



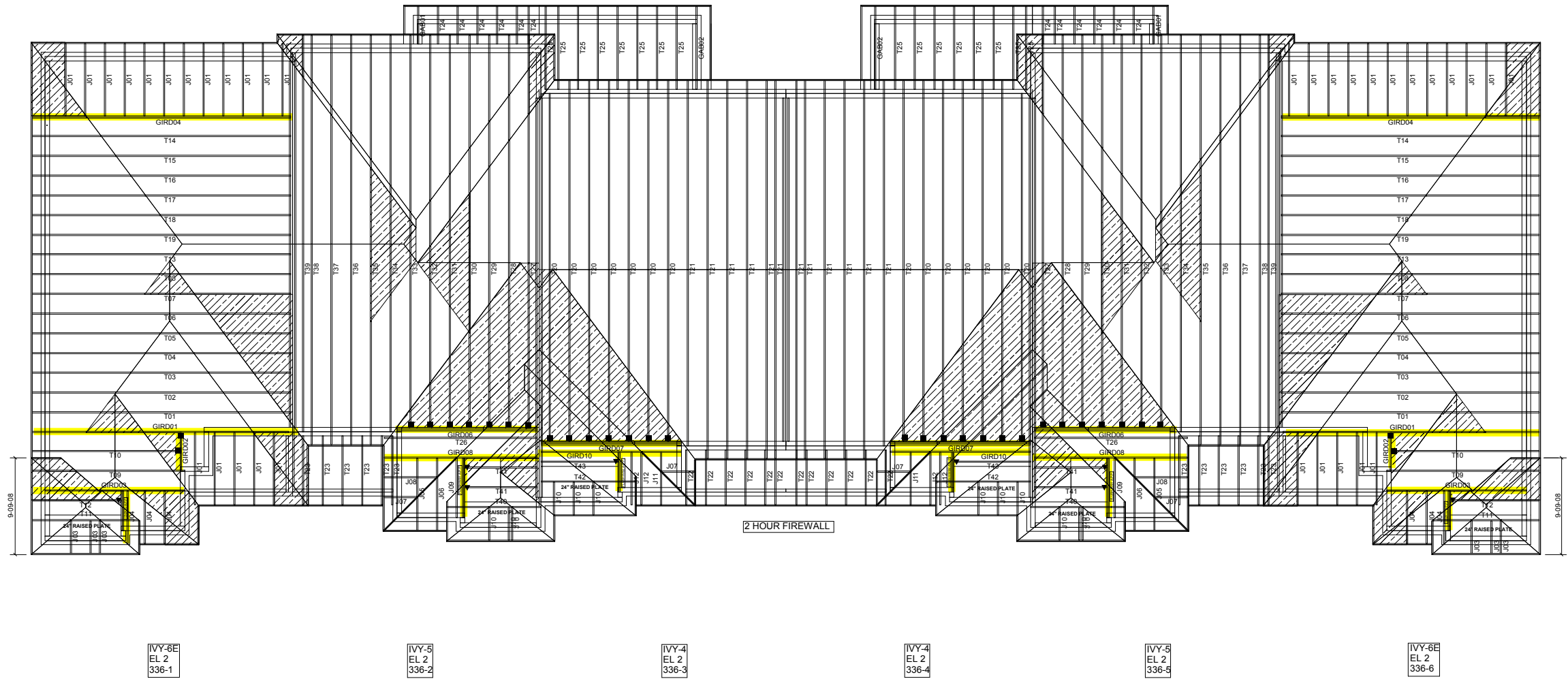
TOWN OF MILTON
PLANNING AND DEVELOPMENT
BUILDING PERMIT: 17-5215

BUILDING: REVIEWED
SCOTT SHERRIFFS
PLANS EXAMINER

APR 24, 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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MAR 29, 2017
17-5215
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.

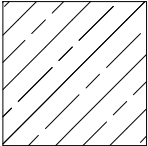
GARAGE WALL PLATES
AT 9' 1 2/16" A.F.F.

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 336**

Customer: **GREENPARK**

Project: **LECCO RIDGE**

Location: **MILTON**

Date: 3/13/2017 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.



01/29/2013

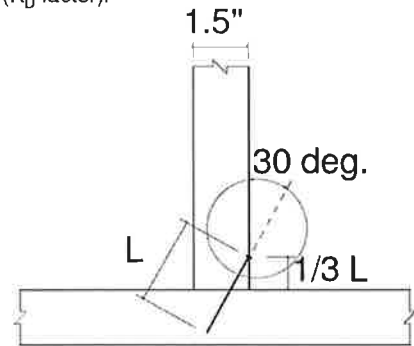
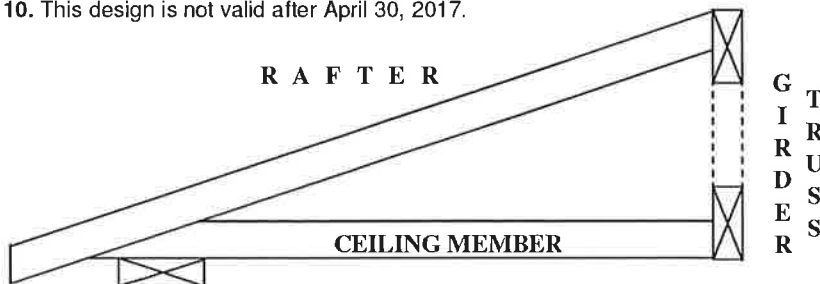
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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

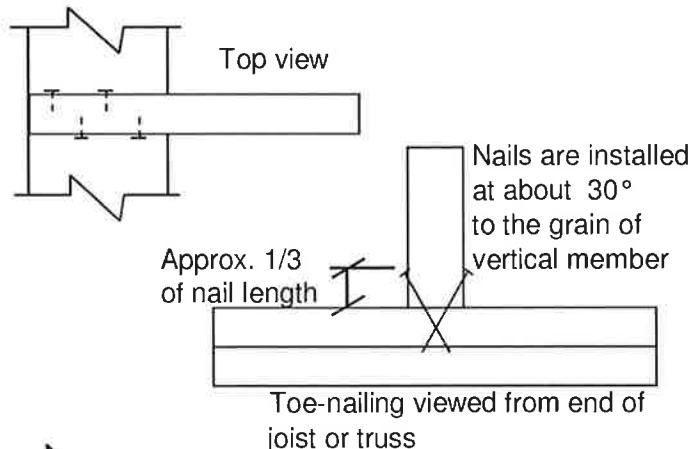
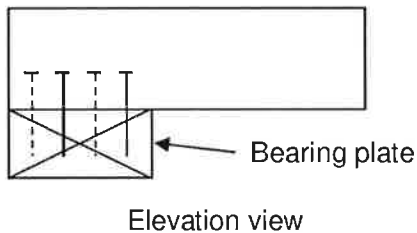
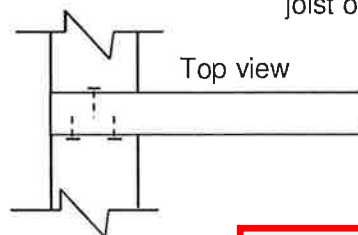
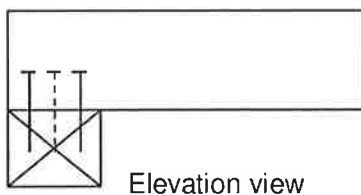
B37579H2

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**

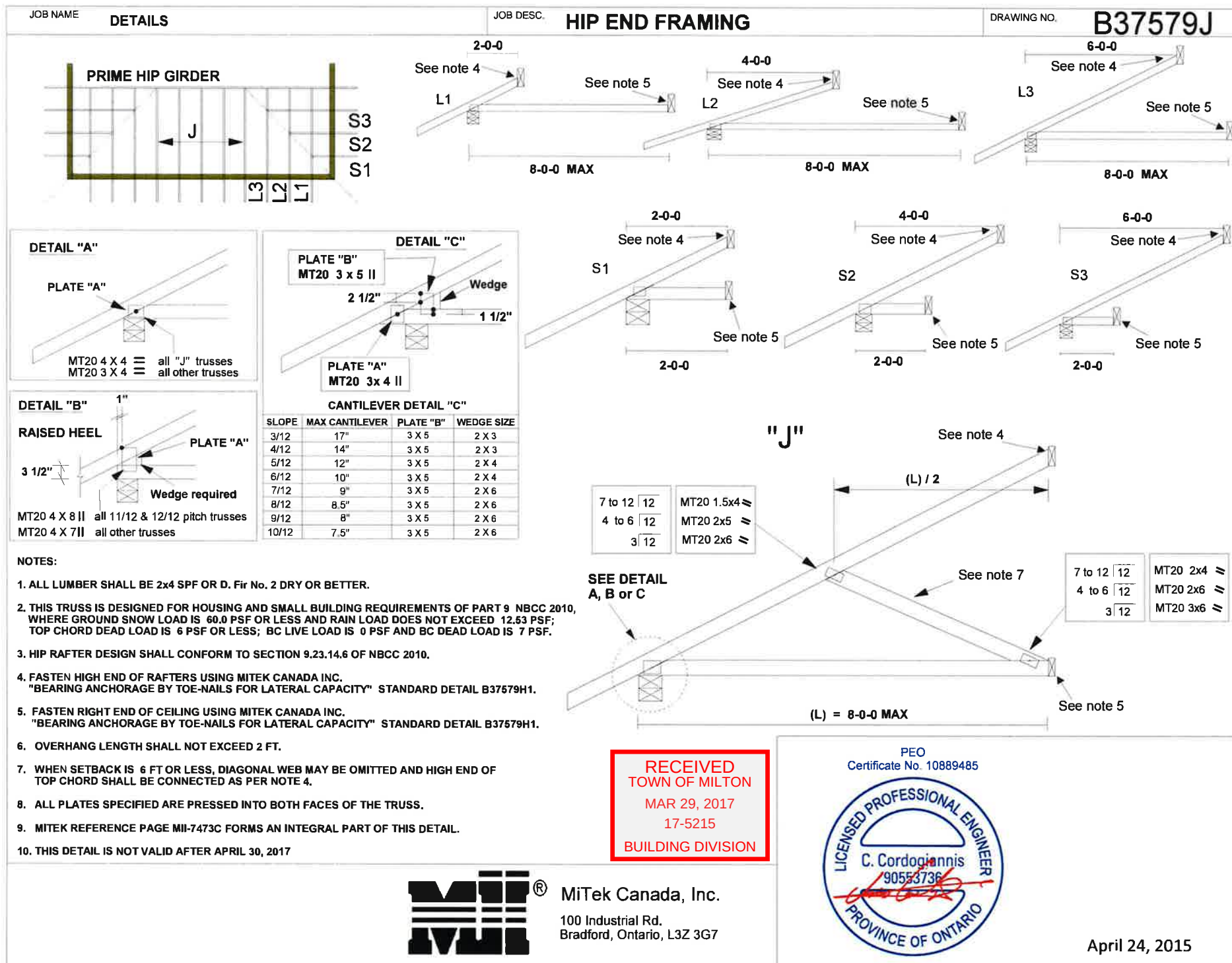
MiTek Canada Inc
100 Industrial Rd.
Bradford, Ontario L3Z 3G7

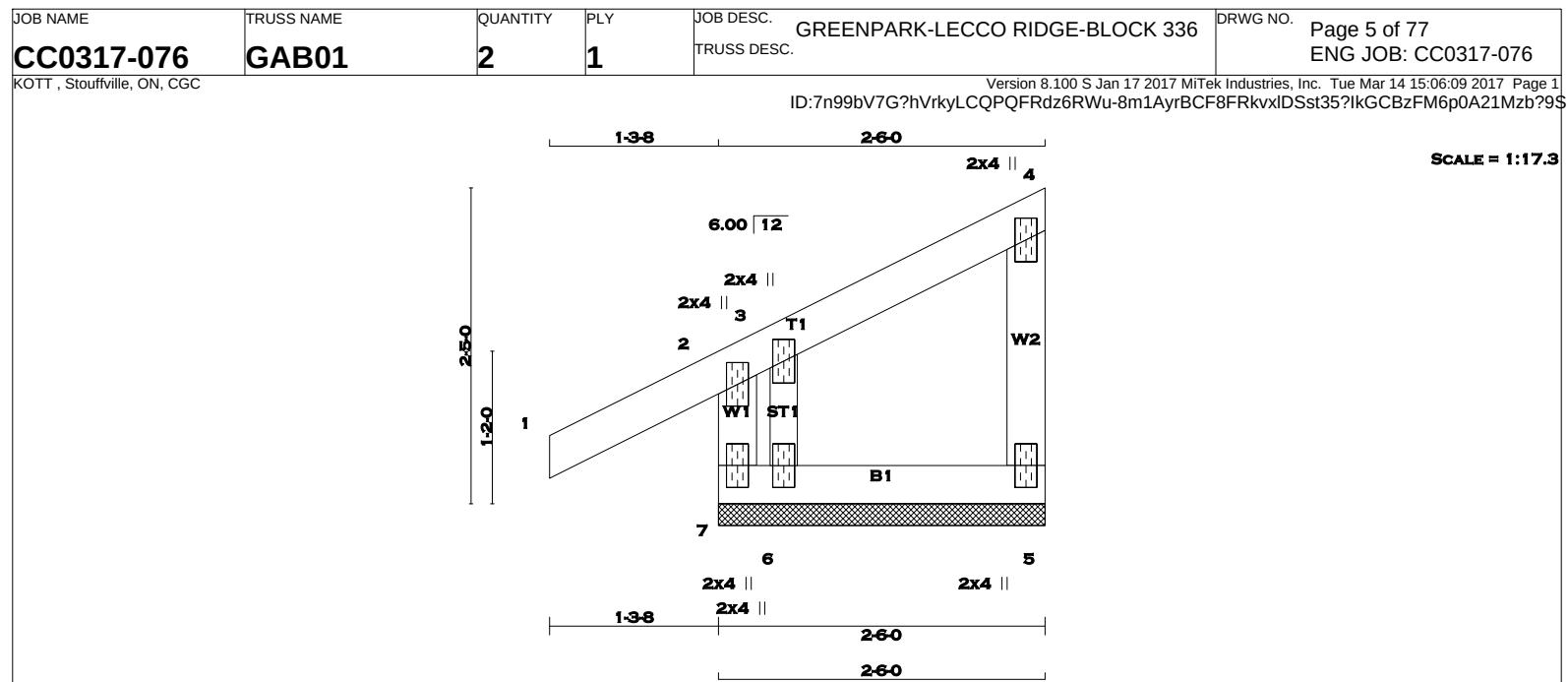
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April 24, 2015





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 7 - 2 2x4 DRY No.2 SPF 1 - 4 2x4 DRY No.2 SPF 5 - 4 2x4 DRY No.2 SPF 7 - 5 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2'-0" 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="2">CHORDS</th><th colspan="2">FACTORED</th><th colspan="2">FACTORED</th><th colspan="2">WEBS</th><th colspan="2">FACTORED</th></tr><tr><th>MEMB.</th><th>FORCE (LBS)</th><th>VERT. LOAD (PLF)</th><th>LC1</th><th>MAX</th><th>UNBRAC</th><th>MEMB.</th><th>FORCE (LBS)</th><th>MAX</th><th>UNBRAC</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td></td><td>LENGTH</td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>7-2</td><td>-218 / 0</td><td>0.0</td><td>0.0</td><td>0.02 (5)</td><td>7.81</td><td>6-3</td><td>-16 / 103</td><td>0.02 (5)</td><td></td></tr><tr><td>1-2</td><td>0 / 23</td><td>-77.3</td><td>-77.3</td><td>0.10 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>2-3</td><td>-48 / 0</td><td>-77.3</td><td>-77.3</td><td>0.09 (1)</td><td>6.25</td><td></td><td></td><td></td><td></td></tr><tr><td>3-4</td><td>-12 / 0</td><td>-77.3</td><td>-77.3</td><td>0.03 (1)</td><td>6.25</td><td></td><td></td><td></td><td></td></tr><tr><td>5-4</td><td>-70 / 0</td><td>0.0</td><td>0.0</td><td>0.02 (1)</td><td>7.81</td><td></td><td></td><td></td><td></td></tr><tr><td>7-6</td><td>-7 / 9</td><td>-17.5</td><td>-17.5</td><td>0.02 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>6-5</td><td>-1 / 8</td><td>-17.5</td><td>-17.5</td><td>0.01 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr></table> <u>CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN</u>					CHORDS		FACTORED		FACTORED		WEBS		FACTORED		MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	UNBRAC	MEMB.	FORCE (LBS)	MAX	UNBRAC	FR-TO		FROM TO			LENGTH	FR-TO				7-2	-218 / 0	0.0	0.0	0.02 (5)	7.81	6-3	-16 / 103	0.02 (5)		1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00					2-3	-48 / 0	-77.3	-77.3	0.09 (1)	6.25					3-4	-12 / 0	-77.3	-77.3	0.03 (1)	6.25					5-4	-70 / 0	0.0	0.0	0.02 (1)	7.81					7-6	-7 / 9	-17.5	-17.5	0.02 (1)	10.00					6-5	-1 / 8	-17.5	-17.5	0.01 (4)	10.00					DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/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		FACTORED		FACTORED		WEBS		FACTORED																																																																																																										
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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.

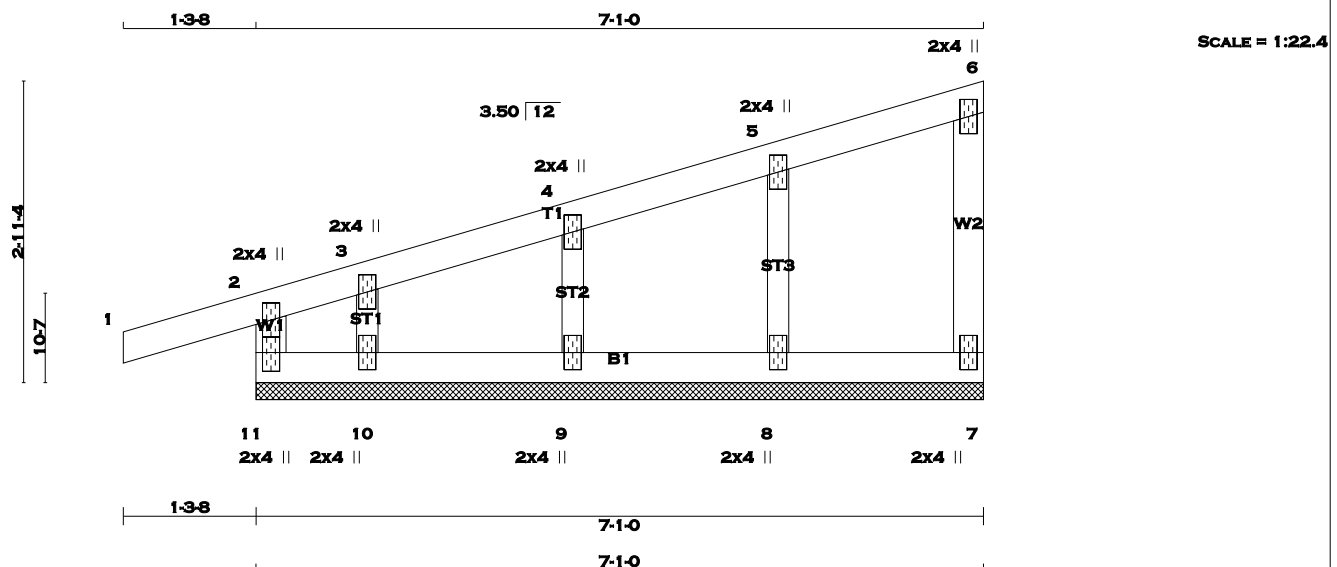
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TOTAL WEIGHT = 2 X 24 = 48 lb [M]

LUMBER					DESCR.	
N. L. G. A. RULES						
CHORDS	SIZE		LUMBER			
11 - 2	2x4	DRY	No.2		SPF	
1 - 6	2x4	DRY	No.2		SPF	
7 - 6	2x4	DRY	No.2		SPF	
11 - 7	2x4	DRY	No.2		SPF	
ALL WEBS 2x3 DRY No.2					SPF	
ALL GABLE WEBS 2x3 DRY No.2					SPF	
DRY: SEASONED LUMBER.						
GABLE STUDS SPACED AT 2'-0" 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	FACTORED	MEMB.		MAX. FACTORED	FACTORED
		FORCE (LBS)	VERT. LOAD LC1 MAX (PLF) CSI (LC)			FORCE (LBS)	MAX (PLF) CSI (LC)
FR-TO			FROM TO	LENGTH FR-TO			
11-2		-191 / 0	0.0 0.0	0.03 (1)	7.81	8-5	-164 / 0 0.03 (1)
1-2		0 / 14	-77.3 -77.3	0.10 (1)	10.00	9-4	-162 / 0 0.02 (1)
2-3		-29 / 0	-77.3 -77.3	0.07 (1)	6.25	10-3	-66 / 0 0.01 (1)
3-4		-12 / 0	-77.3 -77.3	0.04 (1)	6.25		
4-5		-9 / 0	-77.3 -77.3	0.04 (1)	10.00		
5-6		-8 / 0	-77.3 -77.3	0.04 (1)	10.00		
7-6		-69 / 0	0.0 0.0	0.02 (1)	7.81		
11-10		0 / 16	-17.5 -17.5	0.03 (1)	10.00		
10-9		0 / 13	-17.5 -17.5	0.01 (4)	10.00		
9-8		0 / 9	-17.5 -17.5	0.02 (4)	10.00		
8-7		0 / 6	-17.5 -17.5	0.02 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/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.

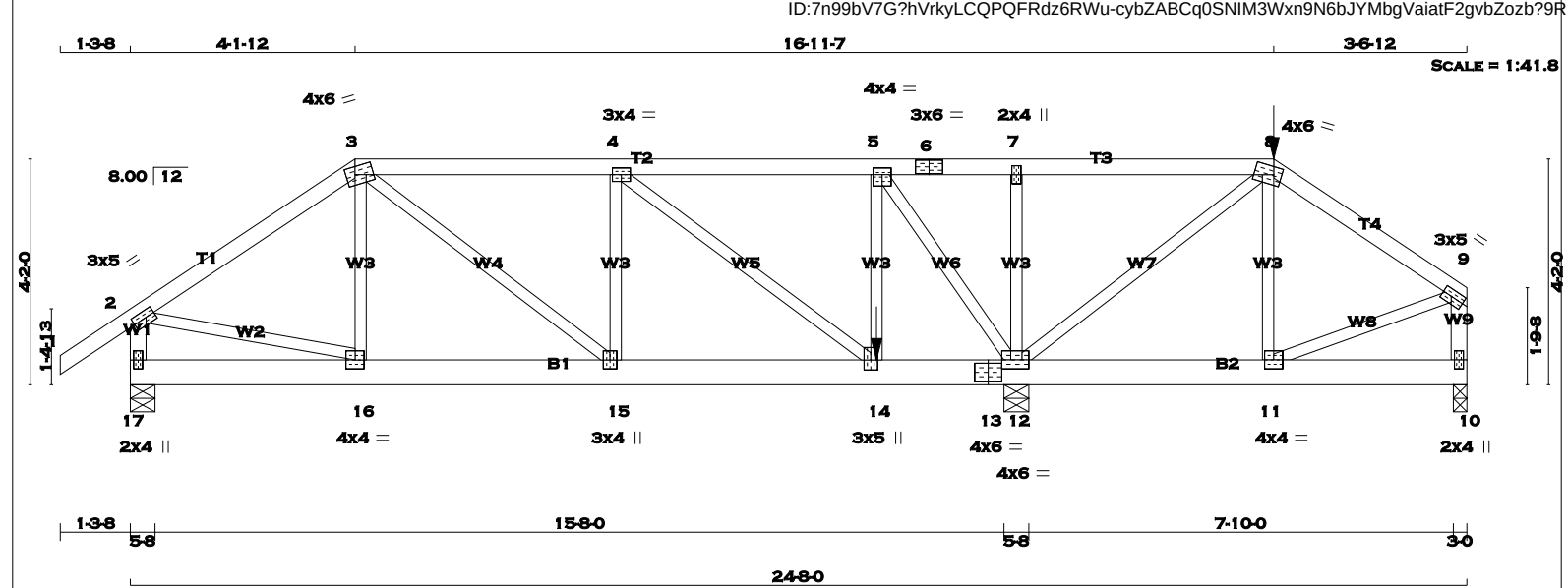
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)

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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TOTAL WEIGHT = 2 X 116 = 231 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 9	2x4	DRY	No.2	SPF
17 - 2	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
17 - 13	2x6	DRY	No.2	SPF
13 - 10	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	6.0	1.75	2.00
4	TMWW-t	MT20	3.0	4.0		
5	TMWW-t	MT20	4.0	4.0	1.50	2.00
6	TS-t	MT20	3.0	6.0		
7	TMW+w	MT20	2.0	4.0		
8	TTWW-m	MT20	4.0	6.0	1.75	1.75
9	TMVW-t	MT20	3.0	5.0	1.50	2.00
10	BMV1+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	4.0		
12	BMWWW1-t	MT20	4.0	6.0	2.00	2.00
13	BS-t	MT20	4.0	6.0		
14	BMWW+t	MT20	3.0	5.0	2.25	1.50
15	BMWW+t	MT20	3.0	4.0		
16	BMWW+t	MT20	4.0	4.0		
17	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) 206.7 lbs FACTORED DOWN AT 21-1-3 ON TOP CHORD, AND 685.4 lbs FACTORED DOWN AT 13-9-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG			
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
17		897	0	897	0	0	5-8	5-8	
12		2691	0	2691	0	0	5-8	5-8	
10		460	0	460	0	0	3-0	3-0	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
17		628	450 / 0	0 / 0	0 / 0	0 / 0	178 / 0
12		1886	1331 / 0	0 / 0	0 / 0	0 / 0	555 / 0
10		326	212 / 0	0 / 0	0 / 0	0 / 0	114 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17, 12, 10

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.
FR-TO		FROM TO			FR-TO				
1-2	0 / 29	-77.3 -77.3 0.11 (1)	10.00	16-3	-72 / 47	0.02 (1)			
2-3	-796 / 0	-77.3 -77.3 0.27 (1)	6.25	3-15	0 / 334	0.08 (1)			
3-4	-922 / 0	-77.3 -77.3 0.32 (1)	5.98	15-4	-105 / 45	0.03 (1)			
4-5	-501 / 0	-77.3 -77.3 0.30 (1)	6.25	14-5	-536 / 0	0.35 (1)			
5-6	0 / 344	-149.9 -149.9 0.54 (1)	10.00	14-5	0 / 986	0.24 (1)			
6-7	0 / 344	-149.9 -149.9 0.54 (1)	10.00	5-12	-1501 / 0	0.52 (1)			
7-8	0 / 344	-149.9 -149.9 0.54 (1)	10.00	12-7	-716 / 0	0.19 (1)			
8-9	-295 / 0	-77.3 -77.3 0.19 (1)	6.25	12-8	-753 / 0	0.47 (1)			
17-2	-865 / 0	0.0 0.0 0.10 (1)	7.81	11-8	0 / 128	0.05 (4)			
10-9	-395 / 0	0.0 0.0 0.05 (1)	7.81	2-16	0 / 679	0.17 (1)			
				11-9	0 / 262	0.06 (1)			
17-16	0 / 0	-17.5 -17.5 0.04 (4)	10.00						
16-15	0 / 659	-17.5 -17.5 0.11 (1)	10.00						
15-14	0 / 922	-17.5 -17.5 0.18 (1)	10.00						
14-13	0 / 501	-33.9 -33.9 0.21 (1)	10.00						
13-12	0 / 501	-33.9 -33.9 0.21 (1)	10.00						
12-11	0 / 245	-33.9 -33.9 0.17 (1)	10.00						
11-10	0 / 0	-33.9 -33.9 0.05 (4)	10.00						

