	DRY	No.2		SPF
6 - 2	2x4	DRY	No.2		SPF
6 - 4	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY					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	1.25
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6	256	0	256	0	0	5-8	5-8	
4	101	0	101	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE				
6	178	137 / 0	0 / 0	0 / 0	0 / 0	41 / 0	0 / 0
4	72	43 / 0	0 / 0	0 / 0	0 / 0	29 / 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: (5)

MEMB.	CHORDS		VERT. LOAD	LC1 MAX	MAX. UNBRAC LENGTH	MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)					MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO		FROM TO		CSI (LC)		FR-TO		
1-2	0 / 23	-77.4 -77.4	0.10 (1)	10.00	2-5	0 / 0	0.00 (1)	
2-3	0 / 0	-77.4 -77.4	0.08 (1)	10.00				
5-3	-97 / 0	0.0 0.0	0.02 (1)	7.81				
6-2	-202 / 0	0.0 0.0	0.02 (1)	7.81				
6-5	0 / 0	-17.5 -17.5	0.11 (1)	10.00				
5-4	0 / 0	-17.5 -17.5	0.11 (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 (0.02")

CSI: TC=0.10 (1-2:1) , BC=0.11 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.08 (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.

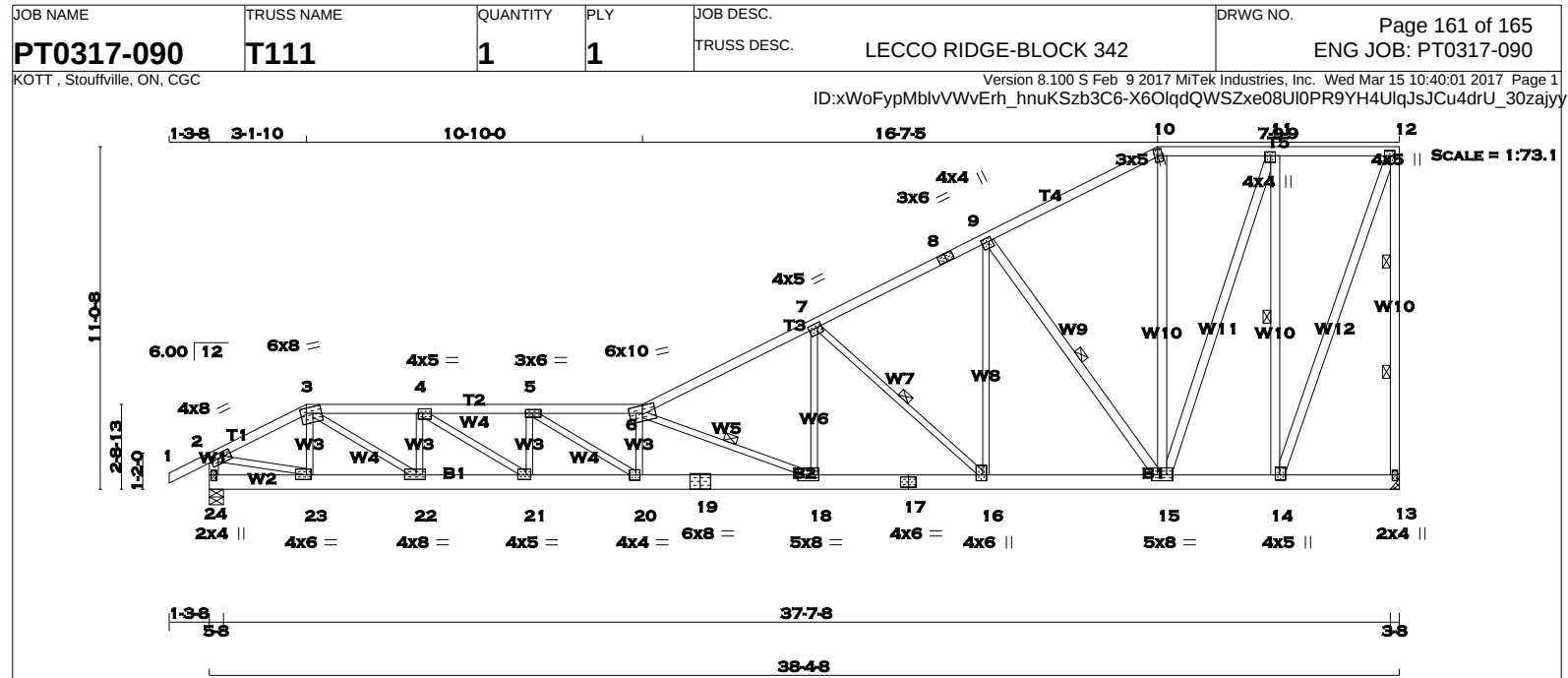
JSI GRIP= 0.18 (2) (INPUT = 0.90)
JSI METAL= 0.04 (6) (INPUT = 1.00)



