



TOWN OF MILTON

PLANNING AND DEVELOPMENT

BUILDING PERMIT:17-5037

BUILDING: REVIEWED

SCOTT SHERRIFFS

PLANS EXAMINER

APR 20, 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

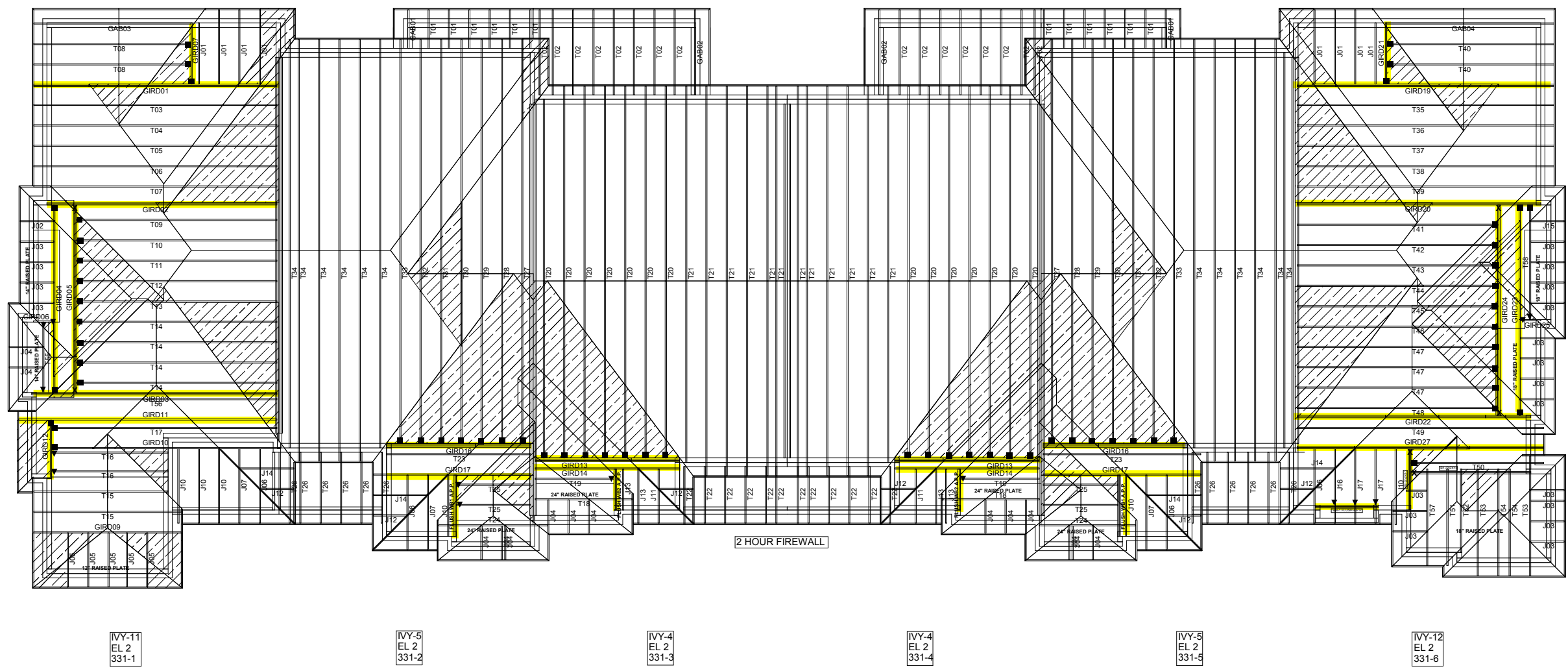
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TOWN OF MILTON

MAR 29, 2017

17-5037

BUILDING DIVISION



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

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

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

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

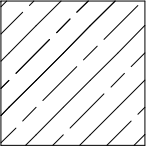
HANGER LEGEND:

▼ LUS24

● HGUS26

■ LJS26DS

× HGUS26-2

 CONVENTIONAL
FRAMING BY OTHERS

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

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

Model: **BLOCK 331**

Customer: **GREENPARK**

Project: **LECCO RIDGE**

Location: **MILTON**

Date: **3/10/2017** 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.

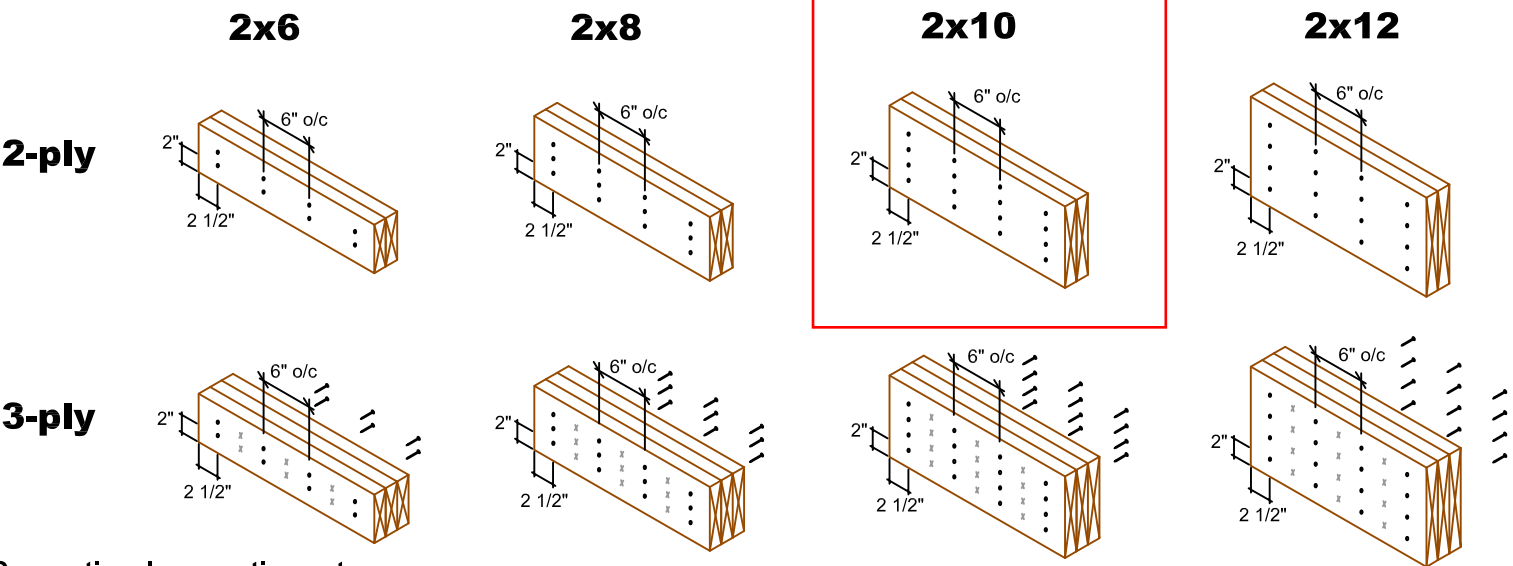
WHERE CONTINUOUS LATERAL
BRACING IS REQUIRED FOR WEBS
BUT CAN NOT BE PROVIDED
SUBSTITUTE EACH WITH ONE SPF
#2 2" X 4" T-BRACE COVERING 90%
OF WEB LENGTH AND FASTENED
TO EDGE OF WEB USING 3 1/4"
SPIRAL NAILS @ 6" C/C

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17-5037
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01/29/2013

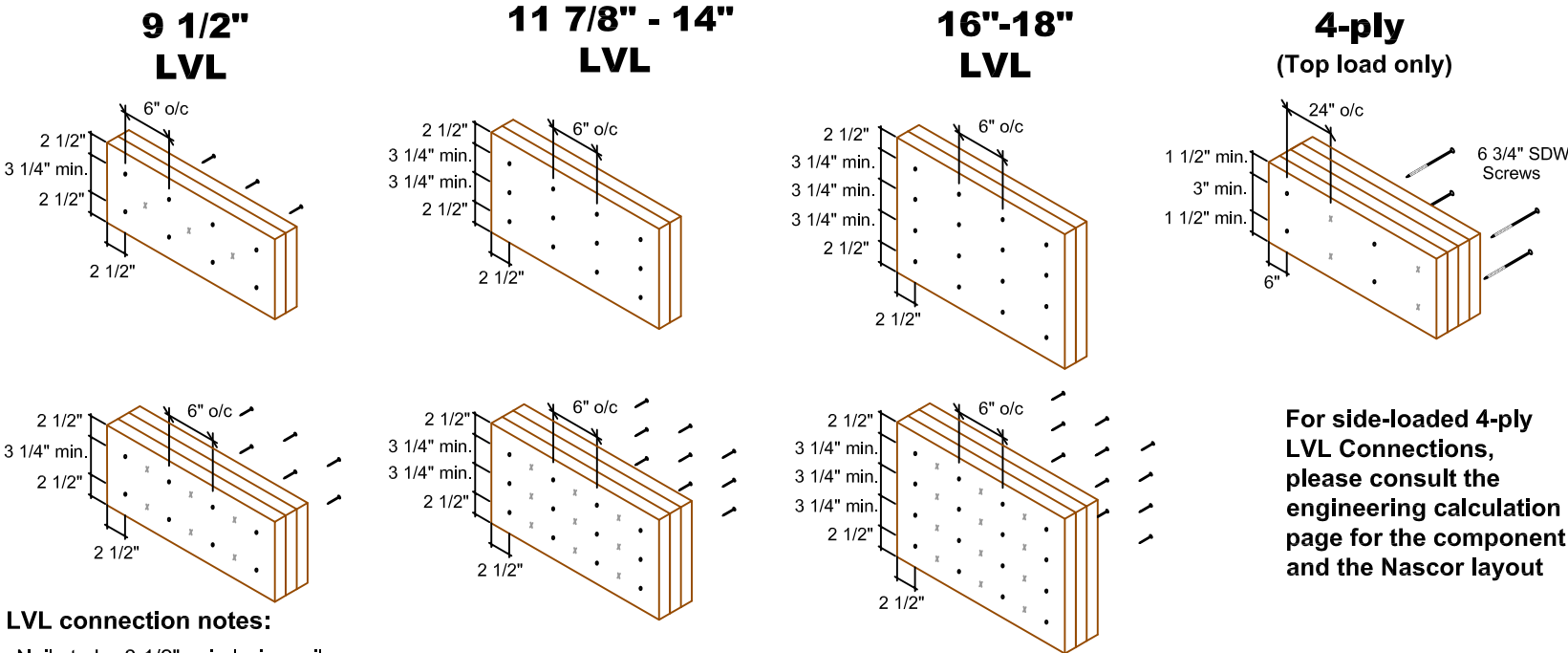
MULTIPLE MEMBER CONNECTIONS

Conventional Connections (for uniform distributed loads)



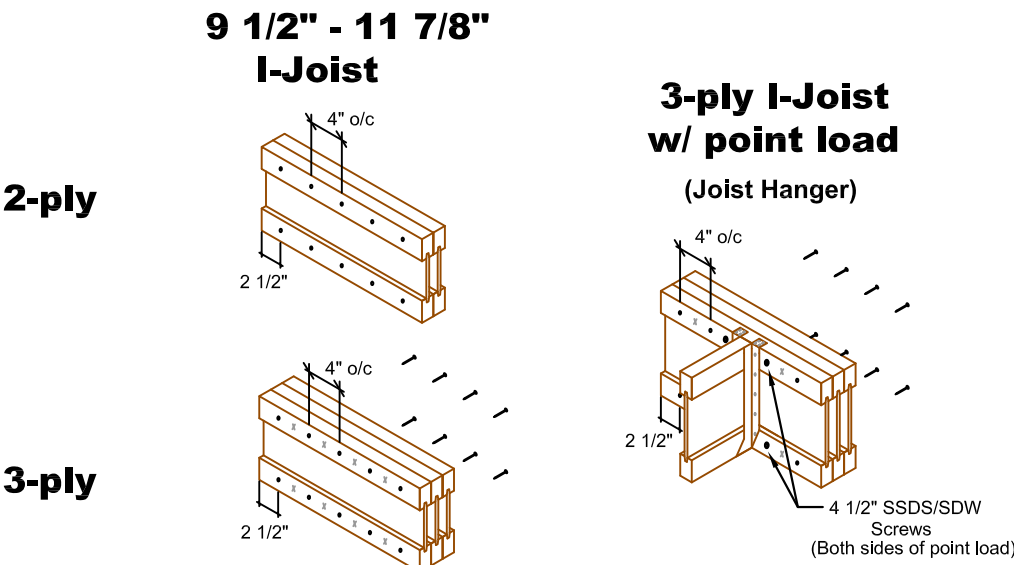
- Conventional connection notes:**
- Nails to be 3" 10d spiral wire nails.
 - Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2 1/2" in from ends.
 - Number of rows and spacing as per details shown, unless noted otherwise.
 - "X" represents nail 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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17-5037
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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:**

Member Type: Beam

Application: Roof

Top Lateral Bracing: Continuous

Slope: 0.00 / 12

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

Building Code: OBC-2012

Standard Load:

Snow Load: 30 PLF

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

0.720" max. LL

Dead Load: 15 PLF

Deck Connection: Nailed

Member Weight: 5.0 PLF

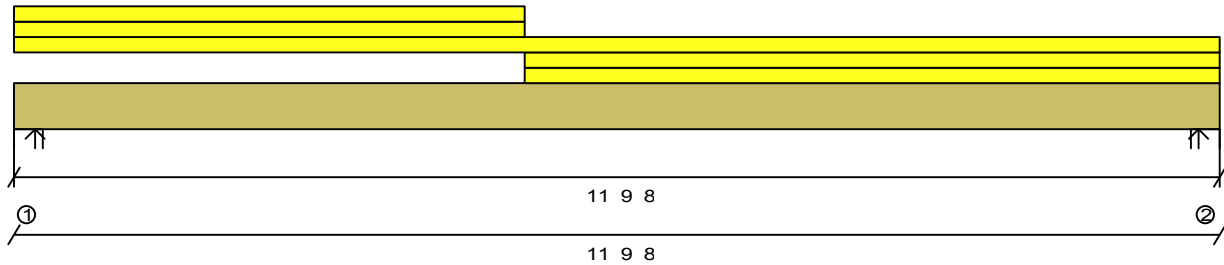
Filename: Beam2

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

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

**Bearings and Factored Reactions**

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

Maximum Unfactored Load Case Reactions

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

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

Design spans

11' 4.250"

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

Design assumes continuous lateral bracing along the top chord.
Design assumes continuous lateral bracing along the bottom chord.

Limit States Design

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

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

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

Control: Positive Moment

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

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

Snow Load: 30 PLF

Dead Load: 15 PLF

Member Type: Beam

Top Lateral Bracing: Continuous

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

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

Deck Connection: Nailed

Filename: Beam3

Application: Roof

Slope: 0.00 / 12

Building Code: OBC-2012

0.720" max. LL

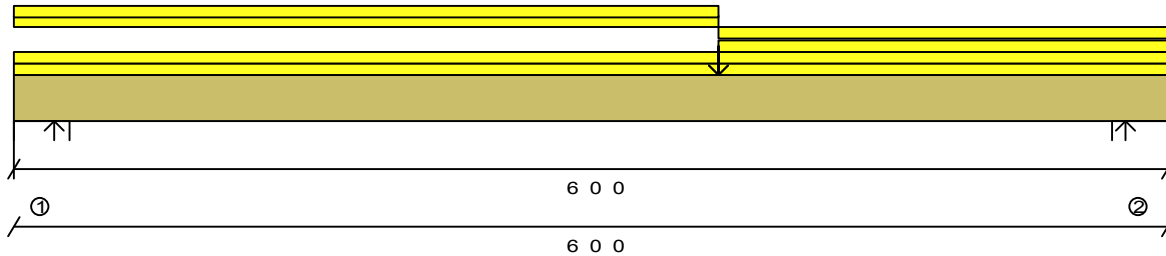
Member Weight: 5.0 PLF

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

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

**Bearings and Factored Reactions**

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

Maximum Unfactored Load Case Reactions

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

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

Design spans
5' 6.750"**Product: S-P-F No1/No2 2x10 2 ply****PASSES DESIGN CHECKS**

Design assumes continuous lateral bracing along the top chord.
Design assumes continuous lateral bracing along the bottom chord.

Limit States Design

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

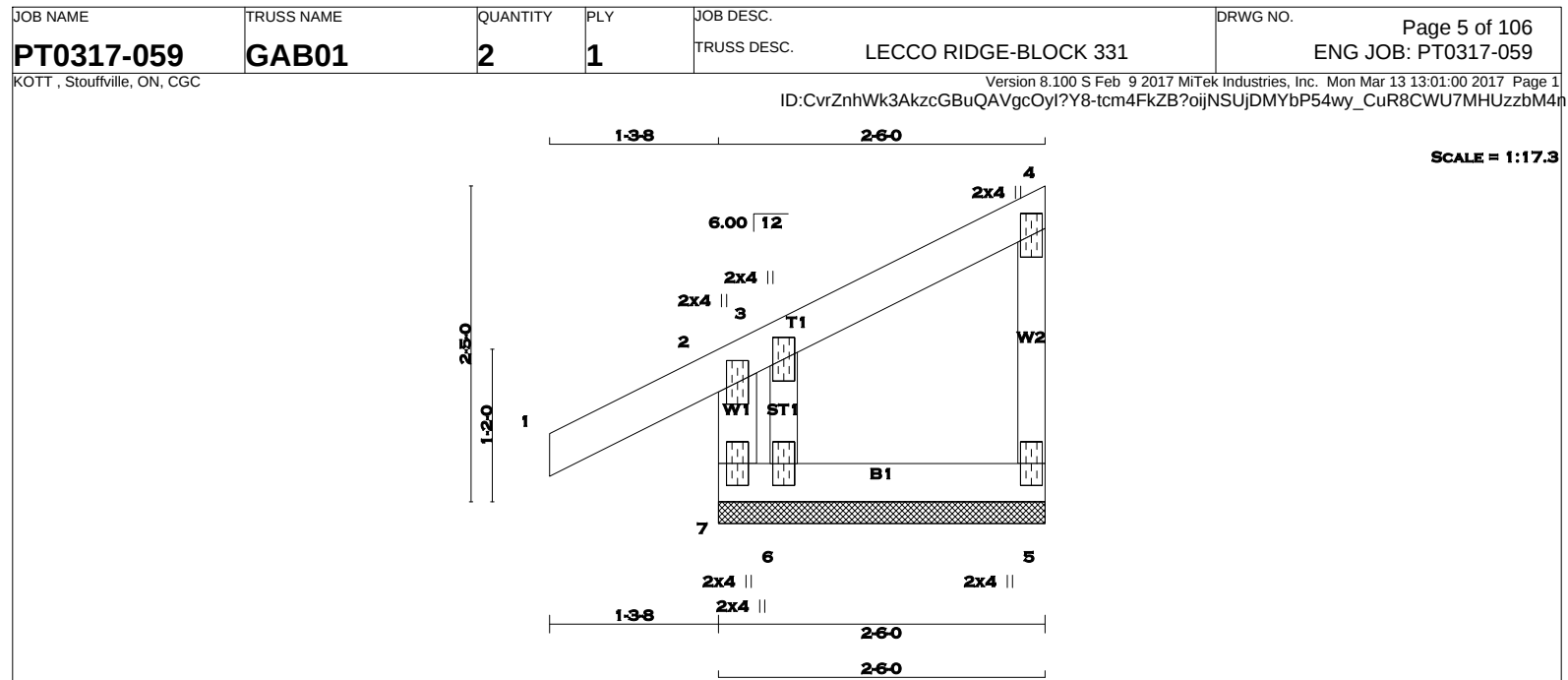
(Actual is factored load effects, Limit is design resistance)

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

Control: Shear

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

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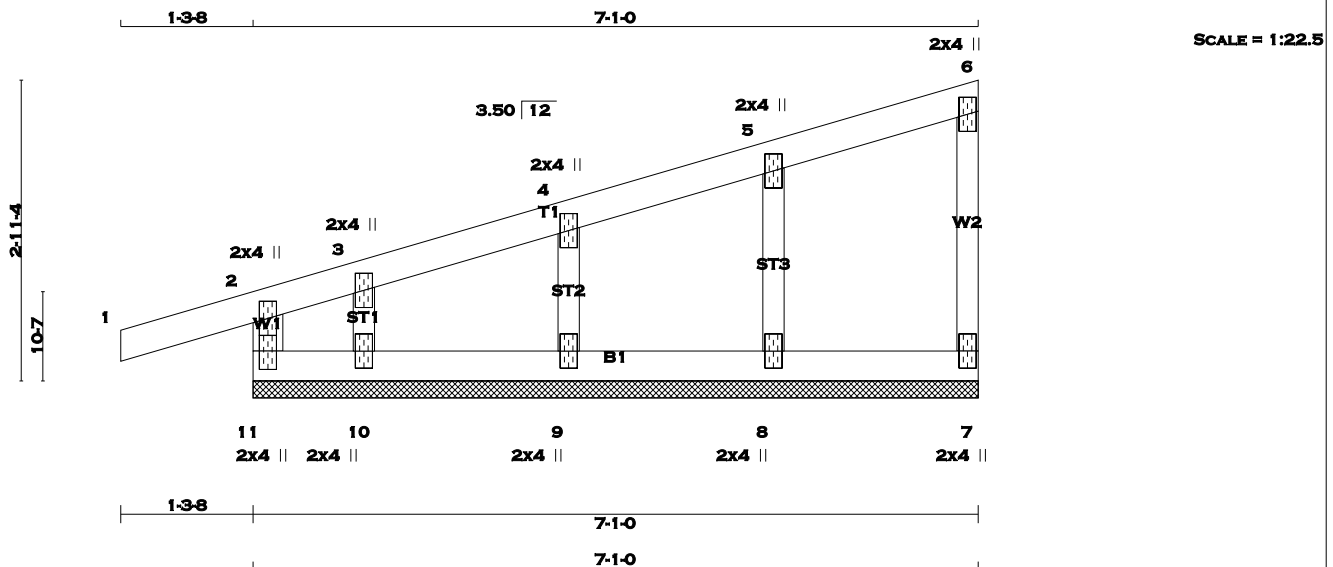
TOTAL WEIGHT = 2 X 11 = 22 lb										[M]																																																																																																							
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 7 - 2 2x4 DRY No.2 SPF 1 - 4 2x4 DRY No.2 SPF 5 - 4 2x3 DRY No.2 SPF 7 - 5 2x4 DRY No.2 SPF ALL WEBS 2x3 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 colspan="2">MAX. FACTORED</th><th colspan="2">FACTORED</th><th colspan="2">MAX. FACTORED</th><th colspan="2">FACTORED</th></tr><tr><th>MEMB.</th><th>FORCE</th><th>VERT. LOAD</th><th>LC1 MAX</th><th>MEMB.</th><th>FORCE</th><th>MAX</th><th></th></tr><tr><th></th><th>(LBS)</th><th>(PLF)</th><th>CSI (LC)</th><th></th><th>(LBS)</th><th>CSI (LC)</th><th></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>-220 / 0</td><td>0.0</td><td>0.0 0.02 (5)</td><td>7.81</td><td>6- 3</td><td>-27 / 105</td><td>0.02 (5)</td></tr><tr><td>1- 2</td><td>0 / 23</td><td>-77.3</td><td>-77.3 0.10 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>2- 3</td><td>-44 / 0</td><td>-77.3</td><td>-77.3 0.08 (1)</td><td>6.25</td><td></td><td></td><td></td></tr><tr><td>3- 4</td><td>-10 / 0</td><td>-77.3</td><td>-77.3 0.04 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>5- 4</td><td>-68 / 0</td><td>0.0</td><td>0.0 0.02 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>7- 6</td><td>-7 / 7</td><td>-17.5</td><td>-17.5 0.02 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>6- 5</td><td>0 / 5</td><td>-17.5</td><td>-17.5 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table> <u>CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN</u>						CHORDS				WEBS				MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED		MEMB.	FORCE	VERT. LOAD	LC1 MAX	MEMB.	FORCE	MAX			(LBS)	(PLF)	CSI (LC)		(LBS)	CSI (LC)		FR-TO		FROM	TO	FR-TO				7- 2	-220 / 0	0.0	0.0 0.02 (5)	7.81	6- 3	-27 / 105	0.02 (5)	1- 2	0 / 23	-77.3	-77.3 0.10 (1)	10.00				2- 3	-44 / 0	-77.3	-77.3 0.08 (1)	6.25				3- 4	-10 / 0	-77.3	-77.3 0.04 (1)	10.00				5- 4	-68 / 0	0.0	0.0 0.02 (1)	7.81				7- 6	-7 / 7	-17.5	-17.5 0.02 (1)	10.00				6- 5	0 / 5	-17.5	-17.5 0.02 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.10 (1-2:1) , BC=0.02 (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																																																																																																													
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED																																																																																																											
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MEMB.	FORCE	MAX																																																																																																											
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READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 2 X 23 = 47 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.				

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)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRAC LENGTH	FACTORED MAX (LC)
FR-TO		FROM TO		FR-TO			
11-2	-189 / 0	0.0	0.0 0.03 (1)	7.81	8-5	-168 / 0	0.03 (1)
1-2	0 / 14	-77.3	-77.3 0.10 (1)	10.00	9-4	-161 / 0	0.02 (1)
2-3	-26 / 0	-77.3	-77.3 0.07 (1)	6.25	10-3	-67 / 0	0.01 (1)
3-4	-9 / 0	-77.3	-77.3 0.04 (1)	10.00			
4-5	-7 / 0	-77.3	-77.3 0.04 (1)	10.00			
5-6	-7 / 0	-77.3	-77.3 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 / 11	-17.5	-17.5 0.01 (4)	10.00			
9-8	0 / 7	-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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

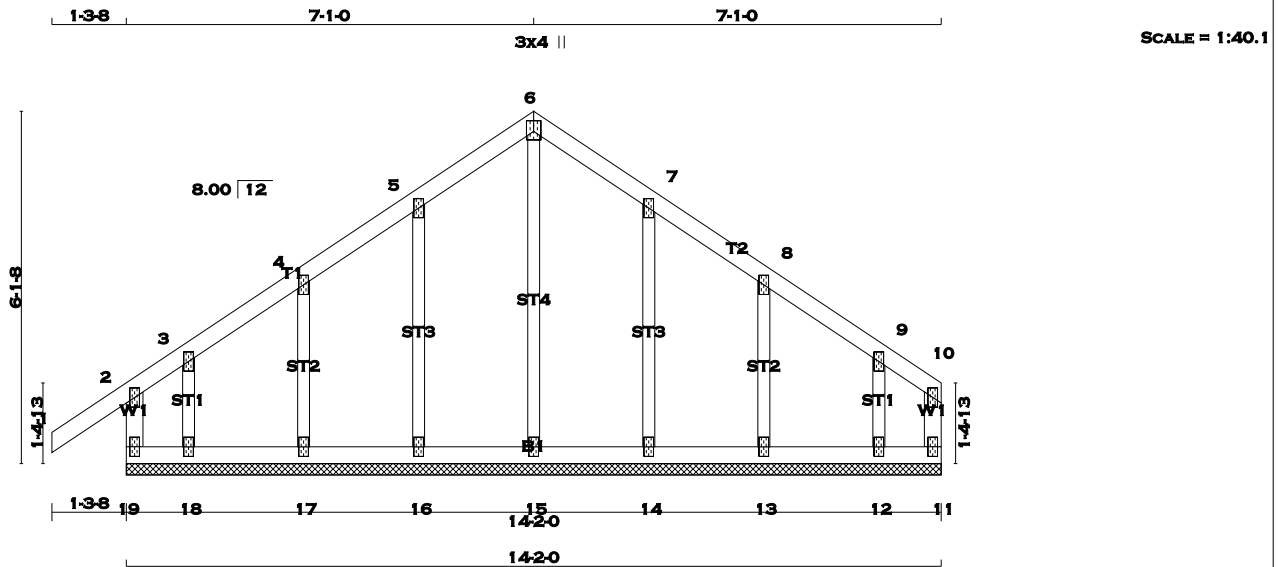
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 59 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
19 - 2	2x4	DRY	No.2	SPF
1 - 6	2x4	DRY	No.2	SPF
6 - 10	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
19 - 11	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)

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

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

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. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	FACTORED MAX. (LC)
FR-TO		FROM TO		FR-TO			
19-2	-191 / 0	0.0	0.0 0.02 (1)	7.81	15-6	-174 / 0	0.10 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	16-5	-155 / 0	0.05 (1)
2-3	-25 / 0	-77.3	-77.3 0.08 (1)	6.25	17-4	-161 / 0	0.03 (1)
3-4	0 / 8	-77.3	-77.3 0.04 (1)	10.00	18-3	-60 / 0	0.01 (1)
4-5	0 / 8	-77.3	-77.3 0.04 (1)	10.00	14-7	-157 / 0	0.05 (1)
5-6	0 / 12	-77.3	-77.3 0.04 (1)	10.00	13-8	-156 / 0	0.03 (1)
6-7	0 / 12	-77.3	-77.3 0.04 (1)	10.00	12-9	-125 / 0	0.02 (1)
7-8	0 / 9	-77.3	-77.3 0.04 (1)	10.00			
8-9	0 / 6	-77.3	-77.3 0.04 (1)	10.00			
9-10	0 / 6	-77.3	-77.3 0.03 (1)	10.00			
11-10	-24 / 0	0.0	0.0 0.00 (1)	7.81			
19-18	0 / 0	-17.5	-17.5 0.02 (1)	10.00			
18-17	-3 / 0	-17.5	-17.5 0.01 (4)	10.00			
17-16	-7 / 0	-17.5	-17.5 0.01 (4)	10.00			
16-15	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			
15-14	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			
14-13	-7 / 0	-17.5	-17.5 0.01 (4)	10.00			
13-12	-3 / 0	-17.5	-17.5 0.01 (4)	10.00			
12-11	0 / 3	-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=0.02 (18-19:1), WB=0.10 (6-15:1), SS=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.

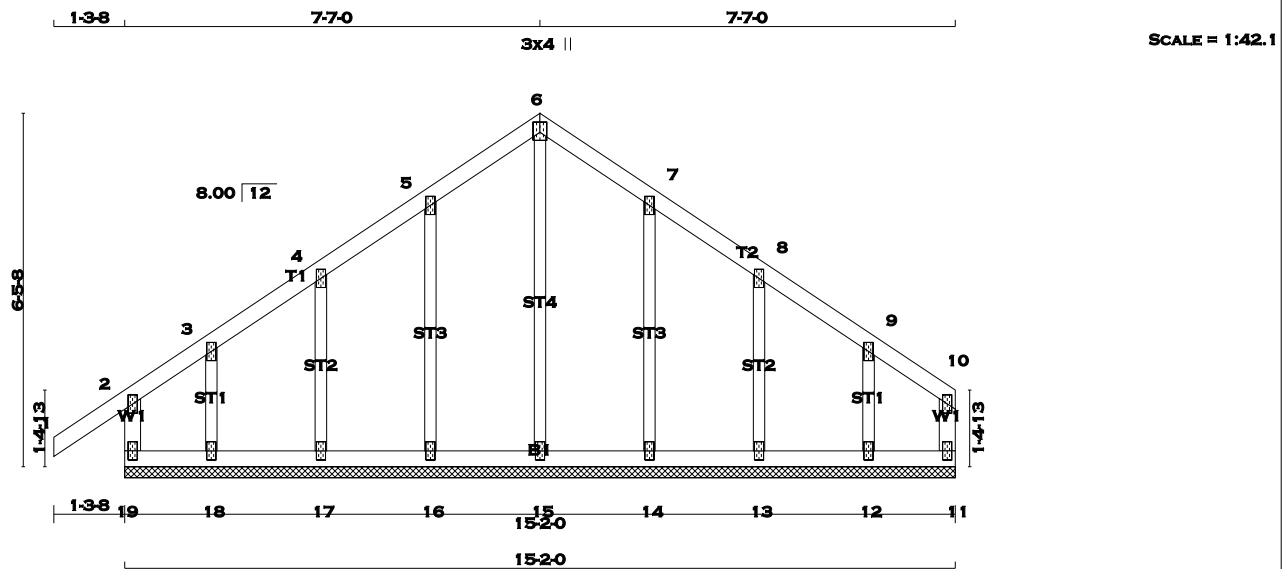
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 63 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
19 - 2	2x4	DRY	No.2	SPF
1 - 6	2x4	DRY	No.2	SPF
6 - 10	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
19 - 11	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)

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

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

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRAC LENGTH (LC)	MAX. FACTORED LC1 (LC)
FR-TO		FROM TO		FR-TO			
19-2	-196 / 0	0.0	0.0 0.02 (1)	7.81	15-6	-171 / 0	0.11 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	16-5	-155 / 0	0.06 (1)
2-3	-19 / 0	-77.3	-77.3 0.08 (1)	6.25	17-4	-161 / 0	0.04 (1)
3-4	0 / 7	-77.3	-77.3 0.04 (1)	10.00	18-3	-94 / 0	0.01 (1)
4-5	0 / 6	-77.3	-77.3 0.04 (1)	10.00	14-7	-157 / 0	0.06 (1)
5-6	0 / 10	-77.3	-77.3 0.04 (1)	10.00	13-8	-153 / 0	0.03 (1)
6-7	0 / 10	-77.3	-77.3 0.04 (1)	10.00	12-9	-142 / 0	0.02 (1)
7-8	0 / 7	-77.3	-77.3 0.04 (1)	10.00			
8-9	-1 / 3	-77.3	-77.3 0.04 (1)	10.00			
9-10	-1 / 2	-77.3	-77.3 0.03 (1)	10.00			
11-10	-49 / 0	0.0	0.0 0.01 (1)	7.81			
19-18	0 / 2	-17.5	-17.5 0.02 (1)	10.00			
18-17	-2 / 1	-17.5	-17.5 0.01 (4)	10.00			
17-16	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
16-15	-8 / 0	-17.5	-17.5 0.01 (4)	10.00			
15-14	-8 / 0	-17.5	-17.5 0.01 (4)	10.00			
14-13	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
13-12	-2 / 1	-17.5	-17.5 0.01 (4)	10.00			
12-11	0 / 4	-17.5	-17.5 0.01 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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THIS DESIGN COMPLIES WITH:
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DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.10 (1-2:1), BC=0.02 (18-19:1), WB=0.11 (6-15:1), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

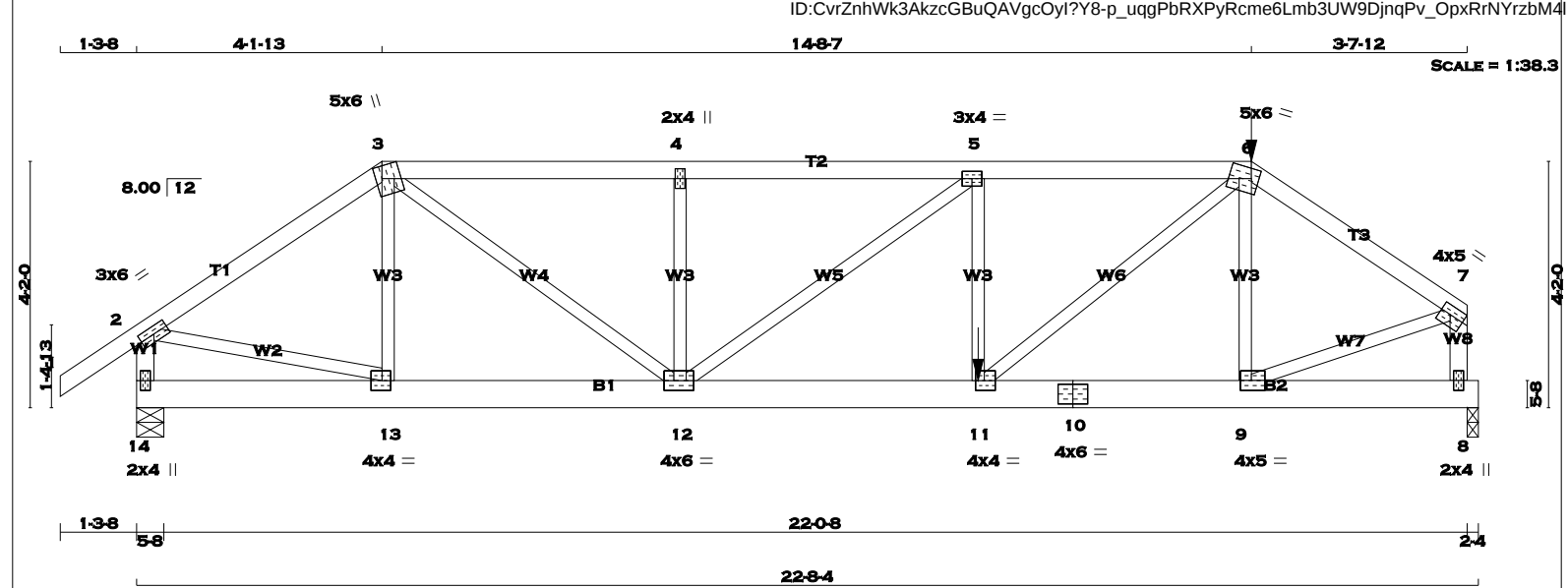
JSI GRIP= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 104 = 208 lb
[M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2 SPF
3 - 6	2x4	DRY	No.2 SPF
6 - 7	2x4	DRY	No.2 SPF
14 - 2	2x4	DRY	No.2 SPF
8 - 7	2x4	DRY	No.2 SPF
14 - 10	2x6	DRY	No.2 SPF
10 - 8	2x6	DRY	No.2 SPF

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
-----------------	-----	-----	------	-----

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-6	12	TOP
6-7	12	TOP
14-2	12	TOP
8-7	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
14-10	12	SIDE(8.7)
10-8	12	SIDE(8.7)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMW-t	MT20	3.0	6.0		
3	TTWW+m	MT20	5.0	6.0	Edge	3.75
4	TMW+w	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
14	1727	0	1727	0	5-8
8	2295	0	2295	0	2-4

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	COMPONENT PERM. LIVE	REACTIIONS WIND	DEAD	SOIL
14	1209	861 / 0	0 / 0	0 / 0	0 / 0	348 / 0	0 / 0
8	1611	1121 / 0	0 / 0	0 / 0	0 / 0	490 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.68 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.06 (1)	10.00	13-3	-271 / 0	0.04 (1)
2-3	-1905 / 0	-77.3	-77.3 0.15 (1)	6.17	3-12	0 / 1667	0.21 (1)
3-4	-2909 / 0	-77.3	-77.3 0.17 (1)	5.23	12-4	-399 / 0	0.05 (1)
4-5	-2909 / 0	-77.3	-77.3 0.23 (1)	5.16	12-5	-853 / 0	0.30 (1)
5-6	-3590 / 0	-145.8	-145.8 0.28 (1)	4.68	11-5	-74 / 87	0.02 (4)
6-7	-2480 / 0	-77.3	-77.3 0.12 (1)	5.62	11-6	0 / 1997	0.25 (1)
14-2	-1698 / 0	0.0	0.0 0.09 (1)	7.81	9-6	-540 / 0	0.07 (1)
8-7	-2252 / 0	0.0	0.0 0.13 (1)	7.45	2-13	0 / 1625	0.20 (1)
					9-7	0 / 2185	0.27 (1)
14-13	0 / 0	-17.5	-17.5 0.02 (4)	10.00			
13-12	0 / 1575	-17.5	-17.5 0.12 (1)	10.00			
12-11	0 / 3591	-17.5	-17.5 0.27 (1)	10.00			
11-10	0 / 2044	-33.0	-33.0 0.17 (1)	10.00			
10-9	0 / 2044	-33.0	-33.0 0.17 (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
6	18-10-4	-219	-219	---	FRONT	VERT	TOTAL
11	14-2-12	-1117	-1117	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = **24.0 IN. C/C**

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-13
RIGHT SETBACK = 3-9-6
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 8-4-14 OF SPAN MEASURED FROM THE RIGHT.

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

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THIS DESIGN COMPLIES WITH:
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- 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 (0.75")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.28 (5-6:1) , BC=0.27 (11-12:1) , WB=0.30 (5-12:1) , SSI=0.17 (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 .

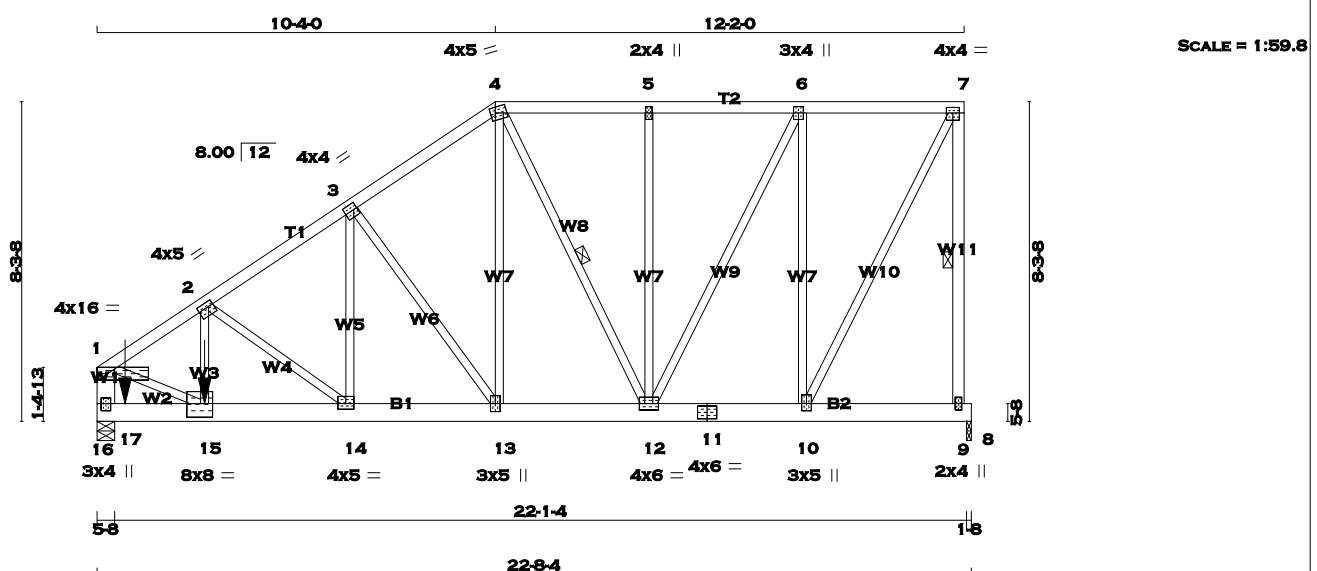
NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
618	354	1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 0.5 degrees
KOTT

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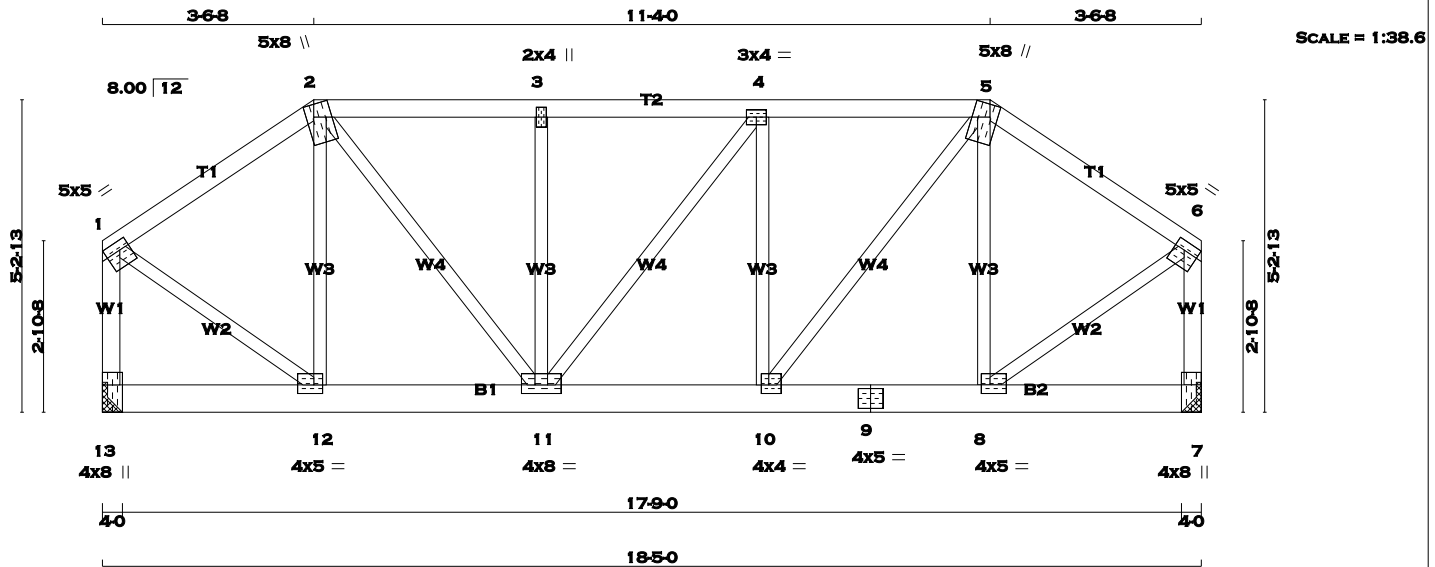


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 7 2x4 DRY No.2 SPF 9 - 7 2x4 DRY No.2 SPF 16 - 1 2x6 DRY No.2 SPF 16 - 11 2x6 DRY No.2 SPF 11 - 8 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED 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 TOP 7-9 1 12 TOP 16-1 2 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 16-11 2 12 SIDE(0.0) 11-8 2 12 TOP 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 1 TMWV-p MT20 4.0 16.0 0.50 Edge 2 TMWW-t MT20 4.0 5.0 1.50 1.50 3 TMWW-t MT20 4.0 4.0 2.00 1.00 4 TTWW-m MT20 4.0 5.0 1.75 1.50 5 TMW+w 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 REQRD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 16 6457 0 6457 0 0 5-8 5-8 8 1705 0 1705 0 0 1-8 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 16 4531 3170 / 0 0 / 0 0 / 0 1361 / 0 0 / 0 8 1197 836 / 0 0 / 0 0 / 0 361 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 8 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. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-9. DBS = 8-0-0. CBF = 88 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-12. DBS = 18-0-0. CBF = 90 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: (3) C H O R D S W E B S MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. FACTORED UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED UNBRAC LENGTH FR-TO FROM TO 1-2 -6361 / 0 -77.3 -77.3 0.20 (1) 3.75 15-2 0 / 3201 0.40 (1) 2-3 -3457 / 0 -77.3 -77.3 0.14 (1) 4.92 2-14 -3010 / 0 0.56 (1) 3-4 -2125 / 0 -77.3 -77.3 0.11 (1) 5.97 14-3 0 / 1979 0.24 (1) 4-5 -1410 / 0 -77.3 -77.3 0.09 (1) 6.25 3-13 -1952 / 0 0.78 (1) 5-6 -1410 / 0 -77.3 -77.3 0.10 (1) 6.25 13-4 0 / 1646 0.20 (1) 6-7 -864 / 0 -77.3 -77.3 0.09 (1) 6.25 4-12 -803 / 0 0.21 (1) 9-7 -1765 / 0 0.0 0.0 0.27 (1) 6.25 12-5 -329 / 0 0.21 (1) 16-1 -5528 / 0 0.0 0.0 0.20 (1) 6.24 12-6 0 / 1214 0.15 (1) 16-17 0 / 0 -17.5 -17.5 0.25 (1) 10.00 10-7 0 / 1846 0.23 (1) 17-15 0 / 0 -17.5 -17.5 0.25 (1) 10.00 1-15 0 / 5619 0.70 (1) 15-14 0 / 5292 -17.5 -17.5 0.46 (1) 10.00 14-13 0 / 2892 -17.5 -17.5 0.20 (1) 10.00 13-12 0 / 1772 -17.5 -17.5 0.13 (1) 10.00 12-11 0 / 864 -17.5 -17.5 0.09 (1) 10.00 11-10 0 / 864 -17.5 -17.5 0.09 (1) 10.00 10-9 0 / 0 -17.5 -17.5 0.12 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.12 (1) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 15 2-9-8 -4950 -4950 --- FRONT VERT TOTAL 17 8-12 -1074 -1074 --- 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 *** NON STANDARD GIRDER *** ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.76") CALCULATED VERT. DEFL.(LL) = L/999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.76") CALCULATED VERT. DEFL.(TL) = L/999 (0.10") CSI: TC=0.27 (7-9:1) , BC=0.46 (14-15:1) , WB=0.92 (6-10:1) , SSI=0.57 (8-9:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (6) (INPUT = 0.90) JSI METAL= 0.52 (1) (INPUT = 1.00)		
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TOTAL WEIGHT = 2 X 96 = 192 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-2	12	TOP
2-5	12	TOP
5-6	12	TOP
13-1	12	TOP
7-6	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
13-9	12	SIDE(208.6)
9-7	12	SIDE(208.6)
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	TTWW+m	MT20	5.0	8.0	2.50	1.50
3	TMW+w	MT20	2.0	4.0		
4	TMWW-t	MT20	3.0	4.0		
5	TTWW+m	MT20	5.0	8.0	2.50	1.50
6	TMVW-t	MT20	5.0	5.0	1.75	Edge

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	HORZ	DOWN	HORZ	IN-SX	IN-SX
13	4715	0	4715	0	0	HANGER BY OTHERS	
7	4715	0	4715	0	0	HANGER BY OTHERS	

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	3309	2315 / 0	0 / 0	0 / 0	0 / 0	994 / 0	0 / 0
7	3309	2315 / 0	0 / 0	0 / 0	0 / 0	994 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
1-2	-3524 / 0	-77.3	-77.3 0.14 (1)	4.88	12-2	-161 / 8	0.03 (1)
2-3	-4373 / 0	-77.3	-77.3 0.15 (1)	4.46	2-11	0 / 2344	0.29 (1)
3-4	-4373 / 0	-77.3	-77.3 0.13 (1)	4.48	11-3	-292 / 0	0.06 (1)
4-5	-4381 / 0	-77.3	-77.3 0.15 (1)	4.46	11-4	-14 / 0	0.00 (1)
5-6	-3522 / 0	-77.3	-77.3 0.14 (1)	4.88	10-4	-287 / 0	0.06 (1)
13-1	-4082 / 0	0.0	0.0 0.31 (1)	5.87	10-5	0 / 2361	0.29 (1)
7-6	-4080 / 0	0.0	0.0 0.31 (1)	5.87	8-5	-173 / 6	0.03 (1)
					1-12	0 / 3535	0.44 (1)
					8-6	0 / 3533	0.44 (1)
13-12	0 / 0	-434.7	-434.7 0.21 (1)	10.00			
12-11	0 / 2923	-434.7	-434.7 0.40 (1)	10.00			
11-10	0 / 4382	-434.7	-434.7 0.43 (1)	10.00			
10-9	0 / 2921	-434.7	-434.7 0.40 (1)	10.00			
9-8	0 / 2921	-434.7	-434.7 0.40 (1)	10.00			
8-7	0 / 0	-434.7	-434.7 0.21 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CStdGirder
 START DISTANCE = 5-8
 START SPAN CARRIED = 19-8-10
 END DISTANCE = 18-10-8
 END SPAN CARRIED = 19-8-10
 END WALL WIDTH = 1-8
 APPLIED TO FRONT SIDE OF BOTTOM CHORD.
 - ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.06")
 ALLOWABLE DEFL.(TL)= L/360 (0.61")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.31 (1-13:1), BC=0.43 (10-11:1), WB=0.44 (1-12:1), SSI=0.32 (12-13:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

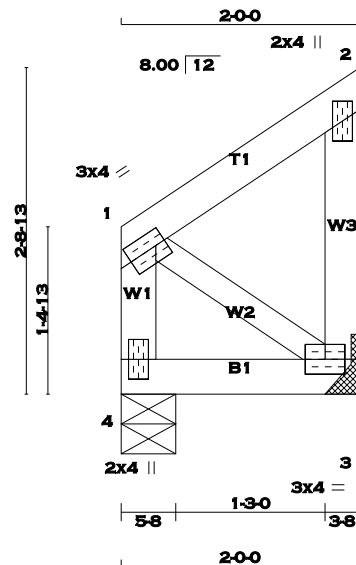
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (1) (INPUT = 0.90)
 JSI METAL= 0.54 (1) (INPUT = 1.00)



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SCALE = 1:19.3

TOTAL WEIGHT = 10 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	No.2	
1 - 2	2x4	DRY	No.2	SPF	
3 - 2	2x4	DRY	No.2	SPF	
4 - 1	2x4	DRY	No.2	SPF	
4 - 3	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
1	TMVW-t	MT20	3.0	4.0	1.50	1.00
2	TMV+p	MT20	2.0	4.0		
3	BMVW1-t	MT20	3.0	4.0		
4	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 UPLIFT	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
3	211	0	211	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8
4	211	0	211	0	0	5-8 5-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
3	148	104 / 0	0 / 0	0 / 0	0 / 0	45 / 0	0 / 0
4	148	104 / 0	0 / 0	0 / 0	0 / 0	45 / 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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRAC. LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 0	-77.3	-77.3	0.06 (1)	10.00	1-3	0 / 0 0.00 (1)
3-2	-77 / 0	0.0	0.0	0.01 (1)	7.81		
4-1	-77 / 0	0.0	0.0	0.01 (1)	7.81		
4-3	0 / 0	-134.1	-134.1	0.10 (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 = 7-4-8
END DISTANCE = 2-0-0
END SPAN CARRIED = 7-4-8
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 (1-2:1) , BC=0.10 (3-4:1) , WB=0.00 (1-3:1) , SSI=0.12 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION	(PL)	(PL)
	(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.