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
8	21-1-3	-207	-207	---	FRONT	VERT	TOTAL
14	13-9-4	-685	-685	---	FRONT	VERT	TOTAL

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

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-12
RIGHT SETBACK = 3-6-12
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 10-10-12 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 (0.55")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.55")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.54 (7-8:1) , BC=0.21 (12-14:1) , WB=0.52 (5-12:1) , SSI=0.36 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (14) (INPUT = 0.90)
JSI METAL= 0.32 (5) (INPUT = 1.00)

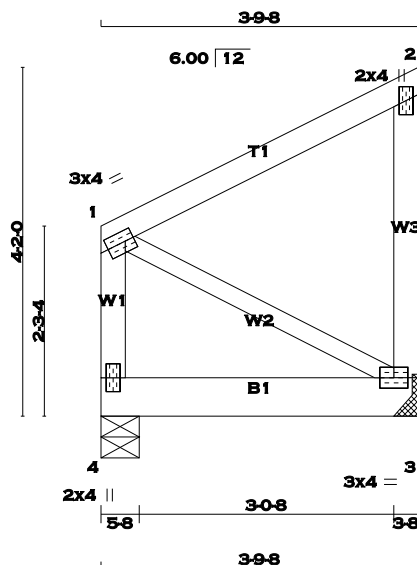
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SCALE = 1:27.5

TOTAL WEIGHT = 2 X 20 = 41 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF
3 - 2	2x4	DRY	No.2	SPF
4 - 1	2x4	DRY	No.2	SPF
4 - 3	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	TMVW-t	MT20	3.0	4.0	1.50	1.25
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 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	
3		686	0	686	0	0	HANGER BY OTHERS		
4		686	0	686	0	0	MIN. SEAT SIZE: 3-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
3	481	337 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0	
4	481	337 / 0	0 / 0	0 / 0	0 / 0	145 / 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		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 / 0	-77.3	-77.3 0.21 (1)	10.00	1-3	0 / 0	0.00 (1)
3-2	-147 / 0	0.0	0.0 0.04 (1)	7.81			
4-1	-147 / 0	0.0	0.0 0.02 (1)	7.81			
4-3	0 / 0	-284.3	-284.3 0.38 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.21 (1-2:1) , BC=0.38 (3-4:1) , WB=0.00 (1-3:1) , SSI=0.36 (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)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

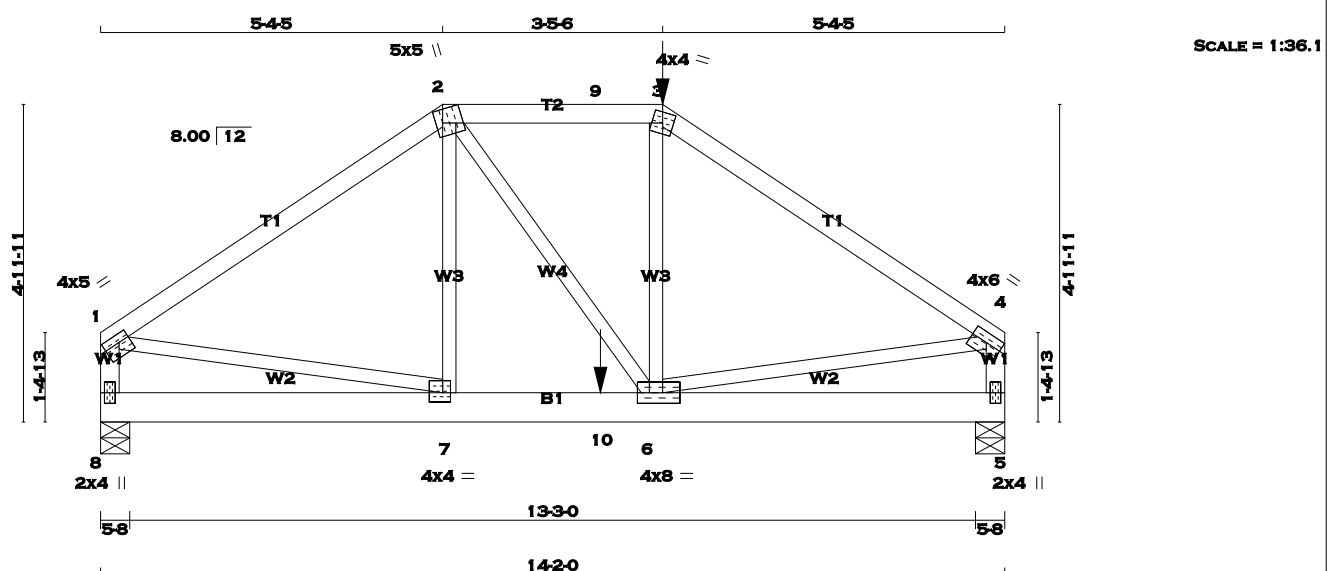
JSI GRIP= 0.15 (3) (INPUT = 0.90)
JSI METAL= 0.03 (2) (INPUT = 1.00)

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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TOTAL WEIGHT = 2 X 66 = 131 lb [M]

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	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	TMVW-t	MT20	4.0	5.0	1.50	2.00
2	TTWW+m	MT20	5.0	5.0	Edge	3.75
3	TTW-m	MT20	4.0	4.0		
4	TMVW-t	MT20	4.0	6.0	1.75	Edge
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	4.0	8.0	2.00	2.25
7	BMVWW-t	MT20	4.0	4.0	1.75	1.50
8	BMV1+p	MT20	2.0	4.0		

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

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

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 172.7 lbs FACTORED DOWN AT 8-9-11 ON TOP CHORD, AND 1198.3 lbs FACTORED DOWN AT 7-10-0 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							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
8	1294	0	1294	0	0	5-8	5-8
5	1492	0	1492	0	0	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE
	8	5	8	5	8	5	8
8	908	639 / 0	0 / 0	0 / 0	0 / 0	0 / 0	268 / 0
5	1048	730 / 0	0 / 0	0 / 0	0 / 0	0 / 0	318 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.36 FT.

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			
1-2	-1503 / 0	-77.3	-77.3 0.52 (1)	4.69	7-2	0 / 159	0.04 (4)
2-9	-1491 / 0	-77.3	-77.3 0.22 (1)	5.10	2-6	0 / 409	0.10 (1)
9-3	-1491 / 0	-107.2	-107.2 0.22 (1)	5.10	6-3	0 / 449	0.11 (1)
3-4	-1774 / 0	-77.3	-77.3 0.55 (1)	4.36	1-7	0 / 1270	0.31 (1)
8-1	-1271 / 0	0.0	0.0 0.14 (1)	7.11	6-4	0 / 1498	0.37 (1)
5-4	-1460 / 0	0.0	0.0 0.16 (1)	6.73			
8-7	0 / 0	-17.5	-17.5 0.10 (1)	10.00			
7-10	0 / 1253	-17.5	-17.5 0.57 (1)	10.00			
10-6	0 / 1253	-24.2	-24.2 0.57 (1)	10.00			
6-5	0 / 0	-24.2	-24.2 0.14 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	8-9-11	-173	-173	---	FRONT	VERT	TOTAL
10	7-10-0	-1198	-1198	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***

GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.

LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 5-4-5

END SETBACK = 4-0-0

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 6-4-0 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 (0.47")

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

ALLOWABLE DEFL.(TL)= L/360 (0.47")

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

CSI: TC=0.55 (3-4:1) , BC=0.57 (6-7:1) , WB=0.37 (4-6:1) , SSI=0.63 (6-7:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 0.50

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

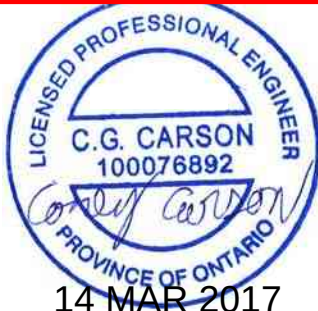
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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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JSI GRIP= 0.89 (1) (INPUT = 0.90)
JSI METAL= 0.49 (1) (INPUT = 1.00)

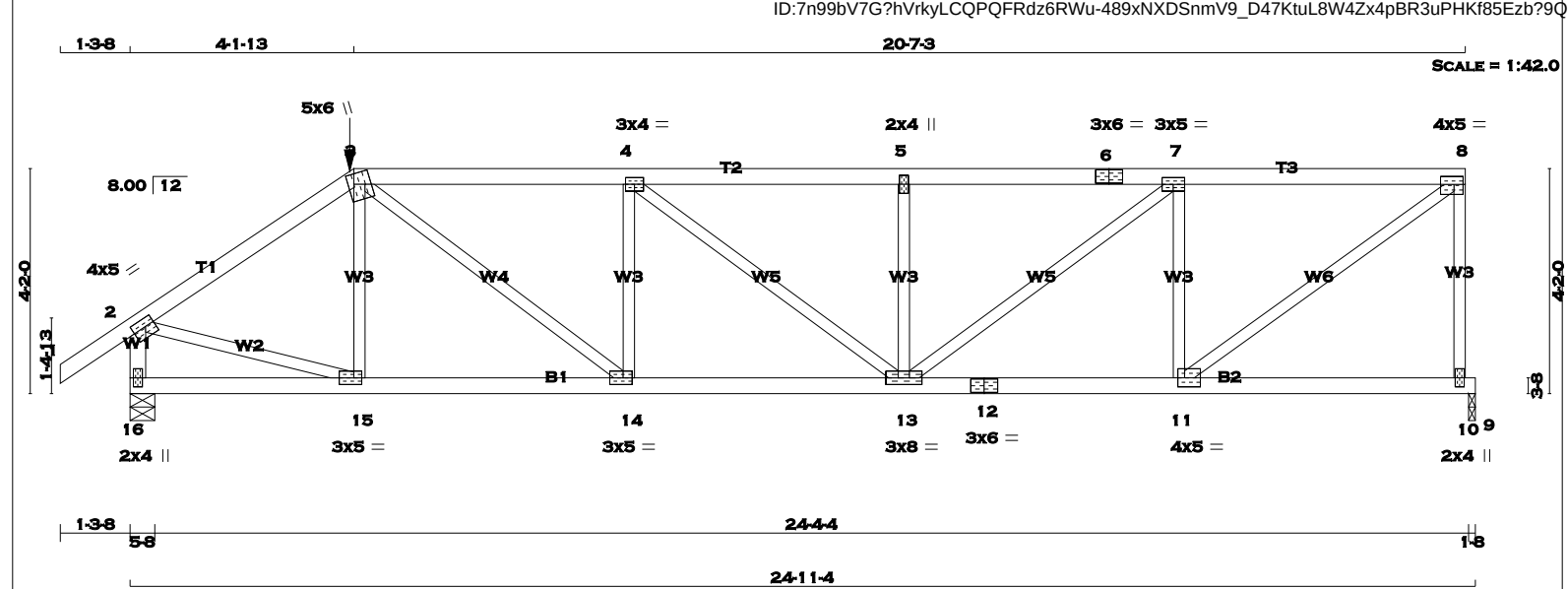
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TOTAL WEIGHT = 4 X 98 = 393 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2 SPF
3 - 6	2x4	DRY	No.2 SPF
6 - 8	2x4	DRY	No.2 SPF
10 - 8	2x3	DRY	No.2 SPF
16 - 2	2x4	DRY	No.2 SPF
16 - 12	2x4	DRY	No.2 SPF
12 - 9	2x4	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	SIDE(0.0)
3-6	12	SIDE(34.2)
6-8	12	SIDE(34.2)
16-2	12	TOP
8-10	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
16-12	12	SIDE(8.7)
12-9	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	TMWw-t	MT20	4.0	5.0	1.75 2.00
3	TTWW+m	MT20	5.0	6.0	2.25 1.25
4	TMWw-t	MT20	3.0	4.0	

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.



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
16	2276	0	2276	0	0
9	2219	0	2219	0	0

UNFACTORED REACTIONS						
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS		
16	1596	1123 / 0	LIVE	PERM.LIVE	WIND	DEAD
9	1558	1088 / 0	0 / 0	0 / 0	0 / 0	474 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.06 (1)	10-0	15-3	-368 / 31	0.05 (1)
2-3	-2546 / 0	-77.3	-77.3 0.16 (1)	5.52	3-14	0 / 1785	0.22 (1)
3-4	-3527 / 0	-145.8	-145.8 0.37 (1)	4.60	14-4	-903 / 0	0.12 (1)
4-5	-3617 / 0	-145.8	-145.8 0.37 (1)	4.55	4-13	0 / 113	0.01 (1)
5-6	-3617 / 0	-145.8	-145.8 0.39 (1)	4.52	13-5	-686 / 0	0.09 (1)
6-7	-3617 / 0	-145.8	-145.8 0.39 (1)	4.52	13-7	0 / 1227	0.15 (1)
7-8	-2640 / 0	-145.8	-145.8 0.36 (1)	5.17	11-7	-1609 / 0	0.22 (1)
10-8	-2239 / 0	0.0	0.0 0.44 (1)	6.55	11-8	0 / 3269	0.40 (1)
16-2	-2221 / 0	0.0	0.0 0.13 (1)	7.48	2-15	0 / 2182	0.27 (1)
16-15	0 / 0	-33.0	-33.0 0.09 (4)	10.00			
15-14	0 / 2105	-33.0	-33.0 0.23 (1)	10.00			
14-13	0 / 3528	-33.0	-33.0 0.37 (1)	10.00			
13-12	0 / 2640	-33.0	-33.0 0.37 (1)	10.00			
12-11	0 / 2640	-33.0	-33.0 0.37 (1)	10.00			
11-10	0 / 0	-33.0	-33.0 0.31 (1)	10.00			
10-9	0 / 0	-33.0	-33.0 0.31 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)						
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.
3	4-1-13	-241	-241	---	FRONT	VERT

DESIGN CRITERIA

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

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

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-13
RIGHT SETBACK = 0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.83")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.83")
CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.44 (8-10:1), BC=0.37 (11-13:1), WB=0.40 (8-11:1), SSI=0.95 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (15) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)

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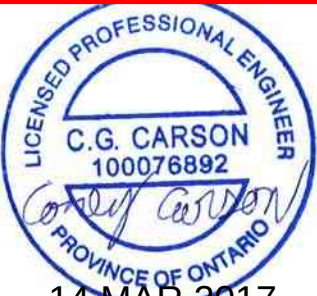
PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
5	TMW+w	MT20	2.0	4.0		
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	5.0		
8	TMVW-t	MT20	4.0	5.0	1.75	2.00
10	BMV+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	5.0	2.00	1.50
12	BS-t	MT20	3.0	6.0		
13	BMWWW-t	MT20	3.0	8.0		
14	BMWW-t	MT20	3.0	5.0	1.50	2.00
15	BMWW-t	MT20	3.0	5.0	1.50	1.75
16	BMV1+p	MT20	2.0	4.0		

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

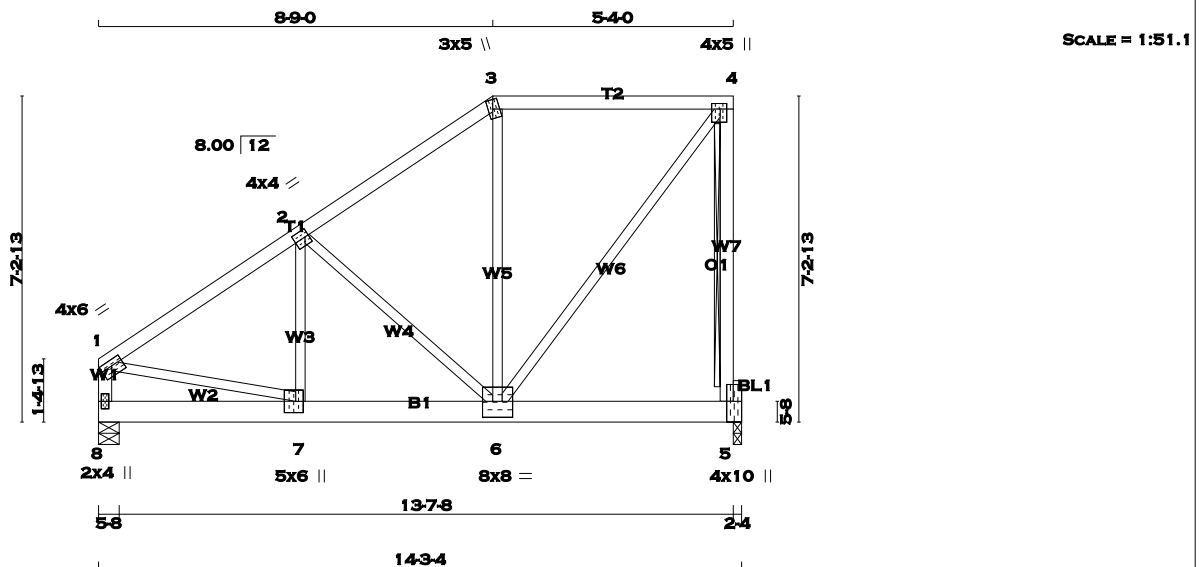
HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 240.8 lbs FACTORED DOWN AT 4-1-13 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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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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	BMVWVW-t	MT20	8.0	8.0	4.25	4.00

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.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS	REACTION	GROSS	REACTION	DOWN	HORZ	BRG	BRG
5	6607	0		6607	0	0	0	2-4	2-4
8	6596	0		6596	0	0	0	5-8	5-8

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.

2x6 SPF No.2 T-BRACE AT 4-5

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
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	0.29 (1)	7.81	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, NBC2010

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=0.29 (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		SECTION	
PLATE GRIP(DRY)	SHEAR	(PSI)	(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 (4) (INPUT = 0.90)
JSI METAL= 0.54 (1) (INPUT = 1.00)



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
7	BMWV+t	MT20	5.0	6.0	3.00	2.00
8	BMV1+p	MT20	2.0	4.0		

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

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

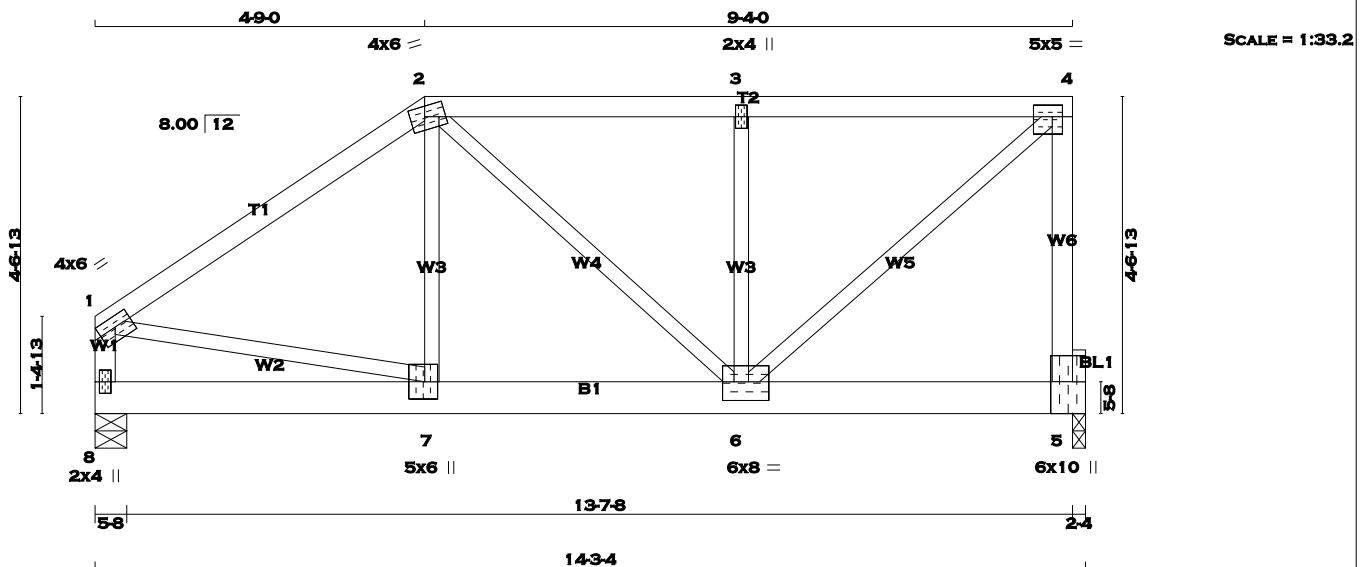
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TOTAL WEIGHT = 6 X 68 = 407 lb [M]

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			
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		
1-2	12	TOP
2-4	12	TOP
4-5	12	TOP
8-1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
8-5	5	SIDE(517.7)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.

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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	4.0	6.0	1.75 Edge
2	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	6.0	10.0	5.50 Edge
6	BMWWW-t	MT20	6.0	8.0	3.25 2.00

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.

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	6084	0	6084	0	2-4
8	6073	0	6073	0	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
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 = 4.69 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			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX (LC)	
FR-TO		FROM	TO	FR-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
MT20	618	354	1667	822	2284

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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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
7	BMWV+t	MT20	5.0	6.0	3.00	2.25
8	BMV1+p	MT20	2.0	4.0		

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

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

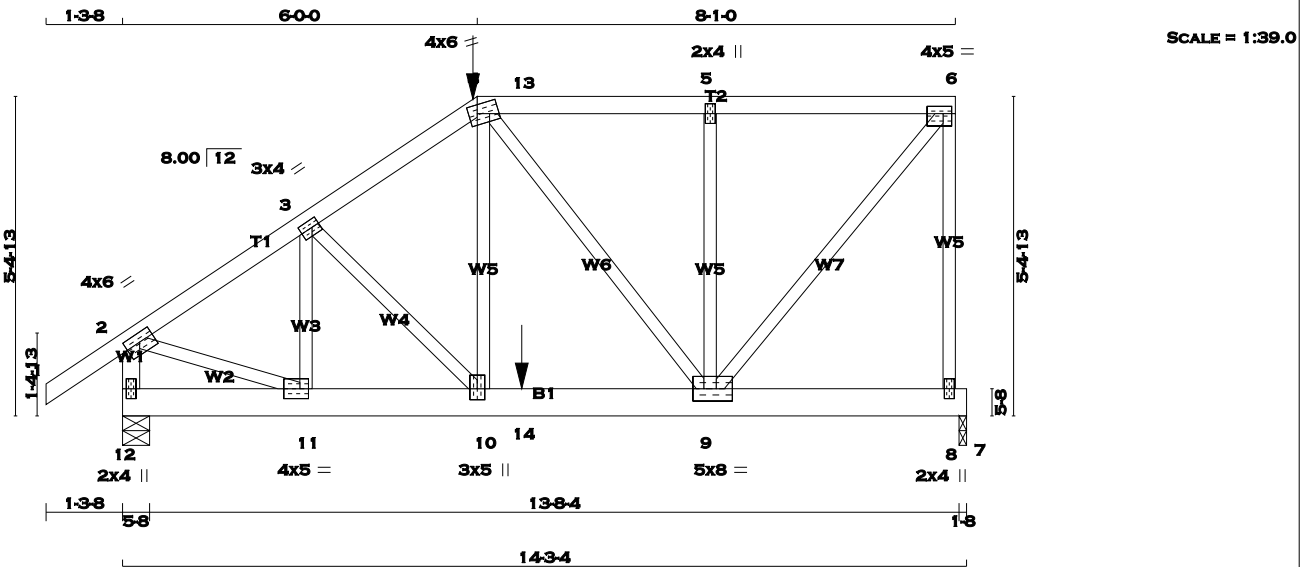
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TOTAL WEIGHT = 2 X 75 = 149 lb

LUMBER					N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.		CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF	1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF	4 - 6	2x4	DRY	No.2	SPF
8 - 6	2x3	DRY	No.2	SPF	8 - 6	2x3	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF	12 - 2	2x4	DRY	No.2	SPF
12 - 7	2x6	DRY	No.2	SPF	12 - 7	2x6	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	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	TMW-t	MT20	4.0	6.0	1.75	3.00	
3	TMW-t	MT20	3.0	4.0	1.50	1.50	
4	TTW-m	MT20	4.0	6.0	1.75	1.75	
5	TMW-w	MT20	2.0	4.0			
6	TMW-t	MT20	4.0	5.0	1.50	1.75	
8	BMV-p	MT20	2.0	4.0			
9	BMW-t	MT20	5.0	8.0	2.50	2.25	
10	BMW-t	MT20	3.0	5.0	2.25	1.50	
11	BMW-t	MT20	4.0	5.0	2.00	1.75	
12	BMV1-p	MT20	2.0	4.0			

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

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 1063.0 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	IN-SX	IN-SX
12	1653	0	1653	0	0	5-8	5-8	5-8	5-8
7	1359	0	1359	0	0	1-8	1-8	1-8	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
12	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	1160	810 / 0	0 / 0	0 / 0	0 / 0	351 / 0	0 / 0
7	953	672 / 0	0 / 0	0 / 0	0 / 0	281 / 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 = 4.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	LENGTH	FR-TO		FROM	TO	LENGTH
1-2	0 / 29	-77.3	-77.3	0.11 (1)	10.00	11-3	-461 / 0	0.10 (1)	
2-3	-1659 / 0	-77.3	-77.3	0.14 (1)	5.00	3-10	0 / 151	0.04 (1)	
3-4	-1814 / 0	-77.3	-77.3	0.15 (1)	4.82	10-4	0 / 971	0.24 (1)	
4-13	-1068 / 0	-145.8	-145.8	0.24 (1)	5.76	4-9	-724 / 0	0.50 (1)	
13-5	-1068 / 0	-77.3	-77.3	0.24 (1)	5.76	9-5	-387 / 0	0.16 (1)	
5-6	-1068 / 0	-77.3	-77.3	0.25 (1)	5.76	9-6	0 / 1679	0.42 (1)	
8-6	-1420 / 0	0.0	0.0	0.96 (1)	5.94	2-11	0 / 1460	0.36 (1)	
12-2	-1578 / 0	0.0	0.0	0.18 (1)	6.53				
12-11	0 / 0	-33.0	-33.0	0.06 (1)	10.00				
11-10	0 / 1390	-33.0	-33.0	0.33 (1)	10.00				
10-14	0 / 1516	-33.0	-33.0	0.49 (1)	10.00				
14-9	0 / 1516	-17.5	-17.5	0.49 (1)	10.00				
9-8	0 / 0	-17.5	-17.5	0.19 (1)	10.00				
8-7	0 / 0	-17.5	-17.5	0.19 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
4	6-0-0	-348	-348	---	FRONT	VERT	TOTAL
14	6-9-0	-1063	-1063	---	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 (0.48")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.96 (6-8:1), BC=0.49 (9-10:1), WB=0.50 (4-9:1), SSI=0.90 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

