



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5001
BUILDING DIVISION



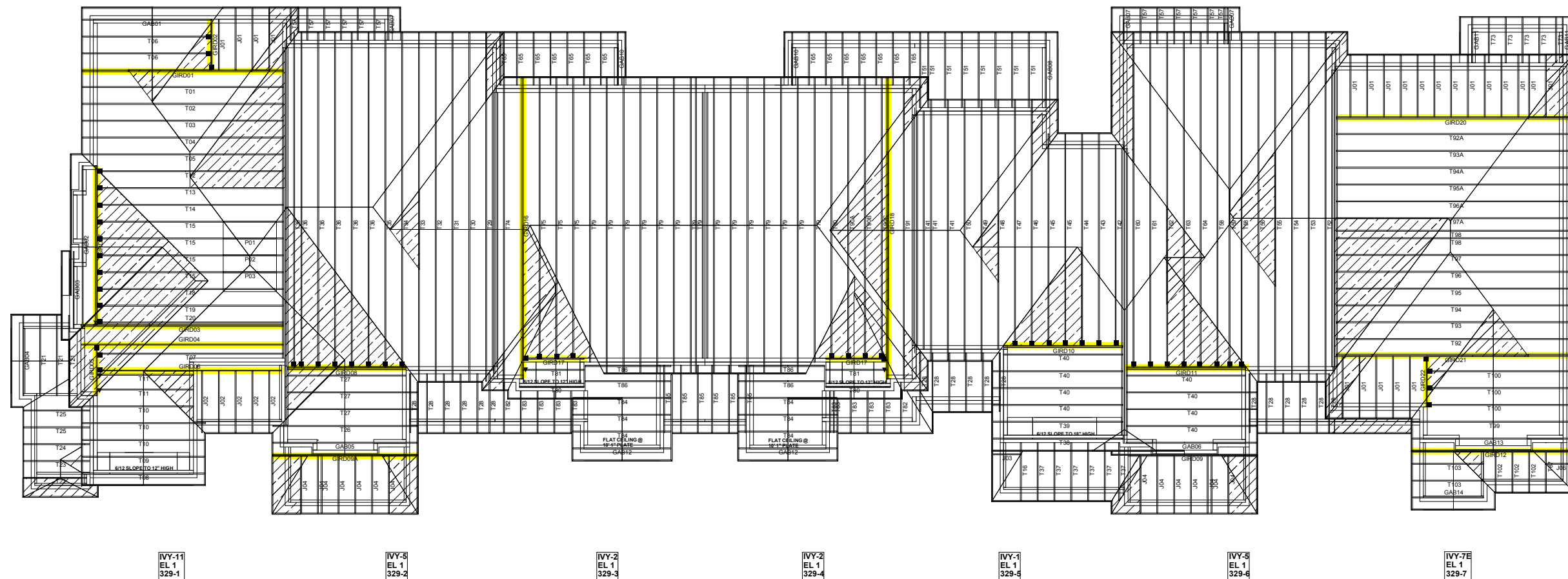
**PARTY WALLS TO BE
FRAMED ON SITE A.P.P.**

▼ LUS24 ■ LJS26DS
● HGUS26 × HGUS26-2



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 329**
Customer: **GREENPARK**
Project: **LECCO RIDGE**
Location: **MILTON**
Date: **3/10/2017** Drawn by: **BB**



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

RESPONSIBILITIES

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY THE DESIGN OFFICE OF KOTT LUMBER. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON THIS DRAWING. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.

TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING

IT IS THE RESPONSIBILITY OF KOTT LUMBER TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

- The truss loading intensity and distribution as well as load transfer mechanism is that indicated on the drawing
- No buildings, trees, parapets or other projections higher than the roof for which the trusses are used are located within a distance less than ten (10) times the difference in height, or five metres (16 ft) whichever is greater, unless the drawing indicates that the snow drifting has been taken into account

HANDLING, INSTALLATION AND BRACING

- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- Temporary and permanent bracing must be installed as indicated on the truss drawing and according to the BCSI-B1 and BCSI-B3 Summary Sheets. Bracing for the lateral stability of the truss is to be provided by the building designer
- **It is recommended that a Professional Engineer's advice be obtained for the bracing of trusses spanning more than 12.37m (40'-7")**

SUPPORTS

- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability of the overall building structure
- Elevation of bearings must be carefully checked and shimmed to alignment for solid bearings
- Adequate wood truss bearing is the responsibility of the building designer.

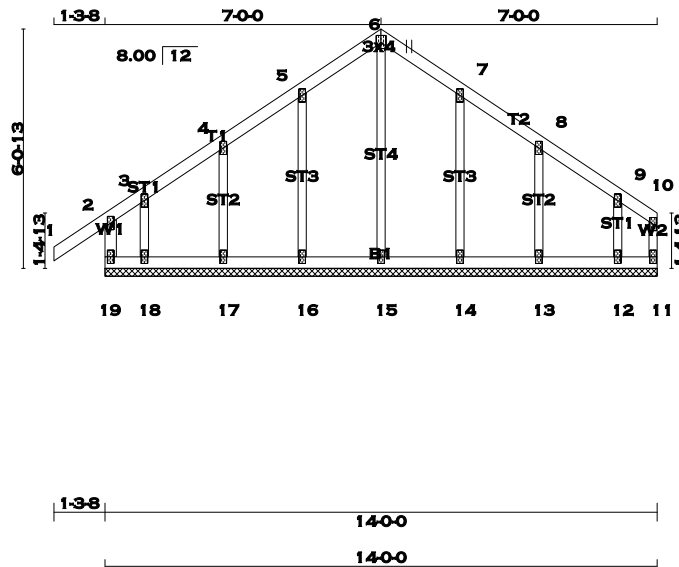
DIMENSIONS

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



01/29/2013

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SCALE = 1:58.4

TOTAL WEIGHT = 57 lb [M]

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

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

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

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

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

LOADING

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			
19-2	-191 / 0	0.0	0.0 0.02 (1)	7.81	15-6	-174 / 0	0.10 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	16-5	-155 / 0	0.05 (1)
2-3	-27 / 0	-77.3	-77.3 0.08 (1)	6.25	17-4	-161 / 0	0.03 (1)
3-4	0 / 8	-77.3	-77.3 0.04 (1)	10.00	18-3	-53 / 0	0.01 (1)
4-5	0 / 9	-77.3	-77.3 0.04 (1)	10.00	14-7	-156 / 0	0.05 (1)
5-6	0 / 12	-77.3	-77.3 0.04 (1)	10.00	13-8	-156 / 0	0.03 (1)
6-7	0 / 12	-77.3	-77.3 0.04 (1)	10.00	12-9	-124 / 0	0.02 (1)
7-8	0 / 9	-77.3	-77.3 0.04 (1)	10.00			
8-9	0 / 6	-77.3	-77.3 0.04 (1)	10.00			
9-10	0 / 7	-77.3	-77.3 0.03 (1)	10.00			
11-10	-19 / 0	0.0	0.0 0.00 (1)	7.81			
19-18	0 / 0	-17.5	-17.5 0.02 (1)	10.00			
18-17	-3 / 0	-17.5	-17.5 0.01 (3)	10.00			
17-16	-8 / 0	-17.5	-17.5 0.01 (3)	10.00			
16-15	-10 / 0	-17.5	-17.5 0.01 (3)	6.25			
15-14	-10 / 0	-17.5	-17.5 0.01 (3)	6.25			
14-13	-8 / 0	-17.5	-17.5 0.01 (3)	10.00			
13-12	-3 / 0	-17.5	-17.5 0.01 (3)	10.00			
12-11	0 / 3	-17.5	-17.5 0.01 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

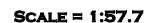
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JSI METAL= 0.06 (6) (INPUT = 1.00)



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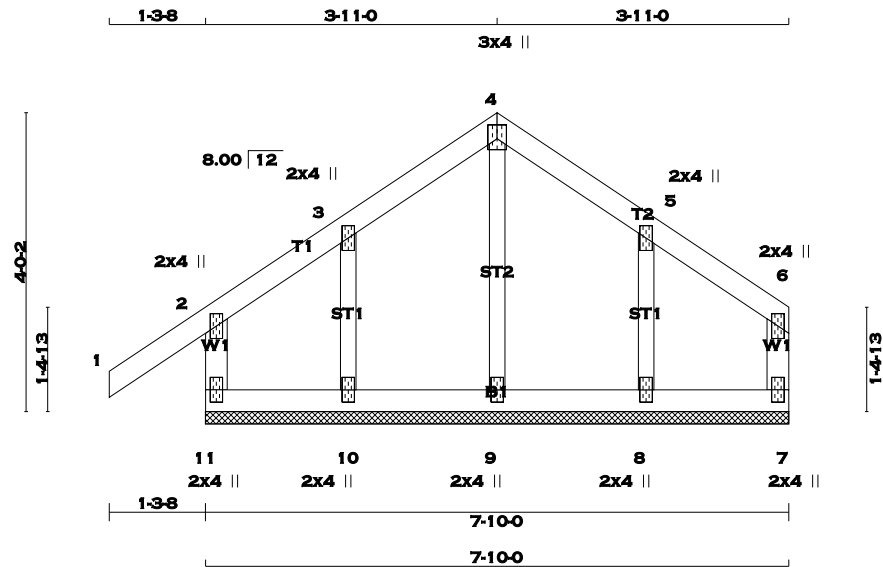
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





[M][F]





SCALE = 1:30.9

TOTAL WEIGHT = 30 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
11 - 2	2x4	DRY	No.2		SPF
1 - 4	2x4	DRY	No.2		SPF
4 - 6	2x4	DRY	No.2		SPF
7 - 6	2x4	DRY	No.2		SPF
11 - 7	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2					SPF
ALL GABLE WEBS 2x3 DRY No.2					SPF
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMW+w	MT20	2.0	4.0	
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	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	

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: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
11-2	-199 / 0	0.0	0.0 0.02 (1)	7.81	9-4	-172 / 0	0.04 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	10-3	-121 / 0	0.02 (1)
2-3	-12 / 0	-77.3	-77.3 0.08 (1)	6.25	8-5	-160 / 0	0.03 (1)
3-4	-3 / 8	-77.3	-77.3 0.04 (1)	10.00			
4-5	-3 / 5	-77.3	-77.3 0.04 (1)	10.00			
5-6	-3 / 5	-77.3	-77.3 0.04 (1)	10.00			
7-6	-60 / 0	0.0	0.0 0.01 (1)	7.81			
11-10	0 / 3	-17.5	-17.5 0.02 (1)	10.00			
10-9	-4 / 2	-17.5	-17.5 0.01 (3)	10.00			
9-8	-4 / 2	-17.5	-17.5 0.02 (3)	10.00			
8-7	0 / 3	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.10 (1-2:1), BC=0.02 (10-11:1), WB=0.04 (4-9:1), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

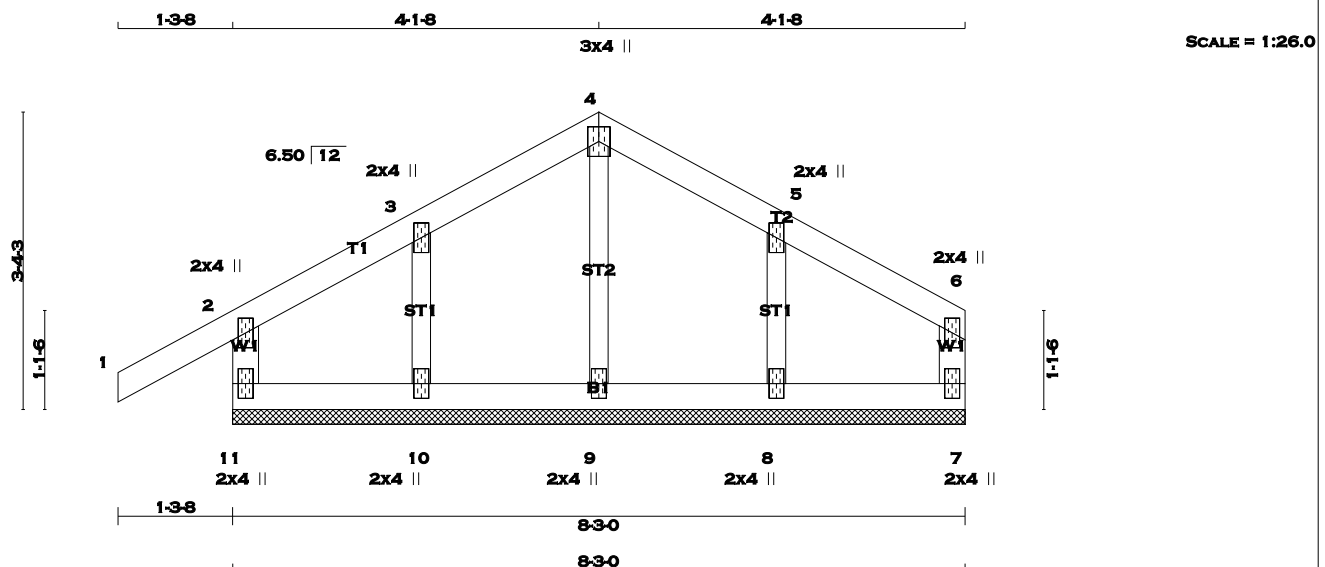
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JSI METAL= 0.07 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 29 lb [M]

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
CHORDS				
11 - 2	2x4	DRY	No.2	SPF
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
11 - 7	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2				SPF
ALL GABLE WEBS 2x3 DRY No.2				SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMW+w	MT20	2.0	4.0	
4	TTW+p	MT20	3.0	4.0	
5	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	BMV1+w	MT20	2.0	4.0	
11	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS
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: (3)

CHORDS				WEBS			
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
11-2	-201 / 0	0.0	0.0 0.02 (1)	7.81	9-4	-134 / 0	0.03 (1)
1-2	0 / 25	-77.3	-77.3 0.10 (1)	10.00	10-3	-156 / 0	0.02 (1)
2-3	-33 / 0	-77.3	-77.3 0.04 (1)	6.25	8-5	-163 / 0	0.02 (1)
3-4	-26 / 0	-77.3	-77.3 0.04 (1)	6.25			
4-5	-27 / 0	-77.3	-77.3 0.04 (1)	6.25			
5-6	-30 / 0	-77.3	-77.3 0.04 (1)	6.25			
7-6	-90 / 0	0.0	0.0 0.03 (1)	7.81			
11-10	0 / 29	-17.5	-17.5 0.02 (3)	10.00			
10-9	0 / 23	-17.5	-17.5 0.02 (3)	10.00			
9-8	0 / 23	-17.5	-17.5 0.02 (3)	10.00			
8-7	0 / 29	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.10 (1-2:1), BC=0.02 (7-8:3), WB=0.03 (4-9:1), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

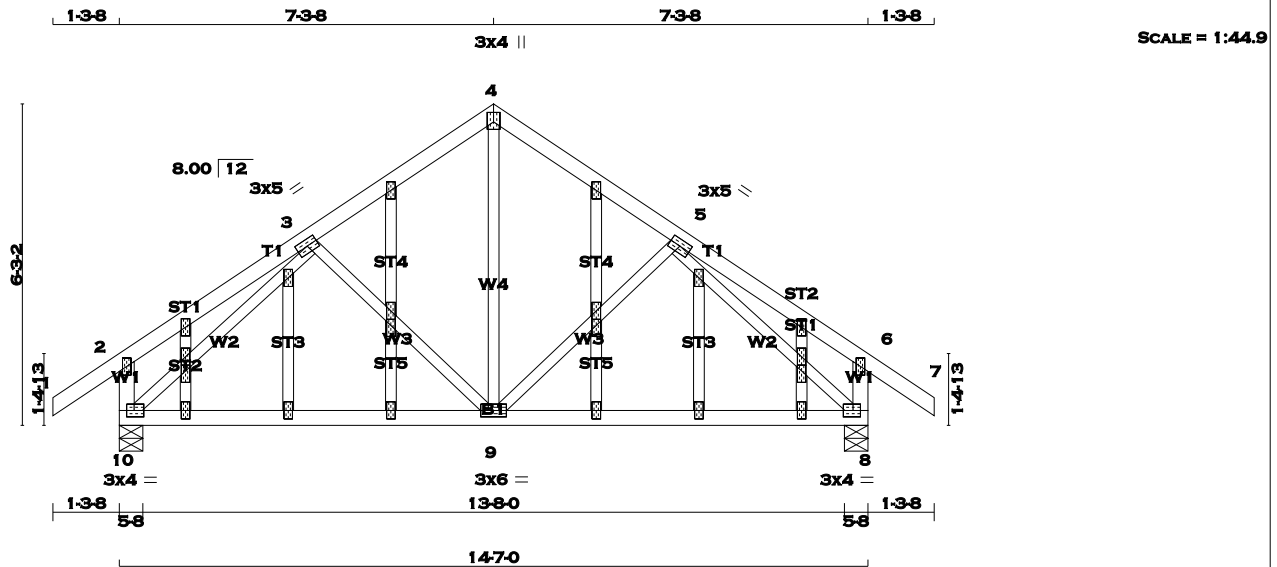
JSI GRIP= 0.14 (6) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 77 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
10 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT		2x3 DRY	No.2	SPF
ALL GABLE WEBS				
2x3 DRY:		DRY	No.2	SPF
SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		DOWN		BRG		BRG	
JT	VERT	JT	HORZ	JT	UPLIFT	JT	IN-SX	JT	IN-SX
10	798	0	798	0	0	5-8	5-8	5-8	5-8
8	798	0	798	0	0	5-8	5-8	5-8	5-8

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 8

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

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

LOADING				TOTAL LOAD CASES: (3)			
CHORDS		WEBS		CHORDS		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	9-4	0 / 371	0.08 (1)
2-3	0 / 18	-77.3	-77.3 0.16 (1)	10.00	9-5	-155 / 5	0.07 (1)
3-4	-550 / 0	-77.3	-77.3 0.13 (1)	6.25	3-9	-155 / 5	0.07 (1)
4-5	-550 / 0	-77.3	-77.3 0.13 (1)	6.25	10-3	-770 / 0	0.31 (1)
5-6	0 / 18	-77.3	-77.3 0.16 (1)	10.00	5-8	-770 / 0	0.31 (1)
6-7	0 / 29	-77.3	-77.3 0.10 (1)	10.00			
10-2	-215 / 0	0.0	0.0 0.02 (1)	7.81			
8-6	-215 / 0	0.0	0.0 0.02 (1)	7.81			
10-9	0 / 554	-17.5	-17.5 0.30 (3)	10.00			
9-8	0 / 554	-17.5	-17.5 0.30 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.49")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.49")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.16 (2-3:1), BC=0.30 (9-10:3), WB=0.31 (3-10:1), 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.

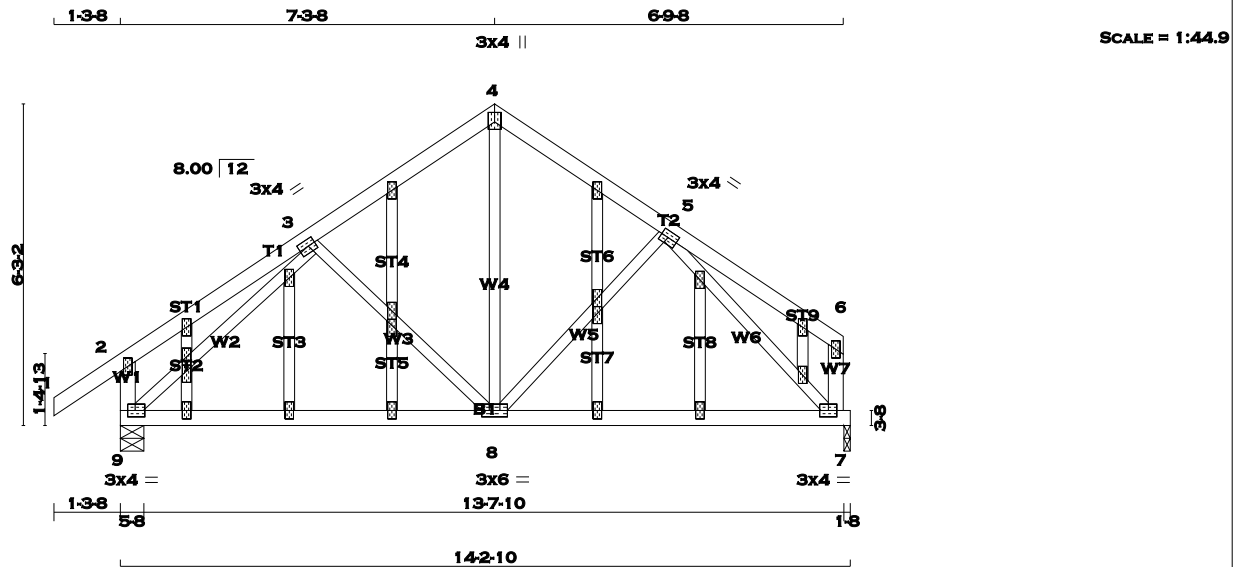
JSI GRIP= 0.85 (8) (INPUT = 0.90)
JSI METAL= 0.22 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 74 lb
[M][F]

LUMBER				
N. L. G. A.	RULES			
CHORDS	SIZE	LUMBER		DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
ALL GABLE WEBS				
	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

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

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

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 7

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

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

LOADING				TOTAL LOAD CASES: (3)			
		CHORDS		WEBS			
		MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-8	-161 / 3	0.07 (1)
2-3	0 / 18	-77.3	-77.3 0.16 (1)	10.00	8-4	0 / 339	0.08 (1)
3-4	-514 / 0	-77.3	-77.3 0.13 (1)	6.25	8-5	-102 / 16	0.04 (1)
4-5	-512 / 0	-77.3	-77.3 0.11 (1)	6.25	9-3	-735 / 0	0.30 (1)
5-6	0 / 16	-77.3	-77.3 0.14 (1)	10.00	5-7	-710 / 0	0.28 (1)
9-2	-215 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	-102 / 0	0.0	0.0 0.01 (1)	7.81			
9-8	0 / 529	-17.5	-17.5 0.28 (3)	10.00			
8-7	0 / 482	-17.5	-17.5 0.28 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

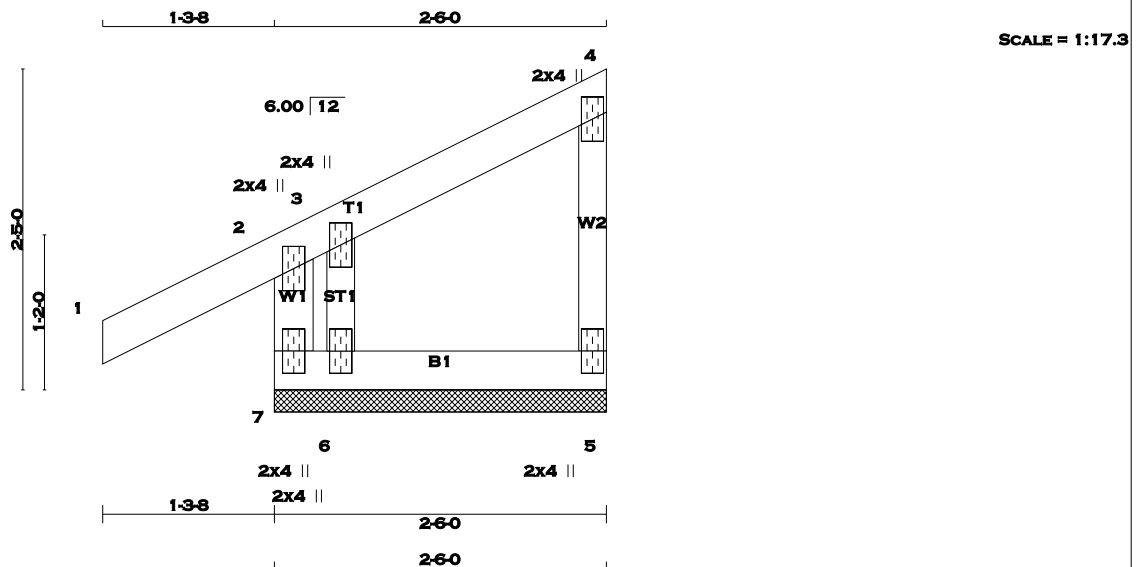
JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.26 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 11 = 32 lb [M]

LUMBER				
N. L. G. A. RULES	SIZE		LUMBER	DESCR.
CHORDS				
7 - 2	2x4	DRY	No.2	SPF
1 - 4	2x4	DRY	No.2	SPF
5 - 4	2x3	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS				
	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

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

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

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

PROVIDE ANCHORAGE AT BEARING JOINT 6 FOR 150 LBS. FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).