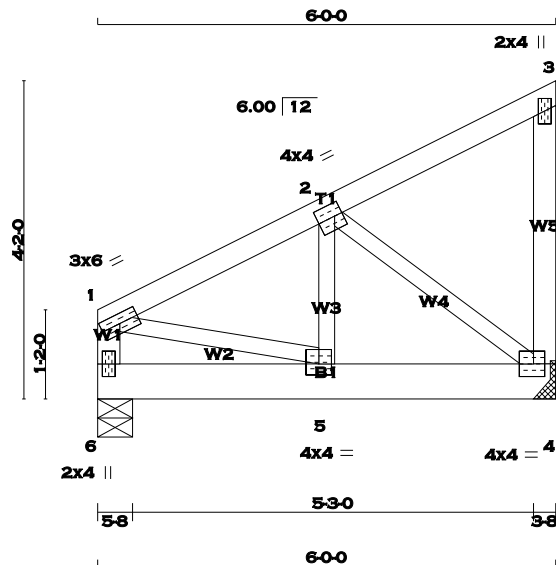
JSI GRIP= 0.08 (3) (INPUT = 0.90)
JSI METAL= 0.02 (2) (INPUT = 1.00)



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SCALE = 1:30.2

TOTAL WEIGHT = 29 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
4 - 3	2x4	DRY	No.2	SPF
6 - 1	2x4	DRY	No.2	SPF
6 - 4	2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	6.0		
2	TMVW-t	MT20	4.0	4.0	2.00	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	4.0	2.00	1.75
5	BMVW-t	MT20	4.0	4.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
4	1117	0	1117	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8
6	1117	0	1117	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	784	549 / 0	0 / 0	0 / 0	0 / 0	236 / 0	0 / 0
6	784	549 / 0	0 / 0	0 / 0	0 / 0	236 / 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 = 6.21 FT.
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		MEMB.		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRAC. LENGTH	MEMB.	FORCE (LBS)	MAX. UNBRAC. LENGTH	MEMB.	FORCE (LBS)
FR-TO		FROM	TO		FR-TO			FR-TO	
1-2	-951 / 0	-77.3	-77.3	0.11 (1)	6.21	5-2	0 / 804	0.20 (1)	
2-3	-10 / 0	-77.3	-77.3	0.10 (1)	10.00	2-4	-1078 / 0	0.26 (1)	
4-3	-94 / 0	0.0	0.0	0.02 (1)	7.81	1-5	0 / 887	0.22 (1)	
6-1	-745 / 0	0.0	0.0	0.08 (1)	7.81				
6-5	0 / 0	-295.1	-295.1	0.17 (1)	10.00				
5-4	0 / 859	-295.1	-295.1	0.28 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 14-2-0
END DISTANCE = 6-0-0
END SPAN CARRIED = 14-2-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

CSI: TC=0.11 (1-2:1) , BC=0.28 (4-5:1) , WB=0.26 (2-4:1) , SSI=0.34 (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	(PL)	(PL)
	(PSI)	(PL)	(PL)		
	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 (2) (INPUT = 0.90)
JSI METAL= 0.32 (5) (INPUT = 1.00)

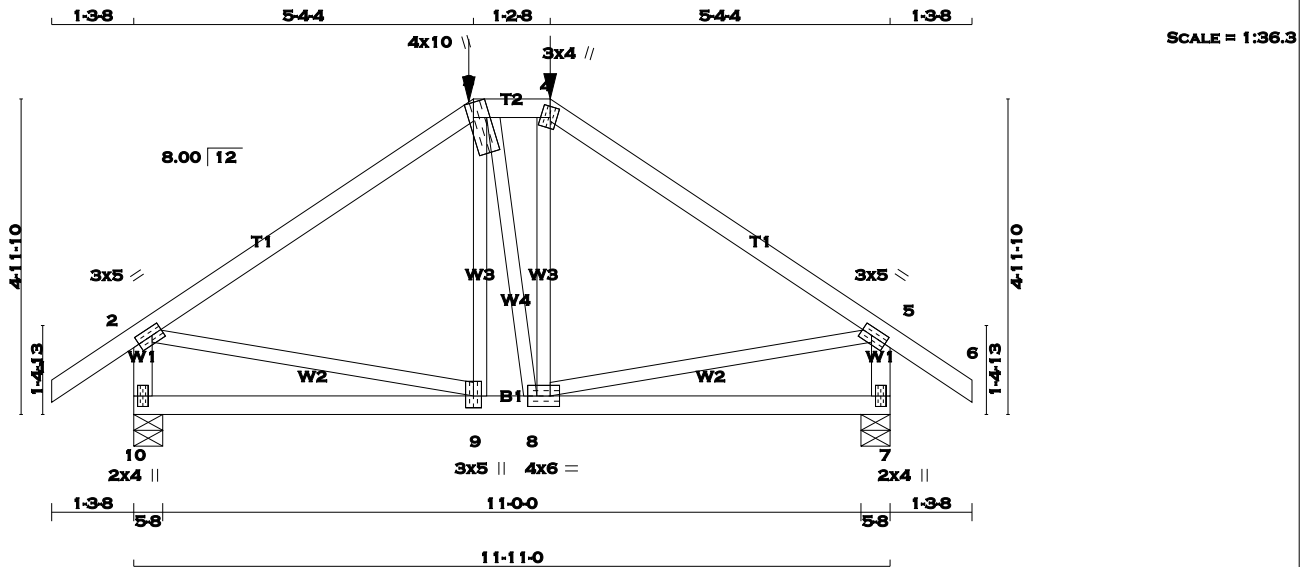


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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 55 lb [M]

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 - 6	2x4	DRY	No.2		SPF
10 - 2	2x4	DRY	No.2		SPF
7 - 5	2x4	DRY	No.2		SPF
10 - 7	2x4	DRY	No.2		SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTWW+m	MT20	4.0	10.0	Edge	1.00
4	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
7	BMV1+p	MT20	2.0	4.0		
8	BMWWV-t	MT20	4.0	6.0		
9	BMWW+t	MT20	3.0	5.0	2.25	1.50
10	BMV1+p	MT20	2.0	4.0		

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

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 172.6 lbs FACTORED DOWN AT 6-6-12, AND 172.6 lbs FACTORED DOWN AT 5-4-4 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
10		902	0	902	0	0	5-8	5-8	
7		902	0	902	0	0	5-8	5-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
10	630	456 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0		
7	630	456 / 0	0 / 0	0 / 0	0 / 0	174 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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	-77.3 -77.3	0.11 (1)	10.00	9-3	-35 / 59	0.02 (4)
2-3	-742 / 0	-77.3 -77.3	0.45 (1)	6.23	3-8	0 / 9	0.00 (4)
3-4	-616 / 0	-107.2 -107.2	0.03 (1)	6.25	8-4	-31 / 68	0.03 (4)
4-5	-743 / 0	-77.3 -77.3	0.45 (1)	6.23	2-9	0 / 628	0.16 (1)
5-6	0 / 29	-77.3 -77.3	0.11 (1)	10.00	8-5	0 / 629	0.16 (1)
10-2	-848 / 0	0.0	0.0 0.10 (1)	7.81			
7-5	-847 / 0	0.0	0.0 0.10 (1)	7.81			
10-9	0 / 0	-24.2 -24.2	0.18 (4)	10.00			
9-8	0 / 616	-24.2 -24.2	0.24 (4)	10.00			
8-7	0 / 0	-24.2 -24.2	0.19 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	5-4-4	-173	-173	---	FRONT	VERT	TOTAL
4	6-6-12	-173	-173	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 5-4-4
END SETBACK = 4-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDT'L 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 (0.40")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.45 (4-5:1), BC=0.24 (8-9:4), WB=0.16 (5-8:1), SSI=0.15 (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. = 5.0 Deg.

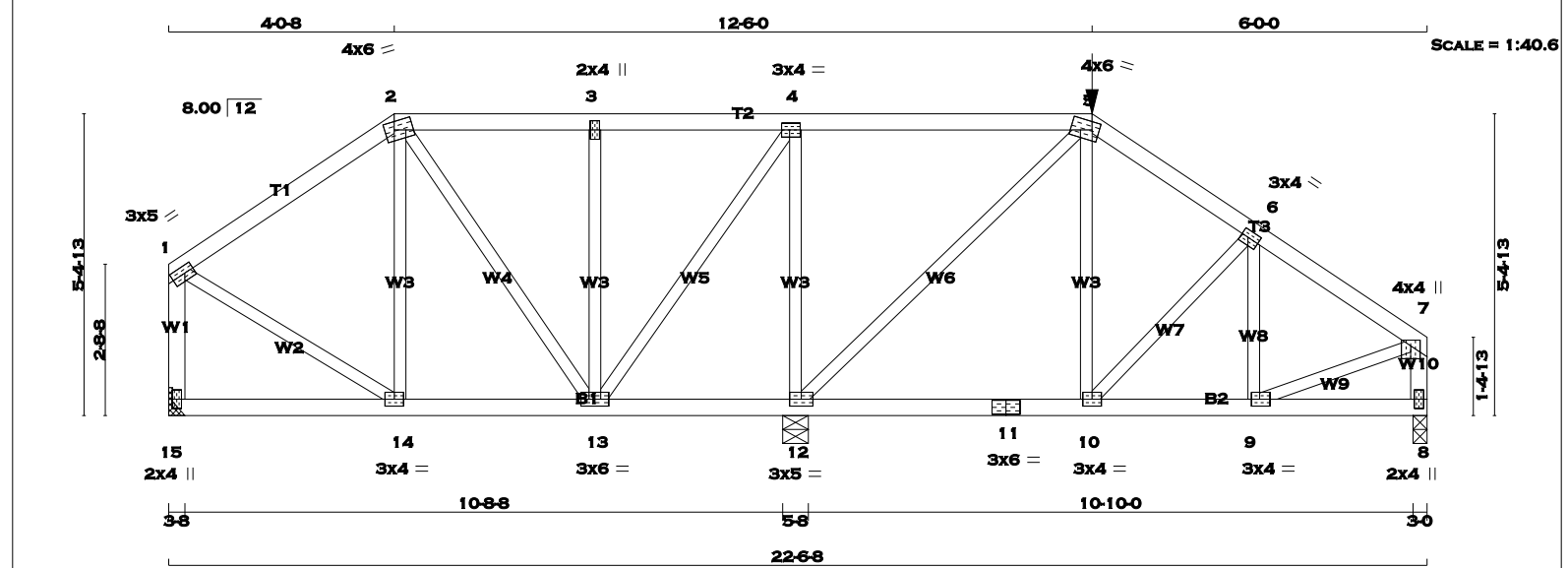
JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.28 (5) (INPUT = 1.00)



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IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 100 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 2	2x4	DRY	No.2	SPF
2 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
15 - 1	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
15 - 11	2x4	DRY	No.2	SPF
11 - 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
1	TMVW-t	MT20	3.0	5.0	1.50	2.00
2	TTWW-m	MT20	4.0	6.0	1.75	2.00
3	TMW+w	MT20	2.0	4.0		
4	TMWW-t	MT20	3.0	4.0	1.50	1.75
5	TTWW-m	MT20	4.0	6.0	1.75	1.50
6	TMWW-t	MT20	3.0	4.0	1.50	1.50
7	TMVW+p	MT20	4.0	4.0	1.25	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMWW-t	MT20	3.0	4.0	1.50	1.75
10	BMWW-t	MT20	3.0	4.0		
11	BS-t	MT20	3.0	6.0		
12	BMWW1-t	MT20	3.0	5.0		
13	BMWWW-t	MT20	3.0	6.0		
14	BMWW-t	MT20	3.0	4.0		
15	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) 348.1 lbs FACTORED DOWN AT 16-6-8 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		REQRD	
JT		VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
15	491	0	491	0	0	5-8	5-8	5-8	5-8
12	1723	0	1723	0	0	3-0	3-0	3-0	3-0
8	842	0	842	0	0				

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	345	242 / 0	0 / 0	0 / 0	0 / 0	103 / 0	0 / 0
12	1208	853 / 0	0 / 0	0 / 0	0 / 0	355 / 0	0 / 0
8	595	397 / 0	0 / 0	0 / 0	0 / 0	198 / 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)	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	-296 / 0	-77.3 -77.3	0.24 (1)	6-25	14-2	-55 / 49	0.02 (1)
2-3	-197 / 0	-77.3 -77.3	0.17 (1)	6-25	2-13	-84 / 0	0.06 (1)
3-4	-197 / 0	-77.3 -77.3	0.55 (1)	6-25	13-3	-191 / 0	0.09 (1)
4-5	0 / 6	-149.9 -149.9	0.55 (1)	10.00	13-4	0 / 347	0.09 (1)
5-6	-744 / 0	-77.3 -77.3	0.12 (1)	6-25	12-4	-984 / 0	0.44 (1)
6-7	-815 / 0	-77.3 -77.3	0.13 (1)	6-25	12-5	-849 / 0	0.88 (1)
15-1	-463 / 0	0.0 0.0	0.07 (1)	7.81	10-5	0 / 231	0.08 (4)
8-7	-795 / 0	0.0 0.0	0.09 (1)	7.81	10-6	-122 / 0	0.04 (1)
					9-6	-141 / 36	0.03 (1)
15-14	0 / 0	-17.5 -17.5	0.08 (4)	10.00	1-14	0 / 284	0.07 (1)
14-13	0 / 245	-17.5 -17.5	0.10 (4)	10.00	9-7	0 / 730	0.18 (1)
13-12	-6 / 0	-17.5 -17.5	0.17 (4)	10.00			
12-11	0 / 610	-33.9 -33.9	0.23 (1)	10.00			
11-10	0 / 610	-33.9 -33.9	0.23 (1)	10.00			
10-9	0 / 690	-33.9 -33.9	0.21 (4)	10.00			
9-8	0 / 0	-33.9 -33.9	0.08 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	TYPE
5	16-6-8	-348	-348	---	FRONT

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 = 4-0-8
RIGHT SETBACK = 6-0-0
END SETBACK = 6-0-0
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 11-1-0 OF SPAN MEASURED FROM THE RIGHT.

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 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 (0.38")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.55 (3-4-1) , BC=0.23 (10-12-1) , WB=0.88 (5-12-1) , SSI=0.40 (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)	(PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

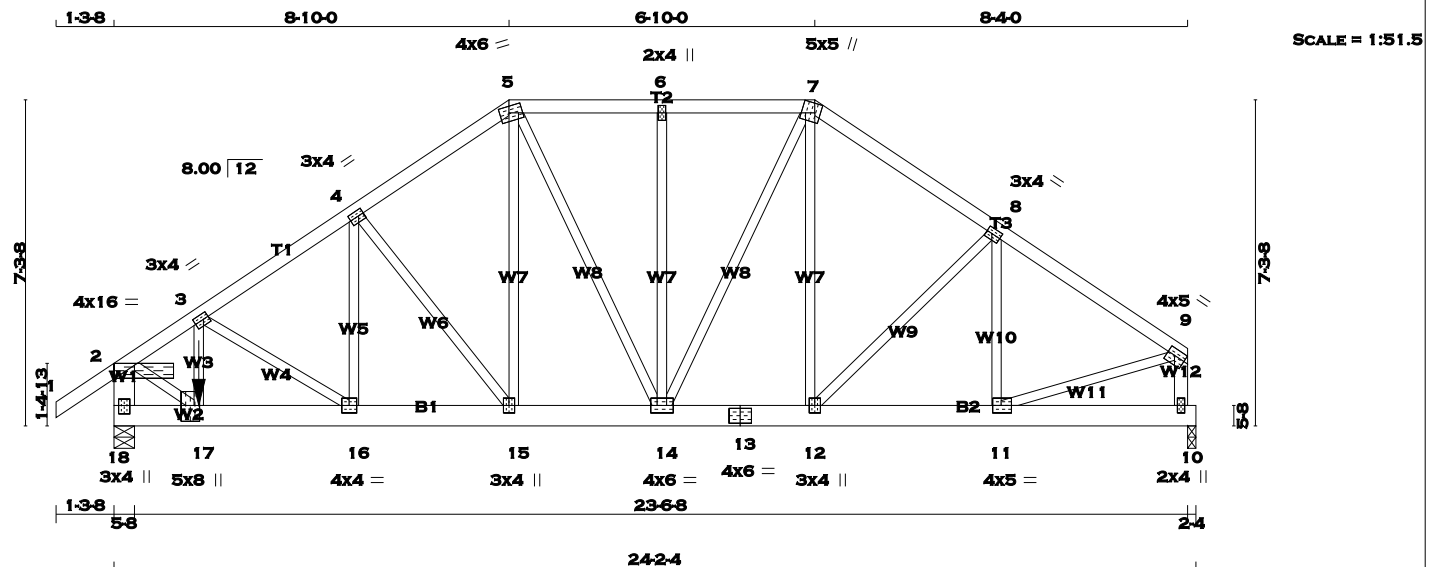
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.28 (5) (INPUT = 1.00)

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
18 - 2	2x6	DRY	No.2
10 - 9	2x4	DRY	No.2
18 - 13	2x6	DRY	No.2
13 - 10	2x6	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-p	MT20	4.0	16.0	Edge	5.50
3, 4, 8						
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	TTWW-m	MT20	4.0	6.0	1.75	2.50
6	TMW+w	MT20	2.0	4.0		
7	TTWW+m	MT20	5.0	5.0	2.50	1.50
9	TMVW-t	MT20	4.0	5.0	1.75	Edge
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	4.0	5.0	2.00	2.25
12	BMVW+t	MT20	3.0	4.0		
13	BS-t	MT20	4.0	6.0		
14	BMVWV-t	MT20	4.0	6.0		
15	BMVW+t	MT20	3.0	4.0		
16	BMVW-t	MT20	4.0	4.0		
17	BMVW+t	MT20	5.0	8.0	4.25	1.50
18	BMV1+p	MT20	3.0	4.0	2.25	1.50
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) 1697.0 lbs FACTORED DOWN AT 1-10-12 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		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	JT	HORZ	JT	DOWN	JT	UPLIFT	JT	IN-SX
18	2810	0	2810	0	0	5-8	5-8		
10	1269	0	1269	0	0	2-4	2-4		

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	JT	SNOW	JT	LIVE	JT	PERM.LIVE
18	1970	1392 / 0	0 / 0	0 / 0	0 / 0	578 / 0	0 / 0
10	891	623 / 0	0 / 0	0 / 0	0 / 0	268 / 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. PURLINE 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: (3)

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	LC1 MAX (PLF)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.11 (1)	10.00	17-3	0 / 501	0.12 (1)
2-3	-2527 / 0	-77.3	-77.3 0.19 (1)	4.14	3-16	-585 / 0	0.17 (1)
3-4	-1903 / 0	-77.3	-77.3 0.22 (1)	4.64	16-4	0 / 439	0.11 (1)
4-5	-1463 / 0	-77.3	-77.3 0.19 (1)	5.18	4-15	-642 / 0	0.37 (1)
5-6	-1225 / 0	-77.3	-77.3 0.17 (1)	5.57	15-5	0 / 560	0.14 (1)
6-7	-1225 / 0	-77.3	-77.3 0.17 (1)	5.57	5-14	0 / 36	0.01 (1)
7-8	-1294 / 0	-77.3	-77.3 0.28 (1)	5.32	14-6	-312 / 0	0.28 (1)
8-9	-1332 / 0	-77.3	-77.3 0.28 (1)	5.26	14-7	0 / 375	0.09 (1)
18-2	-2702 / 0	0.0	0.0 0.19 (1)	6.30	12-7	0 / 146	0.04 (1)
10-9	-1229 / 0	0.0	0.0 0.14 (1)	7.20	12-8	-97 / 0	0.06 (1)
					11-8	-287 / 0	0.09 (1)
18-17	0 / 0	-17.5	-17.5 0.13 (1)	10.00	2-17	0 / 2357	0.58 (1)
17-16	0 / 2087	-17.5	-17.5 0.40 (1)	10.00	11-9	0 / 1179	0.29 (1)
16-15	0 / 1597	-17.5	-17.5 0.22 (1)	10.00			
15-14	0 / 1209	-17.5	-17.5 0.17 (1)	10.00			
14-13	0 / 1059	-17.5	-17.5 0.15 (1)	10.00			
13-12	0 / 1059	-17.5	-17.5 0.15 (1)	10.00			
12-11	0 / 1126	-17.5	-17.5 0.17 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.04 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE
17	1-10-12	-1697	-1697	---	FRONT

DIR.		TYPE	
FRONT	VERT	FACE	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

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

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

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

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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.28 (8-9:1), BC=0.40 (16-17:1), WB=0.58 (2-17:1), SSI=0.14 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

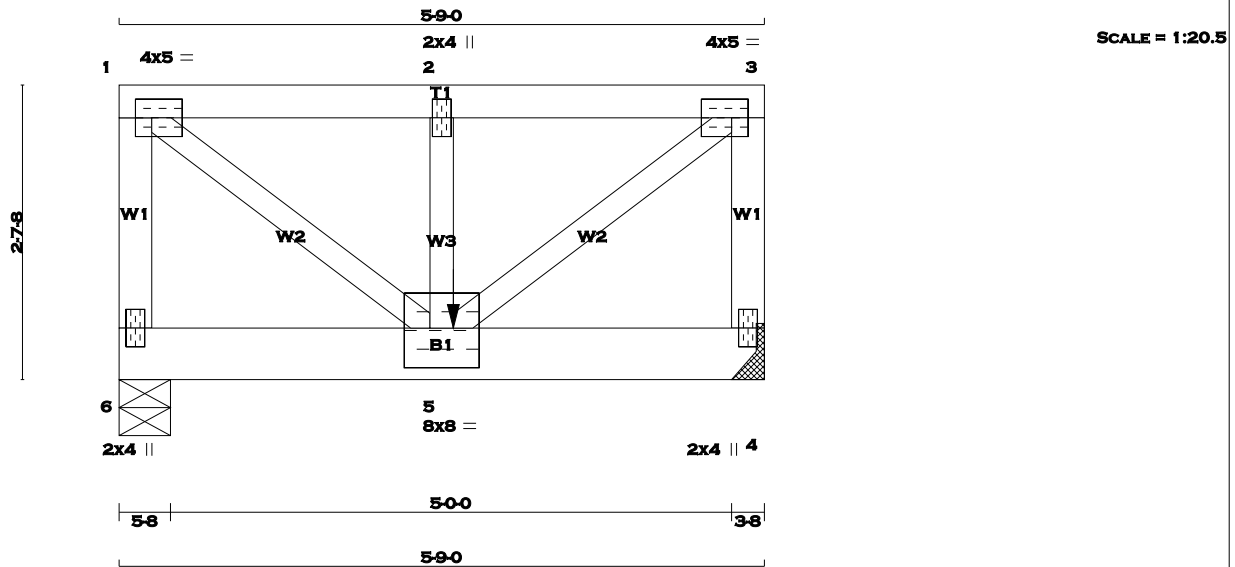
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.54 (17) (INPUT = 1.00)



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MAR 29, 2017
17-5037
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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	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
1	TMW-t	MT20	4.0	5.0	2.00	1.75
2	TMW-w	MT20	2.0	4.0		
3	TMW-t	MT20	4.0	5.0	2.00	1.75
4	BMV1+p	MT20	2.0	4.0		
5	BMVWW-t	MT20	8.0	8.0	4.25	4.00
6	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 491.6 lbs FACTORED DOWN AT 2-11-12 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	IN-SX	IN-SX	
6	1320	0		1320	0	0	5-8	5-8	
4	1697	0		1697	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
6		927	648 / 0	0 / 0	0 / 0	0 / 0	278 / 0
4		1191	833 / 0	0 / 0	0 / 0	0 / 0	358 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.66 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.

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			
6-1	-1050 / 0	0.0	0.0 0.14 (1)	7.64	1-5	0 / 1543	0.38 (1)
1-2	-1216 / 0	-77.3	-77.3 0.12 (1)	5.66	5-2	-246 / 0	0.04 (1)
2-3	-1216 / 0	-77.3	-77.3 0.12 (1)	5.66	5-3	0 / 1543	0.38 (1)
4-3	-1050 / 0	0.0	0.0 0.14 (1)	7.64			
6-5	0 / 0	-230.9	-230.9 0.13 (1)	10.00			
5-4	0 / 0	-493.0	-493.0 0.31 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE
5	2-11-12	-492	-492	---	FRONT
					VERT
					TYPE
					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: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-5-8
END DISTANCE = 2-11-12
END SPAN CARRIED = 11-5-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 2-11-12
START SPAN CARRIED = 22-2-2
END DISTANCE = 5-9-0
END SPAN CARRIED = 22-2-2
END WALL WIDTH = 1-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.14 (1-6:1), BC=0.31 (4-5:1), WB=0.38 (1-5:1), SSI=0.51 (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

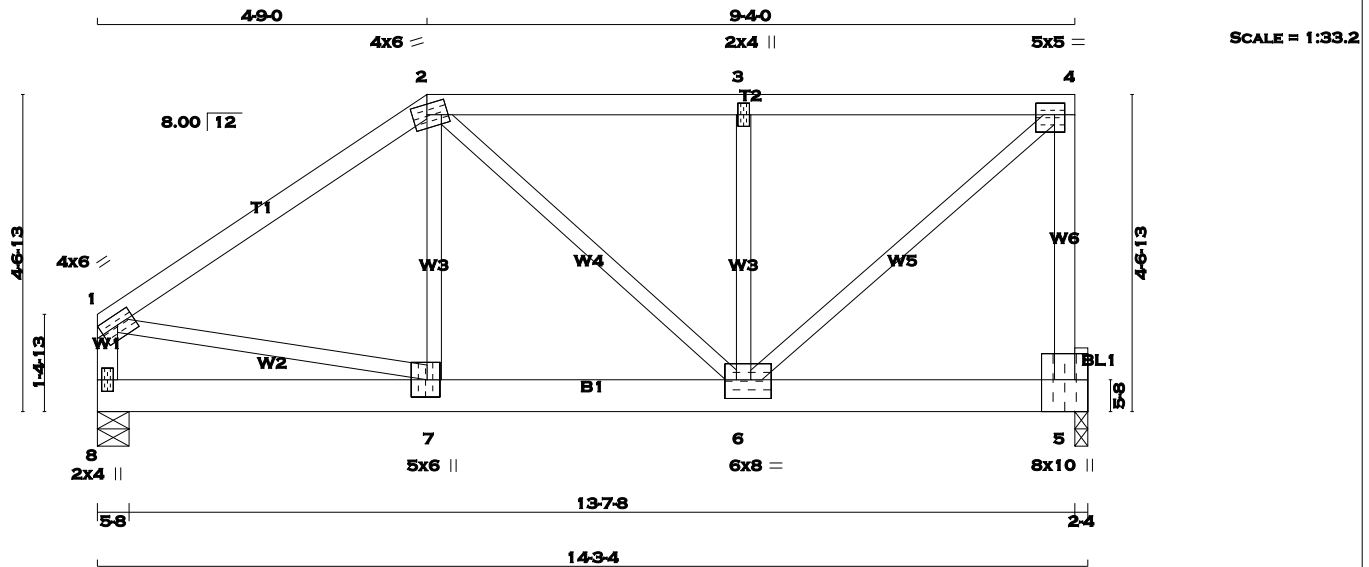
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .



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TOTAL WEIGHT = 6 X 68 = 407 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			
8 - 1	2x4	DRY	No.2 SPF			
8 - 5	2x6	DRY	2100F 1.8E SPF			
BEARING BLOCKS						
BL1	2x6	DRY	No.2 SPF			
ALL WEBS 2x3 DRY No.2 SPF						
EXCEPT						
DRY: SEASONED LUMBER.						
DESIGN CONSISTS OF <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						
1-2	1	12	TOP			
2-4	1	12	TOP			
4-5	1	12	TOP			
8-1	1	12	TOP			
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS						
8-5	2	5	SIDE(517.7)			
WEBS : (0.122"x3") SPIRAL NAILS						
2x3	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
1	TMVW-t	MT20	4.0	6.0	1.75	Edge
2	TTWW-m	MT20	4.0	6.0	1.75	2.50
3	TMW+w	MT20	2.0	4.0		
4	TMVW-t	MT20	5.0	5.0	2.00	1.75
5	BMVK1+p	MT20	8.0	10.0	5.50	Edge
6	BMWWW-t	MT20	6.0	8.0	3.25	2.00

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	
5		6084	0	6084	0	0	2-4	2-4	
8		6073	0	6073	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5		4270	2988 / 0	0 / 0	0 / 0	0 / 0	1281 / 0	0 / 0	
8		4262	2981 / 0	0 / 0	0 / 0	0 / 0	1281 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5, 8									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.69 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				
		MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED	MEMB.	MAX. FACTORED	
		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRAC LENGTH	FORCE (LBS)	FORCE (LBS)	MAX CSI (LC)	
FR-TO			FROM TO						
1-2		-5878 / 0	-77.3	-77.3 0.17 (1)	4.69	7-2	0 / 3049	0.23 (1)	
2-3		-4826 / 0	-77.3	-77.3 0.10 (1)	5.13	2-6	-181 / 0	0.04 (1)	
3-4		-4826 / 0	-77.3	-77.3 0.11 (1)	5.13	6-3	-407 / 0	0.04 (1)	
5-4		-4537 / 0	0.0	0.0 0.46 (1)	6.68	6-4	0 / 6635	0.50 (1)	
8-1		-4457 / 0	0.0	0.0 0.15 (1)	6.73	1-7	0 / 4985	0.37 (1)	
8-7		0 / 0	-794.1	-794.1 0.20 (1)	10.00				
7-6		0 / 4960	-794.1	-794.1 0.26 (1)	10.00				
6-5		-158 / 0	-794.1	-794.1 0.18 (1)	6.25				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 35-2-8
END DISTANCE = 14-3-4
END SPAN CARRIED = 35-2-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.46 (4-5:1) , BC=0.26 (6-7:1) , WB=0.50 (4-6:1) , SSI=0.45 (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

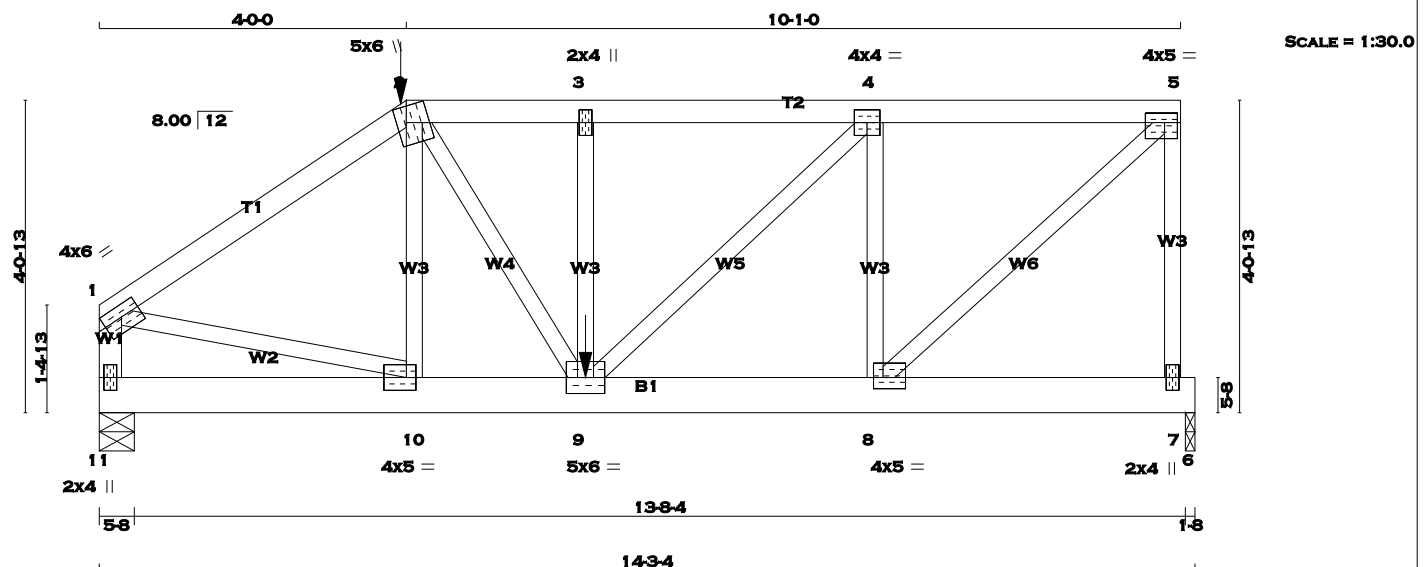
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (2) (INPUT = 0.90)
JSI METAL= 0.50 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 69 = 137 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 2	2x4	DRY	No.2	SPF
2 - 5	2x4	DRY	No.2	SPF
7 - 5	2x3	DRY	No.2	SPF
11 - 1	2x4	DRY	No.2	SPF
11 - 6	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	4.0	6.0	1.75	Edge
2	TTWW+m	MT20	5.0	6.0	2.50	1.50
3	TMVW+w	MT20	2.0	4.0		
4	TMVW-t	MT20	4.0	4.0		
5	TMVW-t	MT20	4.0	5.0	1.50	2.00
7	BMV+p	MT20	2.0	4.0		
8	BMVW-t	MT20	4.0	5.0	1.75	1.50
9	BMVW-t	MT20	5.0	6.0		
10	BMVW-t	MT20	4.0	5.0	2.00	1.50
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.

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 128.9 lbs FACTORED DOWN AT 4'-0" ON TOP CHORD, AND 1161.3 lbs FACTORED DOWN AT 6'-4" ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
11	1493	0	1493	0	5-8
6	1249	0	1249	0	1-8

UNFACTORED REACTIONS						
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS		
11	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
11	1048	732 / 0	0 / 0	0 / 0	0 / 0	316 / 0
6	876	614 / 0	0 / 0	0 / 0	0 / 0	263 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11, 6

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.63 FT.
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 (LBS)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO		FR-TO	
1-2	-1709 / 0	-77.3	-77.3 0.30 (1)	4.75	10-2	-183 / 23
2-3	-1879 / 0	-107.2	-107.2 0.12 (1)	4.77	2-9	0 / 867
3-4	-1879 / 0	-77.3	-77.3 0.24 (1)	4.63	9-3	-258 / 0
4-5	-1255 / 0	-77.3	-77.3 0.21 (1)	5.47	9-4	0 / 873
7-5	-1288 / 0	0.0	0.0 0.44 (1)	6.18	8-4	-961 / 0
11-1	-1451 / 0	0.0	0.0 0.16 (1)	6.74	8-5	0 / 1712
					1-10	0 / 1460
11-10	0 / 0	-24.2	-24.2 0.05 (4)	10.00		
10-9	0 / 1414	-24.2	-24.2 0.29 (1)	10.00		
9-8	0 / 1255	-17.5	-17.5 0.27 (1)	10.00		
8-7	0 / 0	-17.5	-17.5 0.17 (1)	10.00		
7-6	0 / 0	-17.5	-17.5 0.17 (1)	10.00		

FACTORED CONCENTRATED LOADS (LBS)						
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.
2	4'-0"	-129	-129	---	FRONT	VERT
9	6'-4"	-1161	-1161	---	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/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4'-0"
RIGHT SETBACK = 0'-0"
END SETBACK = 4'-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 6'-4" OF SPAN
MEASURED FROM THE LEFT.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.48")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.44 (5-7:1), BC=0.29 (9-10:1), WB=0.42 (5-8:1), SSI=0.83 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

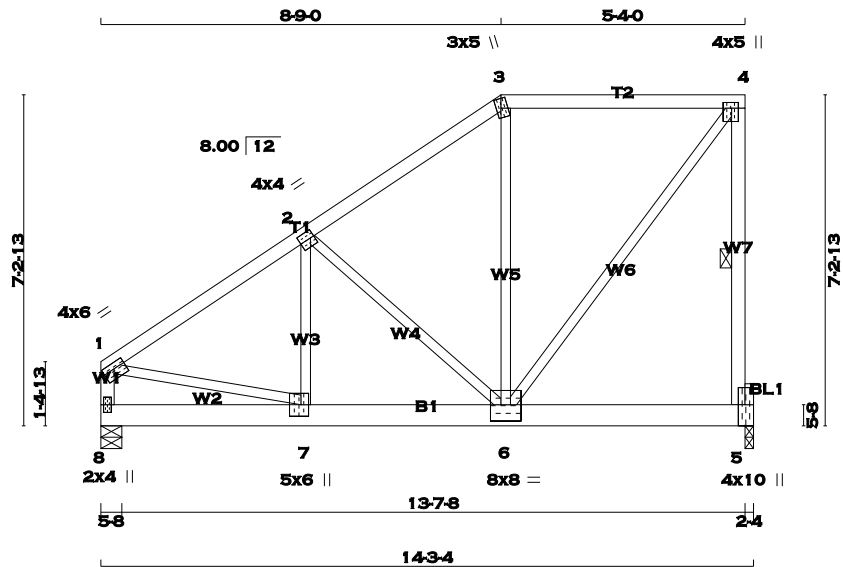
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 0.5 degrees
KOTT



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TOTAL WEIGHT = 6 X 75 = 451 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF
8 - 1	2x4	DRY	No.2	SPF
8 - 5	2x6	DRY	2100F 1.8E	SPF

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

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-4	12	TOP
4-5	12	TOP
8-1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
8-5	5	SIDE(567.8)
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	6.0	1.50 3.00
2	TMVW-t	MT20	4.0	4.0	2.00 1.00
3	TTW+m	MT20	3.0	5.0	2.50 1.25
4	TMVW+p	MT20	4.0	5.0	1.50 1.75
5	BMVK1+t	MT20	4.0	10.0	Edge 1.75
6	BMVWW-t	MT20	8.0	8.0	4.25 4.00

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	6607	0	6607	0	0
8	6596	0	6596	0	0

UNFACTORED REACTIONS							
1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	4637	3245 / 0	0 / 0	0 / 0	0 / 0	1392 / 0	0 / 0
8	4629	3238 / 0	0 / 0	0 / 0	0 / 0	1391 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5, 8
BEARING SIZE FACTOR = 1.08 AT JNT(S) 5 (BASED ON SUPPORT DEPTH = 1-8)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.56 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.

1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-5. DBS = 6-0-0. CBF = 179 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. FACTORED HORIZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	-6435 / 0	-77.3	-77.3 0.14 (1)	4.56	7-2	0 / 2758	0.21 (1)
2-3	-4061 / 0	-77.3	-77.3 0.09 (1)	5.51	2-6	-2713 / 0	0.53 (1)
3-4	-3389 / 0	-77.3	-77.3 0.15 (1)	5.81	6-3	0 / 1900	0.14 (1)
5-4	-4777 / 0	0.0	0.0 0.36 (1)	5.24	6-4	0 / 5758	0.43 (1)
8-1	-4918 / 0	0.0	0.0 0.17 (1)	6.47	1-7	0 / 5498	0.41 (1)
8-7	0 / 0	-869.2	-869.2 0.20 (1)	10.00			
7-6	0 / 5366	-869.2	-869.2 0.32 (1)	10.00			
6-5	-102 / 0	-869.2	-869.2 0.23 (1)	6.25			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = **24.0** IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 38-4-8
END DISTANCE = 14-3-4
END SPAN CARRIED = 38-4-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

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

CSI: TC=0.36 (4-5:1) , BC=0.32 (6-7:1) , WB=0.53 (2-6:1) , SSI=0.52 (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

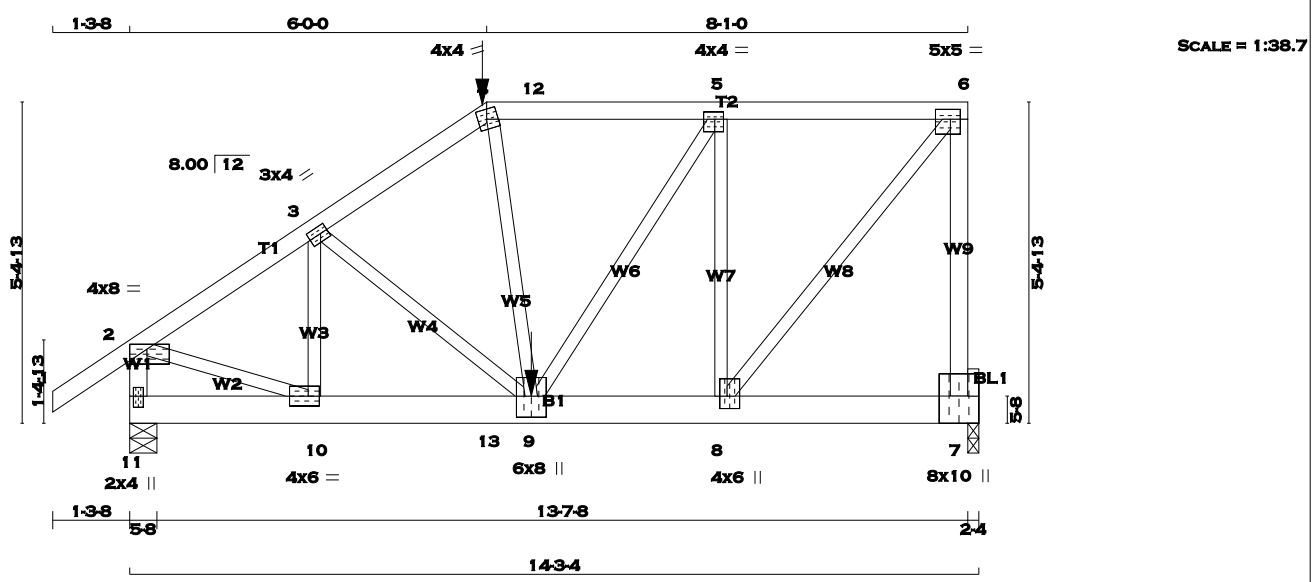
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.54 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 77 = 153 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
11 - 2	2x4	DRY	No.2	SPF
11 - 7	2x6	DRY	No.2	SPF
BEARING BLOCKS				
BL1	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	TTW-m	MT20	4.0	4.0	2.00 1.75
5	TMVW-t	MT20	4.0	4.0	1.50 1.75
6	TMVW-t	MT20	5.0	5.0	2.00 2.00
7	BMVK1+p	MT20	8.0	10.0	5.50 Edge
8	BMWW+t	MT20	4.0	6.0	2.50 1.50
9	BMWWW+t	MT20	6.0	8.0	4.25 3.00
10	BMWW-t	MT20	4.0	6.0	2.00 2.25
11	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.					