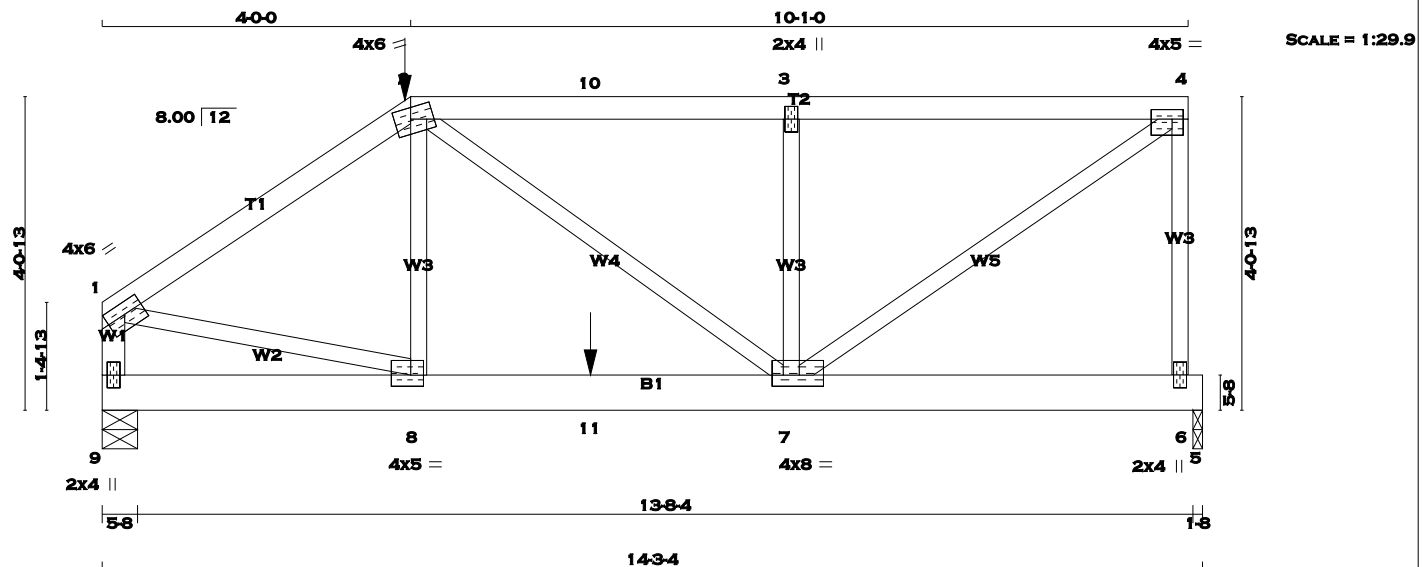
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TOTAL WEIGHT = 2 X 64 = 129 lb
[M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 2	2x4	DRY	No.2	SPF
2 - 4	2x4	DRY	No.2	SPF
6 - 4	2x3	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
9 - 5	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	TMW-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	TMW-t	MT20	4.0	5.0	1.50	1.75
6	BMV+p	MT20	2.0	4.0		
7	BMWWW-t	MT20	4.0	8.0	1.75	1.75
8	BMWW-t	MT20	4.0	5.0	1.75	2.00
9	BMV1+p	MT20	2.0	4.0		

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

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 128.9 lbs FACTORED DOWN AT 4-0-0 ON TOP CHORD, AND 1189.8 lbs FACTORED DOWN AT 6-4-0 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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9	1509	0	1509	0	0	5-8	5-8	
5	1261	0	1261	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	UP
9	1059		740 / 0		0 / 0		0 / 0		0 / 0		319 / 0		0 / 0	
5	885		620 / 0		0 / 0		0 / 0		0 / 0		265 / 0		0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 5

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS			VERT. LOAD	WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)	MAX. LC1 (LC)		MAX. FACTORED FORCE (LBS)	FACTORED (PLF)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO	FROM	TO
1-2	-1869 / 0	-77.3	-77.3 0.31 (1)	4.57	8-2	0 / 492	0.12 (1)
2-10	-1654 / 0	-107.2	-107.2 0.43 (1)	4.61	2-7	0 / 109	0.03 (1)
10-3	-1654 / 0	-77.3	-77.3 0.43 (1)	4.61	7-3	-496 / 0	0.12 (1)
3-4	-1654 / 0	-77.3	-77.3 0.44 (1)	4.61	7-4	0 / 2036	0.50 (1)
6-4	-1339 / 0	0.0	0.0 0.46 (1)	6.08	1-8	0 / 1598	0.40 (1)
9-1	-1573 / 0	0.0	0.0 0.18 (1)	6.53			
9-8	0 / 0	-24.2	-24.2 0.34 (1)	10.00			
8-11	0 / 1567	-24.2	-24.2 0.97 (1)	10.00			
11-7	0 / 1567	-17.5	-17.5 0.97 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.31 (1)	10.00			
6-5	0 / 0	-17.5	-17.5 0.17 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
2	4-0-0	-129	-129	---	FRONT	VERT	TOTAL
11	6-4-0	-1190	-1190	---	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 = 4-0-0
RIGHT SETBACK = 0-0
END SETBACK = 4-0-0
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 6-4-0 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 (0.48")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.48")
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.46 (4-6:1), BC=0.97 (7-8:1), WB=0.50 (4-7:1), SSI=0.84 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.50 (4) (INPUT = 1.00)

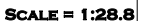
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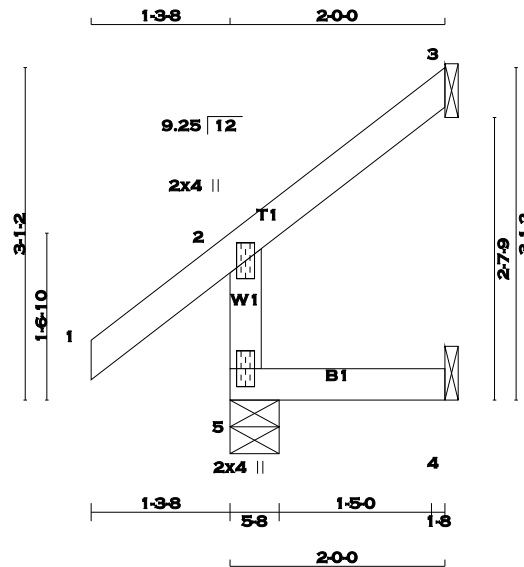




[M]

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





SCALE = 1:21.4

TOTAL WEIGHT = 6 X 9 = 51 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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MEMB. FORCE (LBS)	MAX. CSI (LC)	MEMB. FORCE (LBS)	MAX. CSI (LC)
FR-TO								
5-2	-203 / 0	0.0	0.0	0.01 (4)	7.81			
1-2	0 / 33	-77.3	-77.3	0.11 (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=0.11 (1-2:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

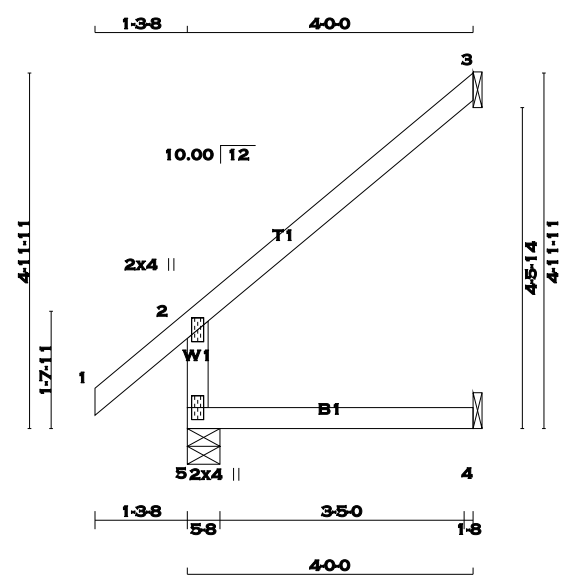
JSI GRIP= 0.14 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)

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SCALE: 3/8"=1'

TOTAL WEIGHT = 6 X 14 = 84 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		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	

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
5		236	181 / 0	0 / 0	0 / 0	0 / 0	55 / 0
3		79	70 / 0	0 / 0	0 / 0	0 / 0	9 / 0
4		24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 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				WEBS			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX (LC)	
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					
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.

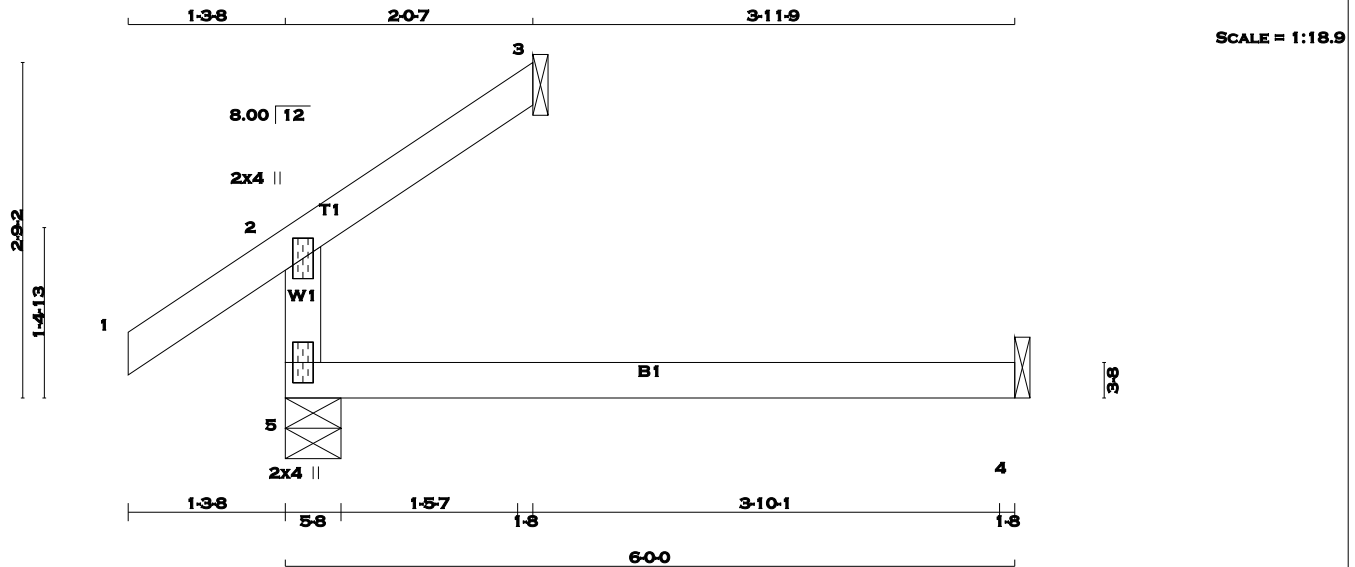
JSI GRIP= 0.22 (2) (INPUT = 0.90)
JSI METAL= 0.08 (2) (INPUT = 1.00)

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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TOTAL WEIGHT = 2 X 13 = 25 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		265	0	265	0	0	5-8	5-8	
3		60	0	60	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

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	188	123 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

SPECIFIED LOADS:
 TOP CH. LL = 23.3 PSF
 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=0.12 (2-5:4), BC=0.13 (4-5:4), WB=0.00 (n/a:0), SSI=0.08 (4-5:4)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

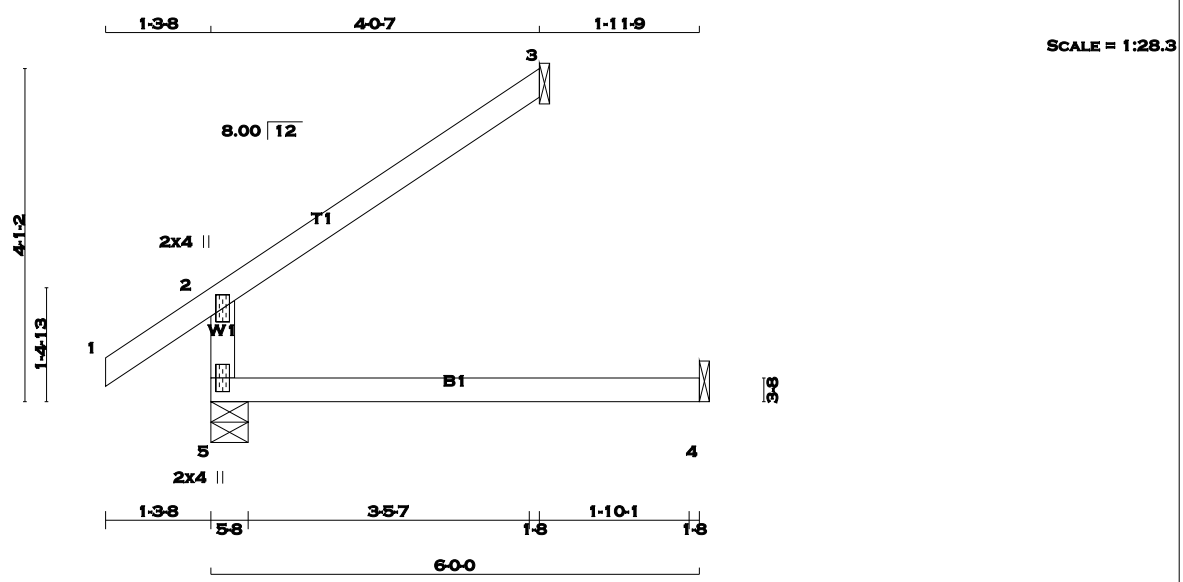
JSI GRIP= 0.13 (2) (INPUT = 0.90)
 JSI METAL= 0.05 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 15 = 31 lb [M]

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
5	362	0	362	0	0	5-8	5-8		
3	117	0	117	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							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	254	181 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
3	80	71 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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

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

LOADING							
TOTAL LOAD CASES: (4)							
MEMB.	CHORDS		FACTORED		WEBS		
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO			FROM TO			LENGTH FR-TO	
5-2	-301 / 0		0.0	0.0	0.12 (4)	7.81	
1-2	0 / 29		-77.3	-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)			
	MAX	MIN	MAX	MIN	MAX
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

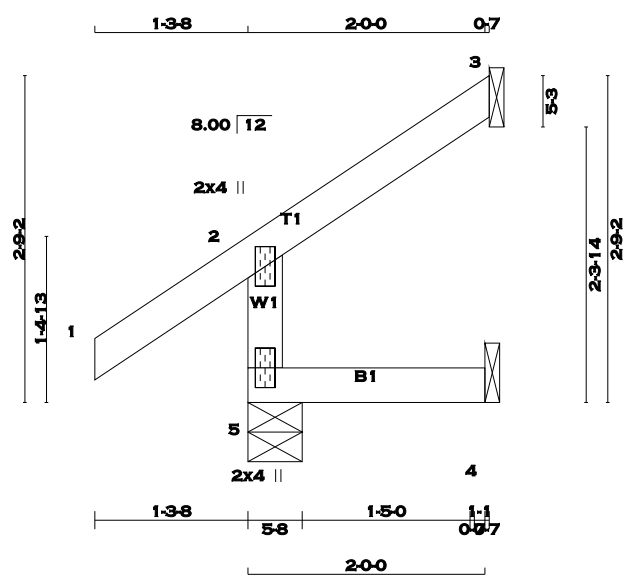
JSI GRIP= 0.19 (2) (INPUT = 0.90)
JSI METAL= 0.07 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 4 X 8 = 33 lb [M]

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
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
5		154	123 / 0	0 / 0	0 / 0	0 / 0	31 / 0
3		40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0
4		13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 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		
		MAX. FACTORED		FACTORED			MAX. FACTORED		
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX (LC)	
FR-TO			FROM TO		LENGTH	FR-TO			
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
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- TPIC 2011

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

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

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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

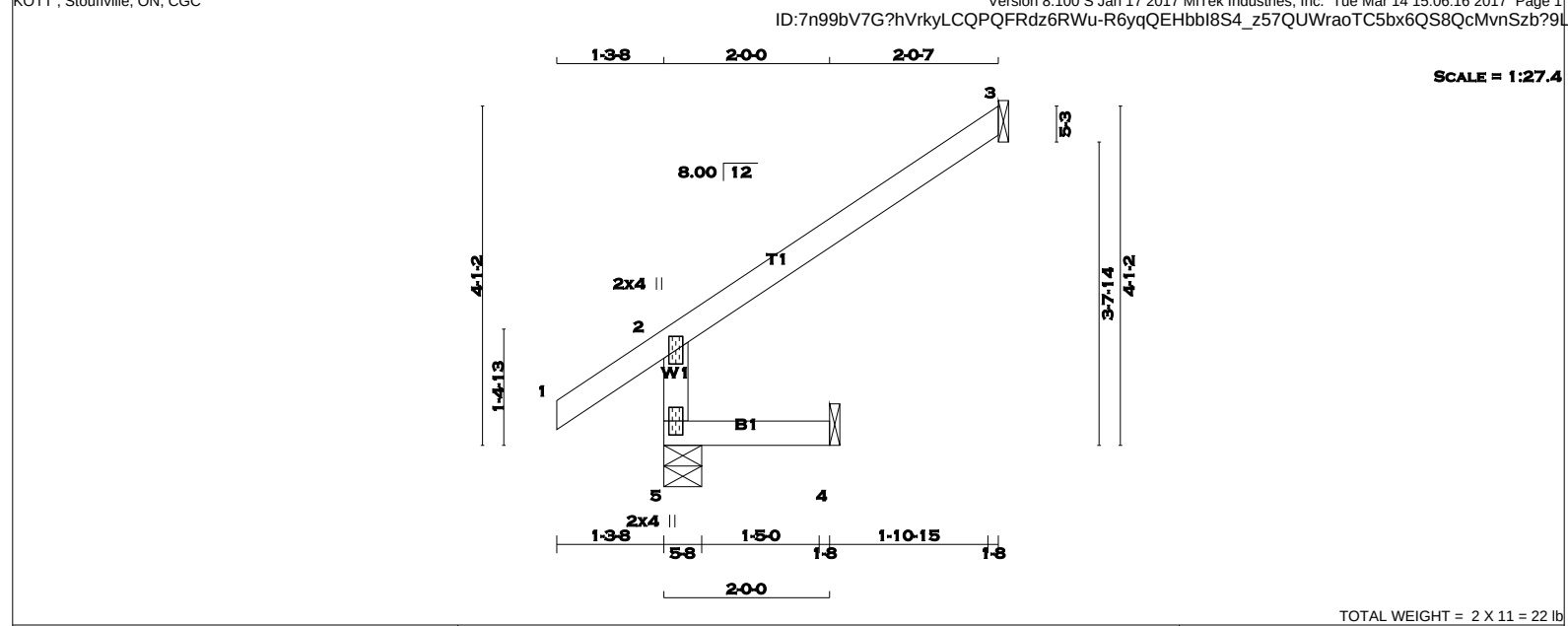
JSI GRIP= 0.13 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 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.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th>JT</th><th>FACTORED GROSS REACTION VERT</th><th>FACTORED GROSS REACTION HORZ</th><th>MAXIMUM FACTORED GROSS REACTION DOWN</th><th>MAXIMUM FACTORED GROSS REACTION HORZ</th><th>INPUT BRG UPLIFT IN-SX</th><th>REQRD BRG IN-SX</th></tr><tr><td>5</td><td>320</td><td>0</td><td>320</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>3</td><td>117</td><td>0</td><td>117</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>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 COMBINED</th><th>MAX./MIN. SNOW</th><th>MAX./MIN. LIVE</th><th>MAX./MIN. PERM. LIVE</th><th>MAX./MIN. WIND</th><th>MAX./MIN. DEAD</th><th>MAX./MIN. SOIL</th></tr><tr><td>5</td><td>220</td><td>181 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>39 / 0</td><td>0 / 0</td></tr><tr><td>3</td><td>80</td><td>71 / 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>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: (4) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>FACTORED LC1 MAX (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>FACTORED LC1 MAX (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td>FROM</td><td>TO</td></tr><tr><td>5-2</td><td>-301 / 0</td><td>0.0</td><td>0.0 0.01 (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>-22 / 0</td><td>-77.3</td><td>-77.3 0.21 (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>					JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG UPLIFT IN-SX	REQRD BRG IN-SX	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	JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. 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	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	FR-TO		FROM	TO	FR-TO		FROM	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.(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. JSI GRIP= 0.19 (2) (INPUT = 0.90) JSI METAL= 0.07 (2) (INPUT = 1.00)				
JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG UPLIFT IN-SX	REQRD BRG IN-SX																																																																																																																												
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																																																																																																																												
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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																																																																																																																											
CHORDS				WEBS																																																																																																																														
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)																																																																																																																											
FR-TO		FROM	TO	FR-TO		FROM	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																																																																																																																														
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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.

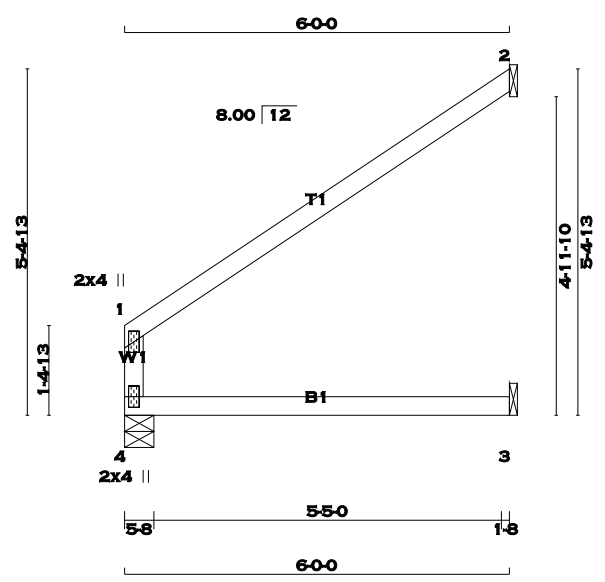
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TOTAL WEIGHT = 2 X 16 = 33 lb [M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMV+p	MT20	2.0	4.0	
4	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		
4	285	0	285	0	0	5-8	5-8		
2	211	0	211	0	0	1-8	1-8		
3	73	0	73	0	0	1-8	1-8		

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	200	140 / 0	0 / 0	0 / 0	0 / 0	60 / 0	0 / 0
2	144	124 / 0	0 / 0	0 / 0	0 / 0	20 / 0	0 / 0
3	55	15 / 0	0 / 0	0 / 0	0 / 0	40 / 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		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH FR-TO	
4-1	-253 / 0	0.0 0.0 0.15 (1)	7.81	
1-2	-11 / 1	-77.3 -77.3 0.40 (1)	6.25	
4-3	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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 628 (0.11")

CSI: TC=0.40 (1-2:1) , BC=0.21 (3-4:1) , WB=0.00 (n/a:0) , SSI=0.16 (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.

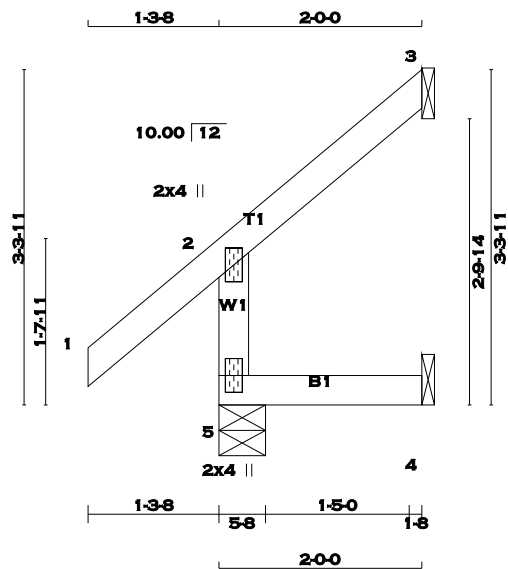
JSI GRIP= 0.16 (1) (INPUT = 0.90)
JSI METAL= 0.06 (1) (INPUT = 1.00)

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SCALE = 1:22.7

TOTAL WEIGHT = 12 X 9 = 106 lb [M]

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
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							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	153	122 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

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

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

LOADING				
TOTAL LOAD CASES: (5)				
MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO		FROM 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 .