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

LOADING									
TOTAL LOAD CASES: (4)									
C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED CSI (LC)	
FR-TO		FROM TO			FR-TO				
7-2	-220 / 0	0.0	0.0	0.02 (4)	7.81	6-3	-27 / 105	0.02 (4)	
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00				
2-3	-44 / 0	-77.3	-77.3	0.08 (1)	6.25				
3-4	-10 / 0	-77.3	-77.3	0.04 (1)	10.00				
5-4	-68 / 0	0.0	0.0	0.02 (1)	7.81				
7-6	-7 / 7	-17.5	-17.5	0.02 (1)	10.00				
6-5	0 / 5	-17.5	-17.5	0.02 (3)	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

CSI: TC=0.10 (1-2:1) , BC=0.02 (6-7:1) , WB=0.02 (3-6:4) , SSI=0.08 (2-3:4)

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)

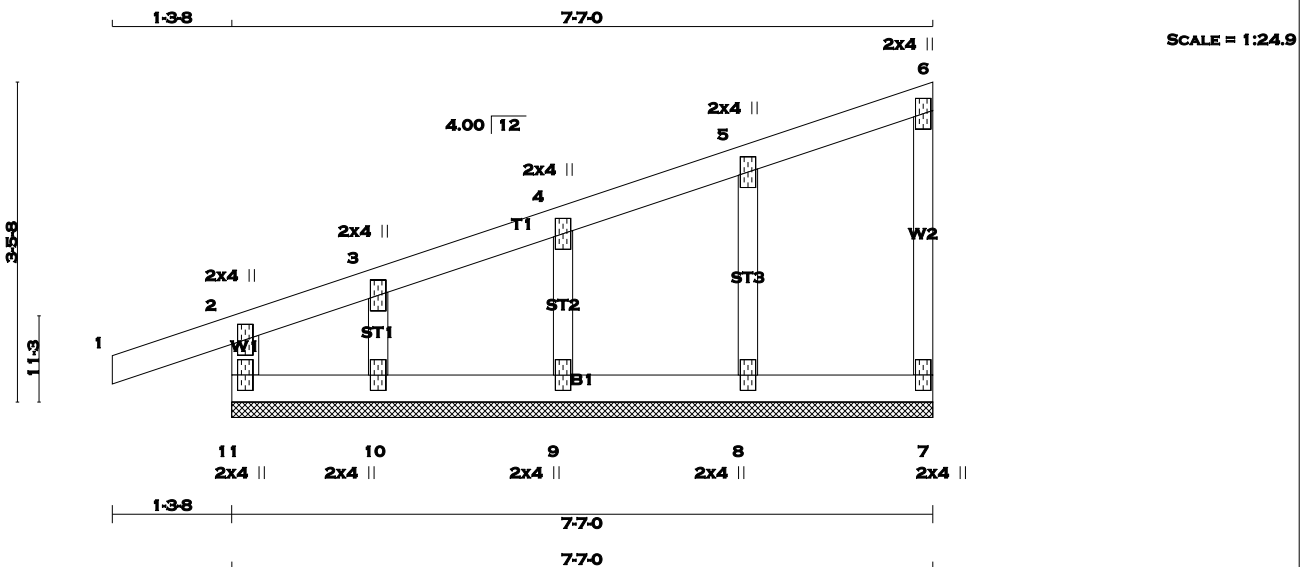


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TOTAL WEIGHT = 26 lb [M]

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

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

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: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
11-2	-196 / 0	0.0	0.0 0.03 (1)	7.81	8-5	-169 / 0	0.03 (1)
1-2	0 / 16	-77.3	-77.3 0.10 (1)	10.00	9-4	-160 / 0	0.02 (1)
2-3	-23 / 0	-77.3	-77.3 0.08 (1)	6.25	10-3	-100 / 0	0.01 (1)
3-4	-8 / 0	-77.3	-77.3 0.04 (1)	10.00			
4-5	-6 / 0	-77.3	-77.3 0.04 (1)	10.00			
5-6	-6 / 0	-77.3	-77.3 0.04 (1)	10.00			
7-6	-66 / 0	0.0	0.0 0.01 (1)	7.81			
11-10	0 / 14	-17.5	-17.5 0.03 (1)	10.00			
10-9	0 / 10	-17.5	-17.5 0.01 (3)	10.00			
9-8	0 / 6	-17.5	-17.5 0.02 (3)	10.00			
8-7	0 / 2	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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.

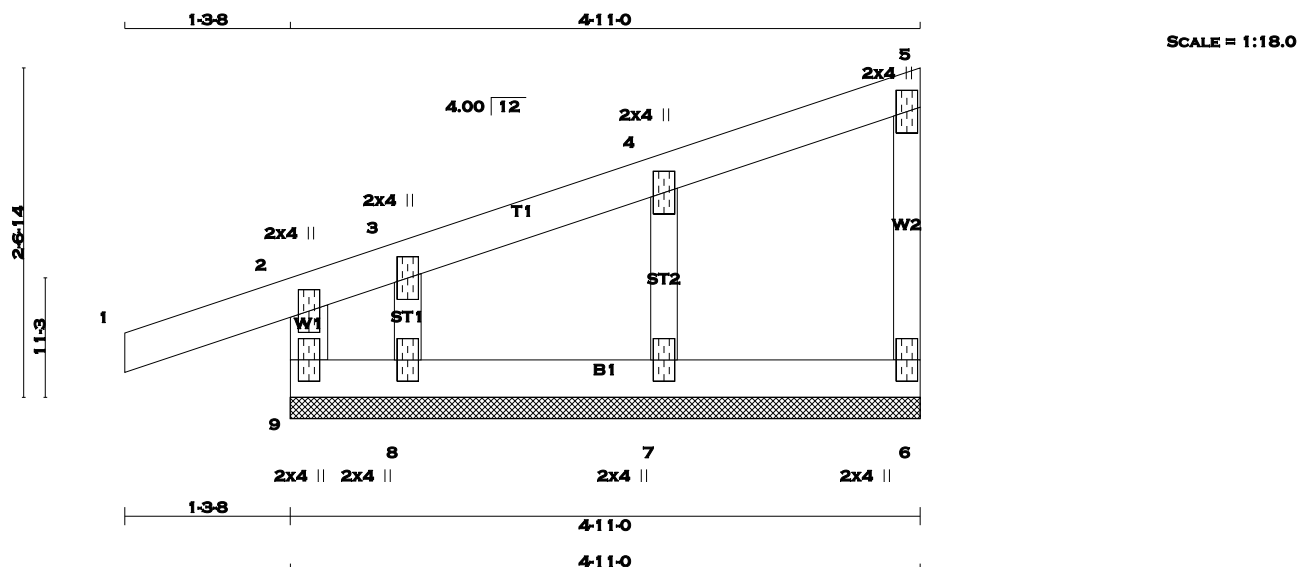
JSI GRIP= 0.11 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 17 = 34 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
9 - 2	2x4	DRY	No.2	SPF
1 - 5	2x4	DRY	No.2	SPF
6 - 5	2x3	DRY	No.2	SPF
9 - 6	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT	2-0-0	OC.		

PLATES (table is in inches)

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

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
9-2	-193 / 0	0.0	0.0 0.03 (1)	7-8	-181 / 0	0.03 (1)	
1-2	0 / 16	-77.3	-77.3 0.10 (1)	8-3	-46 / 0	0.01 (1)	
2-3	-28 / 0	-77.3	-77.3 0.08 (1)				
3-4	-5 / 0	-77.3	-77.3 0.05 (1)				
4-5	-8 / 0	-77.3	-77.3 0.05 (1)				
6-5	-64 / 0	0.0	0.0 0.02 (1)				
9-8	0 / 11	-17.5	-17.5 0.03 (1)				
8-7	0 / 9	-17.5	-17.5 0.02 (3)				
7-6	0 / 4	-17.5	-17.5 0.02 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.10 (1-2:1), BC=0.03 (8-9:1), WB=0.03 (4-7:1), SSI=0.08 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

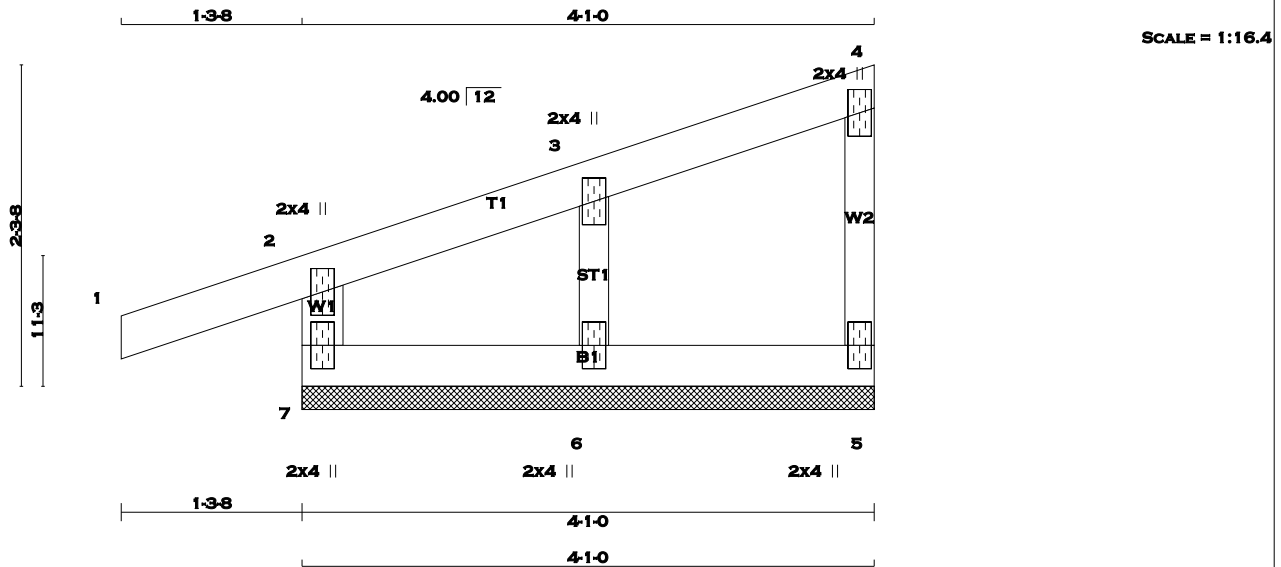
JSI GRIP= 0.11 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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





TOTAL WEIGHT = 2 X 14 = 28 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
7 - 2	2x4	DRY	No.2		SPF
1 - 4	2x4	DRY	No.2		SPF
5 - 4	2x3	DRY	No.2		SPF
7 - 5	2x4	DRY	No.2		SPF
ALL WEBS	2x3	DRY	No.2		SPF
ALL GABLE WEBS	2x3	DRY	No.2		SPF
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

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

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

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

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
7-2	-184 / 0	0.0	0.0 0.01 (3)	7.81	6-3	-170 / 0	0.02 (1)
1-2	0 / 16	-77.3	-77.3 0.10 (1)	10.00			
2-3	-12 / 0	-77.3	-77.3 0.04 (1)	6.25			
3-4	-10 / 0	-77.3	-77.3 0.04 (1)	6.25			
5-4	-66 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	0 / 13	-17.5	-17.5 0.02 (3)	10.00			
6-5	0 / 7	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (6-7:3), WB=0.02 (3-6:1), SSI=0.08 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

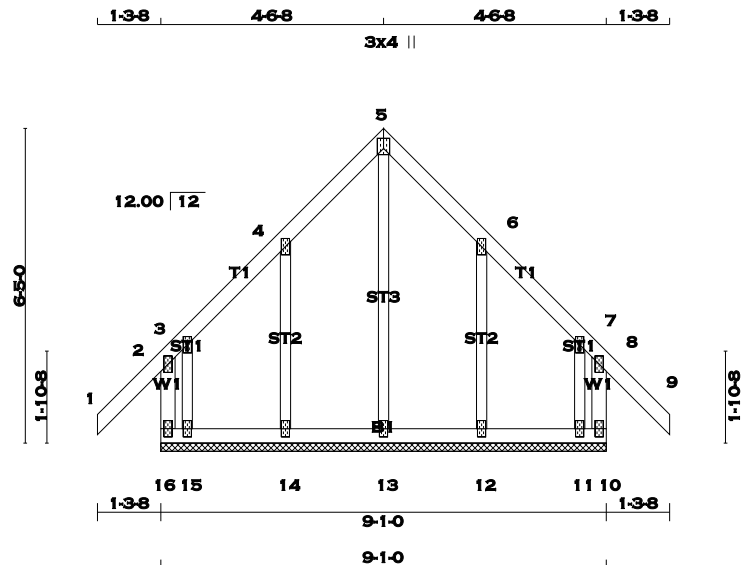
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 47 = 94 lb [M]

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

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

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

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.		MAX. FACTORED	FACTORED	MEMB.		MAX. FACTORED	FACTORED
		FORCE (LBS)	VERT. LOAD LC1 MAX (PLF)			FORCE (LBS)	MAX (LC)
FR-TO			FROM TO	LENGTH FR-TO			
16-2	-197 / 0	0.0	0.0	0.03 (1)	7.81	13-5	-189 / 0
1-2	0 / 38	-77.3	-77.3	0.11 (1)	10.00	14-4	-160 / 0
2-3	-44 / 0	-77.3	-77.3	0.08 (1)	6.25	15-3	-7 / 0
3-4	0 / 18	-77.3	-77.3	0.04 (1)	10.00	12-6	-160 / 0
4-5	0 / 20	-77.3	-77.3	0.04 (1)	10.00	11-7	-7 / 0
5-6	0 / 20	-77.3	-77.3	0.04 (1)	10.00		
6-7	0 / 18	-77.3	-77.3	0.04 (1)	10.00		
7-8	-44 / 0	-77.3	-77.3	0.08 (1)	6.25		
8-9	0 / 38	-77.3	-77.3	0.11 (1)	10.00		
10-8	-197 / 0	0.0	0.0	0.03 (1)	7.81		
16-15	-10 / 0	-17.5	-17.5	0.01 (3)	6.25		
15-14	-11 / 0	-17.5	-17.5	0.01 (3)	6.25		
14-13	-15 / 0	-17.5	-17.5	0.01 (3)	6.25		
13-12	-15 / 0	-17.5	-17.5	0.01 (3)	6.25		
12-11	-11 / 0	-17.5	-17.5	0.01 (3)	6.25		
11-10	-10 / 0	-17.5	-17.5	0.01 (3)	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

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.11 (8-9:1), BC=0.01 (13-14:3), WB=0.12 (5-13:1), SSI=0.06 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (5) (INPUT = 0.90)

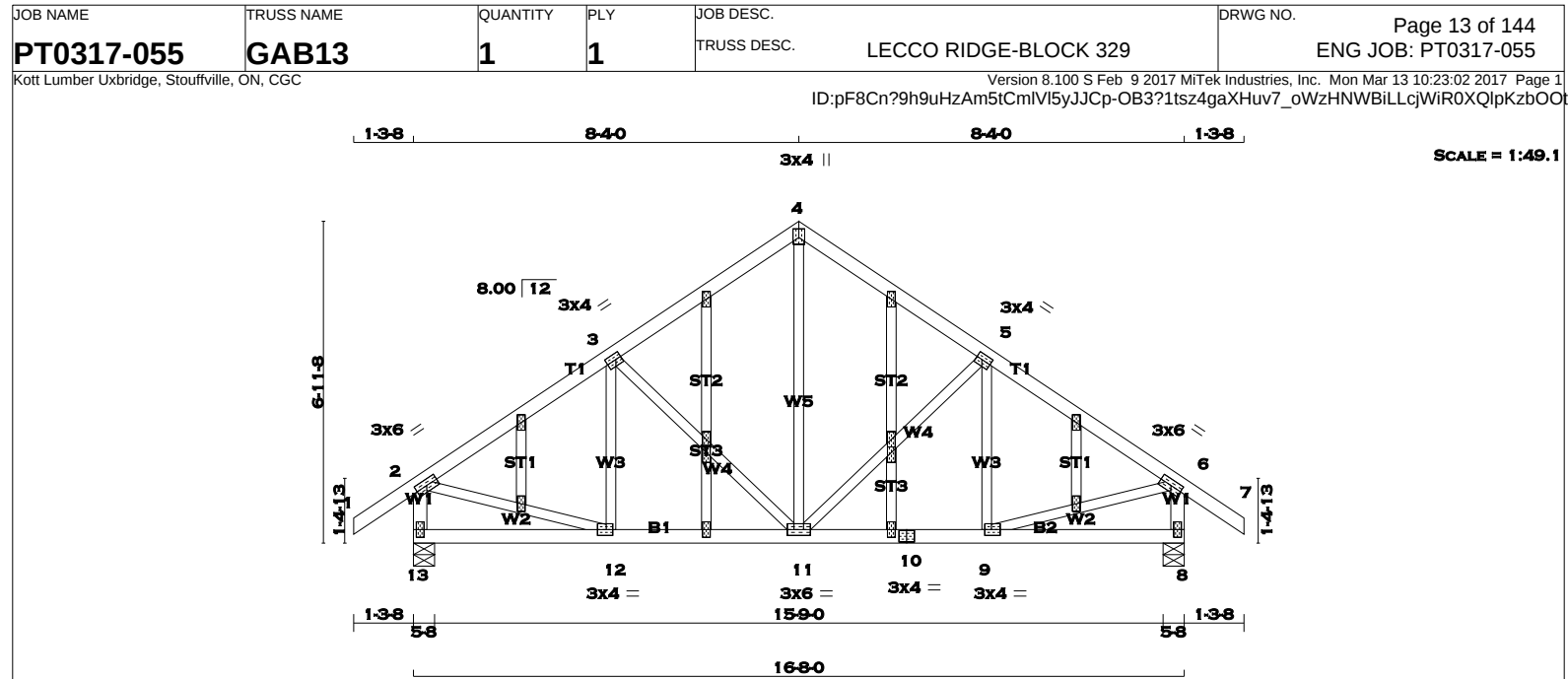
JSI METAL= 0.06 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 85 lb
[M][F]

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR.
1 - 4	2x4	DRY	No.2	SPF	
4 - 7	2x4	DRY	No.2	SPF	
13- 2	2x4	DRY	No.2	SPF	
8 - 6	2x4	DRY	No.2	SPF	
13- 10	2x4	DRY	No.2	SPF	
10- 8	2x4	DRY	No.2	SPF	
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
ALL GABLE WEBS		2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.					

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	TMVW-t	MT20	3.0	4.0	1.50 1.50
6	TMVW-t	MT20	3.0	6.0	
8	BMV1+p	MT20	2.0	4.0	
9	BMVW-t	MT20	3.0	4.0	1.50 1.75
10	BS-t	MT20	3.0	4.0	
11	BMVW-t	MT20	3.0	6.0	
12	BMVW-t	MT20	3.0	4.0	1.50 1.75
13	BMV1+p	MT20	2.0	4.0	
14	NP+w	MT20	2.0	4.0	1.50 1.00
14, 15, 16, 17, 18, 19, 20, 21, 22, 23					
14	NP+w	MT20	2.0	4.0	
21	NP+w	MT20	2.0	4.0	1.50 1.00

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
13		897	0	897	0	0	5-8	5-8	
8		897	0	897	0	0	5-8	5-8	

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	627	452 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0
8	627	452 / 0	0 / 0	0 / 0	0 / 0	175 / 0	0 / 0

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

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

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

LOADING				TOTAL LOAD CASES: (3)			
CHORDS		WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	11-4	0 / 430	0.10 (1)
2-3	-803 / 0	-77.3 -77.3	0.17 (1)	6.25	11-5	-259 / 0	0.14 (1)
3-4	-622 / 0	-77.3 -77.3	0.17 (1)	6.25	9-5	-95 / 41	0.03 (1)
4-5	-622 / 0	-77.3 -77.3	0.17 (1)	6.25	3-11	-259 / 0	0.14 (1)
5-6	-803 / 0	-77.3 -77.3	0.17 (1)	6.25	12-3	-95 / 41	0.03 (1)
6-7	0 / 29	-77.3 -77.3	0.10 (1)	10.00	2-12	0 / 707	0.16 (1)
13-2	-865 / 0	0.0	0.0 0.09 (1)	7.81	9-6	0 / 707	0.16 (1)
8-6	-865 / 0	0.0	0.0 0.09 (1)	7.81			
13-12	0 / 0	-17.5 -17.5	0.07 (3)	10.00			
12-11	0 / 685	-17.5 -17.5	0.14 (1)	10.00			
11-10	0 / 685	-17.5 -17.5	0.14 (1)	10.00			
10-9	0 / 685	-17.5 -17.5	0.14 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.07 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.17 (2-3:1), BC=0.14 (11-12:1), WB=0.16 (2-12:1), SSI=0.13 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

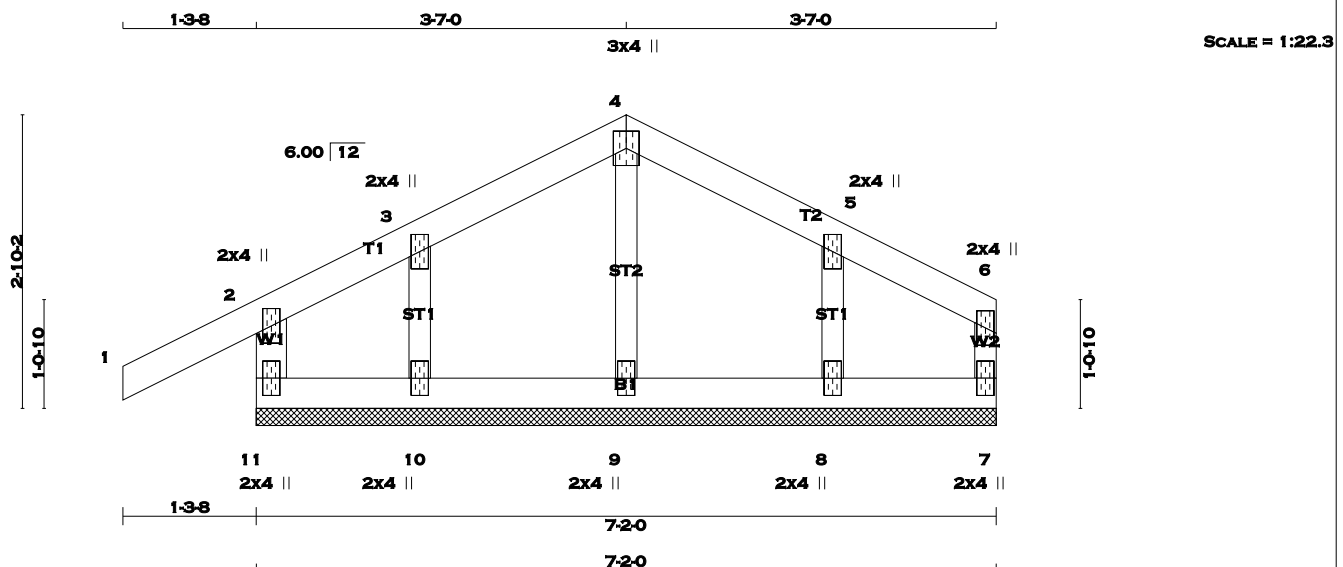
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JSI METAL= 0.26 (12) (INPUT = 1.00)



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LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER		DESIGN CRITERIA	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	SPECIFIED LOADS:	
11 - 2	2x4	DRY	No.2	SPF	THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.	TOP CH. LL =	23.3 PSF
1 - 4	2x4	DRY	No.2	SPF		DL =	3.0 PSF
4 - 6	2x4	DRY	No.2	SPF	THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.	BOT CH. LL =	0.0 PSF
7 - 6	2x3	DRY	No.2	SPF		DL =	7.0 PSF
11 - 7	2x4	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)	TOTAL LOAD =	33.3 PSF
ALL WEBS	2x3	DRY	No.2	SPF			
ALL GABLE WEBS	2x3	DRY	No.2	SPF	BRACING		
DRY: SEASONED LUMBER.							
GABLE STUDS SPACED AT 2-0-0 OC.					SPACING = 24.0 IN./C		
					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
					THIS DESIGN COMPLIES WITH:		
					- PART 9 OF OBC 2012, BCBC 2012, ABC 2014		
					- CSA 086-09		
					- TPIC 2011		
					DESIGN ASSUMPTIONS		
					- OVERHANG NOT TO BE ALTERED OR CUT OFF.		
					(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD		
					CSI: TC=0.10 (1-2:1), BC=0.02 (10-11:1), WB=0.03 (4-9:1), SSI=0.07 (1-2:1)		
					DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10		
					COMPANION LIVE LOAD FACTOR = 0.50		
					TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .		
					NAIL VALUES		
					PLATE GRIP(DRY) SHEAR SECTION		
					(PSI) (PLI) (PLI)		
					MAX MIN MAX MIN MAX MIN		
					MT20 618 354 1667 822 2284 1656		
					PLATE PLACEMENT TOL. = 0.250 inches		
					PLATE ROTATION TOL. = 5.0 Deg.		
					JSI GRIP= 0.11 (2) (INPUT = 0.90)		
					JSI METAL= 0.07 (4) (INPUT = 1.00)		

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMW+w	MT20	2.0	4.0	
4	TTW+p	MT20	3.0	4.0	
5	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	BMV1+w	MT20	2.0	4.0	
11	BMV1+p	MT20	2.0	4.0	