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 6-0-0 ON TOP CHORD, AND 1755.5 lbs FACTORED DOWN AT 6-9-0 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	IN-SX	IN-SX		
7	1725	0	1725	0	0	2-4	2-4		
11	1974	0	1974	0	0	5-8	5-8		

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX SNOW	MIN LIVE	PERM. LIVE	WIND	DEAD	SOIL
7	1209	855 / 0	0 / 0	0 / 0	0 / 0	354 / 0	0 / 0
11	1386	967 / 0	0 / 0	0 / 0	0 / 0	419 / 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 = 4.42 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)	LC1	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO				FR-TO			
1-2	0 / 29	-77.3	-77.3	0.11 (1)	10.00	10-3	-414 / 0	0.09 (1)	
2-3	-2073 / 0	-77.3	-77.3	0.16 (1)	4.55	3-9	-6 / 112	0.03 (1)	
3-4	-2206 / 0	-77.3	-77.3	0.17 (1)	4.42	4-9	0 / 623	0.15 (1)	
4-12	-1916 / 0	-145.8	-145.8	0.28 (1)	4.55	9-5	0 / 1261	0.31 (1)	
12-5	-1916 / 0	-77.3	-77.3	0.28 (1)	4.55	8-5	-1448 / 0	0.61 (1)	
5-6	-1246 / 0	-77.3	-77.3	0.24 (1)	5.44	8-6	0 / 2036	0.50 (1)	
7-6	-1697 / 0	0.0	0.0	0.82 (1)	6.33	2-10	0 / 1822	0.45 (1)	
11-2	-1919 / 0	0.0	0.0	0.21 (1)	6.02				
11-10	0 / 0	-33.0	-33.0	0.02 (4)	10.00				
10-13	0 / 1734	-33.0	-33.0	0.15 (1)	10.00				
13-9	0 / 1734	-33.0	-33.0	0.15 (1)	10.00				
9-8	0 / 1246	-17.5	-17.5	0.12 (1)	10.00				
8-7	-49 / 0	-17.5	-17.5	0.02 (4)	6.25				

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
4	6-0-0	-348	-348	---	FRONT	VERT	TOTAL
9	6-9-0	-1755	-1755	---	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 = 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 6-9-0 OF SPAN MEASURED FROM THE LEFT.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.82 (6-7:1), BC=0.15 (9-10:1), WB=0.61 (5-8:1), SSI=0.17 (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

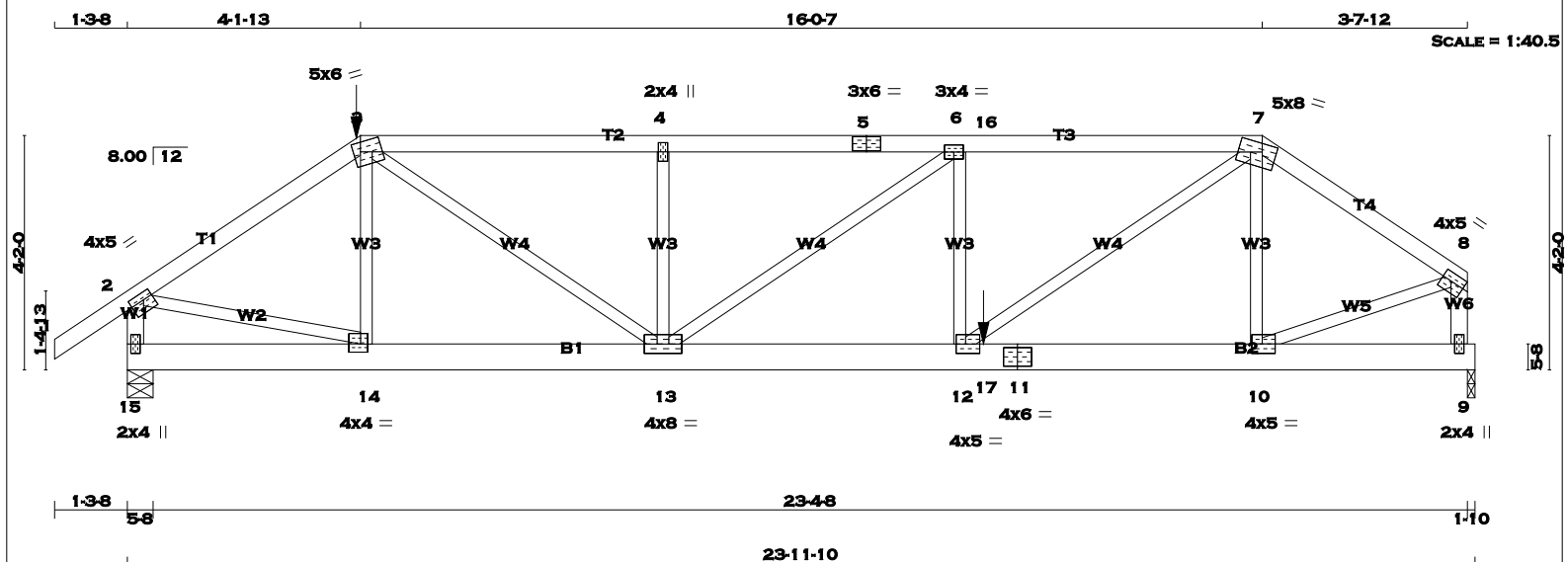
PLATE ROTATION TOL. = 0.5 degrees



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TOTAL WEIGHT = $2 \times 108 = 217 \text{ lb}$

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 8	2x4	DRY	No.2	SPF
15 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
15 - 11	2x6	DRY	No.2	SPF
11 - 9	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	1	12
3-5	1	12
5-7	1	12
7-8	1	12
15-2	1	12
9-8	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
15-11	2	12
11-9	2	12
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 TRANSFERRING. 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

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
15	2475	0	2475	0	0	5-8	5-8
9	2315	0	2315	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	1736	1220 / 0	0 / 0	0 / 0	0 / 0	516 / 0	0 / 0
9	1625	1139 / 0	0 / 0	0 / 0	0 / 0	486 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
1-2	0 / 29	-77.3	-77.3 0.06 (1)	10.00	14-3	-353 / 37	0.05 (1)
2-3	-2872 / 0	-77.3	-77.3 0.17 (1)	5.26	3-13	0 / 2131	0.26 (1)
3-4	-4120 / 0	-145.8	-145.8 0.43 (1)	4.25	13-4	-875 / 0	0.11 (1)
4-5	-4120 / 0	-145.8	-145.8 0.43 (1)	4.25	13-6	-419 / 0	0.16 (1)
5-6	-4120 / 0	-145.8	-145.8 0.43 (1)	4.25	12-6	-379 / 13	0.05 (1)
6-16	-4460 / 0	-145.8	-145.8 0.31 (1)	4.28	12-7	0 / 2866	0.35 (1)
16-7	-4460 / 0	-77.3	-77.3 0.31 (1)	4.28	10-7	-534 / 0	0.07 (1)
7-8	-2564 / 0	-77.3	-77.3 0.13 (1)	5.54	2-14	0 / 2450	0.30 (1)
15-2	-2425 / 0	0.0	0.0 0.14 (1)	7.24	10-8	0 / 2259	0.28 (1)
9-8	-2324 / 0	0.0	0.0 0.13 (1)	7.35			
15-14	0 / 0	-33.0	-33.0 0.05 (4)	10.00			
14-13	0 / 2376	-33.0	-33.0 0.20 (1)	10.00			
13-12	0 / 4460	-33.0	-33.0 0.34 (1)	10.00			
12-17	0 / 2115	-33.0	-33.0 0.27 (1)	10.00			
17-11	0 / 2115	-17.5	-17.5 0.27 (1)	10.00			
11-10	0 / 2115	-17.5	-17.5 0.27 (1)	10.00			
10-9	0 / 0	-17.5	-17.5 0.06 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	4-1-13	-241	-241	---	FRONT	VERT	TOTAL
17	15-2-12	-1188	-1188	---	FRONT	VERT	TOTAL



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IN THE DESIGN OF THIS COMPONENT.**

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-13
RIGHT SETBACK = 3-9-6
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 15-2-12 OF SPAN
MEASURED FROM THE LEFT.

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.43 (3-4:1) , BC=0.34 (12-13:1) ,
WB=0.35 (7-12:1) , SSI=0.38 (10-12:1)

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

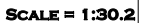
COMPANION LIVE LOAD FACTOR = 0.50

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: $\Omega = 0.05$ De



TOTAL WEIGHT = 29 lb

ALL WEBS 2x3 DRY No.2 SPF

PLATES (table is in inches)

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
4	1189	0	1189	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8	
6	1189	0	1189	0	0	5-8	5-8

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	834	584 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0
6	834	584 / 0	0 / 0	0 / 0	0 / 0	251 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.07 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
1-2	-1012 / 0	-77.3	-77.3	0.11 (1)	6.07	5-2	0 / 874
2-3	-10 / 0	-77.3	-77.3	0.10 (1)	10.00	2-4	-1147 / 0
4-3	-94 / 0	0.0	0.0	0.02 (1)	7.81	1-5	0 / 944
6-1	-787 / 0	0.0	0.0	0.09 (1)	7.81		0.22 (1)
							0.28 (1)
							0.23 (1)
6-5	0 / 0	-318.8	-318.8	0.19 (1)	10.00		
5-4	0 / 914	-318.8	-318.8	0.30 (1)	10.00		

MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
R-TO		
5-2	0 / 874	0.22 (1)
2-4	-1147 / 0	0.28 (1)
1-5	0 / 944	0.23 (1)

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 15-2-0
END DISTANCE = 6-0-0
END SPAN CARRIED = 15-2-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADD'L LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.11 (1-2:1), BC=0.30 (4-5:1), WB=0.28 (2-4:1), SSI=0.37 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY) (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= 0.87 (2) (INPUT = 0.90)
JSI METAL= 0.34 (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.**