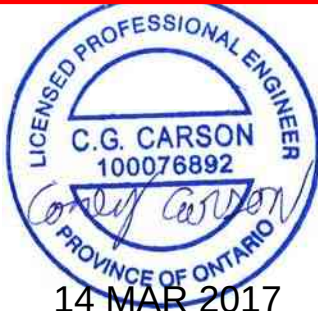
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

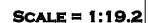
JSI GRIP= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)

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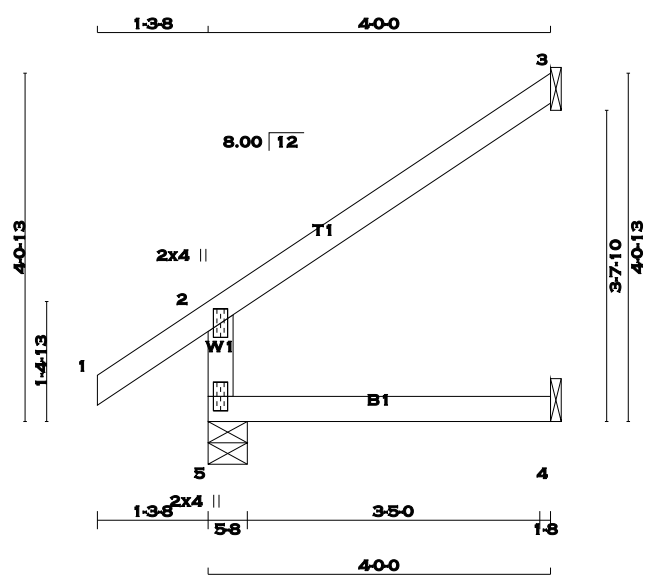


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BUILDING DIVISION





KOTT



SCALE = 1:26.9

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

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
5	339	0	339	0	0	5-8	5-8		
3	116	0	116	0	0	1-8	1-8		
4	30	0	34	0	0	1-8	1-8		

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

UNFACTORED REACTIONS							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	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)				
CHORDS			WEBS						
MEMB.	MAX. FACTORED		FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FACTORED
	FORCE	(LBS)							
FR-TO			FROM 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.(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=0.13 (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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

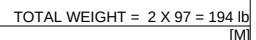
JSI GRIP= 0.19 (2) (INPUT = 0.90)
JSI METAL= 0.07 (2) (INPUT = 1.00)

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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TOWN OF MILTON
MAR 29, 2017
17-5215
BUILDING DIVISION





DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.78 (4-5:1) , BC=0.26 (10-11:1) ,
WB=0.26 (4-10:1) , SSI=0.26 (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

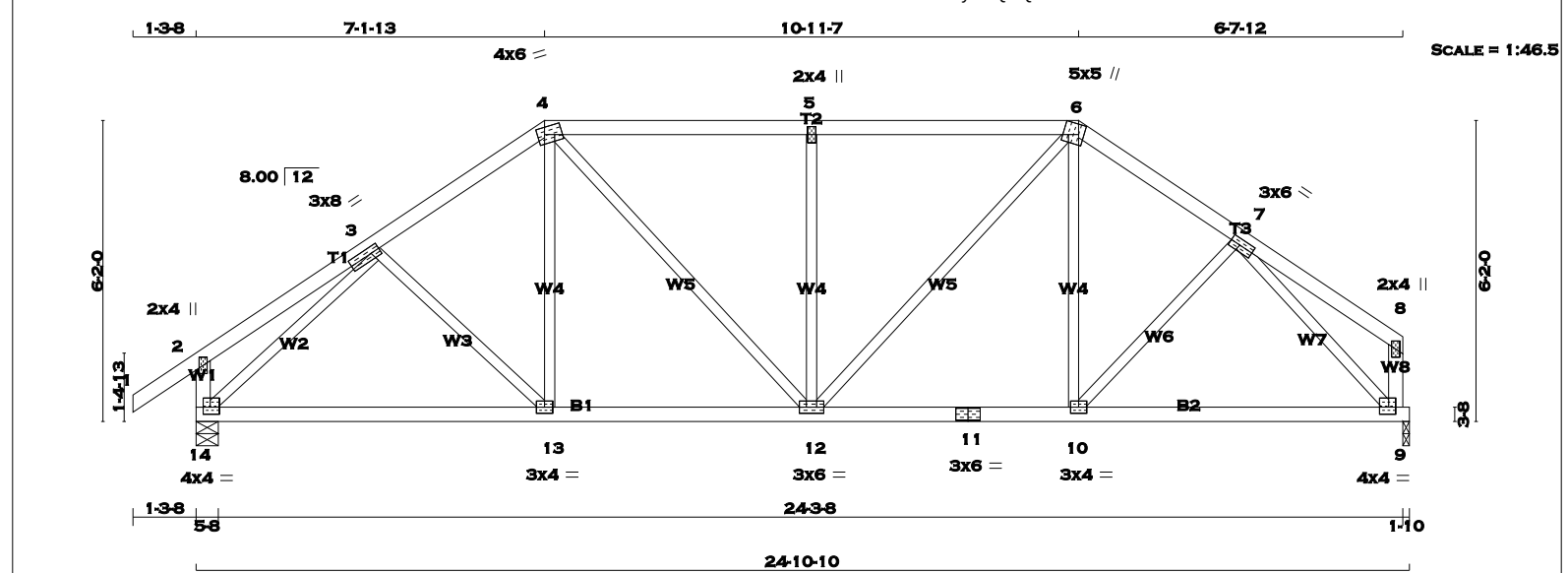
PLATE	GRIP(DRY) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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





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 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
JT VERT HORZ
14 1280 0
9 1174 0

MAXIMUM FACTORED GROSS REACTION
DOWN HORZ UPLIFT
14 1280 0 0
9 1174 0 0

INPUT BRG IN-SX
5-8 5-8
1-10 1-10

REQRD BRG IN-SX
5-8 5-8
1-10 1-10

UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
14 896 640 / 0 0 / 0 0 / 0 256 / 0 0 / 0
9 824 576 / 0 0 / 0 0 / 0 0 / 0 247 / 0 0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.32 (5-6:1), BC=0.28 (12-13:4), WB=0.57 (3-14:1), 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 (14) (INPUT = 0.90)
JSI METAL= 0.39 (14) (INPUT = 1.00)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	8.0	1.50	2.25
4	TTWW-m	MT20	4.0	6.0	1.75	1.75
5	TMW+w	MT20	2.0	4.0		
6	TTWW+m	MT20	5.0	5.0	Edge	3.75
7	TMWW-t	MT20	3.0	6.0	1.50	2.50
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

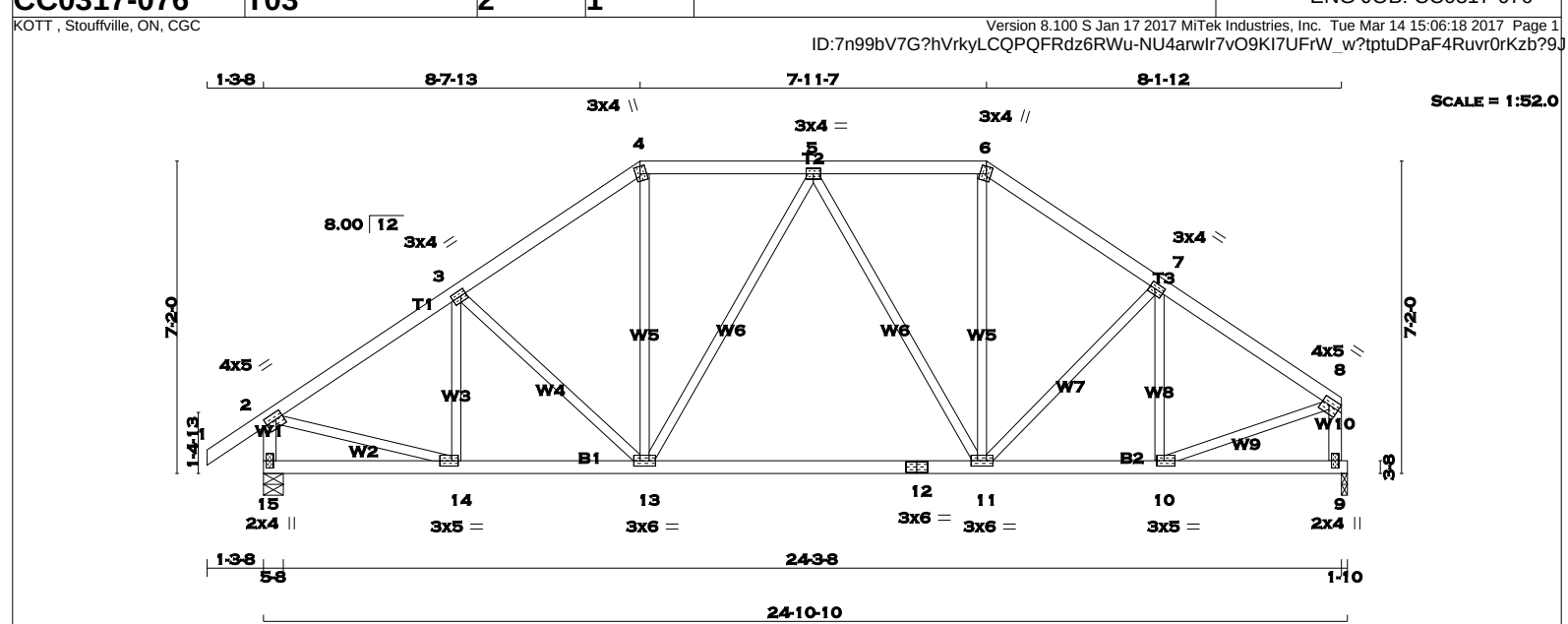
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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

FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX UNBRAC LENGTH
1-2		0 / 29	-77.3	-77.3	0.10 (1)	10.00	3-13	-20 / 43
2-3		0 / 16	-77.3	-77.3	0.15 (1)	10.00	13-4	0 / 148
3-4		-1257 / 0	-77.3	-77.3	0.13 (1)	5.62	4-12	0 / 370
4-5		-1286 / 0	-77.3	-77.3	0.32 (1)	5.33	12-5	-518 / 0
5-6		-1286 / 0	-77.3	-77.3	0.32 (1)	5.33	12-6	0 / 437
6-7		-1203 / 0	-77.3	-77.3	0.11 (1)	5.73	10-6	0 / 97
7-8		0 / 15	-77.3	-77.3	0.12 (1)	10.00	10-7	0 / 70
14-2		-215 / 0	0.0	0.0	0.02 (1)	7.81	14-3	-1456 / 0
9-8		-102 / 0	0.0	0.0	0.01 (1)	7.81	7-9	-1389 / 0
14-13		0 / 1045	-17.5	-17.5	0.28 (1)	10.00		
13-12		0 / 1033	-17.5	-17.5	0.28 (4)	10.00		
12-11		0 / 988	-17.5	-17.5	0.26 (1)	10.00		
11-10		0 / 988	-17.5	-17.5	0.26 (1)	10.00		
10-9		0 / 938	-17.5	-17.5	0.25 (1)	10.00		

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.

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5215
BUILDING DIVISION



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
15 - 2 2x4 DRY No.2 SPF
9 - 8 2x4 DRY No.2 SPF
15 - 12 2x4 DRY No.2 SPF
12 - 9 2x4 DRY No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

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
15 1280 0 1280 0 0 5-8 5-8
9 1174 0 1174 0 0 1-10 1-10

UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
15 896 640 / 0 0 / 0 0 / 0 256 / 0 0 / 0
9 824 576 / 0 0 / 0 0 / 0 0 / 0 247 / 0 0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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)
FR-TO		FROM TO		FR-TO	
1-2	0 / 29	-77.3 -77.3 0.10 (1)	10.00	14-3	-203 / 0
2-3	-1304 / 0	-77.3 -77.3 0.20 (1)	5.45	3-13	-181 / 0
3-4	-1190 / 0	-77.3 -77.3 0.20 (1)	5.65	13-4	0 / 405
4-5	-976 / 0	-77.3 -77.3 0.16 (1)	6.13	13-5	-186 / 0
5-6	-949 / 0	-77.3 -77.3 0.16 (1)	6.19	5-11	-240 / 0
6-7	-1157 / 0	-77.3 -77.3 0.17 (1)	5.74	11-6	0 / 395
7-8	-1192 / 0	-77.3 -77.3 0.18 (1)	5.67	11-7	-93 / 0
15-2	-1244 / 0	0.0 0.0 0.13 (1)	7.20	10-7	-281 / 0
9-8	-1139 / 0	0.0 0.0 0.12 (1)	7.45	2-14	0 / 1135
				10-8	0 / 1064
15-14	0 / 0	-17.5 -17.5 0.08 (4)	10.00		
14-13	0 / 1103	-17.5 -17.5 0.27 (1)	10.00		
13-12	0 / 1067	-17.5 -17.5 0.27 (1)	10.00		
12-11	0 / 1067	-17.5 -17.5 0.27 (1)	10.00		
11-10	0 / 1008	-17.5 -17.5 0.26 (1)	10.00		
10-9	0 / 0	-17.5 -17.5 0.07 (4)	10.00		

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.82")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.20 (2-3:1), BC=0.27 (13-14:1), WB=0.31 (5-11:1), SSI=0.15 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.44 (2) (INPUT = 1.00)

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

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

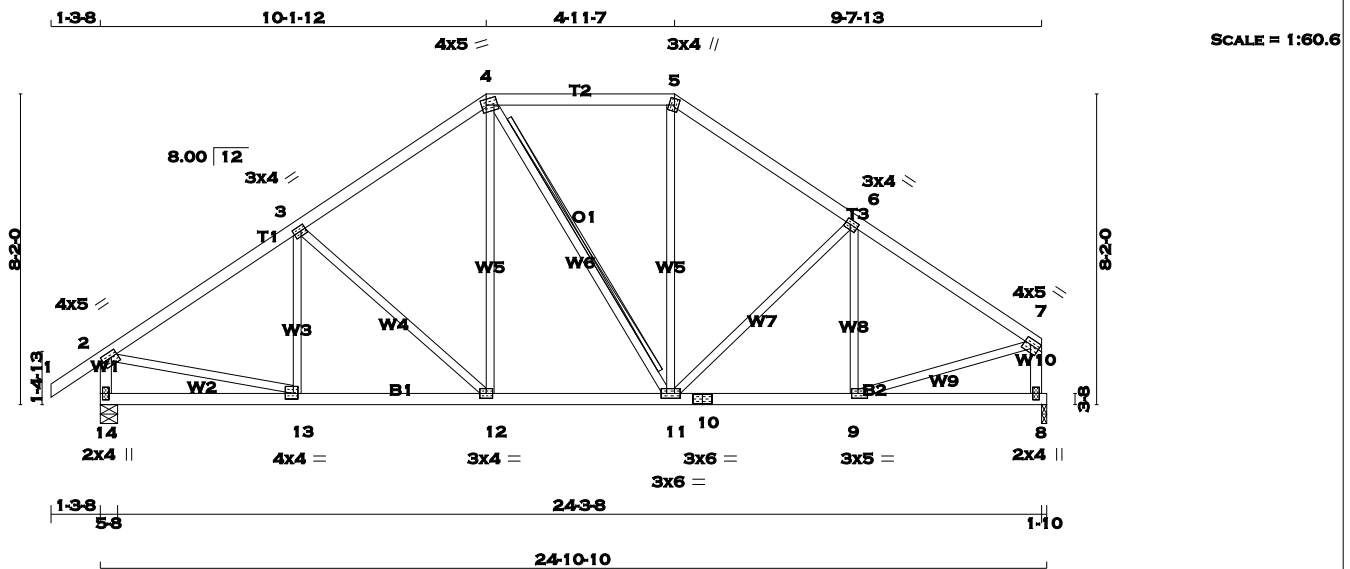
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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.

RECEIVED TOWN OF MILTON MAR 29, 2017 17-5215 BUILDING DIVISION

14 MAR 2017

KOTT



TOTAL WEIGHT = 2 X 111 = 222 lb
[M][F]

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
				GROSS REACTION				GROSS REACTION				BRG				BRG			
				JT	VERT	HORZ		JT	DOWN	HORZ	UPLIFT	IN-SX				JT	IN-SX		
				14	1280	0		1280	0	0	5-8	5-8							
				8	1174	0		1174	0	0	1-10	1-10							
UNFACTORED REACTIONS																			
				1ST LCASE				MAX./MIN. COMPONENT REACTIONS											
				JT	COMBINED	SNOW	LIVE	JT	PERM.LIVE	WIND	DEAD	JT	SOIL			JT			
				14	896	640 / 0	0 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0	0 / 0						
				8	824	576 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	0 / 0						

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 SPF No.2 T-BRACE AT 4-11

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

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

LOADING				TOTAL LOAD CASES: (4)			
C H O R D S				W E B S			
MEMB.				MEMB.			
MAX. FACTORED				MAX. FACTORED			
FORCE (LBS)				FORCE (LBS)			
VERT. LOAD				VERT. LOAD			
LC1 MAX				LC1 MAX			
FROM TO				FROM TO			
FR-TO				FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	13-3	-136 / 45	0.05 (1)
2-3	-1322 / 0	-77.3	-77.3 0.28 (1)	5.33	3-12	-304 / 0	0.26 (1)
3-4	-1103 / 0	-77.3	-77.3 0.27 (1)	5.71	12-4	0 / 287	0.06 (1)
4-5	-884 / 0	-77.3	-77.3 0.25 (1)	6.22	4-11	-27 / 0	0.02 (1)
5-6	-1085 / 0	-77.3	-77.3 0.24 (1)	5.79	11-5	0 / 261	0.06 (1)
6-7	-1224 / 0	-77.3	-77.3 0.25 (1)	5.52	11-6	-221 / 0	0.18 (1)
14-2	-1242 / 0	0.0	0.0 0.13 (1)	7.20	9-6	-206 / 19	0.08 (1)
8-7	-1137 / 0	0.0	0.0 0.12 (1)	7.45	2-13	0 / 1145	0.26 (1)
					9-7	0 / 1080	0.24 (1)
14-13	0 / 0	-17.5	-17.5 0.11 (4)	10.00			
13-12	0 / 1121	-17.5	-17.5 0.23 (1)	10.00			
12-11	0 / 898	-17.5	-17.5 0.19 (1)	10.00			
11-10	0 / 1039	-17.5	-17.5 0.21 (1)	10.00			
10-9	0 / 1039	-17.5	-17.5 0.21 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.10 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

CSI: TC=0.28 (2-3:1), BC=0.23 (12-13:1), WB=0.26 (3-12:1), SSI=0.16 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

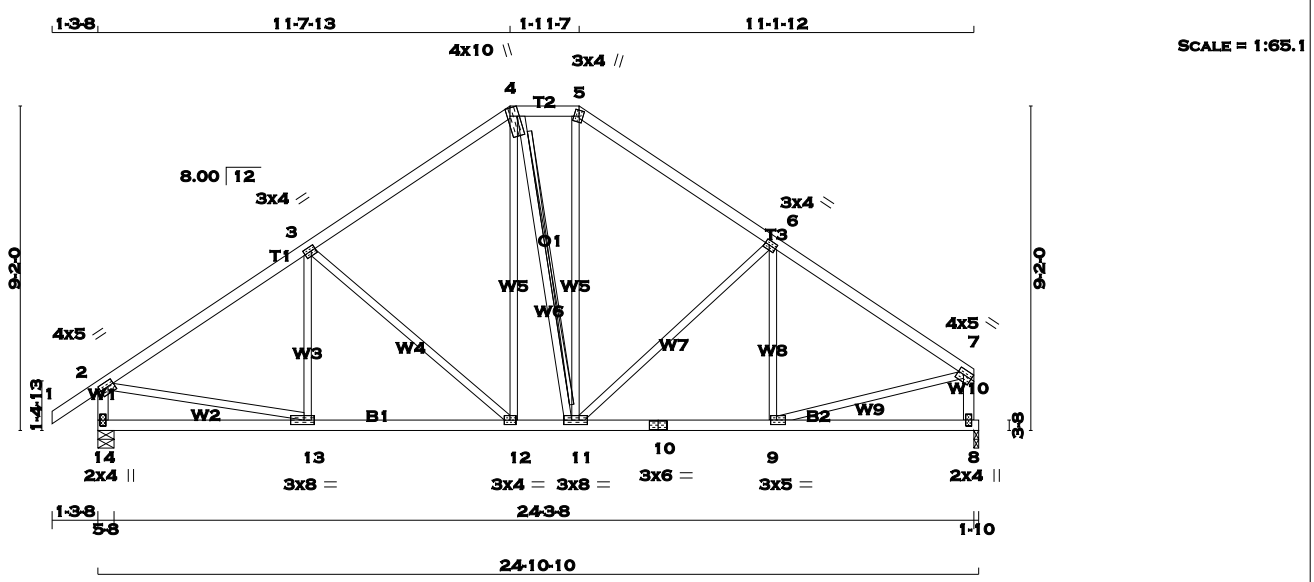
JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

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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TOTAL WEIGHT = 2 X 117 = 233 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW+m	MT20	4.0	10.0	Edge	1.00
5	TTWW+m	MT20	3.0	4.0	2.00	1.25
6	TMVW-t	MT20	3.0	4.0	1.50	1.50
7	TMVW-t	MT20	4.0	5.0	1.75	Edge
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	5.0	1.50	2.00
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	8.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	3.0	8.0	1.50	3.50
14	BMV1+p	MT20	2.0	4.0		
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.						
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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

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

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

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

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

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
2x4 SPF No.2 T-BRACE AT 4-11

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.		FACTORED		MEMB.		FACTORED	
		FORCE (LBS)				FORCE (LBS)	
		VERT. LOAD					
		(PLF)					
		FROM TO					
		CS1 (LC)					
		UNBRAC LENGTH					
		FR-TO					
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	13-3	-87 / 75
2-3	-1324 / 0	-77.3	-77.3	0.38 (1)	5.19	3-12	-410 / 0
3-4	-1012 / 0	-77.3	-77.3	0.35 (1)	5.77	12-4	0 / 321
4-5	-816 / 0	-77.3	-77.3	0.04 (1)	6.25	4-11	-17 / 0
5-6	-1007 / 0	-77.3	-77.3	0.32 (1)	5.83	11-5	0 / 310
6-7	-1238 / 0	-77.3	-77.3	0.34 (1)	5.38	11-6	-329 / 0
14-2	-1238 / 0	0.0	0.0	0.13 (1)	7.22	9-6	-152 / 50
8-7	-1133 / 0	0.0	0.0	0.12 (1)	7.46	2-13	0 / 1145
						9-7	0 / 1085
14-13	0 / 0	-17.5	-17.5	0.15 (4)	10.00		
13-12	0 / 1126	-17.5	-17.5	0.26 (1)	10.00		
12-11	0 / 820	-17.5	-17.5	0.18 (1)	10.00		
11-10	0 / 1053	-17.5	-17.5	0.24 (1)	10.00		
10-9	0 / 1053	-17.5	-17.5	0.24 (1)	10.00		
9-8	0 / 0	-17.5	-17.5	0.14 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

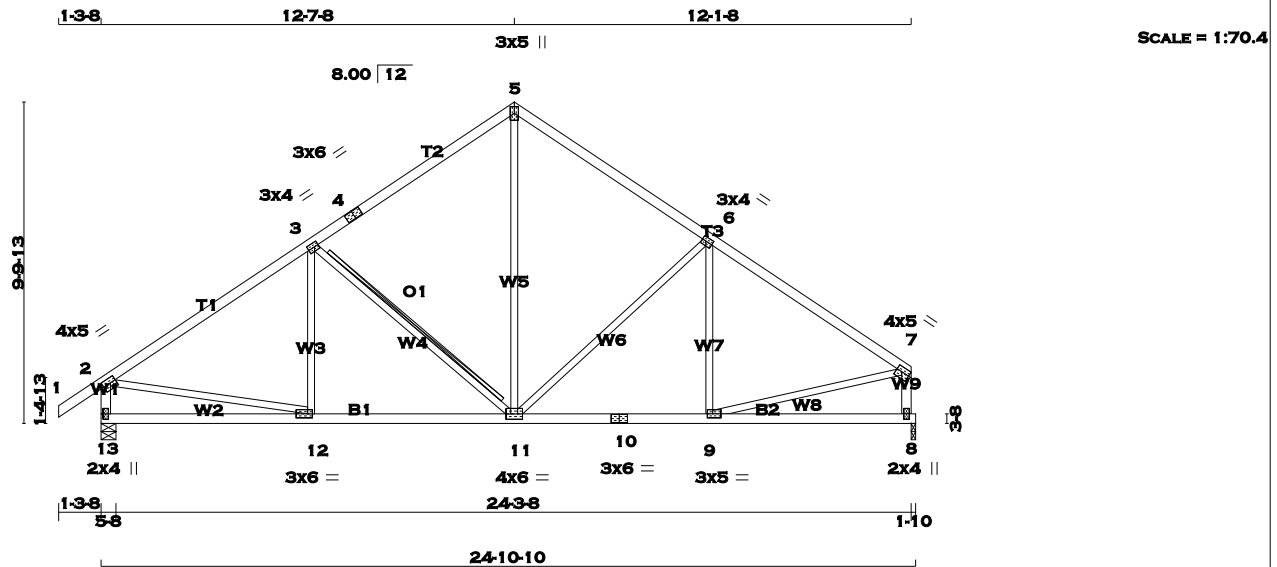
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMW-t	MT20	4.0	5.0	1.75 2.00
3	TMWW-t	MT20	3.0	4.0	1.50 1.50
4	TS-t	MT20	3.0	6.0	
5	TTW+p	MT20	3.0	5.0	
6	TMWW-t	MT20	3.0	4.0	1.50 1.50
7	TMW-t	MT20	4.0	5.0	1.75 Edge
8	BMV1+p	MT20	2.0	4.0	
9	BMWW-t	MT20	3.0	5.0	1.50 2.00
10	BS-t	MT20	3.0	6.0	
11	BMWW-t	MT20	4.0	6.0	
12	BMWW-t	MT20	3.0	6.0	1.50 1.75
13	BMV1+p	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
13		1280	0	1280	0	0	5-8	5-8	
8		1174	0	1174	0	0	1-10	1-10	
UNFACTORED REACTIONS									
		1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE	
JT									
13		896	640 / 0	0 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0
8		824	576 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x3 SPF No.2 T-BRACE AT 3-11

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

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	
FR-TO			FROM TO			FR-TO	
1-2		0 / 29	-77.3 -77.3	0.10 (1)	10.00	12-3	-66 / 86
2-3		-1317 / 0	-77.3 -77.3	0.45 (1)	5.10	3-11	-467 / 0
3-4		-958 / 0	-77.3 -77.3	0.42 (1)	5.79	11-5	0 / 674
4-5		-958 / 0	-77.3 -77.3	0.42 (1)	5.79	11-6	-392 / 0
5-6		-957 / 0	-77.3 -77.3	0.38 (1)	5.85	9-6	-125 / 64
6-7		-1239 / 0	-77.3 -77.3	0.41 (1)	5.29	2-12	0 / 1139
13-2		-1234 / 0	0.0 0.0	0.13 (1)	7.23	9-7	0 / 1084
8-7		-1129 / 0	0.0 0.0	0.12 (1)	7.47		
13-12		0 / 0	-17.5 -17.5	0.17 (4)	10.00		
12-11		0 / 1123	-17.5 -17.5	0.27 (1)	10.00		
11-10		0 / 1057	-17.5 -17.5	0.25 (1)	10.00		
10-9		0 / 1057	-17.5 -17.5	0.25 (1)	10.00		
9-8		0 / 0	-17.5 -17.5	0.16 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

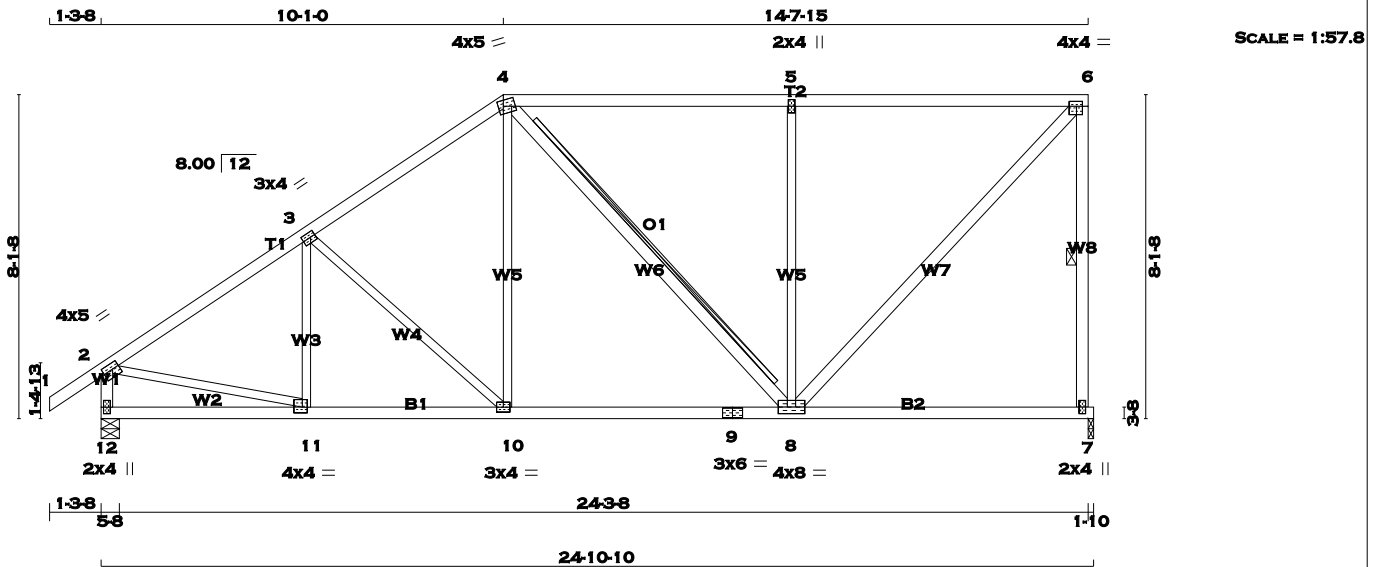
JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 119 = 238 lb [M]

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

DRY: SEASONED LUMBER.