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





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 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 13 - 12 2x4 DRY No.2 SPF 24 - 2 2x4 DRY No.2 SPF 24 - 19 2x6 DRY No.2 SPF 19 - 17 2x6 DRY No.2 SPF 17 - 13 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 9 - 15 2x4 DRY No.2 SPF 15 - 10 2x4 DRY No.2 SPF 15 - 11 2x4 DRY No.2 SPF 14 - 11 2x4 DRY No.2 SPF 14 - 12 2x4 DRY No.2 SPF DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 13 1820 0 24 1925 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1820 0 0 1925 0 0 INPUT BRG IN-SX HANGER BY OTHERS MIN. SEAT SIZE: 3-8 5-8 5-8 REQRD BRG IN-SX 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 13 1277 894 / 0 0 / 0 0 / 0 384 / 0 0 / 0 24 1349 957 / 0 0 / 0 0 / 0 392 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 24 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.20 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. 2 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/3 LENGTH OF 12-13. DBS = 8-0-0 . CBF = 89 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-18. DBS = 4-0-0 . CBF = 89 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 6-0-0 . CBF = 73 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-15, 11-14. DBS = 8-0-0 . CBF = 86 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX (PLF) CSI (LC) UNBRAC LENGTH FR-TO 1-2 0 / 23 -77.4 -77.4 0.10 (1) 10.00 23-3 -444 / 0 0.07 (1) 2-3 -2528 / 0 -77.4 -77.4 0.17 (1) 4.22 3-22 0 / 2448 0.55 (1) 3-4 -4296 / 0 -77.4 -77.4 0.33 (1) 3.19 22-4 -1304 / 0 0.21 (1) 4-5 -5815 / 0 -77.4 -77.4 0.46 (1) 2.61 4-21 0 / 1825 0.41 (1) 5-6 -6726 / 0 -77.4 -77.4 0.64 (1) 2.20 21-5 -880 / 0 0.14 (1) 6-7 -3860 / 0 -77.4 -77.4 0.55 (1) 3.22 5-20 0 / 1095 0.25 (1) 7-8 -2282 / 0 -77.4 -77.4 0.35 (1) 4.24 20-6 -652 / 0 0.10 (1) 8-9 -2282 / 0 -77.4 -77.4 0.35 (1) 4.24 6-18 -3568 / 0 0.94 (1) 9-10 -1185 / 0 -77.4 -77.4 0.30 (1) 5.53 18-7 0 / 1562 0.35 (1) 10-11 -1045 / 0 -77.4 -77.4 0.15 (1) 5.99 7-16 -1944 / 0 0.73 (1) 11-12 -625 / 0 -77.4 -77.4 0.14 (1) 6.25 16-9 0 / 1412 0.32 (1) 13-12 -1788 / 0 0.0 0.0 0.48 (1) 5.00 9-15 -1711 / 0 0.80 (1) 24-2 -1901 / 0 0.0 0.0 0.19 (1) 6.09 15-10 0 / 236 0.04 (1) 15-11 0 / 1297 0.21 (1) 24-23 0 / 0 -17.5 -17.5 0.02 (4) 10.00 14-11 -1593 / 0 0.96 (1) 23-22 0 / 2239 -17.5 -17.5 0.33 (1) 10.00 14-12 0 / 1779 0.29 (1) 22-21 0 / 4296 -17.5 -17.5 0.58 (1) 10.00 2-23 0 / 2322 0.52 (1) 21-20 0 / 5815 -17.5 -17.5 0.88 (1) 10.00 20-19 0 / 6755 -17.5 -17.5 0.99 (1) 10.00 19-18 0 / 6755 -17.5 -17.5 0.99 (1) 10.00 18-17 0 / 3471 -17.5 -17.5 0.45 (1) 10.00 17-16 0 / 3471 -17.5 -17.5 0.45 (1) 10.00 16-15 0 / 2042 -17.5 -17.5 0.28 (1) 10.00 15-14 0 / 625 -17.5 -17.5 0.09 (1) 10.00 14-13 0 / 27.5 -17.5 -17.5 0.03 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C LOADING IN 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 (1.28") CALCULATED VERT. DEFL.(LL) = L/914 (0.50") ALLOWABLE DEFL.(TL)= L/360 (1.28") CALCULATED VERT. DEFL.(TL) = L/516 (0.89") CSI: TC=0.64 (5-6:1) , BC=0.99 (18-20:1) , WB=0.96 (11-14:1) , SSI=0.18 (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= 0.89 (18) (INPUT = 0.90) JSI METAL= 0.97 (19) (INPUT = 1.00)			
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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