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

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

SPACING =  24.0  IN./C

```

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

*** NON STANDARD GIRDER ***

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

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

THIS DESIGN COMPLIES WITH:

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

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

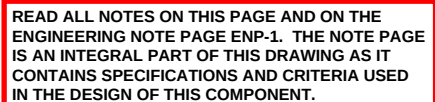
ALLOWABLE DEFL.(LL)= $L/360$ (0.69")
CALCULATED VERT. DEFL.(LL)= $L/999$ (0.12")
ALLOWABLE DEFL.(TL)= $L/360$ (0.69")
CALCULATED VERT. DEFL.(TL)= $L/999$ (0.21")

CSI: TC=0.44 (3-4:1), BC=0.43 (11-12:1) ,
WB=0.41 (7-11:1) , SS=0.19 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

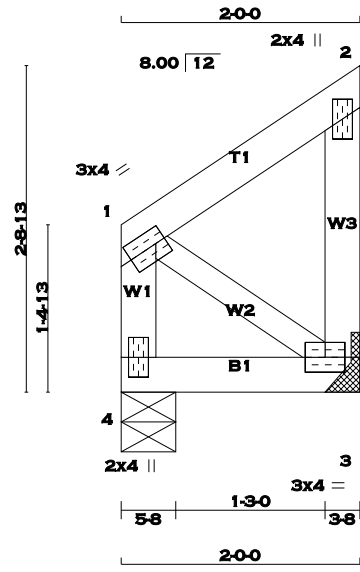
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .



KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 13:01:19 2017 Page 1

ID:CvrZnhWk3AkzcGBuQAVgcOyl?Y8-pFPGEDo5Wd618NRNrrO2h5MBqefuOkGJraSnmZbm4U



SCALE = 1:19.3

TOTAL WEIGHT = 10 lb [M]

LUMBER
N. L. G. A. RULES

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	4.0	1.50	1.00
2	TMV+p	MT20	2.0	4.0		
3	BMVW1-t	MT20	3.0	4.0		
4	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
3	314	314	0	0
4	314	314	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
3	220	154 / 0	0 / 0	0 / 0	0 / 0	66 / 0	0 / 0
4	220	154 / 0	0 / 0	0 / 0	0 / 0	66 / 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 = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO							FR-TO		
1-2	0 / 0	-77.3	-77.3	0.06 (1)	10.00	1-3	0 / 0	0.00 (1)	
3-2	-77 / 0	0.0	0.0	0.01 (1)	7.81				
4-1	-77 / 0	0.0	0.0	0.01 (1)	7.81				
4-3	0 / 0	-236.8	-236.8	0.18 (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 = 11-3-0
END DISTANCE = 2-0-0
END SPAN CARRIED = 11-3-0
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.01")

CSI: TC=0.06 (1-2:1) , BC=0.18 (3-4:1) , WB=0.00 (1-3:1) , SSI=0.20 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

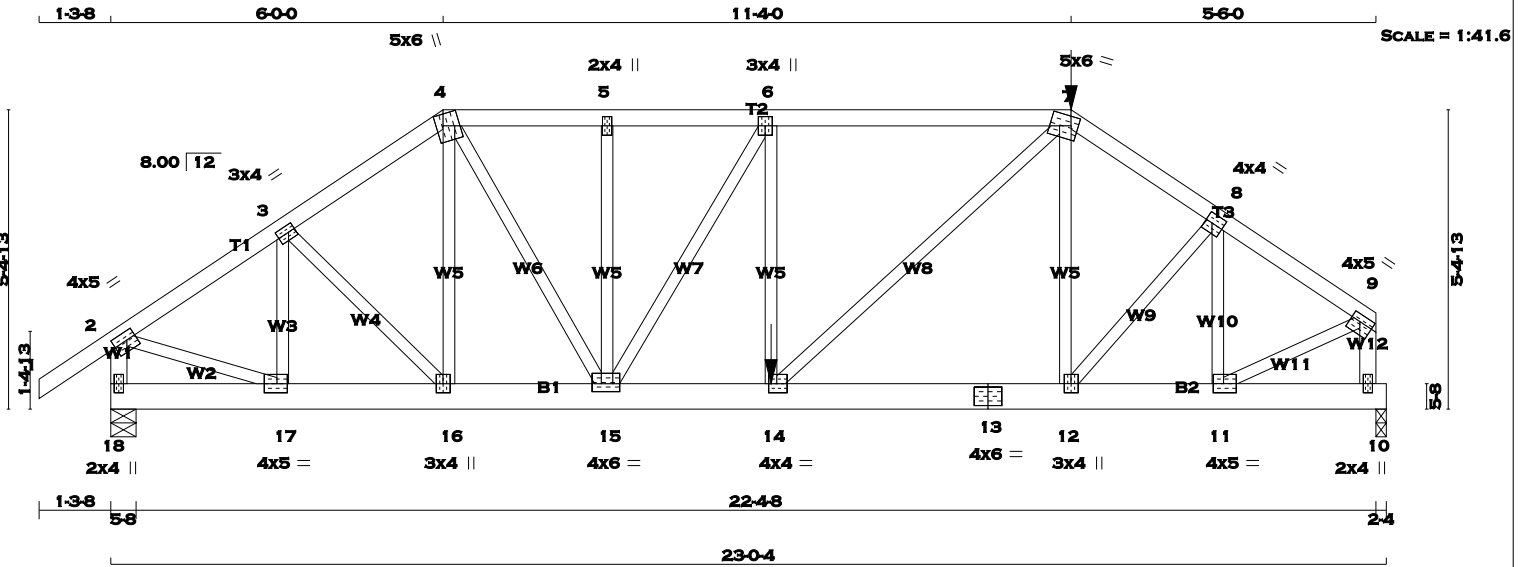
JSI GRIP= 0.08 (3) (INPUT = 0.90)
JSI METAL= 0.02 (2) (INPUT = 1.00)



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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
18 - 2	2x4	DRY	No.2
10 - 9	2x4	DRY	No.2
18 - 13	2x6	DRY	No.2
13 - 10	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

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	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	6.0	2.50	1.50

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
18		2399	0	2399	0	0	5-8	5-8	
10		2742	0	2742	0	0	2-4	2-4	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
18		1680	1193 / 0	0 / 0	0 / 0	0 / 0	487 / 0	0 / 0	
10		1926	1337 / 0	0 / 0	0 / 0	0 / 0	589 / 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 = 4.29 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS									
		MAX. FACTORED		FACTORED		W E B S		FACTORED	
MEMB.		FORCE	VERT. LOAD	LC1	MAX	MEMB.	FORCE	MAX	
		(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2		0 / 29	-77.3	-77.3	0.06 (1)	10.00	17-3	-719 / 0	0.07 (1)
2-3		-2591 / 0	-77.3	-77.3	0.07 (1)	5.58	3-16	0 / 365	0.05 (1)
3-4		-2928 / 0	-77.3	-77.3	0.08 (1)	5.32	16-4	-136 / 0	0.03 (1)
4-5		-3324 / 0	-77.3	-77.3	0.11 (1)	5.03	4-15	0 / 1783	0.22 (1)
5-6		-3324 / 0	-77.3	-77.3	0.30 (1)	4.77	15-5	-85 / 0	0.02 (1)
6-7		-4134 / 0	-145.8	-145.8	0.40 (1)	4.29	15-6	-1597 / 0	0.46 (1)
7-8		-3279 / 0	-77.3	-77.3	0.08 (1)	5.10	14-6	0 / 694	0.09 (1)
8-9		-2724 / 0	-77.3	-77.3	0.07 (1)	5.49	14-7	0 / 1944	0.24 (1)
18-2		-2344 / 0	0.0	0.0	0.13 (1)	7.33	12-7	-251 / 61	0.05 (1)
10-9		-2669 / 0	0.0	0.0	0.15 (1)	6.97	12-8	0 / 675	0.08 (1)
18-17		0 / 0	-17.5	-17.5	0.03 (1)	10.00	11-8	-1071 / 0	0.12 (1)
17-16		0 / 2165	-17.5	-17.5	0.17 (1)	10.00	11-9	0 / 2274	0.28 (1)
16-15		0 / 2418	-17.5	-17.5	0.18 (1)	10.00		0 / 2509	0.31 (1)
15-14		0 / 4134	-17.5	-17.5	0.32 (1)	10.00			
14-13		0 / 2707	-33.0	-33.0	0.24 (1)	10.00			
13-12		0 / 2707	-33.0	-33.0	0.24 (1)	10.00			
12-11		0 / 2275	-33.0	-33.0	0.20 (1)	10.00			
11-10		0 / 0	-33.0	-33.0	0.03 (1)	10.00			
FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
7	17-4-0	-327	-327	---	FRONT	VERT	TOTAL		
14	11-11-0	-2002	-2002	---	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 11-0-10 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 (0.06")

ALLOWABLE DEFL.(TL)= L/360 (0.76")

CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.40 (6-7:1), BC=0.32 (14-15:1), WB=0.46 (6-15:1), SSI=0.20 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

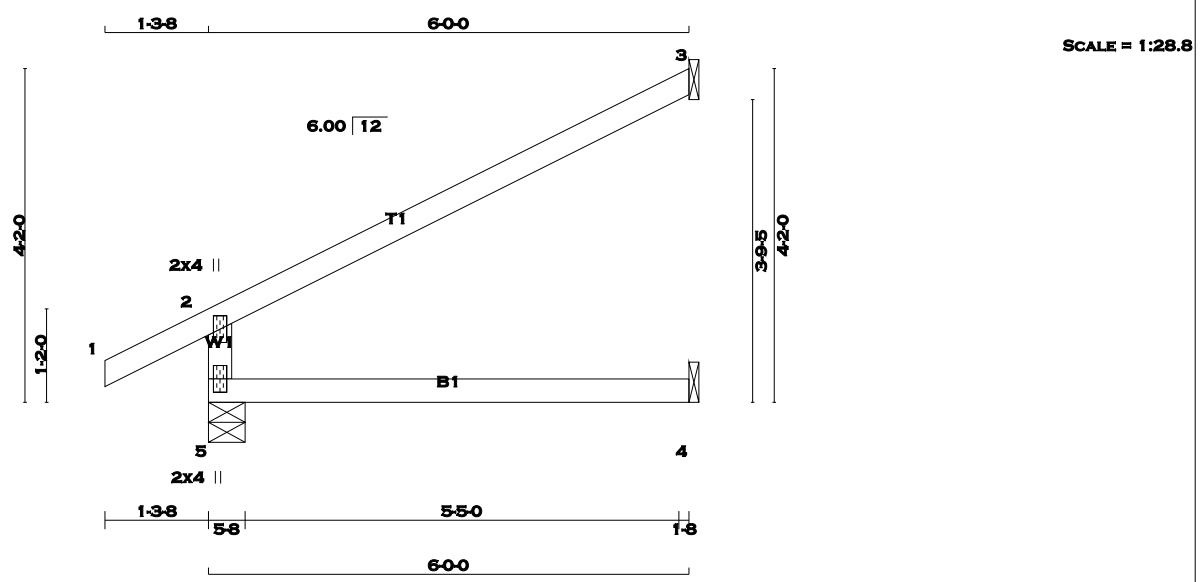
PLATE ROTATION TOL. = 0.250 degrees



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TOTAL WEIGHT = 8 X 17 = 137 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	457	0	457	0	5-8	5-8
3	174	0	174	0	1-8	1-8
4	43	0	49	0	1-8	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	318	238 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX		MEMB. FORCE (LBS)	FACTORED MAX (LC)
FR-TO			FROM	TO		LENGTH	FR-TO
5-2	-395 / 0		0.0	0.0	0.13 (4)	7.81	
1-2	0 / 23		-77.3	-77.3	0.10 (1)	10.00	
2-3	-26 / 0		-77.3	-77.3	0.47 (1)	6.25	
5-4	0 / 0		-17.5	-17.5	0.13 (4)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	3.0	PSF

BOT CH.	LL	PSF
DL	0.0	PSF
DL	7.0	PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.47 (2-3:1) , BC=0.13 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.20 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

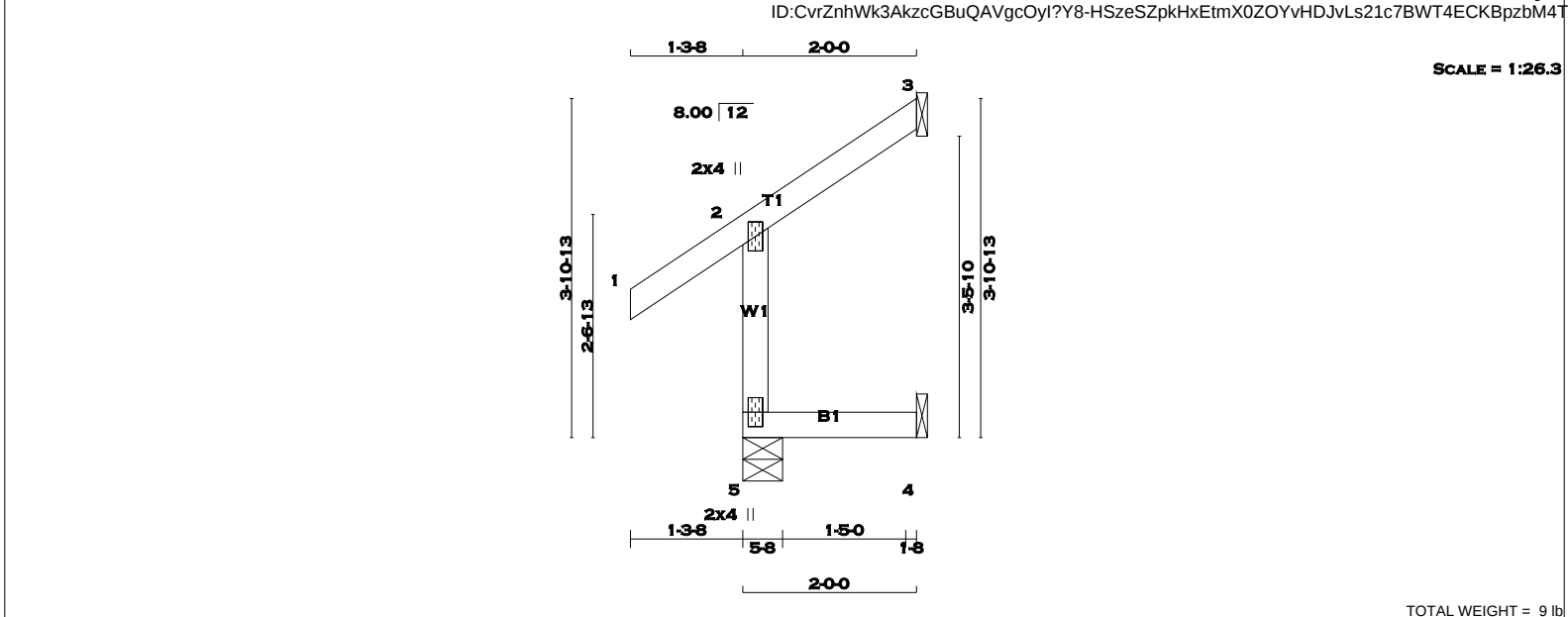
JSI GRIP= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



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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.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>5</td><td>220</td><td>0</td><td>220</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>3</td><td>59</td><td>0</td><td>59</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td></tr><tr><td>4</td><td>16</td><td>0</td><td>18</td><td>0</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><th>JT</th><th>1ST LCASE</th><th colspan="6">MAX./MIN. 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>5</td><td>152</td><td>121 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>30 / 0</td><td>0 / 0</td></tr><tr><td>3</td><td>40</td><td>36 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>5 / 0</td><td>0 / 0</td></tr><tr><td>4</td><td>13</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>13 / 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: (5) <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 MAX CSI (LC)</th><th>MAX. UNBRACED 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>5- 2</td><td>-202 / 0</td><td>0.0</td><td>0.0 0.00 (4)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>1- 2</td><td>0 / 29</td><td>-77.3</td><td>-77.3 0.10 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>2- 3</td><td>-10 / 0</td><td>-77.3</td><td>-77.3 0.05 (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 0.02 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table> <u>CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN</u>											FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	5	220	0	220	0	0	5-8	5-8	3	59	0	59	0	0	1-8	1-8	4	16	0	18	0	0	1-8	1-8	JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS							COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	5	152	121 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0	3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0	CHORDS				WEBS				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			5- 2	-202 / 0	0.0	0.0 0.00 (4)	7.81				1- 2	0 / 29	-77.3	-77.3 0.10 (1)	10.00				2- 3	-10 / 0	-77.3	-77.3 0.05 (1)	6.25				5- 4	0 / 0	-17.5	-17.5 0.02 (4)	10.00				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					
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG																																																																																																																																																						
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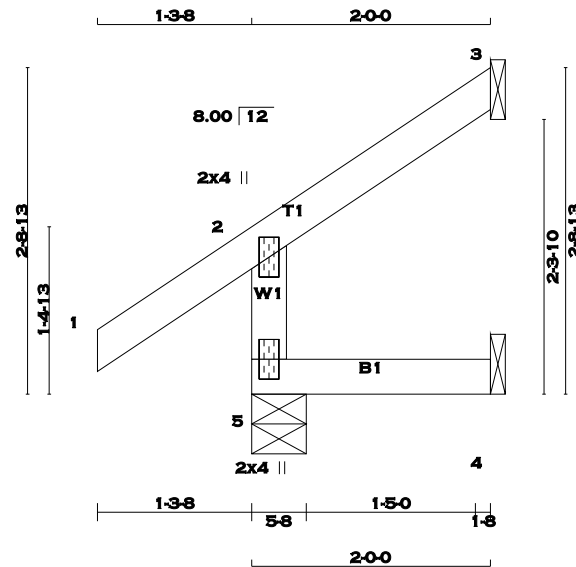
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17-5037

BUILDING DIVISION

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SCALE = 1:19.3

TOTAL WEIGHT = 19 X 8 = 154 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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
5	222	0	222	0	0	5-8
3	59	0	59	0	0	1-8
4	16	0	18	0	0	1-8

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

UNFACTORED REACTIONS

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)

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			
5-2	-202 / 0	0.0	0.0	0.01 (4)	7.81				
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00				
2-3	-10 / 0	-77.3	-77.3	0.05 (1)	6.25				
5-4	0 / 0	-17.5	-17.5	0.02 (4)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

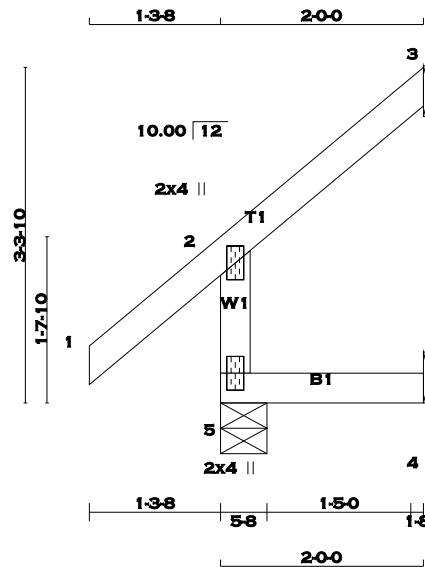


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SCALE = 1:22.7

TOTAL WEIGHT = 14 X 9 = 124 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	222	0	222	0	0	5-8	5-8	
3	59	0	59	0	0	1-8	1-8	
4	16	0	18	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5, 3

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		WEBS		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			FR-TO			
5-2	-203 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 34	-77.3	-77.3	0.11 (1)	10.00			
2-3	-12 / 0	-77.3	-77.3	0.05 (1)	6.25			
5-4	0 / 0	-17.5	-17.5	0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.11 (1-2:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

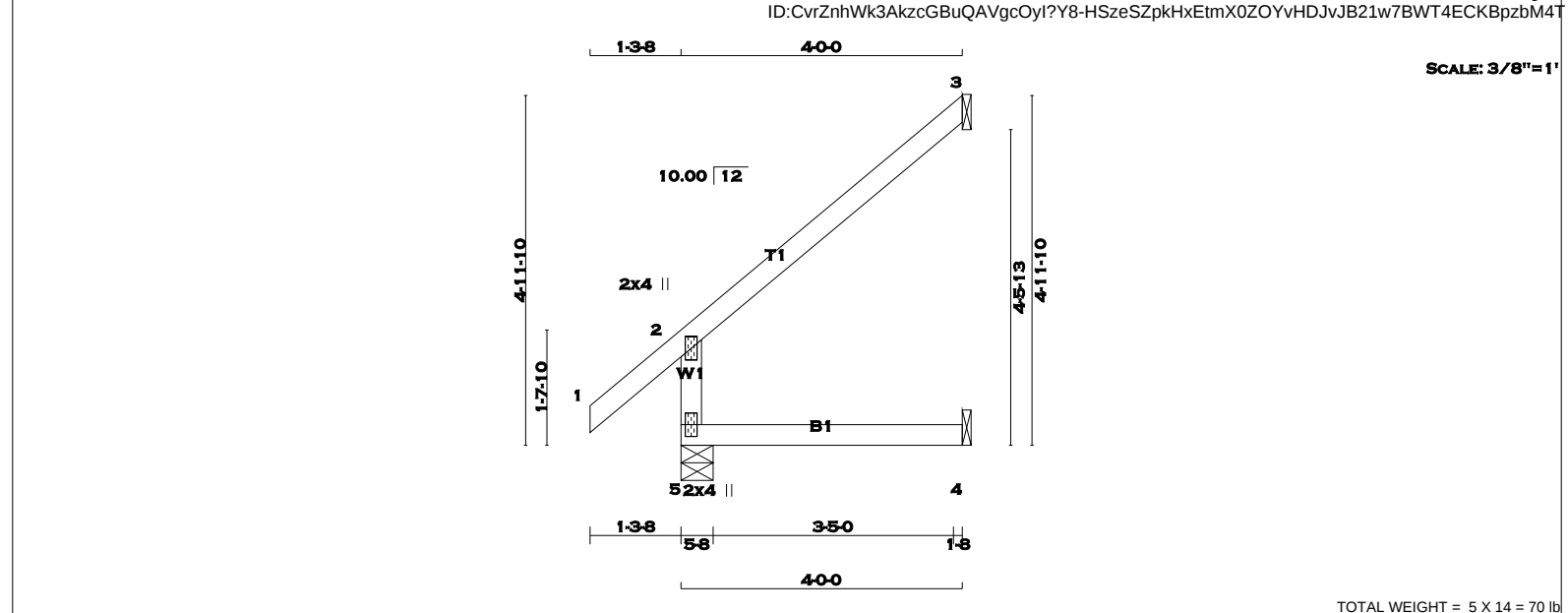
JSI GRIP= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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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.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th rowspan="2">JT</th><th colspan="2">FACTORED</th><th colspan="2">MAXIMUM FACTORED</th><th colspan="2">INPUT</th><th colspan="2">REQRD</th></tr><tr><th>GROSS REACTION</th><th>GROSS REACTION</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>5</td><td>340</td><td>0</td><td>340</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>3</td><td>116</td><td>0</td><td>116</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td></tr><tr><td>4</td><td>31</td><td>0</td><td>34</td><td>0</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><th rowspan="2">JT</th><th colspan="2">1ST LCASE</th><th colspan="2">MAX./MIN. COMPONENT REACTIONS</th><th rowspan="2">WIND</th><th rowspan="2">DEAD</th><th rowspan="2">SOIL</th></tr><tr><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th></tr><tr><td>5</td><td>236</td><td>181 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>55 / 0</td><td>0 / 0</td></tr><tr><td>3</td><td>79</td><td>70 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>9 / 0</td><td>0 / 0</td></tr><tr><td>4</td><td>24</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>24 / 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><th rowspan="2">MEMB.</th><th colspan="2">CHORDS</th><th colspan="2">FACTORED</th><th rowspan="2">MAX.</th><th rowspan="2">MAX.</th><th rowspan="2">MEMB.</th><th colspan="2">WEBS</th><th rowspan="2">MAX.</th><th rowspan="2">MAX.</th></tr><tr><th>FORCE (LBS)</th><th>VERT. LOAD (PLF)</th><th>LC1</th><th>LC2</th><th>UNBRAC</th><th>UNBRAC</th><th>FORCE (LBS)</th><th>MAX</th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td></td><td>LENGTH</td><td>FR-TO</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5-2</td><td>-300 / 0</td><td>0.0</td><td>0.0</td><td>0.04 (4)</td><td>7.81</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 34</td><td>-77.3</td><td>-77.3</td><td>0.11 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2-3</td><td>-25 / 0</td><td>-77.3</td><td>-77.3</td><td>0.21 (1)</td><td>6.25</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5-4</td><td>0 / 0</td><td>-17.5</td><td>-17.5</td><td>0.06 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>					JT	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	5	340	0	340	0	0	5-8	5-8	3	116	0	116	0	0	1-8	1-8	4	31	0	34	0	0	1-8	1-8	JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL	COMBINED	SNOW	LIVE	PERM.LIVE	5	236	181 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0	3	79	70 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0	4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0	MEMB.	CHORDS		FACTORED		MAX.	MAX.	MEMB.	WEBS		MAX.	MAX.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	LC2	UNBRAC	UNBRAC	FORCE (LBS)	MAX	FR-TO		FROM	TO		LENGTH	FR-TO						5-2	-300 / 0	0.0	0.0	0.04 (4)	7.81							1-2	0 / 34	-77.3	-77.3	0.11 (1)	10.00							2-3	-25 / 0	-77.3	-77.3	0.21 (1)	6.25							5-4	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 DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.19") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00") ALLOWABLE DEFL.(TL)= L/360 (0.19") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01") CSI: TC=0.21 (2-3:1) , BC=0.06 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.12 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES <table><tr><th>PLATE</th><th>GRIP(DRY)</th><th>SHEAR</th><th>SECTION</th></tr><tr><td></td><td>(PSI)</td><td>(PLI)</td><td>(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= 0.22 (2) (INPUT = 0.90) JSI METAL= 0.08 (2) (INPUT = 1.00)					PLATE	GRIP(DRY)	SHEAR	SECTION		(PSI)	(PLI)	(PLI)		MAX MIN	MAX MIN	MAX MIN	MT20	618 354	1667 822	2284 1656
JT	FACTORED		MAXIMUM FACTORED		INPUT		REQRD																																																																																																																																																																																			
	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																			
5	340	0	340	0	0	5-8	5-8																																																																																																																																																																																			
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5	236	181 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0																																																																																																																																																																																			
3	79	70 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0																																																																																																																																																																																			
4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0																																																																																																																																																																																			
MEMB.	CHORDS		FACTORED		MAX.	MAX.	MEMB.	WEBS		MAX.	MAX.																																																																																																																																																																															
	FORCE (LBS)	VERT. LOAD (PLF)	LC1	LC2				UNBRAC	UNBRAC			FORCE (LBS)	MAX																																																																																																																																																																													
FR-TO		FROM	TO		LENGTH	FR-TO																																																																																																																																																																																				
5-2	-300 / 0	0.0	0.0	0.04 (4)	7.81																																																																																																																																																																																					
1-2	0 / 34	-77.3	-77.3	0.11 (1)	10.00																																																																																																																																																																																					
2-3	-25 / 0	-77.3	-77.3	0.21 (1)	6.25																																																																																																																																																																																					
5-4	0 / 0	-17.5	-17.5	0.06 (4)	10.00																																																																																																																																																																																					
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	(PSI)	(PLI)	(PLI)																																																																																																																																																																																							
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MT20	618 354	1667 822	2284 1656																																																																																																																																																																																							



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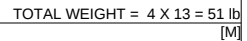
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DRY: SEASONED LUMBER.

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. FR-TO	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO					
5-2	-204 / 0	0.0	0.0	0.12	(4)	7.81		
1-2	0 / 29	-77.3	-77.3	0.10	(1)	10.00		
2-3	-11 / 0	-77.3	-77.3	0.05	(1)	6.25		
5-4	0 / 0	-17.5	-17.5	0.13	(4)	10.00		

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



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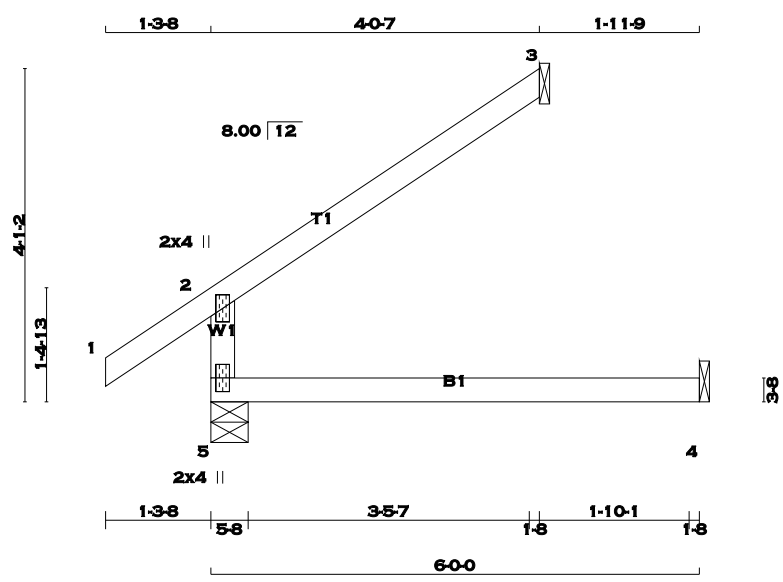
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KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 13:01:21 2017 Page 1

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SCALE = 1:28.3

TOTAL WEIGHT = 3 X 15 = 46 lb [M]

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
5	362	362	5-8	5-8
3	117	117	1-8	1-8
4	44	49	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	DEAD	SOIL
5	254	181 / 0	0 / 0	72 / 0
3	80	71 / 0	0 / 0	9 / 0
4	35	0 / 0	0 / 0	35 / 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	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FACTORED	FORCE	MAX
FR-TO	MAX. FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FACTORED	FORCE	MAX	
5-2	-301 / 0	0.0	0.0	0.12	(4)	7.81				
1-2	0 / 29	-77.3	-77.3	0.10	(1)	10.00				
2-3	-22 / 0	-77.3	-77.3	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)	(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= 0.19 (2) (INPUT = 0.90)

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



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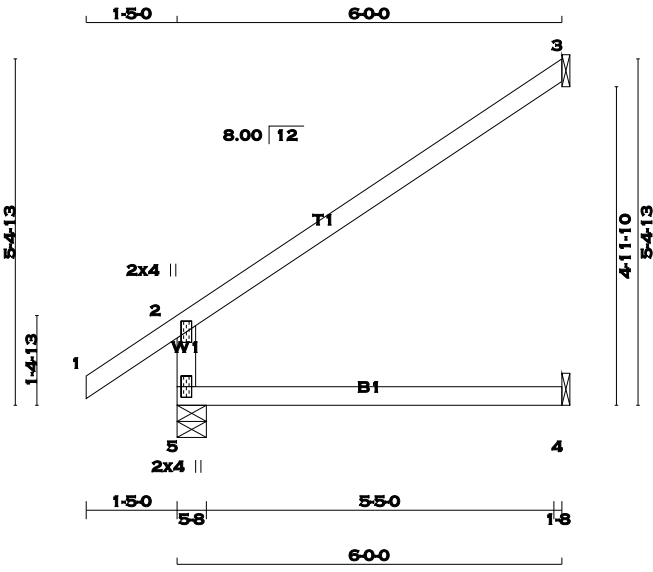
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TOTAL WEIGHT = 6 X 18 = 110 lb [M]

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

DRY: SEASONED LUMBER.

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

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		467	0	467	0	0	5-8	5-8	
3		174	0	174	0	0	1-8	1-8	
4		44	0	49	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		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
JT		COMBINED	SNOW												
5		325	244 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0	0 / 0	0 / 0
3		118	105 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0	0 / 0	0 / 0
4		35	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	35 / 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 = 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.		MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FORCE (LBS)	VERT. LOAD (PLF)
FR-TO											
5-2		-406 / 0	0.0	0.0	0.12 (4)	7.81					
1-2		0 / 32	-77.3	-77.3	0.12 (1)	10.00					
2-3		-32 / 0	-77.3	-77.3	0.47 (1)	6.25					
5-4		0 / 0	-17.5	-17.5	0.13 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.47 (2-3:1) , BC=0.13 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.19 (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)
				MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

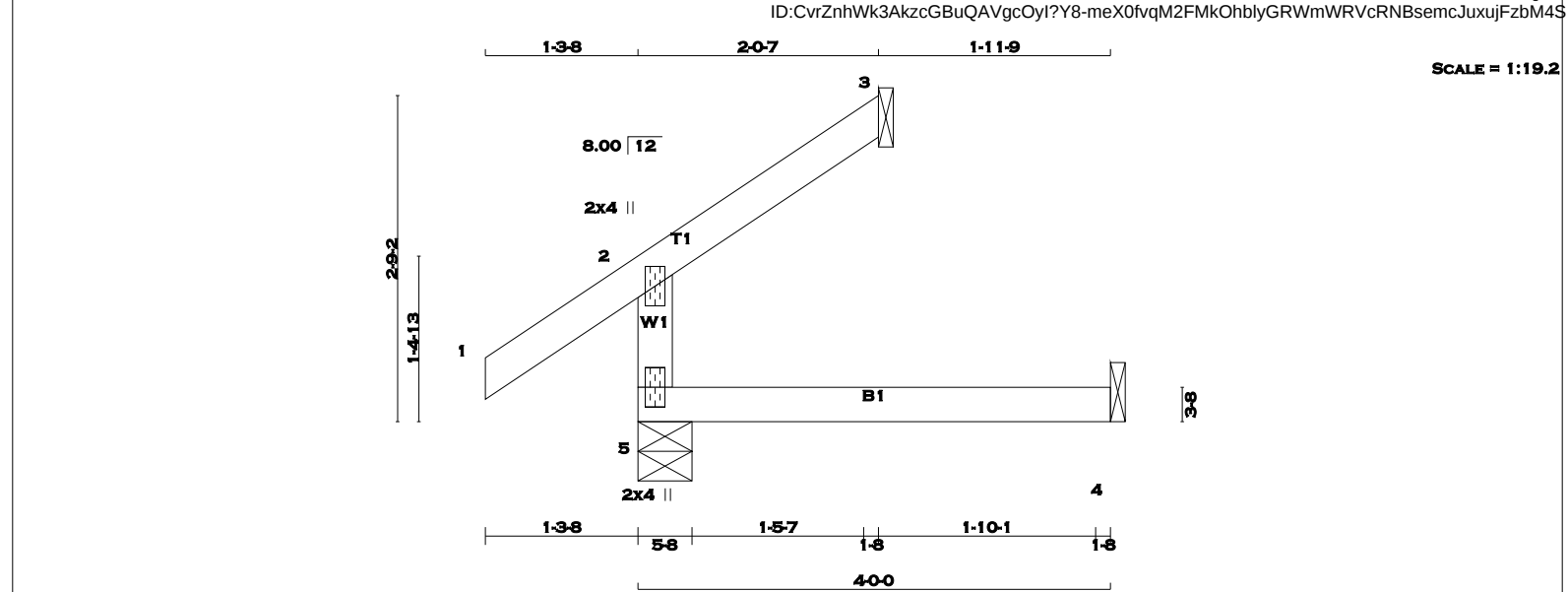
JSI GRIP= 0.26 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 10 = 21 lb [M]

LUMBER										
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	SPF	SPF	SPF	SPF	SPF	SPF
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 VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED DOWN	MAXIMUM FACTORED HORZ	INPUT BRG UPLIFT	REQRD BRG IN-SX
5	244	0	244	0	0	5-8
3	60	0	60	0	0	1-8
4	30	0	34	0	0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
5	171	123 / 0	0 / 0	0 / 0	0 / 0	48 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10 (1-2:1), BC=0.06 (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

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 MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	UNBRAC	MEMB. MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO							
5-2	-204 / 0	0.0	0.0	0.05 (4)	7.81		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00		
2-3	-11 / 0	-77.3	-77.3	0.05 (1)	6.25		
5-4	0 / 0	-17.5	-17.5	0.06 (4)	10.00		

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

March 13th, 2017

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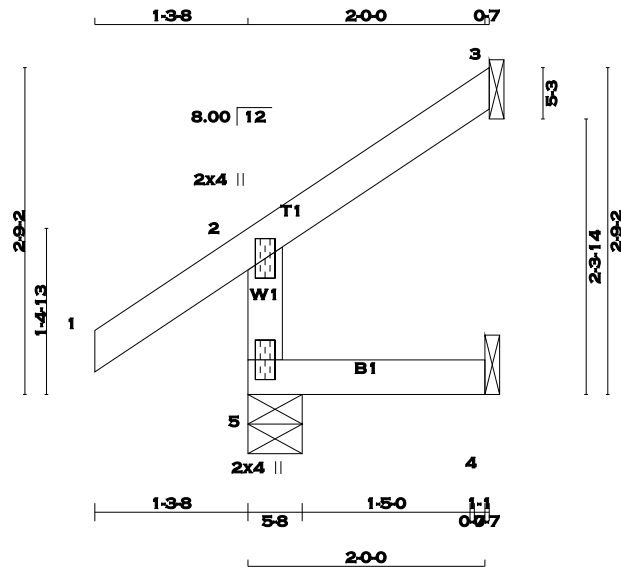
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MAR 29, 2017

17-5037

BUILDING DIVISION

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SCALE = 1:19.4

TOTAL WEIGHT = 6 X 8 = 49 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS		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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO		LENGTH	
5-2	-204 / 0	0.0	0.0 0.01 (4)	7.81			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00			
2-3	-11 / 0	-77.3	-77.3 0.05 (1)	6.25			
5-4	0 / 0	-17.5	-17.5 0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

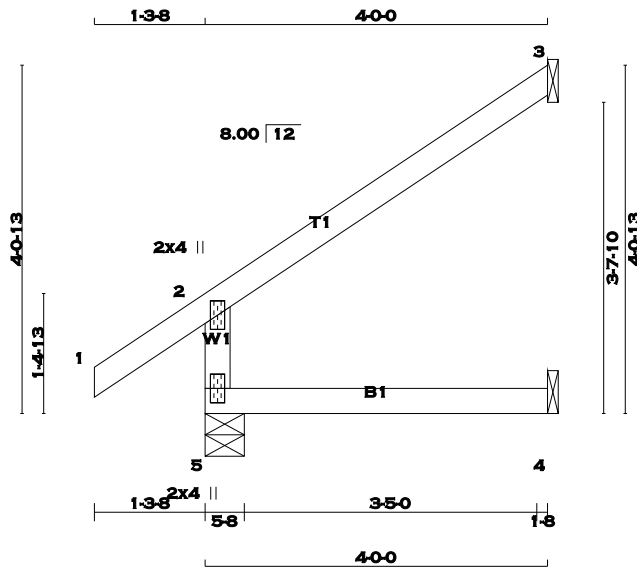
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JSI METAL= 0.05 (2) (INPUT = 1.00)



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SCALE = 1:26.9

TOTAL WEIGHT = 4 X 13 = 52 lb [M]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

	FACTORED		MAXIMUM FACTORED		INPUT	REQRD
	GROSS REACTION		GROSS REACTION		BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
5	339	0	339	0	0	5-8
3	116	0	116	0	0	1-8
4	30	0	34	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	235	180 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
3	79	70 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 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.	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		
5-2	-299 / 0	0.0	0.0	0.05 (4)	7.81			
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00			
2-3	-21 / 0	-77.3	-77.3	0.21 (1)	6.25			
5-4	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

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

CSI: TC=0.21 (2-3:1) , BC=0.06 (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.

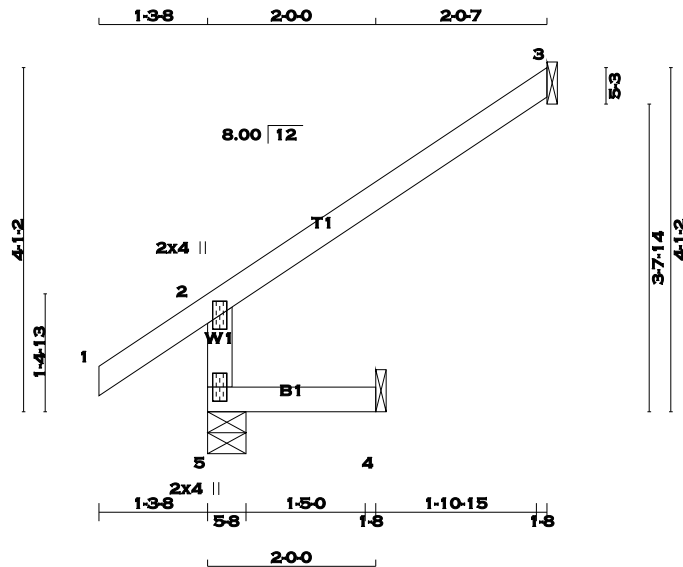
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JSI METAL= 0.07 (2) (INPUT = 1.00)



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SCALE = 1:27.4

TOTAL WEIGHT = 4 X 11 = 44 lb [M]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	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	MEMB.	WEBS	
	MAX. FACTORED	FORCE	VERT. LOAD	LC1			MAX. FACTORED	FORCE
	(LBS)	(LBS)	(PLF)	(LC)			(LBS)	(LC)
FR-TO			FROM	TO	LENGTH	FR-TO		
5-2	-301 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00			
2-3	-22 / 0	-77.3	-77.3	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.

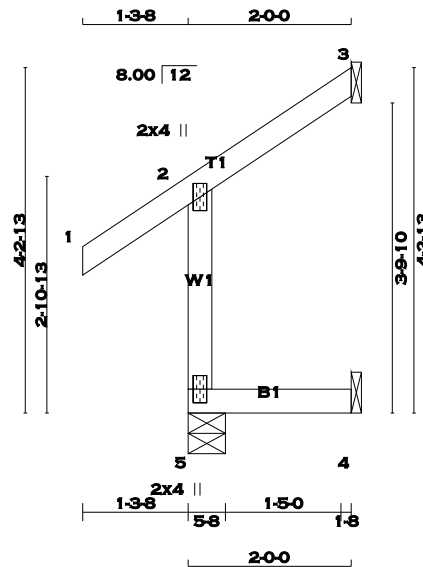
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JSI METAL= 0.07 (2) (INPUT = 1.00)



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SCALE = 1:28.3

TOTAL WEIGHT = 10 lb [M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
5 - 2	2x4	No.2	SPF
1 - 3	2x4	No.2	SPF
5 - 4	2x4	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	220	0	220	0	5-8	5-8
3	59	0	59	0	1-8	1-8
4	17	0	19	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	152	121 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)		MAX. FACTORED	FORCE (LBS)
FR-TO			FROM	TO	LENGTH	FR-TO	
5-2	-202 / 0		0.0	0.0	0.00 (4)	7.81	
1-2	0 / 29		-77.3	-77.3	0.10 (1)	10.00	
2-3	-10 / 0		-77.3	-77.3	0.05 (1)	6.25	
5-4	0 / 0		-17.5	-17.5	0.02 (4)	10.00	

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

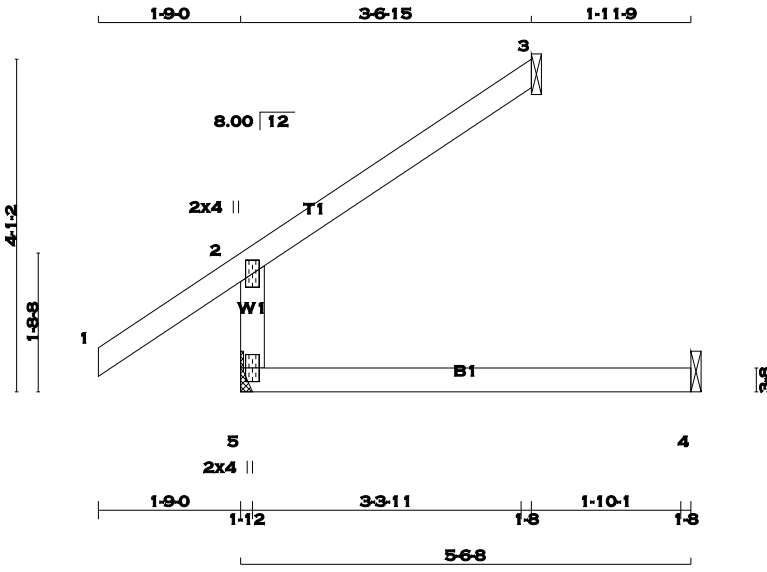