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

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		1174	0	1174	0	0	1-10	1-10	
12		1280	0	1280	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
7		824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
12		896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.13 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 84 LBS.
2x4 SPF No.2 T-BRACE AT 4-8

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.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (CSI (LC)	MEMB.	FORCE (LBS)	LC1 MAX (CSI (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	11-3	-143 / 38	0.05 (1)
2-3	-1320 / 0	-77.3	-77.3 0.38 (1)	5.18	3-10	-295 / 0	0.25 (1)
3-4	-1110 / 0	-77.3	-77.3 0.37 (1)	5.54	10-4	0 / 299	0.07 (1)
4-5	-857 / 0	-77.3	-77.3 0.78 (1)	5.13	4-8	-69 / 0	0.05 (1)
5-6	-857 / 0	-77.3	-77.3 0.78 (1)	5.13	8-5	-705 / 0	0.90 (1)
7-6	-1122 / 0	0.0	0.0 0.33 (1)	5.99	8-6	0 / 1245	0.20 (1)
12-2	-1241 / 0	0.0	0.0 0.13 (1)	7.20	2-11	0 / 1144	0.26 (1)
12-11	0 / 0	-17.5	-17.5 0.10 (4)	10.00			
11-10	0 / 1120	-17.5	-17.5 0.25 (1)	10.00			
10-9	0 / 904	-17.5	-17.5 0.31 (4)	10.00			
9-8	0 / 904	-17.5	-17.5 0.31 (4)	10.00			
8-7	0 / 0	-17.5	-17.5 0.24 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

CSI: TC=0.78 (5-6:1), BC=0.31 (8-10:4), WB=0.90 (5-8:1), SSI=0.28 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES
PLATE GRIP(DRY) 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.

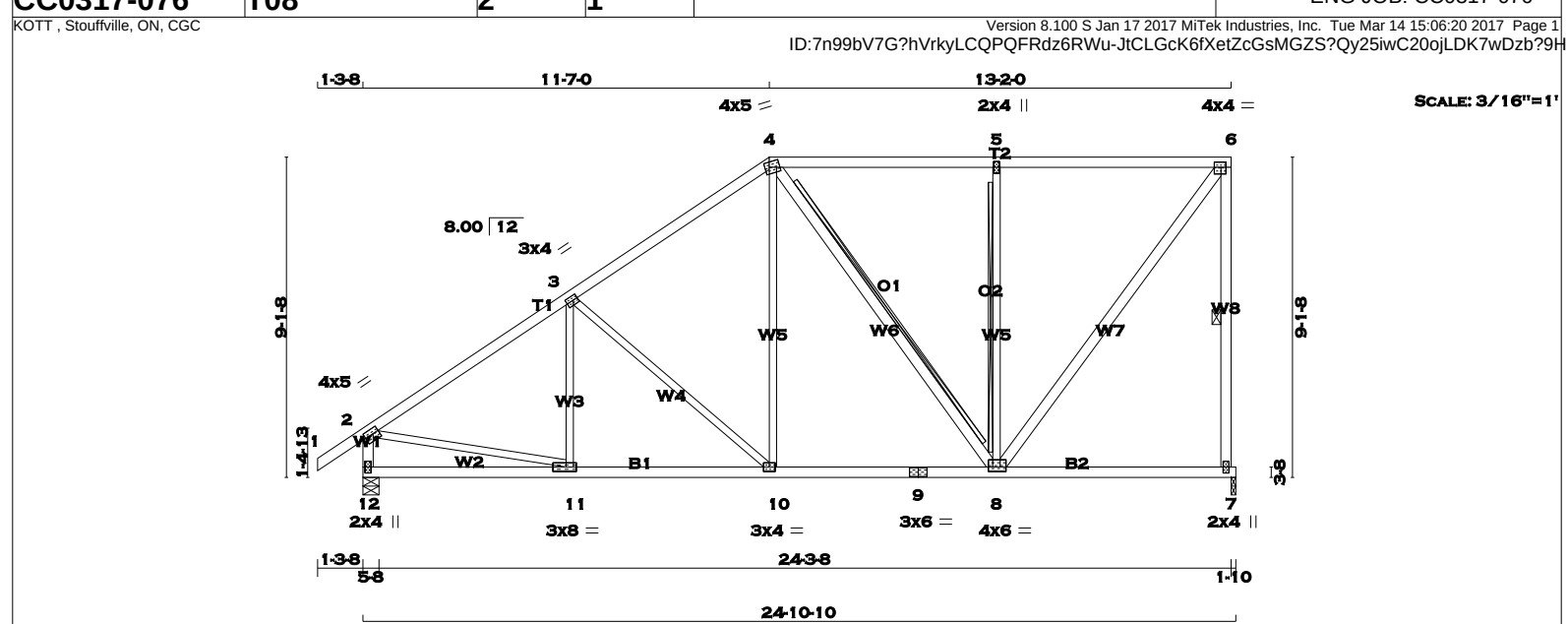
JSI GRIP= 0.86 (2) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA					
1 - 4	2x4	DRY	No.2	SPF	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		SPECIFIED LOADS:							
4 - 6	2x4	DRY	No.2	SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		TOP CH. LL = 23.3 PSF							
7 - 6	2x4	DRY	No.2	SPF	JT VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		DL = 3.0 PSF							
12 - 2	2x4	DRY	No.2	SPF	7	1174	0	1174	0	0	1-10		BOT CH. LL = 0.0 PSF							
12 - 9	2x4	DRY	No.2	SPF	12	1280	0	1280	0	0	5-8		DL = 7.0 PSF							
9 - 7	2x4	DRY	No.2	SPF											TOTAL LOAD = 33.3 PSF					
ALL WEBS 2x3 DRY No.2 SPF					UNFACTORED REACTIONS										SPACING = 24.0 IN./C					
EXCEPT					1ST LCASE MAX./MIN. COMPONENT REACTIONS										LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12					
4 - 8	2x4	DRY	No.2	SPF	JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010							
8 - 6	2x4	DRY	No.2	SPF	7	824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0		THIS DESIGN COMPLIES WITH:							
DRY: SEASONED LUMBER.					12	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0		0 / 0		- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014					
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 12										- CSA 086-09					
					BRACING										- TPIC 2011					
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.97 FT.										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD					
					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										ALLOWABLE DEFL.(LL)= L/360 (0.82")					
					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")					
					1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 84 LBS.										ALLOWABLE DEFL.(TL)= L/360 (0.82")					
					2x4 SPF No.2 T-BRACE AT 4-8										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")					
					2x3 SPF No.2 T-BRACE AT 5-8										CSI: TC=0.60 (5-6:1) , BC=0.25 (8-10:4) , WB=0.87 (5-8:1) , SSI=0.25 (5-6:1)					
					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.										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10					
					FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.										COMP=1.10 SHEAR=1.10 TENS= 1.10					
					END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW										COMPANION LIVE LOAD FACTOR = 0.50					
					LOADING										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .					
					TOTAL LOAD CASES: (4)										NAIL VALUES					
					CHORDS					WEBS					PLATE GRIP(DRY) SHEAR SECTION					
					MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED		MAX. FACTORED		(PSI) (PLI) (PLI)					
					MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	FORCE	MAX	MAX MIN MAX MIN MAX MIN						
						(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	(LBS)	CSI (LC)	MT20 618 354 1667 822 2284 1656						
					FR-TO		FROM TO		LENGTH	FR-TO				PLATE PLACEMENT TOL. = 0.250 inches						
					1- 2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11- 3	-94 / 69	0.04 (1)	PLATE ROTATION TOL. = 5.0 Deg.						
					2- 3	-1323 / 0	-77.3	-77.3	0.53 (1)	4.97	3-10	-401 / 0	0.48 (1)	JSI GRIP= 0.88 (8) (INPUT = 0.90)						
					3- 4	-1019 / 0	-77.3	-77.3	0.49 (1)	5.52	10- 4	0 / 363	0.08 (1)	JSI METAL= 0.45 (2) (INPUT = 1.00)						
					4- 5	-703 / 0	-77.3	-77.3	0.60 (1)	6.02	4- 8	-207 / 0	0.18 (1)							
					5- 6	-704 / 0	-77.3	-77.3	0.60 (1)	6.02	8- 5	-632 / 0	0.87 (1)							
					7- 6	-1127 / 0	0.0	0.0	0.44 (1)	5.98	8- 6	0 / 1166	0.19 (1)							
					12- 2	-1237 / 0	0.0	0.0	0.13 (1)	7.22	2-11	0 / 1144	0.26 (1)							
					12-11	0 / 0	-17.5	-17.5	0.14 (4)	10.00										
					11-10	0 / 1125	-17.5	-17.5	0.25 (1)	10.00										
					10- 9	0 / 826	-17.5	-17.5	0.25 (4)	10.00										
					9- 8	0 / 826	-17.5	-17.5	0.25 (4)	10.00										
					8- 7	0 / 0	-17.5	-17.5	0.19 (4)	10.00										

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.

LICENSED PROFESSIONAL ENGINEER
C.G. CARSON
100076892
PROVINCE OF ONTARIO
14 MAR 2017

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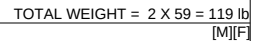
KOTT

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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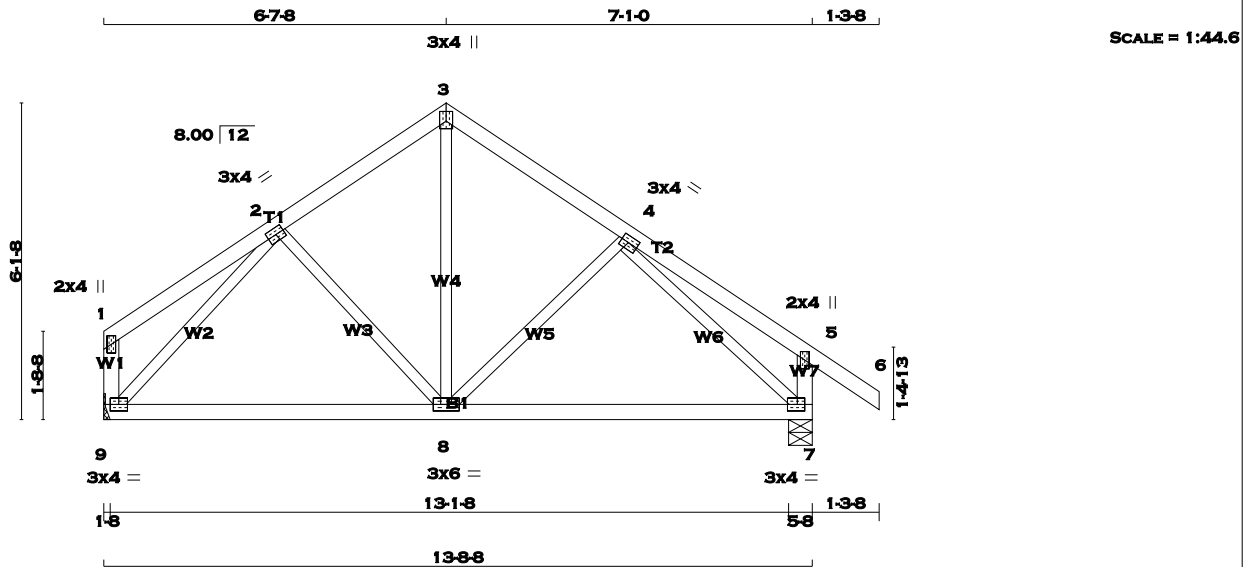
DRY: SEASONED LUMBER.

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)	FACTORED MAX CSI (LC)	
FR-TO		FROM	TO			FR-TO			
1-2	0 / 17	-77.3	-77.3	0.15 (1)	10.00	8-3	0 / 357	0.08 (1)	
2-3	-531 / 0	-77.3	-77.3	0.12 (1)	6.25	8-4	-147 / 6	0.06 (1)	
3-4	-531 / 0	-77.3	-77.3	0.12 (1)	6.25	2-8	-147 / 6	0.06 (1)	
4-5	0 / 17	-77.3	-77.3	0.15 (1)	10.00	9-2	-744 / 0	0.29 (1)	
5-6	0 / 29	-77.3	-77.3	0.10 (1)	10.00	4-7	-744 / 0	0.29 (1)	
9-1	-106 / 0	0.0	0.0	0.01 (1)	7.81				
7-5	-212 / 0	0.0	0.0	0.02 (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				

JSI GRIP= 0.82 (4) (INPUT = 0.90)
JSI METAL= 0.21 (4) (INPUT = 1.00)





TOTAL WEIGHT = 2 X 58 = 117 lb [M][F]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 6	2x4	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
7 - 5	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	4.0		
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMWW-t	MT20	3.0	4.0	1.50	1.75
5	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		

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

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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
JT	GROSS REACTION		GROSS REACTION			BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
9	650	0	650	0	0	HANGER BY OTHERS	
7	756	0	756	0	0	MIN. SEAT SIZE: 1-8	
						5-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS					
9	456	319 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL	
7	528	383 / 0	0 / 0	0 / 0	0 / 0	137 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 16	-77.3 -77.3	0.13 (1)	2-8	-100 / 15	0.04 (1)	
2-3	-497 / 0	-77.3 -77.3	0.10 (1)	8-3	0 / 328	0.07 (1)	
3-4	-498 / 0	-77.3 -77.3	0.12 (1)	8-4	-153 / 4	0.06 (1)	
4-5	0 / 17	-77.3 -77.3	0.15 (1)	10.00	9-2	-690 / 0	0.26 (1)
5-6	0 / 29	-77.3 -77.3	0.10 (1)	10.00	4-7	-712 / 0	0.28 (1)
9-1	-100 / 0	0.0 0.0	0.01 (1)	7.81			
7-5	-212 / 0	0.0 0.0	0.02 (1)	7.81			
9-8	0 / 468	-17.5 -17.5	0.27 (4)	10.00			
8-7	0 / 510	-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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.15 (4-5:1) , BC=0.27 (7-8:4) , WB=0.28 (4-7:1) , SSI=0.11 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

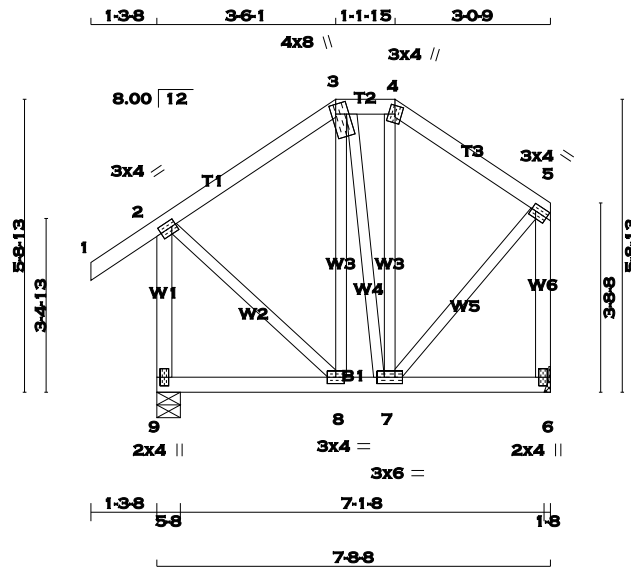
JSI GRIP= 0.88 (2) (INPUT = 0.90)
JSI METAL= 0.25 (4) (INPUT = 1.00)

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SCALE = 1:45.1

TOTAL WEIGHT = 2 X 48 = 96 lb

LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER		DESCR.	
1 - 3	2x4	DRY	No.2		SPF
3 - 4	2x4	DRY	No.2		SPF
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	4.0	1.50	1.00
3	TTWW+m	MT20	4.0	8.0	2.25	1.00
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.00
6	BMV1+p	MT20	2.0	4.0		
7	BMWWV-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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
9	472	0	472	0	0	5-8	5-8		
6	366	0	366	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
9	329	243 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0	
6	257	179 / 0	0 / 0	0 / 0	0 / 0	77 / 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	8-3	-59 / 20	0.03 (1)
2-3	-161 / 0	-77.3 -77.3	0.12 (1)	6.25	3-7	-32 / 0	0.02 (1)
3-4	-126 / 0	-77.3 -77.3	0.01 (1)	6.25	7-4	-77 / 9	0.04 (1)
4-5	-154 / 0	-77.3 -77.3	0.09 (1)	6.25	2-8	0 / 176	0.04 (1)
9-2	-445 / 0	0.0 0.0	0.09 (1)	7.81	7-5	0 / 188	0.04 (1)
6-5	-341 / 0	0.0 0.0	0.08 (1)	7.81			
9-8	0 / 0	-17.5 -17.5	0.05 (4)	10.00			
8-7	0 / 133	-17.5 -17.5	0.06 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.03 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.12 (2-3:1), BC=0.06 (7-8:4), WB=0.04 (5-7:1), SSI=0.09 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

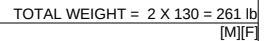
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JSI METAL= 0.11 (2) (INPUT = 1.00)

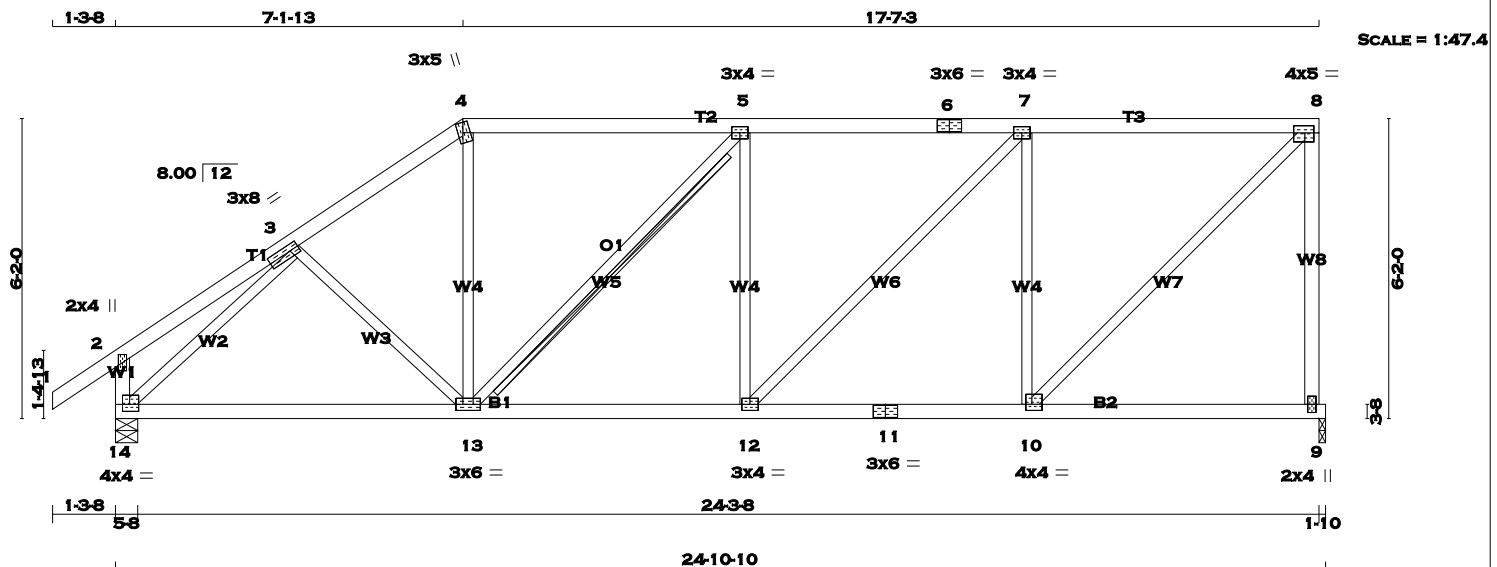
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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
14 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	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 2.25
4	TTW+m	MT20	3.0	5.0	2.50 1.25
5	TMWW-t	MT20	3.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TMWW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	5.0	1.75 2.25
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	4.0	1.50 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWW-t	MT20	3.0	4.0	
13	BMWWW-t	MT20	3.0	6.0	
14	BMVW1-t	MT20	4.0	4.0	1.75 1.75

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		DOWN		BRG		BRG	
JT	VERT	JT	HORZ	JT	UPLIFT	JT	IN-SX	JT	IN-SX
9	1174	0	1174	0	0	1-10	1-10	1-10	1-10
14	1280	0	1280	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
1ST LCASE		MAX/MIN. COMPONENT REACTIONS		PERM. LIVE		WIND	
JT	COMBINED	JT	SNOW	JT	PERM. LIVE	JT	DEAD
9	824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
14	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x3 SPF No.2 T-BRACE AT 5-13

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.		FACTORED		MEMB.		FACTORED	
FORCE (LBS)		VERT. LOAD LC1 MAX		FORCE (LBS)		MAX	
		(PLF)				(LBS)	
		FROM TO					
		CSI (LC)					
		LENGTH					
FR-TO				FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-13	-19 / 43	0.01 (4)
2-3	0 / 16	-77.3	-77.3 0.14 (1)	10.00	13-4	0 / 398	0.09 (1)
3-4	-1257 / 0	-77.3	-77.3 0.17 (1)	5.55	13-5	-348 / 0	0.38 (1)
4-5	-1038 / 0	-77.3	-77.3 0.38 (1)	5.65	12-5	-235 / 5	0.14 (1)
5-6	-1280 / 0	-77.3	-77.3 0.42 (1)	5.16	12-7	0 / 449	0.10 (1)
6-7	-1280 / 0	-77.3	-77.3 0.42 (1)	5.16	10-7	-824 / 0	0.49 (1)
7-8	-965 / 0	-77.3	-77.3 0.40 (1)	5.76	10-8	0 / 1349	0.30 (1)
9-8	-1131 / 0	0.0	0.0 0.84 (1)	7.46	14-3	-1455 / 0	0.57 (1)
14-2	-215 / 0	0.0	0.0 0.02 (1)	7.81			
14-13	0 / 1045	-17.5	-17.5 0.28 (1)	10.00			
13-12	0 / 1280	-17.5	-17.5 0.32 (1)	10.00			
12-11	0 / 965	-17.5	-17.5 0.24 (1)	10.00			
11-10	0 / 965	-17.5	-17.5 0.24 (1)	10.00			
10-9	0 / 0	-17.5	-17.5 0.16 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.82")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.82")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.84 (8-9:1), BC=0.32 (12-13:1), WB=0.57 (3-14:1), SSI=0.22 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE GRIP(DRY)		SHEAR (PLI)		SECTION (PLI)	
(PSI)	(PLI)	(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.

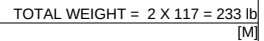
JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.39 (14) (INPUT = 1.00)

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.



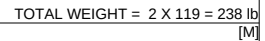
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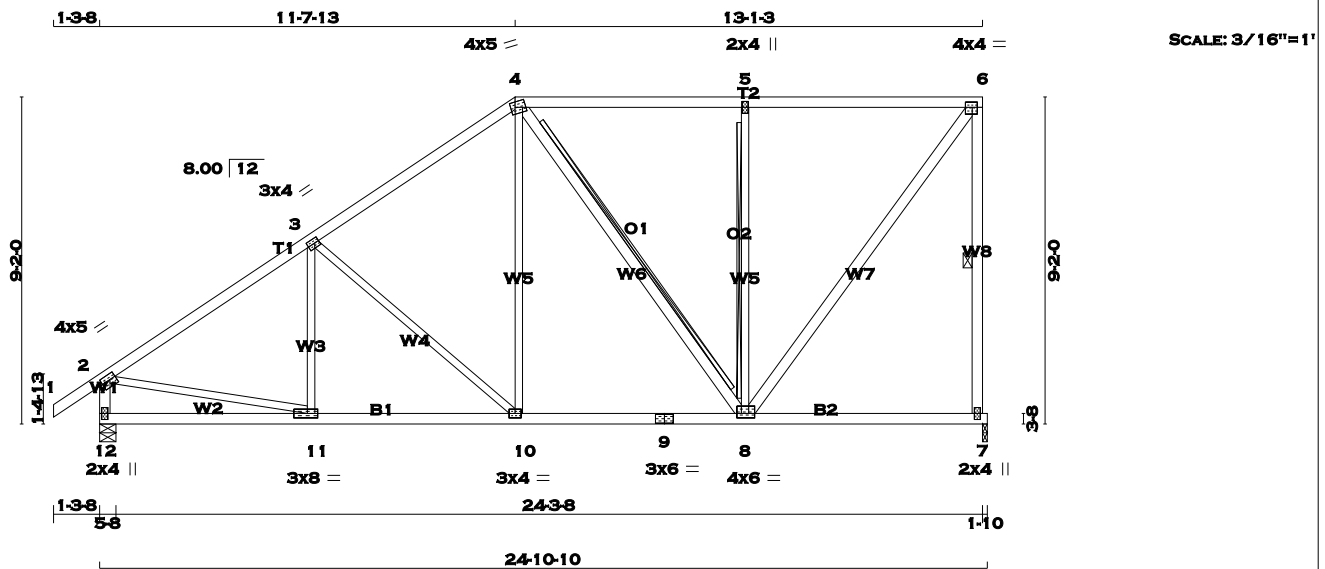




JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.44 (2) (INPUT = 1.00)







TOTAL WEIGHT = 2 X 125 = 249 lb

LUMBER					N. L. G. A. RULES				
CHORDS	SIZE				CHORDS	SIZE			
1 - 4	2x4	DRY	No.2	SPF	1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF	4 - 6	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF	7 - 6	2x4	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF	12 - 2	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF	12 - 9	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF	9 - 7	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT					ALL WEBS EXCEPT				
4 - 8	2x4	DRY	No.2	SPF	4 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF	8 - 6	2x4	DRY	No.2	SPF
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	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TMVW-t	MT20	2.0	4.0		
6	TMVW-t	MT20	4.0	4.0	1.75	1.75
7	BMV1+p	MT20	2.0	4.0		
8	BMVWV-t	MT20	4.0	6.0	1.50	1.50
9	BS-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	4.0		
11	BMVW-t	MT20	3.0	8.0	1.50	3.50
12	BMV1+p	MT20	2.0	4.0		

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		1174	0	1174	0	0	1-10	1-10	
12		1280	0	1280	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
7		824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0	
12		896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 12									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.96 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 85 LBS.									
2x4 SPF No.2 T-BRACE AT 4-8									
2x3 SPF No.2 T-BRACE AT 5-8									
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.									
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.									
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW									
LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS				WEBS			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX	
		(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO			FROM TO		LENGTH	FR-TO			
1-2		0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-3	-92 / 70	0.04 (1)
2-3		-1322 / 0	-77.3	-77.3	0.53 (1)	4.96	3-10	-405 / 0	0.49 (1)
3-4		-1015 / 0	-77.3	-77.3	0.50 (1)	5.51	10-4	0 / 365	0.08 (1)
4-5		-698 / 0	-77.3	-77.3	0.59 (1)	6.05	4-8	-212 / 0	0.18 (1)
5-6		-698 / 0	-77.3	-77.3	0.60 (1)	6.05	8-5	-629 / 0	0.88 (1)
7-6		-1127 / 0	0.0	0.0	0.44 (1)	5.98	8-6	0 / 1163	0.19 (1)
12-2		-1237 / 0	0.0	0.0	0.13 (1)	7.22	2-11	0 / 1144	0.26 (1)
12-11		0 / 0	-17.5	-17.5	0.14 (4)	10.00			
11-10		0 / 1125	-17.5	-17.5	0.25 (1)	10.00			
10-9		0 / 823	-17.5	-17.5	0.25 (4)	10.00			
9-8		0 / 823	-17.5	-17.5	0.25 (4)	10.00			
8-7		0 / 0	-17.5	-17.5	0.19 (4)	10.00			

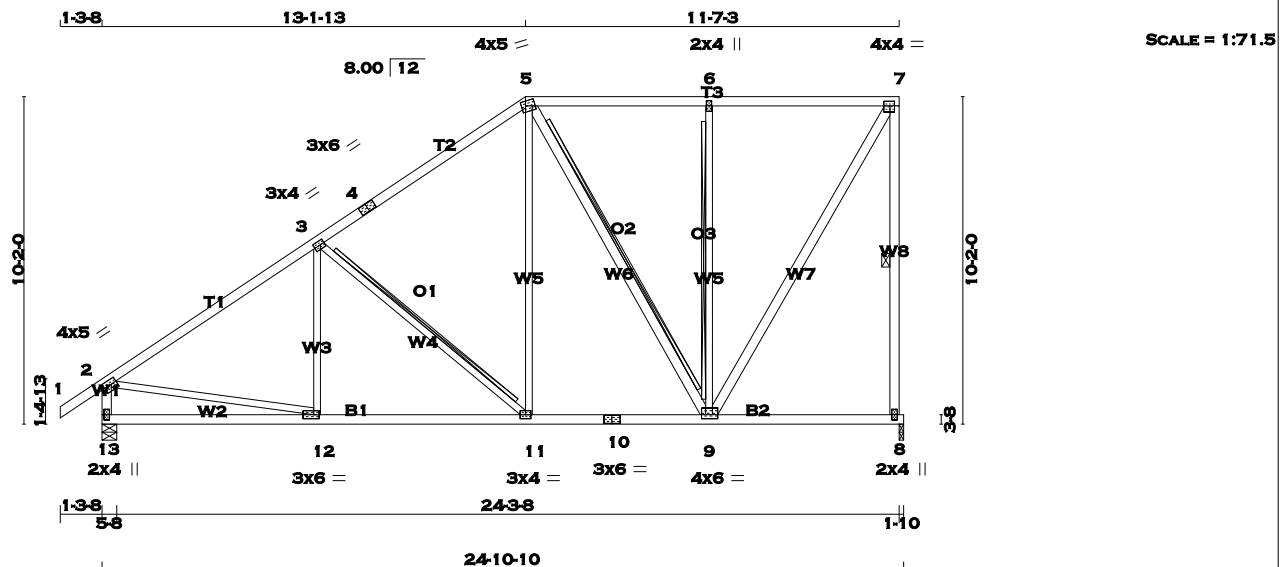
DESIGN CRITERIA				
SPECIFIED LOADS:				
TOP CH.	LL	=	23.3	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD = 33.3 PSF				
SPACING = 24.0 IN./C				
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12				
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010				
THIS DESIGN COMPLIES WITH:				
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014				
- CSA 086-09				
- TPIC 2011				
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD				
ALLOWABLE DEFL.(LL)= L/360 (0.82")				
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")				
ALLOWABLE DEFL.(TL)= L/360 (0.82")				
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")				
CSI: TC=0.60 (5-6:1) , BC=0.25 (10-11:1) , WB=0.88 (5-8:1) , SSI=0.25 (5-6:1)				
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10				
COMPANION LIVE LOAD FACTOR = 0.50				
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .				
NAIL VALUES				
PLATE GRIP(DRY)	SHEAR	SECTION		
(PSI)	(PLI)	(PLI)		
MAX MIN	MAX MIN	MAX MIN		
MT20	618	354	1667	822
			2284	1656
PLATE PLACEMENT TOL. = 0.250 inches				
PLATE ROTATION TOL. = 5.0 Deg.				
JSI GRIP= 0.88 (8) (INPUT = 0.90)				
JSI METAL= 0.45 (2) (INPUT = 1.00)				

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



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LUMBER				DESCR.	
CHORDS	SIZE	LUMBER			
1 - 4	2x4	DRY	No.2	SPF	
4 - 5	2x4	DRY	No.2	SPF	
5 - 7	2x4	DRY	No.2	SPF	
8 - 7	2x4	DRY	No.2	SPF	
13 - 2	2x4	DRY	No.2	SPF	
13 - 10	2x4	DRY	No.2	SPF	
10 - 8	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
5 - 9	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

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

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
8	1174	0	1174	0	0	1-10	1-10
13	1280	0	1280	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
8	824	576 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
13	896	640 / 0	0 / 0	0 / 0	0 / 0	256 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.04 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 85 LBS.
2x3 SPF No.2 T-BRACE AT 3-11
2x4 SPF No.2 T-BRACE AT 5-9, 6-9

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.