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

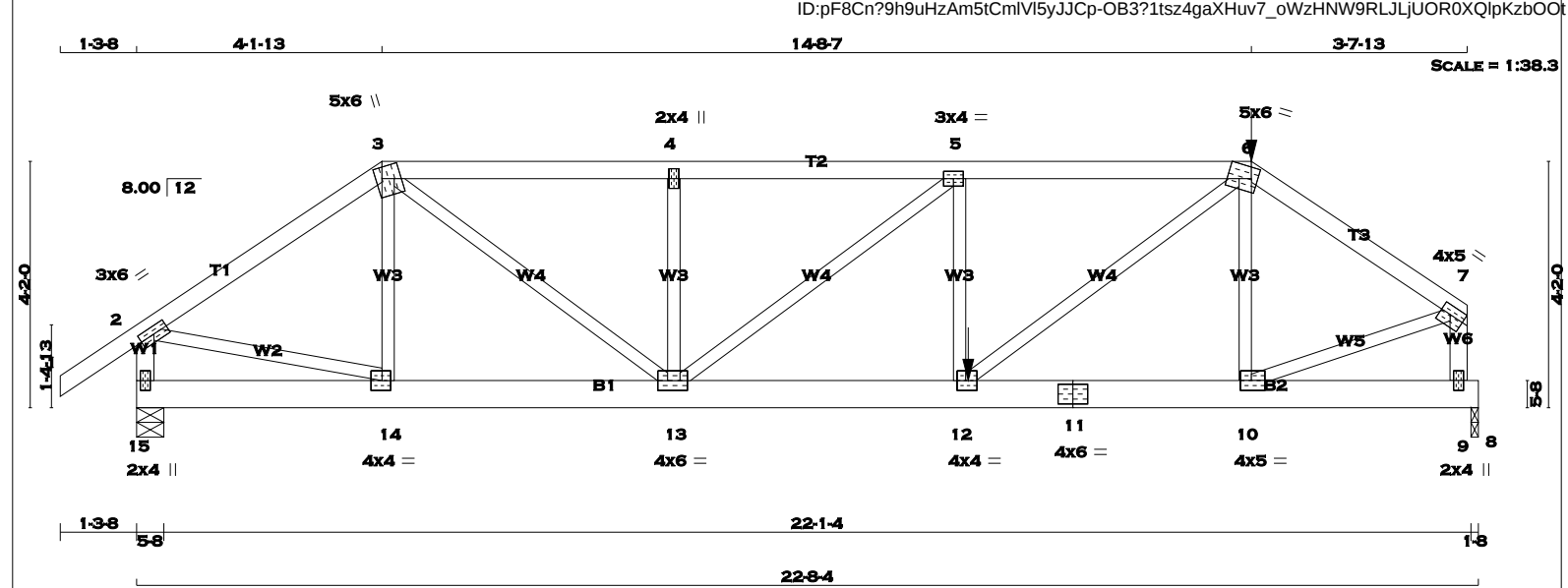
LOADING				TOTAL LOAD CASES: (3)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
11-2	-184 / 0	0.0	0.0 0.03 (1)	7-8	-181 / 0	0.03 (1)	
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10-3	-105 / 0	0.02 (1)	
2-3	-3 / 0	-77.3	-77.3 0.07 (1)	8-5	-149 / 0	0.02 (1)	
3-4	0 / 16	-77.3	-77.3 0.04 (1)				
4-5	0 / 14	-77.3	-77.3 0.04 (1)				
5-6	0 / 13	-77.3	-77.3 0.04 (1)				
7-6	-40 / 0	0.0	0.0 0.01 (1)				
11-10	-7 / 1	-17.5	-17.5 0.02 (1)				
10-9	-11 / 0	-17.5	-17.5 0.01 (3)				
9-8	-11 / 0	-17.5	-17.5 0.01 (3)				
8-7	-5 / 1	-17.5	-17.5 0.01 (3)				



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

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2 SPF
3 - 6	2x4	DRY	No.2 SPF
6 - 7	2x4	DRY	No.2 SPF
15 - 2	2x4	DRY	No.2 SPF
9 - 7	2x4	DRY	No.2 SPF
15 - 11	2x6	DRY	No.2 SPF
11 - 8	2x6	DRY	No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-6	12	TOP
6-7	12	TOP
15-2	12	TOP
9-7	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
15-11	12	SIDE(8.7)
11-8	12	SIDE(8.7)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMW-t	MT20	3.0	6.0	
3	TTWW+m	MT20	5.0	6.0	2.25 1.25
4	TMW+w	MT20	2.0	4.0	

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
15	1767	0	1767	0	5-8
8	2276	0	2276	0	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
15	1237	881 / 0	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	1599	1109 / 0	0 / 0	0 / 0	0 / 0	356 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (3)			
CHORDS		WEBS		FACTORED		FACTORED	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO		FR-TO		FR-TO		FR-TO	
1-2	0 / 29	10-7	0 / 2304	1-2	-283 / 0	10-7	0 / 2304
2-3	-1958 / 0	13-4	-372 / 0	2-3	0 / 1713	13-4	-372 / 0
3-4	-2979 / 0	13-5	-936 / 0	3-4	-38 / 102	13-5	-936 / 0
4-5	-2979 / 0	12-6	0 / 1957	4-5	-38 / 102	12-6	0 / 1957
5-6	-3715 / 0	10-6	-411 / 12	5-6	-38 / 102	10-6	-411 / 12
6-7	-2615 / 0	2-14	0 / 1670	6-7	0 / 1957	2-14	0 / 1670
15-2	-1738 / 0	10-7	0 / 2304	15-2	-1738 / 0	10-7	0 / 2304
9-7	-2367 / 0			9-7	-2367 / 0		
15-14	0 / 0			15-14	0 / 0		
14-13	0 / 1618			14-13	0 / 1618		
13-12	0 / 3715			13-12	0 / 3715		
12-11	0 / 2160			12-11	0 / 2160		
11-10	0 / 2160			11-10	0 / 2160		
10-9	0 / 0			10-9	0 / 0		
9-8	0 / 0			9-8	0 / 0		

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	FACE	DIR.	TYPE	
6	18-10-3	-220	-220	---	FRONT	VERT	TOTAL
12	14-0-12	-1106	-1106	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-13
RIGHT SETBACK = 3-9-7
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 8-6-14 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.76")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.76")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.32 (5-6:1), BC=0.29 (12-13:1), WB=0.31 (5-13:1), SSI=0.75 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

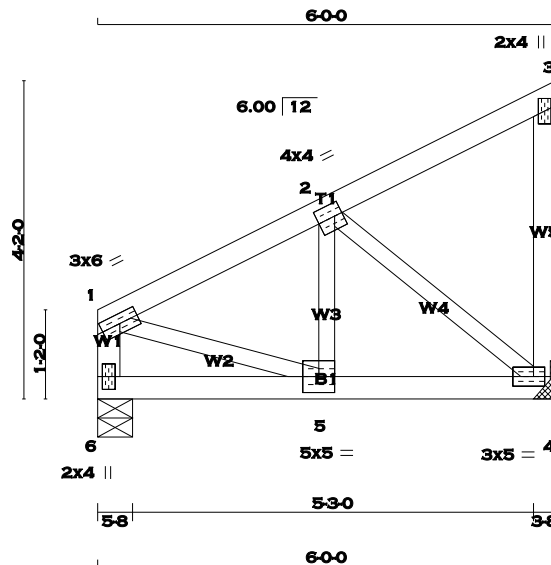
PLATE PLACEMENT TOL = 0.750 inches

PLATE ROTATION TOL = 0.750 degrees



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SCALE = 1:30.2

TOTAL WEIGHT = 26 lb
[M]

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	6.0		
2	TMVW-t	MT20	4.0	4.0	2.00	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	5.0	1.50	1.75
5	BMVW-t	MT20	5.0	5.0		
6	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
4		1106	0	1106	0	0	HANGER BY OTHERS		
6		1106	0	1106	0	0	MIN. SEAT SIZE: 3-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
JT		COMBINED	SNOW										
4		776	543 / 0	0 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0	233 / 0	0 / 0	0 / 0	0 / 0
6		776	543 / 0	0 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0	233 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.22 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		LC1 MAX. (LC)		MAX. UNBRACED LENGTH		WEBS		MAX. FACTORED FORCE (LBS)		MAX. (LC)	
MEMB.										MEMB.					
FR-TO										FR-TO					
1-2		-948 / 0	-77.3	-77.3	0.11 (1)	6.22	5-2	0 / 825	0.20 (1)	5-2		0 / 825	0.20 (1)		
2-3		-10 / 0	-77.3	-77.3	0.10 (1)	10.00	2-4	-1090 / 0	0.28 (1)	2-4		-1090 / 0	0.28 (1)		
4-3		-94 / 0	0.0	0.0	0.03 (1)	7.81	1-5	0 / 891	0.22 (1)	1-5		0 / 891	0.22 (1)		
6-1		-767 / 0	0.0	0.0	0.09 (1)	7.81									
6-5		0 / 0	-291.2	-291.2	0.44 (1)	10.00									
5-4		0 / 857	-291.2	-291.2	0.59 (1)	10.00									

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.11 (1-2:1) , BC=0.59 (4-5:1) , WB=0.28 (2-4:1) , SSI=0.46 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

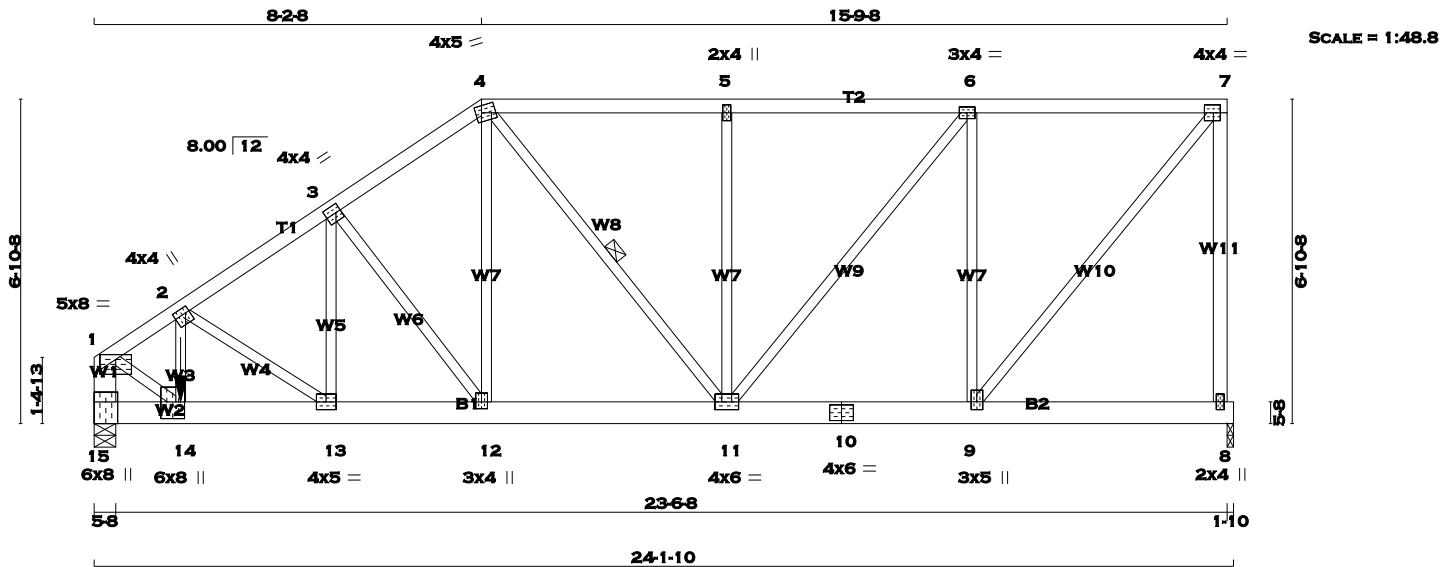
JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.31 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 129 = 257 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	No.2	SPF
4 - 7	2x4	No.2	SPF
8 - 7	2x4	No.2	SPF
15 - 1	2x6	No.2	SPF
15 - 10	2x6	No.2	SPF
10 - 8	2x6	No.2	SPF

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

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-4	12	TOP
4-7	12	TOP
7-8	12	TOP
15-1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
15-10	12	SIDE(194.6)
10-8	12	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

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

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	5.0	8.0	1.25	4.00
2	TMVW+t	MT20	4.0	4.0	1.50	1.00
3	TMVW-t	MT20	4.0	4.0	2.00	1.25
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TMW+w	MT20	2.0	4.0		

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
8	1577	0	1577	0	0
15	6795	0	6795	0	0

UNFACTORED REACTIONS						
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS		
8	1106	774 / 0	LIVE	PERM.LIVE	WIND	DEAD
15	4769	3336 / 0	0 / 0	0 / 0	0 / 0	1433 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.87 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 47 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED MAX (LC)
FR-TO		FROM TO		FR-TO			
1-2	-6021 / 0	-77.3 -77.3	0.16 (1)	3.87	14-2	0 / 2619	0.32 (1)
2-3	-3563 / 0	-77.3 -77.3	0.12 (1)	4.89	2-13	-2452 / 0	0.33 (1)
3-4	-2422 / 0	-77.3 -77.3	0.09 (1)	5.71	13-3	0 / 1634	0.20 (1)
4-5	-1783 / 0	-77.3 -77.3	0.17 (1)	6.25	3-12	-1635 / 0	0.41 (1)
5-6	-1783 / 0	-77.3 -77.3	0.18 (1)	6.25	12-4	0 / 1373	0.17 (1)
6-7	-1136 / 0	-77.3 -77.3	0.17 (1)	6.25	4-11	-379 / 0	0.09 (1)
8-7	-1536 / 0	0.0 0.0	0.74 (1)	7.81	11-5	-430 / 0	0.16 (1)
15-1	-6146 / 0	0.0 0.0	0.22 (1)	5.97	11-6	0 / 1036	0.13 (1)
					9-6	-1262 / 0	0.48 (1)
15-14	0 / 0	-406.8 -406.8	0.19 (1)	10.00	9-7	0 / 1777	0.22 (1)
14-13	0 / 4998	-17.5 -17.5	0.51 (1)	10.00	1-14	0 / 5688	0.70 (1)
13-12	0 / 2985	-17.5 -17.5	0.21 (1)	10.00			
12-11	0 / 2020	-17.5 -17.5	0.15 (1)	10.00			
11-10	0 / 1136	-17.5 -17.5	0.09 (1)	10.00			
10-9	0 / 1136	-17.5 -17.5	0.09 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.03 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX- MAX+	FACE	DIR.
14	1-10-0	-5382	-5382	---	FRONT

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 18-10-8
END DISTANCE = 1-10-0
END SPAN CARRIED = 18-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

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

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

CSI: TC=0.74 (7-8-1) , BC=0.51 (13-14-1) , WB=0.70 (1-14-1) , SSI=0.22 (14-15-1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

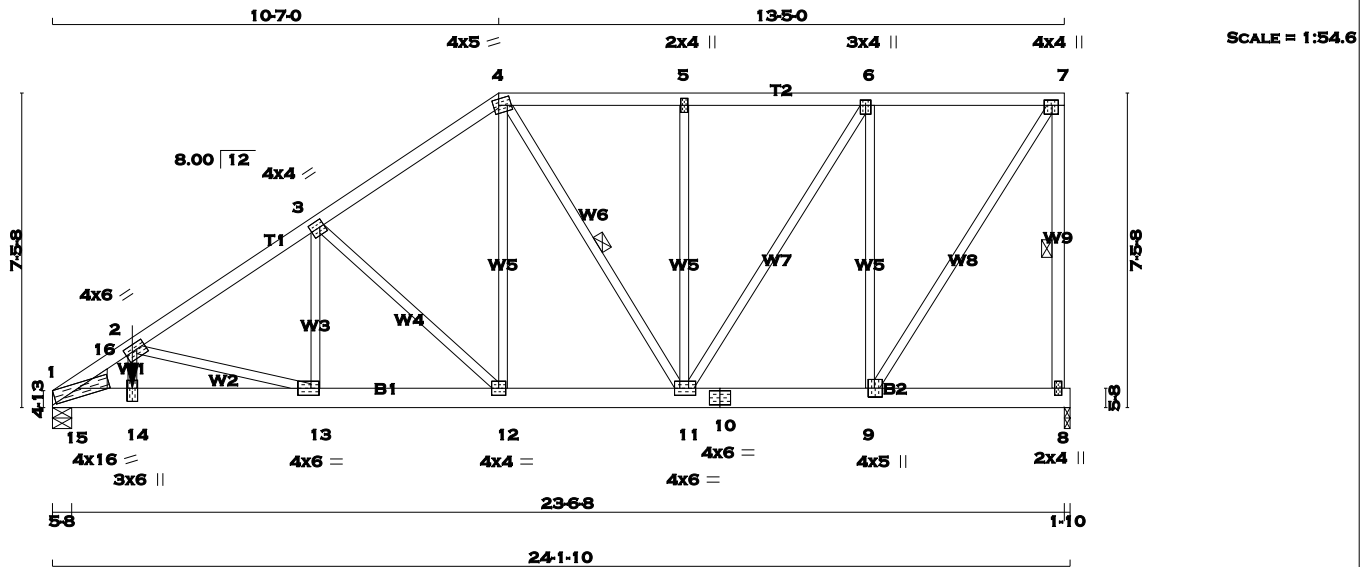
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (24) JSI PLI = 290 (24)
JSI METAL= 0.64 (1 IN) JSI PLI = 1 (1 IN)

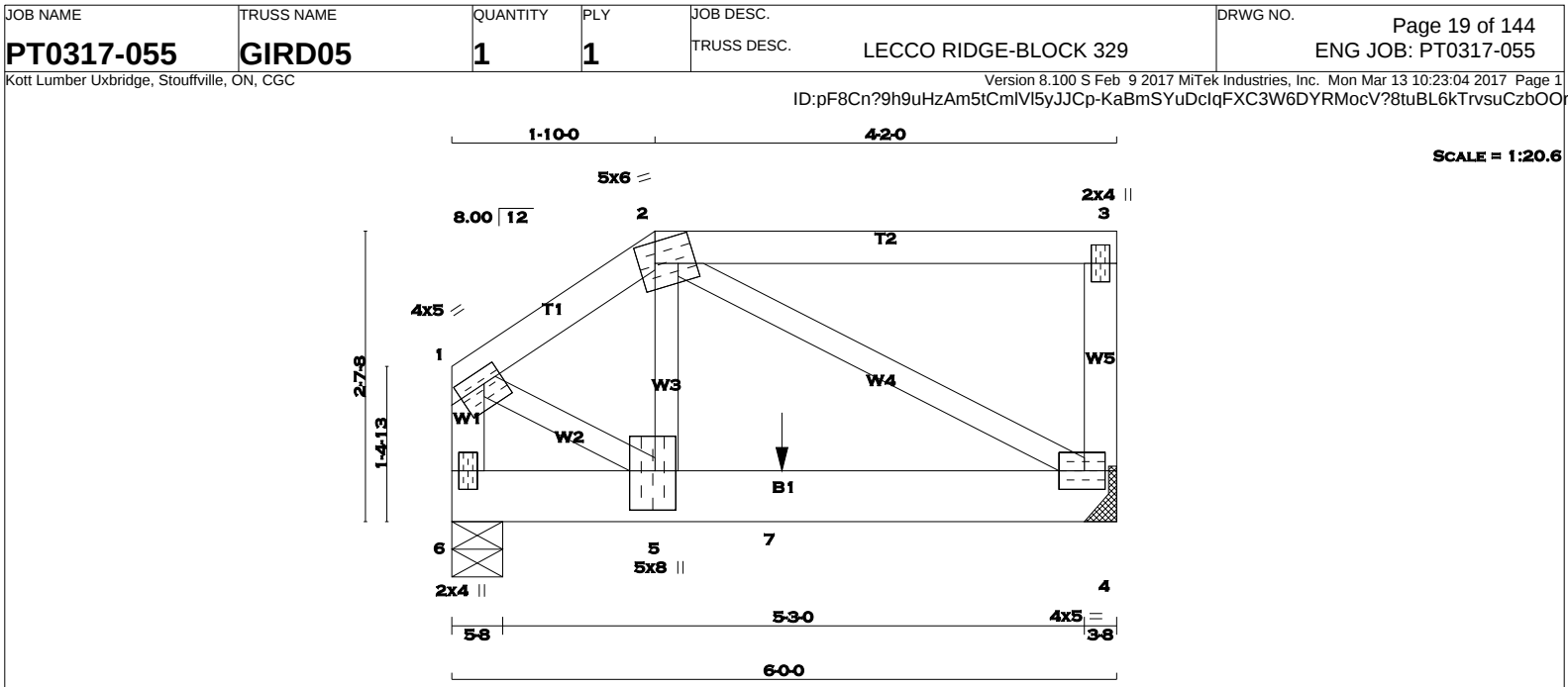


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LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 7 2x4 DRY No.2 8 - 7 2x4 DRY No.2 1 - 10 2x6 DRY No.2 10 - 8 2x6 DRY No.2 ALL WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER.			DESCR. SPF SPF SPF SPF SPF SPF		
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 1 TMB1-m MT20 4.0 16.0 4.00 Edge 2 TMWW-t MT20 4.0 6.0 1.75 2.50 3 TMWW-t MT20 4.0 4.0 2.00 1.25 4 TTWW-m MT20 4.0 5.0 1.75 1.50 5 TMW+w MT20 2.0 4.0 6 TMWW+t MT20 3.0 4.0 1.50 1.50 7 TMVW+p MT20 4.0 4.0 1.50 1.75 8 BMV1+p MT20 2.0 4.0 9 BMWW+t MT20 4.0 5.0 2.50 1.75 10 BS-t MT20 4.0 6.0 11 BMWW+t MT20 4.0 6.0 2.00 1.50 12 BMWW-t MT20 4.0 4.0 13 BMWW-t MT20 4.0 6.0 2.00 2.25 14 BMW+w MT20 3.0 6.0 3.75 1.50 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD. A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.			HANGERS NOTES 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 1751.2 lbs FACTORED DOWN AT 1-10-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.		
			RECEIVED TOWN OF MILTON MAR 29, 2017 17-5001 BUILDING DIVISION		
			READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.		
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 1 2751 0 8 1277 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1 2751 0 0 8 1277 0 0 INPUT BRG IN-SX 5-8 1-10 REQRD BRG IN-SX 5-8 1-10 HEEL WEDGE 2x6 L			DESIGN CRITERIA *** SPECIAL LOADS ANALYSIS *** GEOMETRY AND/OR BASIC LOADS CHANGED BY USER. LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 *** NON STANDARD GIRDER *** ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.80") CALCULATED VERT. DEFL.(LL) = L/999 (0.08") ALLOWABLE DEFL.(TL)= L/360 (0.80") CALCULATED VERT. DEFL.(TL) = L/999 (0.14") CSI: TC=0.38 (2-3:1) , BC=0.80 (14-15:1) , WB=0.96 (6-9:1) , SSI=0.18 (6-7:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (4) (INPUT = 0.90) JSI METAL= 0.49 (2) (INPUT = 1.00)		
UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 1 1931 1351 / 0 0 / 0 0 / 0 580 / 0 0 / 0 8 896 627 / 0 0 / 0 0 / 0 0 / 0 269 / 0 0 / 0			BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 1, 8 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.05 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 93 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 27 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: (3) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FR-TO 1-16 -4459 / 0 16-2 -4373 / 0 2-3 -2286 / 0 3-4 -1472 / 0 4-5 -1100 / 0 5-6 -1101 / 0 6-7 -714 / 0 8-7 -1241 / 0 FACTORED VERT. LOAD LC1 MAX (PLF) CSI (LC) FROM TO -77.3 -77.3 0.32 (1) -77.3 -77.3 0.32 (1) -77.3 -77.3 0.38 (1) -77.3 -77.3 0.32 (1) -77.3 -77.3 0.23 (1) -77.3 -77.3 0.26 (1) -77.3 -77.3 0.25 (1) 0.0 0.0 0.31 (1) MAX. UNBRACED LENGTH 3.05 14-2 0 / 1440 3.08 2-13 -1806 / 0 4.13 13-3 0 / 726 5.02 3-12 -980 / 0 5.72 12-4 0 / 721 5.68 4-11 -217 / 0 6.25 11-5 -364 / 0 5.74 11-6 0 / 732 9-6 -1007 / 0 10.00 9-7 0 / 1309 10.00 15-16 0 / 82 WEBS MEMB. MAX. FACTORED FORCE (LBS) FR-TO 14-2 0 / 1440 2-13 -1806 / 0 3-12 -980 / 0 12-4 0 / 721 4-11 -217 / 0 11-5 -364 / 0 11-6 0 / 732 9-6 -1007 / 0 9-7 0 / 1309 15-16 0 / 82		
FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 14 1-10-12 -1751 -1751 --- FRONT VERT TOTAL					