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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

SPF

LUMBER

No.2

SPF

DESCR.

SPF

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

FACTORED

GROSS REACTION

MAXIMUM FACTORED

GROSS REACTION

INPUT

BRG

REQRD

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

5

370

0

370

0

0

HANGER BY OTHERS

3

104

0

104

0

0

1-8

4

42

0

47

0

0

1-8

MIN. SEAT SIZE: 1-12

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

258

189 / 0

0 / 0

0 / 0

0 / 0

69 / 0

0 / 0

3

71

63 / 0

0 / 0

0 / 0

0 / 0

8 / 0

0 / 0

4

33

0 / 0

0 / 0

0 / 0

0 / 0

33 / 0

0 / 0

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

MEMB.

FORCE

VERT.

(PLF)

CSI

(LC)

UNBRAC

LENGTH

FR-TO

FR-TO

314 / 0

0.0

0.0

0.09

(4)

7.81

1-2

0 / 39

-77.3

-77.3

0.18

(1)

10.00

2-3

-19 / 0

-77.3

-77.3

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.

JSI GRIP= 0.20 (2) (INPUT = 0.90)

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



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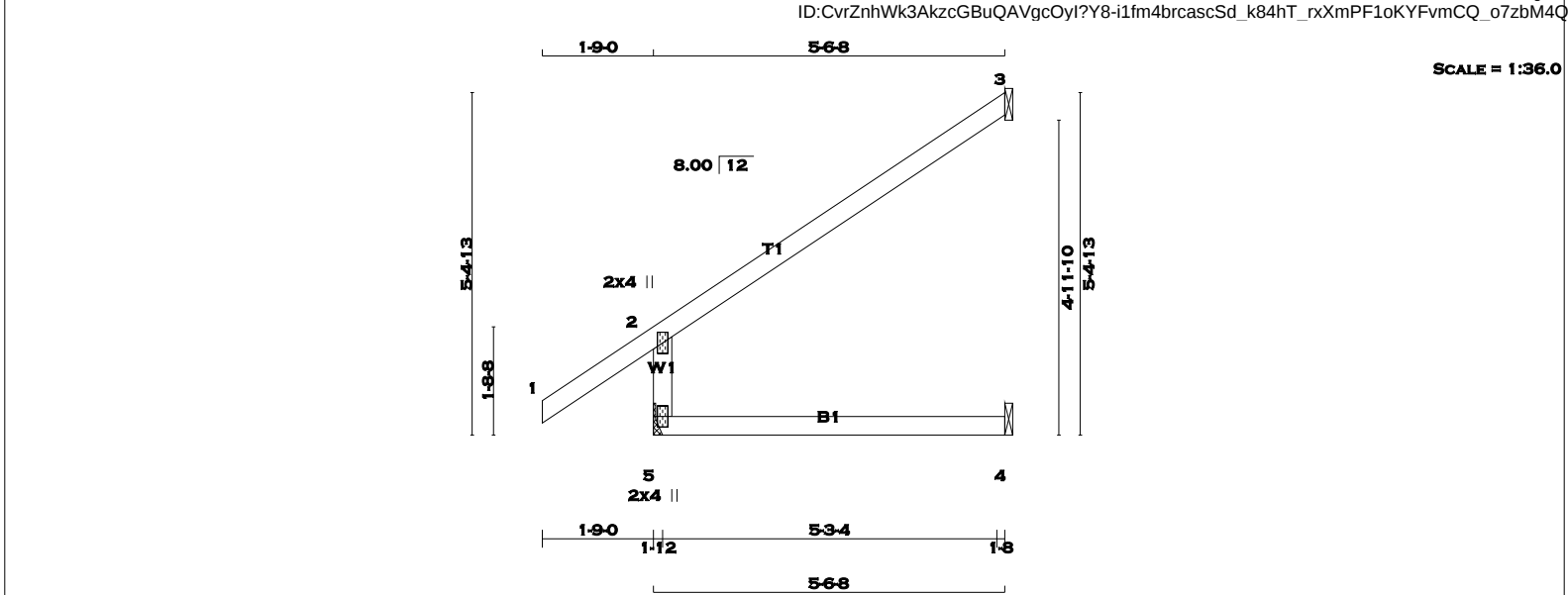
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17-5037

BUILDING DIVISION

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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR. SPF
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 DOWN	REQRD BRG IN-SX			
	VERT	HORZ	DOWN	HORZ			MIN. SEAT SIZE: 1-12		
5	465	0	465	0	0	1-8	1-8		
3	161	0	161	0	0	1-8	1-8		
4	42	0	47	0	0	1-8	1-8		

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

UNFACTORED REACTIONS									
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE	WIND	DEAD	SOIL	
	COMBINED	SNOW	LIVE						
5	323	246 / 0	0 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0	
3	109	97 / 0	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	
4	33	0 / 0	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		MEMB.	WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (PLF)	LC1 MAX. (PLF)		MAX. FORCE (LBS)	MAX. (PLF)	LC1 MAX. (PLF)	LC1 MAX. (PLF)
FR-TO			FROM	TO	FR-TO			FROM	TO
5-2	-409 / 0	0.0	0.0	0.09 (4)	7.81				
1-2	0 / 39	-77.3	-77.3	0.18 (1)	10.00				
2-3	-30 / 0	-77.3	-77.3	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.

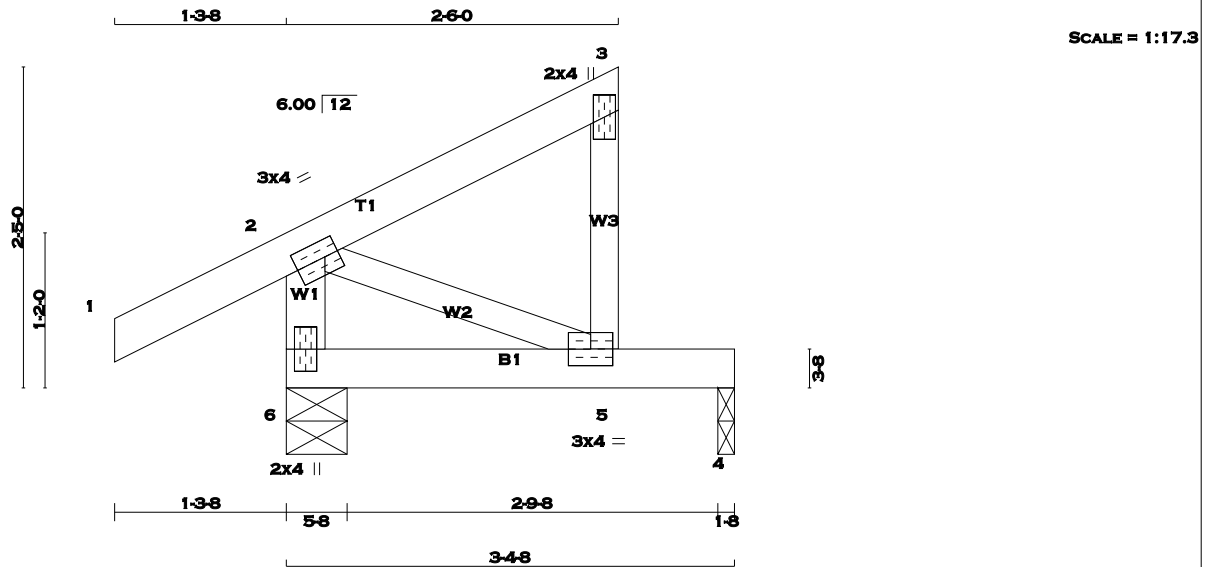
JSI GRIP= 0.26 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 12 X 13 = 154 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	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	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 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	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

		1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6	178	136 / 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)

		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			
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	2-5	0 / 0	0.00 (1)
2-3	0 / 0	-77.3	-77.3 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 (PSI)	SECTION (PLI)
		MAX MIN	MAX MIN
MT20	618	354 1667	822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

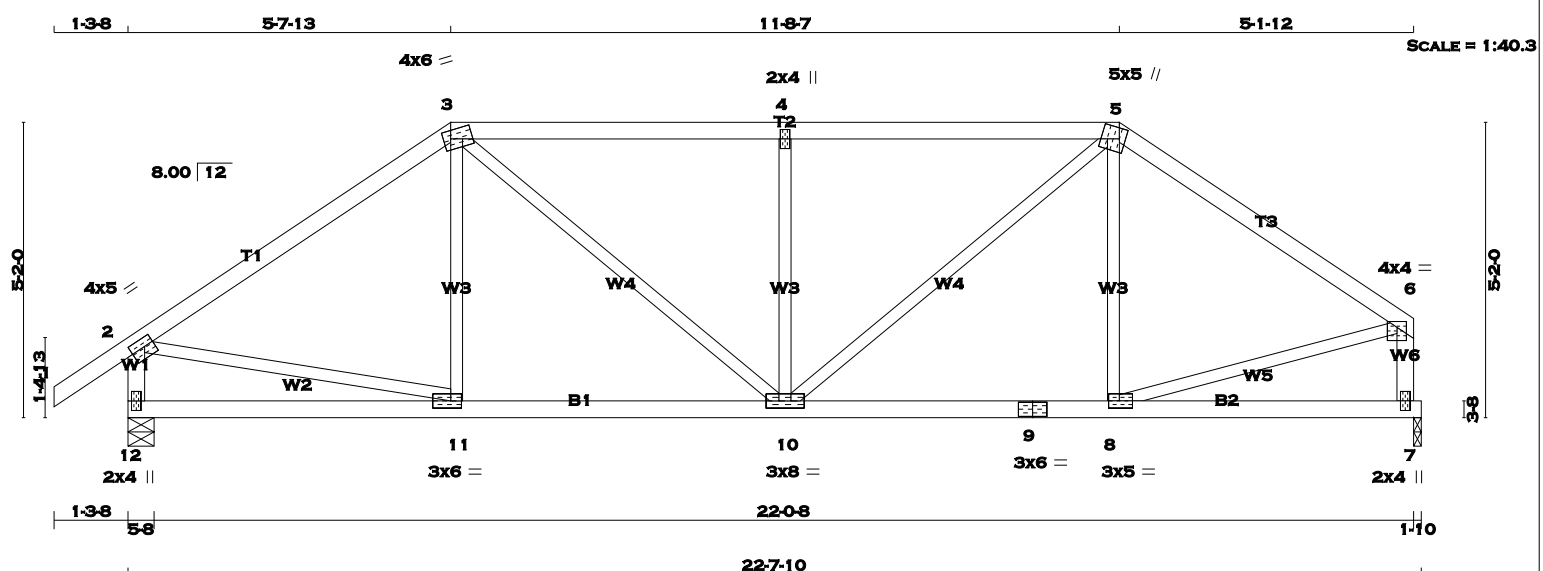
JSI GRIP= 0.18 (2) (INPUT = 0.90)
JSI METAL= 0.04 (6) (INPUT = 1.00)



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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 - 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

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	4.0	6.0	1.75	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW+m	MT20	5.0	5.0	2.25	1.25
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	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	2.25
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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
12	1173	0	1173	0	0	5-8	5-8	
7	1067	0	1067	0	0	1-10	1-10	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
12	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0
7	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS		MEMB.	FACTORED	
	MAX. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. VERT. LOAD (LBS)	MAX. UNBRACED LENGTH		MAX. FORCE (LBS)	MAX. FACTORED (LBS)
FR-TO					FR-TO		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-3	-62 / 74
2-3	-1135 / 0	-77.3	-77.3	0.49 (1)	5.30	3-10	0 / 469
3-4	-1302 / 0	-77.3	-77.3	0.50 (1)	4.99	10-4	-555 / 0
4-5	-1302 / 0	-77.3	-77.3	0.50 (1)	4.99	10-5	0 / 544
5-6	-1067 / 0	-77.3	-77.3	0.40 (1)	5.57	8-5	-129 / 49
12-2	-1133 / 0	0.0	0.0	0.12 (1)	7.46	2-11	0 / 960
7-6	-1031 / 0	0.0	0.0	0.11 (1)	7.73	8-6	0 / 918
12-11	0 / 0	-17.5	-17.5	0.14 (4)	10.00		
11-10	0 / 942	-17.5	-17.5	0.23 (1)	10.00		
10-9	0 / 884	-17.5	-17.5	0.21 (1)	10.00		
9-8	0 / 884	-17.5	-17.5	0.21 (1)	10.00		
8-7	0 / 0	-17.5	-17.5	0.13 (4)	10.00		

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

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 (0.75")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.50 (4-5:1), BC=0.23 (10-11:1), WB=0.22 (4-10:1), SSI=0.22 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

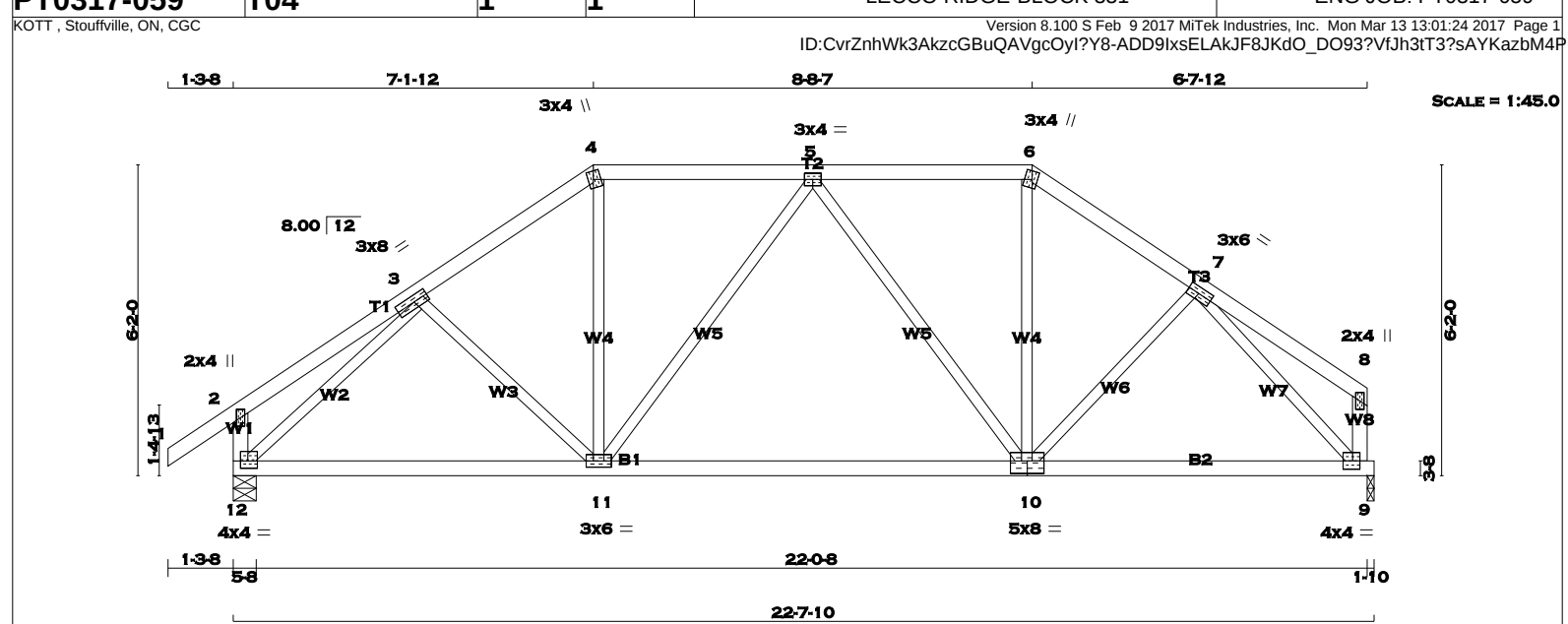
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.39 (2) (INPUT = 1.00)

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 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 95 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		
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	3.50
4	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TMWW-t	MT20	3.0	4.0		
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMWW-t	MT20	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	8.0	3.00	4.00
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 REQRD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG IN-SX
12	1173	0	1173	0	0	5-8
9	1067	0	1067	0	0	1-10
UNFACTORED REACTIONS						
1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
12	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0
9	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO	FROM	TO	FR-TO	FROM	TO	
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-11	-47 / 36
2-3	0 / 16	-77.3	-77.3 0.15 (1)	10.00	11-4	0 / 366
3-4	-1105 / 0	-77.3	-77.3 0.13 (1)	5.90	11-5	-222 / 0
4-5	-910 / 0	-77.3	-77.3 0.19 (1)	6.24	5-10	-284 / 0
5-6	-874 / 0	-77.3	-77.3 0.19 (1)	6.25	10-6	0 / 350
6-7	-1061 / 0	-77.3	-77.3 0.11 (1)	6.01	10-7	0 / 55
7-8	0 / 15	-77.3	-77.3 0.12 (1)	10.00	12-3	-1307 / 0
12-2	-214 / 0	0.0	0.0 0.02 (1)	7.81	7-9	-1248 / 0
9-8	-102 / 0	0.0	0.0 0.01 (1)	7.81		
12-11	0 / 938	-17.5	-17.5 0.32 (4)	10.00		
11-10	0 / 1041	-17.5	-17.5 0.33 (4)	10.00		
10-9	0 / 843	-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						
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 (0.75")						
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")						
ALLOWABLE DEFL.(TL)= L/360 (0.75")						
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")						
CSI: TC=0.19 (4-5:1) , BC=0.33 (10-11:4) , WB=0.51 (3-12:1) , SSI=0.16 (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						

RECEIVED

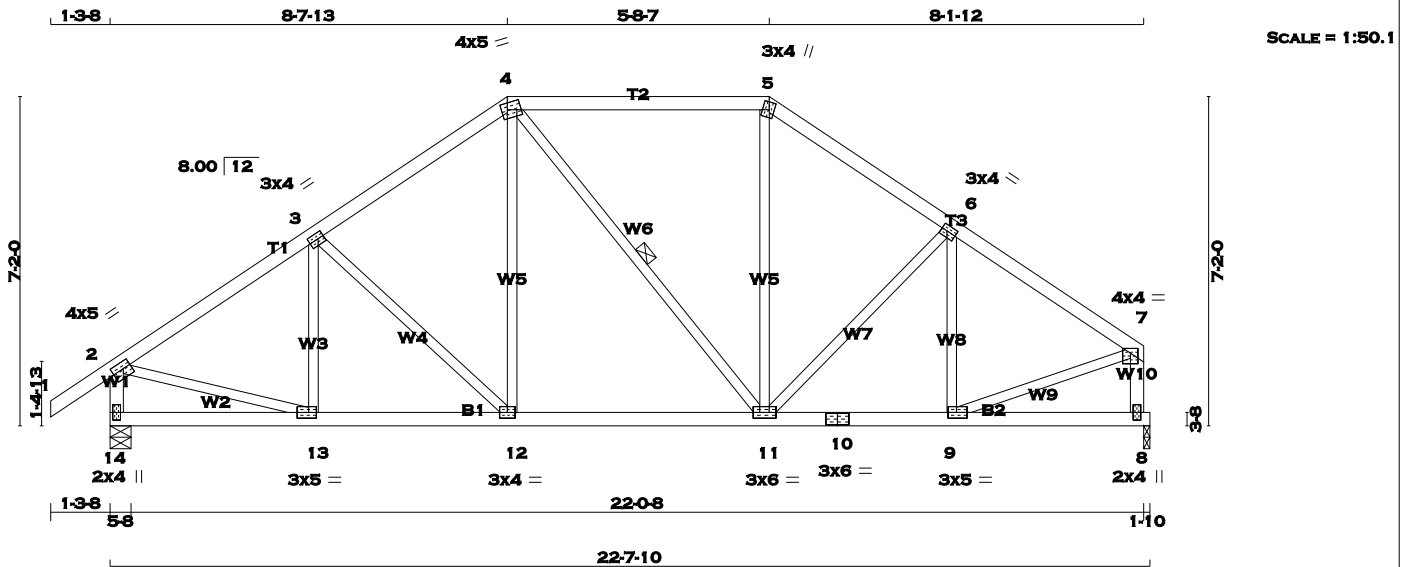
TOWN OF MILTON

MAR 29, 2017

17-5037

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][F]

LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER		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 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-p	MT20	4.0	4.0	1.25	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	5.0	1.50	2.25
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	6.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	3.0	5.0	1.50	2.00
14	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		1173	0	1173	0	0	5-8	5-8	
8		1067	0	1067	0	0	1-10	1-10	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
14	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0
	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 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 = 5.69 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 4-11. DBS = 20-0-0 . CBF = 4 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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED MAX. (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-163 / 21	0.05 (1)
2-3	-1167 / 0	-77.3 -77.3	0.20 (1)	5.69	3-12	-216 / 0	0.13 (1)
3-4	-1022 / 0	-77.3 -77.3	0.19 (1)	5.98	12-4	0 / 236	0.05 (1)
4-5	-815 / 0	-77.3 -77.3	0.33 (1)	6.25	4-11	-30 / 0	0.02 (1)
5-6	-998 / 0	-77.3 -77.3	0.17 (1)	6.06	11-5	0 / 208	0.05 (1)
6-7	-1067 / 0	-77.3 -77.3	0.17 (1)	5.91	11-6	-134 / 0	0.08 (1)
14-2	-1139 / 0	0.0 0.0	0.12 (1)	7.45	9-6	-234 / 0	0.07 (1)
8-7	-1035 / 0	0.0 0.0	0.11 (1)	7.72	2-13	0 / 1017	0.23 (1)
					9-7	0 / 955	0.21 (1)
14-13	0 / 0	-17.5 -17.5	0.07 (4)	10.00			
13-12	0 / 988	-17.5 -17.5	0.21 (1)	10.00			
12-11	0 / 834	-17.5 -17.5	0.18 (1)	10.00			
11-10	0 / 905	-17.5 -17.5	0.20 (1)	10.00			
10-9	0 / 905	-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/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 (0.75")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.33 (4-5:1), BC=0.21 (12-13:1), WB=0.23 (2-13:1), 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.

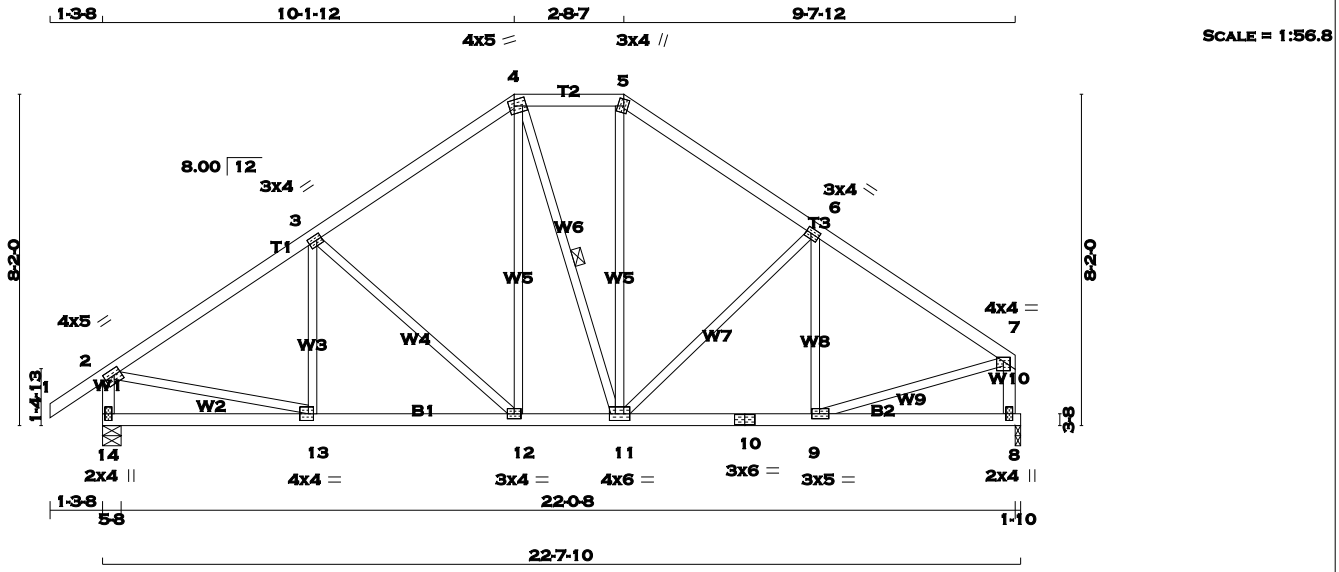
JSI GRIP= 0.88 (9) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



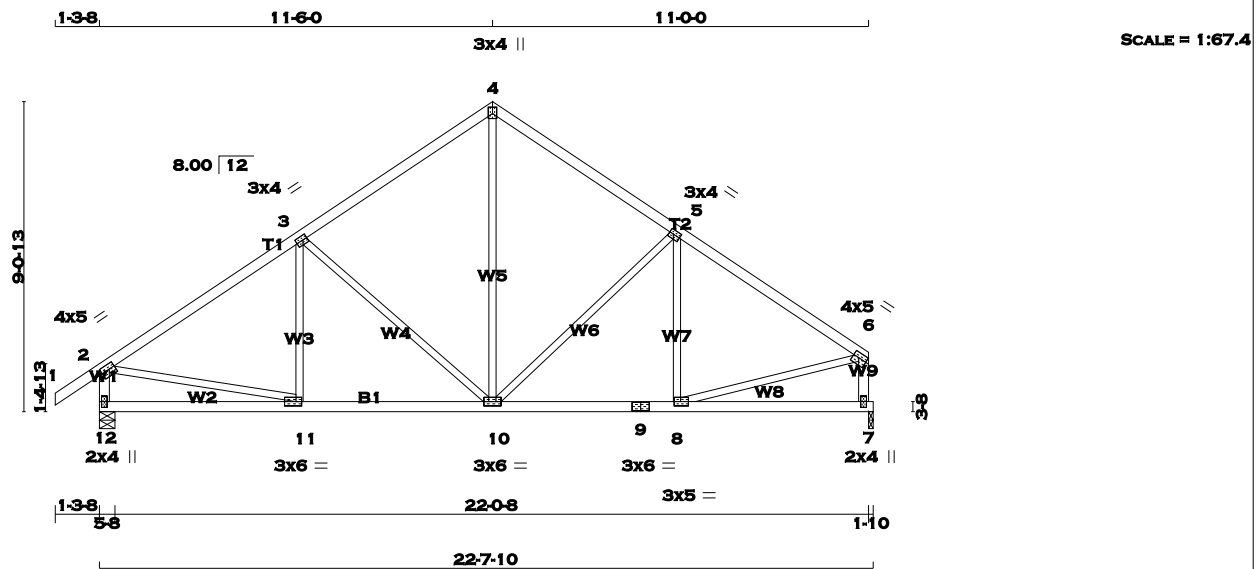
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MAR 29, 2017
17-5037
BUILDING DIVISION

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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 14- 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 14- 10 2x4 DRY No.2 10- 8 2x4 DRY No.2 ALL WEBS 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 REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 14 1173 0 1173 0 0 5-8 5-8 8 1067 0 1067 0 0 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 14 821 588 / 0 0 / 0 0 / 0 233 / 0 0 / 0 8 749 524 / 0 0 / 0 0 / 0 0 / 0 225 / 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 = 5.57 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 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 MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC) FR-TO FROM TO LENGTH FR-TO 1- 2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 13- 3 -106 / 56 0.04 (1) 2- 3 -1177 / 0 -77.3 -77.3 0.28 (1) 5.57 3-12 -329 / 0 0.28 (1) 3- 4 -936 / 0 -77.3 -77.3 0.26 (1) 6.08 12- 4 0 / 278 0.06 (1) 4- 5 -752 / 0 -77.3 -77.3 0.08 (1) 6.25 4-11 -22 / 0 0.01 (1) 5- 6 -926 / 0 -77.3 -77.3 0.24 (1) 6.14 11- 5 0 / 260 0.06 (1) 6- 7 -1090 / 0 -77.3 -77.3 0.25 (1) 5.77 11- 6 -250 / 0 0.21 (1) 14- 2 -1136 / 0 0.0 0.0 0.12 (1) 7.45 9- 6 -171 / 32 0.06 (1) 8- 7 -1031 / 0 0.0 0.0 0.11 (1) 7.73 2-13 0 / 1022 0.23 (1) 9- 7 0 / 965 0.22 (1) 14-13 0 / 0 -17.5 -17.5 0.12 (4) 10.00 13-12 0 / 1000 -17.5 -17.5 0.22 (1) 10.00 12-11 0 / 759 -17.5 -17.5 0.15 (1) 10.00 11-10 0 / 927 -17.5 -17.5 0.20 (1) 10.00 10- 9 0 / 927 -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 (0.75") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.75") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06") CSI: TC=0.28 (2-3:1) , BC=0.22 (12-13:1) , WB=0.28 (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= 0.90 (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-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 TMWW-t MT20 3.0 4.0 1.50 1.50 7 TMVW-p MT20 4.0 4.0 1.25 2.00 8 BMV1+p MT20 2.0 4.0 9 BMWW-t MT20 3.0 5.0 1.50 2.25 10 BS-t MT20 3.0 6.0 11 BMWWW-t MT20 4.0 6.0 12 BMWW-t MT20 3.0 4.0 13 BMWW-t MT20 4.0 4.0 2.00 1.50 14 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					RECEIVED TOWN OF MILTON MAR 29, 2017 17-5037 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 = 97 lb

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2	4 - 6	2x4	DRY	No.2
12 - 2	2x4	DRY	No.2	12 - 2	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2	7 - 6	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2	12 - 9	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2	9 - 7	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			
DRY: SEASONED LUMBER.				DRY: SEASONED LUMBER.			

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
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+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	4.0	5.0	1.75	Edge	
7	BMV1+p	MT20	2.0	4.0			
8	BMVW-t	MT20	3.0	5.0	1.50	2.25	
9	BS-t	MT20	3.0	6.0			
10	BMVW-t	MT20	3.0	6.0			
11	BMVW-t	MT20	3.0	6.0	1.50	2.00	
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				MAXIMUM FACTORED				INPUT				REQRD			
JT	VERT	HORZ	DOWN	GROSS REACTION	GROSS REACTION	BRG	BRG	JT	VERT	HORZ	DOWN	UPLIFT	IN-SX	IN-SX	IN-SX	JT	VERT	HORZ	DOWN
12	1173	0	1173	0	1173	0	5-8	5-8	12	1173	0	1173	0	5-8	5-8	12	1173	0	1173
7	1067	0	1067	0	1067	0	1-10	1-10	7	1067	0	1067	0	1-10	1-10	7	1067	0	1067

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0
7	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.46 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING							
TOTAL LOAD CASES: (4)							
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	11-3	-73 / 74	0.03 (1)
2-3	-1172 / 0	-77.3 -77.3	0.36 (1)	5.46	3-10	-413 / 0	0.47 (1)
3-4	-860 / 0	-77.3 -77.3	0.34 (1)	6.15	10-4	0 / 600	0.14 (1)
4-5	-859 / 0	-77.3 -77.3	0.31 (1)	6.21	10-5	-340 / 0	0.37 (1)
5-6	-1097 / 0	-77.3 -77.3	0.32 (1)	5.65	8-5	-130 / 53	0.06 (1)
12-2	-1131 / 0	0.0 0.0	0.12 (1)	7.46	2-11	0 / 1017	0.23 (1)
7-6	-1026 / 0	0.0 0.0	0.11 (1)	7.74	8-6	0 / 965	0.22 (1)
12-11	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
11-10	0 / 1000	-17.5 -17.5	0.23 (1)	10.00			
10-9	0 / 936	-17.5 -17.5	0.21 (1)	10.00			
9-8	0 / 936	-17.5 -17.5	0.21 (1)	10.00			
8-7	0 / 0	-17.5 -17.5	0.13 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.75")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.36 (2-3:1) , BC=0.23 (10-11:1) , WB=0.47 (3-10:1) , 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)	(PSI)	(PLI)		
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

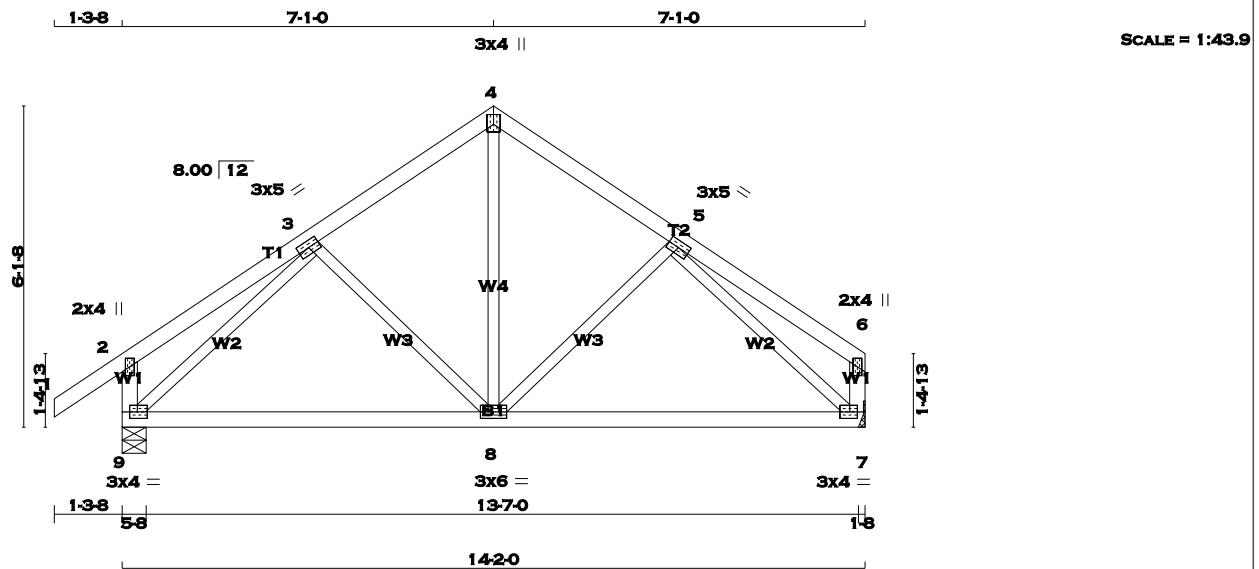
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.41 (2) (INPUT = 1.00)

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

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

DRY: SEASONED LUMBER.

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
9	778	0	778	0	0
7	672	0	672	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	544	394 / 0	0 / 0	0 / 0	0 / 0	150 / 0	0 / 0
7	472	330 / 0	0 / 0	0 / 0	0 / 0	142 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	8-4	0 / 357	0.08 (1)	
2-3	0 / 17	-77.3	-77.3 0.15 (1)	10.00	8-5	-147 / 6	0.06 (1)
3-4	-531 / 0	-77.3	-77.3 0.12 (1)	6.25	3-8	-147 / 6	0.06 (1)
4-5	-531 / 0	-77.3	-77.3 0.12 (1)	6.25	9-3	-744 / 0	0.29 (1)
5-6	0 / 17	-77.3	-77.3 0.15 (1)	10.00	5-7	-744 / 0	0.29 (1)
9-2	-212 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	-106 / 0	0.0	0.0 0.01 (1)	7.81			
9-8	0 / 533	-17.5	-17.5 0.29 (4)	10.00			
8-7	0 / 533	-17.5	-17.5 0.29 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (3) (INPUT = 0.90)
JSI METAL= 0.21 (3) (INPUT = 1.00)

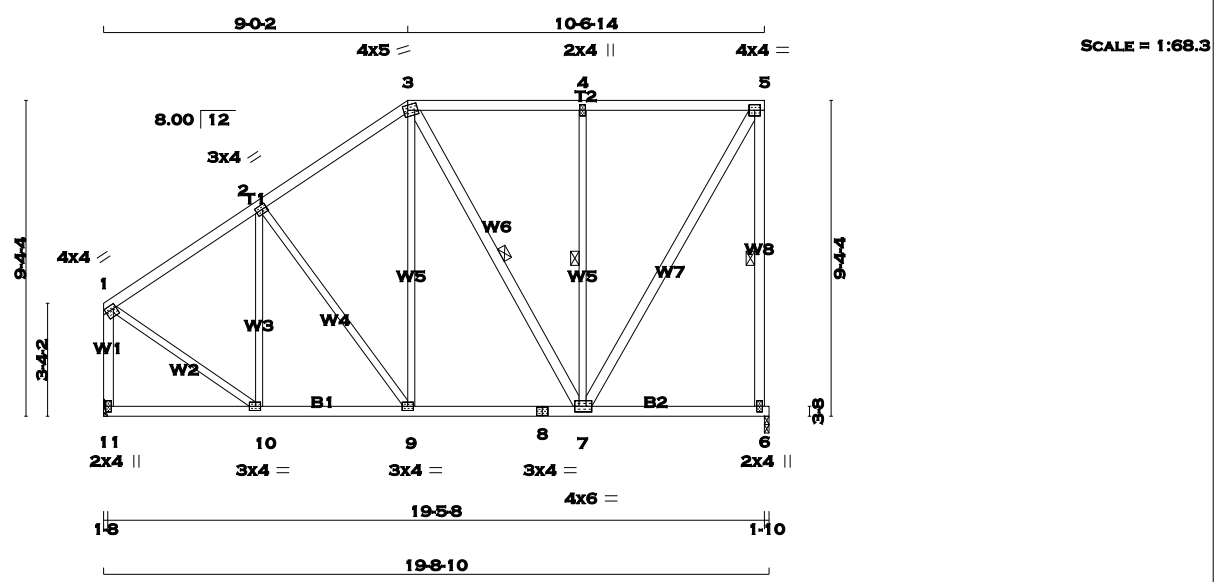


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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4 DRY	No.2	SPF	
3 - 5	2x4 DRY	No.2	SPF	
6 - 5	2x4 DRY	No.2	SPF	
11 - 1	2x4 DRY	No.2	SPF	
11 - 8	2x4 DRY	No.2	SPF	
8 - 6	2x4 DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3 DRY	No.2	SPF	
3 - 7	2x4 DRY	No.2	SPF	
7 - 5	2x4 DRY	No.2	SPF	
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
1	TMVW-t	MT20	4.0	4.0	1.50 1.00
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TMVW-w	MT20	2.0	4.0	
5	TMVW-t	MT20	4.0	4.0	
6	BMV1+p	MT20	2.0	4.0	
7	BMVWV-t	MT20	4.0	6.0	2.00 1.50
8	BS-t	MT20	3.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		929	0	929	0	0	1-10	1-10	
11		929	0	929	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
11	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 63 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)	FACTORED LC1 MAX. (CSI (LC))	MAX. UNBRACED LENGTH (FR-TO)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. (CSI (LC))		
FR-TO		FROM TO			FR-TO				
1-2	-666 / 0	-77.3	-77.3 0.28 (1)	6.25	10-2	-287 / 0	0.19 (1)		
2-3	-627 / 0	-77.3	-77.3 0.27 (1)	6.25	2-9	-123 / 0	0.14 (1)		
3-4	-434 / 0	-77.3	-77.3 0.37 (1)	6.25	9-3	0 / 177	0.04 (1)		
4-5	-434 / 0	-77.3	-77.3 0.37 (1)	6.25	3-7	-138 / 0	0.08 (1)		
6-5	-890 / 0	0.0	0.0 0.37 (1)	6.25	7-4	-506 / 0	0.29 (1)		
11-1	-896 / 0	0.0	0.0 0.17 (1)	7.81	7-5	0 / 850	0.14 (1)		
					1-10	0 / 686	0.15 (1)		
11-10	0 / 0	-17.5	-17.5 0.09 (4)	10.00					
10-9	0 / 574	-17.5	-17.5 0.14 (1)	10.00					
9-8	0 / 503	-17.5	-17.5 0.16 (4)	10.00					
8-7	0 / 503	-17.5	-17.5 0.16 (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/C				

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.37 (4-5:1), BC=0.16 (7-9:4), WB=0.29 (4-7:1), 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

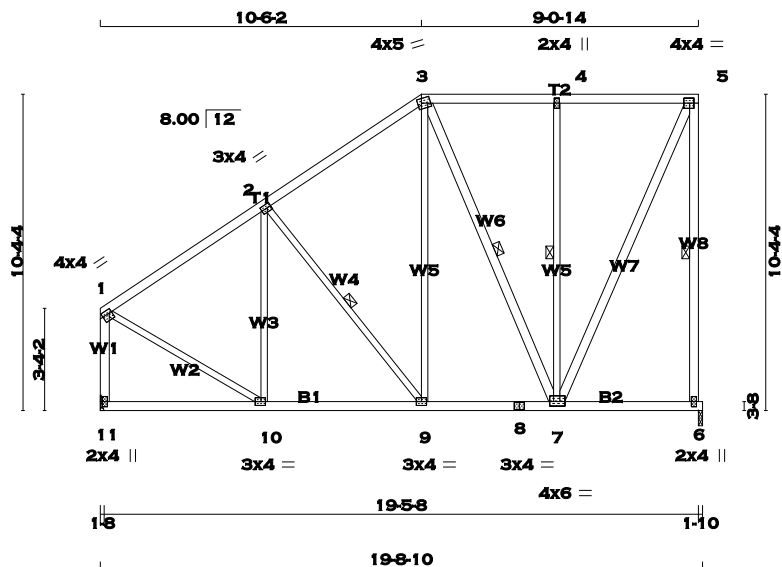
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.29 (1) (INPUT = 1.00)

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SCALE = 1:75.4

TOTAL WEIGHT = 119 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4 DRY	No.2	SPF	
3 - 5	2x4 DRY	No.2	SPF	
6 - 5	2x4 DRY	No.2	SPF	
11 - 1	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	
3 - 7	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	X
1	TMVW-t	MT20	4.0	4.0	1.50 1.00
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TMW+w	MT20	2.0	4.0	
5	TMVW-t	MT20	4.0	4.0	2.00 1.75
6	BMV1+p	MT20	2.0	4.0	
7	BMVWV-t	MT20	4.0	6.0	1.75 1.50
8	BS-t	MT20	3.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS					
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION		
JT	VERT	HORZ	DOWN	UPLIFT	IN-SX
6	929	0	929	0	0
11	929	0	929	0	0
INPUT BRG REQ'D 1-10 1-10 HANGER BY OTHERS MIN. SEAT SIZE: 1-8					

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
11	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 54 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	-688 / 0	-77.3 -77.3	0.28 (1)	6.25	10-2	-229 / 22	0.19 (1)
2-3	-570 / 0	-77.3 -77.3	0.28 (1)	6.25	2-9	-232 / 0	0.11 (1)
3-4	-348 / 0	-77.3 -77.3	0.20 (1)	6.25	9-3	0 / 260	0.06 (1)
4-5	-349 / 0	-77.3 -77.3	0.20 (1)	6.25	3-7	-259 / 0	0.17 (1)
6-5	-895 / 0	0.0 0.0	0.47 (1)	6.25	7-4	-433 / 0	0.32 (1)
11-1	-891 / 0	0.0 0.0	0.17 (1)	7.81	7-5	0 / 833	0.13 (1)
					1-10	0 / 683	0.15 (1)
11-10	0 / 0	-17.5 -17.5	0.12 (4)	10.00			
10-9	0 / 595	-17.5 -17.5	0.17 (4)	10.00			
9-8	0 / 453	-17.5 -17.5	0.12 (4)	10.00			
8-7	0 / 453	-17.5 -17.5	0.12 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.09 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.47 (5-6:1), BC=0.17 (9-10:4), WB=0.32 (4-7:1), SSI=0.17 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

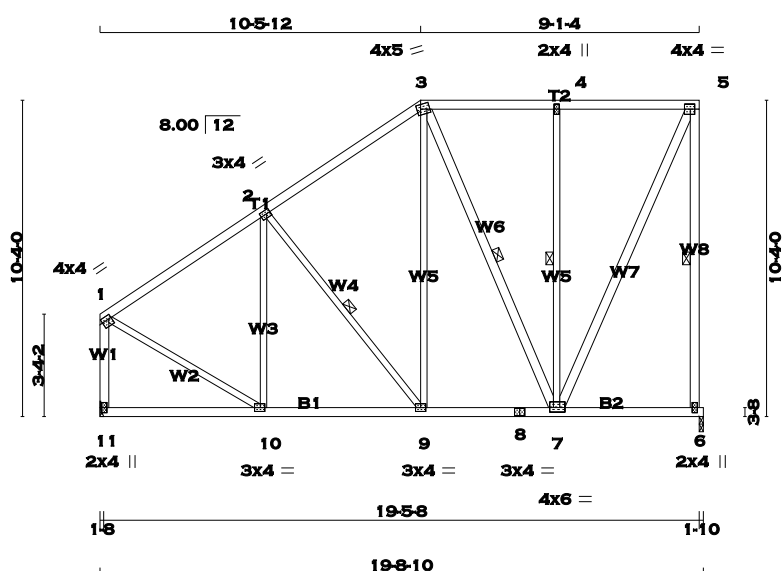
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.30 (1) (INPUT = 1.00)



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SCALE = 1:75.3

TOTAL WEIGHT = 118 lb [M][F]

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR
1 - 3	2x4	DRY	No.2		SPF
3 - 5	2x4	DRY	No.2		SPF
6 - 5	2x4	DRY	No.2		SPF
11- 1	2x4	DRY	No.2		SPF
11- 8	2x4	DRY	No.2		SPF
8 - 6	2x4	DRY	No.2		SPF
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
3 - 7	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	X
1	TMVW-t	MT20	4.0	4.0	1.50 1.00
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TMW+w	MT20	2.0	4.0	
5	TMVW-t	MT20	4.0	4.0	2.00 1.75
6	BMV1+p	MT20	2.0	4.0	
7	BMVWV-t	MT20	4.0	6.0	1.75 1.50
8	BS-t	MT20	3.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BMV1+p	MT20	2.0	4.0	

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
6		929	0	929	0	0	1-10	1-10	
11		929	0	929	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-8									

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

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 54 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	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX	CSI (LC)	
FR-TO		FROM TO			FR-TO				
1-2	-688 / 0	-77.3 -77.3	0.28 (1)	6.25	10-2	-230 / 21	0.19 (1)		
2-3	-571 / 0	-77.3 -77.3	0.28 (1)	6.25	2-9	-230 / 0	0.11 (1)		
3-4	-350 / 0	-77.3 -77.3	0.20 (1)	6.25	9-3	0 / 258	0.06 (1)		
4-5	-350 / 0	-77.3 -77.3	0.20 (1)	6.25	3-7	-256 / 0	0.17 (1)		
6-5	-895 / 0	0.0 0.0	0.47 (1)	6.25	7-4	-434 / 0	0.32 (1)		
11-1	-891 / 0	0.0 0.0	0.17 (1)	7.81	7-5	0 / 833	0.13 (1)		
					1-10	0 / 683	0.15 (1)		
11-10	0 / 0	-17.5 -17.5	0.12 (4)	10.00					
10-9	0 / 595	-17.5 -17.5	0.17 (4)	10.00					
9-8	0 / 454	-17.5 -17.5	0.12 (4)	10.00					
8-7	0 / 454	-17.5 -17.5	0.12 (4)	10.00					
7-6	0 / 0	-17.5 -17.5	0.09 (4)	10.00					

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL =	23.3	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	33.3	PSF
SPACING = 24.0 IN./C/C			

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.47 (5-6:1) , BC=0.17 (9-10:4) , WB=0.32 (4-7:1) , 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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.30 (1) (INPUT = 1.00)



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

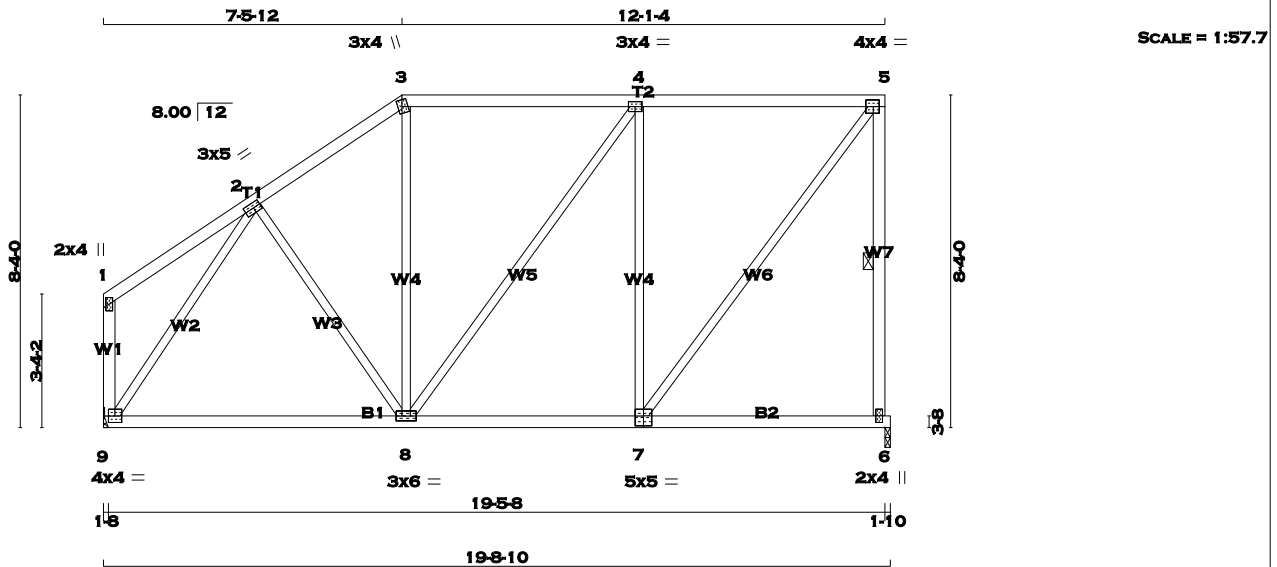
CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	-666 / 0	-77.3	-77.3 0.27 (1)	6.25	10-2	-289 / 0	0.19 (1)
2-3	-628 / 0	-77.3	-77.3 0.27 (1)	6.25	2-9	-120 / 0	0.14 (1)
3-4	-436 / 0	-77.3	-77.3 0.37 (1)	6.25	9-3	0 / 175	0.04 (1)
4-5	-436 / 0	-77.3	-77.3 0.37 (1)	6.25	3-7	-135 / 0	0.08 (1)
6-5	-890 / 0	0.0	0.0 0.36 (1)	6.25	7-4	-508 / 0	0.29 (1)
11-1	-896 / 0	0.0	0.0 0.17 (1)	7.81	7-5	0 / 850	0.14 (1)
					1-10	0 / 686	0.15 (1)
11-10	0 / 0	-17.5	-17.5 0.09 (4)	10.00			
10-9	0 / 573	-17.5	-17.5 0.14 (1)	10.00			
9-8	0 / 504	-17.5	-17.5 0.16 (4)	10.00			
8-7	0 / 504	-17.5	-17.5 0.16 (4)	10.00			
7-6	0 / 0	-17.5	-17.5 0.12 (4)	10.00			

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.29 (1) (INPUT = 1.00)



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





TOTAL WEIGHT = 98 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
2	TMVW-t	MT20	3.0	5.0	1.50	2.25
3	TTW+m	MT20	3.0	4.0	2.00	1.25
4	TMVW-t	MT20	3.0	4.0		
5	TMVW-t	MT20	4.0	4.0	2.00	1.75
6	BMV1+p	MT20	2.0	4.0		
7	BSWW-l	MT20	5.0	5.0	3.00	2.50
8	BSWWW-t	MT20	3.0	6.0		
9	BMVW1-t	MT20	4.0	4.0		

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
JT	VERT	HORZ	DOWN	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX
6	929	0	929	0	0	0	0	0	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10
9	929	0	929	0	0	0	0	0	HANGER BY OTHERS										
MIN. SEAT SIZE: 1-8																			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
6	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
9	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 88 LBS.

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 / 19	-77.3 -77.3	0.17 (1)	10.00	2-8	0 / 59	0.02 (4)
2-3	-675 / 0	-77.3 -77.3	0.18 (1)	6.25	8-3	0 / 83	0.03 (4)
3-4	-546 / 0	-77.3 -77.3	0.49 (1)	6.25	8-4	0 / 25	0.01 (4)
4-5	-537 / 0	-77.3 -77.3	0.49 (1)	6.25	7-4	-594 / 0	0.82 (1)
6-5	-883 / 0	0.0 0.0	0.28 (1)	6.25	7-5	0 / 883	0.20 (1)
9-1	-112 / 0	0.0 0.0	0.02 (1)	7.81	9-2	-921 / 0	0.73 (1)
9-8	0 / 518	-17.5 -17.5	0.24 (4)	10.00			
8-7	0 / 537	-17.5 -17.5	0.25 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.13 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.49 (4-5:1) , BC=0.25 (7-8:4) , WB=0.82 (4-7:1) , 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.

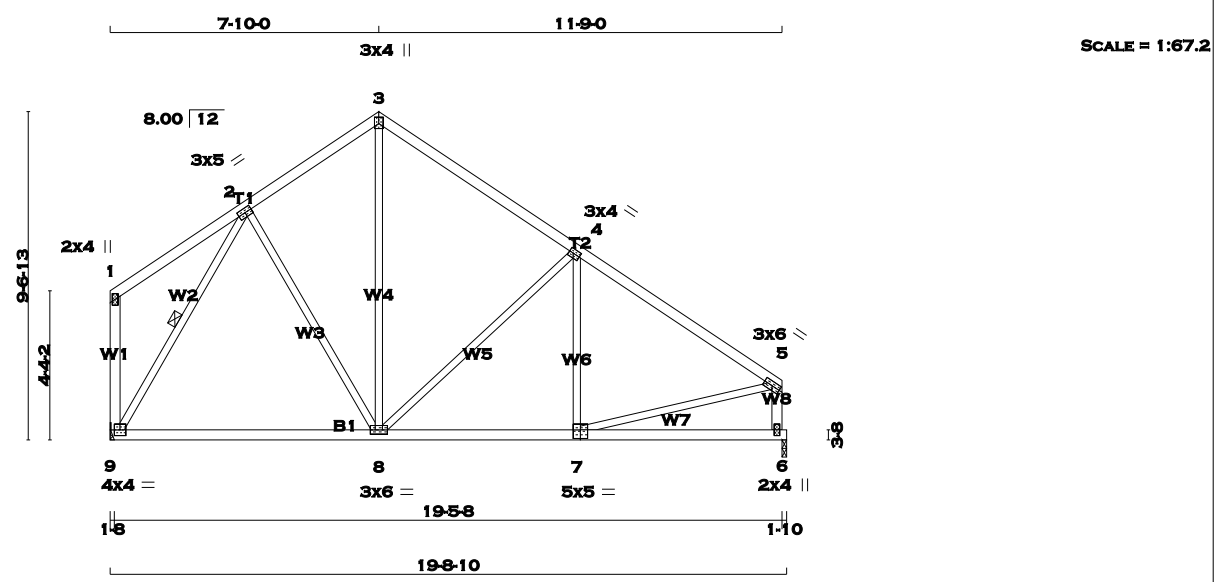
JSI GRIP= 0.87 (3) (INPUT = 0.90)
JSI METAL= 0.26 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 90 = 360 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
9 - 1	2x4	DRY	No.2		SPF
6 - 5	2x4	DRY	No.2		SPF
9 - 7	2x4	DRY	No.2		SPF
7 - 6	2x4	DRY	No.2		SPF
ALL WEBS	2x3	DRY	No.2		SPF
EXCEPT					
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	BSWW-l	MT20	5.0	5.0	3.00	2.50
8	BSWWW-t	MT20	3.0	6.0		
9	BMVW1-t	MT20	4.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DOWN	REQRD UPLIFT	BRG IN-SX	BRG IN-SX	HANGER BY OTHERS
	VERT	HORZ	DOWN	HORZ					
9	929	0	929	0	0				MIN. SEAT SIZE: 1-8
6	929	0	929	0	0	1-10	1-10		
UNFACTORED REACTIONS									
JT	1ST LCASE		MAX./MIN. LIVE		PERM. LIVE		WIND	DEAD	SOIL
	COMBINED	SNOW							
9	652	456 / 0	0 / 0		0 / 0	0 / 0		196 / 0	0 / 0
6	652	456 / 0	0 / 0		0 / 0	0 / 0		196 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9. DBS = 16-0-0 . CBF = 88 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH		
FR-TO		FROM TO			FR-TO				
1-2	0 / 19	-77.3 -77.3	0.19 (1)	10.00	2-8	0 / 69	0.02 (4)		
2-3	-599 / 0	-77.3 -77.3	0.15 (1)	6.25	8-3	0 / 362	0.08 (1)		