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO	MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	12-3	-50 / 96	0.03 (4)
2-3	-1314 / 0	-77.3 -77.3	0.50 (1)	5.04	3-11	-507 / 0	0.64 (1)
3-4	-918 / 0	-77.3 -77.3	0.46 (1)	5.81	11-5	0 / 426	0.10 (1)
4-5	-918 / 0	-77.3 -77.3	0.46 (1)	5.81	5-9	-333 / 0	0.32 (1)
5-6	-572 / 0	-77.3 -77.3	0.34 (1)	6.25	9-6	-556 / 0	0.45 (1)
6-7	-572 / 0	-77.3 -77.3	0.34 (1)	6.25	9-7	0 / 1115	0.18 (1)
8-7	-1131 / 0	0.0 0.0	0.57 (1)	5.97	2-12	0 / 1136	0.26 (1)
13-2	-1232 / 0	0.0 0.0	0.13 (1)	7.23			
13-12	0 / 0	-17.5 -17.5	0.19 (4)	10.00			
12-11	0 / 1122	-17.5 -17.5	0.28 (1)	10.00			
11-10	0 / 739	-17.5 -17.5	0.20 (4)	10.00			
10-9	0 / 739	-17.5 -17.5	0.20 (4)	10.00			
9-8	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.57 (7-8:1), BC=0.28 (11-12:1), WB=0.64 (3-11:1), SSI=0.22 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

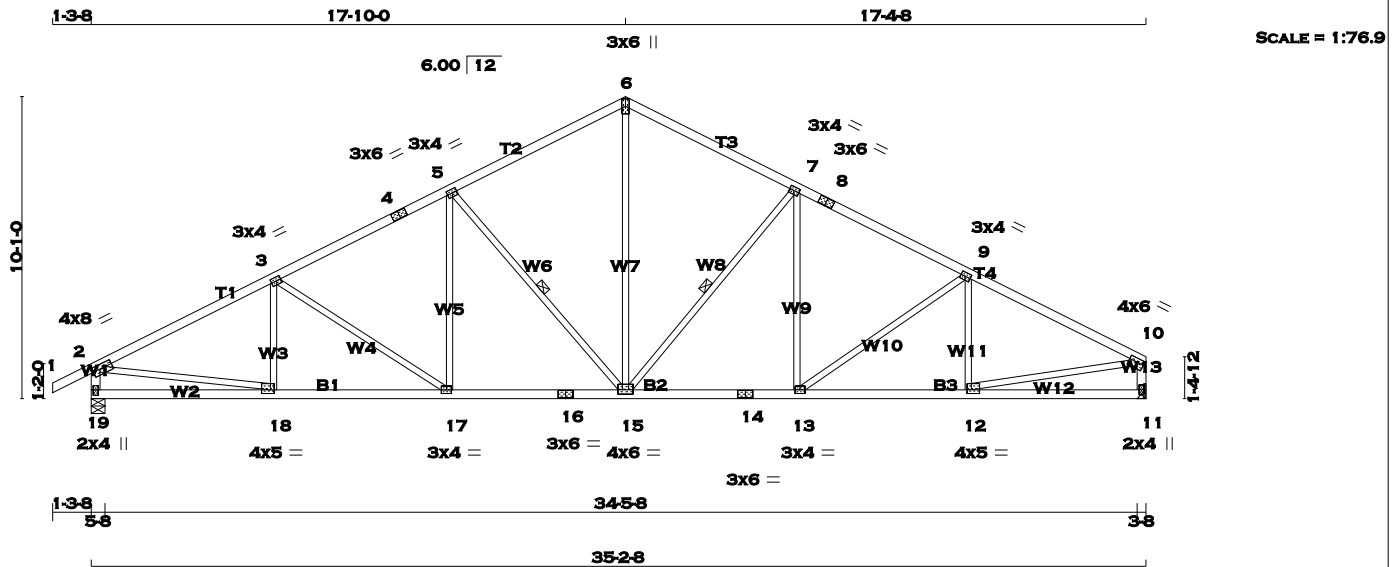
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.45 (2) (INPUT = 1.00)



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

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 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	BMVWW-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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
19		1775	0	1775	0	5-8	5-8		
11		1670	0	1670	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
19		1243	883 / 0	0 / 0	0 / 0	0 / 0	360 / 0
11		1172	820 / 0	0 / 0	0 / 0	0 / 0	352 / 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

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX (CSI (LC))	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX (CSI (LC))	
FR-TO		FROM TO		FR-TO			
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	6.33	2-18	0 / 2255	0.51 (1)
11-10	-1625 / 0	0.0	0.0	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.

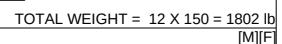
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.67 (18) (INPUT = 1.00)

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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MAR 29, 2017
17-5215
BUILDING DIVISION





DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	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, NBC 2010

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.

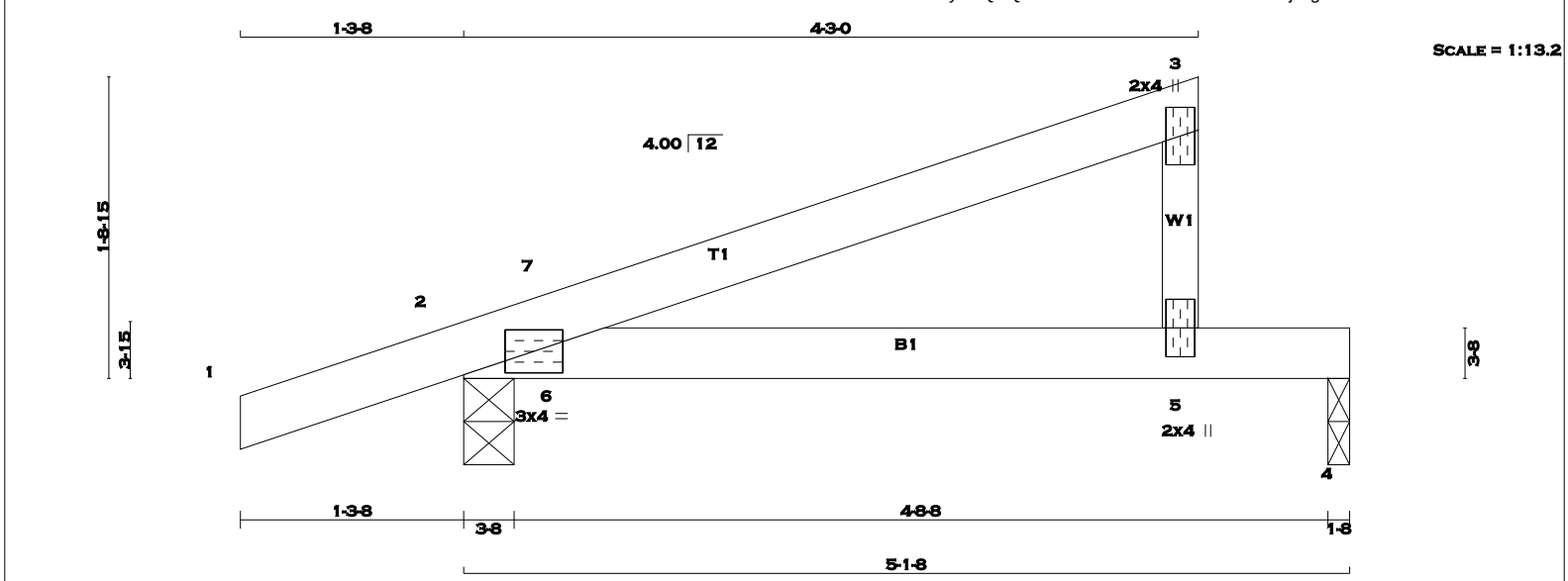
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

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 / 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					



14 MAR 2017





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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
2	341	0	341	0	3-8	3-8
4	181	0	181	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND	DEAD	SOIL
	VERT	HORZ	VERT	HORZ	VERT	HORZ	VERT	HORZ			
2	237	178 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0	0 / 0
4	129	82 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	46 / 0	0 / 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.

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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)

N. L. G. A. RULES

CHORDS

1 - 3

2x4

DRY

No.2

5 - 3

2x3

DRY

No.2

2 - 4

2x4

DRY

No.2

LUMBER

No.2

DESCR.

SPF

SPF

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-I	MT20	3.0	4.0		
3	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.

BUILDING DESIGNER

BEARINGS

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
2	341	0	341	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	237	178 / 0	0 / 0	0 / 0	0 / 0	59 / 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 (LC)	MAX. UNBRACED LENGTH
FR-TO		FROM TO		
1- 2	0 / 15	-77.3 -77.3	0.10 (1)	10.00
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

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
6- 7	-71 / 51	0.00 (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	

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

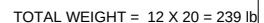
PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822	2284 1656

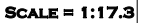
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

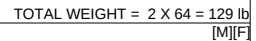
JSI METAL= 0.05 (2) (INPUT = 1.00)





[M]





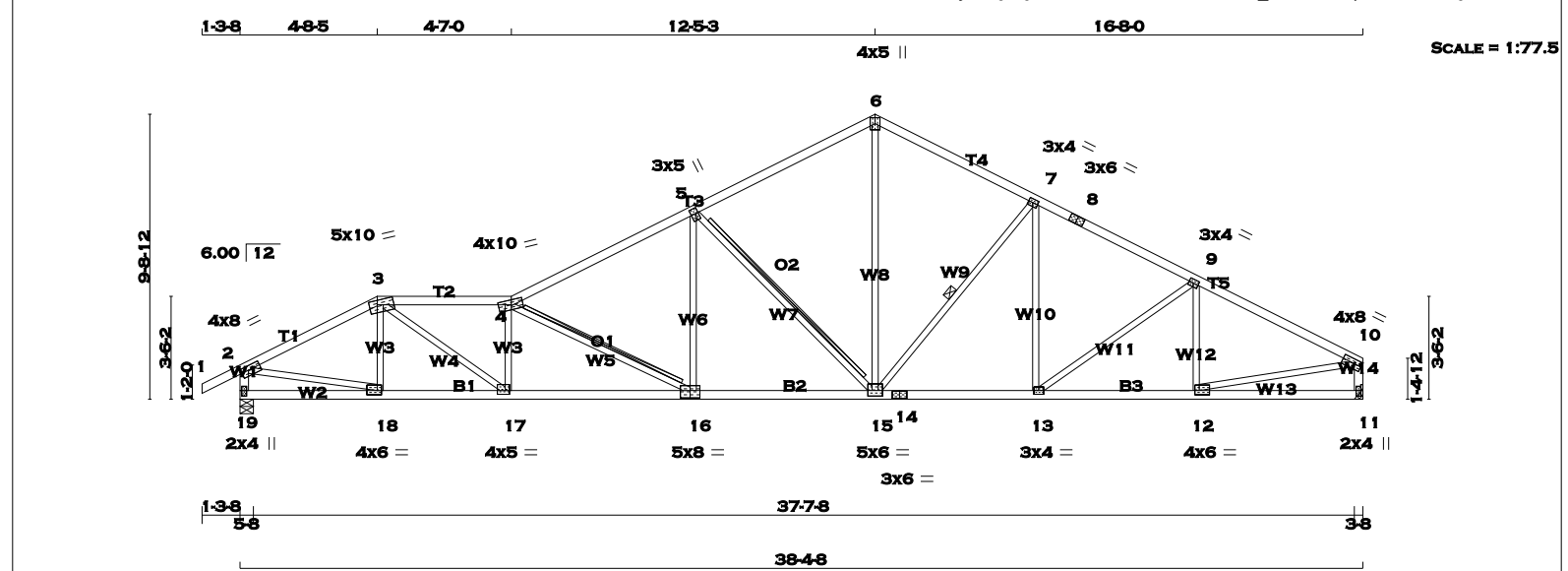
READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



14 MAR 2017

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MAR 29, 2017
17-5215
BUILDING DIVISION





TOTAL WEIGHT = 2 X 158 = 316 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 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	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	8.0	1.75 3.00
3	TTWW-m	MT20	5.0	10.0	1.75 3.25
4	TTWW-m	MT20	4.0	10.0	2.00 4.75
5	TMVW+t	MT20	3.0	5.0	2.25 0.75
6	TTW+p	MT20	4.0	5.0	
7	TMVW-t	MT20	3.0	4.0	1.50 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	6.0	1.75 1.75
13	BMVW-t	MT20	3.0	4.0	
14	BS-t	MT20	3.0	6.0	
15	BMVW+t	MT20	5.0	6.0	2.25 3.00
16	BSWV-l	MT20	5.0	8.0	3.00 4.00
17	BMVW-t	MT20	4.0	5.0	1.50 1.75
18	BMVW-t	MT20	4.0	6.0	1.75 1.75
19	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

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

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.

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
19	1925	0	1925	0	0	5-8	5-8
11	1820	0	1820	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	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) 19

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-15. DBS = 20-0-0. CBF = 73 LBS.
2x4 SPF No.2 T-BRACE AT 4-16, 5-15

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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	18-3	-328 / 0	0.07 (1)
2-3	-2635 / 0	-77.3 -77.3	0.32 (1)	4.00	3-17	0 / 1974	0.44 (1)
3-4	-3948 / 0	-77.3 -77.3	0.41 (1)	3.25	17-4	-1074 / 0	0.22 (1)
4-5	-3024 / 0	-77.3 -77.3	0.58 (1)	3.53	4-16	-1411 / 0	0.53 (1)
5-6	-2069 / 0	-77.3 -77.3	0.47 (1)	4.25	16-5	0 / 767	0.17 (1)
6-7	-2061 / 0	-77.3 -77.3	0.34 (1)	4.42	5-15	-1286 / 0	0.79 (1)
7-8	-2457 / 0	-77.3 -77.3	0.35 (1)	4.11	15-6	0 / 1472	0.33 (1)
8-9	-2457 / 0	-77.3 -77.3	0.35 (1)	4.11	15-7	-583 / 0	0.30 (1)
9-10	-2565 / 0	-77.3 -77.3	0.42 (1)	3.97	13-7	0 / 172	0.04 (4)
19-2	-1889 / 0	0.0 0.0	0.19 (1)	6.10	13-9	-139 / 0	0.12 (1)
11-10	-1776 / 0	0.0 0.0	0.18 (1)	6.26	12-9	-336 / 0	0.09 (1)
					2-18	0 / 2392	0.54 (1)
19-18	0 / 0	-17.5 -17.5	0.08 (4)	10.00	12-10	0 / 2352	0.53 (1)
18-17	0 / 2344	-17.5 -17.5	0.42 (1)	10.00			
17-16	0 / 3983	-17.5 -17.5	0.72 (1)	10.00			
16-15	0 / 2729	-17.5 -17.5	0.51 (1)	10.00			
15-14	0 / 2197	-17.5 -17.5	0.43 (1)	10.00			
14-13	0 / 2197	-17.5 -17.5	0.43 (1)	10.00			
13-12	0 / 2310	-17.5 -17.5	0.42 (1)	10.00			
12-11	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
- 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 (0.25")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/992 (0.46")

CSI: TC=0.58 (4-5:1), BC=0.72 (16-17:1), WB=0.79 (5-15:1), SSI=0.21 (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.

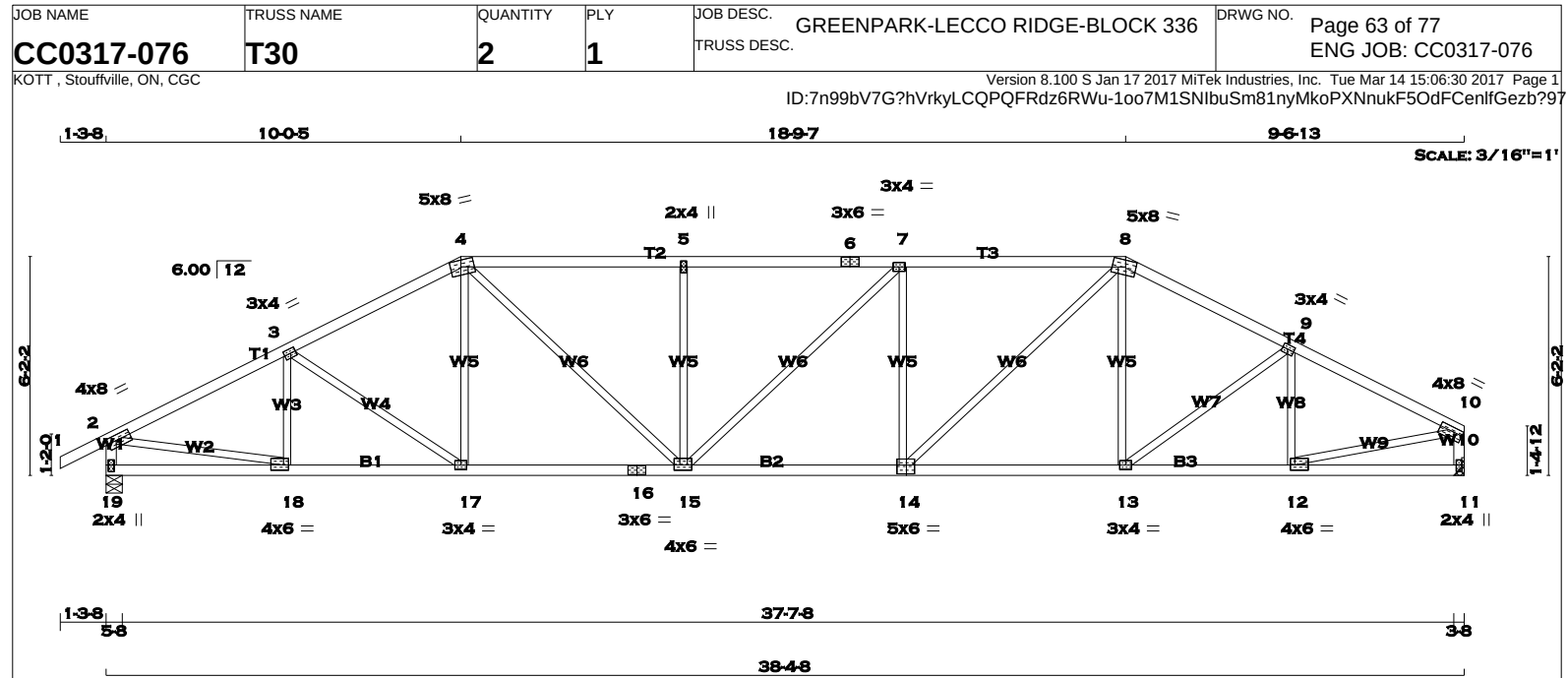
JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.81 (16) (INPUT = 1.00)

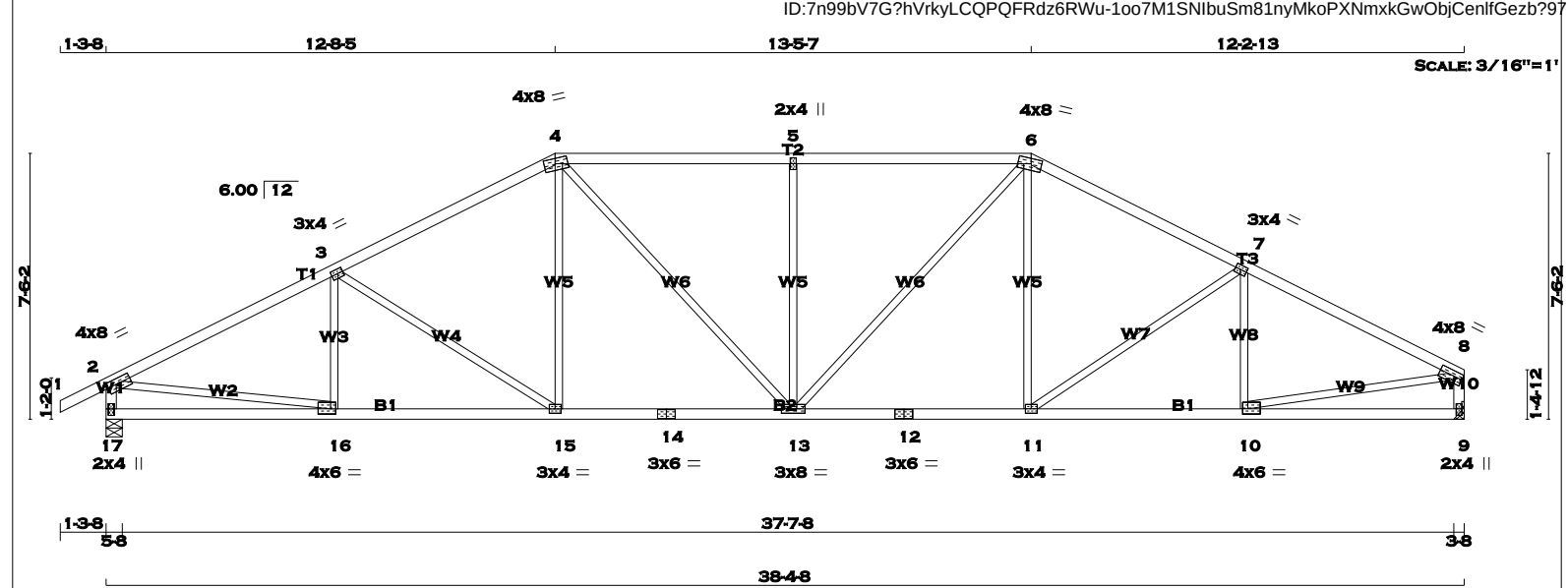


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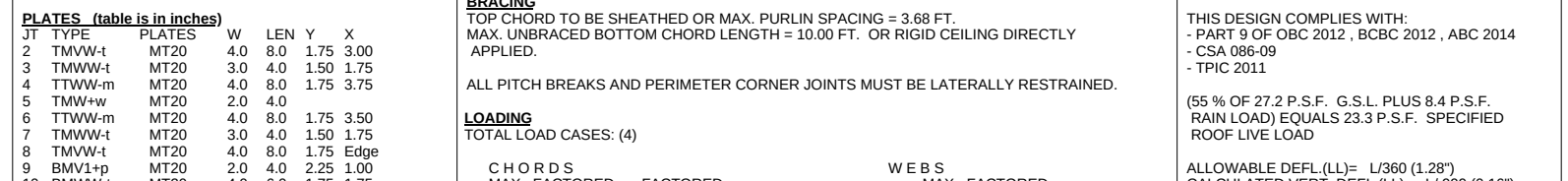
LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 4 2x4 DRY No.2 SPF
2 - 4 2x4 DRY No.2 SPF
6 - 8 2x4 DRY No.2 SPF
17 - 2 2x4 DRY No.2 SPF
9 - 8 2x4 DRY No.2 SPF
17 - 14 2x4 DRY No.2 SPF
14 - 12 2x4 DRY No.2 SPF
12 - 9 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED MAXIMUM FACTORED INPUT REQRD
GROSS REACTION GROSS REACTION BRG BRG
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX
17 1925 0 1925 0 0 5-8 5-8
9 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
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
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) VERT. LOAD (PLF) LC1 MAX. (LC) UNBRAC. LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. (LC)
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 0.19 (1) 6.13 11-7 -295 / 0 0.32 (1)
9-8 -1773 / 0 0.0 0.0 0.18 (1) 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