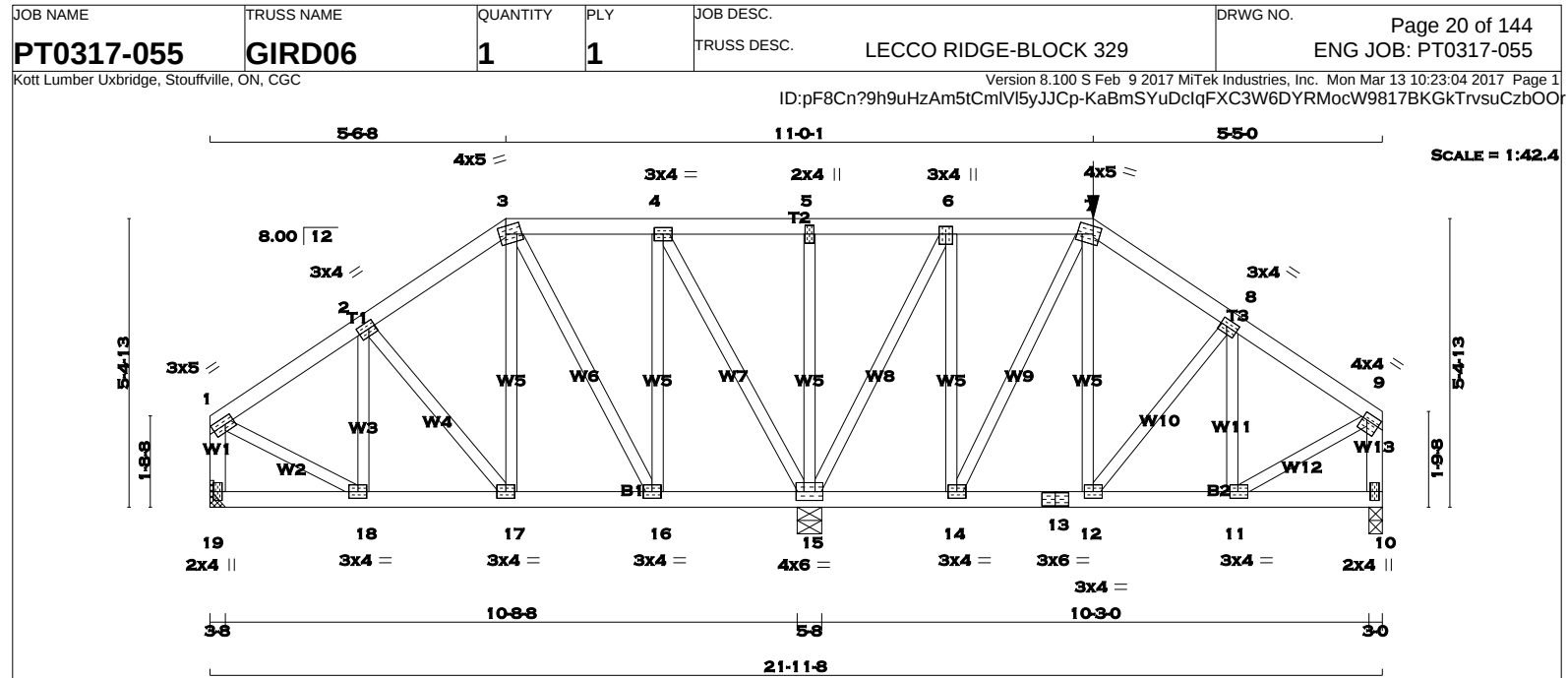


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 2 2x4 DRY No.2 SPF 2 - 3 2x4 DRY No.2 SPF 4 - 3 2x4 DRY No.2 SPF 6 - 1 2x4 DRY No.2 SPF 6 - 4 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 4 1752 0 1752 0 0 HANGER BY OTHERS 6 1370 0 1370 0 0 MIN. SEAT SIZE: 3-8 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 4 1229 860 / 0 0 / 0 0 / 0 369 / 0 0 / 0 6 961 672 / 0 0 / 0 0 / 0 289 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.33 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. LOADING TOTAL LOAD CASES: (3) CHORDS FACTORED FACTORED WEBS MAX. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1-2 -1453 / 0 -77.3 -77.3 0.08 (1) 5.33 5-2 0 / 1259 0.31 (1) 2-3 0 / 0 -77.3 -77.3 0.25 (1) 10.00 2-4 -1433 / 0 0.49 (1) 4-3 -161 / 0 0.0 0.0 0.02 (1) 7.81 1-5 0 / 1355 0.34 (1) 6-1 -1503 / 0 0.0 0.0 0.17 (1) 6.65 6-5 0 / 0 -230.9 -230.9 0.51 (1) 10.00 5-7 0 / 1263 -230.9 -230.9 0.79 (1) 10.00 7-4 0 / 1263 -487.8 -487.8 0.79 (1) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 7 2-11-12 -496 -496 --- 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: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 11-5-8 END DISTANCE = 2-11-12 END SPAN CARRIED = 11-5-8 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDT'L LOADS BASED ON 55 % OF GSL. GIRDER TYPE: CStdGirder START DISTANCE = 2-11-12 START SPAN CARRIED = 21-11-8 END DISTANCE = 6-0-0 END SPAN CARRIED = 21-11-8 END WALL WIDTH = 1-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDT'L LOADS BASED ON 55 % OF GSL. *** NON STANDARD GIRDER *** ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.20") CALCULATED VERT. DEFL.(LL) = L/999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.20") CALCULATED VERT. DEFL.(TL) = L/863 (0.08") CSI: TC=0.25 (2-3:1), BC=0.79 (4-5:1), WB=0.49 (2-4:1), SSI=0.86 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.	
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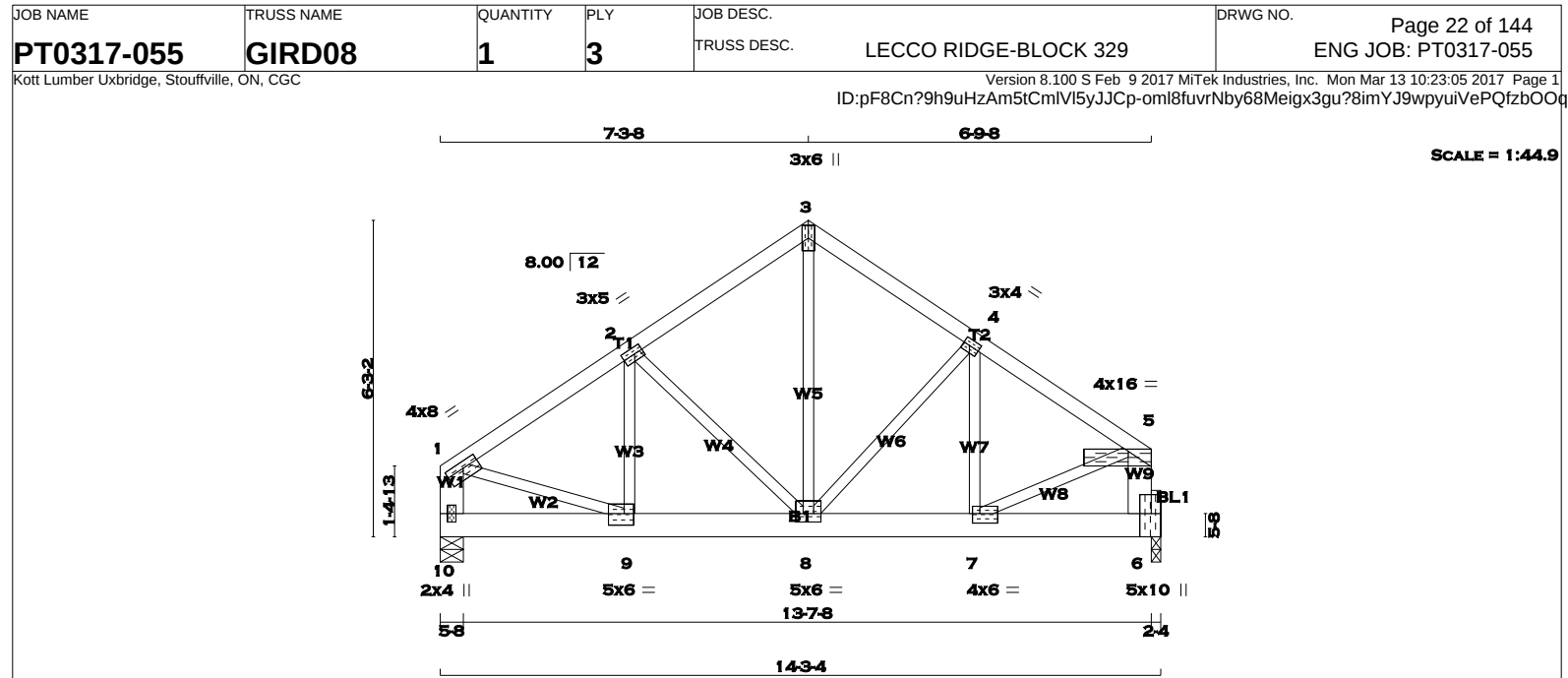


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17-5001
BUILDING DIVISION

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LUMBER N. L. G. A. RULES <table><tr><th>CHORDS</th><th>SIZE</th><th>LUMBER</th><th>DESCR.</th></tr><tr><td>1 - 3</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>3 - 7</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>7 - 9</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>19 - 1</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>10 - 9</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>19 - 13</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr><tr><td>13 - 10</td><td>2x4</td><td>DRY</td><td>No.2 SPF</td></tr></table> ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.							CHORDS	SIZE	LUMBER	DESCR.	1 - 3	2x4	DRY	No.2 SPF	3 - 7	2x4	DRY	No.2 SPF	7 - 9	2x4	DRY	No.2 SPF	19 - 1	2x4	DRY	No.2 SPF	10 - 9	2x4	DRY	No.2 SPF	19 - 13	2x4	DRY	No.2 SPF	13 - 10	2x4	DRY	No.2 SPF	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>19</td><td>494</td><td>0</td><td>494</td><td>0</td></tr><tr><td>15</td><td>1657</td><td>0</td><td>1657</td><td>0</td></tr><tr><td>10</td><td>808</td><td>0</td><td>808</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>19</td><td>348</td><td>238 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>110 / 0</td><td>0 / 0</td></tr><tr><td>15</td><td>1159</td><td>830 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>329 / 0</td><td>0 / 0</td></tr><tr><td>10</td><td>571</td><td>376 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>195 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10 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: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED LC1 MAX. (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED LC1 MAX. (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>-389 / 0</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>6-25</td><td>18-2</td><td>-109 / 11</td><td>0.02 (1)</td></tr><tr><td>2-3</td><td>-316 / 0</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>6-25</td><td>2-17</td><td>-130 / 0</td><td>0.04 (1)</td></tr><tr><td>3-4</td><td>-169 / 0</td><td>-77.3 -77.3</td><td>0.09 (1)</td><td>6-25</td><td>17-3</td><td>0 / 152</td><td>0.04 (1)</td></tr><tr><td>4-5</td><td>-1 / 60</td><td>-77.3 -77.3</td><td>0.12 (1)</td><td>10.00</td><td>3-16</td><td>-173 / 0</td><td>0.10 (1)</td></tr><tr><td>5-6</td><td>-1 / 60</td><td>-149.9 -149.9</td><td>0.18 (1)</td><td>10.00</td><td>16-4</td><td>0 / 178</td><td>0.04 (1)</td></tr><tr><td>6-7</td><td>-375 / 0</td><td>-149.9 -149.9</td><td>0.17 (1)</td><td>6-25</td><td>4-15</td><td>-473 / 0</td><td>0.28 (1)</td></tr><tr><td>7-8</td><td>-663 / 0</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>6-25</td><td>15-5</td><td>-301 / 0</td><td>0.14 (1)</td></tr><tr><td>8-9</td><td>-675 / 0</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>6-25</td><td>15-6</td><td>-944 / 0</td><td>0.54 (1)</td></tr><tr><td>19-1</td><td>-472 / 0</td><td>0.0 0.0</td><td>0.06 (1)</td><td>7.81</td><td>14-6</td><td>0 / 386</td><td>0.10 (1)</td></tr><tr><td>10-9</td><td>-767 / 0</td><td>0.0 0.0</td><td>0.09 (1)</td><td>7.81</td><td>14-7</td><td>-360 / 0</td><td>0.20 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td>12-7</td><td>0 / 132</td><td>0.05 (3)</td><td></td></tr><tr><td>19-18</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.03 (3)</td><td>10.00</td><td>12-8</td><td>-52 / 0</td><td>0.02 (1)</td></tr><tr><td>18-17</td><td>0 / 335</td><td>-17.5 -17.5</td><td>0.07 (1)</td><td>10.00</td><td>11-8</td><td>-196 / 22</td><td>0.05 (1)</td></tr><tr><td>17-16</td><td>0 / 254</td><td>-17.5 -17.5</td><td>0.06 (1)</td><td>10.00</td><td>1-18</td><td>0 / 372</td><td>0.09 (1)</td></tr><tr><td>16-15</td><td>0 / 169</td><td>-17.5 -17.5</td><td>0.10 (1)</td><td>10.00</td><td>11-9</td><td>0 / 646</td><td>0.16 (1)</td></tr><tr><td>15-14</td><td>0 / 375</td><td>-33.9 -33.9</td><td>0.14 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 542</td><td>-33.9 -33.9</td><td>0.13 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 542</td><td>-33.9 -33.9</td><td>0.13 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 572</td><td>-33.9 -33.9</td><td>0.13 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 0</td><td>-33.9 -33.9</td><td>0.06 (3)</td><td>10.00</td><td></td><td></td><td></td></tr></table> FACTORED CONCENTRATED LOADS (LBS) <table><tr><th>JT</th><th>LOC.</th><th>LC1</th><th>MAX-</th><th>MAX+</th><th>FACE</th><th>DIR.</th><th>TYPE</th></tr><tr><td>7</td><td>16-6-9</td><td>-314</td><td>-314</td><td>---</td><td>FRONT</td><td>VERT</td><td>TOTAL</td></tr></table>								FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	19	494	0	494	0	15	1657	0	1657	0	10	808	0	808	0	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	19	348	238 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0	15	1159	830 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0	10	571	376 / 0	0 / 0	0 / 0	0 / 0	195 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)		FR-TO		FROM TO		FR-TO				1-2	-389 / 0	-77.3 -77.3	0.10 (1)	6-25	18-2	-109 / 11	0.02 (1)	2-3	-316 / 0	-77.3 -77.3	0.10 (1)	6-25	2-17	-130 / 0	0.04 (1)	3-4	-169 / 0	-77.3 -77.3	0.09 (1)	6-25	17-3	0 / 152	0.04 (1)	4-5	-1 / 60	-77.3 -77.3	0.12 (1)	10.00	3-16	-173 / 0	0.10 (1)	5-6	-1 / 60	-149.9 -149.9	0.18 (1)	10.00	16-4	0 / 178	0.04 (1)	6-7	-375 / 0	-149.9 -149.9	0.17 (1)	6-25	4-15	-473 / 0	0.28 (1)	7-8	-663 / 0	-77.3 -77.3	0.10 (1)	6-25	15-5	-301 / 0	0.14 (1)	8-9	-675 / 0	-77.3 -77.3	0.10 (1)	6-25	15-6	-944 / 0	0.54 (1)	19-1	-472 / 0	0.0 0.0	0.06 (1)	7.81	14-6	0 / 386	0.10 (1)	10-9	-767 / 0	0.0 0.0	0.09 (1)	7.81	14-7	-360 / 0	0.20 (1)					12-7	0 / 132	0.05 (3)		19-18	0 / 0	-17.5 -17.5	0.03 (3)	10.00	12-8	-52 / 0	0.02 (1)	18-17	0 / 335	-17.5 -17.5	0.07 (1)	10.00	11-8	-196 / 22	0.05 (1)	17-16	0 / 254	-17.5 -17.5	0.06 (1)	10.00	1-18	0 / 372	0.09 (1)	16-15	0 / 169	-17.5 -17.5	0.10 (1)	10.00	11-9	0 / 646	0.16 (1)	15-14	0 / 375	-33.9 -33.9	0.14 (1)	10.00				14-13	0 / 542	-33.9 -33.9	0.13 (1)	10.00				13-12	0 / 542	-33.9 -33.9	0.13 (1)	10.00				12-11	0 / 572	-33.9 -33.9	0.13 (1)	10.00				11-10	0 / 0	-33.9 -33.9	0.06 (3)	10.00				JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	7	16-6-9	-314	-314	---	FRONT	VERT	TOTAL	DESIGN CRITERIA SPECIFIED LOADS: <table><tr><td>TOP CH.</td><td>LL</td><td>=</td><td>23.3</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>3.0</td><td>PSF</td></tr><tr><td>BOT CH.</td><td>LL</td><td>=</td><td>0.0</td><td>PSF</td></tr><tr><td></td><td>DL</td><td>=</td><td>7.0</td><td>PSF</td></tr><tr><td>TOTAL LOAD</td><td>=</td><td>33.3</td><td>PSF</td><td></td></tr></table> SPACING = 24.0 IN./C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 GIRDER TYPE: CPrimeHip LEFT SETBACK = 5-6-8 RIGHT SETBACK = 5-5-0 END SETBACK = 6-0-0 END WALL WIDTH = 3-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDT'L LOADS BASED ON 55 % OF GSL. LOADS APPLIED TO FIRST 10-6-0 OF SPAN MEASURED FROM THE RIGHT. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.36") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01") ALLOWABLE DEFL.(TL)= L/360 (0.36") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02") CSI: TC=0.18 (5-6-1), BC=0.14 (14-15-1), WB=0.54 (6-15-1), SSI=0.21 (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 <table><tr><th>PLATE</th><th>GRIP(DRY) (PSI)</th><th>SHEAR (PLI)</th><th>SECTION (PLI)</th></tr><tr><td>MAX MIN</td><td>MAX MIN</td><td>MAX MIN</td><td>MAX MIN</td></tr><tr><td>MT20</td><td>618 354</td><td>1667 822</td><td>2284 1656</td></tr></table> PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (11) (INPUT = 0.90) JSI METAL= 0.28 (9) (INPUT = 1.00)							TOP CH.	LL	=	23.3	PSF		DL	=	3.0	PSF	BOT CH.	LL	=	0.0	PSF		DL	=	7.0	PSF	TOTAL LOAD	=	33.3	PSF		PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN	MAX MIN	MT20	618 354	1667 822	2284 1656
CHORDS	SIZE	LUMBER	DESCR.																																																																																																																																																																																																																																																																																																																																																							
1 - 3	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
3 - 7	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
7 - 9	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
19 - 1	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
10 - 9	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
19 - 13	2x4	DRY	No.2 SPF																																																																																																																																																																																																																																																																																																																																																							
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JT	VERT	HORZ	DOWN	HORZ																																																																																																																																																																																																																																																																																																																																																						
19	494	0	494	0																																																																																																																																																																																																																																																																																																																																																						
15	1657	0	1657	0																																																																																																																																																																																																																																																																																																																																																						
10	808	0	808	0																																																																																																																																																																																																																																																																																																																																																						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																																																																																																																																																																																																																																																			
19	348	238 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0																																																																																																																																																																																																																																																																																																																																																			
15	1159	830 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0																																																																																																																																																																																																																																																																																																																																																			
10	571	376 / 0	0 / 0	0 / 0	0 / 0	195 / 0	0 / 0																																																																																																																																																																																																																																																																																																																																																			
CHORDS				WEBS																																																																																																																																																																																																																																																																																																																																																						
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)																																																																																																																																																																																																																																																																																																																																																				
FR-TO		FROM TO		FR-TO																																																																																																																																																																																																																																																																																																																																																						
1-2	-389 / 0	-77.3 -77.3	0.10 (1)	6-25	18-2	-109 / 11	0.02 (1)																																																																																																																																																																																																																																																																																																																																																			
2-3	-316 / 0	-77.3 -77.3	0.10 (1)	6-25	2-17	-130 / 0	0.04 (1)																																																																																																																																																																																																																																																																																																																																																			
3-4	-169 / 0	-77.3 -77.3	0.09 (1)	6-25	17-3	0 / 152	0.04 (1)																																																																																																																																																																																																																																																																																																																																																			
4-5	-1 / 60	-77.3 -77.3	0.12 (1)	10.00	3-16	-173 / 0	0.10 (1)																																																																																																																																																																																																																																																																																																																																																			
5-6	-1 / 60	-149.9 -149.9	0.18 (1)	10.00	16-4	0 / 178	0.04 (1)																																																																																																																																																																																																																																																																																																																																																			
6-7	-375 / 0	-149.9 -149.9	0.17 (1)	6-25	4-15	-473 / 0	0.28 (1)																																																																																																																																																																																																																																																																																																																																																			
7-8	-663 / 0	-77.3 -77.3	0.10 (1)	6-25	15-5	-301 / 0	0.14 (1)																																																																																																																																																																																																																																																																																																																																																			
8-9	-675 / 0	-77.3 -77.3	0.10 (1)	6-25	15-6	-944 / 0	0.54 (1)																																																																																																																																																																																																																																																																																																																																																			
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16-15	0 / 169	-17.5 -17.5	0.10 (1)	10.00	11-9	0 / 646	0.16 (1)																																																																																																																																																																																																																																																																																																																																																			
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JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE																																																																																																																																																																																																																																																																																																																																																			
7	16-6-9	-314	-314	---	FRONT	VERT	TOTAL																																																																																																																																																																																																																																																																																																																																																			
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BOT CH.	LL	=	0.0	PSF																																																																																																																																																																																																																																																																																																																																																						
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LICENSED PROFESSIONAL ENGINEER PAUL TREVISAN 100136551 March 13th, 2017 PROVINCE OF ONTARIO RECEIVED TOWN OF MILTON MAR 29, 2017 17-5001 BUILDING DIVISION READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.							KOTT																																																																																																																																																																																																																																																																																																																																																			

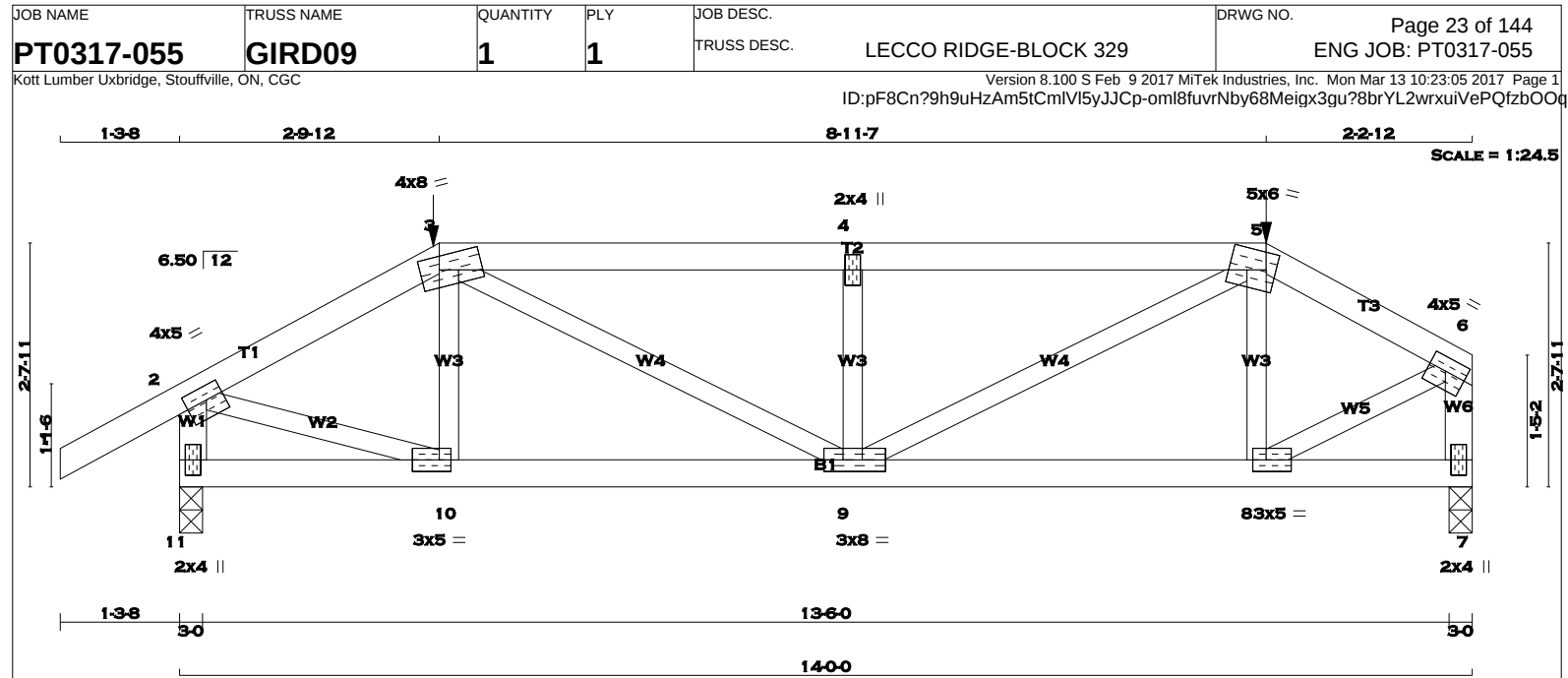


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 5 2x4 DRY No.2 SPF 10 - 1 2x6 DRY No.2 SPF 6 - 5 2x6 DRY No.2 SPF 10 - 6 2x6 DRY No.2 SPF BEARING BLOCKS BL1 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS: CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF) TOP CHORDS : (0.122"x3") SPIRAL NAILS 1-3 1 12 TOP 3-5 1 12 TOP 10-1 2 12 TOP 6-5 2 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 10-6 2 4 SIDE(567.8) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES. TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY. SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP. PLATES (table is in inches) JT TYPE PLATES W LEN Y X 1 TMVW-t MT20 4.0 8.0 1.50 3.75 2 TMWW-t MT20 3.0 5.0 1.50 2.00 3 TTW+p MT20 3.0 6.0 4 TMWW-t MT20 3.0 4.0 1.50 1.50 5 TMVW-p MT20 4.0 16.0 Edge 5.50 6 BMVK1+t MT20 5.0 10.0 5.50 Edge			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 10 6556 0 6556 0 0 5-8 5-8 6 6574 0 6574 0 0 2-4 2-4 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 10 4601 3219 / 0 0 / 0 0 / 0 1383 / 0 0 / 0 6 4614 3230 / 0 0 / 0 0 / 0 1384 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 6 BEARING SIZE FACTOR = 1.08 AT JNT(S) 6 (BASED ON SUPPORT DEPTH = 1-8) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.56 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. LOADING TOTAL LOAD CASES: (3) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. UNBRAC LENGTH FR-TO FR-TO 1-2 -6472 / 0 -77.3 -77.3 0.12 (1) 4.56 9-2 0 / 1994 0.15 (1) 2-3 -4815 / 0 -77.3 -77.3 0.08 (1) 5.16 2-8 -1951 / 0 0.26 (1) 3-4 -4813 / 0 -77.3 -77.3 0.07 (1) 5.17 8-3 0 / 5088 0.38 (1) 4-5 -5582 / 0 -77.3 -77.3 0.09 (1) 4.86 8-4 -968 / 0 0.12 (1) 10-1 -5160 / 0 0.0 0.0 0.11 (1) 7.55 7-4 0 / 874 0.07 (1) 6-5 -5422 / 0 0.0 0.0 0.12 (1) 7.42 1-9 0 / 5577 0.42 (1) 7-5 0 / 5957 0.45 (1) 10-9 0 / 0 -869.2 -869.2 0.25 (1) 10.00 9-8 0 / 5389 -869.2 -869.2 0.41 (1) 10.00 8-7 0 / 4648 -869.2 -869.2 0.36 (1) 10.00 7-6 -921 / 0 -869.2 -869.2 0.20 (1) 6.25			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 38-4-8 END DISTANCE = 14-2-10 END SPAN CARRIED = 38-4-8 END WALL WIDTH = 5-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.46") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.46") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07") CSI: TC=0.12 (5-6:1), BC=0.41 (8-9:1), WB=0.45 (5-7:1), SSI=0.37 (9-10:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (10) (INPUT = 0.90) JSI METAL= 0.46 (7) (INPUT = 1.00)		
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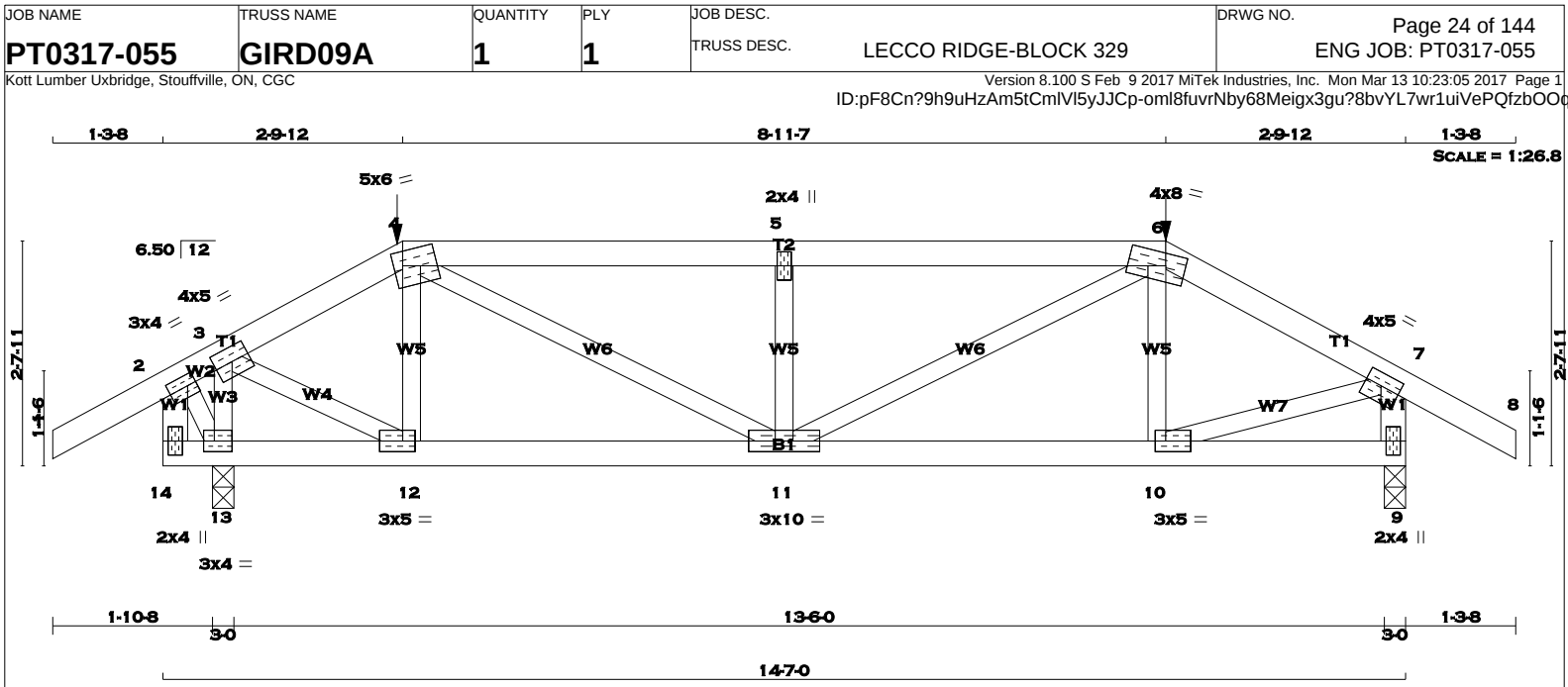