3-4	-611 / 0	-77.3 -77.3	0.35 (1)	6.25	8-4	-412 / 0	0.53 (1)		
4-5	-911 / 0	-77.3 -77.3	0.37 (1)	5.99	7-4	-84 / 61	0.04 (1)		
9-1	-118 / 0	0.0 0.0	0.04 (1)	7.81	9-2	-877 / 0	0.34 (1)		
6-5	-884 / 0	0.0 0.0	0.10 (1)	7.81	7-5	0 / 804	0.18 (1)		
9-8	0 / 447	-17.5 -17.5	0.26 (4)	10.00					
8-7	0 / 783	-17.5 -17.5	0.28 (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

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

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

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

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

CSI: TC=0.37 (4-5:1) , BC=0.28 (7-8:4) , WB=0.53 (4-8:1) , SSI=0.19 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

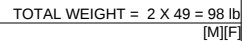
JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.26 (5) (INPUT = 1.00)



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DRY: SEASONED LUMBER.

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

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	7-3	0 / 104	0.04 (4)		
2-3	-418 / 0	-77.3	-77.3 0.35 (1)	6.25	2-7	0 / 353	0.08 (1)		
3-4	-418 / 0	-77.3	-77.3 0.35 (1)	6.25	7-4	0 / 353	0.08 (1)		
4-5	0 / 29	-77.3	-77.3 0.10 (1)	10.00					
8-2	-631 / 0	0.0	0.0 0.07 (1)	7.81					
6-4	-631 / 0	0.0	0.0 0.07 (1)	7.81					
8-7	0 / 0	-17.5	-17.5 0.18 (4)	10.00					
7-6	0 / 0	-17.5	-17.5 0.18 (4)	10.00					

JSI GRIP= 0.76 (7) (INPUT = 0.90)
JSI METAL= 0.18 (2) (INPUT = 1.00)

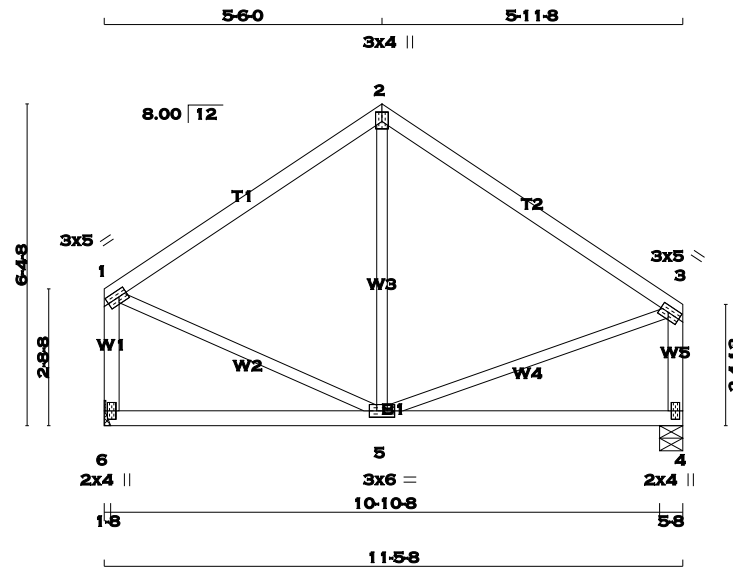


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KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 13:01:28 2017 Page 1
ID:CvrZnhWk3AkzcGBuQAVgcOyl?Y8-2_SF7lVlPOElkmd6sE39Y?EeyGkB?oUewU8ITLzbM4L



SCALE = 1:45.6

TOTAL WEIGHT = 2 X 48 = 96 lb
[M][F]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF
2 - 3	2x4	DRY	No.2	SPF
6 - 1	2x4	DRY	No.2	SPF
4 - 3	2x4	DRY	No.2	SPF
6 - 4	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	3.0	5.0	1.50	2.00
2	TTW+p	MT20	3.0	4.0	2.25	1.50
3	TMVW-t	MT20	3.0	5.0	1.50	2.00
4	BMV1+p	MT20	2.0	4.0		
5	BMVWW-t	MT20	3.0	6.0		
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		
6	543	0	543	0	0	0
4	543	0	543	0	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	381	267 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
4	381	267 / 0	0 / 0	0 / 0	0 / 0	115 / 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. UNBRACED LENGTH	MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)	LC2 MAX. (LC)			MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO						FR-TO		
1-2	-322 / 0	-77.3	-77.3	0.30 (1)	6.25	5-2	-86 / 70	0.05 (1)
2-3	-322 / 0	-77.3	-77.3	0.35 (1)	6.25	1-5	0 / 292	0.07 (1)
6-1	-508 / 0	0.0	0.0	0.07 (1)	7.81	5-3	0 / 284	0.06 (1)
4-3	-503 / 0	0.0	0.0	0.06 (1)	7.81			
6-5	0 / 0	-17.5	-17.5	0.17 (4)	10.00			
5-4	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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.38")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.35 (2-3:1), BC=0.17 (5-6:4), WB=0.07 (1-5:1), 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.

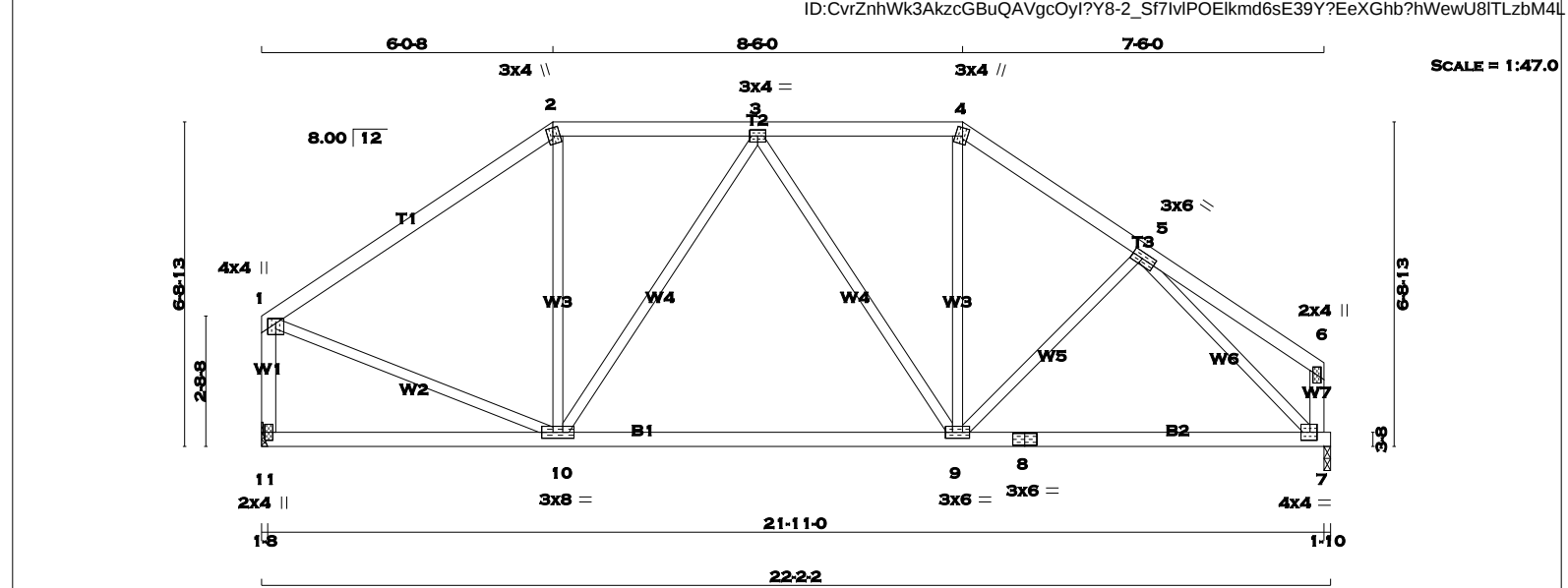
JSI GRIP= 0.53 (5) (INPUT = 0.90)
JSI METAL= 0.13 (3) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS SIZE

LUMBER

DESCR.

1 - 2

2x4

DRY

No.2

SPF

2 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

11 - 1

2x4

DRY

No.2

SPF

7 - 6

2x4

DRY

No.2

SPF

11 - 8

2x4

DRY

No.2

SPF

8 - 7

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
11		1045	0	1045	0	0	HANGER BY OTHERS		
7		1045	0	1045	0	0	MIN. SEAT SIZE: 1-8		
UNFACTORED REACTIONS									
1ST LCASE MAX./MIN. COMPONENT REACTIONS									
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
11	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0		
7	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.73")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

ALLOWABLE DEFL.(TL)= L/360 (0.73")

CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.38 (1-2:1), BC=0.33 (9-10:4), WB=0.58 (5-7:1), 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 (9) (INPUT = 0.90)

JSI METAL= 0.32 (7) (INPUT = 1.00)

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.04 FT.

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)	LC1 MAX. (LC)	MEMB.	FORCE (LBS)	MAX. (LC)	
FR-TO				FROM	TO	FR-TO			
1-2	-878 / 0		-77.3	-77.3	0.38 (1)	6.04	10-2	0 / 127	0.04 (4)
2-3	-732 / 0		-77.3	-77.3	0.18 (1)	6.25	10-3	-325 / 0	0.39 (1)
3-4	-825 / 0		-77.3	-77.3	0.18 (1)	6.25	3-9	-153 / 4	0.18 (1)
4-5	-1005 / 0		-77.3	-77.3	0.14 (1)	6.09	9-4	0 / 309	0.07 (1)
5-6	0 / 18		-77.3	-77.3	0.17 (1)	10.00	9-5	-34 / 41	0.02 (1)
11-1	-1005 / 0		0.0	0.0	0.14 (1)	7.80	1-10	0 / 783	0.18 (1)
7-6	-113 / 0		0.0	0.0	0.01 (1)	7.81	5-7	-1219 / 0	0.58 (1)
11-10	0 / 0		-17.5	-17.5	0.20 (4)	10.00			
10-9	0 / 908		-17.5	-17.5	0.33 (4)	10.00			
9-8	0 / 844		-17.5	-17.5	0.32 (4)	10.00			
8-7	0 / 844		-17.5	-17.5	0.32 (4)	10.00			

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

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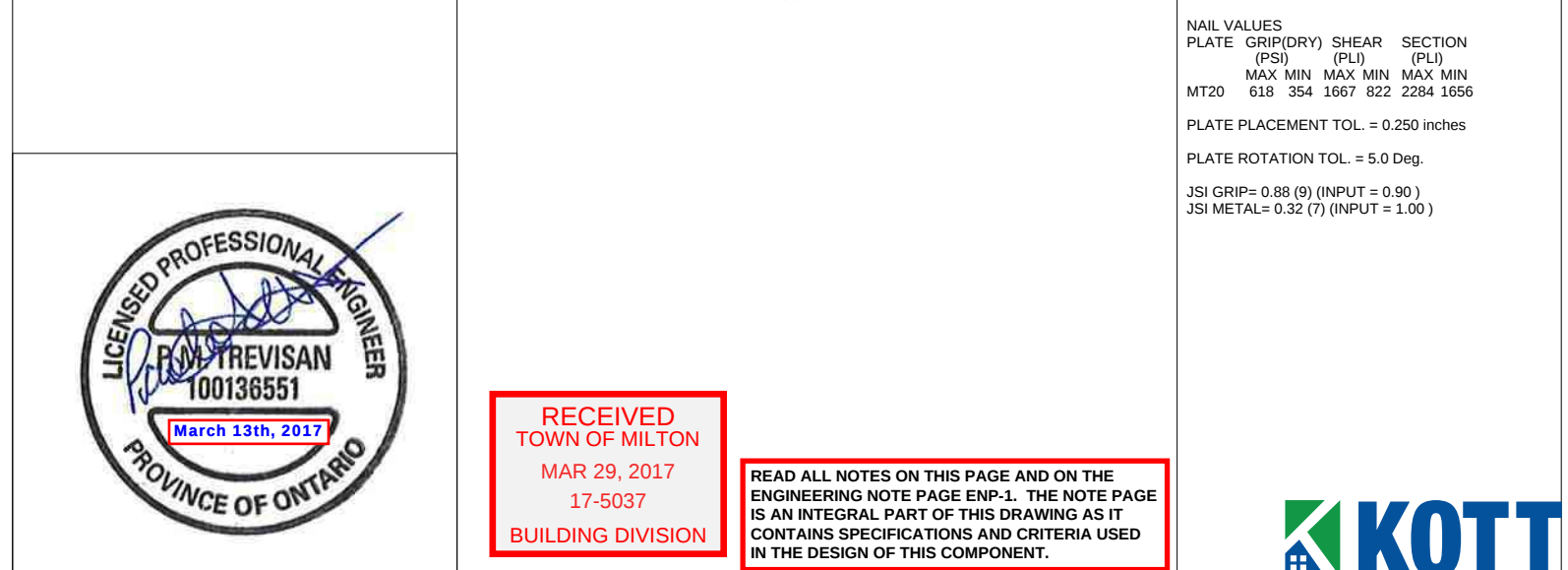
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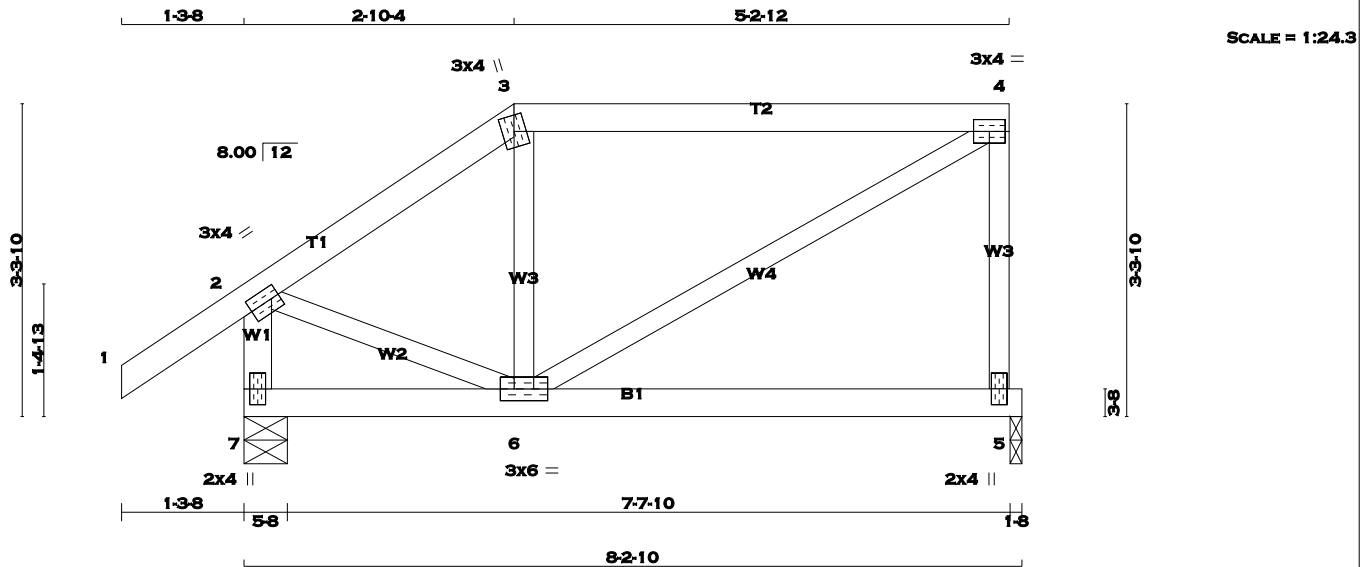
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TOTAL WEIGHT = 2 X 33 = 67 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
3 - 4	2x4	DRY	No.2		SPF
5 - 4	2x3	DRY	No.2		SPF
7 - 2	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	1.00
3	TTW+m	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0		
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	
5		383	0	383	0	0	1-8	1-8	
7		490	0	490	0	0	5-8	5-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
5	COMBINED		188 / 0	0 / 0	0 / 0	0 / 0	81 / 0
7			252 / 0	0 / 0	0 / 0	0 / 0	89 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS		FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	6-3	-145 / 23	0.03 (1)
2-3	-302 / 0	-77.3 -77.3	0.11 (1)	6.25	6-4	0 / 285	0.06 (1)
3-4	-245 / 0	-77.3 -77.3	0.37 (1)	6.25	2-6	0 / 266	0.06 (1)
5-4	-346 / 0	0.0 0.0	0.08 (1)	7.81			
7-2	-476 / 0	0.0 0.0	0.05 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.10 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.10 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.27")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.37 (3-4:1), BC=0.10 (5-6:4), WB=0.06 (4-6:1), SSI=0.16 (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= 0.87 (2) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)

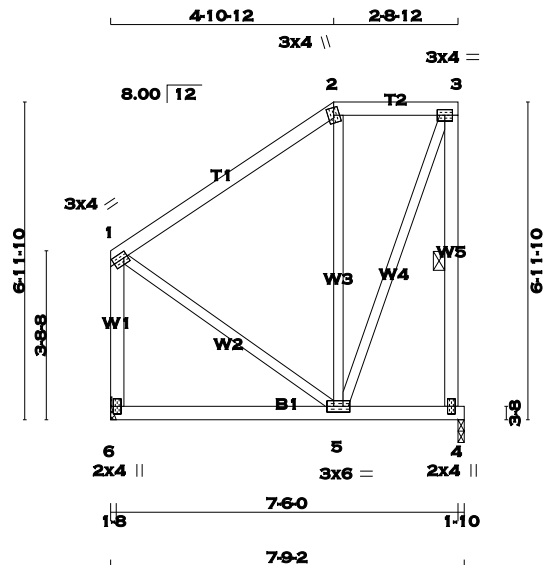


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SCALE = 1:50.6

TOTAL WEIGHT = 2 X 45 = 90 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	No.2	SPF
2 - 3	2x4	No.2	SPF
4 - 3	2x4	No.2	SPF
6 - 1	2x4	No.2	SPF
6 - 4	2x4	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	4.0	1.50	1.00
2	TTW+m	MT20	3.0	4.0		
3	TMVW-t	MT20	3.0	4.0		
4	BMV1+p	MT20	2.0	4.0		
5	BMVWW-t	MT20	3.0	6.0		
6	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
4	362	0	362	0	0	1-10
6	362	0	362	0	0	1-10

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
4	254	178 / 0	0 / 0		0 / 0	0 / 0	76 / 0	0 / 0
6	254	178 / 0	0 / 0		0 / 0	0 / 0	76 / 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-4. 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					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX		
FR-TO		FROM TO	CSI (LC)		FR-TO		CSI (LC)		
1-2	-121 / 0	-77.3	-77.3 0.24 (1)	6.25	5-2	-228 / 0	0.19 (1)		
2-3	-97 / 0	-77.3	-77.3 0.07 (1)	6.25	5-3	0 / 265	0.06 (1)		
4-3	-352 / 0	0.0	0.0 0.08 (1)	6.25	1-5	0 / 121	0.03 (1)		
6-1	-325 / 0	0.0	0.0 0.07 (1)	7.81					
6-5	0 / 0	-17.5	-17.5 0.09 (4)	10.00					
5-4	0 / 0	-17.5	-17.5 0.09 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (0.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.24 (1-2:1) , BC=0.09 (5-6:4) , WB=0.19 (2-5:1) , SSI=0.12 (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= 0.65 (5) (INPUT = 0.90)
JSI METAL= 0.09 (5) (INPUT = 1.00)

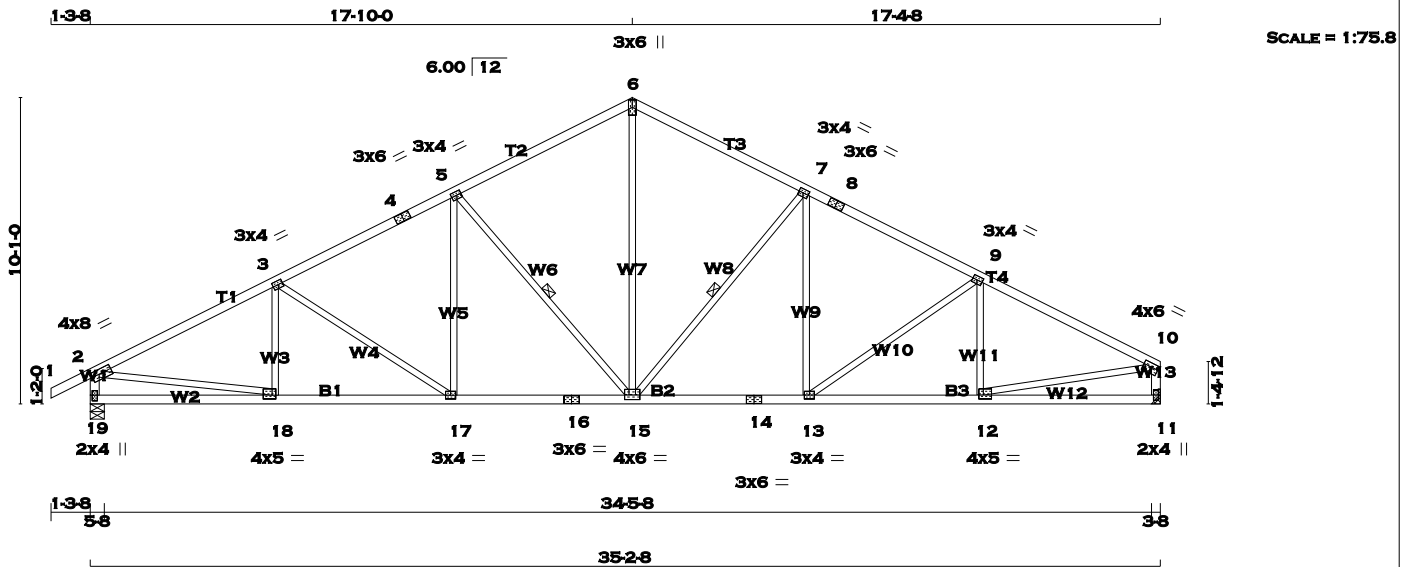


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BUILDING DIVISION

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TOTAL WEIGHT = 14 X 148 = 2068 lb
[M][F]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
8 - 10	2x4	DRY	No.2	SPF	
19 - 2	2x4	DRY	No.2	SPF	
11 - 10	2x4	DRY	No.2	SPF	
19 - 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	
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	6.0	1.50	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMVW-t	MT20	4.0	5.0	1.50	1.75
13	BMVW-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
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	1.50	1.50
19	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	COMBINED	SNOW	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
19	1775	0	1775	0	0	5-8	5-8		
11	1670	0	1670	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	1243	883 / 0	0 / 0	0 / 0	0 / 0	360 / 0	0 / 0
11	1172	820 / 0	0 / 0	0 / 0	0 / 0	352 / 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 = 3.98 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 5-15, 7-15. DBS = 20-0-0 . CBF = 89 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S		FACTORED		W E B S		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	MAX
FR-TO		FROM TO	CSI (LC)	FR-TO			CSI (LC)
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	18-3	-202 / 38	0.05 (1)
2-3	-2477 / 0	-77.3	-77.3 0.47 (1)	3.98	3-17	-313 / 0	0.30 (1)
3-4	-2205 / 0	-77.3	-77.3 0.38 (1)	4.28	17-5	0 / 273	0.06 (1)
4-5	-2205 / 0	-77.3	-77.3 0.38 (1)	4.28	5-15	-710 / 0	0.40 (1)
5-6	-1706 / 0	-77.3	-77.3 0.37 (1)	4.74	15-6	0 / 1146	0.26 (1)
6-7	-1706 / 0	-77.3	-77.3 0.35 (1)	4.76	15-7	-650 / 0	0.36 (1)
7-8	-2151 / 0	-77.3	-77.3 0.35 (1)	4.34	13-7	0 / 224	0.05 (4)
8-9	-2151 / 0	-77.3	-77.3 0.35 (1)	4.34	13-9	-222 / 0	0.21 (1)
9-10	-2334 / 0	-77.3	-77.3 0.43 (1)	4.12	12-9	-275 / 15	0.08 (1)
19-2	-1729 / 0	0.0	0.0 0.17 (1)	6.33	2-18	0 / 2255	0.51 (1)
11-10	-1625 / 0	0.0	0.0 0.17 (1)	6.49	12-10	0 / 2139	0.48 (1)

19-18	0 / 0	-17.5	-17.5 0.14 (4)	10.00
18-17	0 / 2233	-17.5	-17.5 0.42 (1)	10.00
17-16	0 / 1972	-17.5	-17.5 0.39 (1)	10.00
16-15	0 / 1972	-17.5	-17.5 0.39 (1)	10.00
15-14	0 / 1923	-17.5	-17.5 0.38 (1)	10.00
14-13	0 / 1923	-17.5	-17.5 0.38 (1)	10.00
13-12	0 / 2104	-17.5	-17.5 0.40 (1)	10.00
12-11	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
- TPC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (1.17")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.17")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.47 (2-3:1) , BC=0.42 (17-18:1) , WB=0.51 (2-18:1) , 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
(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.

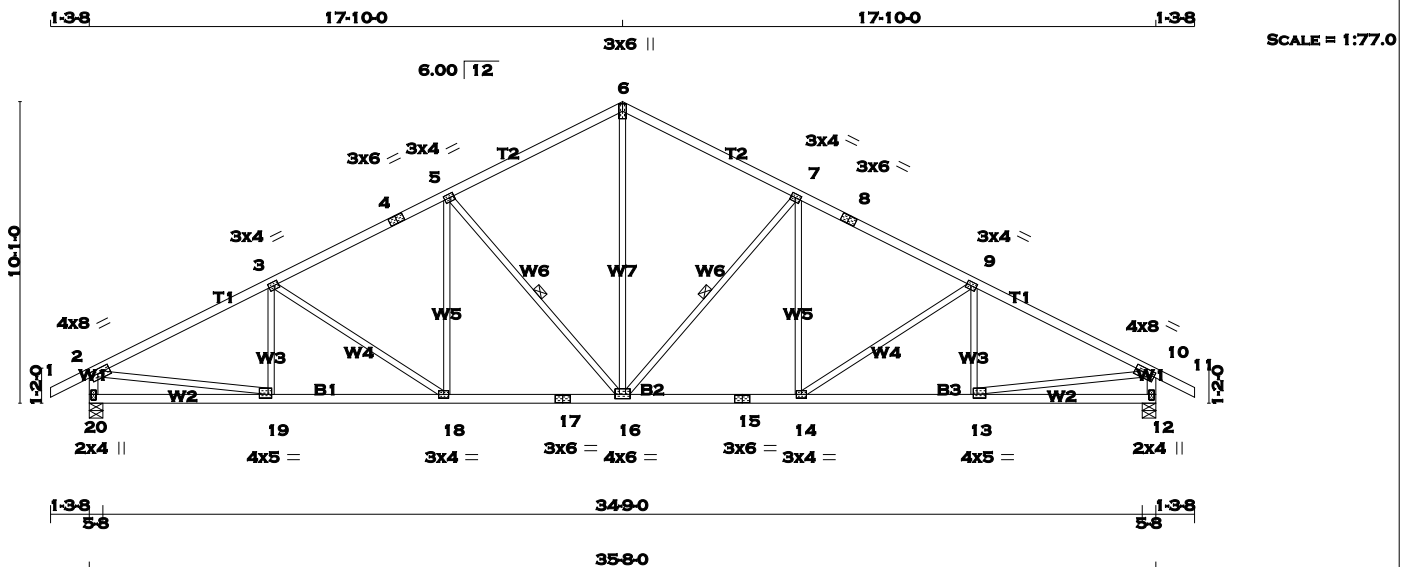
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.67 (18) (INPUT = 1.00)



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TOTAL WEIGHT = 12 X 150 = 1802 lb

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

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	1.75	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		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
20	1796	0		1796	0	0	5-8	5-8	
12	1796	0		1796	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
20	1258	894 / 0	0 / 0	0 / 0	0 / 0	365 / 0	0 / 0		
12	1258	894 / 0	0 / 0	0 / 0	0 / 0	365 / 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 = 3.95 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16, 5-16. DBS = 20-0-0 . CBF = 88 LBS.

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

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

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	16-6	0 / 1181	0.27 (1)
2-3	-2515 / 0	-77.3 -77.3	0.47 (1)	3.95	16-7	-708 / 0	0.40 (1)
3-4	-2247 / 0	-77.3 -77.3	0.38 (1)	4.24	14-7	0 / 270	0.06 (1)
4-5	-2247 / 0	-77.3 -77.3	0.38 (1)	4.24	14-9	-308 / 0	0.29 (1)
5-6	-1751 / 0	-77.3 -77.3	0.37 (1)	4.68	13-9	-207 / 37	0.06 (1)
6-7	-1751 / 0	-77.3 -77.3	0.37 (1)	4.68	5-16	-708 / 0	0.40 (1)
7-8	-2247 / 0	-77.3 -77.3	0.38 (1)	4.24	18-5	0 / 270	0.06 (1)
8-9	-2247 / 0	-77.3 -77.3	0.38 (1)	4.24	3-18	-308 / 0	0.29 (1)
9-10	-2515 / 0	-77.3 -77.3	0.47 (1)	3.95	19-3	-207 / 37	0.06 (1)
10-11	0 / 23	-77.3 -77.3	0.10 (1)	10.00	2-19	0 / 2289	0.52 (1)
20-2	-1750 / 0	0.0	0.0 0.18 (1)	6.30	13-10	0 / 2289	0.52 (1)
12-10	-1750 / 0	0.0	0.0 0.18 (1)	6.30			
20-19	0 / 0	-17.5 -17.5	0.14 (4)	10.00			
19-18	0 / 2266	-17.5 -17.5	0.42 (1)	10.00			
18-17	0 / 2010	-17.5 -17.5	0.40 (1)	10.00			
17-16	0 / 2010	-17.5 -17.5	0.40 (1)	10.00			
16-15	0 / 2010	-17.5 -17.5	0.40 (1)	10.00			
15-14	0 / 2010	-17.5 -17.5	0.40 (1)	10.00			
14-13	0 / 2266	-17.5 -17.5	0.42 (1)	10.00			
13-12	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 (1.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (1.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.25")

CSI: TC=0.47 (2-3:1) , BC=0.42 (13-14:1) , WB=0.52 (10-13:1) , 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
(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.

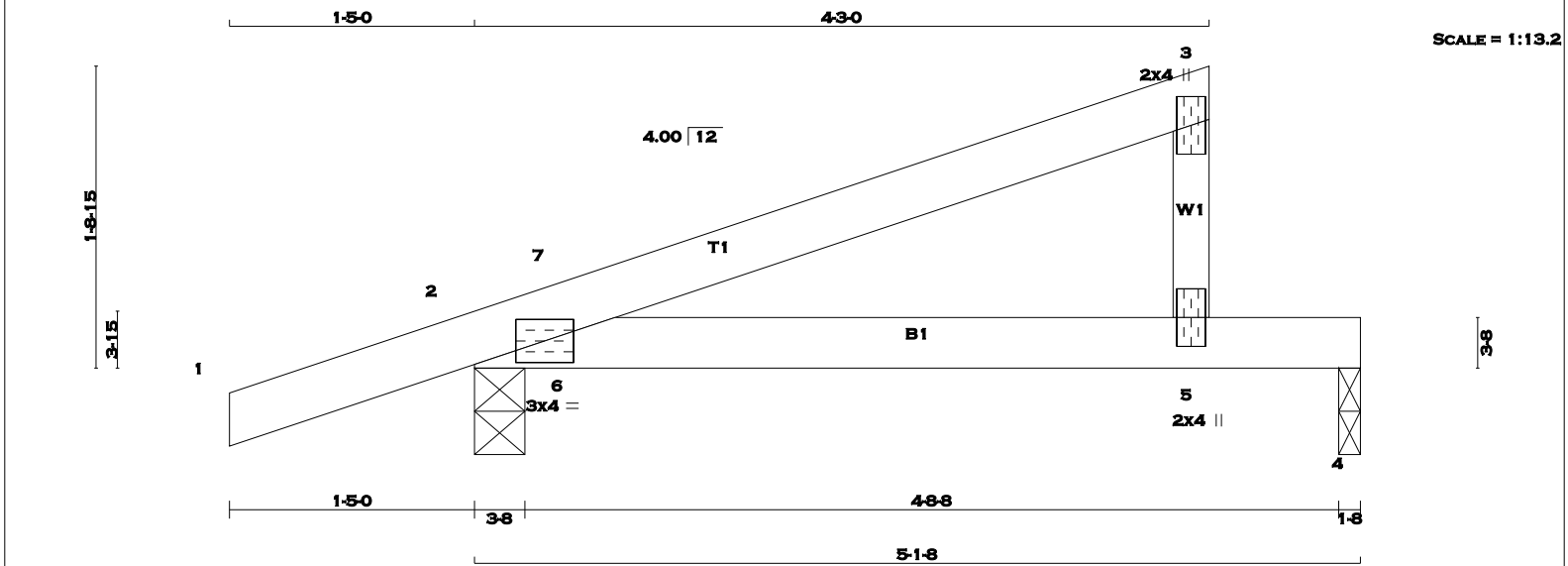
JSI GRIP= 0.88 (16) (INPUT = 0.90)
JSI METAL= 0.68 (13) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

DESCR.

SPF

SPF

1 - 3

2x4

DRY

No.2

5 - 3

2x3

DRY

No.2

2 - 4

2x4

DRY

No.2

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

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

2

350

0

350

0

0

3-8

3-8

4

181

0

181

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

2

244

184 / 0

0 / 0

0 / 0

0 / 0

60 / 0

0 / 0

4

129

82 / 0

0 / 0

0 / 0

0 / 0

46 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB.

MAX. FACTORED FORCE (LBS)

FACTORED VERT. LOAD (PLF)

LC1 MAX. CSI (LC)

MAX. UNBRAC LENGTH

WEBS

MEMB.

MAX. FACTORED FORCE (LBS)

MAX. CSI (LC)

FR-TO

1-2

0 / 17

-77.3

-77.3

0.12 (1)

10.00

6-7

-71 / 51

0.00 (1)

2-7

-28 / 0

-77.3

-77.3

0.08 (4)

6.25

7-3

0 / 4

-77.3

-77.3

0.21 (1)

10.00

5-3

-154 / 0

0.0

0.0

0.02 (1)

7.81

2-6

0 / 0

-17.5

-17.5

0.11 (1)

10.00

6-5

0 / 0

-17.5

-17.5

0.21 (1)

10.00

5-4

0 / 0

-17.5

-17.5

0.21 (1)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/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/ 694 (0.09")

CSI: TC=0.21 (3-7:1) , BC=0.21 (5-6:1) , WB=0.00 (6-7:1) , SSI=0.14 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (2) (INPUT = 0.90)

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



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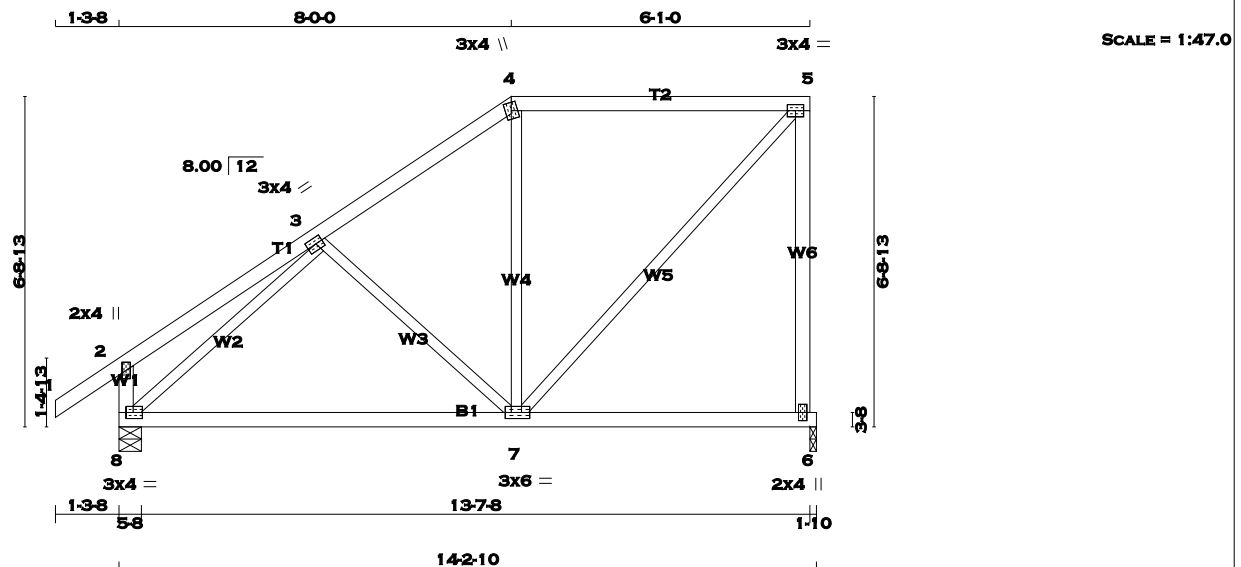
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BUILDING DIVISION

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TOTAL WEIGHT = 2 X 64 = 129 lb
[M][F]

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS	SIZE			
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	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	4.0	1.50	1.75
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	3.0	6.0	1.50	1.50
8	BMVW1-t	MT20	3.0	4.0	1.50	1.75

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
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
6		469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0
8		541	392 / 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.

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-7	-207 / 0	0.11 (1)
2-3	0 / 20	-77.3	-77.3 0.20 (1)	10.00	7-4	-105 / 44	0.08 (1)
3-4	-469 / 0	-77.3	-77.3 0.16 (1)	6.25	7-5	0 / 545	0.12 (1)
4-5	-371 / 0	-77.3	-77.3 0.37 (1)	6.25	8-3	-721 / 0	0.35 (1)
6-5	-634 / 0	0.0	0.0 0.61 (1)	7.81			
8-2	-224 / 0	0.0	0.0 0.02 (1)	7.81			
8-7	0 / 526	-17.5	-17.5 0.30 (4)	10.00			
7-6	0 / 0	-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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.61 (5-6:1), BC=0.30 (7-8:4), WB=0.35 (3-8:1), SSI=0.18 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

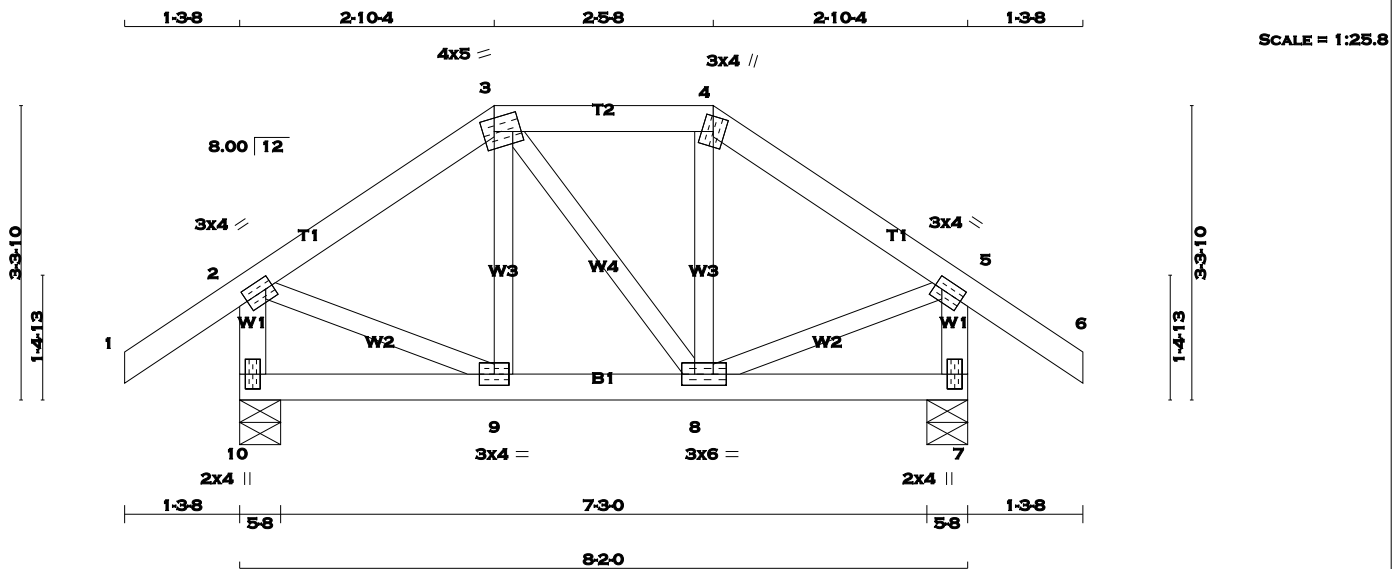
JSI GRIP= 0.88 (5) (INPUT = 0.90)
JSI METAL= 0.25 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 38 = 76 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 - 6	2x4	DRY	No.2	SPF
10 - 2	2x4	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
10 - 7	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.00
7	BMV1+p	MT20	2.0	4.0		
8	BMVWW-t	MT20	3.0	6.0		
9	BMVWW-t	MT20	3.0	4.0		
10	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
10	493	0	493	0	0	5-8	5-8	
7	493	0	493	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL							
10	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0							
7	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0							

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 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 (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	9-3	-40 / 28	0.01 (4)
2-3	-295 / 0	-77.3	-77.3 0.08 (1)	6.25	3-8	0 / 0	0.00 (1)
3-4	-244 / 0	-77.3	-77.3 0.06 (1)	6.25	8-4	-41 / 28	0.01 (4)
4-5	-295 / 0	-77.3	-77.3 0.08 (1)	6.25	2-9	0 / 261	0.06 (1)
5-6	0 / 29	-77.3	-77.3 0.10 (1)	10.00	8-5	0 / 261	0.06 (1)
10-2	-471 / 0	0.0	0.0 0.05 (1)	7.81			
7-5	-471 / 0	0.0	0.0 0.05 (1)	7.81			
10-9	0 / 0	-17.5	-17.5 0.03 (4)	10.00			
9-8	0 / 244	-17.5	-17.5 0.05 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.03 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.10 (1-2:1), BC=0.05 (8-9:1), WB=0.06 (2-9:1), SSI=0.07 (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= 0.85 (2) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)



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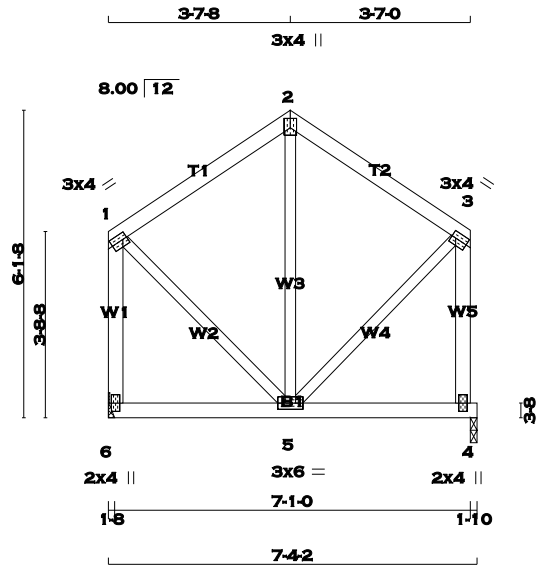
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KOTT, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 13:01:31 2017 Page 1
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SCALE = 1:45.9

TOTAL WEIGHT = 4 X 38 = 152 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
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	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	3.0	4.0	1.50	1.00
2	TTW+p	MT20	3.0	4.0	2.25	1.50
3	TMVW-t	MT20	3.0	4.0	1.50	1.00
4	BMV1+p	MT20	2.0	4.0		
5	BMVWW-t	MT20	3.0	6.0		
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
6		342	0	342	0	0	0	HANGER BY OTHERS	
4		342	0	342	0	0	0	MIN. SEAT SIZE: 1-8	1-10

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	240	168 / 0	0 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
4	240	168 / 0	0 / 0	0 / 0	0 / 0	0 / 0	72 / 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)

CHORDS		FACTORED		MEMB.		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. UNBRAC	MEMB.	FORCE (LBS)
FR-TO		FROM	TO	LENGTH	FR-TO			FR-TO	
1-2	-133 / 0	-77.3	-77.3	0.13 (1)	6.25	5-2	-131 / 19	0.08 (1)	
2-3	-133 / 0	-77.3	-77.3	0.13 (1)	6.25	1-5	0 / 151	0.03 (1)	
6-1	-317 / 0	0.0	0.0	0.07 (1)	7.81	5-3	0 / 153	0.03 (1)	
4-3	-318 / 0	0.0	0.0	0.07 (1)	7.81				
6-5	0 / 0	-17.5	-17.5	0.06 (4)	10.00				
5-4	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 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.13 (1-2:1), BC=0.06 (4-5:4), WB=0.08 (2-5:1), SSI=0.09 (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.

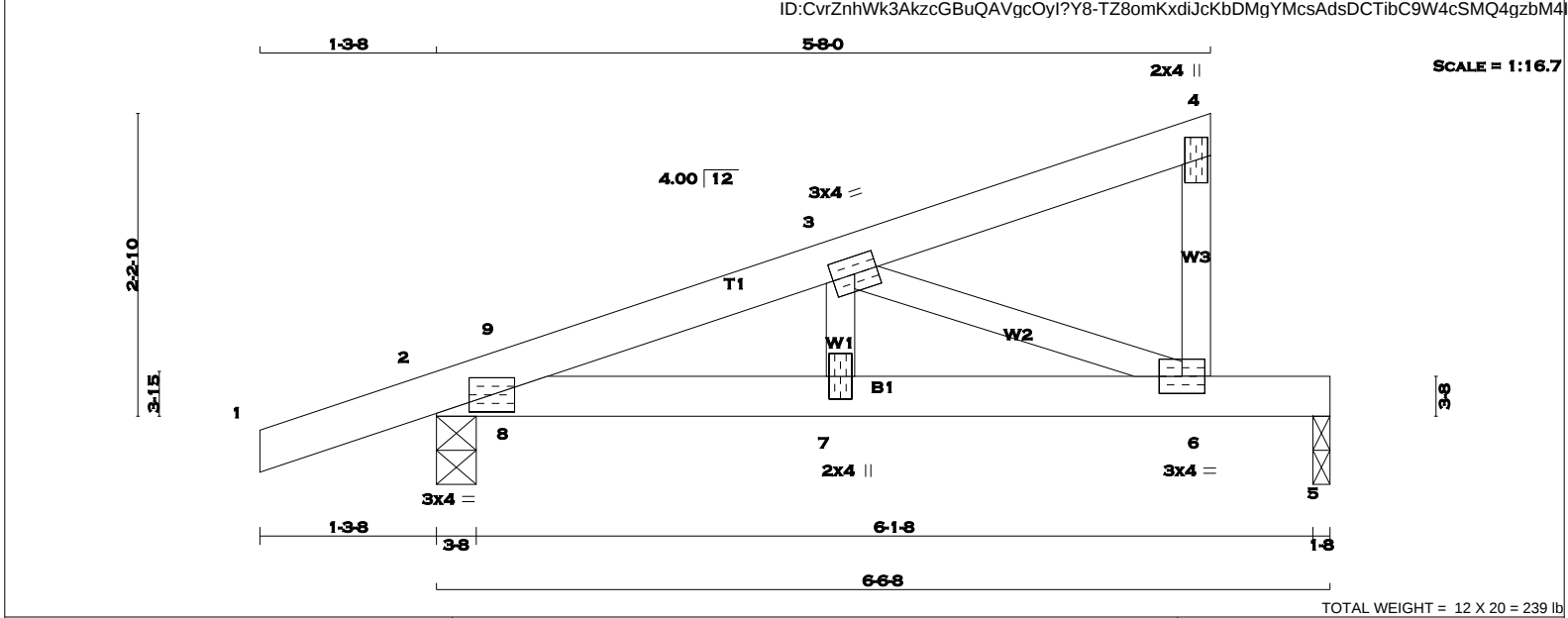
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JSI METAL= 0.08 (1) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

6 - 4

2x3

DRY

No.2

SPF

2 - 5

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

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

BEARINGS

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

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 15	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 178	0.04 (1)
2-9	-607 / 0	-77.3 -77.3	0.01 (1)	6.25	3-6	-606 / 0	0.11 (1)
9-3	-593 / 0	-77.3 -77.3	0.05 (1)	6.25	8-9	-74 / 2	0.00 (1)
3-4	-4 / 0	-77.3 -77.3	0.06 (1)	10.00			
6-4	-91 / 0	0.0 0.0	0.01 (1)	7.81			
2-8	0 / 568	-17.5 -17.5	0.14 (1)	10.00			
8-7	0 / 568	-17.5 -17.5	0.16 (1)	10.00			
7-6	0 / 568	-17.5 -17.5	0.38 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.29 (1)	10.00			

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	BMV+w	MT20	2.0	4.0		

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

DESIGN CRITERIA

TOTAL WEIGHT = 12 X 20 = 239 lb

[M][F]

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

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

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")

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

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

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

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (6) (INPUT = 0.90)

JSI METAL= 0.21 (6) (INPUT = 1.00)

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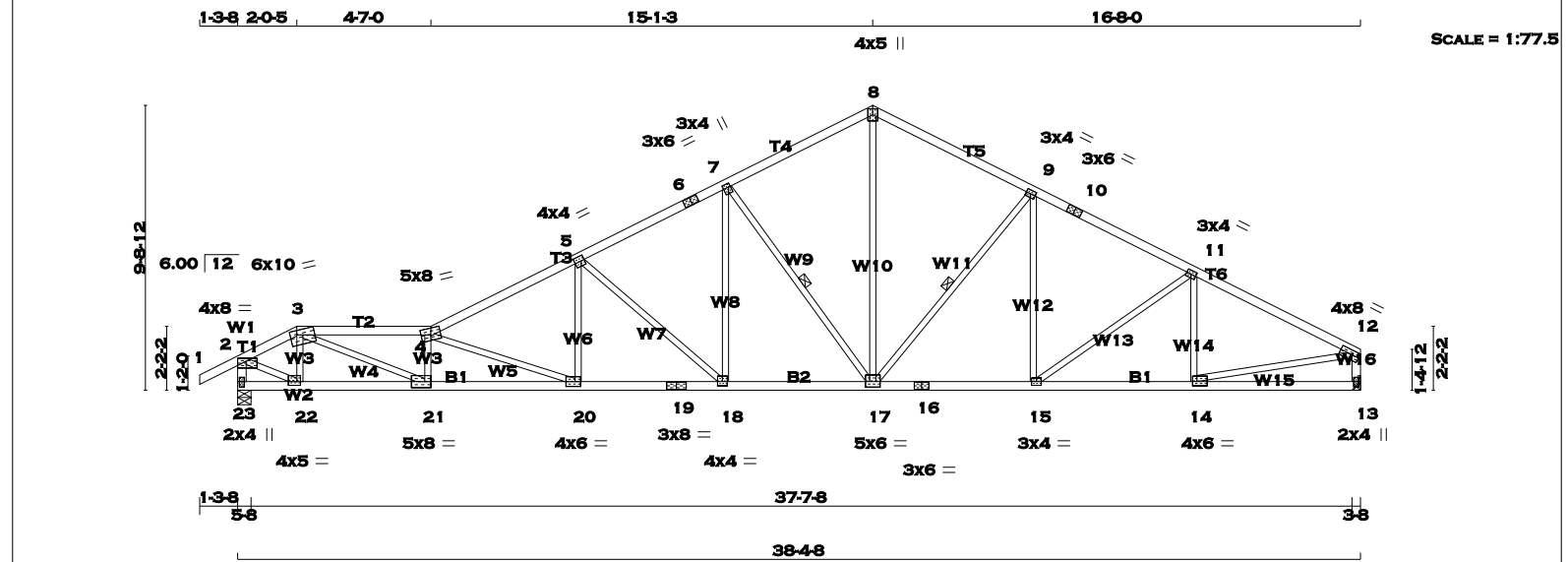
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MAR 29, 2017

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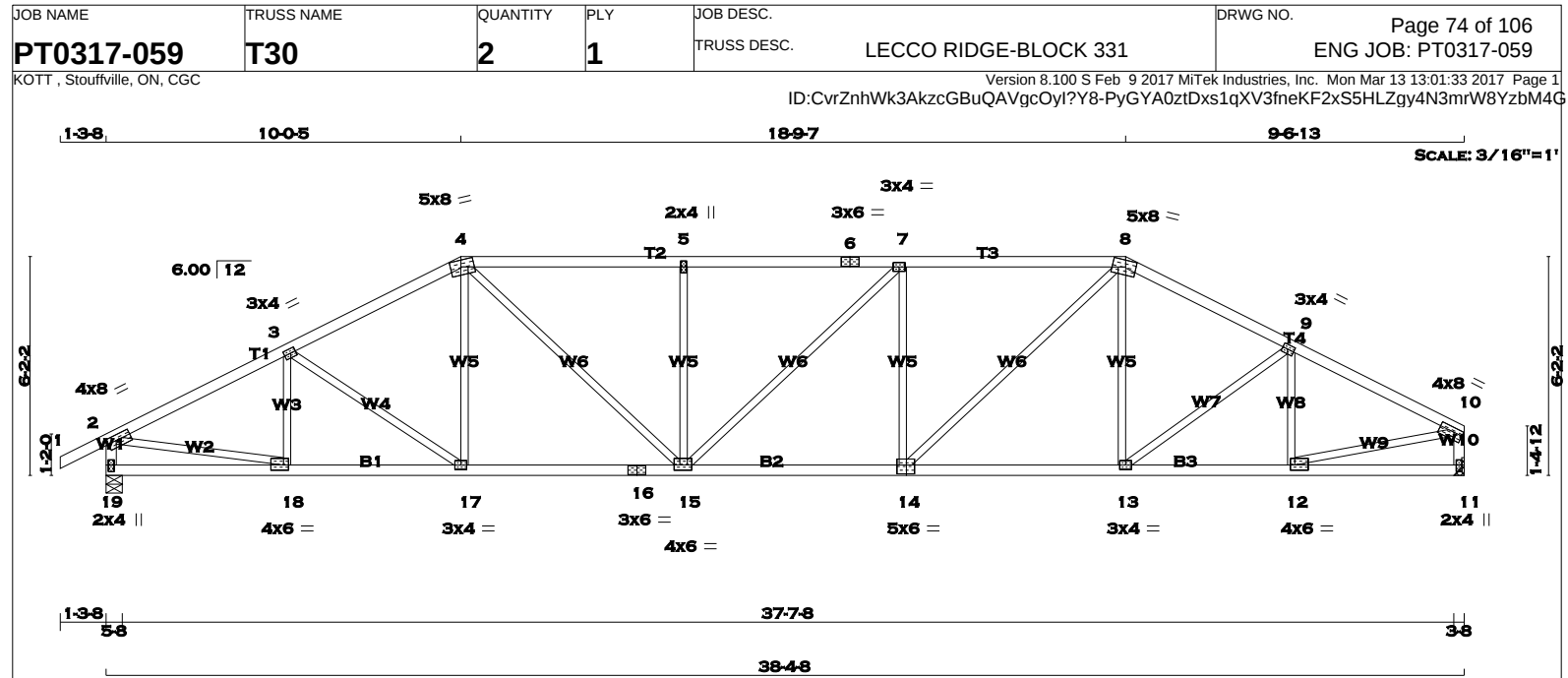


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 10 2x4 DRY No.2 SPF 10 - 12 2x4 DRY No.2 SPF 23 - 2 2x4 DRY No.2 SPF 13 - 12 2x4 DRY No.2 SPF 23 - 19 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 13 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 23 1925 0 1925 0 0 5-8 5-8 13 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 23 1349 957 / 0 0 / 0 0 / 0 0 / 0 392 / 0 0 / 0 13 1277 893 / 0 0 / 0 0 / 0 0 / 0 384 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 23 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.70 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-17. DBS = 12-0-0 . CBF = 88 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-17. 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) 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 (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 22-3 -654 / 0 0.10 (1) 2-3 -2168 / 0 -77.3 -77.3 0.09 (1) 4.57 3-21 0 / 3552 0.80 (1) 3-4 -5176 / 0 -77.3 -77.3 0.56 (1) 2.70 21-4 -1356 / 0 0.20 (1) 4-5 -3802 / 0 -77.3 -77.3 0.46 (1) 3.31 4-20 -1958 / 0 0.99 (1) 5-6 -2811 / 0 -77.3 -77.3 0.32 (1) 3.91 20-5 0 / 807 0.18 (1) 6-7 -2811 / 0 -77.3 -77.3 0.32 (1) 3.91 5-18 -1197 / 0 0.98 (1) 7-8 -2059 / 0 -77.3 -77.3 0.29 (1) 4.48 18-7 0 / 861 0.19 (1) 8-9 -2060 / 0 -77.3 -77.3 0.34 (1) 4.42 7-17 -1168 / 0 0.58 (1) 9-10 -2457 / 0 -77.3 -77.3 0.35 (1) 4.11 17-8 0 / 1496 0.34 (1) 10-11 -2457 / 0 -77.3 -77.3 0.35 (1) 4.11 17-9 -583 / 0 0.30 (1) 11-12 -2565 / 0 -77.3 -77.3 0.42 (1) 3.97 15-9 0 / 173 0.04 (4) 23-2 -1940 / 0 0.0 0.0 0.20 (1) 6.04 15-11 -139 / 0 0.12 (1) 13-12 -1776 / 0 0.0 0.0 0.18 (1) 6.26 14-11 -336 / 0 0.09 (1) 22-2 0 / 2088 0.47 (1) 14-12 0 / 2351 0.53 (1) 23-22 0 / 0 -17.5 -17.5 0.10 (1) 10.00 22-21 0 / 1900 -17.5 -17.5 0.43 (1) 10.00 21-20 0 / 5251 -17.5 -17.5 0.98 (1) 10.00 20-19 0 / 3417 -17.5 -17.5 0.62 (1) 10.00 19-18 0 / 3417 -17.5 -17.5 0.62 (1) 10.00 18-17 0 / 2515 -17.5 -17.5 0.47 (1) 10.00 17-16 0 / 2197 -17.5 -17.5 0.42 (1) 10.00 16-15 0 / 2197 -17.5 -17.5 0.42 (1) 10.00 15-14 0 / 2310 -17.5 -17.5 0.42 (1) 10.00 14-13 0 / 0 -17.5 -17.5 0.12 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.28") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.33") ALLOWABLE DEFL.(TL)= L/360 (1.28") CALCULATED VERT. DEFL.(TL) = L/ 781 (0.59") CSI: TC=0.56 (3-4:1) , BC=0.98 (20-21:1) , WB=0.99 (4-20:1) , SSI=0.18 (11-12:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (22) (INPUT = 0.90) JSI METAL= 0.89 (19) (INPUT = 1.00)			
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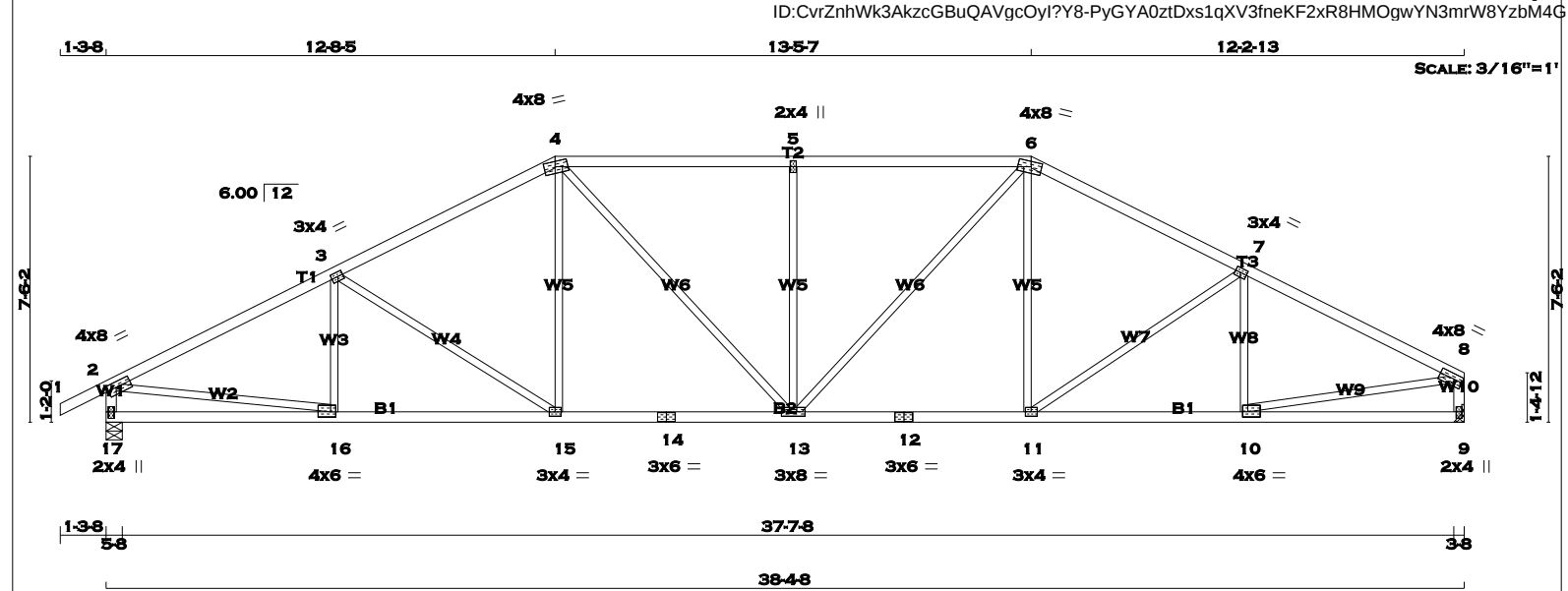
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA					
1 - 4 2x4 DRY No.2 SPF						FACTORED MAXIMUM FACTORED INPUT REQ'D										SPECIFIED LOADS:					
4 - 6 2x4 DRY No.2 SPF						GROSS REACTION GROSS REACTION BRG BRG										TOP CH. LL = 23.3 PSF					
6 - 8 2x4 DRY No.2 SPF						JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 3.0 PSF					
8 - 10 2x4 DRY No.2 SPF						19 1925 0 1925 0 0 5-8 5-8										BOT CH. LL = 0.0 PSF					
19 - 2 2x4 DRY No.2 SPF						11 1820 0 1820 0 0 HANGER BY OTHERS										DL = 7.0 PSF					
11 - 10 2x4 DRY No.2 SPF						MIN. SEAT SIZE: 3-8										TOTAL LOAD = 33.3 PSF					
19 - 16 2x4 DRY No.2 SPF																					
16 - 14 2x4 DRY No.2 SPF																					
14 - 11 2x4 DRY No.2 SPF																					
ALL WEBS 2x3 DRY No.2 SPF																					
EXCEPT																					
DRY: SEASONED LUMBER.																					



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TOTAL WEIGHT = 2 X 155 = 310 lb [M][F]