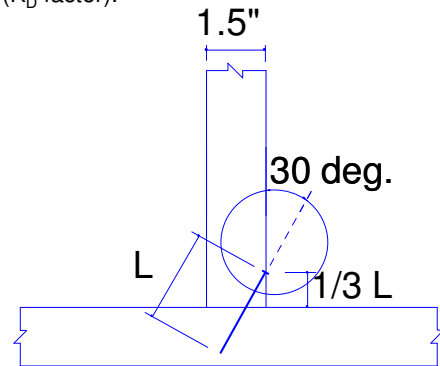
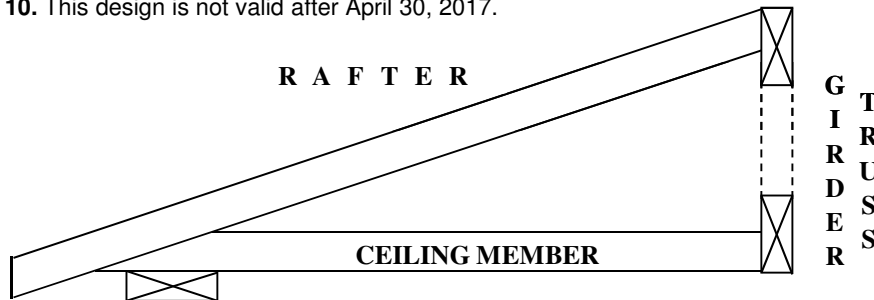
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2017.



TOE-NAIL INSTALLATION

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



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BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

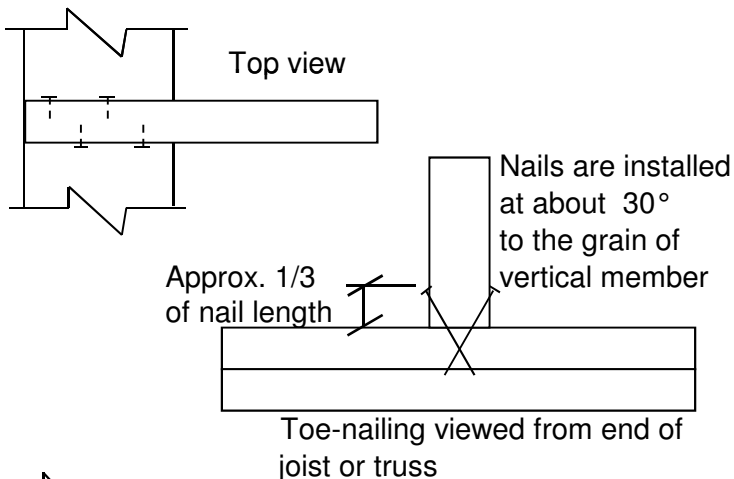
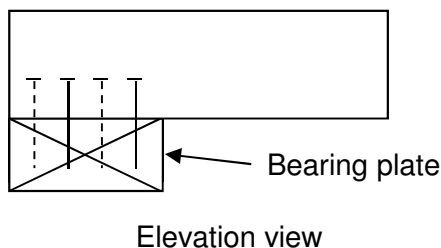
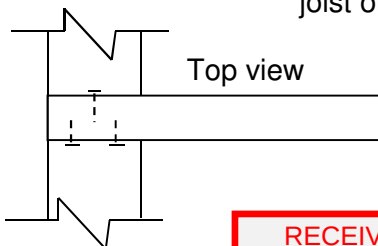
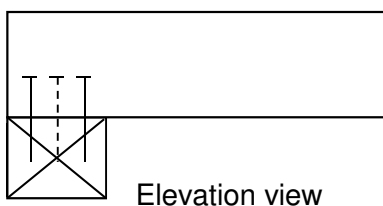
B37579H2

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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JOB NAME DETAILS

JOB DESC.