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TOWN OF MILTON
MAR 29, 2017
17-5001
BUILDING DIVISION

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



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 5 2x4 DRY No.2 SPF 5 - 6 2x4 DRY No.2 SPF 11- 2 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 EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 11 1266 0 1266 0 0 3-0 3-0 7 1176 0 1176 0 0 3-0 3-0 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL 11 887 630 / 0 0 / 0 0 / 0 258 / 0 0 / 0 7 826 575 / 0 0 / 0 0 / 0 0 / 0 251 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11, 7 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.04 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) CHORDS WEBS MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1-2 0 / 25 -77.3 -77.3 0.11 (1) 10.00 10-3 -208 / 42 0.04 (1) 2-3 -1417 / 0 -77.3 -77.3 0.14 (1) 5.30 3-9 0 / 837 0.21 (1) 3-4 -1977 / 0 -139.4 -139.4 0.57 (1) 4.04 9-4 -755 / 0 0.13 (1) 4-5 -1977 / 0 -139.4 -139.4 0.57 (1) 4.04 9-5 0 / 1068 0.26 (1) 5-6 -1193 / 0 -77.3 -77.3 0.09 (1) 5.73 8-5 -369 / 0 0.07 (1) 11-2 -1235 / 0 0.0 0.0 0.14 (1) 7.19 2-10 0 / 1290 0.32 (1) 7-6 -1159 / 0 0.0 0.0 0.13 (1) 7.37 8-6 0 / 1160 0.29 (1) 11-10 0 / 0 -31.5 -31.5 0.11 (3) 10.00 10-9 0 / 1235 -31.5 -31.5 0.29 (1) 10.00 9-8 0 / 1030 -31.5 -31.5 0.25 (1) 10.00 8-7 0 / 0 -31.5 -31.5 0.10 (3) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 3 2-9-12 -144 -144 --- FRONT VERT TOTAL 5 11-9-4 -114 -114 --- FRONT VERT TOTAL				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 GIRDER TYPE: CPrimeHip LEFT SETBACK = 2-9-12 RIGHT SETBACK = 2-2-12 END SETBACK = 5-5-8 END WALL WIDTH = 3-0 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.47") CALCULATED VERT. DEFL.(LL) = L/999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.47") CALCULATED VERT. DEFL.(TL) = L/999 (0.08") CSI: TC=0.57 (3-4:1), BC=0.29 (9-10:1), WB=0.32 (2-10:1), SSI=0.33 (3-4:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (9) (INPUT = 0.90) JSI METAL= 0.46 (2) (INPUT = 1.00)			
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.

1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
14 - 9	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TMVW-t	MT20	4.0	5.0		
4	TTWW-m	MT20	5.0	6.0	2.00	1.25
5	TMVW-w	MT20	2.0	4.0		
6	TTWW-m	MT20	4.0	8.0	1.75	2.75
7	TMVW-t	MT20	4.0	5.0	1.75	2.25
9	BMV1-p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	1.50
11	BMVW-t	MT20	3.0	10.0		
12	BMVW-t	MT20	3.0	5.0	1.50	1.75
13	BMVW1-t	MT20	3.0	4.0	1.50	1.50
14	BMV-p	MT20	2.0	4.0		

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 143.5 lbs FACTORED DOWN AT 11-9-4, AND 143.5 lbs FACTORED DOWN AT 2-9-12 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
9	1248	0	1248	0
13	1393	0	1393	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	COMPONENT LIVE	PERM. LIVE	WIND	DEAD	SOIL
9	874	620 / 0	0 / 0	0 / 0	0 / 0	254 / 0	0 / 0
13	976	693 / 0	0 / 0	0 / 0	0 / 0	283 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 13

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10 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: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 25	-77.3	-77.3	10.00	12-4	-447 / 0	0.08 (1)
2-3	0 / 63	-77.3	-77.3	10.00	4-11	0 / 1114	0.28 (1)
3-4	-1095 / 0	-77.3	-77.3	5.94	11-5	-756 / 0	0.13 (1)
4-5	-1920 / 0	-139.4	-139.4	4.10	11-6	0 / 799	0.20 (1)
5-6	-1920 / 0	-139.4	-139.4	4.10	10-6	-203 / 43	0.04 (1)
6-7	-1391 / 0	-77.3	-77.3	5.34	3-12	0 / 1165	0.29 (1)
7-8	0 / 25	-77.3	-77.3	10.00	13-3	-1197 / 0	0.19 (1)
14-2	-52 / 0	0.0	0.0	7.81	2-13	-111 / 0	0.02 (1)
9-7	-1216 / 0	0.0	0.0	7.23	10-7	0 / 1267	0.31 (1)
14-13	0 / 0	-31.5	-31.5	0.07 (1)	10.00		
13-12	-73 / 0	-31.5	-31.5	0.10 (3)	6.25		
12-11	0 / 933	-31.5	-31.5	0.23 (1)	10.00		
11-10	0 / 1212	-31.5	-31.5	0.28 (1)	10.00		
10-9	0 / 0	-31.5	-31.5	0.10 (3)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
4	2-9-12	-144	-144	---	FRONT	VERT	TOTAL
6	11-9-4	-144	-144	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

CSI: TC=0.56 (4-5:1), BC=0.28 (10-11:1), WB=0.31 (7-10:1), SSI=0.33 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

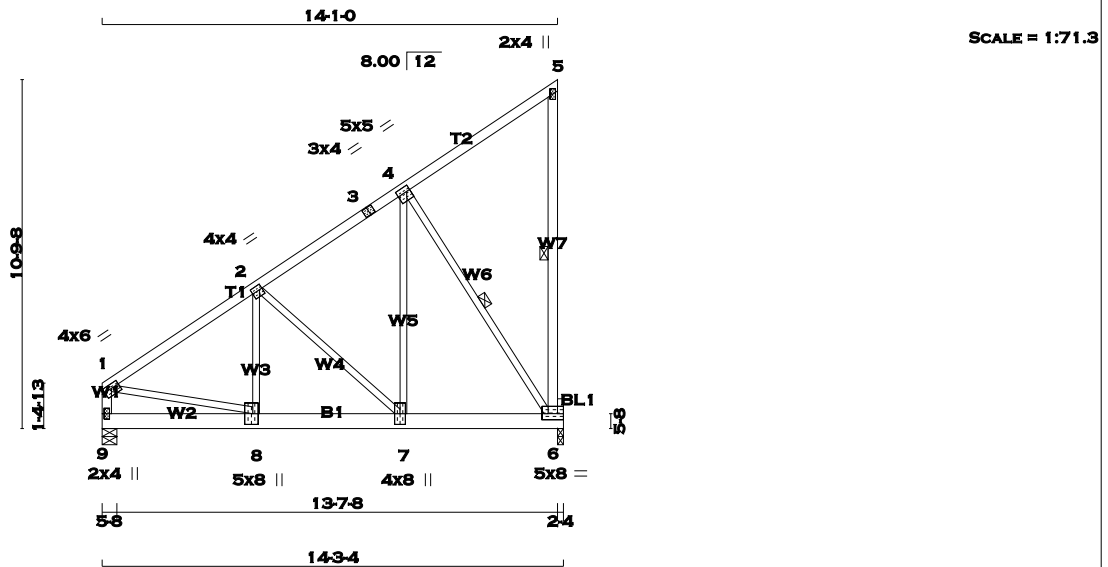
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

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TOTAL WEIGHT = 2 X 81 = 163 lb [M]

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

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

DRY: SEASONED LUMBER.

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

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

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.50	3.00
2	TMWW-t	MT20	4.0	4.0	1.75	1.00
3	TS-t	MT20	3.0	4.0		
4	TMVW-t	MT20	5.0	5.0	2.00	1.25
5	TMV+p	MT20	2.0	4.0		
6	BMVWK1-t	MT20	5.0	8.0	2.25	Edge
7	BMWW-t	MT20	4.0	8.0		

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

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

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.43 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 19 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 93 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S		FACTORED		W E B S		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	MAX. FORCE (LBS)	MAX (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
1- 2	-4316 / 0	-77.3 -77.3	0.24 (1)	4.43	8- 2	0 / 2173	0.27 (1)
2- 3	-2390 / 0	-77.3 -77.3	0.17 (1)	5.65	2- 7	-2179 / 0	0.73 (1)
3- 4	-2390 / 0	-77.3 -77.3	0.17 (1)	5.65	7- 4	0 / 4038	0.50 (1)
4- 5	-18 / 0	-77.3 -77.3	0.13 (1)	6.25	4- 6	-3703 / 0	0.93 (1)
6- 5	-149 / 0	0.0 0.0	0.04 (1)	6.25	1- 8	0 / 3680	0.46 (1)
9- 1	-3315 / 0	0.0 0.0	0.19 (1)	6.39			
9- 8	0 / 0	-620.2 -620.2	0.26 (1)	10.00			
8- 7	0 / 3602	-525.3 -525.3	0.30 (1)	10.00			
7- 6	0 / 1995	-525.3 -525.3	0.25 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.46")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.24 (1-2:1) , BC=0.30 (7-8:1) , WB=0.93 (4-6:1) , SSI=0.56 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

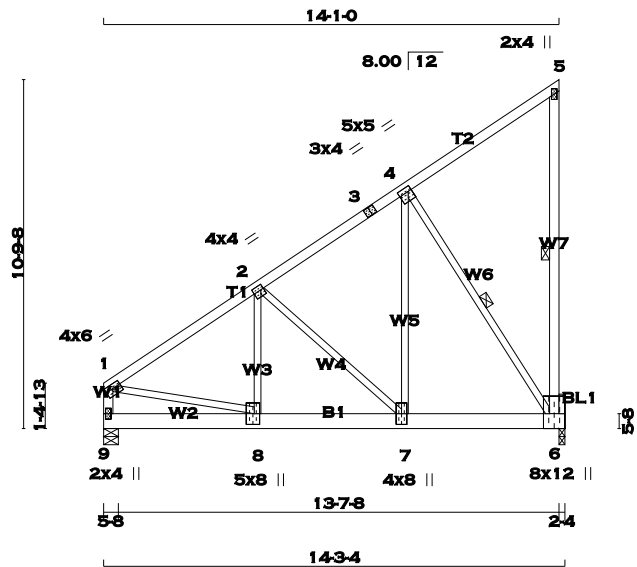
PLATE ROTATION TOL. = 5.0 Deg.

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



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TOTAL WEIGHT = 3 X 82 = 245 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
9 - 6	2x6	DRY	2100F 1.8E	SPF
BEARING BLOCKS				
BL1	2x8	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2 SPF EXCEPT				
DRY: SEASONED LUMBER.				
DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:				
CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)		
TOP CHORDS : (0.122"x3") SPIRAL NAILS				
1-3	12	TOP		
3-5	12	TOP		
5-6	12	TOP		
9-1	12	TOP		
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS				
9-6	5	SIDE(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 1.75 1.00
3	TS-t	MT20	3.0	4.0
4	TMVW-t	MT20	5.0	5.0 1.75 1.25
5	TMV+p	MT20	2.0	4.0
6	BMVWK1+p	MT20	8.0	12.0 Edge

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		6607	0	6607	0	0	2-4	2-4	
9		6596	0	6596	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6		4637	3245 / 0	0 / 0	0 / 0	0 / 0	1392 / 0	0 / 0	
9		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) 6, 9									
BEARING SIZE FACTOR = 1.08 AT JNT(S) 6 (BASED ON SUPPORT DEPTH = 1-8)									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 19 LBS.									
1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 142 LBS.									
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) TO EACH PLY USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.									
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW									
LOADING									
TOTAL LOAD CASES: (3)									
C H O R D S									
		MAX. FACTORED	FACTORED			W E B S		MAX. FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE (LBS)	MAX	
			FROM TO	CSI (LC)	UNBRAC LENGTH			CSI (LC)	
FR-TO						FR-TO			
1-2		-6414 / 0	-77.3	-77.3 0.17 (1)	4.55	8-2	0 / 3256	0.24 (1)	
2-3		-3668 / 0	-77.3	-77.3 0.11 (1)	5.69	2-7	-3097 / 0	0.68 (1)	
3-4		-3668 / 0	-77.3	-77.3 0.11 (1)	5.69	7-4	0 / 6406	0.48 (1)	
4-5		-18 / 0	-77.3	-77.3 0.08 (1)	6.25	4-6	-5679 / 0	0.93 (1)	
6-5		-148 / 0	0.0	0.0 0.03 (1)	6.25	1-8	0 / 5461	0.41 (1)	
9-1		-4848 / 0	0.0	0.0 0.16 (1)	6.51				
9-8		0 / 0	-869.2	-869.2 0.21 (1)	10.00				
8-7		0 / 5345	-869.2	-869.2 0.27 (1)	10.00				
7-6		0 / 3061	-869.2	-869.2 0.24 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 38-4-8
END DISTANCE = 14-2-10
END SPAN CARRIED = 38-4-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.46")
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=0.17 (1-2:1) , BC=0.27 (7-8:1) , WB=0.93 (4-6:1) , SSI=0.48 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

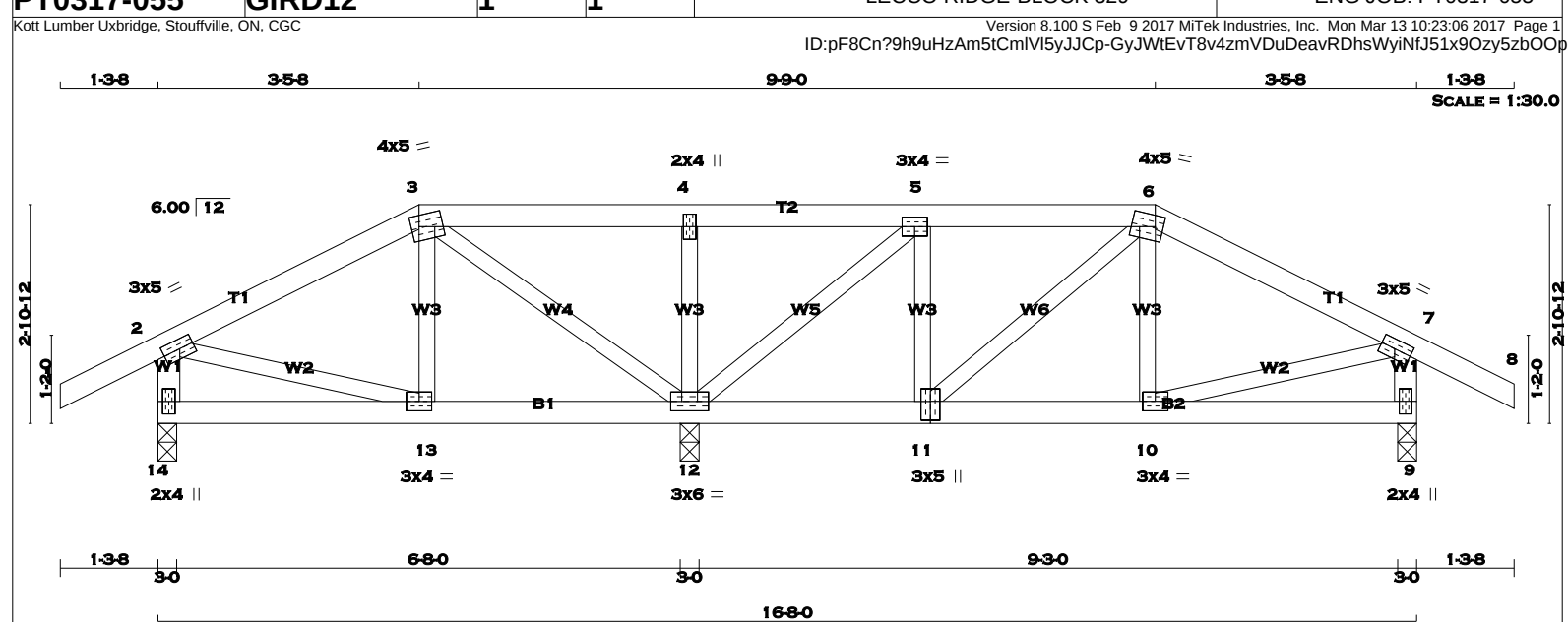
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (8) (INPUT = 0.90)
JSI METAL= 0.54 (1) (INPUT = 1.00)



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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS UNFACTORED REACTIONS DESIGN CRITERIA

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
14 - 2	2x4	DRY No.2	SPF
9 - 7	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.

<u>PLATES (table is in inches)</u>							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMVW-t	MT20	3.0	5.0	1.50	2.25	
3	TTWW-m	MT20	4.0	5.0	1.75	1.25	
4	TMW+w	MT20	2.0	4.0			
5	TMWW-t	MT20	3.0	4.0			
6	TTWW-m	MT20	4.0	5.0	1.75	1.25	
7	TMVW-t	MT20	3.0	5.0	1.50	2.25	
9	BMV1+p	MT20	2.0	4.0			
10	BMWW-t	MT20	3.0	4.0			
11	BSWW+l	MT20	3.0	5.0	3.00	1.50	
12	BMWWW1-t	MT20	3.0	6.0			
13	BMWW-t	MT20	3.0	4.0			
14	BMV1+p	MT20	2.0	4.0			

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

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX. (PLF)	MAX. UNBRAC. LENGTH (FT)	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-2	0 / 23	-77.3	-77.3	0.11 (1)	10.00	13-3	0 / 63	0.02 (3)
2-3	-132 / 0	-77.3	-77.3	0.17 (1)	6.25	3-12	-358 / 0	0.12 (1)
3-4	0 / 171	-77.3	-77.3	0.19 (1)	10.00	12-4	-302 / 0	0.06 (1)
4-5	0 / 171	-77.3	-77.3	0.19 (1)	10.00	12-5	-687 / 0	0.20 (1)
5-6	-354 / 0	-77.3	-77.3	0.10 (1)	6.25	11-5	0 / 201	0.05 (1)
6-7	-498 / 0	-77.3	-77.3	0.18 (1)	6.25	11-6	-122 / 0	0.03 (1)
7-8	0 / 23	-77.3	-77.3	0.11 (1)	10.00	10-6	0 / 73	0.03 (3)
14-2	-327 / 0	0.0	0.0	0.04 (1)	7.81	2-13	0 / 122	0.03 (1)
9-7	-569 / 0	0.0	0.0	0.06 (1)	7.81	10-7	0 / 457	0.11 (1)
14-13	0 / 0	-17.5	-17.5	0.05 (3)	10.00			
13-12	0 / 119	-17.5	-17.5	0.09 (1)	10.00			
12-11	0 / 354	-46.2	-46.2	0.13 (1)	10.00			
11-10	0 / 447	-46.2	-46.2	0.15 (1)	10.00			
10-9	0 / 0	-46.2	-46.2	0.08 (1)	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 FLAT SECTION BASED ON A SLOPE OF 6.00/12

GIRDER TYPE: CStdGirder
START DISTANCE = 7-2-0
START SPAN CARRIED = 3-5-8
END DISTANCE = 16-8-0
END SPAN CARRIED = 3-5-8
END WALL WIDTH = 3-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

CSI: TC=0.19 (3-4:1), BC=0.15 (10-11:1), WB=0.20 (5-12:1), SSI=0.14 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

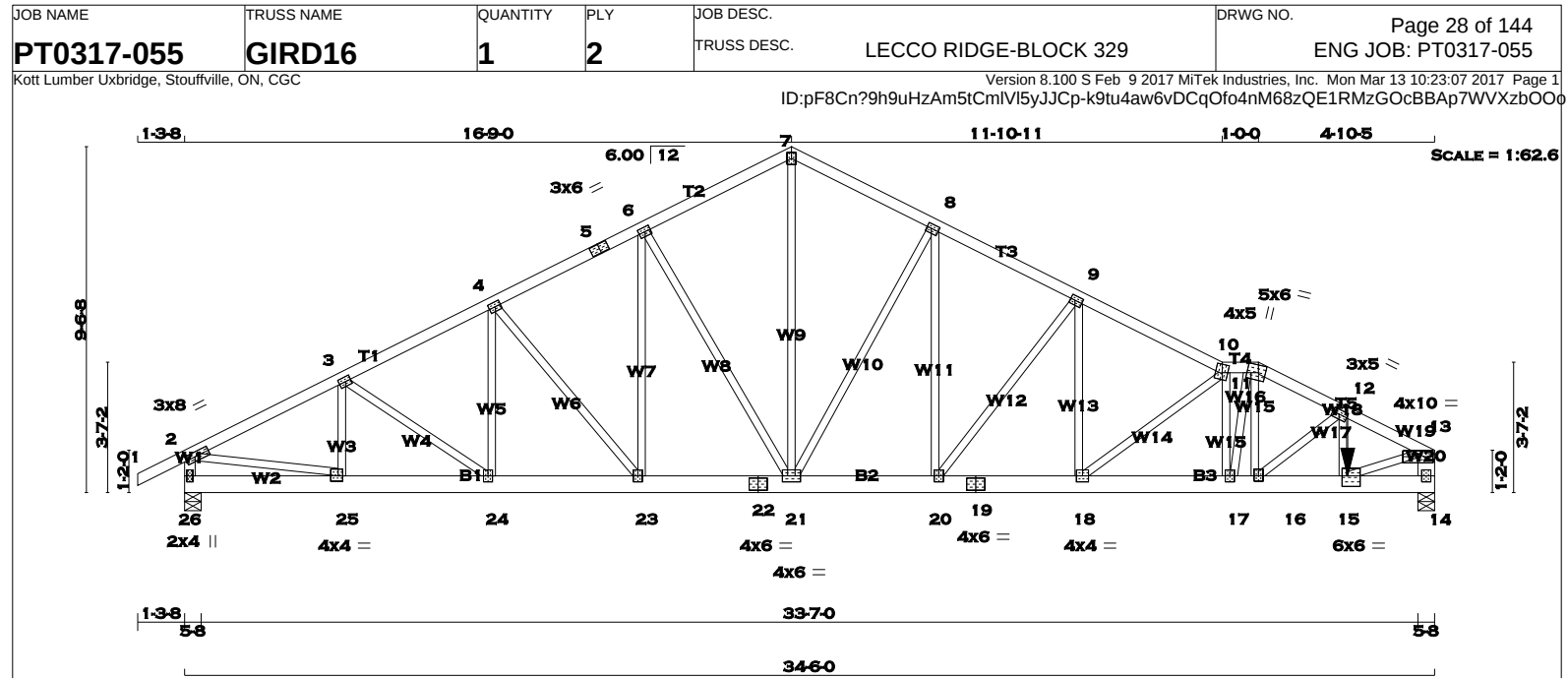
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (5) (INPUT = 0.90)
JSI METAL= 0.20 (5) (INPUT = 1.00)