N. L. G. A. RULES					BUILDING DESIGNER					DESIGN CRITERIA				
CHORDS		SIZE	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 - 8		2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF
17 - 2		2x4	DRY	No.2	SPF	17	1925	0	1925	0	0	5-8	5-8	DL = 7.0 PSF
9 - 8		2x4	DRY	No.2	SPF	9	1820	0	1820	0	0	HANGER BY OTHERS		TOTAL LOAD = 33.3 PSF
17 - 14		2x4	DRY	No.2	SPF	MIN. SEAT SIZE: 3-8								
14 - 12		2x4	DRY	No.2	SPF									
12 - 9		2x4	DRY	No.2	SPF									
					<u>UNFACTORED REACTIONS</u>									
					1ST LCASE					MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL					
17		1349		957 / 0	0 / 0	0 / 0	0 / 0	392 / 0	0 / 0					
9		1277		893 / 0	0 / 0	0 / 0	0 / 0	384 / 0	0 / 0					
ALL WEBS 2x3 DRY No.2 SPF														
EXCEPT														
DRY: SEASONED LUMBER.														
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12														
SPACING = 24.0 IN. C/C														

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.68 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	16-3	-214 / 42	0.06 (1)
2-3	-2762 / 0	-77.3 -77.3	0.58 (1)	3.68	3-15	-410 / 0	0.47 (1)
3-4	-2429 / 0	-77.3 -77.3	0.52 (1)	3.94	15-4	0 / 338	0.08 (1)
4-5	-2484 / 0	-77.3 -77.3	0.57 (1)	3.80	4-13	0 / 486	0.11 (1)
5-6	-2484 / 0	-77.3 -77.3	0.57 (1)	3.80	13-5	-639 / 0	0.65 (1)
6-7	-2383 / 0	-77.3 -77.3	0.47 (1)	4.02	13-6	0 / 546	0.12 (1)
7-8	-2605 / 0	-77.3 -77.3	0.52 (1)	3.83	11-6	0 / 281	0.06 (1)
17-2	-1876 / 0	0.0	0.0	6.13	11-7	-295 / 0	0.32 (1)
9-8	-1773 / 0	0.0	0.0	6.27	10-7	-298 / 13	0.09 (1)
					2-16	0 / 2515	0.57 (1)
					10-8	0 / 2387	0.54 (1)
17-16	0 / 0	-17.5 -17.5	0.16 (4)	10.00			
16-15	0 / 2493	-17.5 -17.5	0.48 (1)	10.00			
15-14	0 / 2153	-17.5 -17.5	0.43 (1)	10.00			
14-13	0 / 2153	-17.5 -17.5	0.43 (1)	10.00			
13-12	0 / 2112	-17.5 -17.5	0.42 (1)	10.00			
12-11	0 / 2112	-17.5 -17.5	0.42 (1)	10.00			
11-10	0 / 2351	-17.5 -17.5	0.46 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.15 (4)	10.00			

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

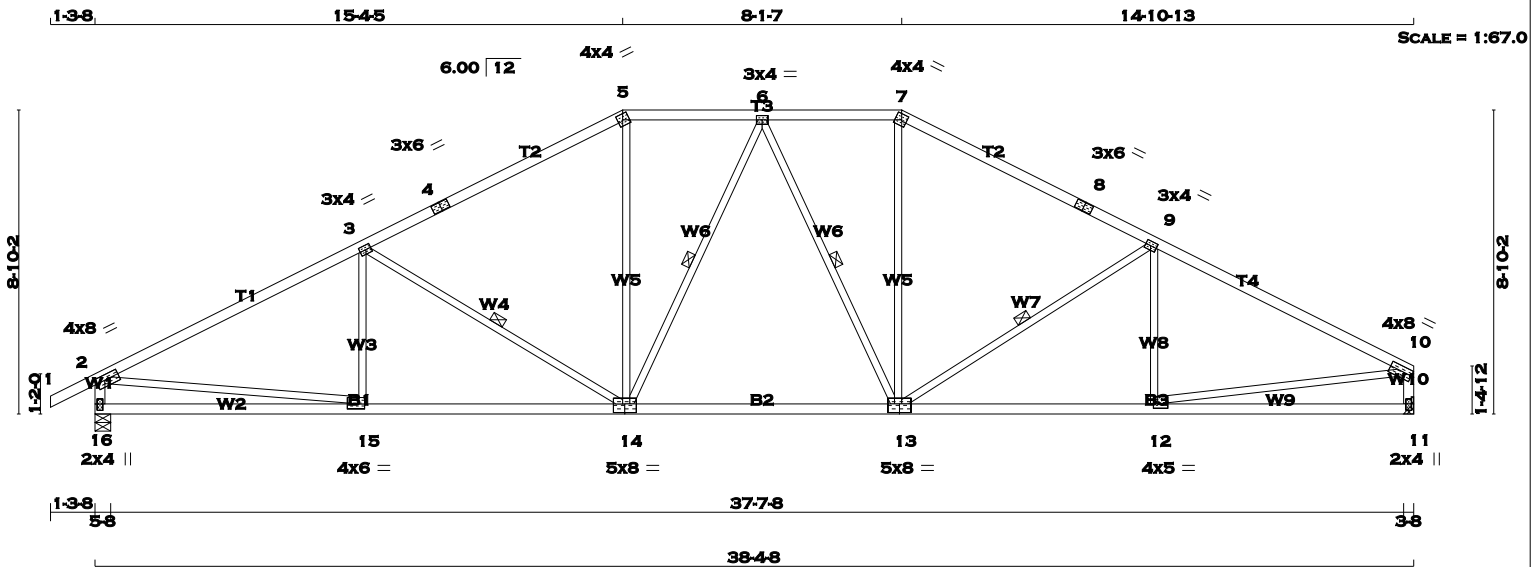
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.62 (16) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 157 = 314 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 8	2x4	DRY	No.2	SPF
8 - 10	2x4	DRY	No.2	SPF
16 - 2	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
16 - 14	2x4	DRY	No.2	SPF
14 - 13	2x4	DRY	No.2	SPF
13 - 11	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	8.0	1.75 3.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TTW-h	MT20	4.0	4.0	2.00 1.75
6	TMVW-t	MT20	3.0	4.0	
7	TTW-h	MT20	4.0	4.0	2.00 1.75
8	TS-t	MT20	3.0	6.0	
9	TMVW-t	MT20	3.0	4.0	1.50 1.75
10	TMVW-t	MT20	4.0	8.0	1.75 Edge
11	BMV1+p	MT20	2.0	4.0	2.25 1.00
12	BMVW-t	MT20	4.0	5.0	1.50 1.50
13	BSWWW-l	MT20	5.0	8.0	3.00 4.00
14	BSWWW-l	MT20	5.0	8.0	3.00 4.00
15	BMVW-t	MT20	4.0	6.0	1.75 2.00
16	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

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

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

BEARINGS				
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT REQRD
JT	VERT	HORZ	DOWN	BRG IN-SX
16	1925	0	1925	0
11	1820	0	1820	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	LIVE	PERM.	WIND	DEAD	SOIL
16	1349	957 / 0	0 / 0	0 / 0	0 / 0	392 / 0	0 / 0
11	1277	893 / 0	0 / 0	0 / 0	0 / 0	384 / 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 = 3.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14, 6-14, 6-13, 9-13. DBS = 20-0-0 . 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		FACTORED		WEBS
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB. MAX. FORCE (LBS)
FR-TO		FROM TO	UNBRAC LENGTH	FR-TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00 15-3
2-3	-2776 / 0	-77.3	-77.3 0.92 (1)	3.27 3-14
3-4	-2235 / 0	-77.3	-77.3 0.78 (1)	3.71 14-5
4-5	-2235 / 0	-77.3	-77.3 0.78 (1)	3.71 14-6
5-6	-1974 / 0	-77.3	-77.3 0.19 (1)	4.64 6-13
6-7	-1953 / 0	-77.3	-77.3 0.19 (1)	4.66 13-7
7-8	-2211 / 0	-77.3	-77.3 0.72 (1)	3.81 13-9
8-9	-2211 / 0	-77.3	-77.3 0.72 (1)	3.81 12-9
9-10	-2645 / 0	-77.3	-77.3 0.82 (1)	3.45 2-15
16-2	-1868 / 0	0.0	0.0 0.19 (1)	6.13 12-10
11-10	-1764 / 0	0.0	0.0 0.18 (1)	6.28
16-15	0 / 0	-17.5	-17.5 0.24 (4)	10.00
15-14	0 / 2511	-17.5	-17.5 0.52 (1)	10.00
14-13	0 / 2051	-17.5	-17.5 0.45 (1)	10.00
13-12	0 / 2393	-17.5	-17.5 0.50 (1)	10.00
12-11	0 / 0	-17.5	-17.5 0.22 (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
- TPC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.92 (2-3:1), BC=0.52 (14-15:1), WB=0.57 (2-15:1), 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.

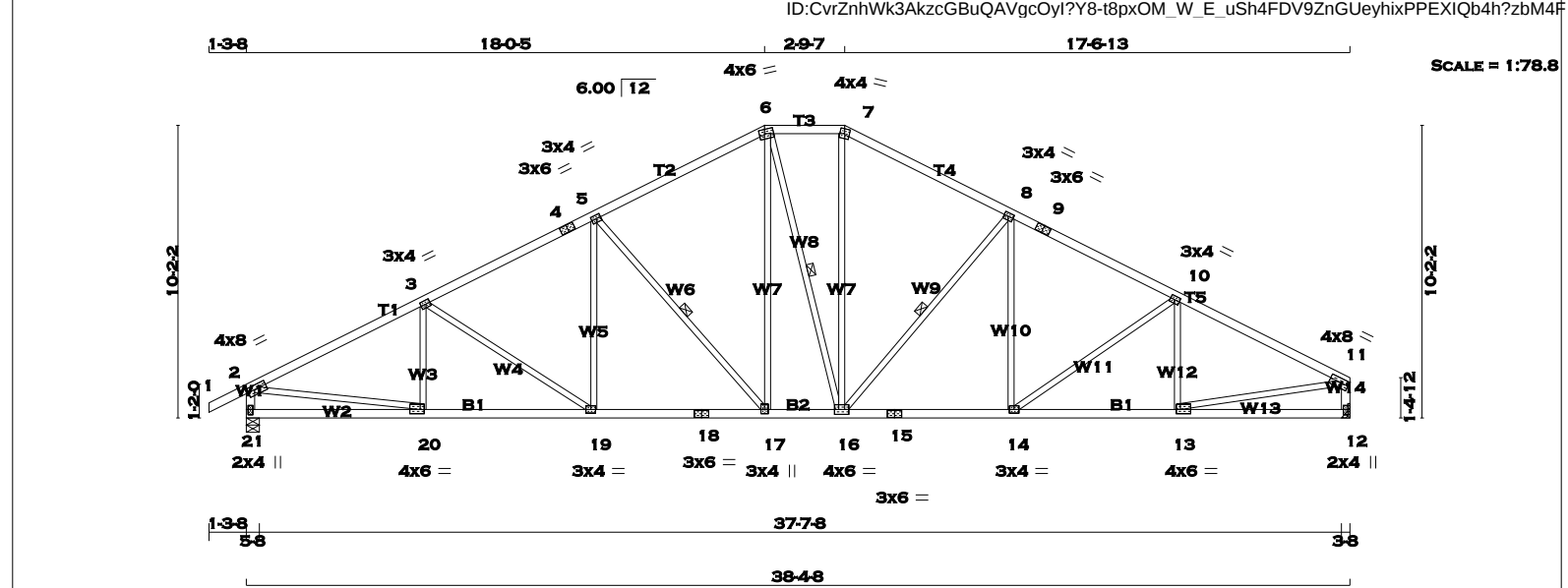
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.72 (12) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 172 = 343 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2	4 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2	6 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2	7 - 9	2x4	DRY	No.2
9 - 11	2x4	DRY	No.2	9 - 11	2x4	DRY	No.2
21 - 2	2x4	DRY	No.2	21 - 2	2x4	DRY	No.2
12 - 11	2x4	DRY	No.2	12 - 11	2x4	DRY	No.2
21 - 18	2x4	DRY	No.2	21 - 18	2x4	DRY	No.2
18 - 15	2x4	DRY	No.2	18 - 15	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2	15 - 12	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	8.0	1.75	3.00
3, 5, 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		
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	BMWWW-t	MT20	4.0	6.0		
17	BMWW-t	MT20	3.0	4.0	1.75	1.50
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.



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			
				DOWN				DOWN				IN-SX				IN-SX			
JT	21	1925	0	1925	0	0	0	1925	0	0	0	5-8	5-8						
12	1820	0	1820	0	0	0	0	1820	0	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	893 / 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 = 3.78 FT.
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 = 89 LBS.

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

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

LOADING				TOTAL LOAD CASES: (4)			
C H O R D S				W E B S			
MAX. FACTORED				MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO				LENGTH FR-TO			
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	20-3	-233 / 29	0.06 (1)
2-3	-2739 / 0	-77.3	-77.3 0.51 (1)	3.78	3-19	-286 / 0	0.28 (1)
3-4	-2492 / 0	-77.3	-77.3 0.41 (1)	4.03	19-5	0 / 268	0.06 (1)
4-5	-2492 / 0	-77.3	-77.3 0.41 (1)	4.03	5-17	-716 / 0	0.42 (1)
5-6	-1986 / 0	-77.3	-77.3 0.40 (1)	4.43	17-6	0 / 603	0.14 (1)
6-7	-1760 / 0	-77.3	-77.3 0.11 (1)	4.95	6-16	-15 / 0	0.01 (1)
7-8	-1981 / 0	-77.3	-77.3 0.38 (1)	4.46	16-7	0 / 591	0.13 (1)
8-9	-2427 / 0	-77.3	-77.3 0.39 (1)	4.10	16-8	-647 / 0	0.38 (1)
9-10	-2427 / 0	-77.3	-77.3 0.39 (1)	4.10	14-8	0 / 210	0.05 (4)
10-11	-2581 / 0	-77.3	-77.3 0.47 (1)	3.91	14-10	-189 / 0	0.18 (1)
21-2	-1878 / 0	0.0	0.0 0.19 (1)	6.12	13-10	-311 / 4	0.09 (1)
12-11	-1774 / 0	0.0	0.0 0.18 (1)	6.26	2-20	0 / 2491	0.56 (1)
					13-11	0 / 2364	0.53 (1)
21-20	0 / 0	-17.5	-17.5 0.14 (4)	10.00			
20-19	0 / 2467	-17.5	-17.5 0.46 (1)	10.00			
19-18	0 / 2229	-17.5	-17.5 0.43 (1)	10.00			
18-17	0 / 2229	-17.5	-17.5 0.43 (1)	10.00			
17-16	0 / 1764	-17.5	-17.5 0.35 (1)	10.00			
16-15	0 / 2171	-17.5	-17.5 0.41 (1)	10.00			
15-14	0 / 2171	-17.5	-17.5 0.41 (1)	10.00			
14-13	0 / 2326	-17.5	-17.5 0.43 (1)	10.00			
13-12	0 / 0	-17.5	-17.5 0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.29")

CSI: TC=0.51 (2-3:1), BC=0.46 (19-20:1), WB=0.56 (2-20:1), 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

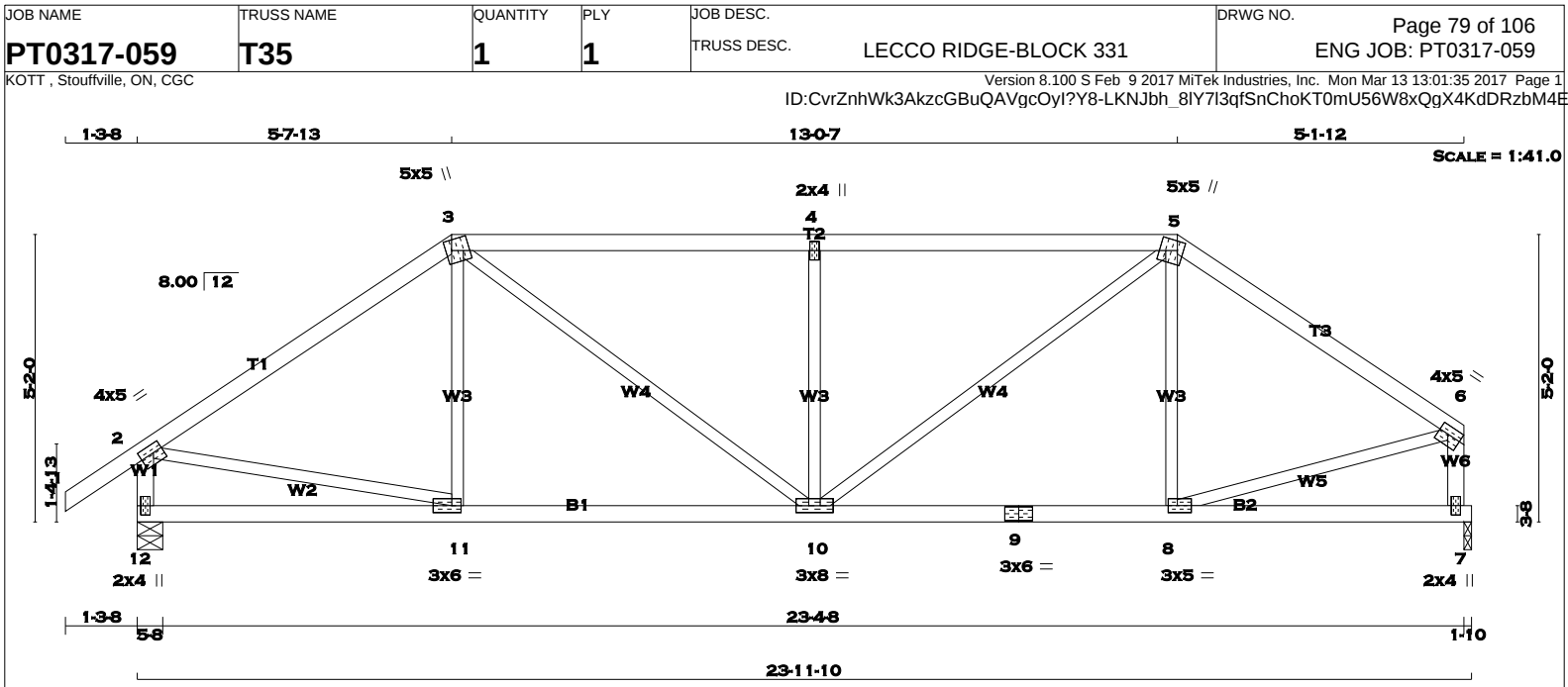
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.64 (18) (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 - 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

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	2.25	1.25
4	TMW+w	MT20	2.0	4.0		
5	TTWW+m	MT20	5.0	5.0	2.00	1.25
6	TMVW-t	MT20	4.0	5.0	1.75	Edge
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	3.0	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	2.00
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
12	1236	0	1236	0
7	1130	0	1130	0

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
12	865	619 / 0	0 / 0
7	793	555 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.51 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-3	-71 / 75
2-3	-1225 / 0	-77.3	-77.3	0.50 (1)	5.14	3-10	0 / 568
3-4	-1472 / 0	-77.3	-77.3	0.65 (1)	4.51	10-4	-619 / 0
4-5	-1472 / 0	-77.3	-77.3	0.65 (1)	4.51	10-5	0 / 648
5-6	-1149 / 0	-77.3	-77.3	0.40 (1)	5.41	8-5	-142 / 49
12-2	-1197 / 0	0.0	0.0	0.12 (1)	7.31	2-11	0 / 1036
7-6	-1096 / 0	0.0	0.0	0.12 (1)	7.55	8-6	0 / 989
12-11	0 / 0	-17.5	-17.5	0.15 (4)	10.00		
11-10	0 / 1017	-17.5	-17.5	0.25 (1)	10.00		
10-9	0 / 952	-17.5	-17.5	0.23 (1)	10.00		
9-8	0 / 952	-17.5	-17.5	0.23 (1)	10.00		
8-7	0 / 0	-17.5	-17.5	0.14 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

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 (0.05")

ALLOWABLE DEFL.(TL)= L/360 (0.79")

CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.65 (3-4:1), BC=0.25 (10-11:1), WB=0.24 (4-10:1), SSI=0.24 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

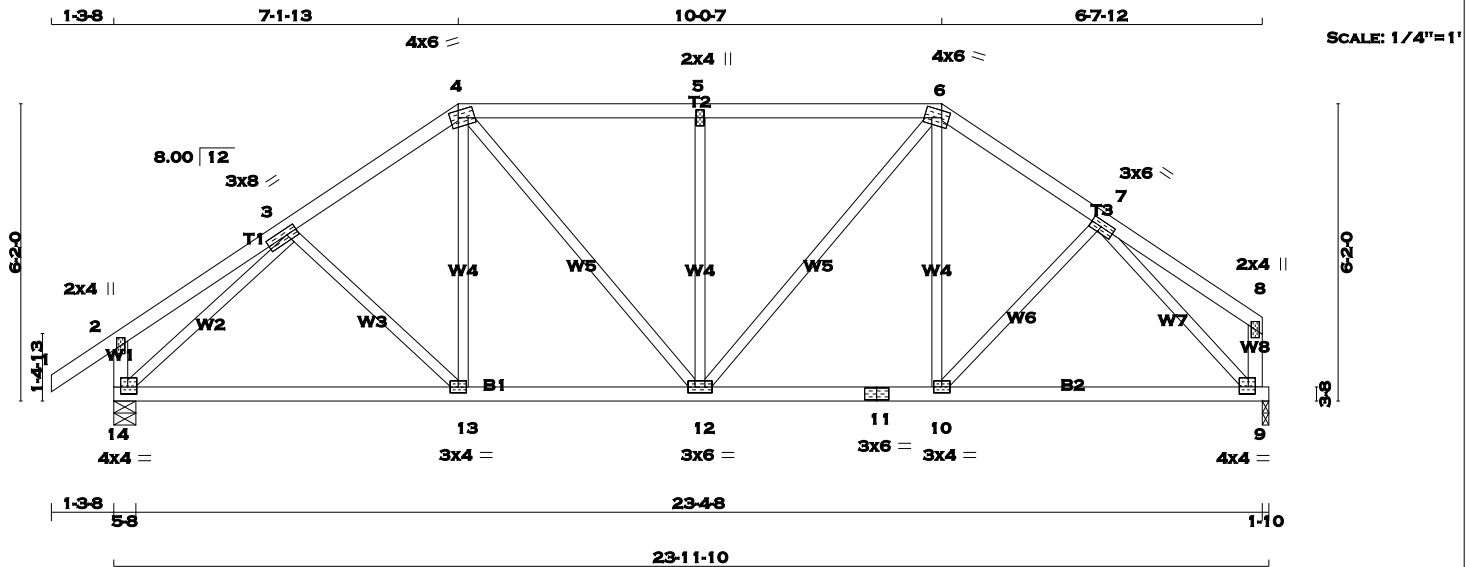
JSI GRIP= 0.88 (11) (INPUT = 0.90)

JSI METAL= 0.42 (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
14 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
14 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMWW-t	MT20	3.0	8.0	1.50 2.75
4	TTWW-m	MT20	4.0	6.0	1.75 2.00
5	TMW+w	MT20	2.0	4.0	
6	TTWW-m	MT20	4.0	6.0	1.75 1.75
7	TMWW-t	MT20	3.0	6.0	1.50 2.75
8	TMV+p	MT20	2.0	4.0	
9	BMVW1-t	MT20	4.0	4.0	1.75 1.75
10	BMWW-t	MT20	3.0	4.0	
11	BS-t	MT20	3.0	6.0	
12	BMWW-t	MT20	3.0	6.0	
13	BMWW-t	MT20	3.0	4.0	
14	BMVW1-t	MT20	4.0	4.0	1.75 1.75

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
14	1236	0	1236	0	0
9	1130	0	1130	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
14	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	865	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
9	793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-13	-31 / 40	0.01 (4)
2-3	0 / 16	-77.3	-77.3 0.15 (1)	10.00	13-4	0 / 154	0.04 (4)
3-4	-1193 / 0	-77.3	-77.3 0.13 (1)	5.73	4-12	0 / 317	0.07 (1)
4-5	-1186 / 0	-77.3	-77.3 0.26 (1)	5.57	12-5	-474 / 0	0.28 (1)
5-6	-1186 / 0	-77.3	-77.3 0.26 (1)	5.57	12-6	0 / 382	0.09 (1)
6-7	-1143 / 0	-77.3	-77.3 0.11 (1)	5.84	10-6	0 / 98	0.03 (4)
7-8	0 / 15	-77.3	-77.3 0.13 (1)	10.00	10-7	0 / 60	0.02 (4)
14-2	-214 / 0	0.0	0.0 0.02 (1)	7.81	14-3	-1393 / 0	0.55 (1)
9-8	-101 / 0	0.0	0.0 0.01 (1)	7.81	7-9	-1330 / 0	0.51 (1)
14-13	0 / 1000	-17.5	-17.5 0.27 (1)	10.00			
13-12	0 / 980	-17.5	-17.5 0.27 (4)	10.00			
12-11	0 / 938	-17.5	-17.5 0.25 (1)	10.00			
11-10	0 / 938	-17.5	-17.5 0.25 (1)	10.00			
10-9	0 / 898	-17.5	-17.5 0.24 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.26 (5-6:1), BC=0.27 (12-13:4), WB=0.55 (3-14:1), 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.

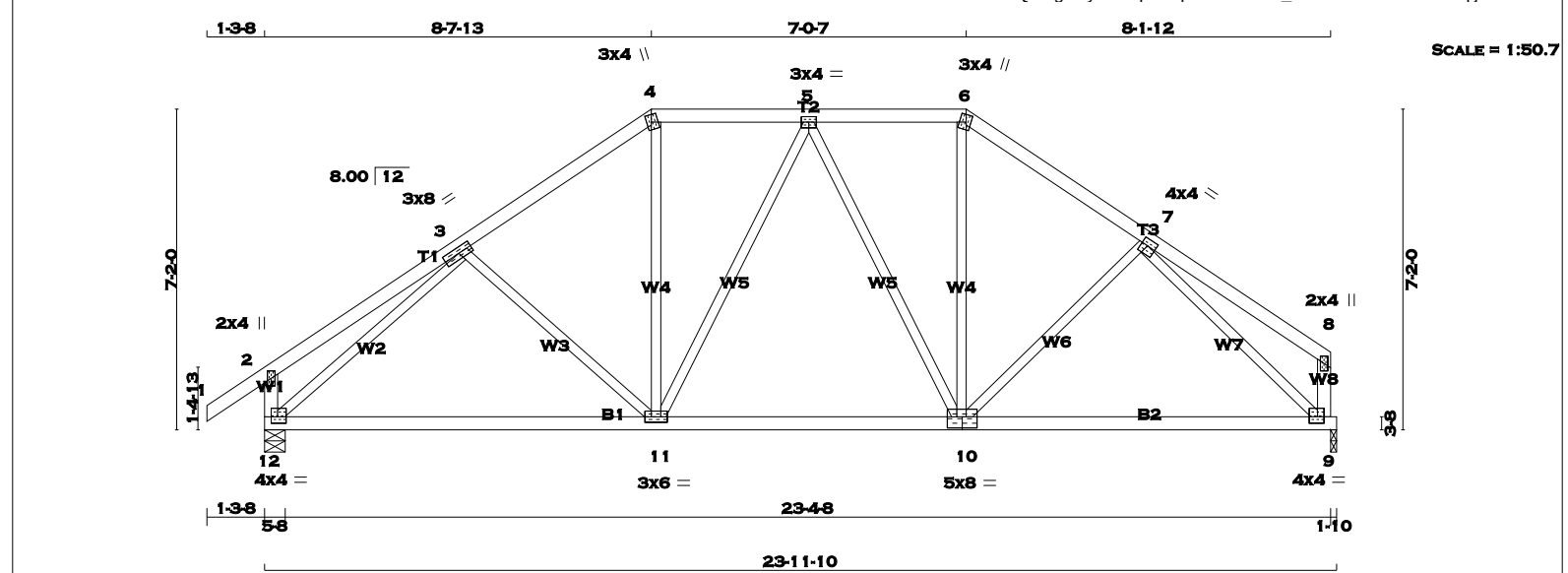
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.37 (14) (INPUT = 1.00)



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TOTAL WEIGHT = 104 lb
[M][F]

LUMBER					
N. L. G. A.		RULES			
CHORDS	SIZE		LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF	
4 - 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	4.0	4.0	1.75 1.75
8	TMV+p	MT20	2.0	4.0	
9	BMVW1-t	MT20	4.0	4.0	1.75 1.75
10	BSWWW-l	MT20	5.0	8.0	3.00 4.00
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	UPLIFT	IN-SX	IN-SX	
12		1236	0	1236	0	0	5-8	5-8	
9		1130	0	1130	0	0	1-10	1-10	

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	865	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) 12, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.77 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO				LENGTH FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-11	-136 / 20	0.08 (1)
2-3	0 / 21	-77.3	-77.3 0.23 (1)	10.00	11-4	0 / 378	0.09 (1)
3-4	-1130 / 0	-77.3	-77.3 0.19 (1)	5.77	11-5	-152 / 0	0.18 (1)
4-5	-927 / 0	-77.3	-77.3 0.12 (1)	6.25	5-10	-211 / 0	0.25 (1)
5-6	-900 / 0	-77.3	-77.3 0.12 (1)	6.25	10-6	0 / 368	0.08 (1)
6-7	-1098 / 0	-77.3	-77.3 0.17 (1)	5.86	10-7	-55 / 38	0.03 (1)
7-8	0 / 20	-77.3	-77.3 0.20 (1)	10.00	12-3	-1387 / 0	0.80 (1)
12-2	-235 / 0	0.0	0.0 0.02 (1)	7.81	7-9	-1331 / 0	0.74 (1)
9-8	-122 / 0	0.0	0.0 0.01 (1)	7.81			
12-11	0 / 1022	-17.5	-17.5 0.34 (4)	10.00			
11-10	0 / 995	-17.5	-17.5 0.34 (4)	10.00			
10-9	0 / 935	-17.5	-17.5 0.30 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.18")

CSI: TC=0.23 (2-3:1), BC=0.34 (10-11:4), WB=0.80 (3-12:1), SSI=0.13 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

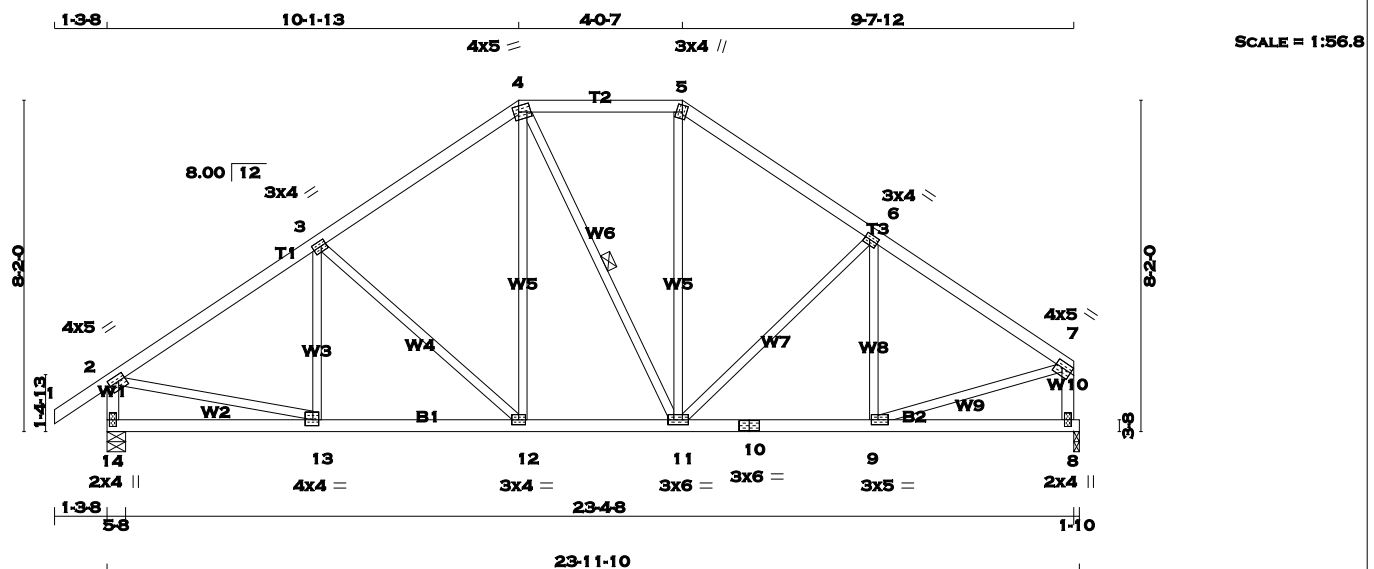
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (3) (INPUT = 0.90)
JSI METAL= 0.48 (7) (INPUT = 1.00)

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TOTAL WEIGHT = 108 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 1.75
14	BMV1+p	MT20	2.0	4.0	

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

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

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

BEARINGS							
		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG		
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
14		1236	0	1236	0	0	5-8
8		1130	0	1130	0	0	1-10

UNFACTORED REACTIONS							
		1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD
JT							
14		865	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0
8		793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.43 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 3 LBS.

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

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

LOADING							
TOTAL LOAD CASES: (4)							
		CHORDS				WEBS	
		MAX. FACTORED	FACTORED			MAX. FACTORED	FACTORED
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)
FR-TO			FROM TO			FR-TO	
1-2		0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-123 / 50
2-3		-1263 / 0	-77.3 -77.3	0.28 (1)	5.43	3-12	-314 / 0
3-4		-1035 / 0	-77.3 -77.3	0.27 (1)	5.85	12-4	0 / 284
4-5		-830 / 0	-77.3 -77.3	0.17 (1)	6.25	4-11	-26 / 0
5-6		-1020 / 0	-77.3 -77.3	0.24 (1)	5.92	11-5	0 / 260
6-7		-1170 / 0	-77.3 -77.3	0.25 (1)	5.62	11-6	-233 / 0
14-2		-1199 / 0	0.0 0.0	0.12 (1)	7.30	9-6	-191 / 25
8-7		-1094 / 0	0.0 0.0	0.12 (1)	7.55	2-13	0 / 1095
						9-7	0 / 1034
14-13		0 / 0	-17.5 -17.5	0.11 (4)	10.00		
13-12		0 / 1072	-17.5 -17.5	0.23 (1)	10.00		
12-11		0 / 841	-17.5 -17.5	0.17 (1)	10.00		
11-10		0 / 993	-17.5 -17.5	0.21 (1)	10.00		
10-9		0 / 993	-17.5 -17.5	0.21 (1)	10.00		
9-8		0 / 0	-17.5 -17.5	0.10 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.28 (2-3:1), BC=0.23 (12-13:1), WB=0.27 (3-12:1), SSI=0.16 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR 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.

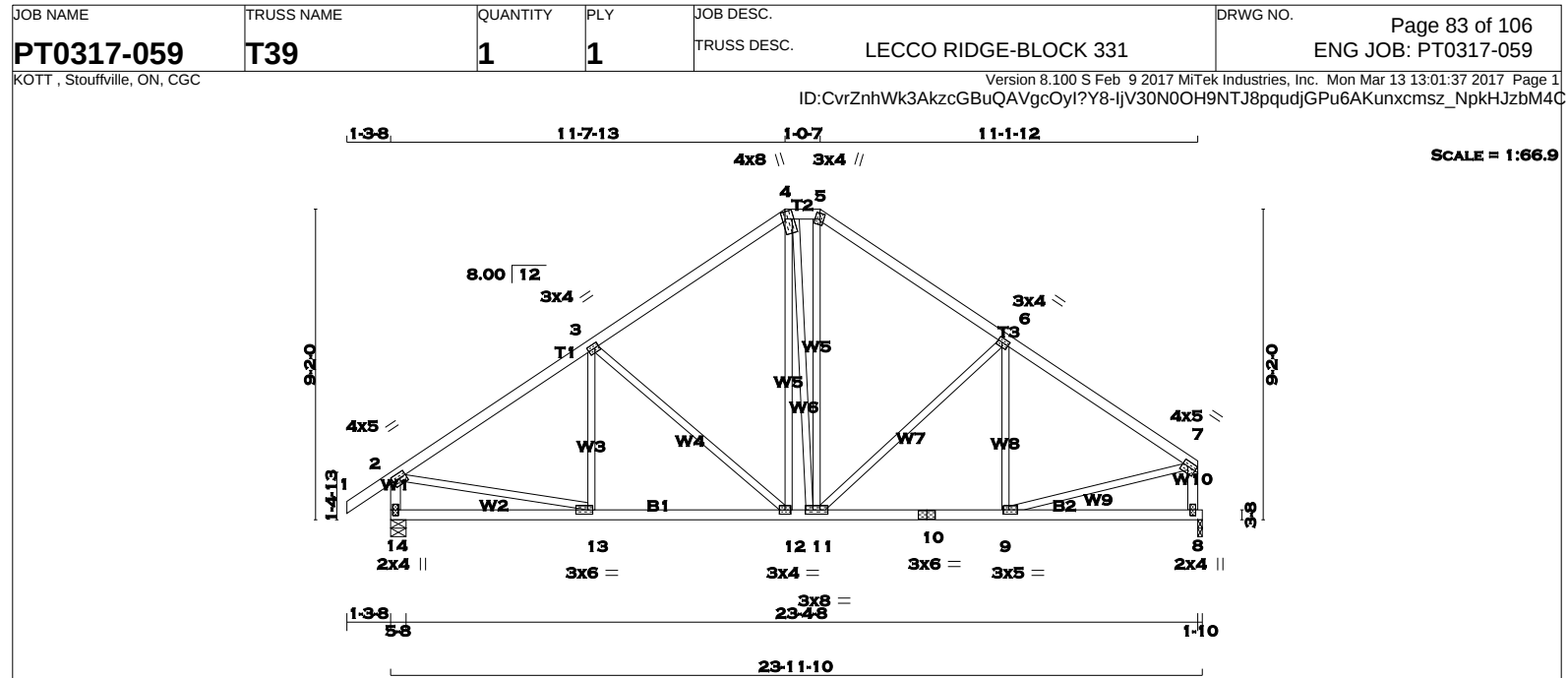
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.43 (2) (INPUT = 1.00)



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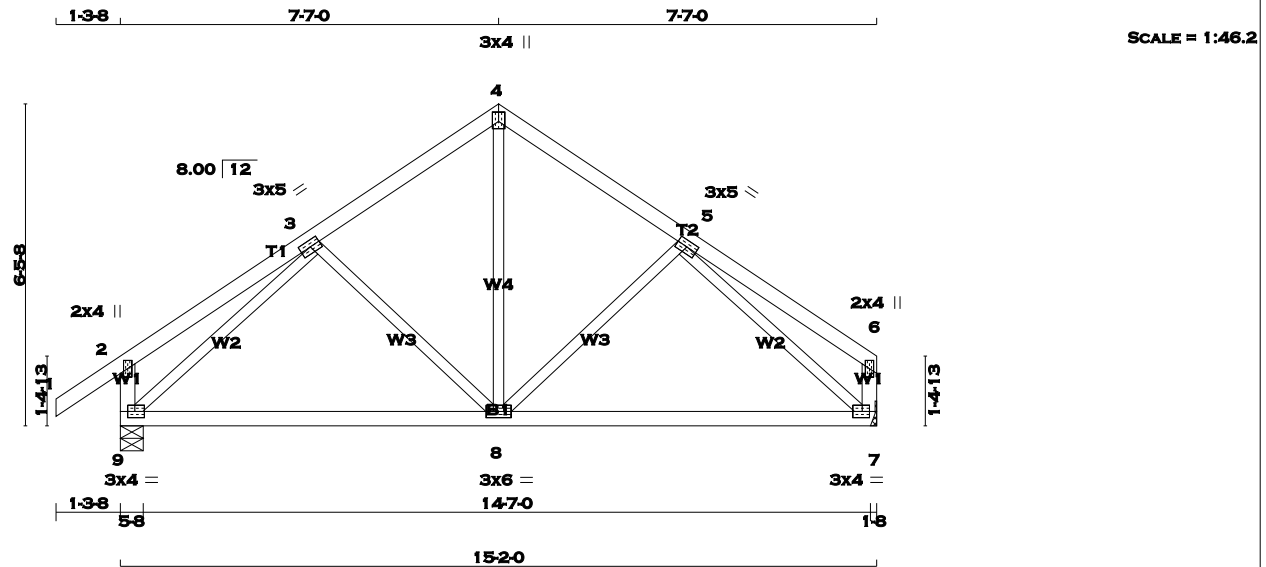




LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 14 - 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 14 - 10 2x4 DRY No.2 10 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 14 1236 0 1236 0 0 5-8 5-8 8 1130 0 1130 0 0 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 14 865 619 / 0 0 / 0 0 / 0 247 / 0 0 / 0 8 793 555 / 0 0 / 0 0 / 0 0 / 0 238 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 8 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.29 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 13-3 -77 / 77 0.03 (1) 2-3 -1262 / 0 -77.3 -77.3 0.38 (1) 5.29 3-12 -419 / 0 0.50 (1) 3-4 -943 / 0 -77.3 -77.3 0.35 (1) 5.93 12-4 0 / 292 0.07 (1) 4-5 -763 / 0 -77.3 -77.3 0.02 (1) 6.25 4-11 0 / 10 0.00 (1) 5-6 -943 / 0 -77.3 -77.3 0.32 (1) 5.98 11-5 0 / 310 0.07 (1) 6-7 -1180 / 0 -77.3 -77.3 0.34 (1) 5.48 11-6 -337 / 0 0.39 (1) 14-2 -1194 / 0 0.0 0.0 0.12 (1) 7.31 9-6 -144 / 52 0.07 (1) 8-7 -1089 / 0 0.0 0.0 0.12 (1) 7.57 2-13 0 / 1093 0.25 (1) 9-7 0 / 1036 0.23 (1) 14-13 0 / 0 -17.5 -17.5 0.15 (4) 10.00 13-12 0 / 1075 -17.5 -17.5 0.25 (1) 10.00 12-11 0 / 762 -17.5 -17.5 0.19 (1) 10.00 11-10 0 / 1005 -17.5 -17.5 0.23 (1) 10.00 10-9 0 / 1005 -17.5 -17.5 0.23 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.13 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.79") CALCULATED VERT. DEFL.(LL) = L/999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.79") CALCULATED VERT. DEFL.(TL) = L/999 (0.08") CSI: TC=0.38 (2-3:1), BC=0.25 (12-13:1), WB=0.50 (3-12:1), SSI=0.18 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (13) (INPUT = 0.90) JSI METAL= 0.43 (2) (INPUT = 1.00)			
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TOTAL WEIGHT = 2 X 63 = 126 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
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 GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
9	825	0	825	0	0
7	719	0	719	0	0

HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	577	417 / 0	0 / 0	0 / 0	0 / 0	0 / 0	160 / 0	0 / 0
7	505	353 / 0	0 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	8-4	0 / 391	0.09 (1)
2-3	0 / 19	-77.3	-77.3 0.18 (1)	10.00	8-5	-165 / 4	0.08 (1)
3-4	-576 / 0	-77.3	-77.3 0.14 (1)	6.25	3-8	-165 / 4	0.08 (1)
4-5	-576 / 0	-77.3	-77.3 0.14 (1)	6.25	9-3	-806 / 0	0.35 (1)
5-6	0 / 19	-77.3	-77.3 0.18 (1)	10.00	5-7	-806 / 0	0.35 (1)
9-2	-219 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	-113 / 0	0.0	0.0 0.01 (1)	7.81			
9-8	0 / 584	-17.5	-17.5 0.33 (4)	10.00			
8-7	0 / 584	-17.5	-17.5 0.33 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.51")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.51")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.18 (2-3:1) , BC=0.33 (8-9:4) , WB=0.35 (3-9:1) , SSI=0.12 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

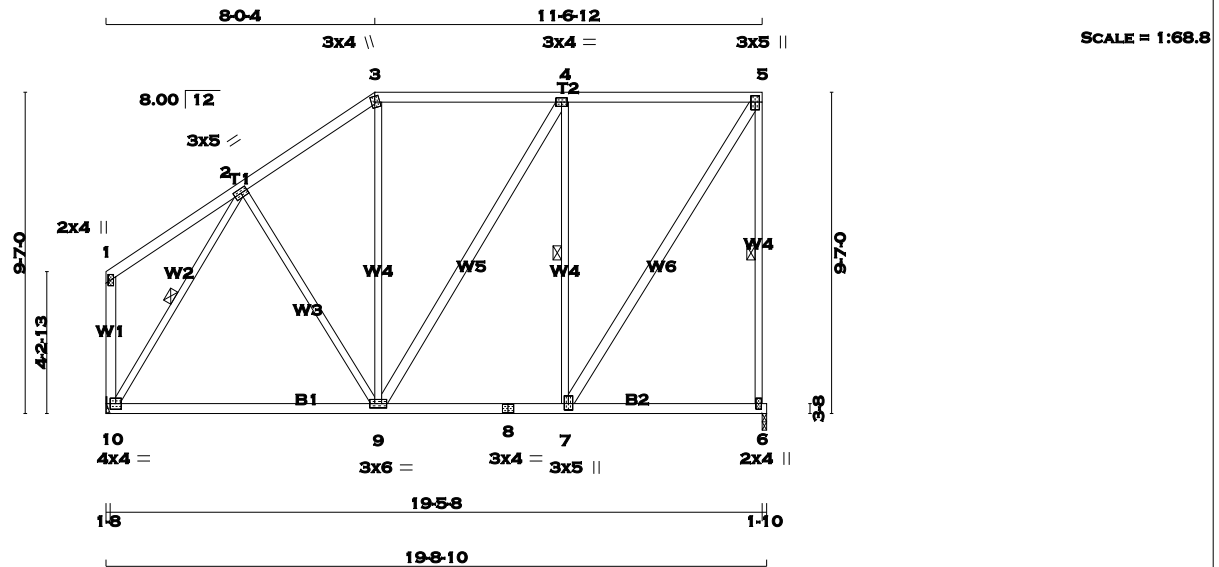
JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.23 (3) (INPUT = 1.00)



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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x3	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	TMVW-t	MT20	3.0	5.0	
3	TTW+m	MT20	3.0	4.0	2.00 1.25
4	TMVW-t	MT20	3.0	4.0	
5	TMVW+p	MT20	3.0	5.0	2.25 1.50
6	BMV1+p	MT20	2.0	4.0	
7	BMVW-t	MT20	3.0	5.0	2.25 1.50
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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
6		929	0	929	0	0	1-10	1-10	
10		929	0	929	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0
10	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 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, 2-10. DBS = 16-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-7. 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

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)		
FR-TO					FR-TO				
1-2	0 / 20	-77.3	-77.3	0.20 (1)	10.00	2-9	0 / 62	0.02 (4)	
2-3	-604 / 0	-77.3	-77.3	0.21 (1)	6.25	9-3	0 / 70	0.02 (4)	
3-4	-485 / 0	-77.3	-77.3	0.45 (1)	6.25	9-4	0 / 67	0.01 (1)	
4-5	-450 / 0	-77.3	-77.3	0.45 (1)	6.25	7-4	-613 / 0	0.37 (1)	
6-5	-885 / 0	0.0	0.0	0.54 (1)	5.77	7-5	0 / 841	0.14 (1)	
10-1	-120 / 0	0.0	0.0	0.04 (1)	7.81	10-2	-879 / 0	0.34 (1)	
10-9	0 / 459	-17.5	-17.5	0.27 (4)	10.00				
9-8	0 / 450	-17.5	-17.5	0.27 (4)	10.00				
8-7	0 / 450	-17.5	-17.5	0.27 (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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.54 (5-6:1) , BC=0.27 (7-9:4) , WB=0.37 (4-7:1) , SSI=0.22 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

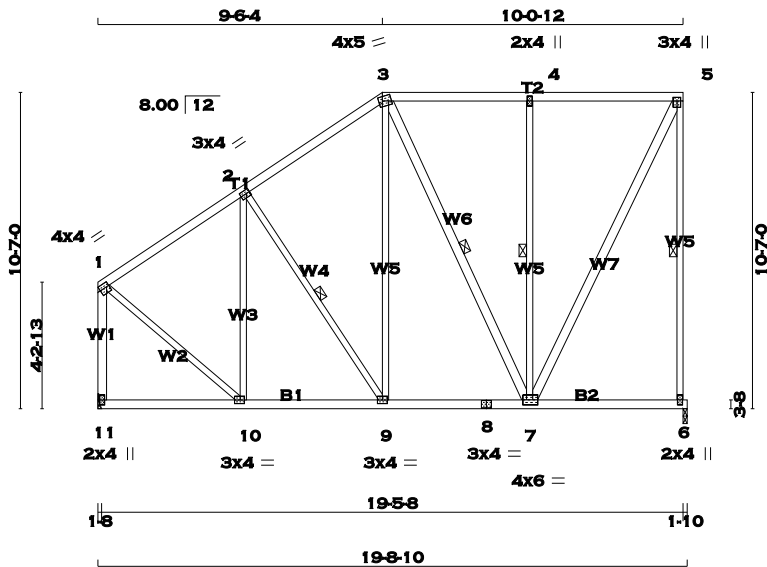
JSI GRIP= 0.87 (3) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 118 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	2x3	DRY	No.2	SPF
11- 1	2x4	DRY	No.2	SPF
11- 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
3 - 7	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	X
1	TMVW-t	MT20	4.0	4.0	1.75 Edge
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TMW+w	MT20	2.0	4.0	
5	TMVW+p	MT20	3.0	4.0	1.50 1.50
6	BMV1+p	MT20	2.0	4.0	
7	BMVW-t	MT20	4.0	6.0	2.00 1.50
8	BS-t	MT20	3.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BMV1+p	MT20	2.0	4.0	

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

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

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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	929	0	929	0	0	1-10	1-10
11	929	0	929	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0
11	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0

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

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 60 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	-588 / 0	-77.3 -77.3	0.31 (1)	6.25	10-2	-315 / 0	0.32 (1)
2-3	-559 / 0	-77.3 -77.3	0.31 (1)	6.25	2-9	-120 / 0	0.06 (1)
3-4	-368 / 0	-77.3 -77.3	0.33 (1)	6.25	9-3	0 / 178	0.04 (1)
4-5	-369 / 0	-77.3 -77.3	0.33 (1)	6.25	3-7	-177 / 0	0.13 (1)
6-5	-892 / 0	0.0 0.0	0.70 (1)	5.75	7-4	-481 / 0	0.38 (1)
11-1	-894 / 0	0.0 0.0	0.27 (1)	7.81	7-5	0 / 826	0.13 (1)
					1-10	0 / 654	0.15 (1)
11-10	0 / 0	-17.5 -17.5	0.10 (4)	10.00			
10-9	0 / 510	-17.5 -17.5	0.14 (4)	10.00			
9-8	0 / 445	-17.5 -17.5	0.14 (4)	10.00			
8-7	0 / 445	-17.5 -17.5	0.14 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.11 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.70 (5-6:1) , BC=0.14 (7-9:4) , WB=0.38 (4-7:1) , 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.

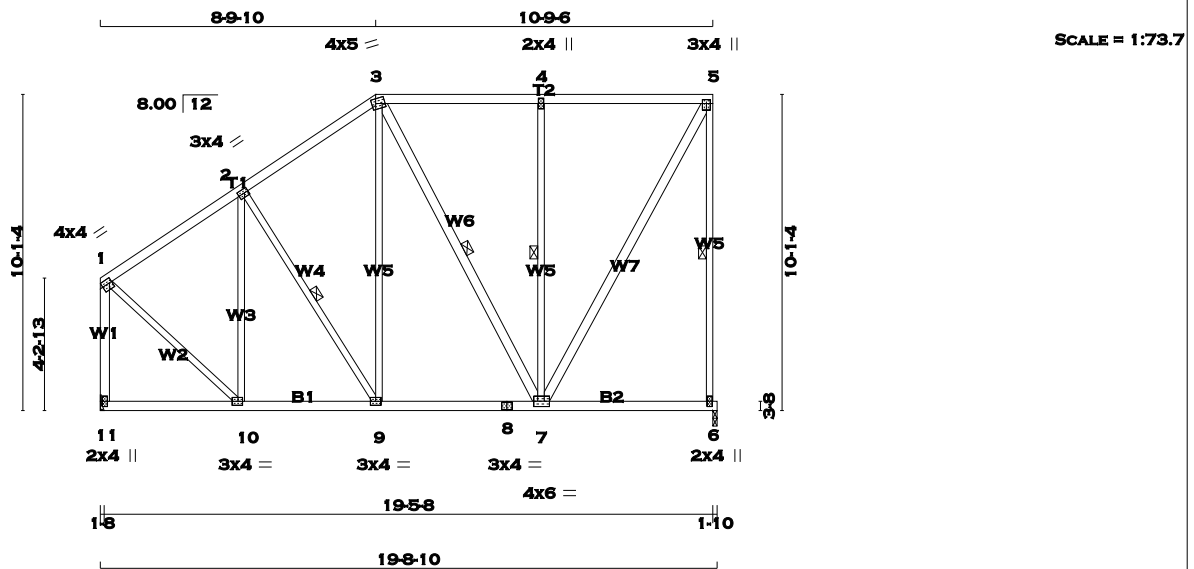
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.26 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 116 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	2x3	DRY	No.2	SPF
11- 1	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
3 - 7	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	X
1	TMVW-t	MT20	4.0	4.0	1.75 Edge
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TMW+w	MT20	2.0	4.0	
5	TMVW+p	MT20	3.0	4.0	1.50 1.50
6	BMV1+p	MT20	2.0	4.0	
7	BMVWW-t	MT20	4.0	6.0	2.00 1.50
8	BS-t	MT20	3.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BMV1+p	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	929	0	929	0	0	1-10	1-10
11	929	0	929	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

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

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 65 LBS.

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

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

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRACED LENGTH (LC)		
FR-TO					FR-TO				
1-2	-575 / 0	-77.3	-77.3	0.26 (1)	6.25	10-2	-345 / 0	0.32 (1)	
2-3	-579 / 0	-77.3	-77.3	0.26 (1)	6.25	2-9	-67 / 0	0.03 (1)	
3-4	-407 / 0	-77.3	-77.3	0.38 (1)	6.25	9-3	0 / 134	0.03 (4)	
4-5	-407 / 0	-77.3	-77.3	0.38 (1)	6.25	3-7	-118 / 0	0.08 (1)	
6-5	-889 / 0	0.0	0.0	0.62 (1)	5.76	7-4	-517 / 0	0.36 (1)	
11-1	-897 / 0	0.0	0.0	0.27 (1)	7.81	7-5	0 / 833	0.13 (1)	
						1-10	0 / 658	0.15 (1)	
11-10	0 / 0	-17.5	-17.5	0.08 (4)	10.00				
10-9	0 / 497	-17.5	-17.5	0.12 (1)	10.00				
9-8	0 / 462	-17.5	-17.5	0.16 (4)	10.00				
8-7	0 / 462	-17.5	-17.5	0.16 (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 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.62 (5-6:1) , BC=0.16 (7-9:4) , WB=0.36 (4-7:1) , 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.

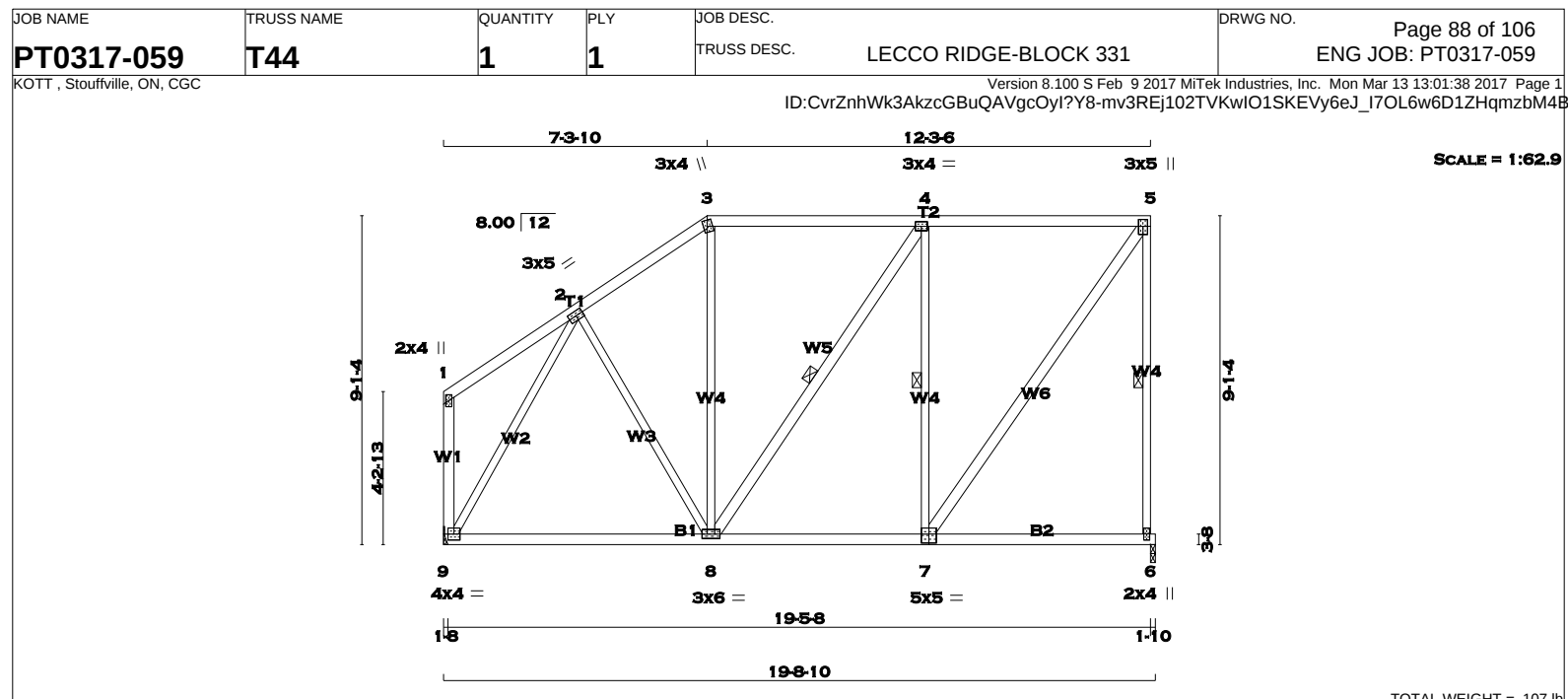
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.25 (1) (INPUT = 1.00)



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LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
6 - 5	2x3	DRY	No.2
9 - 1	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
8 - 4	2x4	DRY	No.2
7 - 5	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
2	TMVW-t	MT20	3.0	5.0		
3	TTW+m	MT20	3.0	4.0	2.00	1.25
4	TMVW-t	MT20	3.0	4.0		
5	TMVW+p	MT20	3.0	5.0	2.25	1.50
6	BMV1+p	MT20	2.0	4.0		
7	BSWW-l	MT20	5.0	5.0	3.00	2.50
8	BMVWW-t	MT20	3.0	6.0		
9	BMVW1-t	MT20	4.0	4.0		

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UP
JT	VERT	HORZ	UP	DOWN
6	929	0	0	0
9	929	0	0	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
	COMBINED	SNOW	LIVE
6	652	456 / 0	0 / 0
9	652	456 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 16-0-0. CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8, 4-7. DBS = 20-0-0. CBF = 73 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