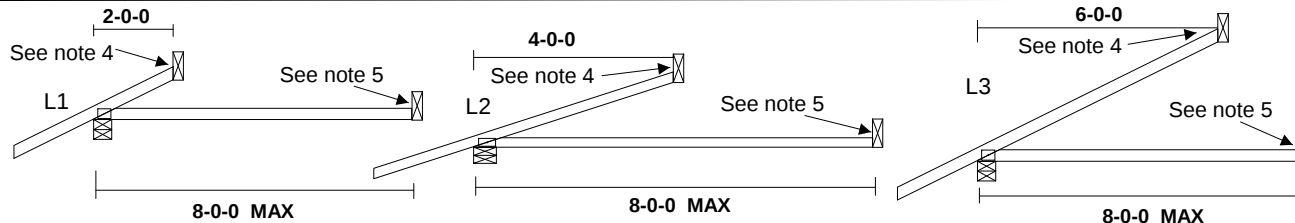
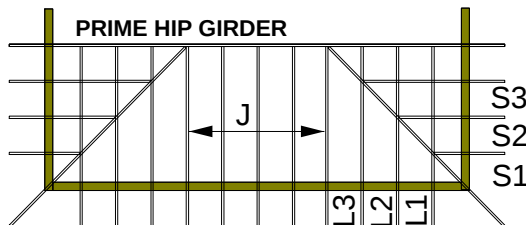
HIP END FRAMING

TOO BRIDGE-BLOCK 342

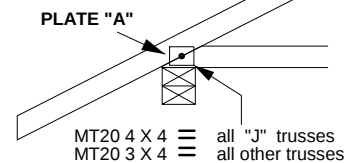
DRAWING NO.

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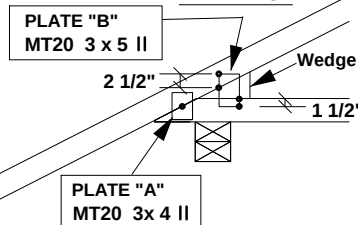
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DETAIL "A"



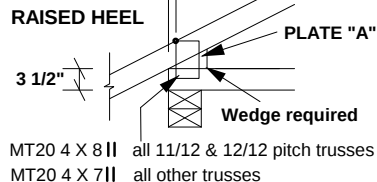
DETAIL "C"



CANTILEVER DETAIL "C"

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

DETAIL "B"



NOTES:

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

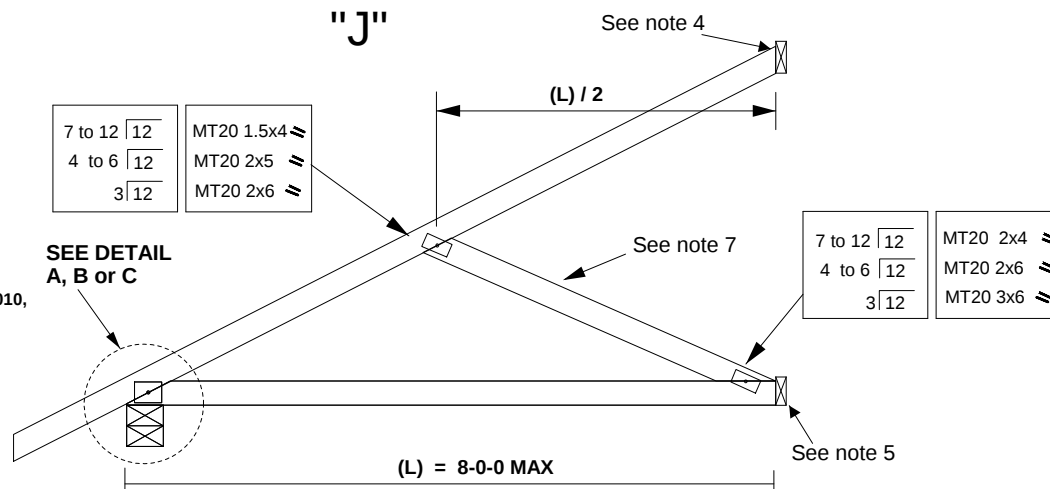
SEE DETAIL A, B or C

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"J"