TOTAL WEIGHT = 2 X 184 = 367 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 10	2x4	DRY	No.2
10 - 11	2x4	DRY	No.2
11 - 13	2x4	DRY	No.2
26 - 2	2x4	DRY	No.2
14 - 13	2x6	DRY	No.2
26 - 22	2x6	DRY	No.2
22 - 19	2x6	DRY	No.2
19 - 14	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-5	12	TOP
5-7	12	TOP
7-10	12	TOP
10-11	12	TOP
11-13	12	TOP
26-2	12	TOP
14-13	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
26-22	12	TOP
22-19	12	TOP
19-14	12	SIDE(56.3)
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 TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
26	1962	0	1962	0	5-8	5-8	
14	4570	0	4570	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE PERM.LIVE WIND DEAD SOIL
26	1375	975 / 0	0 / 0 0 / 0 400 / 0 0 / 0
14	3207	2244 / 0	0 / 0 0 / 0 0 / 0 964 / 0 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 26, 14

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.95 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	MAX (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.06 (1)	10-00	25-3	-402 / 0	0.04 (1)
2-3	-2726 / 0	-77.3 -77.3	0.13 (1)	5-41	3-24	0 / 38	0.00 (1)
3-4	-2777 / 0	-77.3 -77.3	0.13 (1)	5-38	24-4	0 / 81	0.02 (3)
4-5	-2518 / 0	-77.3 -77.3	0.12 (1)	5-59	4-23	-353 / 0	0.13 (1)
5-6	-2518 / 0	-77.3 -77.3	0.12 (1)	5-59	23-6	0 / 307	0.04 (1)
6-7	-2199 / 0	-77.3 -77.3	0.12 (1)	5-89	6-21	-596 / 0	0.42 (1)
7-8	-2198 / 0	-77.3 -77.3	0.10 (1)	5-91	21-7	0 / 1699	0.21 (1)
8-9	-2839 / 0	-77.3 -77.3	0.12 (1)	5-35	21-8	-1206 / 0	0.85 (1)
9-10	-3653 / 0	-77.3 -77.3	0.14 (1)	4-82	20-8	0 / 1014	0.13 (1)
10-11	-4359 / 0	-77.3 -77.3	0.06 (1)	4-55	20-9	-1223 / 0	0.47 (1)
11-12	-4640 / 0	-77.3 -77.3	0.13 (1)	4-36	18-9	0 / 1001	0.12 (1)
12-13	-5715 / 0	-77.3 -77.3	0.17 (1)	3-95	18-10	-1485 / 0	0.33 (1)
26-2	-1906 / 0	0.0 0.0	0.11 (1)	7-81	17-10	-866 / 0	0.09 (1)
14-13	-4230 / 0	0.0 0.0	0.15 (1)	6-95	17-11	0 / 773	0.10 (1)
					16-11	0 / 1188	0.15 (1)
					16-12	-1243 / 0	0.13 (1)
					15-12	0 / 1113	0.14 (1)
					2-25	0 / 2488	0.31 (1)
					15-13	0 / 5337	0.66 (1)
26-25	0 / 0	-17.5 -17.5	0.03 (1)	10-00			
25-24	0 / 2449	-17.5 -17.5	0.19 (1)	10-00			
24-23	0 / 2480	-17.5 -17.5	0.18 (1)	10-00			
23-22	0 / 2256	-17.5 -17.5	0.18 (1)	10-00			
22-21	0 / 2256	-17.5 -17.5	0.18 (1)	10-00			
21-20	0 / 2539	-17.5 -17.5	0.20 (1)	10-00			
20-19	0 / 3281	-17.5 -17.5	0.24 (1)	10-00			
19-18	0 / 3281	-17.5 -17.5	0.24 (1)	10-00			
18-17	0 / 4436	-17.5 -17.5	0.32 (1)	10-00			
17-16	0 / 4191	-17.5 -17.5	0.29 (1)	10-00			
16-15	0 / 5104	-17.5 -17.5	0.49 (1)	10-00			
15-14	0 / 0	-130.1 -130.1	0.16 (1)	10-00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
15	32-1-4	-2870	-2870	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CStdGirder
START DISTANCE = 32-1-4
START SPAN CARRIED = 7-2-8
END DISTANCE = 34-6-0
END SPAN CARRIED = 7-2-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.15")
CALCULATED VERT. DEFL.(LL)= L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.15")
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.17 (12-13:1), BC=0.49 (15-16:1), WB=0.85 (8-21:1), SSI=0.11 (14-15:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

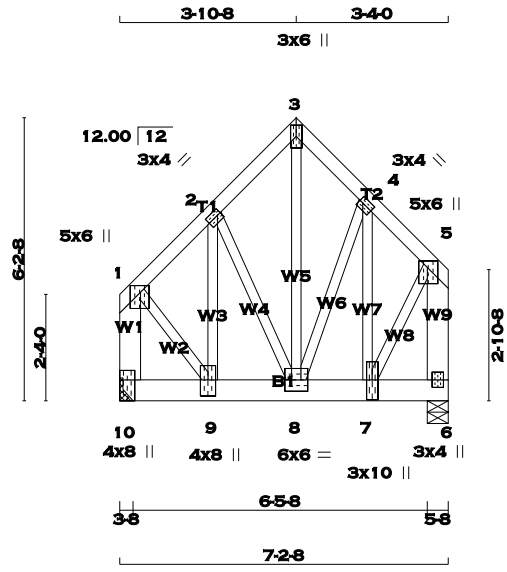
JSI GRIP= 0.90 (20) JSI PLI = 290 (20)
JSI METAL= 0.64 (10) JSI INCHES = 1 (10)

KOTT
CONTINUED ON PAGE 2



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SCALE = 1:50.5

TOTAL WEIGHT = 2 X 54 = 109 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW+p	MT20	5.0	6.0	1.75	2.75
2	TMVW-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	6.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
5	TMVW+p	MT20	5.0	6.0	1.75	2.75
6	BMV1+p	MT20	3.0	4.0		
7	BMVW+t	MT20	3.0	10.0	5.25	1.50
8	BMVW-t	MT20	6.0	6.0		
9	BMVW+t	MT20	4.0	8.0	4.25	2.00
10	BMV1+t	MT20	4.0	8.0	5.50	

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

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

		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
		VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
JT	10	2870	0	2870	0	0	HANGER BY OTHERS		
						MIN. SEAT SIZE: 3-8			
6	2870	0	2870	0	0	5-8	5-8		

UNFACTORED REACTIONS

		1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
10	2014	1409 / 0	0 / 0	0 / 0	0 / 0	605 / 0	0 / 0	
6	2014	1409 / 0	0 / 0	0 / 0	0 / 0	605 / 0	0 / 0	

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.17 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-1553 / 0	-77.3	-77.3 0.10 (1)	5.17	9-2	0 / 440	0.11 (1)
2-3	-1285 / 0	-77.3	-77.3 0.08 (1)	5.59	2-8	-436 / 0	0.14 (1)
3-4	-1275 / 0	-77.3	-77.3 0.08 (1)	5.60	8-3	0 / 1666	0.41 (1)
4-5	-1316 / 0	-77.3	-77.3 0.09 (1)	5.52	8-4	-31 / 0	0.01 (1)
10-1	-2197 / 0	0.0	0.0 0.19 (1)	6.85	7-4	-52 / 8	0.02 (1)
6-5	-2278 / 0	0.0	0.0 0.24 (1)	6.75	1-9	0 / 1495	0.37 (1)
					7-5	0 / 1570	0.39 (1)
10-9	0 / 0	-719.0	-719.0 0.23 (1)	10.00			
9-8	0 / 1095	-719.0	-719.0 0.28 (1)	10.00			
8-7	0 / 922	-719.0	-719.0 0.21 (1)	10.00			
7-6	0 / 0	-719.0	-719.0 0.18 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.24 (5-6:1), BC=0.28 (8-9:1), WB=0.41 (3-8:1), SSI=0.53 (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)		(PLI)	
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

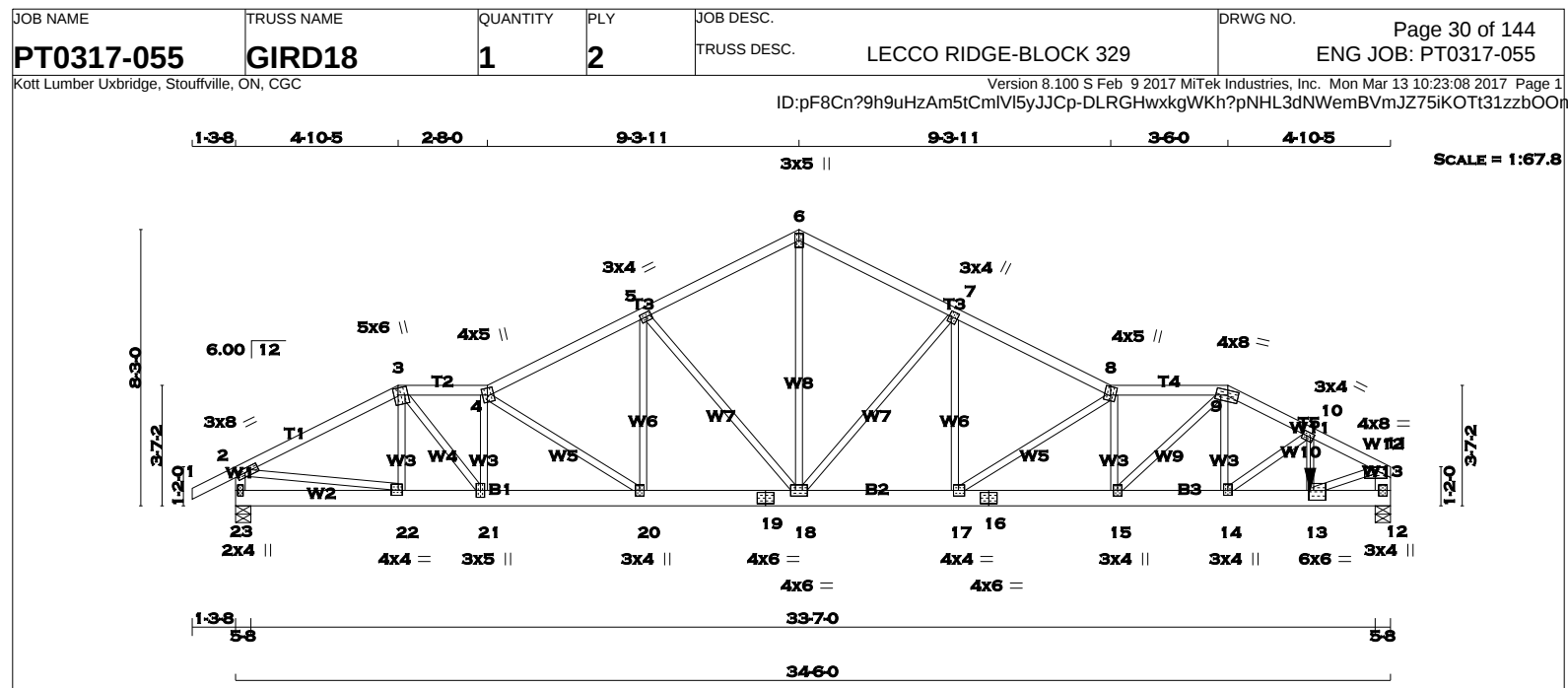
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.41 (8) (INPUT = 1.00)

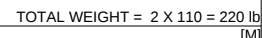


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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





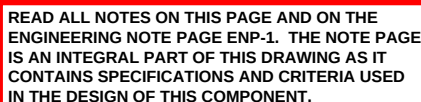


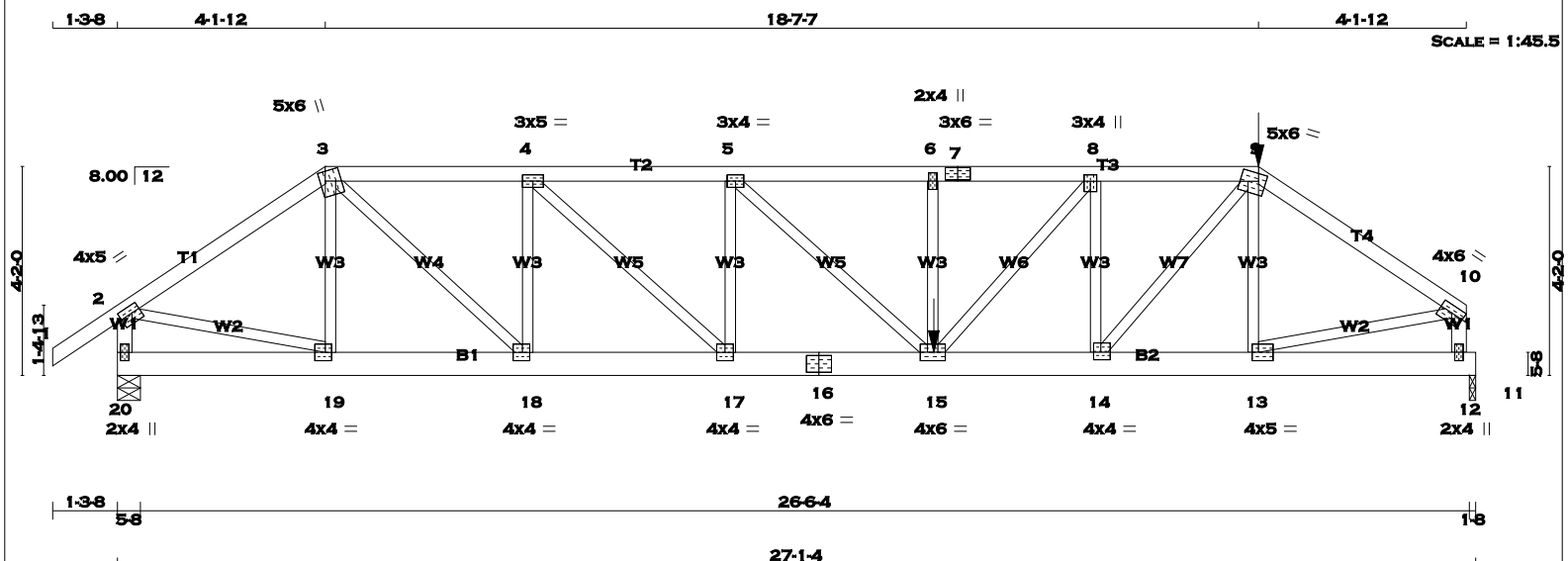
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TTWW+m	MT20	5.0	6.0	2.25	1.25
4	TMWW-t	MT20	3.0	4.0		

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 29	-77.3	-77.3	0.06 (1)	10.00	16-3	-423 / 9	0.06 (1)	
2-3	-2776 / 0	-77.3	-77.3	0.16 (1)	10.00	3-15	0 / 1983	0.25 (1)	
3-4	-3801 / 0	-145.8	-145.8	0.29 (1)	4.56	15-1	-1149 / 0	0.16 (1)	
4-5	-4297 / 0	-145.8	-145.8	0.31 (1)	4.32	4-14	0 / 653	0.08 (1)	
5-6	-3863 / 0	-145.8	-145.8	0.24 (1)	4.60	14-5	-273 / 37	0.04 (1)	
6-7	-3863 / 0	-145.8	-145.8	0.32 (1)	4.50	5-12	-572 / 0	0.18 (1)	
7-8	-3863 / 0	-145.8	-145.8	0.32 (1)	4.50	12-6	-632 / 0	0.09 (1)	
8-9	-2532 / 0	-145.8	-145.8	0.27 (1)	5.37	12-8	0 / 1755	0.22 (1)	
10-9	-2357 / 0	0.0	0.0	0.33 (1)	7.32	11-8	-1906 / 0	0.26 (1)	
17-2	-2398 / 0	0.0	0.0	0.14 (1)	7.27	11-9	0 / 3275	0.41 (1)	
						2-16	0 / 2379	0.29 (1)	
17-16	0 / 0	-33.0	-33.0	0.08 (3)	10.00				
16-15	0 / 2295	-33.0	-33.0	0.25 (1)	10.00				
15-14	0 / 3801	-33.0	-33.0	0.37 (1)	10.00				
14-13	0 / 4297	-33.0	-33.0	0.42 (1)	10.00				
13-12	0 / 4297	-33.0	-33.0	0.42 (1)	10.00				
12-11	0 / 2532	-33.0	-33.0	0.27 (1)	10.00				
11-10	0 / 0	-33.0	-33.0	0.09 (3)	10.00				

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

JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.59 (13) (INPUT = 1.00)





TOTAL WEIGHT = 2 X 128 = 256 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
9 - 10	2x4	DRY	No.2	SPF
20 - 2	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
20 - 16	2x6	DRY	No.2	SPF
16 - 11	2x6	DRY	No.2	SPF

ALL WEBS	2x3	DRY	No 2	SPE
----------	-----	-----	------	-----

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1- 3	1	12
3- 7	1	12
7- 9	1	12
9- 10	1	12
20- 2	1	12
12- 10	1	12
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
20- 16	2	12
16- 11	2	12
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	1	6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00

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

JTB	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
20	2094	0	2094	0	0	5-8	5-8
11	2692	0	2692	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1467	1042 / 0	0 / 0	0 / 0	0 / 0	425 / 0	0 / 0
11	1891	1313 / 0	0 / 0	0 / 0	0 / 0	578 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 11

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.09 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED	FACTORED		MAX.	MAX.	MEMB.	MAX. FACTORED	MAX	
	FORCE	VERT. LOAD	LC1				FORCE		FORCE
FR-TO	(LBS)	(PLF)	CSI (LC)	UNBRAC	FR-TO	(LBS)	CSI (LC)		
1-2	0 / 29	-77.3	-77.3	0.06 (1)	10.00	19-3	-374 / 0	0.05 (1)	
2-3	-2390 / 0	-77.3	-77.3	0.16 (1)	5.66	3-18	0 / 2055	0.25 (1)	
3-4	-3476 / 0	-77.3	-77.3	0.14 (1)	4.91	18-4	-1352 / 0	0.18 (1)	
4-5	-4559 / 0	-77.3	-77.3	0.17 (1)	4.37	4-17	0 / 1485	0.18 (1)	
5-6	-5190 / 0	-77.3	-77.3	0.17 (1)	4.14	17-5	-902 / 0	0.12 (1)	
6-7	-5190 / 0	-145.8	-145.8	0.21 (1)	4.09	5-15	0 / 866	0.11 (1)	
7-8	-5190 / 0	-145.8	-145.8	0.21 (1)	4.09	15-6	-366 / 0	0.05 (1)	
8-9	-4297 / 0	-145.8	-145.8	0.18 (1)	4.46	5-8	0 / 1373	0.17 (1)	
9-10	-3473 / 0	-77.3	-77.3	0.18 (1)	4.86	18-4	-1562 / 0	0.20 (1)	
20-2	-2062 / 0	0.0	0.0	0.12 (1)	7.70	14-9	0 / 2179	0.27 (1)	
12-10	-2771 / 0	0.0	0.0	0.15 (1)	6.87	13-9	-340 / 20	0.04 (1)	
						2-19	0 / 2039	0.25 (1)	
20-19	0 / 0	-17.5	-17.5	0.02 (3)	10.00	13-10	0 / 2963	0.37 (1)	
19-18	0 / 1975	-17.5	-17.5	0.14 (1)	10.00				
18-17	0 / 3476	-17.5	-17.5	0.25 (1)	10.00				
17-16	0 / 4559	-17.5	-17.5	0.36 (1)	10.00				
16-15	0 / 4559	-17.5	-17.5	0.36 (1)	10.00				
15-14	0 / 4297	-33.0	-33.0	0.34 (1)	10.00				
14-13	0 / 2876	-33.0	-33.0	0.24 (1)	10.00				
13-12	0 / 0	-33.0	-33.0	0.19 (1)	10.00				
12-11	0 / 0	-33.0	-33.0	0.19 (1)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
9	22-9-4	-248	-248	---	FRONT	VERT	TOTAL
15	16-3-8	-1262	-1262	---	FRONT	VERT	TOTAL



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IN THE DESIGN OF THIS COMPONENT.**

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-12
RIGHT SETBACK = 4-3-6
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 10-9-6 OF SPAN
MEASURED FROM THE RIGHT.

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.21 (6-8:1) , BC=0.36 (15-17:1) ,
WB=0.37 (10-13:1) , SSI=0.89 (11-12:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

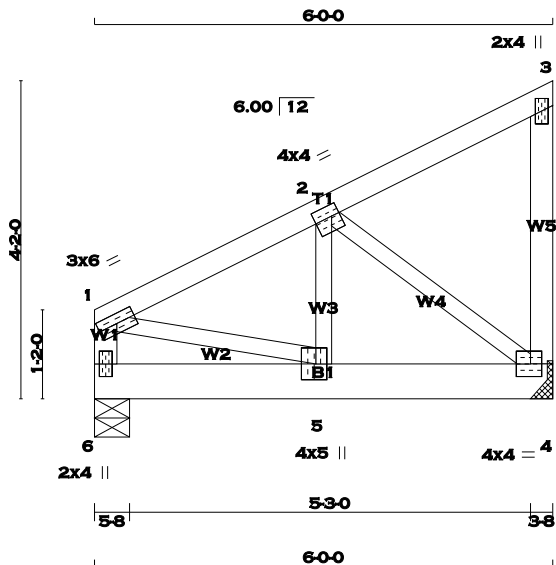
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION = $\frac{1}{2} \Delta \sigma_{\theta}$ De

CONTINUED ON PAGE 2



SCALE = 1:30.2

TOTAL WEIGHT = 29 lb [M]

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

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	6.0		
2	TMVW-t	MT20	4.0	4.0	1.75	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	4.0	2.00	1.75
5	BMVW-t	MT20	4.0	5.0	2.50	1.75
6	BMV1+p	MT20	2.0	4.0		

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

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

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	COMBINED	SNOW	LIVE	PERM.LIVE
4	886	620 / 0	0 / 0	0 / 0	0 / 0	266 / 0	0 / 0	886	620 / 0	0 / 0	0 / 0
6	886	620 / 0	0 / 0	0 / 0	0 / 0	266 / 0	0 / 0	886	620 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.93 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS		FACTORED		MAX. FACTORED		MEMB.		FACTORED		MEMB.		FACTORED	
FR-TO	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	FR-TO	MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	FR-TO	MEMB.
1-2		-1076 / 0	-77.3	-77.3	0.11 (1)	5.93	5-2	0 / 946	0.23 (1)			5-2	
2-3		-10 / 0	-77.3	-77.3	0.10 (1)	10.00	2-4	-1218 / 0	0.30 (1)			2-4	
4-3		-95 / 0	0.0	0.0	0.02 (1)	7.81	1-5	0 / 1002	0.25 (1)			1-5	
6-1		-830 / 0	0.0	0.0	0.09 (1)	7.81							
6-5		0 / 0	-343.5	-343.5	0.20 (1)	10.00							
5-4		0 / 971	-343.5	-343.5	0.33 (1)	10.00							

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 16-2-8
END DISTANCE = 6-0-0
END SPAN CARRIED = 16-2-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

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

CSI: TC=0.11 (1-2:1), BC=0.33 (4-5:1), WB=0.30 (2-4:1), SSI=0.40 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.36 (4) (INPUT = 1.00)



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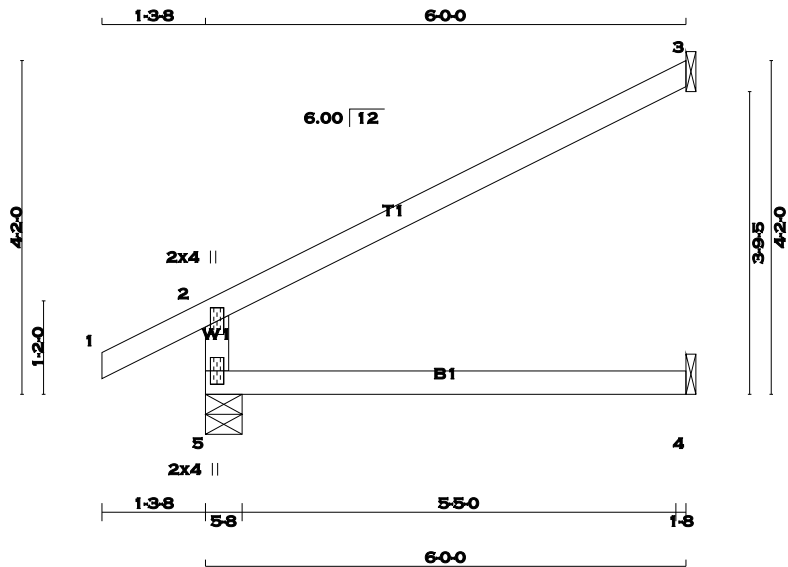
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Kott Lumber Uxbridge, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 10:23:09 2017 Page 1

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SCALE = 1:28.8

TOTAL WEIGHT = 22 X 17 = 376 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
5	457	0	457	0	0
3	174	0	174	0	0
4	43	0	49	0	0

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

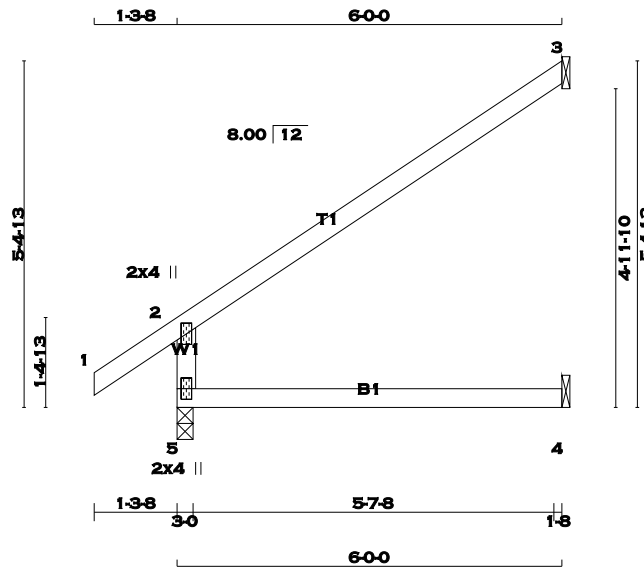
JSI GRIP= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



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SCALE = 1:35.9

TOTAL WEIGHT = 5 X 18 = 91 lb

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

DRY: SEASONED LUMBER.