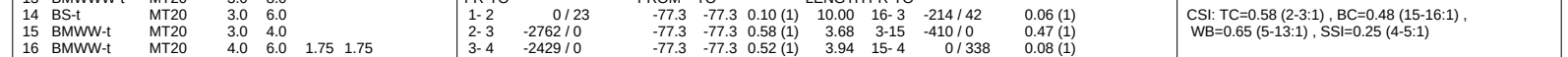
DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN. C/C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010
THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.30")
CSI: TC=0.58 (2-3:1), BC=0.48 (15-16:1), WB=0.65 (5-13:1), SSI=0.25 (4-5:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10
COMPANION LIVE LOAD FACTOR = 0.50
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.62 (16) (INPUT = 1.00)

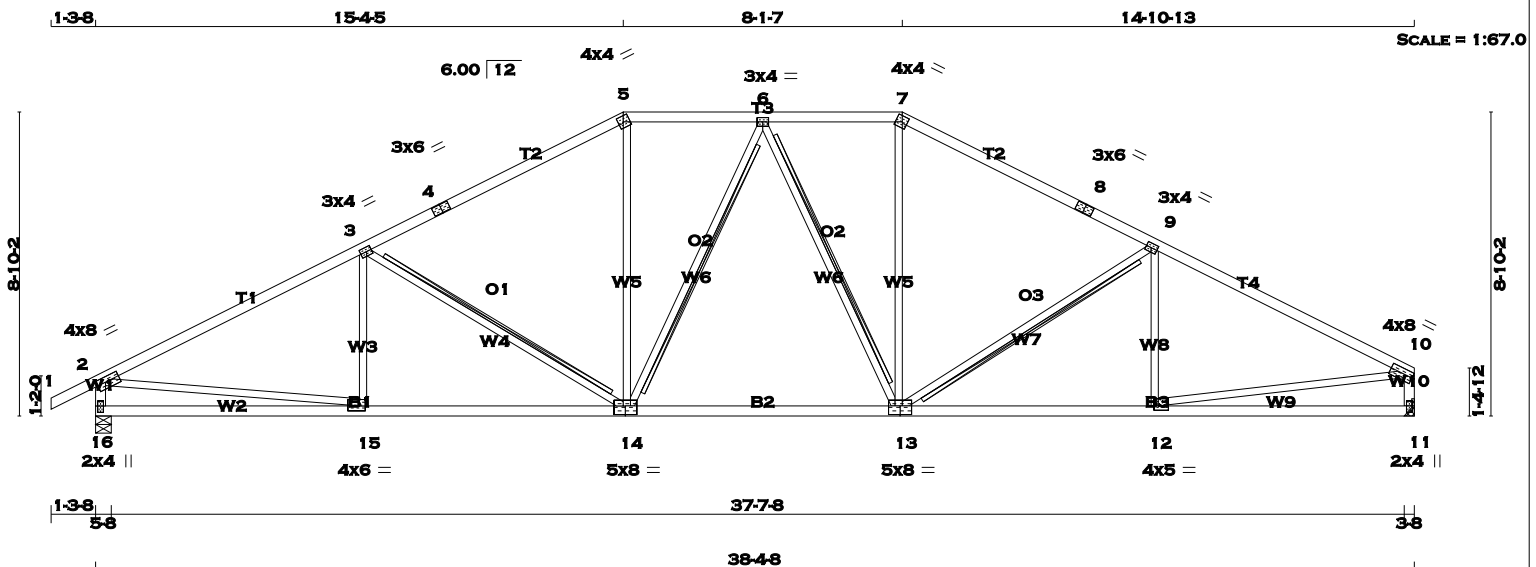
PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
2 TMVW-t MT20 4.0 8.0 1.75 3.00
3 TMVW-t MT20 3.0 4.0 1.50 1.75
4 TTWW-m MT20 4.0 8.0 1.75 3.75
5 TMW+w MT20 2.0 4.0
6 TTWW-m MT20 4.0 8.0 1.75 3.50
7 TMVW-t MT20 3.0 4.0 1.50 1.75
8 TMVW-t MT20 4.0 8.0 1.75 Edge
9 BMV1+p MT20 2.0 4.0 2.25 1.00
10 BMVW-t MT20 4.0 6.0 1.75 1.75
11 BMVW-t MT20 3.0 4.0
12 BS-t MT20 3.0 6.0
13 BMVW-t MT20 3.0 8.0
14 BS-t MT20 3.0 6.0
15 BMVW-t MT20 3.0 4.0
16 BMVW-t MT20 4.0 6.0 1.75 1.75
17 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.

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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TOTAL WEIGHT = 2 X 157 = 314 lb
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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 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	TMWW-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	TMWW-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	TMWW-t	MT20	3.0	4.0	1.50 1.75
10	TMVW-t	MT20	4.0	8.0	1.75 Edge
11	BMV1+p	MT20	2.0	4.0	2.25 1.00
12	BMWW-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	BMWW-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.

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.

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
16	1925	0	1925	0	0	5-8	5-8
11	1820	0	1820	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	DOWN	HORZ	UPLIFT	IN-SX	DOWN	HORZ	UPLIFT	IN-SX	DOWN	HORZ
16	1349	957 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	392 / 0	0 / 0	384 / 0	0 / 0	0 / 0	0 / 0
11	1277	893 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	384 / 0	0 / 0	384 / 0	0 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.27 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.

2x4 SPF No.2 T-BRACE AT 3-14, 6-14, 6-13
2x3 SPF No.2 T-BRACE AT 9-13

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

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

LOADING		TOTAL LOAD CASES: (4)	
CHORDS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)
FR-TO		FROM TO	
1-2	0 / 23	-77.3	-77.3 0.10 (1)
2-3	-2776 / 0	-77.3	-77.3 0.92 (1)
3-4	-2235 / 0	-77.3	-77.3 0.78 (1)
4-5	-2235 / 0	-77.3	-77.3 0.78 (1)
5-6	-1974 / 0	-77.3	-77.3 0.19 (1)
6-7	-1953 / 0	-77.3	-77.3 0.19 (1)
7-8	-2211 / 0	-77.3	-77.3 0.72 (1)
8-9	-2211 / 0	-77.3	-77.3 0.72 (1)
9-10	-2645 / 0	-77.3	-77.3 0.82 (1)
16-2	-1868 / 0	0.0	0.0 0.19 (1)
11-10	-1764 / 0	0.0	0.0 0.18 (1)
16-15	0 / 0	-17.5	-17.5 0.24 (4)
15-14	0 / 2511	-17.5	-17.5 0.52 (1)
14-13	0 / 2051	-17.5	-17.5 0.45 (1)
13-12	0 / 2393	-17.5	-17.5 0.50 (1)
12-11	0 / 0	-17.5	-17.5 0.22 (4)

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
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=0.74 (9-13:1), 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)
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

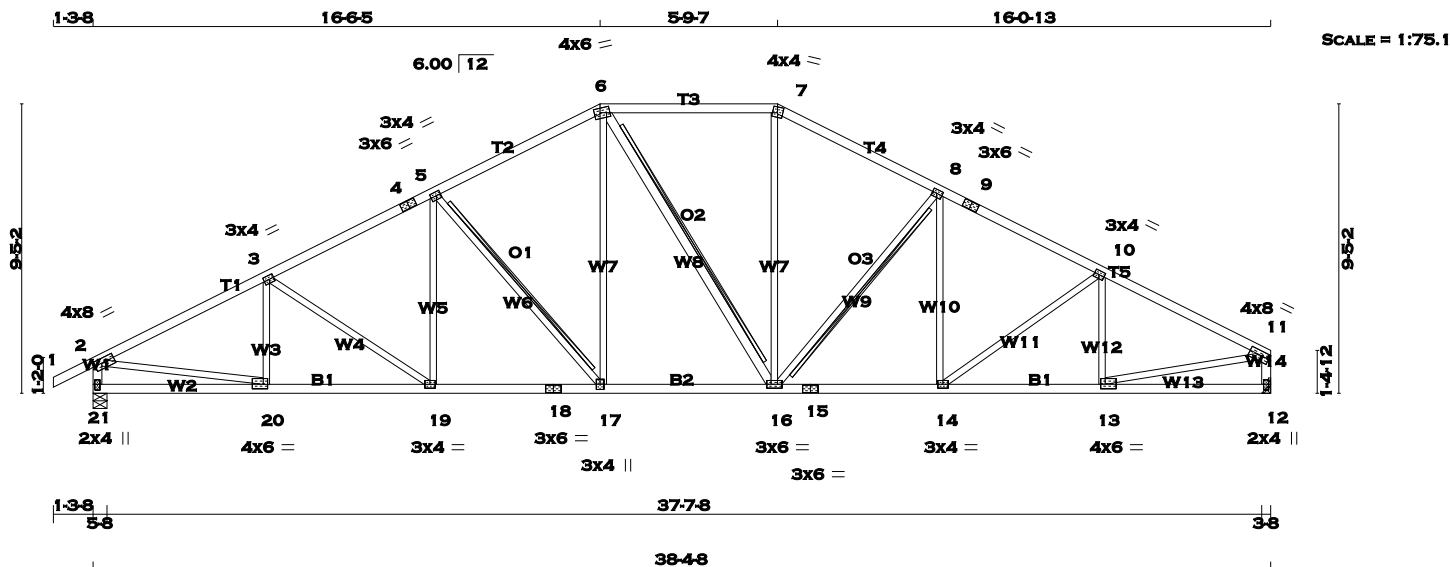
PLATE ROTATION TOL. = 5.0 Deg.

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



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TOTAL WEIGHT = 2 X 170 = 339 lb
[M][F]

LUMBER					
N. L. G. A. RULES		LUMBER	DESCR.	SIZE	
CHORDS					
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 7	2x4	DRY	No.2	SPF	
7 - 9	2x4	DRY	No.2	SPF	
9 - 11	2x4	DRY	No.2	SPF	
21 - 2	2x4	DRY	No.2	SPF	
12 - 11	2x4	DRY	No.2	SPF	
21 - 18	2x4	DRY	No.2	SPF	
18 - 15	2x4	DRY	No.2	SPF	
15 - 12	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
6 - 16	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	8.0	1.75 3.00
3, 5, 8, 10					
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
6	TTWW-m	MT20	4.0	6.0	1.75 2.25
7	TTW-m	MT20	4.0	4.0	2.25 2.00
9	TS-t	MT20	3.0	6.0	
11	TMVW-t	MT20	4.0	8.0	1.75 Edge
12	BMV1+p	MT20	2.0	4.0	2.25 1.00
13	BMWW-t	MT20	4.0	6.0	1.75 1.75
14	BMWW-t	MT20	3.0	4.0	
15	BS-t	MT20	3.0	6.0	
16	BMWW-t	MT20	3.0	6.0	
17	BMWW-t	MT20	3.0	4.0	
18	BS-t	MT20	3.0	6.0	
19	BMWW-t	MT20	3.0	4.0	
20	BMWW-t	MT20	4.0	6.0	1.75 1.75
21	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

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

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.

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
21	1925	0	1925	0	0	5-8	5-8
12	1820	0	1820	0	0	HANGER BY OTHERS	
						MIN. SEAT SIZE: 3-8	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
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 = 3.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

2x3 SPF No.2 T-BRACE AT 5-17, 8-16
2x4 SPF No.2 T-BRACE AT 6-16

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

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

LOADING									
TOTAL LOAD CASES: (4)									
C H O R D S					W E B S				
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	LC1 MAX	MAX.	MEMB.	MAX. FACTORED		
	FORCE		(PLF)	CSI (LC)	UNBRAC		FORCE	MAX	
	(LBS)						(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	20-3	-270 / 11		0.07 (1)
2-3	-2720 / 0	-77.3	-77.3	0.43 (1)	3.86	3-19	-202 / 0		0.16 (1)
3-4	-2550 / 0	-77.3	-77.3	0.35 (1)	4.05	19-5	0 / 209		0.05 (4)
4-5	-2550 / 0	-77.3	-77.3	0.35 (1)	4.05	5-17	-621 / 0		0.75 (1)
5-6	-2115 / 0	-77.3	-77.3	0.34 (1)	4.38	17-6	0 / 567		0.13 (1)
6-7	-1868 / 0	-77.3	-77.3	0.39 (1)	4.52	6-16	-24 / 0		0.02 (1)
7-8	-2100 / 0	-77.3	-77.3	0.32 (1)	4.41	16-7	0 / 545		0.12 (1)
8-9	-2476 / 0	-77.3	-77.3	0.33 (1)	4.13	16-8	-551 / 0		0.66 (1)
9-10	-2476 / 0	-77.3	-77.3	0.33 (1)	4.13	14-8	0 / 150		0.04 (4)
10-11	-2551 / 0	-77.3	-77.3	0.39 (1)	4.01	14-10	-102 / 0		0.08 (1)
21-2	-1881 / 0	0.0	0.0	0.19 (1)	6.12	13-10	-354 / 0		0.09 (1)
12-11	-1778 / 0	0.0	0.0	0.18 (1)	6.26	2-20	0 / 2476		0.56 (1)
						13-11	0 / 2341		0.53 (1)
21-20	0 / 0	-17.5	-17.5	0.12 (4)	10.00				
20-19	0 / 2448	-17.5	-17.5	0.44 (1)	10.00				
19-18	0 / 2281	-17.5	-17.5	0.42 (1)	10.00				
18-17	0 / 2281	-17.5	-17.5	0.42 (1)	10.00				
17-16	0 / 1881	-17.5	-17.5	0.37 (1)	10.00				
16-15	0 / 2215	-17.5	-17.5	0.42 (1)	10.00				
15-14	0 / 2215	-17.5	-17.5	0.42 (1)	10.00				
14-13	0 / 2297	-17.5	-17.5	0.41 (1)	10.00				
13-12	0 / 0	-17.5	-17.5	0.11 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.43 (2-3:1), BC=0.44 (19-20:1), WB=0.75 (5-17:1), SSI=0.18 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

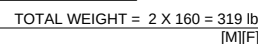
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.61 (20) (INPUT = 1.00)



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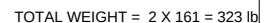
DRY: SEASONED LUMBER.

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

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

18-17	0/0	-17.5	-17.5	0.20 (4)	10.00
17-16	0/2541	-17.5	-17.5	0.50 (1)	10.00
16-15	0/2114	-17.5	-17.5	0.42 (1)	10.00
15-14	0/2114	-17.5	-17.5	0.42 (1)	10.00
14-13	0/2114	-17.5	-17.5	0.42 (1)	10.00
13-12	0/2114	-17.5	-17.5	0.42 (1)	10.00
12-11	0/2541	-17.5	-17.5	0.50 (1)	10.00
11-10	0/0	-17.5	-17.5	0.20 (4)	10.00

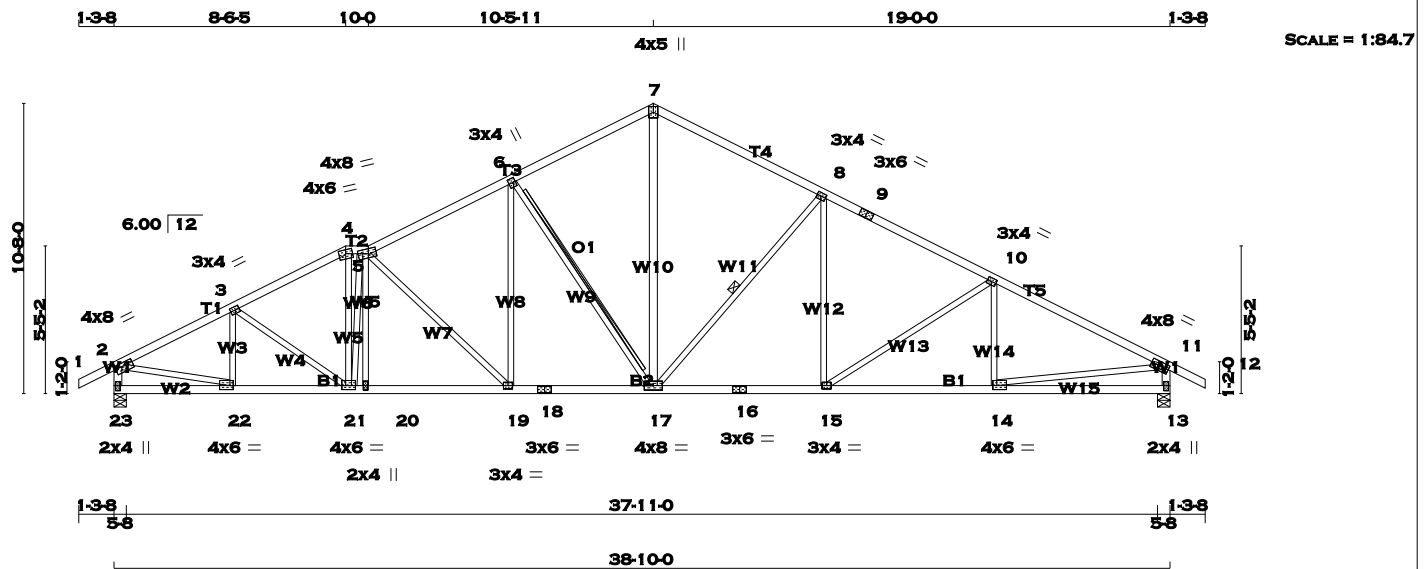




JSI GRIP= 0.89 (10) (INPUT = 0.90)
JSI METAL= 0.62 (13) (INPUT = 1.00)

21-20	0/0	-17.5	-17.5	0.12 (4)	10.00
20-19	0/2498	-17.5	-17.5	0.46 (1)	10.00
19-18	0/2278	-17.5	-17.5	0.43 (1)	10.00
18-17	0/2278	-17.5	-17.5	0.43 (1)	10.00
17-16	0/2749	-17.5	-17.5	0.49 (1)	10.00
16-15	0/2278	-17.5	-17.5	0.43 (1)	10.00
15-14	0/2278	-17.5	-17.5	0.43 (1)	10.00
14-13	0/2498	-17.5	-17.5	0.46 (1)	10.00
13-12	0/0	-17.5	-17.5	0.12 (4)	10.00





LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
9 - 12	2x4	DRY	No.2	SPF
23 - 2	2x4	DRY	No.2	SPF
13 - 11	2x4	DRY	No.2	SPF
23 - 18	2x4	DRY	No.2	SPF
18 - 16	2x4	DRY	No.2	SPF
16 - 13	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
17 - 7	2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
2	TMVW-t	MT20	4.0	8.0 1.50 3.00
3, 8, 10				
3	TMWW-t	MT20	3.0	4.0 1.50 1.75
4	TTW-m	MT20	4.0	6.0 1.75 3.00
5	TTWWW-m	MT20	4.0	8.0 2.25 3.50
6	TMWW+t	MT20	3.0	4.0 2.00 0.75
7	TTW+p	MT20	4.0	5.0
9	TS-t	MT20	3.0	6.0
11	TMVW-t	MT20	4.0	8.0 1.75 3.00
13	BMV1+p	MT20	2.0	4.0 2.25 1.00
14	BMWW-t	MT20	4.0	6.0 1.75 1.75
15	BMWW-t	MT20	3.0	4.0
16	BS-t	MT20	3.0	6.0
17	BMWWW-t	MT20	4.0	8.0
18	BS-t	MT20	3.0	6.0
19	BMWW-t	MT20	3.0	4.0
20	BMW+w	MT20	2.0	4.0
21	BMWWW-t	MT20	4.0	6.0 1.75 3.00
22	BMWW-t	MT20	4.0	6.0 1.75 1.50
23	BMV1+p	MT20	2.0	4.0 2.25 1.00

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

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.



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	
23		1947	0	1947	0	0	5-8	5-8	
13		1947	0	1947	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
23		1364	967 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0	
13		1364	967 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 23, 13									

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-17. DBS = 18-0-0. CBF = 86 LBS.
2x4 SPF No.2 T-BRACE AT 6-17

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.

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

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

LOADING				
TOTAL LOAD CASES: (4)				
CHORDS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO				
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00
2-3	-2660 / 0	-77.3	-77.3 0.26 (1)	4.05
3-4	-2701 / 0	-77.3	-77.3 0.25 (1)	4.03
4-5	-2421 / 0	-77.3	-77.3 0.07 (1)	4.39
5-6	-2443 / 0	-77.3	-77.3 0.36 (1)	4.09
6-7	-1956 / 0	-77.3	-77.3 0.33 (1)	4.52
7-8	-1956 / 0	-77.3	-77.3 0.44 (1)	4.40
8-9	-2492 / 0	-77.3	-77.3 0.46 (1)	3.99
9-10	-2492 / 0	-77.3	-77.3 0.46 (1)	3.99
10-11	-2787 / 0	-77.3	-77.3 0.58 (1)	3.69
11-12	0 / 23	-77.3	-77.3 0.10 (1)	10.00
23-2	-1907 / 0	0.0	0.0 0.19 (1)	6.09
13-11	-1898 / 0	0.0	0.0 0.19 (1)	6.10
23-22	0 / 0	-17.5	-17.5 0.07 (4)	10.00
22-21	0 / 2392	-17.5	-17.5 0.47 (1)	10.00
21-20	0 / 2546	-17.5	-17.5 0.49 (1)	10.00
20-19	0 / 2547	-17.5	-17.5 0.48 (1)	10.00
19-18	0 / 2205	-17.5	-17.5 0.43 (1)	10.00
18-17	0 / 2205	-17.5	-17.5 0.43 (1)	10.00
17-16	0 / 2229	-17.5	-17.5 0.43 (1)	10.00
16-15	0 / 2229	-17.5	-17.5 0.43 (1)	10.00
15-14	0 / 2511	-17.5	-17.5 0.47 (1)	10.00
14-13	0 / 0	-17.5	-17.5 0.16 (4)	10.00

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/999 (0.32")

CSI: TC=0.58 (10-11:1), BC=0.49 (20-21:1), WB=0.59 (6-17:1), SSI=0.21 (10-11:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

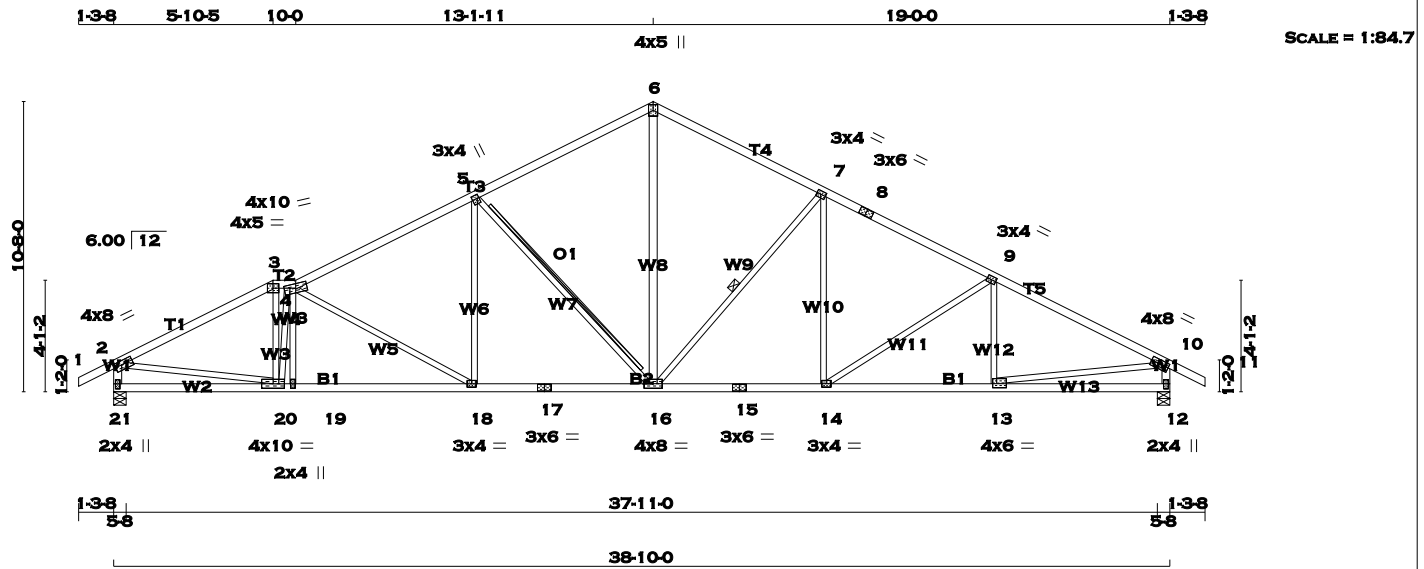
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.77 (5) (INPUT = 1.00)





TOTAL WEIGHT = $2 \times 170 = 340 \text{ lb}$

LUMBER

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 11	2x4	DRY	No.2	SPF
21 - 2	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
21 - 17	2x4	DRY	No.2	SPF
17 - 15	2x4	DRY	No.2	SPF
15 - 12	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
16 - 6	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

J	T	TYPE	PLATES	W	LEN	Y	X
2		TMWV-t	MT20	4.0	8.0	1.75	3.00
3		TTW-l	MT20	4.0	5.0		
4		TTWVV-m	MT20	4.0	10.0		
5		TMWV+t	MT20	3.0	4.0	1.75	0.75
6		TTW+p	MT20	4.0	5.0		
7		TMWV-t	MT20	3.0	4.0	1.50	1.75
8		TS-t	MT20	3.0	6.0		
9		TMWV-t	MT20	3.0	4.0	1.50	1.75
10		TMWV-t	MT20	4.0	8.0	1.75	3.00
12		BMV1+p	MT20	2.0	4.0	2.25	1.00
13		BMWV-t	MT20	4.0	6.0	1.75	1.75
14		BMWV-t	MT20	3.0	4.0		
15		BS-t	MT20	3.0	6.0		
16		BMWVV-t	MT20	4.0	8.0		
17		BS-t	MT20	3.0	6.0		
18		BMWV-t	MT20	3.0	4.0		
19		BMW+w	MT20	2.0	4.0		
20		BMWVV-t	MT20	4.0	10.0		
21		BMV1+p	MT20	2.0	4.0	2.25	1.00

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

**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.**



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
21	1947	0	1947	0	0	5-8	5-8
12	1947	0	1947	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	
21	1364	967 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0
12	1364	967 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 7-16. DBS = 18-0-0 . CBF = 85 LBS.
2x4 SPF No.2 T-BRACE AT 5-16

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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)	UNBRAC			(LBS)	CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO				
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	20-3	0 / 970	0.22 (1)	
2-3	-2738 / 0	-77.3	-77.3	0.49 (1)	3.77	20-4	-1134 / 0	0.29 (1)	
3-4	-2501 / 0	-77.3	-77.3	0.07 (1)	4.33	19-4	-72 / 6	0.02 (1)	
4-5	-2588 / 0	-77.3	-77.3	0.60 (1)	3.75	4-18	-400 / 0	0.48 (1)	
5-6	-1963 / 0	-77.3	-77.3	0.53 (1)	4.27	18-5	0 / 326	0.07 (1)	
6-7	-1957 / 0	-77.3	-77.3	0.44 (1)	4.40	5-16	-895 / 0	0.67 (1)	
7-8	-2492 / 0	-77.3	-77.3	0.46 (1)	3.99	16-6	0 / 1343	0.22 (1)	
8-9	-2492 / 0	-77.3	-77.3	0.46 (1)	3.99	16-7	-759 / 0	0.49 (1)	
9-10	-2787 / 0	-77.3	-77.3	0.58 (1)	3.69	14-7	0 / 291	0.07 (1)	
10-11	0 / 23	-77.3	-77.3	0.10 (1)	10.00	14-9	-338 / 0	0.38 (1)	
21-2	-1905 / 0	0.0	0.0	0.19 (1)	6.09	13-9	-213 / 42	0.06 (1)	
12-10	-1898 / 0	0.0	0.0	0.19 (1)	6.10	2-20	0 / 2472	0.56 (1)	
						13-10	0 / 2533	0.57 (1)	
21-20	0 / 0	-17.5	-17.5	0.17 (4)	10.00				
20-19	0 / 2685	-17.5	-17.5	0.53 (1)	10.00				
19-18	0 / 2687	-17.5	-17.5	0.52 (1)	10.00				
18-17	0 / 2341	-17.5	-17.5	0.47 (1)	10.00				
17-16	0 / 2341	-17.5	-17.5	0.47 (1)	10.00				
16-15	0 / 2228	-17.5	-17.5	0.44 (1)	10.00				
15-14	0 / 2228	-17.5	-17.5	0.44 (1)	10.00				
14-13	0 / 2511	-17.5	-17.5	0.47 (1)	10.00				
13-12	0 / 0	-17.5	-17.5	0.16 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")