1-2	0 / 18	-77.3 -77.3	0.17 (1)	10.00	2-8	0 / 100	0.03 (4)
2-3	-612 / 0	-77.3 -77.3	0.17 (1)	6.25	8-3	0 / 71	0.02 (4)
3-4	-493 / 0	-77.3 -77.3	0.51 (1)	6.25	8-4	-3 / 18	0.00 (4)
4-5	-495 / 0	-77.3 -77.3	0.51 (1)	6.25	7-4	-588 / 0	0.32 (1)
6-5	-883 / 0	0.0 0.0	0.48 (1)	5.77	7-5	0 / 857	0.14 (1)
9-1	-110 / 0	0.0 0.0	0.03 (1)	7.81	9-2	-884 / 0	0.90 (1)
9-8	0 / 443	-17.5 -17.5	0.23 (4)	10.00			
8-7	0 / 495	-17.5 -17.5	0.24 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	23.3	PSF
DL	3.0	PSF

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.51 (4-5:1), BC=0.24 (7-8:4), WB=0.90 (2-9:1), 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.

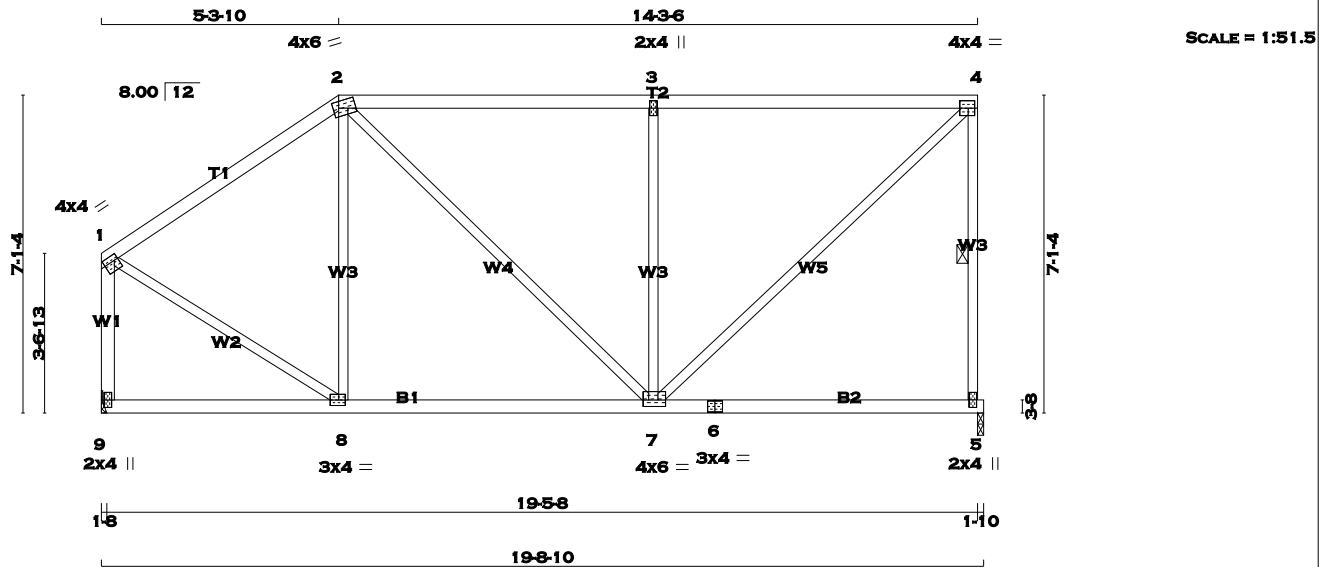
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 86 lb [M]

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

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
5	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0
9	652	456 / 0	0 / 0	0 / 0	0 / 0	0 / 0	196 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.69 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 4-5. DBS = 16-0-0 . CBF = 88 LBS.

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

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

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 (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)		
FR-TO		FROM TO			FR-TO				
1-2	-651 / 0	-77.3	-77.3 0.40 (1)	6.25	8-2	-210 / 28	0.18 (1)		
2-3	-706 / 0	-77.3	-77.3 0.71 (1)	5.69	2-7	0 / 233	0.05 (1)		
3-4	-706 / 0	-77.3	-77.3 0.72 (1)	5.69	7-3	-686 / 0	0.60 (1)		
5-4	-877 / 0	0.0	0.0 0.28 (1)	5.79	7-4	0 / 969	0.22 (1)		
9-1	-893 / 0	0.0	0.0 0.19 (1)	7.81	1-8	0 / 631	0.14 (1)		
9-8	0 / 0	-17.5	-17.5 0.14 (4)	10.00					
8-7	0 / 538	-17.5	-17.5 0.26 (4)	10.00					
7-6	0 / 0	-17.5	-17.5 0.22 (4)	10.00					
6-5	0 / 0	-17.5	-17.5 0.22 (4)	10.00					

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.65")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.65")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.72 (3-4:1) , BC=0.26 (7-8:4) , WB=0.60 (3-7:1) , SSI=0.27 (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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

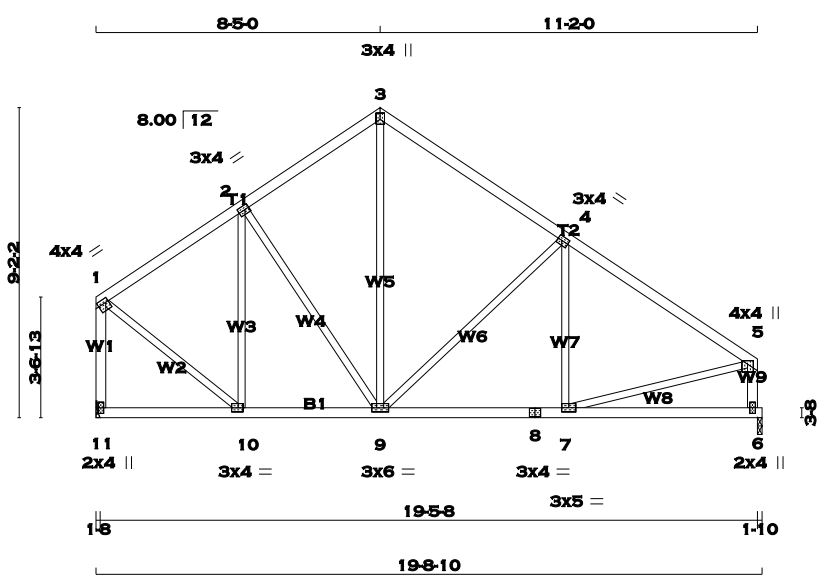
JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.29 (1) (INPUT = 1.00)

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Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 13:01:39 2017 Page 1
ID:CvrZnhWk3AkzcGBuQAVgcOyl?Y8-E6dqR31epndBYSzD02IkUJBWZITG4hKGSshrMCzbM4A



TOTAL WEIGHT = 3 X 91 = 272 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	4.0	1.50	1.00
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW+p	MT20	4.0	4.0	1.25	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVW-t	MT20	3.0	5.0		
8	BS-t	MT20	3.0	4.0		
9	BMVW-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	4.0	1.50	1.75
11	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS					
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
11	929	0	929	0	0
6	929	0	929	0	0

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC1) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-630 / 0	-77.3	-77.3 0.18 (1)	6.25	10-2	-328 / 0	0.22 (1)
2-3	-631 / 0	-77.3	-77.3 0.18 (1)	6.25	2-9	-63 / 0	0.07 (1)
3-4	-638 / 0	-77.3	-77.3 0.32 (1)	6.25	9-3	0 / 398	0.09 (1)
4-5	-917 / 0	-77.3	-77.3 0.33 (1)	6.03	9-4	-386 / 0	0.44 (1)
11-1	-897 / 0	0.0	0.0 0.19 (1)	7.81	7-4	-84 / 69	0.04 (1)
6-5	-888 / 0	0.0	0.0 0.10 (1)	7.81	1-10	0 / 678	0.15 (1)
					7-5	0 / 810	0.18 (1)
11-10	0 / 0	-17.5	-17.5 0.07 (4)	10.00			
10-9	0 / 541	-17.5	-17.5 0.13 (1)	10.00			
9-8	0 / 786	-17.5	-17.5 0.20 (1)	10.00			
8-7	0 / 786	-17.5	-17.5 0.20 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.33 (4-5:1) , BC=0.20 (7-9:1) , WB=0.44 (4-9:1) , SSI=0.18 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(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.

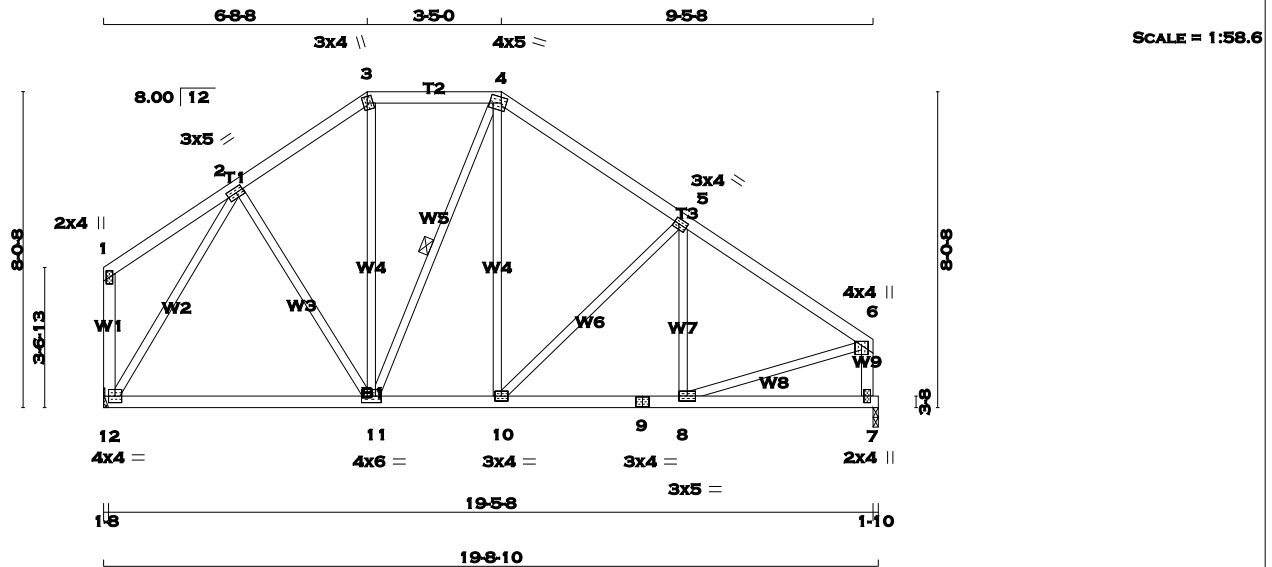
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.27 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 95 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
12 - 1	2x4 DRY	No.2	SPF
7 - 6	2x4 DRY	No.2	SPF
12 - 9	2x4 DRY	No.2	SPF
9 - 7	2x4 DRY	No.2	SPF
ALL WEBS EXCEPT	2x3 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	1.50	2.25
3	TTW+m	MT20	3.0	4.0	2.00	1.25
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TMWW-t	MT20	3.0	4.0	1.50	1.50
6	TMV+p	MT20	4.0	4.0	1.25	2.00
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	3.0	5.0		
9	BS-t	MT20	3.0	4.0		
10	BMWW-t	MT20	3.0	4.0		
11	BMWW-t	MT20	4.0	6.0		
12	BMV1-t	MT20	4.0	4.0		

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

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

BEARINGS		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
12	929	0	929	0	0	HANGER BY OTHERS			
7	929	0	929	0	0	MIN. SEAT SIZE: 1-8	1-10	1-10	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
12	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0	12	652	456 / 0	0 / 0	0 / 0	0 / 0
7	652	456 / 0	0 / 0	0 / 0	0 / 0	196 / 0	0 / 0	7	652	456 / 0	0 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.18 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0. CBF = 15 LBS.

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

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

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 UNBRACED LENGTH (LC)
FR-TO	FROM	TO	FR-TO
1-2	0 / 16	-77.3 -77.3	0.14 (1) 10.00
2-3	-666 / 0	-77.3 -77.3	0.11 (1) 6.25
3-4	-541 / 0	-77.3 -77.3	0.12 (1) 6.25
4-5	-729 / 0	-77.3 -77.3	0.23 (1) 6.25
5-6	-917 / 0	-77.3 -77.3	0.23 (1) 6.18
12-1	-102 / 0	0.0 0.0	0.02 (1) 7.81
7-6	-895 / 0	0.0 0.0	0.10 (1) 7.81
12-11	0 / 478	-17.5 -17.5	0.21 (4) 10.00
11-10	0 / 588	-17.5 -17.5	0.22 (4) 10.00
10-9	0 / 783	-17.5 -17.5	0.18 (1) 10.00
9-8	0 / 783	-17.5 -17.5	0.18 (1) 10.00
8-7	0 / 0	-17.5 -17.5	0.11 (4) 10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

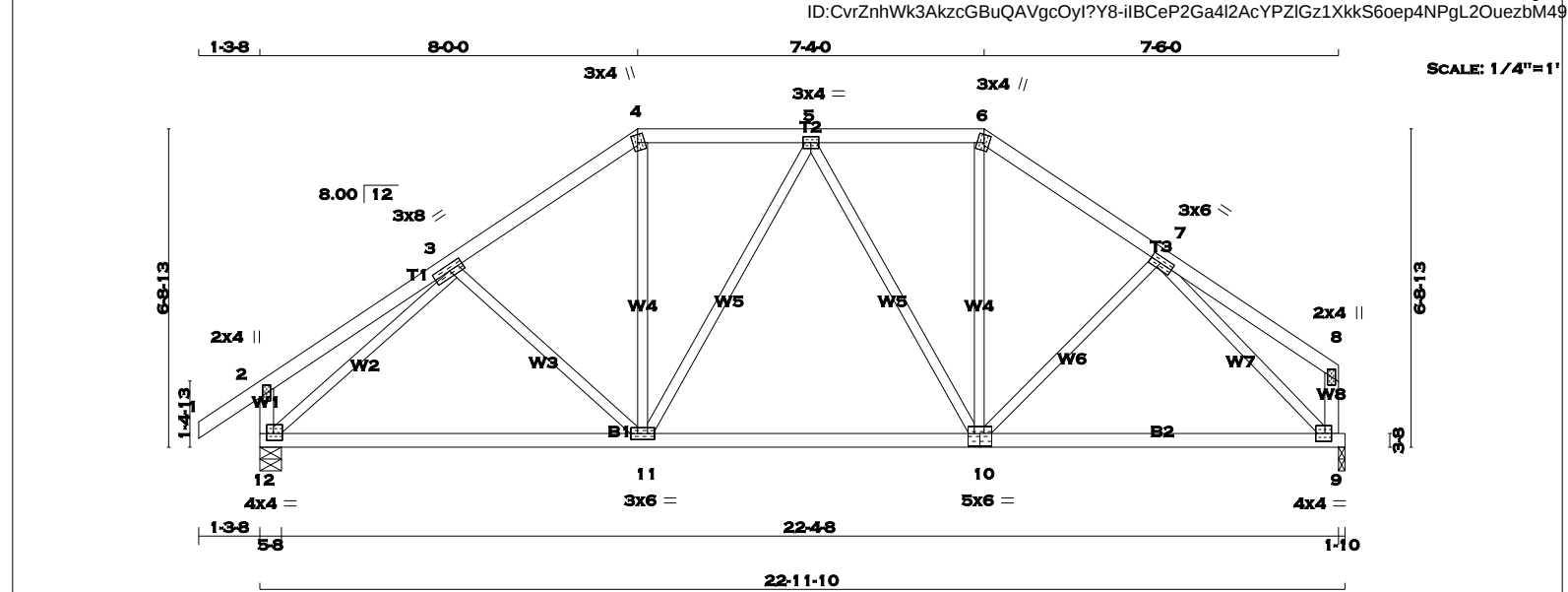
JSI GRIP= 0.87 (3) (INPUT = 0.90)
JSI METAL= 0.25 (2) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS SIZE

LUMBER

DESCR.

1 - 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

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

12

1189

0

1189

0

0

5-8

5-8

9

1083

0

1083

0

0

1-10

1-10

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

12

832

596 / 0

0 / 0

0 / 0

0 / 0

237 / 0

0 / 0

9

760

532 / 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 = 5.88 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD LC1

MAX

MAX.

MEMB.

FORCE

MAX

WEBS

MAX. FACTORED

FORCE

MAX

FR-TO

FROM

TO

LENGTH

FR-TO

1-2

0 / 29

-77.3

-77.3

0.10 (1)

10.00

3-11

-103 / 25

0.05 (1)

2-3

0 / 19

-77.3

-77.3

0.19 (1)

10.00

11-4

0 / 362

0.08 (1)

3-4

-1089 / 0

-77.3

-77.3

0.16 (1)

5.88

11-5

-165 / 0

0.18 (1)

4-5

-894 / 0

-77.3

-77.3

0.13 (1)

6.25

5-10

-224 / 0

0.24 (1)

5-6

-866 / 0

-77.3

-77.3

0.13 (1)

6.25

10-6

0 / 351

0.08 (1)

6-7

-1054 / 0

-77.3

-77.3

0.14 (1)

5.98

10-7

-23 / 43

0.01 (4)

7-8

0 / 18

-77.3

-77.3

0.17 (1)

10.00

12-3

-1323 / 0

0.65 (1)

12-2

-226 / 0

0.0

0.0

0.02 (1)

7.81

7-9

-1267 / 0

0.60 (1)

9-8

-113 / 0

0.0

0.0

0.01 (1)

7.81

12-11

0 / 965

-17.5

-17.5

0.31 (4)

10.00

11-10

0 / 975

-17.5

-17.5

0.32 (4)

10.00

10-9

0 / 877

-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=0.32 (10-11:4) , WB=0.65 (3-12:1) , SSI=0.14 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (10) (INPUT = 0.90)

JSI METAL= 0.36 (12) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

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TOWN OF MILTON

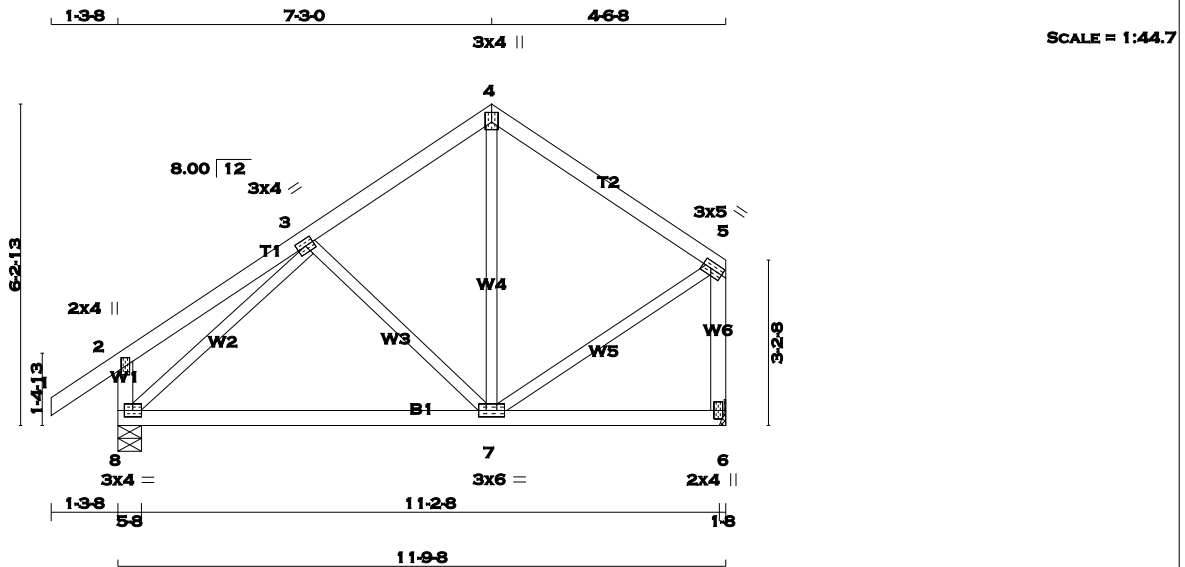
MAR 29, 2017

17-5037

BUILDING DIVISION

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KOTT



TOTAL WEIGHT = 52 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
8 - 2	2x4	DRY	No.2		SPF
6 - 5	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	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	4.0		
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	3.0	6.0		
8	BMVW1-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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		559	0	559	0	0	HANGER BY OTHERS		
8		665	0	665	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	392	275 / 0	0 / 0	0 / 0	0 / 0	0 / 0	118 / 0	0 / 0
8	465	338 / 0	0 / 0	0 / 0	0 / 0	0 / 0	126 / 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)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	3-7	-189 / 0	0.08 (1)	
2-3	0 / 18	-77.3	-77.3 0.16 (1)	7-4	0 / 95	0.03 (4)	
3-4	-352 / 0	-77.3	-77.3 0.13 (1)	8-3	-576 / 0	0.23 (1)	
4-5	-334 / 0	-77.3	-77.3 0.21 (1)	6-25	0 / 329	0.07 (1)	
8-2	-213 / 0	0.0	0.0 0.02 (1)	7-8			
6-5	-538 / 0	0.0	0.0 0.10 (1)				
8-7	0 / 415	-17.5	-17.5 0.23 (4)	10.00			
7-6	0 / 0	-17.5	-17.5 0.20 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 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 (0.07")

CSI: TC=0.21 (4-5:1), BC=0.23 (7-8:4), WB=0.23 (3-8:1), SSI=0.11 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

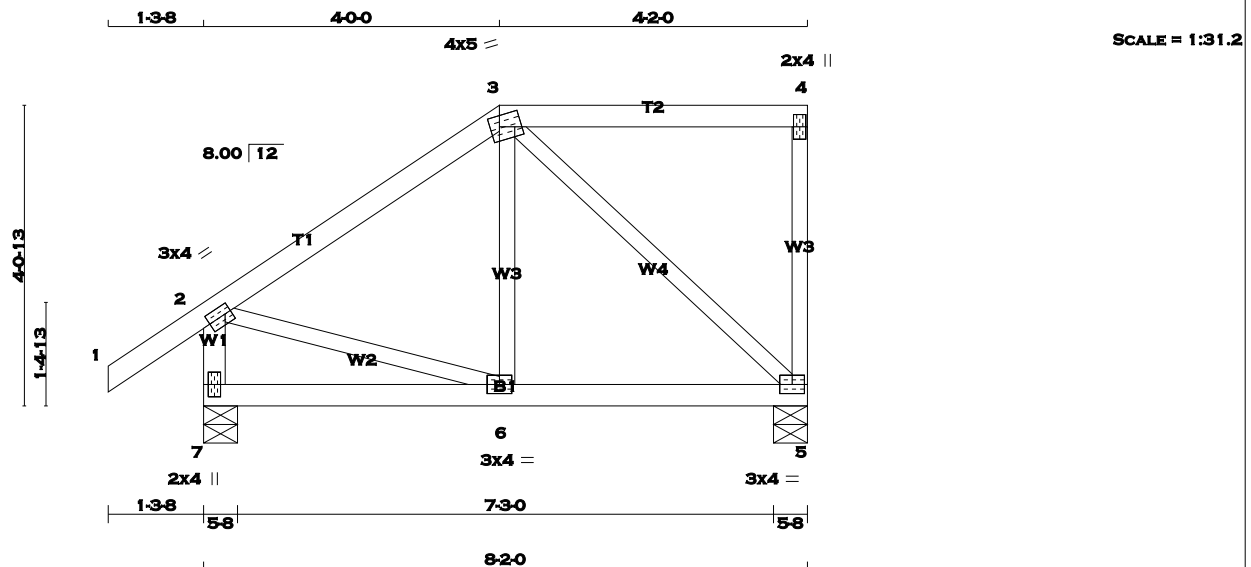
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.79 (3) (INPUT = 0.90)
JSI METAL= 0.20 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 36 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
5 - 4	2x3	DRY	No.2	SPF
7 - 2	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	1.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TMV+p	MT20	2.0	4.0		
5	BMVW1-t	MT20	3.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		387	0	387	0	0	5-8	5-8	
7		493	0	493	0	0	5-8	5-8	

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
7	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		MEMB.		WEBS		MEMB.	
MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FORCE (LBS)	MAX. VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FORCE (LBS)	MAX. VERT. LOAD (PLF)
FR-TO	FROM TO	FR-TO	FROM TO	FR-TO	FROM TO	FR-TO	FROM TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	6-3	0 / 80	0.03 (4)
2-3	-263 / 0	-77.3	-77.3 0.21 (1)	6.25	3-5	-296 / 0	0.15 (1)
3-4	0 / 0	-77.3	-77.3 0.23 (1)	10.00	2-6	0 / 226	0.05 (1)
5-4	-161 / 0	0.0	0.0 0.06 (1)	7.81			
7-2	-465 / 0	0.0	0.0 0.05 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.08 (4)	10.00			
6-5	0 / 220	-17.5	-17.5 0.10 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.23 (3-4:1), BC=0.10 (5-6:4), WB=0.15 (3-5:1), SSI=0.13 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

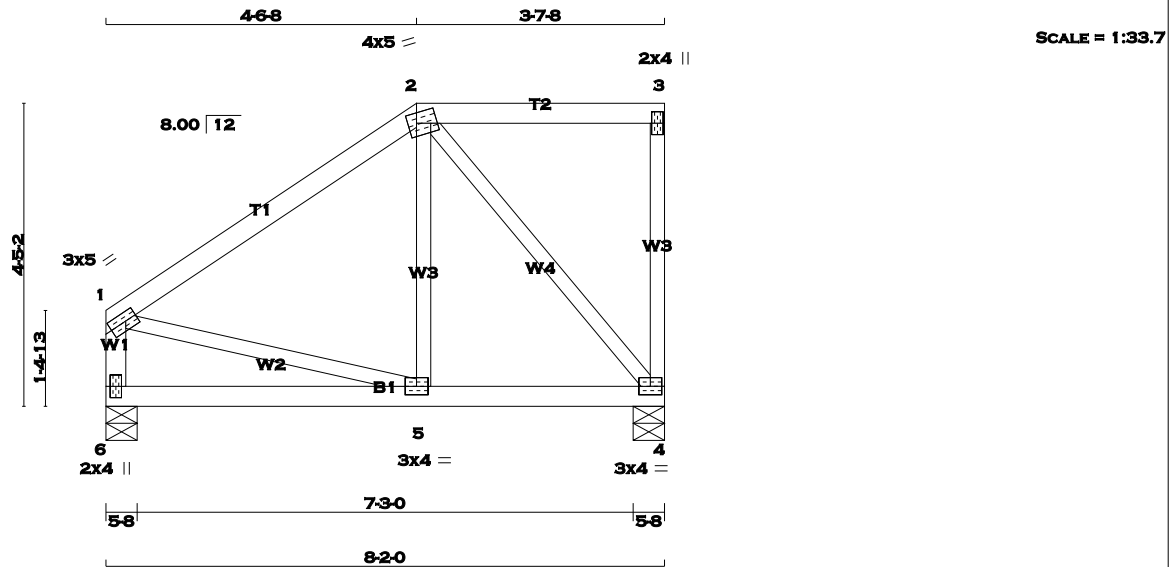
JSI GRIP= 0.74 (2) (INPUT = 0.90)
JSI METAL= 0.15 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 35 lb
[M][F]

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

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

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

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

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
4	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
6	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS		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	-238 / 0	-77.3	-77.3 0.20 (1)	6.25	5-2	0 / 85	0.03 (4)
2-3	0 / 0	-77.3	-77.3 0.17 (1)	10.00	2-4	-301 / 0	0.14 (1)
4-3	-140 / 0	0.0	0.0 0.06 (1)	7.81	1-5	0 / 203	0.05 (1)
6-1	-354 / 0	0.0	0.0 0.04 (1)	7.81			
6-5	0 / 0	-17.5	-17.5 0.09 (4)	10.00			
5-4	0 / 199	-17.5	-17.5 0.10 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

CSI: TC=0.20 (1-2:1), BC=0.10 (4-5:4), WB=0.14 (2-4:1), SSI=0.11 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

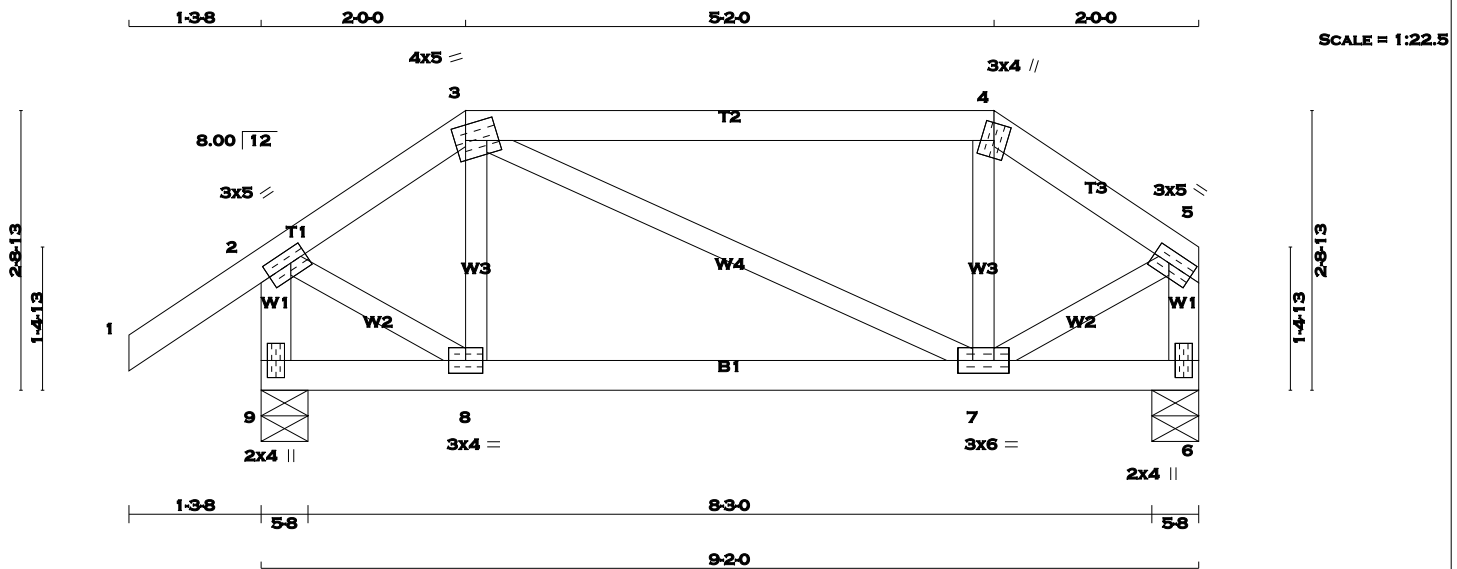
JSI GRIP= 0.55 (2) (INPUT = 0.90)
JSI METAL= 0.10 (1) (INPUT = 1.00)



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MAR 29, 2017
17-5037
BUILDING DIVISION

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TOTAL WEIGHT = 2 X 37 = 74 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMWW-t	MT20	3.0	6.0		
8	BMWW-t	MT20	3.0	4.0		
9	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9	541	0	541	0	0	5-8	5-8	
6	435	0	435	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
9	377	277 / 0			0 / 0		0 / 0		0 / 0		100 / 0		0 / 0	
6	305	213 / 0			0 / 0		0 / 0		0 / 0		92 / 0		0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX (PLF)	LC1 MAX (LC)
FR-TO						FR-TO			
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	8-3	-78 / 35	0.01 (1)	
2-3	-357 / 0	-77.3	-77.3	0.05 (1)	6.25	3-7	0 / 0	0.00 (1)	
3-4	-293 / 0	-77.3	-77.3	0.36 (1)	6.25	7-4	-78 / 35	0.01 (1)	
4-5	-357 / 0	-77.3	-77.3	0.05 (1)	6.25	2-8	0 / 333	0.07 (1)	
9-2	-535 / 0	0.0	0.0	0.06 (1)	7.81	7-5	0 / 333	0.07 (1)	
6-5	-429 / 0	0.0	0.0	0.04 (1)	7.81				
9-8	0 / 0	-17.5	-17.5	0.07 (4)	10.00				
8-7	0 / 293	-17.5	-17.5	0.09 (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/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.02")

CSI: TC=0.36 (3-4:1), BC=0.09 (7-8:4), WB=0.07 (2-8:1), SSI=0.16 (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.

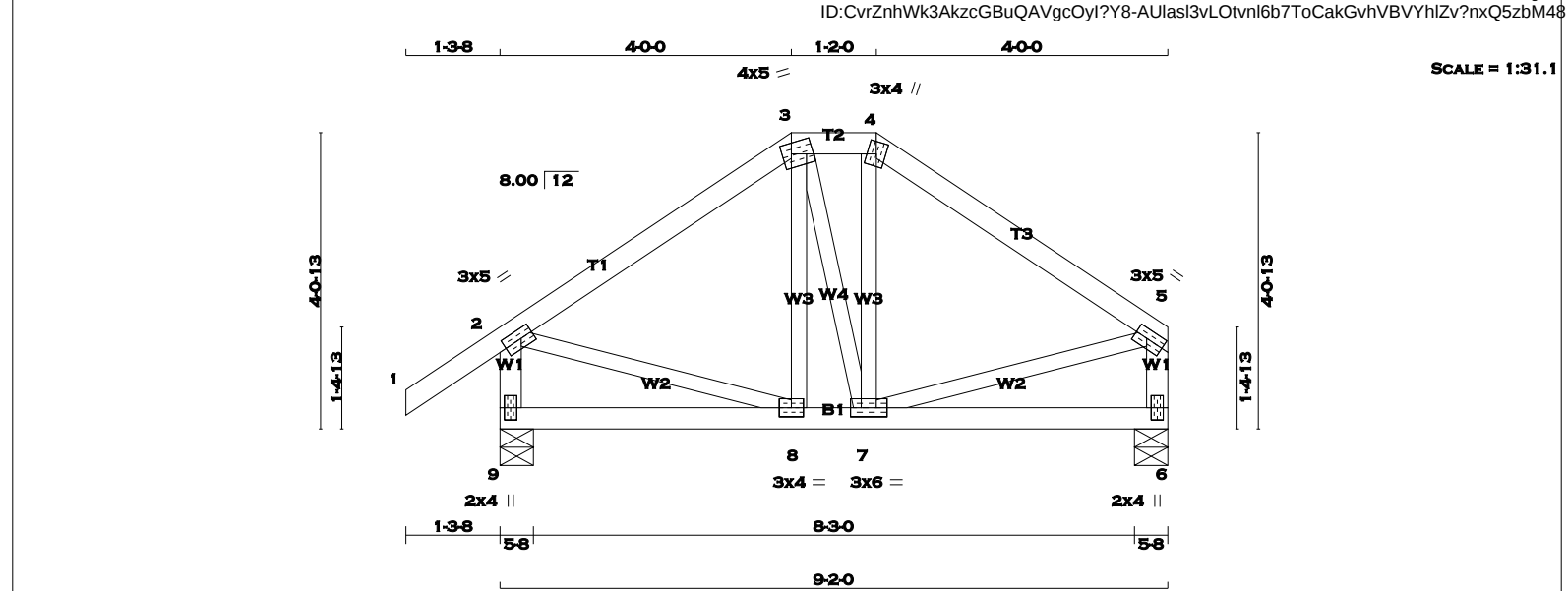
JSI GRIP= 0.60 (7) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)



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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	3.0	5.0	1.50 2.00
3	TTWW-m	MT20	4.0	5.0	1.75 1.50
4	TTW+m	MT20	3.0	4.0	
5	TMVW-t	MT20	3.0	5.0	1.50 2.00
6	BMV1+p	MT20	2.0	4.0	
7	BMVWW-t	MT20	3.0	6.0	
8	BMVWW-t	MT20	3.0	4.0	
9	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
9	541	0	541	0	0	5-8	5-8	5-8	
6	435	0	435	0	0	5-8	5-8	5-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9	377	277 / 0	0 / 0	0 / 0	0 / 0	0 / 0	100 / 0
6	305	213 / 0	0 / 0	0 / 0	0 / 0	0 / 0	92 / 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 / 29	-77.3	-77.3 0.10 (1)	10.00	8-3	-20 / 33	0.01 (4)
2-3	-322 / 0	-77.3	-77.3 0.16 (1)	6.25	3-7	0 / 2	0.00 (4)
3-4	-267 / 0	-77.3	-77.3 0.01 (1)	6.25	7-4	-21 / 35	0.01 (4)
4-5	-322 / 0	-77.3	-77.3 0.16 (1)	6.25	2-8	0 / 277	0.06 (1)
9-2	-511 / 0	0.0	0.0 0.05 (1)	7.81	7-5	0 / 277	0.06 (1)
6-5	-404 / 0	0.0	0.0 0.04 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.06 (4)	10.00			
8-7	0 / 267	-17.5	-17.5 0.08 (4)	10.00			
7-6	0 / 0	-17.5	-17.5 0.06 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.16 (2-3:1), BC=0.08 (7-8:4), WB=0.06 (2-8:1), SSI=0.10 (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.

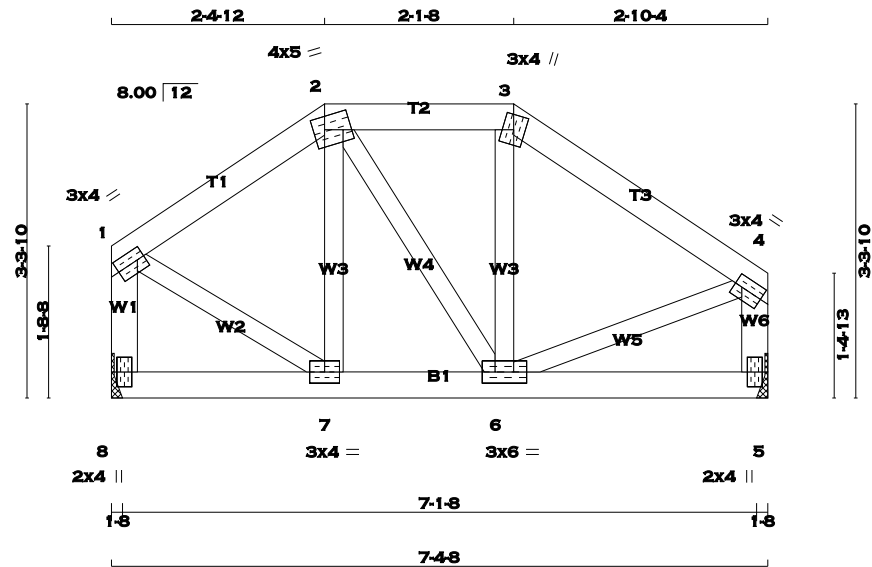
JSI GRIP= 0.51 (7) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)



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SCALE = 1:25.9

TOTAL WEIGHT = 32 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
3 - 4	2x4	DRY	No.2	SPF
8 - 1	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF
8 - 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
1	TMVW-t	MT20	3.0	4.0	1.50	1.00
2	TTWW-m	MT20	4.0	5.0	1.75	1.50
3	TTW+m	MT20	3.0	4.0		
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	BMVWW-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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX
8	350	0	350	0	0		HANGER BY OTHERS		HANGER BY OTHERS
5	350	0	350	0	0		MIN. SEAT SIZE: 1-8		MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	1ST LCASE	MAX/MIN. COMPONENT REACTIONS
8	245	172 / 0	0 / 0	0 / 0
5	245	172 / 0	0 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	-234 / 0	-77.3	-77.3 0.06 (1)	6.25	7-2	-67 / 11	0.01 (1)
2-3	-207 / 0	-77.3	-77.3 0.04 (1)	6.25	2-6	0 / 28	0.01 (1)
3-4	-251 / 0	-77.3	-77.3 0.08 (1)	6.25	6-3	-52 / 22	0.01 (1)
8-1	-330 / 0	0.0	0.0 0.04 (1)	7.81	1-7	0 / 222	0.05 (1)
5-4	-327 / 0	0.0	0.0 0.03 (1)	7.81	6-4	0 / 222	0.05 (1)
8-7	0 / 0	-17.5	-17.5 0.02 (4)	10.00			
7-6	0 / 191	-17.5	-17.5 0.04 (4)	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

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 (0.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.08 (3-4:1), BC=0.04 (6-7:4), WB=0.05 (4-6:1), SSI=0.07 (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.

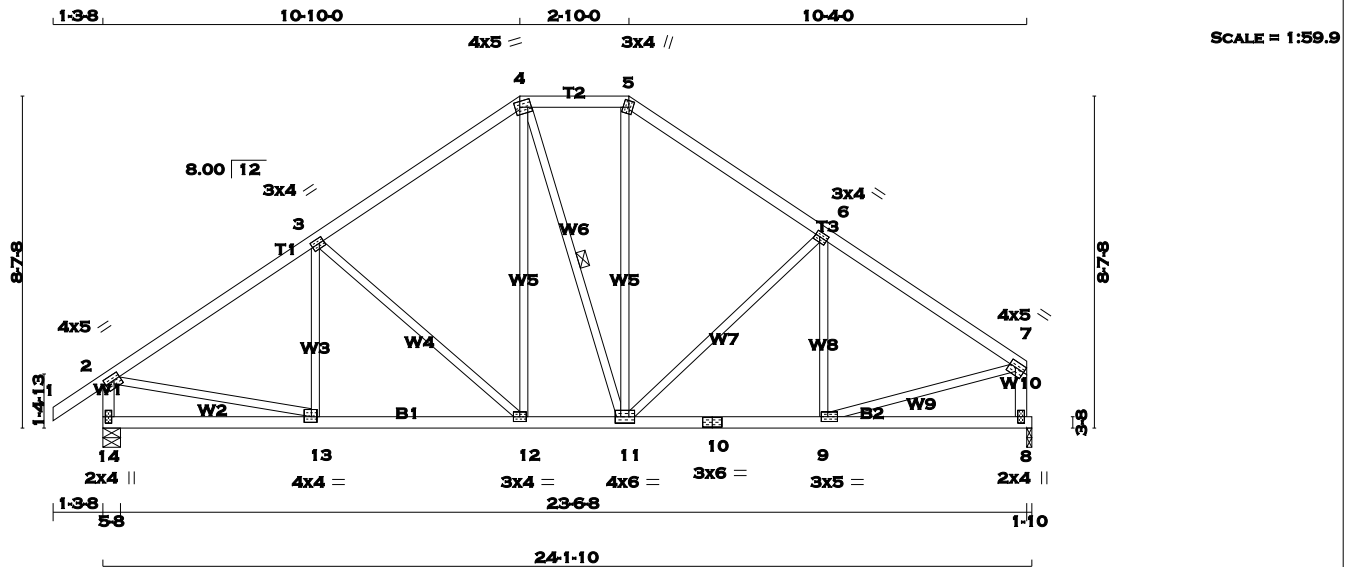
JSI GRIP= 0.73 (4) (INPUT = 0.90)
JSI METAL= 0.12 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 111 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 4	2x4	No.2			
4 - 5	2x4	No.2			
5 - 7	2x4	No.2			
14 - 2	2x4	No.2			
8 - 7	2x4	No.2			
14 - 10	2x4	No.2			
10 - 8	2x4	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	TTWV-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	4.0	6.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	4.0	4.0	1.75	1.75
14	BMV1+p	MT20	2.0	4.0		
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.						
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						



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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
GROSS REACTION		GROSS REACTION		DOWN		HORZ		DOWN		HORZ		UPLIFT		IN-SX		BRG		BRG	
JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ
14	1244	0	1244	0	0	5-8	5-8	8	1138	0	1138	0	0	1-10	1-10				

UNFACTORED REACTIONS

1ST LCASE				MAX./MIN. COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	871	623 / 0	0 / 0	0 / 0	0 / 0	248 / 0	0 / 0
8	799	559 / 0	0 / 0	0 / 0	0 / 0	240 / 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 = 5.35 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 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

CHORDS				WEBS			
MAX. FACTORED		FACTORED		MAX. FACTORED		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 / 29	-77.3	-77.3 0.10 (1)	10.00	13-3	-103 / 63	0.04 (1)
2-3	-1275 / 0	-77.3	-77.3 0.32 (1)	5.35	3-12	-361 / 0	0.36 (1)
3-4	-1006 / 0	-77.3	-77.3 0.31 (1)	5.86	12-4	0 / 302	0.07 (1)
4-5	-809 / 0	-77.3	-77.3 0.09 (1)	6.25	4-11	-23 / 0	0.01 (1)
5-6	-997 / 0	-77.3	-77.3 0.28 (1)	5.92	11-5	0 / 283	0.06 (1)
6-7	-1187 / 0	-77.3	-77.3 0.29 (1)	5.54	11-6	-281 / 0	0.28 (1)
14-2	-1205 / 0	0.0	0.0 0.12 (1)	7.29	9-6	-168 / 39	0.07 (1)
8-7	-1100 / 0	0.0	0.0 0.12 (1)	7.54	2-13	0 / 1104	0.25 (1)
					9-7	0 / 1045	0.24 (1)
14-13	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
13-12	0 / 1084	-17.5	-17.5 0.24 (1)	10.00			
12-11	0 / 816	-17.5	-17.5 0.17 (1)	10.00			
11-10	0 / 1009	-17.5	-17.5 0.22 (1)	10.00			
10-9	0 / 1009	-17.5	-17.5 0.22 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.12 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.32 (2-3:1), BC=0.24 (12-13:1), WB=0.36 (3-12:1), 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

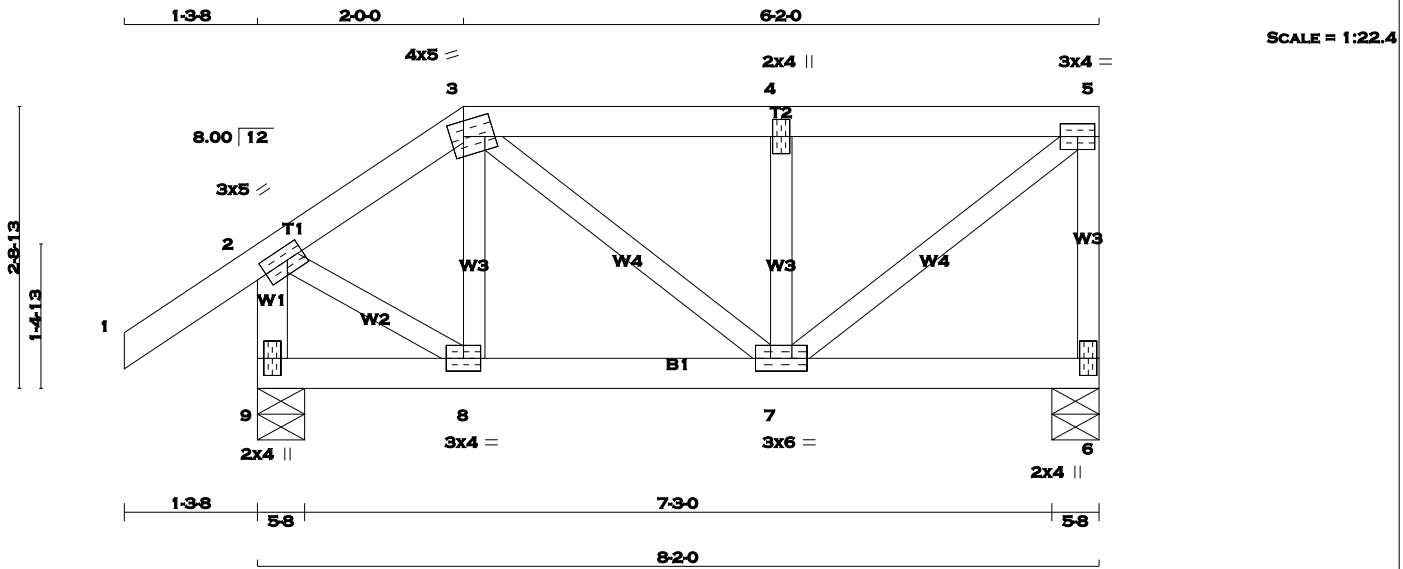
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (5) (INPUT = 0.90)
JSI METAL= 0.44 (2) (INPUT = 1.00)

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LUMBER

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6	387	0	387	0	0	5-8	5-8	
9	493	0	493	0	0	5-8	5-8	

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					
6	272	190 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0	0 / 0	0 / 0	0 / 0
9	344	254 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0	0 / 0	0 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (LBS)		MAX. LC1 (LC)		MAX. UNBRAC LENGTH		MEMB.	WEBS MAX. FACTORED FORCE (LBS)		MAX. LC1 (LC)	
	FR-TO	FROM	TO	FROM	TO	FROM	TO	FR-TO		FR-TO	FROM	TO	FROM
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	8-3	-78 / 14	0.01 (1)					
2-3	-301 / 0	-77.3	-77.3	0.05 (1)	6.25	3-7	0 / 120	0.03 (1)					
3-4	-340 / 0	-77.3	-77.3	0.11 (1)	6.25	7-4	-290 / 0	0.05 (1)					
4-5	-341 / 0	-77.3	-77.3	0.11 (1)	6.25	7-5	0 / 434	0.10 (1)					
6-5	-363 / 0	0.0	0.0	0.07 (1)	7.81	2-8	0 / 280	0.06 (1)					
9-2	-480 / 0	0.0	0.0	0.05 (1)	7.81								
9-8	0 / 0	-17.5	-17.5	0.02 (4)	10.00								
8-7	0 / 246	-17.5	-17.5	0.05 (4)	10.00								
7-6	0 / 0	-17.5	-17.5	0.04 (4)	10.00								

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.11 (4-5:1), BC=0.05 (7-8:4), WB=0.10 (5-7:1), SSI=0.11 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

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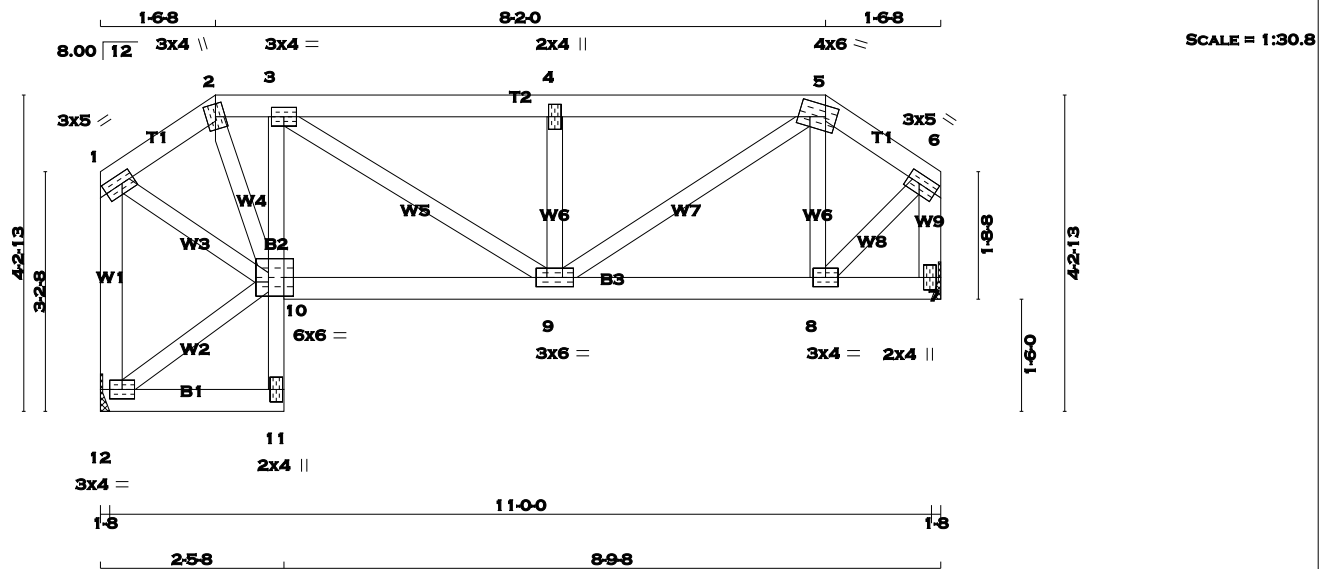
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BUILDING DIVISION

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TOTAL WEIGHT = 52 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY No.2	SPF
2 - 5	2x4	DRY No.2	SPF
5 - 6	2x4	DRY No.2	SPF
12 - 1	2x4	DRY No.2	SPF
7 - 6	2x4	DRY No.2	SPF
12 - 11	2x4	DRY No.2	SPF
11 - 3	2x3	DRY No.2	SPF
10 - 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
1	TMWw-t	MT20	3.0	5.0	1.50 2.00
2	TTW+m	MT20	3.0	4.0	
3	TMWV-t	MT20	3.0	4.0	
4	TMWw	MT20	2.0	4.0	
5	TTWw-m	MT20	4.0	6.0	1.75 1.75
6	TMWV-t	MT20	3.0	5.0	1.50 2.00
7	BMV1+p	MT20	2.0	4.0	
8	BMWw-t	MT20	3.0	4.0	
9	BMWWW-t	MT20	3.0	6.0	
10	BYMWWW-I	MT20	6.0	6.0	3.00 4.00
11	BMV+p	MT20	2.0	4.0	
12	BMWV1-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	534	0	534	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8
12	534	0	534	0	0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	374	262 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0
12	374	262 / 0	0 / 0	0 / 0	0 / 0	113 / 0	0 / 0

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEB S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOCL1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED CSI (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	-431 / 0	-77.3	-77.3	0.03 (1)	6.25	2-10	0 / 227		
2-3	-428 / 0	-77.3	-77.3	0.08 (1)	6.25	3-9	0 / 270		
3-4	-657 / 0	-77.3	-77.3	0.15 (1)	6.25	9-4	-322 / 0		
4-5	-657 / 0	-77.3	-77.3	0.15 (1)	6.25	9-5	0 / 429		
5-6	-373 / 0	-77.3	-77.3	0.03 (1)	6.25	8-5	-204 / 0		
12-1	-511 / 0	0.0	0.0	0.09 (1)	7.81	1-10	0 / 414		
7-6	-529 / 0	0.0	0.0	0.06 (1)	7.81	8-6	0 / 404		
						12-10	-3 / 0		
12-11	0 / 2	-17.5	-17.5	0.03 (4)	10.00				
11-10	0 / 23	0.0	0.0	0.01 (1)	10.00				
10-3	-377 / 0	0.0	0.0	0.02 (1)	7.81				
10-9	0 / 431	-17.5	-17.5	0.10 (1)	10.00				
9-8	0 / 300	-17.5	-17.5	0.08 (4)	10.00				
8-7	0 / 0	-17.5	-17.5	0.03 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.15 (3-4:1), BC=0.10 (9-10:1), WB=0.10 (5-9:1), SSI=0.13 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (6) (INPUT = 0.90)
JSI METAL= 0.14 (1) (INPUT = 1.00)



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



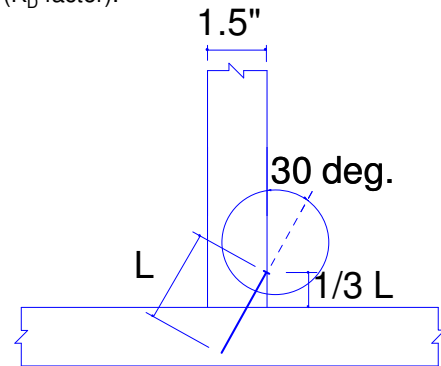
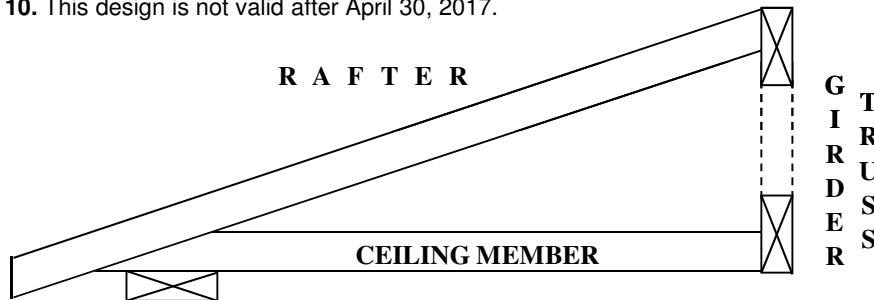
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2017.



TOE-NAIL INSTALLATION

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



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

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PEO
Certificate No. 10889485



April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

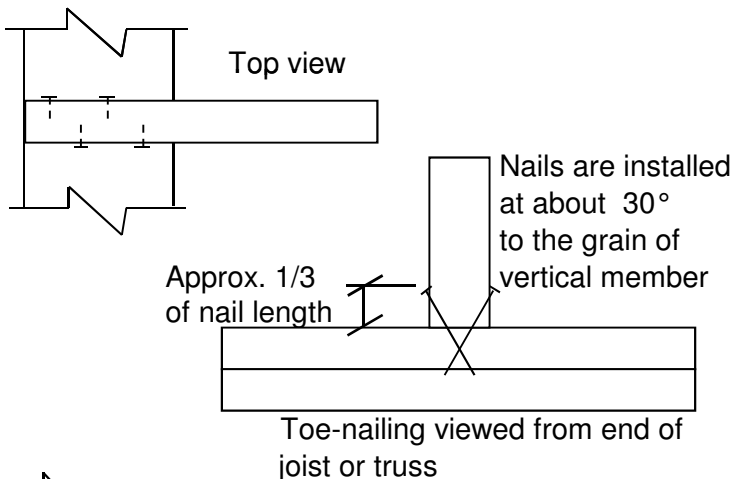
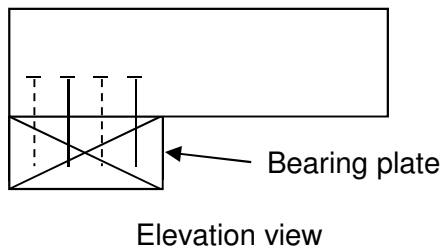
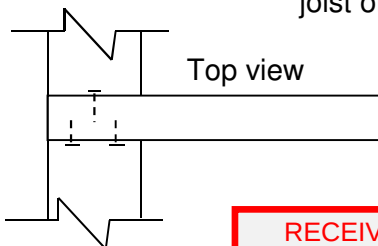
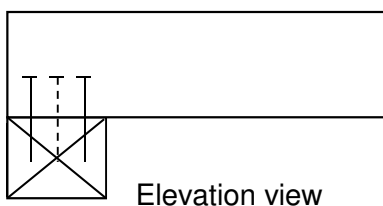
B37579H2

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-09, section 10.9.5
9. This design is not valid after April 30, 2017

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

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



PEO
Certificate No. 10889485



April 24, 2015

JOB NAME DETAILS

JOB DESC.

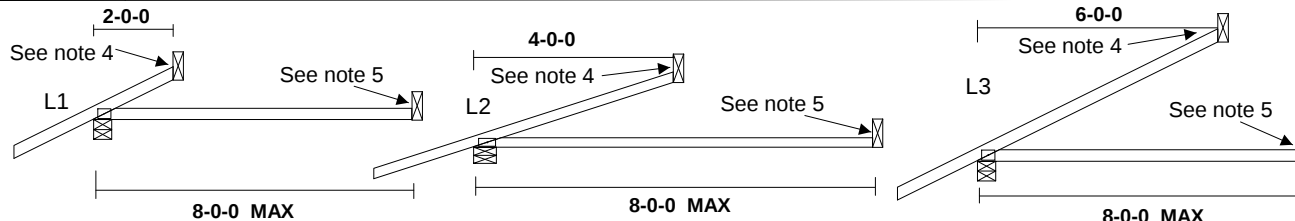
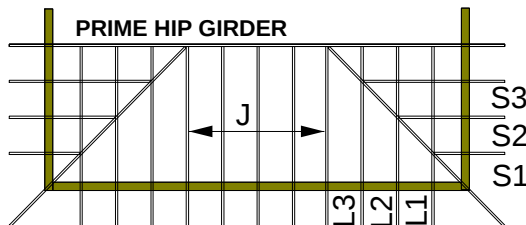
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TOO BRIDGE-BLOCK 331

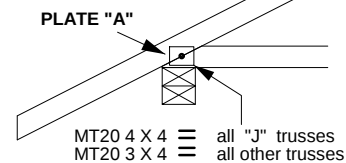
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B37579J

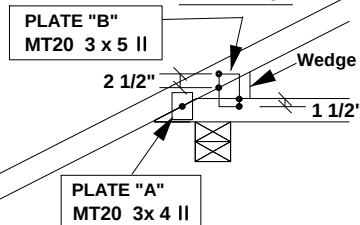
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DETAIL "A"



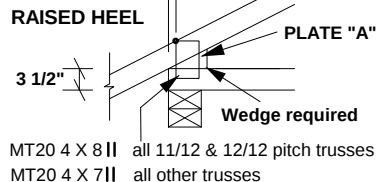
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CANTILEVER DETAIL "C"

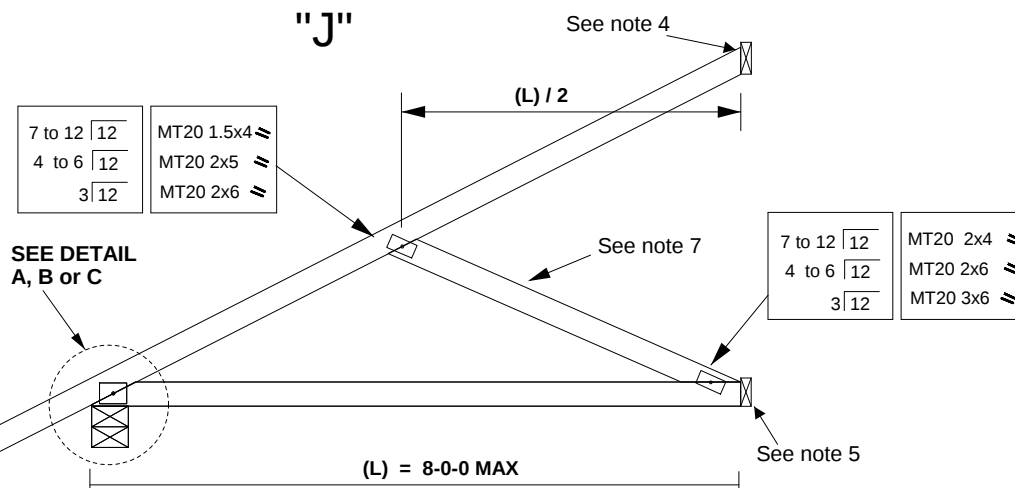
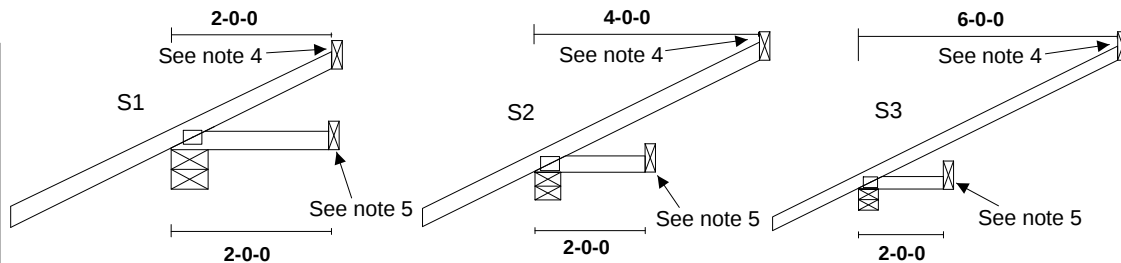
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

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



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

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STANDARD GABLE END DETAIL

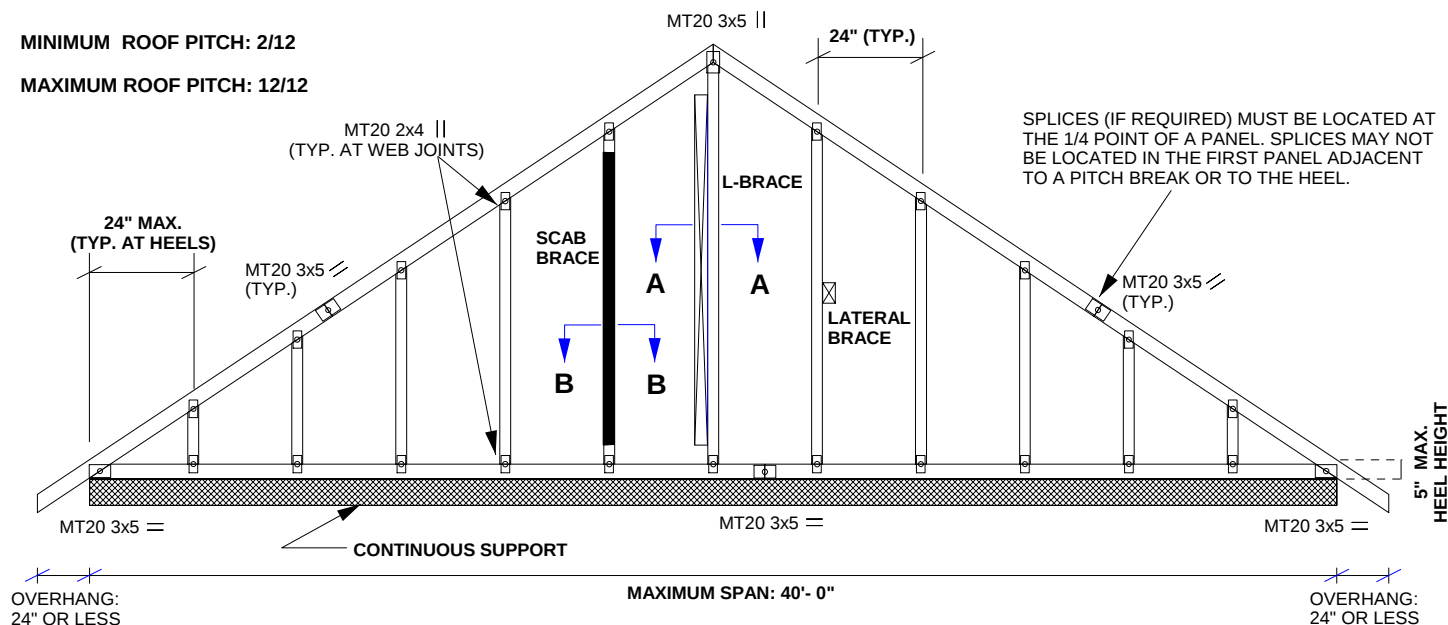
LECCO RIDGE-BLOCK 331

DRAWING NO.: B37579K

ENR 108-PT0017-059

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

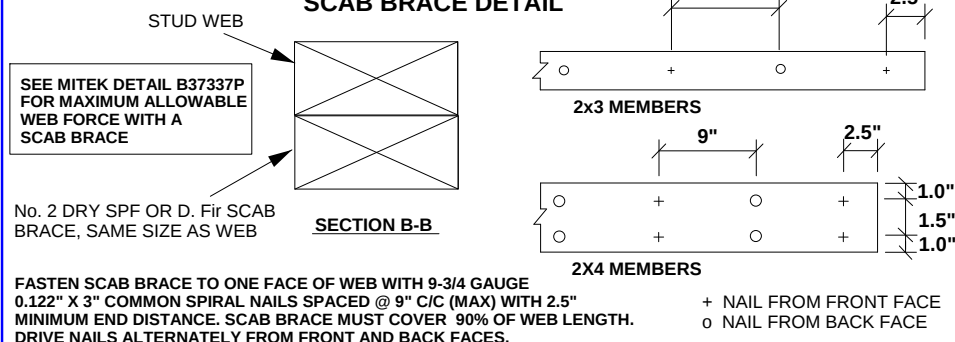
TOTAL LOAD = 73.0 PSF OR LESS

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:

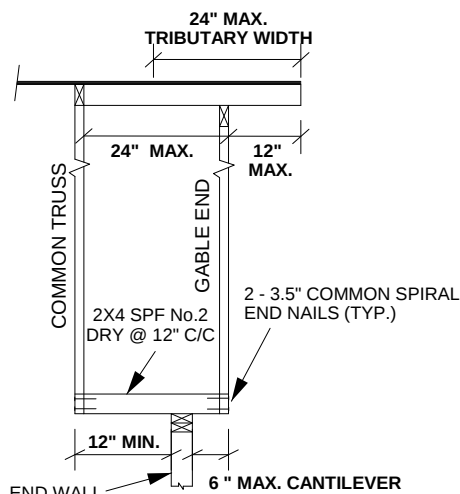
WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

SCAB BRACE DETAIL

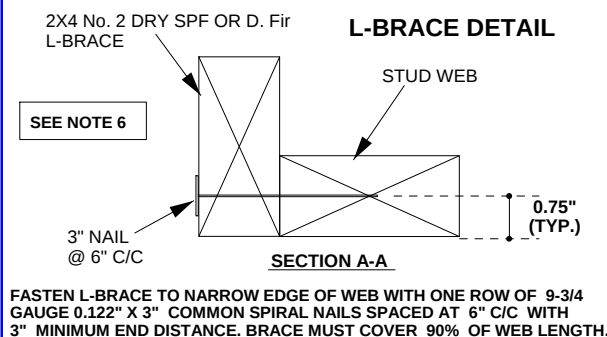


CANTILEVER DETAIL

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



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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