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

A SIZE FOR SIZE SUBSTITUTION OF MIK II20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
5	457	0	457	0	0
3	174	0	174	0	0
4	44	0	49	0	0

SEE MIK 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	318	239 / 0	0 / 0	0 / 0	0 / 0	80 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 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: (3)

CHORDS		FACTORED		WEBS	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MEMB.	FORCE (LBS)
FR-TO		FROM	TO	FR-TO	
5-2	-396 / 0	0.0	0.0 0.10 (3)	7.81	
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	
2-3	-32 / 0	-77.3	-77.3 0.36 (1)	6.25	
5-4	0 / 0	-17.5	-17.5 0.13 (3)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.36 (2-3:1) , BC=0.13 (4-5:3) , WB=0.00 (n/a:0) , SSI=0.19 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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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.

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

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

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

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.

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM	TO		FR-TO		
5- 2	-202 / 0	0.0	0.0	0.01 (3)	7.81		
1- 2	0 / 25	-77.3	-77.3	0.10 (1)	10.00		
2- 3	-9 / 0	-77.3	-77.3	0.05 (1)	10.00		
5- 4	0 / 0	-17.5	-17.5	0.02 (3)	10.00		

A circular professional engineer seal for the Province of Ontario. The outer ring contains the text "LICENSED PROFESSIONAL ENGINEER" at the top and "PROVINCE OF ONTARIO" at the bottom. In the center, the name "P. M. TREVISAN" and license number "100136551" are printed. A blue ink signature is written across the seal. Below the seal, a red rectangular stamp contains the date "March 13th, 2017".

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

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

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

-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 (4-5:3) , 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

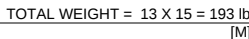
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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



DRY: SEASONED LUMBER.

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

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5, 3, 4

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.

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC (LBS)	MEMB.	MAX. FACTORED (LBS)	MAX CSI (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
5-2	-367 / 0	0.0	0.0	0.12 (3)			7.81
1-2	0 / 16	-77.3	-77.3	0.10 (1)			10.00
2-3	-17 / 0	-77.3	-77.3	0.39 (1)			6.25
5-4	0 / 0	-17.5	-17.5	0.12 (3)			10.00

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

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

THIS DESIGN COMPLIES WITH:

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

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= $L/360$ (0.19")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.19")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.02")

CSI: TC=0.39 (2-3:1) , BC=0.12 (4-5:3) , WB=0.00 (n/a:0) , SSI=0.20 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

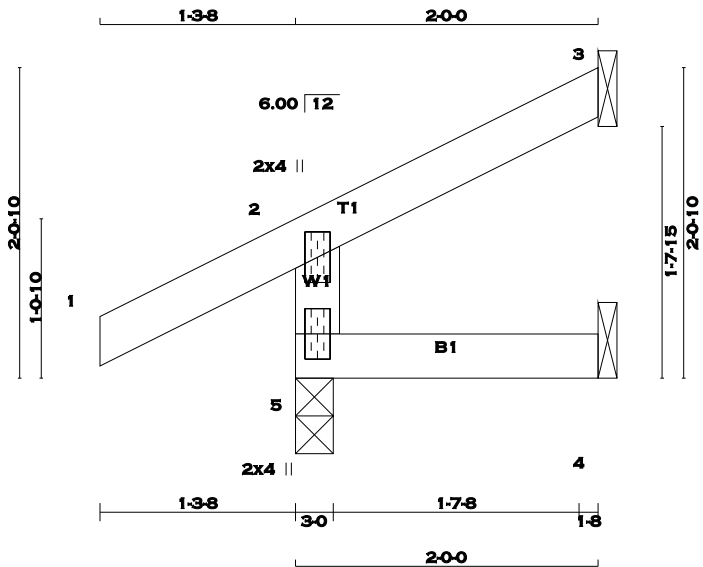
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (5) (INPUT = 0.90)
JSI METAL= 0.05 (5) (INPUT = 1.00)



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SCALE = 1:15.2

TOTAL WEIGHT = 7 lb [M]

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

DRY: SEASONED LUMBER.

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5	221	0	221	0	0	3-0	3-0	
3	58	0	58	0	0	1-8	1-8	
4	15	0	17	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		LIVE	PERM.LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	VERT	HORZ					
5	152	121 / 0	0 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0	
3	40	35 / 0	0 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	
4	12	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEB S		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRAC	MEMB. FORCE (LBS)	MAX. CSI (LC)	
FR-TO			FROM	TO	LENGTH	FR-TO		
5-2	-201 / 0	0.0	0.0	0.01 (3)	7.81			
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00			
2-3	-8 / 0	-77.3	-77.3	0.05 (1)	10.00			
5-4	0 / 0	-17.5	-17.5	0.02 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.10 (1-2:1) , BC=0.02 (4-5:3) , WB=0.00 (n/a:0) , SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

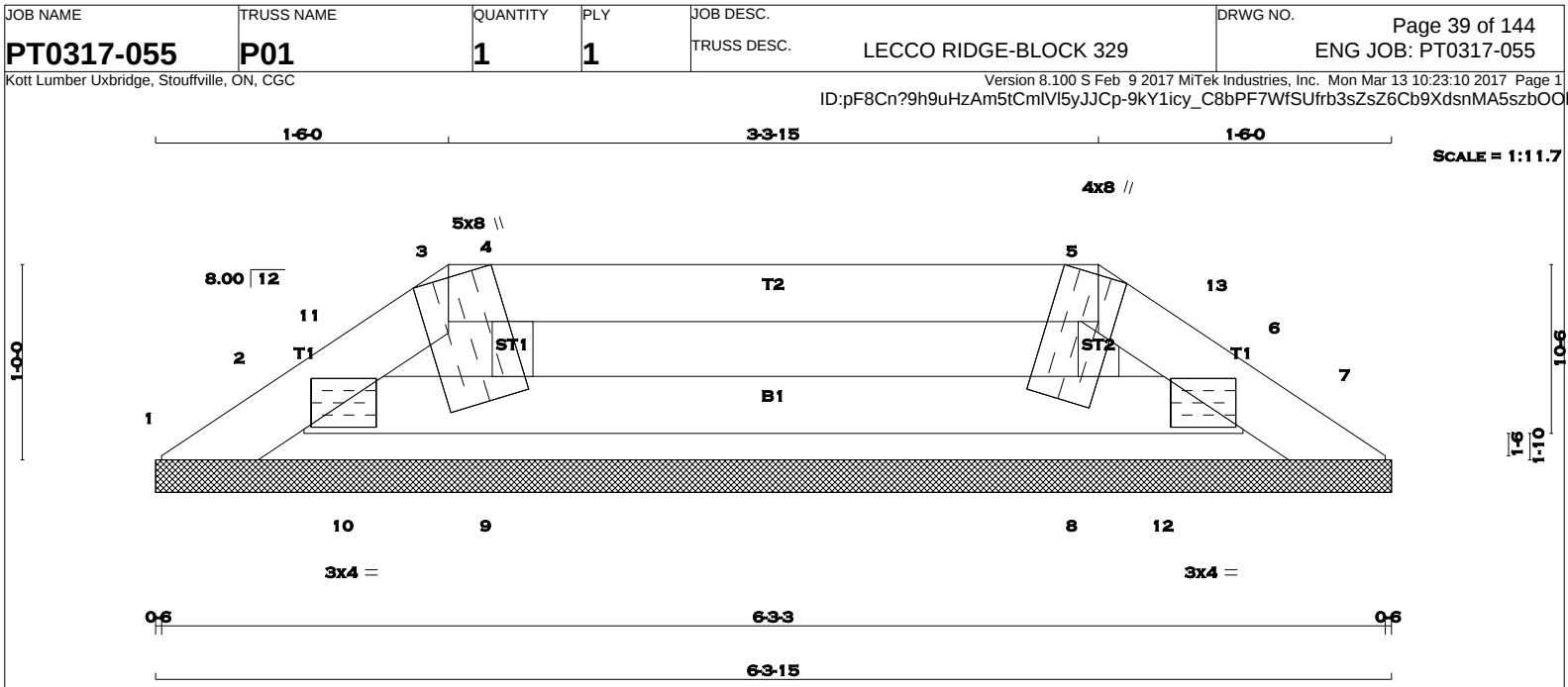
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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

1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
2 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
ALL GABLE WEBS 2x3 DRY No.2 SPF
DRY: SEASONED LUMBER.
GABLE STUDS SPACED AT 3-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-I	MT20	3.0	4.0		
3	4, 5, 8, 9					
3	TTBW1*+m	MT20	5.0	8.0	Edge	3.25
5	TTBW1*+m	MT20	4.0	8.0	Edge	3.75
6	TMB1-I	MT20	3.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S): 8, 9
PROVIDE ANCHORAGE AT BEARING JOINT 2 FOR 150 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 6 FOR 150 LBS. FACTORED UPLIFT
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)
FR-TO		FROM TO		FR-TO			
1-2	-6 / 0	-94.8 -94.8	0.01 (1)	10-00	8-5 -156 / 0	0.02 (1)	
2-11	0 / 48	-77.3 -77.3	0.05 (1)	10-00	9-4 -294 / 0	0.04 (1)	
11-3	0 / 128	-77.3 -77.3	0.06 (1)	10-00	10-11 0 / 104	0.00 (1)	
3-4	0 / 80	-77.3 -77.3	0.08 (1)	10-00	12-13 -49 / 0	0.00 (1)	
4-5	0 / 73	-77.3 -77.3	0.10 (1)	10-00			
5-13	0 / 83	-77.3 -77.3	0.02 (1)	10-00			
13-6	0 / 95	-77.3 -77.3	0.02 (1)	10-00			
6-7	0 / 4	-94.8 -94.8	0.01 (1)	10-00			
2-10	-73 / 0	-17.5 -17.5	0.03 (1)	6.25			
10-9	-73 / 0	-17.5 -17.5	0.03 (1)	6.25			
9-8	-73 / 0	-17.5 -17.5	0.03 (3)	6.25			
8-12	-73 / 0	-17.5 -17.5	0.03 (3)	6.25			
12-6	-73 / 0	-17.5 -17.5	0.01 (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

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

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

(55 % OF 27.2 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 (4-5:1), BC=0.03 (9-10:1), WB=0.04 (4-9:1), SSI=0.12 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

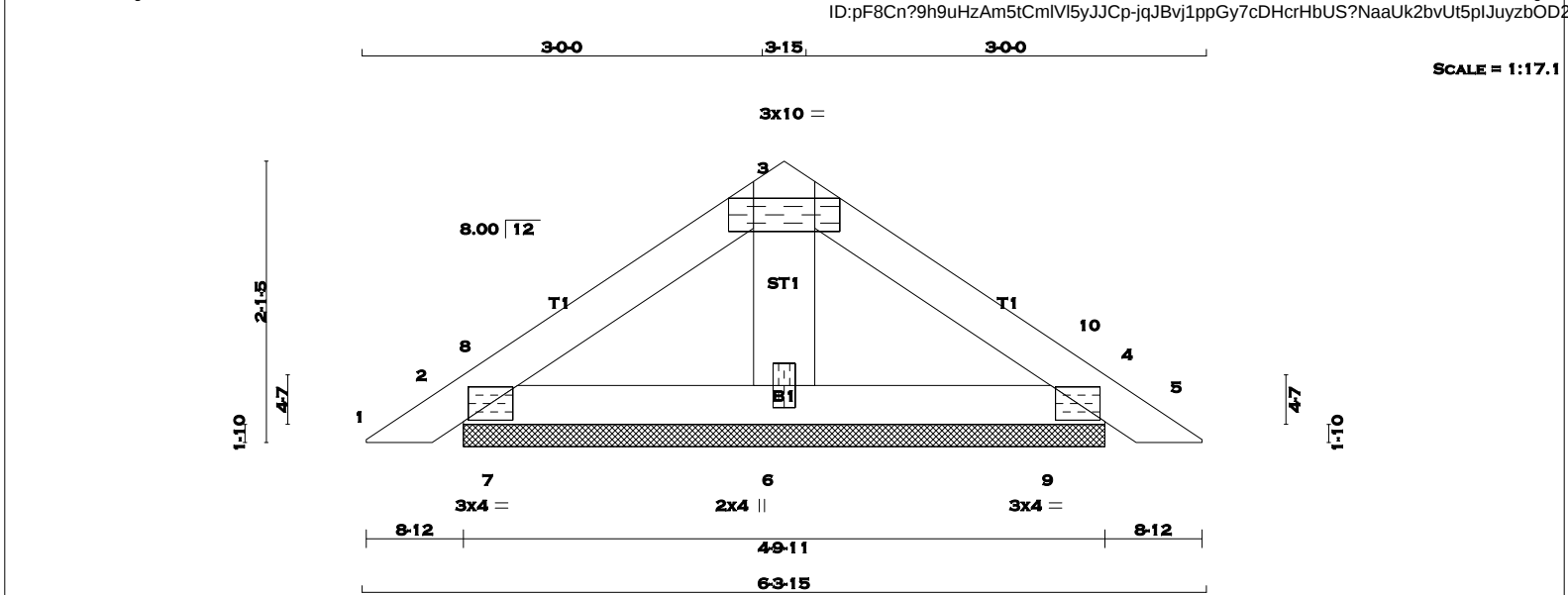
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (3) (INPUT = 0.90)
JSI METAL= 0.06 (3) (INPUT = 1.00)

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TOTAL WEIGHT = 16 lb										[M]																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 No.2 SPF 3 - 5 2x4 No.2 SPF 2 - 4 2x4 No.2 SPF ALL WEBS 2x6 No.2 SPF DRY: SEASONED LUMBER.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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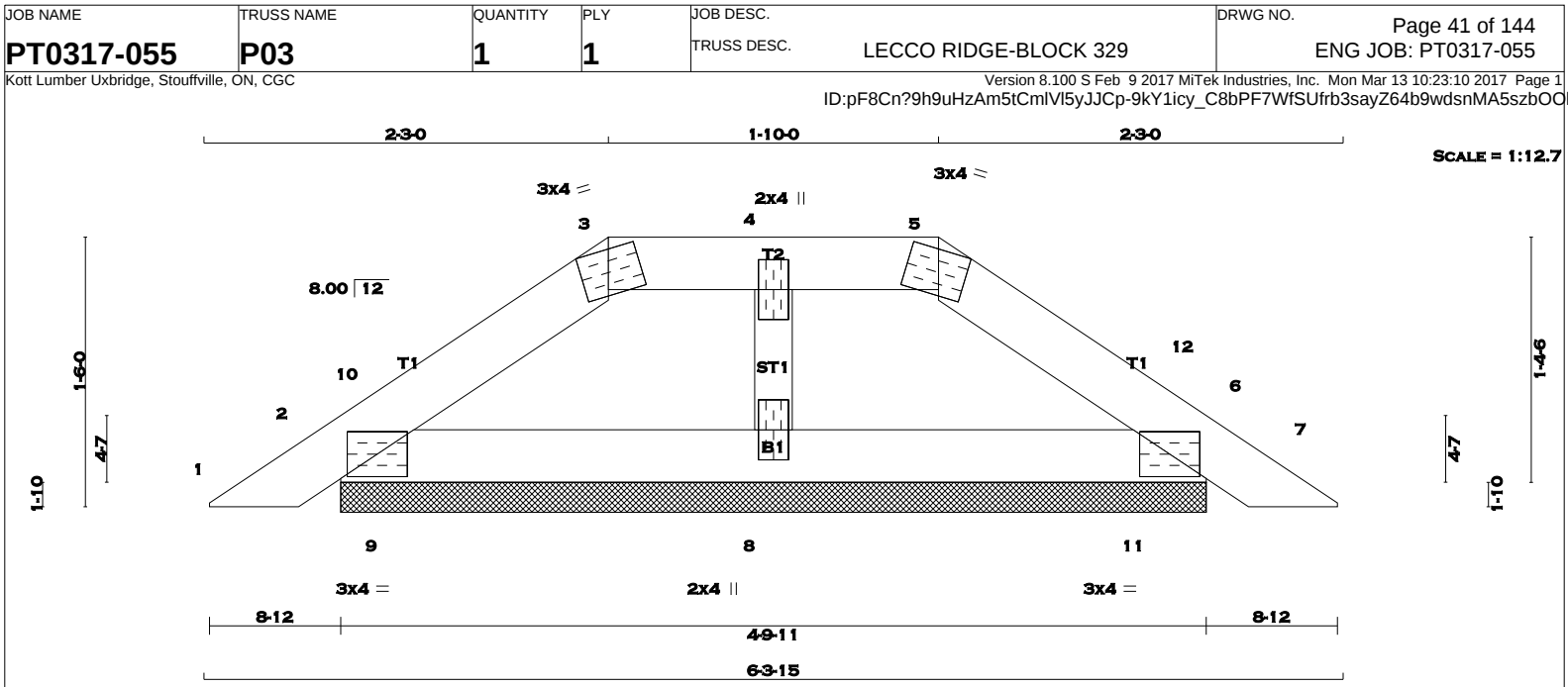
TOWN OF MILTON

MAR 29, 2017

17-5001

BUILDING DIVISION

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

1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
2 - 6	2x4	DRY	No.2	SPF

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-l	MT20	3.0	4.0		
3	TT-m	MT20	3.0	4.0	Edge	
4	TMW+w	MT20	2.0	4.0		
5	TT-m	MT20	3.0	4.0	Edge	
6	TMB1-l	MT20	3.0	4.0		
8	BMW1+w	MT20	2.0	4.0		

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
2	188	0	0	4-9-11
6	188	0	0	4-9-11
8	182	0	0	4-9-11

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
2	130	102 / 0	0 / 0	0 / 0	28 / 0	0 / 0
6	130	102 / 0	0 / 0	0 / 0	28 / 0	0 / 0
8	129	82 / 0	0 / 0	0 / 0	48 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	UNBRACED LENGTH FR-TO
FR-TO		FROM TO		FR-TO			
1-2	0 / 13	-77.3 -77.3	0.02 (1)	10.00	8-4	-116 / 0	0.02 (1)
2-10	-119 / 0	-77.3 -77.3	0.01 (3)	6.25	9-10	-36 / 15	0.00 (1)
10-3	-107 / 0	-77.3 -77.3	0.02 (1)	6.25	11-12	-36 / 15	0.00 (1)
3-4	-88 / 0	-77.3 -77.3	0.03 (1)	6.25			
4-5	-88 / 0	-77.3 -77.3	0.03 (1)	6.25			
5-12	-107 / 0	-77.3 -77.3	0.02 (1)	6.25			
12-6	-119 / 0	-77.3 -77.3	0.01 (3)	6.25			
6-7	0 / 13	-77.3 -77.3	0.02 (1)	10.00			
2-9	0 / 89	-17.5 -17.5	0.03 (1)	10.00			
9-8	0 / 89	-17.5 -17.5	0.04 (1)	10.00			
8-11	0 / 89	-17.5 -17.5	0.04 (1)	10.00			
11-6	0 / 89	-17.5 -17.5	0.03 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.03 (4-5:1), BC=0.04 (8-11:1), WB=0.02 (4-8:1), SSI=0.05 (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.

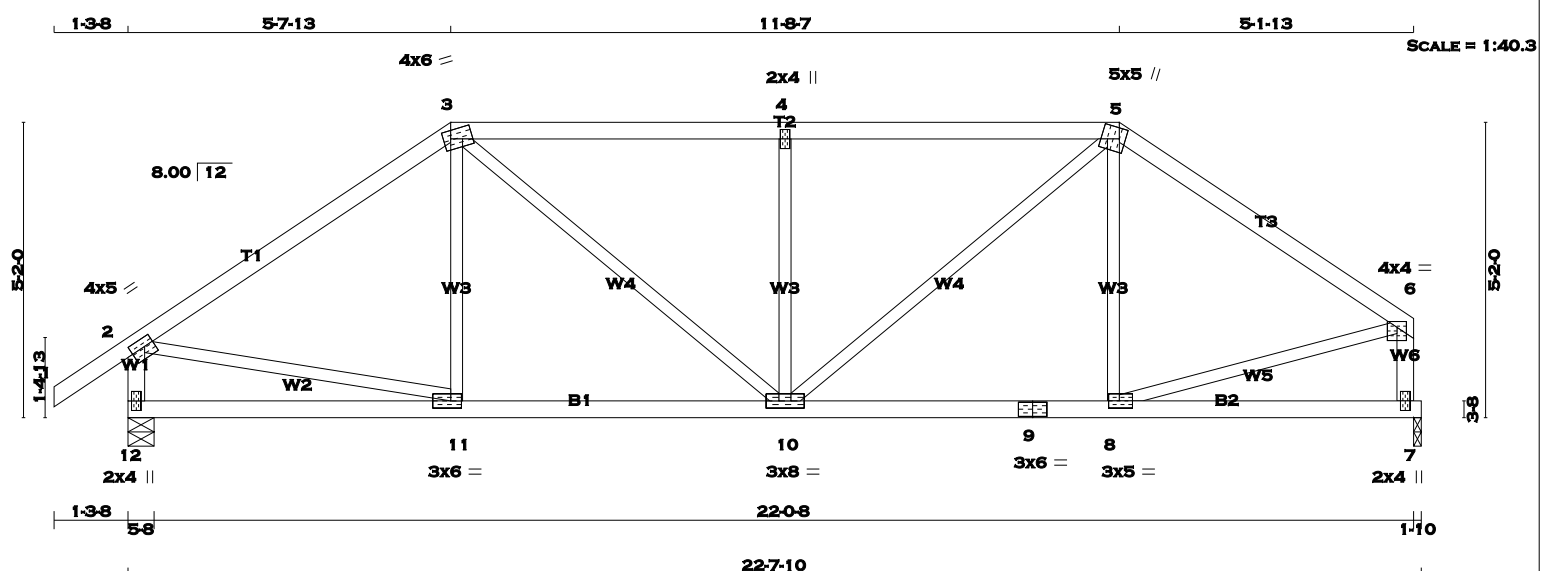
JSI GRIP= 0.14 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 90 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMVW-t	MT20	4.0	5.0	1.75	2.00	
3	TTWW-m	MT20	4.0	6.0	1.75	1.50	
4	TMW+w	MT20	2.0	4.0			
5	TTWW+m	MT20	5.0	5.0	2.25	1.25	
6	TMVW-p	MT20	4.0	4.0	1.25	2.00	
7	BMV1+p	MT20	2.0	4.0			
8	BMWW-t	MT20	3.0	5.0	1.50	2.25	
9	BS-t	MT20	3.0	6.0			
10	BMWWW-t	MT20	3.0	8.0			
11	BMWW-t	MT20	3.0	6.0	1.50	2.25	
12	BMV1+p	MT20	2.0	4.0			

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



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

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

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

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

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

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

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

LOADING				TOTAL LOAD CASES: (3)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10-00	-62 / 74	0.03 (3)	
2-3	-1135 / 0	-77.3	-77.3 0.49 (1)	5-30	0 / 469	0.11 (1)	
3-4	-1302 / 0	-77.3	-77.3 0.50 (1)	4-99	-555 / 0	0.22 (1)	
4-5	-1302 / 0	-77.3	-77.3 0.50 (1)	4-99	0 / 544	0.12 (1)	
5-6	-1067 / 0	-77.3	-77.3 0.40 (1)	5-57	-129 / 49	0.05 (1)	
12-2	-1133 / 0	0.0	0.0 0.12 (1)	7-46	0 / 960	0.22 (1)	
7-6	-1031 / 0	0.0	0.0 0.11 (1)	7-73	0 / 918	0.21 (1)	
12-11	0 / 0	-17.5	-17.5 0.14 (3)	10-00			
11-10	0 / 942	-17.5	-17.5 0.23 (1)	10-00			
10-9	0 / 884	-17.5	-17.5 0.21 (1)	10-00			
9-8	0 / 884	-17.5	-17.5 0.21 (1)	10-00			
8-7	0 / 0	-17.5	-17.5 0.13 (3)	10-00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