CSI: TC=0.60 (4-5:1), BC=0.53 (19-20:1),
WB=0.67 (5-16:1), SSI=0.22 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

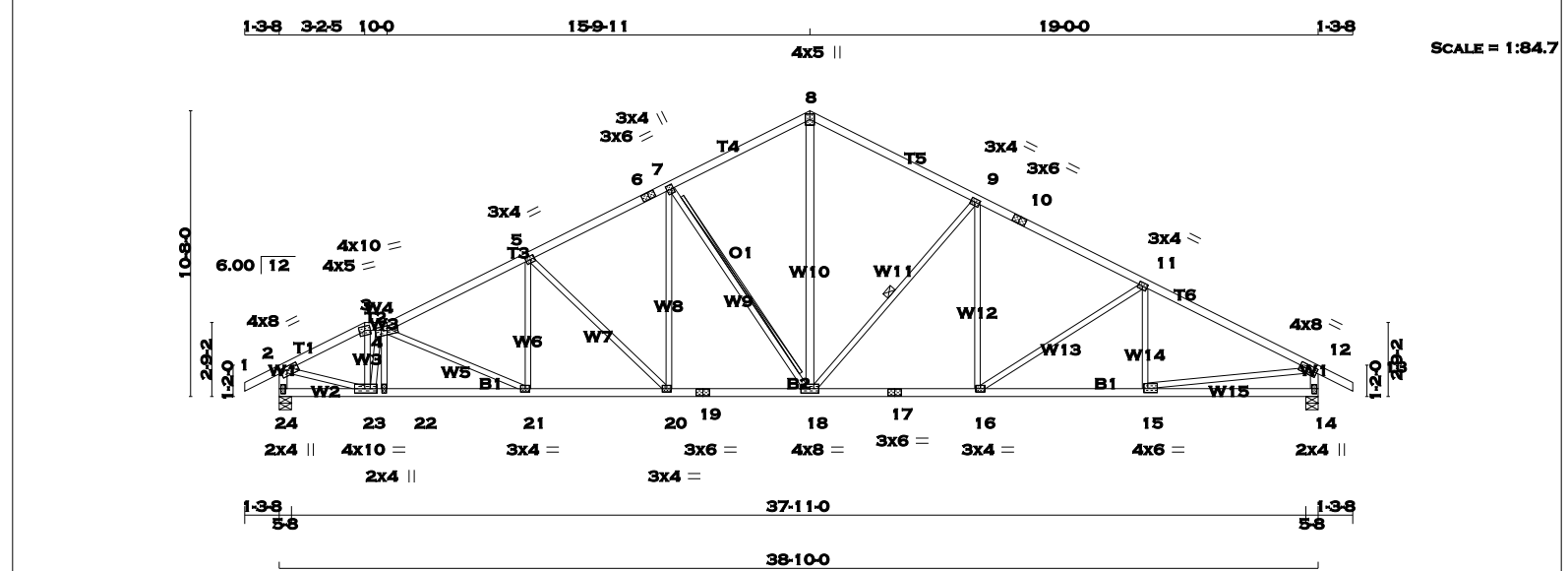
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (2) (INPUT = 0.90)
JSI METAL= 0.87 (4) (INPUT = 1.00)



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 - 13

2x4

DRY

No.2

SPF

24 - 2

2x4

DRY

No.2

SPF

14 - 12

2x4

DRY

No.2

SPF

24 - 19

2x4

DRY

No.2

SPF

19 - 17

2x4

DRY

No.2

SPF

17 - 14

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

18 - 8

2x4

DRY

No.2

SPF

DRY: SEASONED LUMBER.

TOTAL WEIGHT = 2 X 173 = 346 lb

[M][F]

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			
BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	HORIZ
24	1947	0	1947
14	1947	0	1947
INPUT BRG		REQRD BRG	
JT	IN-SX	JT	IN-SX
24	5-8	24	5-8
14	5-8	14	5-8

UNFACTORED REACTIONS			
1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	LIVE	PERM.LIVE
24	1364	967 / 0	0 / 0
14	1364	967 / 0	0 / 0
WIND		DEAD	
JT	SOIL	JT	SOIL
24	396 / 0	24	396 / 0
14	396 / 0	14	396 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 24, 14

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-18. DBS = 18-0-0. CBF = 85 LBS.

2x4 SPF No.2 T-BRACE AT 7-18

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.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC1)
FR-TO	FROM	TO	FR-TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)
2-3	-2485 / 0	-77.3	-77.3 0.17 (1)
3-4	-2261 / 0	-77.3	-77.3 0.06 (1)
4-5	-2896 / 0	-77.3	-77.3 0.39 (1)
5-6	-2459 / 0	-77.3	-77.3 0.32 (1)
6-7	-2459 / 0	-77.3	-77.3 0.32 (1)
7-8	-1953 / 0	-77.3	-77.3 0.31 (1)
8-9	-1956 / 0	-77.3	-77.3 0.44 (1)
9-10	-2492 / 0	-77.3	-77.3 0.46 (1)
10-11	-2492 / 0	-77.3	-77.3 0.46 (1)
11-12	-2787 / 0	-77.3	-77.3 0.58 (1)
12-13	0 / 23	-77.3	-77.3 0.10 (1)
24-2	-1922 / 0	0.0	0.0 0.19 (1)
14-12	-1898 / 0	0.0	0.0 0.19 (1)
24-23	0 / 0	-17.5	-17.5 0.04 (4)
23-22	0 / 2688	-17.5	-17.5 0.46 (1)
22-21	0 / 2689	-17.5	-17.5 0.51 (1)
21-20	0 / 2607	-17.5	-17.5 0.48 (1)
20-19	0 / 2200	-17.5	-17.5 0.43 (1)
19-18	0 / 2200	-17.5	-17.5 0.43 (1)
18-17	0 / 2228	-17.5	-17.5 0.44 (1)
17-16	0 / 2228	-17.5	-17.5 0.44 (1)
16-15	0 / 2511	-17.5	-17.5 0.47 (1)
15-14	0 / 2511	-17.5	-17.5 0.16 (4)
23-3	0 / 961	0.22	0.22 (1)
22-4	-1506 / 0	0.25	0.25 (1)
21-5	-15 / 55	0.02	0.02 (4)
20-6	-90 / 0	0.05	0.05 (1)
19-7	0 / 148	0.04	0.04 (4)
18-8	-566 / 0	0.59	0.59 (1)
17-9	0 / 475	0.11	0.11 (1)
16-10	-832 / 0	0.58	0.58 (1)
15-11	0 / 1371	0.22	0.22 (1)
14-12	-760 / 0	0.49	0.49 (1)
13-13	0 / 292	0.07	0.07 (1)
12-14	-337 / 0	0.38	0.38 (1)
11-15	-213 / 41	0.06	0.06 (1)
10-16	0 / 2294	0.52	0.52 (1)
9-17	0 / 2533	0.57	0.57 (1)

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")

CALCULATED VERT. DEFL.(LL) = L/999 (0.17")

ALLOWABLE DEFL.(TL)= L/360 (1.29")

CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CSI: TC=0.58 (11-12:1), BC=0.51 (21-22:1), WB=0.59 (5-20:1), SSI=0.21 (11-12:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES			
PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	SECTION (PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667
822	2284	1656	
PLATE PLACEMENT TOL. = 0.250 inches			
PLATE ROTATION TOL. = 5.0 Deg.			
JSI GRIP= 0.89 (20) (INPUT = 0.90)			
JSI METAL= 0.96 (4) (INPUT = 1.00)			

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.

LICENSED PROFESSIONAL ENGINEER

C.G. CARSON

100076892

PROVINCE OF ONTARIO

14 MAR 2017

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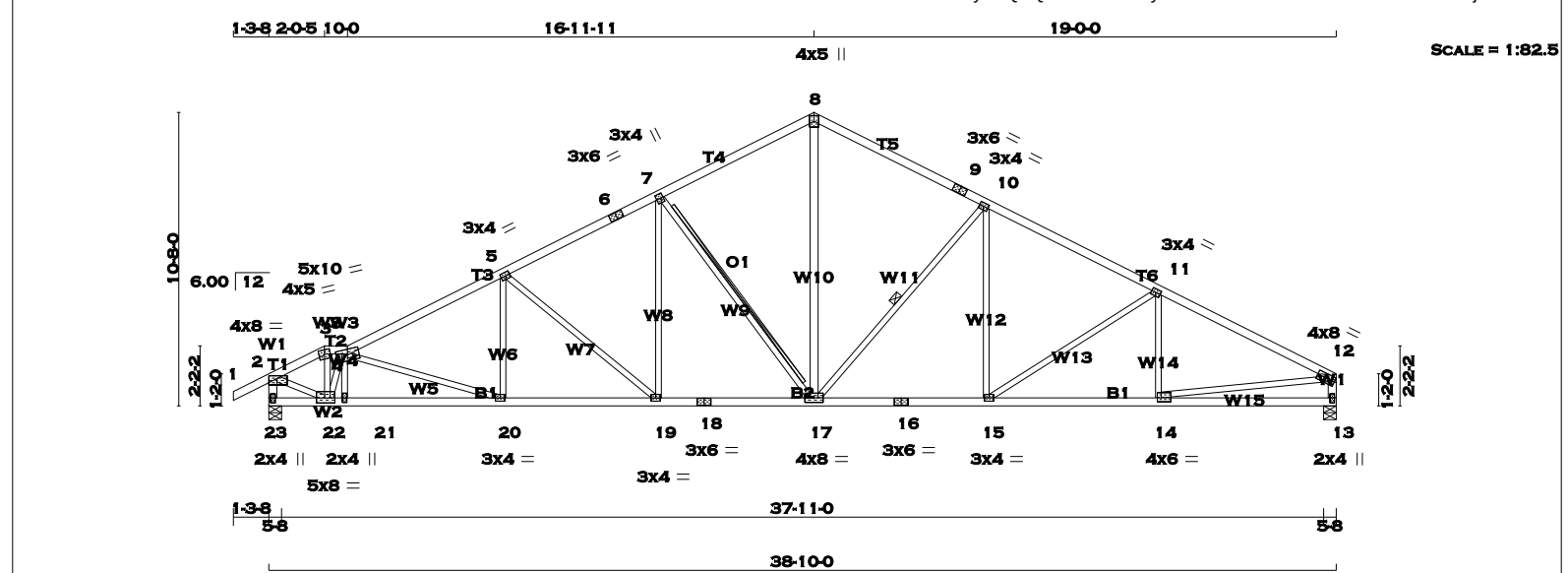
TOWN OF MILTON

MAR 29, 2017

17-5215

BUILDING DIVISION

KOTT



TOTAL WEIGHT = 2 X 169 = 338 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF			
3 - 4	2x4	DRY	No.2	SPF			
4 - 6	2x4	DRY	No.2	SPF			
6 - 8	2x4	DRY	No.2	SPF			
8 - 9	2x4	DRY	No.2	SPF			
9 - 12	2x4	DRY	No.2	SPF			
23 - 2	2x4	DRY	No.2	SPF			
13 - 12	2x4	DRY	No.2	SPF			
23 - 18	2x4	DRY	No.2	SPF			
18 - 16	2x4	DRY	No.2	SPF			
16 - 13	2x4	DRY	No.2	SPF			
ALL WEBS	2x3	DRY	No.2	SPF			
EXCEPT							
17 - 8	2x4	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	1.25	3.50
3	TTW-m	MT20	4.0	5.0	1.75	2.50
4	TTWWW-m	MT20	5.0	10.0	2.00	5.00
5, 10, 11						
5	TMWW-t	MT20	3.0	4.0	1.50	1.75
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	2.00	0.75
8	TTW+p	MT20	4.0	5.0		
9	TS-t	MT20	3.0	6.0		
12	TMVW-t	MT20	4.0	8.0	1.75	Edge
13	BMV1+p	MT20	2.0	4.0	2.25	1.00
14	BMWW-t	MT20	4.0	6.0	1.75	1.75
15, 19, 20						
15	BMWW-t	MT20	3.0	4.0		
16	BS-t	MT20	3.0	6.0		
17	BMWWW-t	MT20	4.0	8.0		
18	BS-t	MT20	3.0	6.0		
21	BMW+w	MT20	2.0	4.0		
22	BMWW-t	MT20	5.0	8.0	2.25	3.50
23	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

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.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DOWN		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
23		1947	0	1947	0	0	5-8	5-8	
13		1842	0	1842	0	0	5-8	5-8	

UNFACTORED REACTIONS							
		1ST LCASE COMBINED	MAX SNOW	MIN LIVE	MAX PERM.LIVE	WIND	DEAD
JT							
23		1364	967 / 0	0 / 0	0 / 0	0 / 0	396 / 0
13		1292	904 / 0	0 / 0	0 / 0	0 / 0	388 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 23, 13

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-17. DBS = 18-0-0. CBF = 85 LBS.
2x4 SPF No.2 T-BRACE AT 7-17

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.

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

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	22-3	0 / 862	0.19 (1)
2-3	-2157 / 0	-77.3 -77.3	0.09 (1)	4.58	22-4	-1695 / 0	0.26 (1)
3-4	-1974 / 0	-77.3 -77.3	0.05 (1)	4.79	21-4	0 / 90	0.03 (4)
4-5	-2960 / 0	-77.3 -77.3	0.45 (1)	3.71	4-20	0 / 83	0.02 (1)
5-6	-2501 / 0	-77.3 -77.3	0.38 (1)	4.06	20-5	0 / 116	0.04 (4)
6-7	-2501 / 0	-77.3 -77.3	0.38 (1)	4.06	5-19	-556 / 0	0.59 (1)
7-8	-1954 / 0	-77.3 -77.3	0.36 (1)	4.50	19-7	0 / 446	0.10 (1)
8-9	-1956 / 0	-77.3 -77.3	0.44 (1)	4.40	7-17	-843 / 0	0.60 (1)
9-10	-1956 / 0	-77.3 -77.3	0.44 (1)	4.40	17-8	0 / 1359	0.22 (1)
10-11	-2492 / 0	-77.3 -77.3	0.46 (1)	3.99	17-10	-759 / 0	0.49 (1)
11-12	-2787 / 0	-77.3 -77.3	0.58 (1)	3.69	15-10	0 / 291	0.07 (1)
23-2	-1931 / 0	0.0 0.0	0.20 (1)	6.06	15-11	-337 / 0	0.38 (1)
13-12	-1793 / 0	0.0 0.0	0.18 (1)	6.24	14-11	-213 / 42	0.06 (1)
					2-22	0 / 2077	0.47 (1)
23-22	0 / 0	-17.5 -17.5	0.02 (4)	10.00	14-12	0 / 2533	0.57 (1)
22-21	0 / 2587	-17.5 -17.5	0.43 (1)	10.00			
21-20	0 / 2587	-17.5 -17.5	0.49 (1)	10.00			
20-19	0 / 2666	-17.5 -17.5	0.49 (1)	10.00			
19-18	0 / 2238	-17.5 -17.5	0.44 (1)	10.00			
18-17	0 / 2238	-17.5 -17.5	0.44 (1)	10.00			
17-16	0 / 2228	-17.5 -17.5	0.44 (1)	10.00			
16-15	0 / 2228	-17.5 -17.5	0.44 (1)	10.00			
15-14	0 / 2511	-17.5 -17.5	0.47 (1)	10.00			
14-13	0 / 0	-17.5 -17.5	0.16 (4)	10.00			



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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.29")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.31")

CSI: TC=0.58 (11-12:1), BC=0.49 (19-20:1), WB=0.60 (7-17:1), SSI=0.21 (11-12:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION	(PSI)	(PLI)
	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 (22) (INPUT = 0.90)
JSI METAL= 0.73 (4) (INPUT = 1.00)

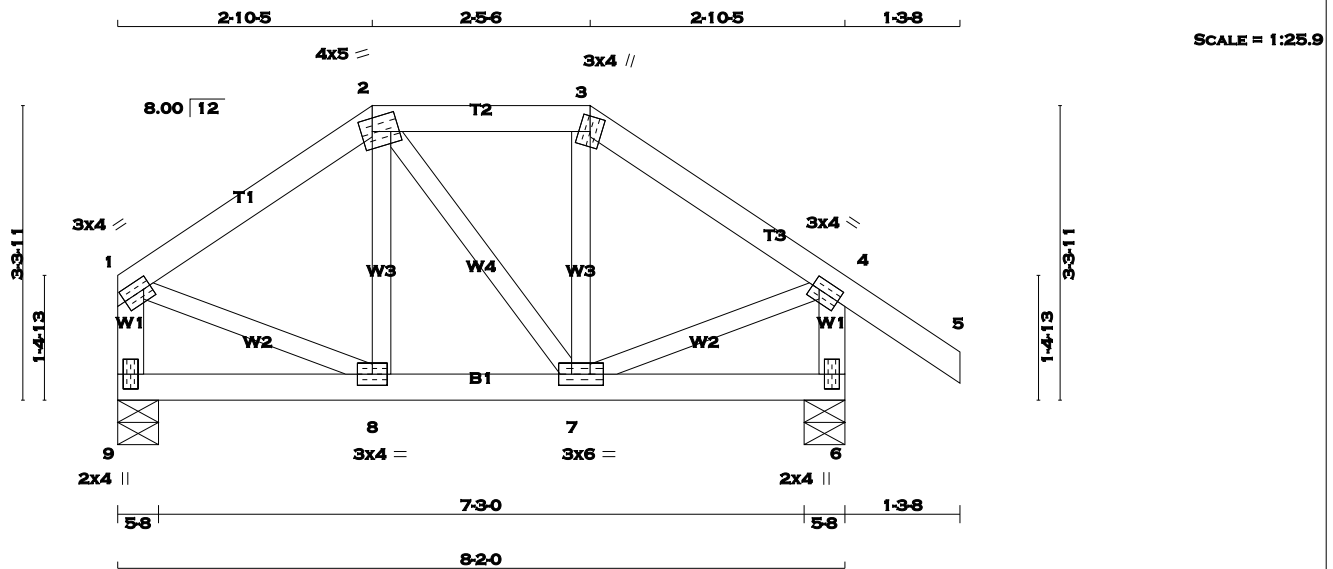


READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



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TOWN OF MILTON
MAR 29, 2017
17-5215
BUILDING DIVISION





TOTAL WEIGHT = 2 X 36 = 72 lb [M][F]

LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE						
1 - 2	2x4	DRY	No.2			SPF	
2 - 3	2x4	DRY	No.2			SPF	
3 - 5	2x4	DRY	No.2			SPF	
9 - 1	2x4	DRY	No.2			SPF	
6 - 4	2x4	DRY	No.2			SPF	
9 - 6	2x4	DRY	No.2			SPF	

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
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
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	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
9	387	0		387	0	0	5-8	5-8	
6	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
9	272	190 / 0	0 / 0	0 / 0	0 / 0	82 / 0	0 / 0
6	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) 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		MEMB.		MAX. FACTORED	
		FORCE (LBS)				FORCE (LBS)	
		VERT. LOAD LC1				MAX. FACTORED	
		PLF				FORCE (LBS)	
		CSI (LC)				MAX. FACTORED	
		UNBRAC				FORCE (LBS)	
		LENGTH FR-TO				MAX. FACTORED	
		FROM TO				FORCE (LBS)	
1-2	-295 / 0	-77.3	-77.3 0.08 (1)	6.25	8-2	-40 / 28	0.01 (4)
2-3	-243 / 0	-77.3	-77.3 0.06 (1)	6.25	2-7	0 / 0	0.00 (1)
3-4	-295 / 0	-77.3	-77.3 0.08 (1)	6.25	7-3	-41 / 28	0.01 (4)
4-5	0 / 29	-77.3	-77.3 0.10 (1)	10.00	1-8	0 / 261	0.06 (1)
9-1	-365 / 0	0.0	0.0 0.04 (1)	7.81	7-4	0 / 261	0.06 (1)
6-4	-470 / 0	0.0	0.0 0.05 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.03 (4)	10.00			
8-7	0 / 244	-17.5	-17.5 0.05 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.03 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/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 (4-5:1), BC=0.05 (7-8:1), WB=0.06 (1-8:1), SSI=0.07 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

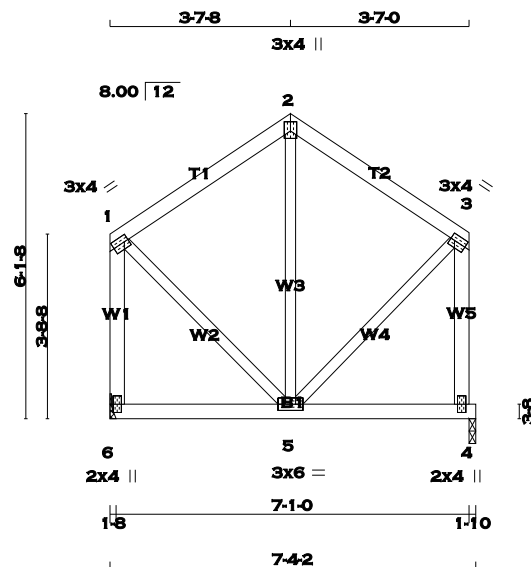
JSI GRIP= 0.85 (1) (INPUT = 0.90)
JSI METAL= 0.16 (4) (INPUT = 1.00)

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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SCALE = 1:46.3

TOTAL WEIGHT = 4 X 38 = 152 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	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			
4		342	0	342	0	0			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	240	168 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
4	240	168 / 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		MAX. FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. (LC)	UNBRAC. LENGTH	MEMB.	FORCE (LBS)	MAX. (LC)	UNBRAC. LENGTH
FR-TO		FROM	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 (5-6:4), 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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

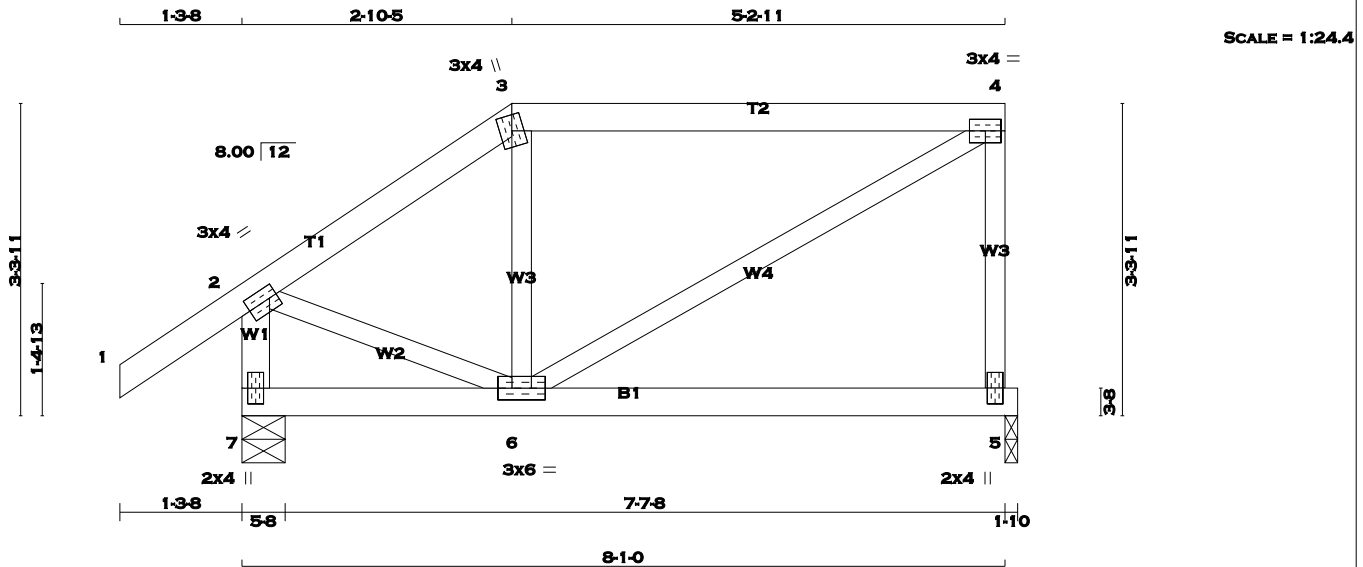
JSI GRIP= 0.48 (3) (INPUT = 0.90)
JSI METAL= 0.08 (1) (INPUT = 1.00)

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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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	1-10	1-10	
7		490	0	490	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5		269	188 / 0	0 / 0	0 / 0	0 / 0	81 / 0	0 / 0	
7		341	252 / 0	0 / 0	0 / 0	0 / 0	89 / 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		MAX. FACTORED		FACTORED		WEBS		MAX. 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	6-3	-145 / 23	0.03 (1)
2-3		-301 / 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 0.36 (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=0.36 (3-4:1), BC=0.10 (6-7:4), 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.

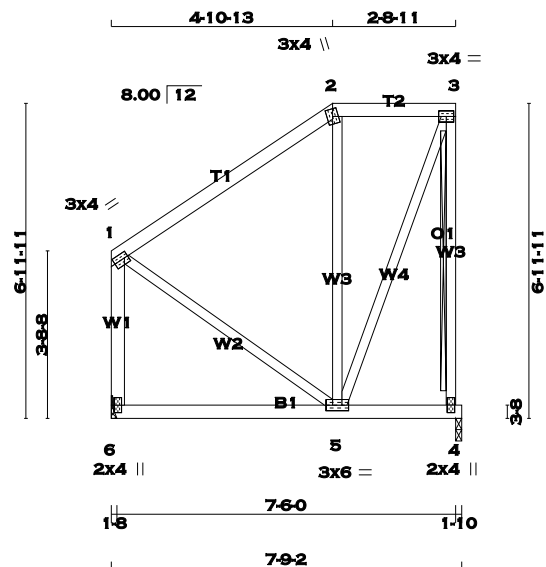
JSI GRIP= 0.87 (2) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)

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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TOTAL WEIGHT = 2 X 43 = 86 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMW-t	MT20	3.0	4.0	1.50	1.00
2	TTW+m	MT20	3.0	4.0		
3	TMW-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	1-10	1-10
6	362	0	362	0	0	HANGER BY OTHERS

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS							
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
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.

2x3 SPF No.2 T-BRACE AT 3-4

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

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

LOADING									
TOTAL LOAD CASES: (4)									
C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
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	-351 / 0	0.0	0.0	0.23 (1)	7.81	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= 0.64 (3) (INPUT = 0.90)
JSI METAL= 0.09 (5) (INPUT = 1.00)

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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