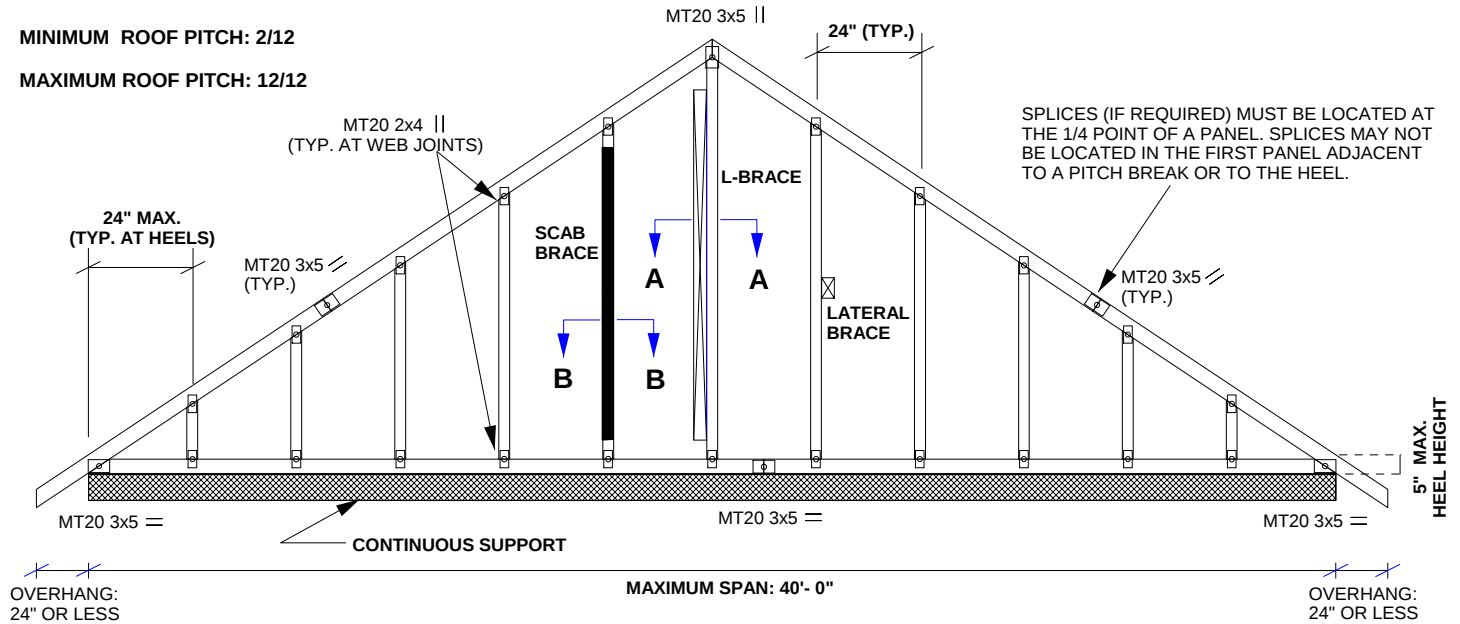
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MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

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

PLATES

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

DESIGN CRITERIA

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

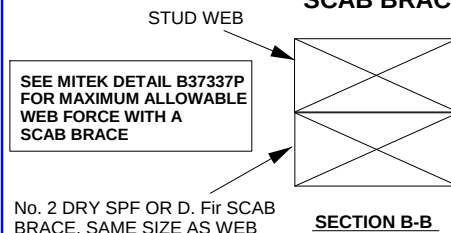
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

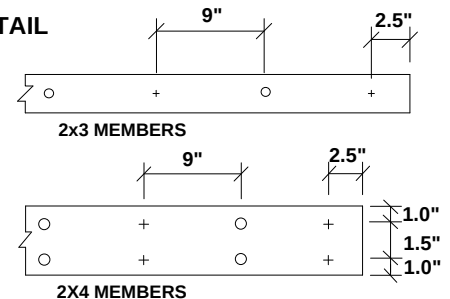
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED.
 WEBS MUST BE Laterally Braced, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

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

SCAB BRACE DETAIL



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

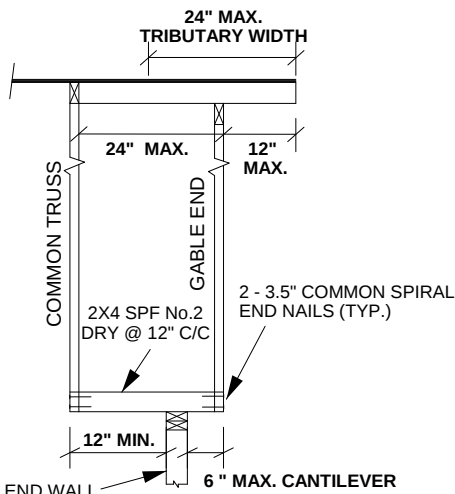


FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

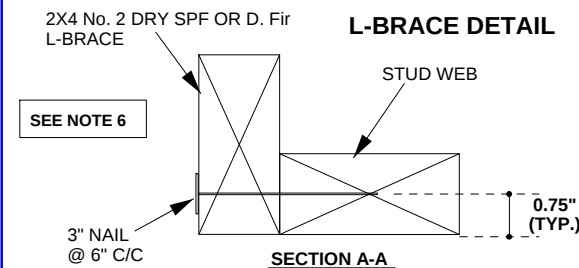
+ NAIL FROM FRONT FACE
 o NAIL FROM BACK FACE

CANTILEVER DETAIL

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



L-BRACE DETAIL



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

NOTES:

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

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