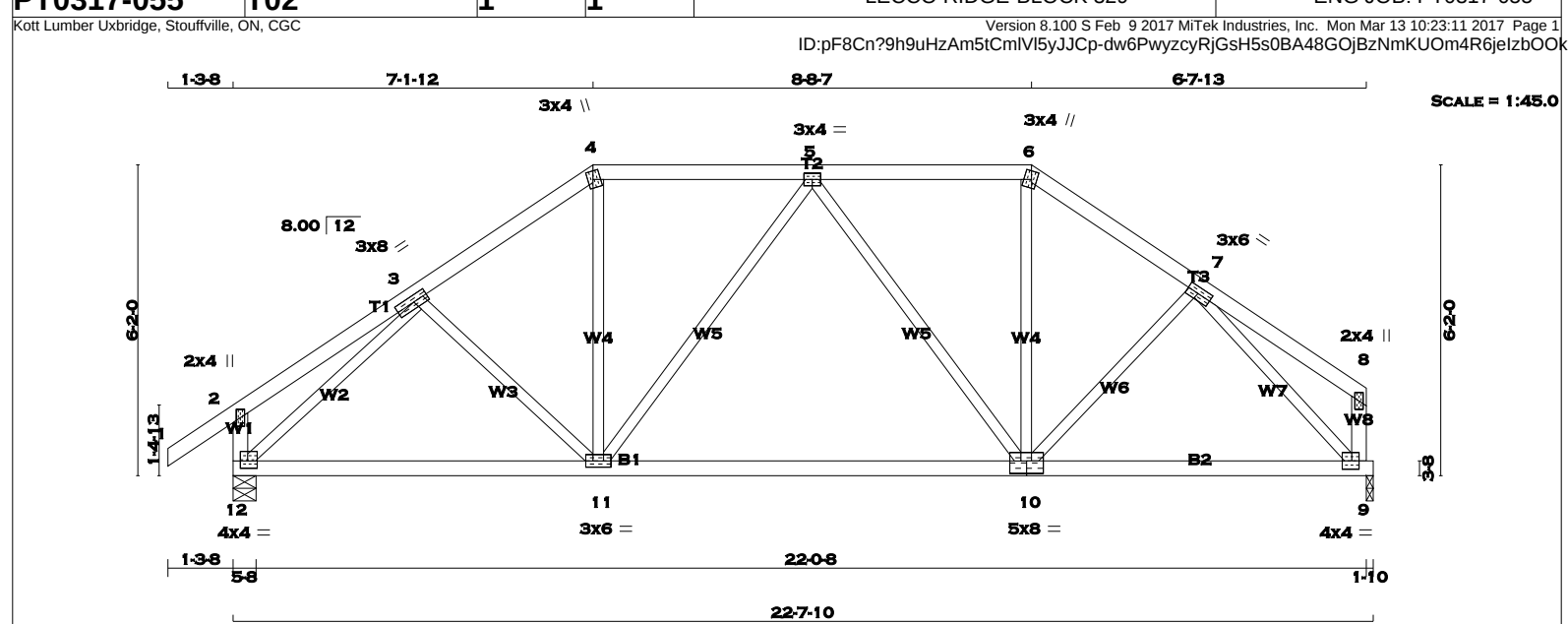
JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.39 (2) (INPUT = 1.00)

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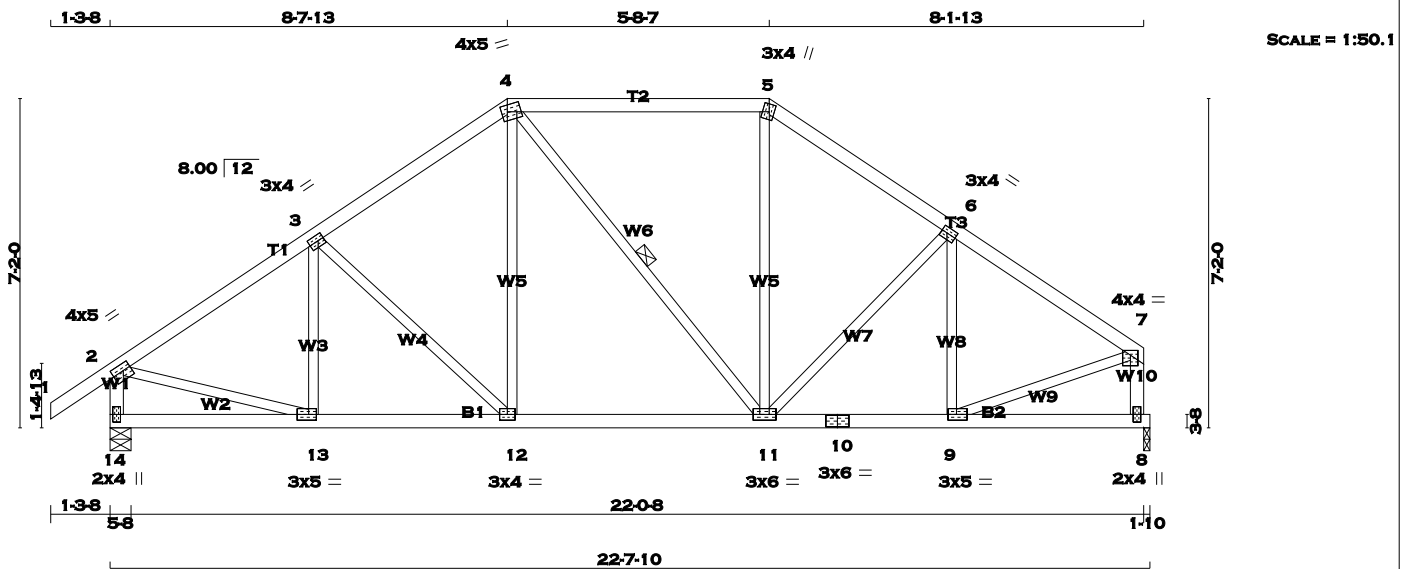
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS			DESIGN CRITERIA		
1 - 4	2x4	DRY	No.2	SPF		SPECIFIED LOADS:		
4 - 6	2x4	DRY	No.2	SPF		TOP CH. LL =	23.3	PSF
6 - 8	2x4	DRY	No.2	SPF		DL =	3.0	PSF
12 - 2	2x4	DRY	No.2	SPF		BOT CH. LL =	0.0	PSF
9 - 8	2x4	DRY	No.2	SPF		DL =	7.0	PSF
12 - 10	2x4	DRY	No.2	SPF		TOTAL LOAD =	33.3	PSF
10 - 9	2x4	DRY	No.2	SPF				
ALL WEBS 2x3 DRY No.2 SPF			UNFACTORED REACTIONS			SPACING = 24.0 IN. C/C		
DRY: SEASONED LUMBER.			1ST LCASE MAX./MIN. COMPONENT REACTIONS			LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12		
			JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
			12	821	588 / 0	0 / 0	0 / 0	233 / 0
			9	749	524 / 0	0 / 0	0 / 0	225 / 0
			BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 9			THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
			BRACING			THIS DESIGN COMPLIES WITH:		
			TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.90 FT.			- PART 9 OF OBC 2012, BCBC 2012, ABC 2014		
			MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.			- CSA 086-09		
			ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.			- TPIC 2011		
			LOADING			(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD		
			TOTAL LOAD CASES: (3)			ALLOWABLE DEFL.(LL)= L/360 (0.75")		
			CHORDS			WEBS		
			MAX. FACTORED FORCE (LBS)			MAX. FACTORED FORCE (LBS)		
			VERT. LOAD LC1 MAX (PLF)			MAX. FACTORED FORCE (LBS)		
			CSI (LC)			MAX. FACTORED FORCE (LBS)		
			UNBRACED LENGTH			MAX. FACTORED FORCE (LBS)		
			FR-TO			FR-TO		
			1-2 0 / 29			3-11 -47 / 36		
			2-3 0 / 16			11-4 0 / 366		
			3-4 -1105 / 0			5-10 -222 / 0		
			4-5 -910 / 0			10-6 0 / 350		
			5-6 -874 / 0			10-7 0 / 55		
			6-7 -1061 / 0			12-3 -1307 / 0		
			7-8 0 / 15			7-9 -1248 / 0		
			12-2 -214 / 0					
			9-8 -102 / 0					
			12-11 0 / 938					
			11-10 0 / 1041					
			10-9 0 / 843					
						COMPANION LIVE LOAD FACTOR = 0.50		
						TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.		
						NAIL VALUES		
						PLATE GRIP(DRY) SHEAR SECTION		
						(PSI) (PLI) (PLI)		
						MAX MIN MAX MIN 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= 0.35 (12) (INPUT = 1.00)		



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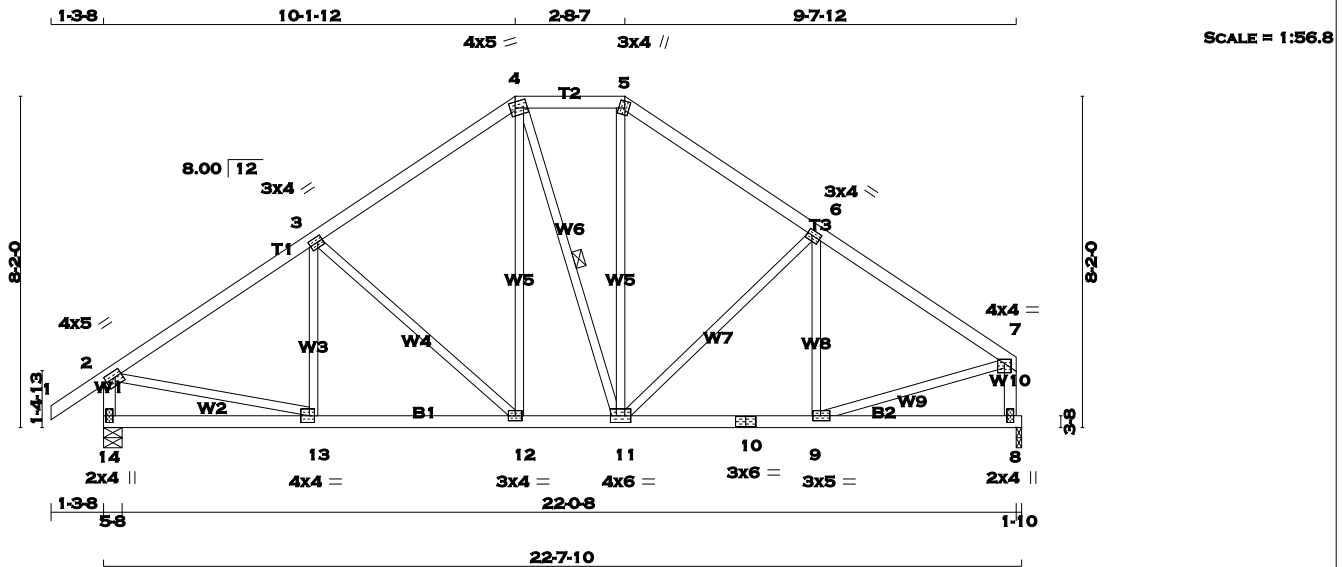
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 14 - 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 14 - 10 2x4 DRY No.2 10 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.					DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>14</td><td>1173</td><td>0</td><td>1173</td><td>0</td><td>0</td><td>5-8</td><td>5-8</td></tr><tr><td>8</td><td>1067</td><td>0</td><td>1067</td><td>0</td><td>0</td><td>1-10</td><td>1-10</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX. SNOW</th><th>MIN. LIVE</th><th>MAX. PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>14</td><td>821</td><td>588 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>233 / 0</td><td>0 / 0</td></tr><tr><td>8</td><td>749</td><td>524 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>225 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 8 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.69 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 4 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1 (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. UNBRACED LENGTH</th><th>FACTORED MAX. (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>13-3</td><td>-163 / 21</td><td>0.05 (1)</td></tr><tr><td>2-3</td><td>-1167 / 0</td><td>-77.3 -77.3</td><td>0.20 (1)</td><td>5.69</td><td>3-12</td><td>-216 / 0</td><td>0.13 (1)</td></tr><tr><td>3-4</td><td>-1022 / 0</td><td>-77.3 -77.3</td><td>0.19 (1)</td><td>5.98</td><td>12-4</td><td>0 / 236</td><td>0.05 (1)</td></tr><tr><td>4-5</td><td>-815 / 0</td><td>-77.3 -77.3</td><td>0.33 (1)</td><td>6.25</td><td>4-11</td><td>-30 / 0</td><td>0.02 (1)</td></tr><tr><td>5-6</td><td>-998 / 0</td><td>-77.3 -77.3</td><td>0.17 (1)</td><td>6.06</td><td>11-5</td><td>0 / 208</td><td>0.05 (1)</td></tr><tr><td>6-7</td><td>-1067 / 0</td><td>-77.3 -77.3</td><td>0.17 (1)</td><td>5.91</td><td>11-6</td><td>-134 / 0</td><td>0.08 (1)</td></tr><tr><td>14-2</td><td>-1139 / 0</td><td>0.0 0.0</td><td>0.12 (1)</td><td>7.45</td><td>9-6</td><td>-234 / 0</td><td>0.07 (1)</td></tr><tr><td>8-7</td><td>-1035 / 0</td><td>0.0 0.0</td><td>0.11 (1)</td><td>7.72</td><td>2-13</td><td>0 / 1017</td><td>0.23 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>9-7</td><td>0 / 955</td><td>0.21 (1)</td></tr><tr><td>14-13</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.07 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 988</td><td>-17.5 -17.5</td><td>0.21 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 834</td><td>-17.5 -17.5</td><td>0.18 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 905</td><td>-17.5 -17.5</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 905</td><td>-17.5 -17.5</td><td>0.20 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.06 (3)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	14	1173	0	1173	0	0	5-8	5-8	8	1067	0	1067	0	0	1-10	1-10	JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	MAX. PERM. LIVE	WIND	DEAD	SOIL	14	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0	8	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. (LC)	FR-TO		FROM TO		FR-TO				1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-163 / 21	0.05 (1)	2-3	-1167 / 0	-77.3 -77.3	0.20 (1)	5.69	3-12	-216 / 0	0.13 (1)	3-4	-1022 / 0	-77.3 -77.3	0.19 (1)	5.98	12-4	0 / 236	0.05 (1)	4-5	-815 / 0	-77.3 -77.3	0.33 (1)	6.25	4-11	-30 / 0	0.02 (1)	5-6	-998 / 0	-77.3 -77.3	0.17 (1)	6.06	11-5	0 / 208	0.05 (1)	6-7	-1067 / 0	-77.3 -77.3	0.17 (1)	5.91	11-6	-134 / 0	0.08 (1)	14-2	-1139 / 0	0.0 0.0	0.12 (1)	7.45	9-6	-234 / 0	0.07 (1)	8-7	-1035 / 0	0.0 0.0	0.11 (1)	7.72	2-13	0 / 1017	0.23 (1)						9-7	0 / 955	0.21 (1)	14-13	0 / 0	-17.5 -17.5	0.07 (3)	10.00				13-12	0 / 988	-17.5 -17.5	0.21 (1)	10.00				12-11	0 / 834	-17.5 -17.5	0.18 (1)	10.00				11-10	0 / 905	-17.5 -17.5	0.20 (1)	10.00				10-9	0 / 905	-17.5 -17.5	0.20 (1)	10.00				9-8	0 / 0	-17.5 -17.5	0.06 (3)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.75") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.75") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06") CSI: TC=0.33 (4-5:1) , BC=0.21 (12-13:1) , WB=0.23 (2-13:1) , SSI=0.17 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.88 (9) (INPUT = 0.90) JSI METAL= 0.40 (2) (INPUT = 1.00)				
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																																																									
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																																																						
14	1173	0	1173	0	0	5-8	5-8																																																																																																																																																																																																																						
8	1067	0	1067	0	0	1-10	1-10																																																																																																																																																																																																																						
JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	MAX. PERM. LIVE	WIND	DEAD	SOIL																																																																																																																																																																																																																						
14	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0																																																																																																																																																																																																																						
8	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0																																																																																																																																																																																																																						
CHORDS				WEBS																																																																																																																																																																																																																									
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. (LC)																																																																																																																																																																																																																						
FR-TO		FROM TO		FR-TO																																																																																																																																																																																																																									
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-163 / 21	0.05 (1)																																																																																																																																																																																																																						
2-3	-1167 / 0	-77.3 -77.3	0.20 (1)	5.69	3-12	-216 / 0	0.13 (1)																																																																																																																																																																																																																						
3-4	-1022 / 0	-77.3 -77.3	0.19 (1)	5.98	12-4	0 / 236	0.05 (1)																																																																																																																																																																																																																						
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6-7	-1067 / 0	-77.3 -77.3	0.17 (1)	5.91	11-6	-134 / 0	0.08 (1)																																																																																																																																																																																																																						
14-2	-1139 / 0	0.0 0.0	0.12 (1)	7.45	9-6	-234 / 0	0.07 (1)																																																																																																																																																																																																																						
8-7	-1035 / 0	0.0 0.0	0.11 (1)	7.72	2-13	0 / 1017	0.23 (1)																																																																																																																																																																																																																						
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13-12	0 / 988	-17.5 -17.5	0.21 (1)	10.00																																																																																																																																																																																																																									
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9-8	0 / 0	-17.5 -17.5	0.06 (3)	10.00																																																																																																																																																																																																																									



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TOTAL WEIGHT = 105 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	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-p	MT20	4.0	4.0	1.25	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	5.0	1.50	2.25
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	4.0	6.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	4.0	4.0	2.00	1.50
14	BMV1+p	MT20	2.0	4.0		

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

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

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0
8	749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-11. DBS = 20-0-0 . CBF = 3 LBS.

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

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

LOADING		TOTAL LOAD CASES: (3)	
C H O R D S		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRAC LENGTH (LC)
FR-TO	FROM	TO	FR-TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)
2-3	-1177 / 0	-77.3	-77.3 0.28 (1)
3-4	-936 / 0	-77.3	-77.3 0.26 (1)
4-5	-752 / 0	-77.3	-77.3 0.08 (1)
5-6	-926 / 0	-77.3	-77.3 0.24 (1)
6-7	-1090 / 0	-77.3	-77.3 0.25 (1)
14-2	-1136 / 0	0.0	0.0 0.12 (1)
8-7	-1031 / 0	0.0	0.0 0.11 (1)
14-13	0 / 0	-17.5	-17.5 0.12 (3)
13-12	0 / 1000	-17.5	-17.5 0.22 (1)
12-11	0 / 759	-17.5	-17.5 0.15 (1)
11-10	0 / 927	-17.5	-17.5 0.20 (1)
10-9	0 / 927	-17.5	-17.5 0.20 (1)
9-8	0 / 0	-17.5	-17.5 0.10 (3)

DESIGN CRITERIA

SPECIFIED LOADS:			
TOP CH.	LL	=	23.3 PSF
	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 (0.75")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.75")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.28 (2-3:1) , BC=0.22 (12-13:1) , WB=0.28 (3-12:1) , SSI=0.16 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
(PSI)	(PLI)	(PLI)	(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 (7) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)

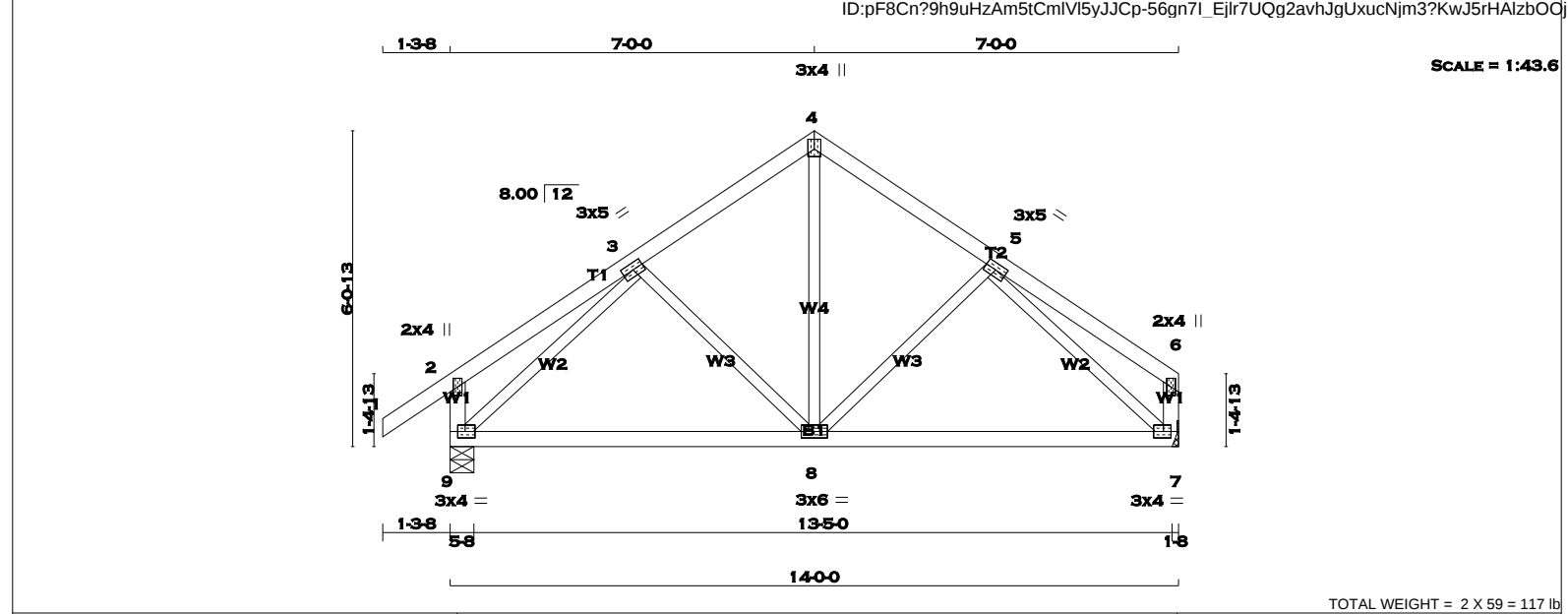


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LUMBER

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

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		
9	770	0	770	0	5-8	5-8
7	664	0	664	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	538	390 / 0	0 / 0	0 / 0	0 / 0	148 / 0	0 / 0
7	466	326 / 0	0 / 0	0 / 0	0 / 0	140 / 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: (3)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.15 (2-3:1) , BC=0.28 (8-9:3) , WB=0.28 (3-9:1) , SSI=0.11 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (3) (INPUT = 0.90)
JSI METAL= 0.21 (5) (INPUT = 1.00)

PLATES (table is in inches)

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

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	538	390 / 0	0 / 0	0 / 0	0 / 0	148 / 0	0 / 0
7	466	326 / 0	0 / 0	0 / 0	0 / 0	140 / 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: (3)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.15 (2-3:1) , BC=0.28 (8-9:3) , WB=0.28 (3-9:1) , SSI=0.11 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (3) (INPUT = 0.90)
JSI METAL= 0.21 (5) (INPUT = 1.00)

PLATES (table is in inches)

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

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	538	390 / 0	0 / 0	0 / 0	0 / 0	148 / 0	0 / 0
7	466	326 / 0	0 / 0	0 / 0	0 / 0	140 / 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.

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DL	23.3	PSF
BOT CH.	LL	PSF
DL	0.0	PSF
DL	7.0	PSF
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UNFACTORED REACTIONS

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	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	538	390 / 0	0 / 0	0 / 0	0 / 0	148 / 0	0 / 0
7	466	326 / 0	0 / 0	0 / 0	0 / 0	140 / 0	0 / 0

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

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

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PLATE ROTATION TOL. = 5.0 Deg.

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RECEIVED

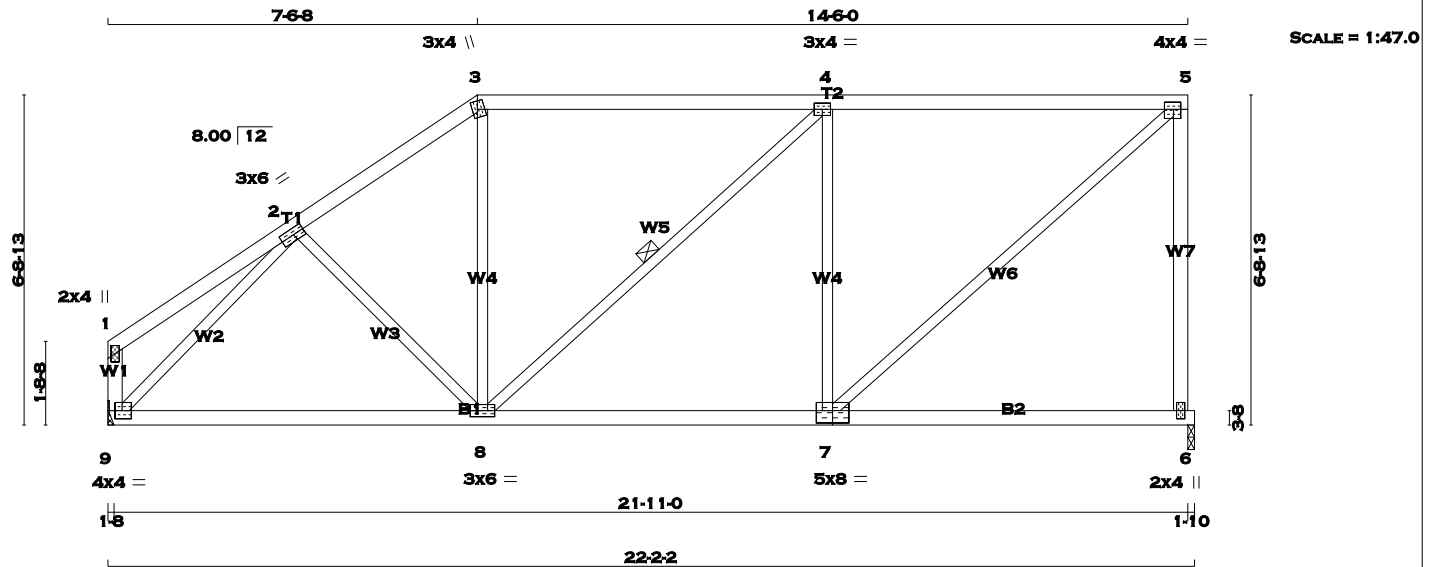
TOWN OF MILTON

MAR 29, 2017

17-5001

BUILDING DIVISION

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



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 5 2x4 DRY No.2 SPF 6 - 5 2x4 DRY No.2 SPF 9 - 1 2x4 DRY No.2 SPF 9 - 7 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 6 1045 0 9 1045 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1045 0 0 1045 0 0 INPUT BRG IN-SX 1-10 1-10 HANGER BY OTHERS MIN. SEAT SIZE: 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 6 734 513 / 0 0 / 0 0 / 0 220 / 0 0 / 0 9 734 513 / 0 0 / 0 0 / 0 220 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.13 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 4-8. DBS = 20-0-0 . CBF = 11 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: (3) C H O R D S MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 W E B S MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. 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LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 / 0 9-1 -113 / 0 MAX. FACTORED FORCE (LBS) MEMB. VERT. LOAD (PLF) FR-TO 0 / 18 1-2 -77.3 2-3 -1005 / 0 3-4 -823 / 0 4-5 -885 / 0 6-5 -992 /				
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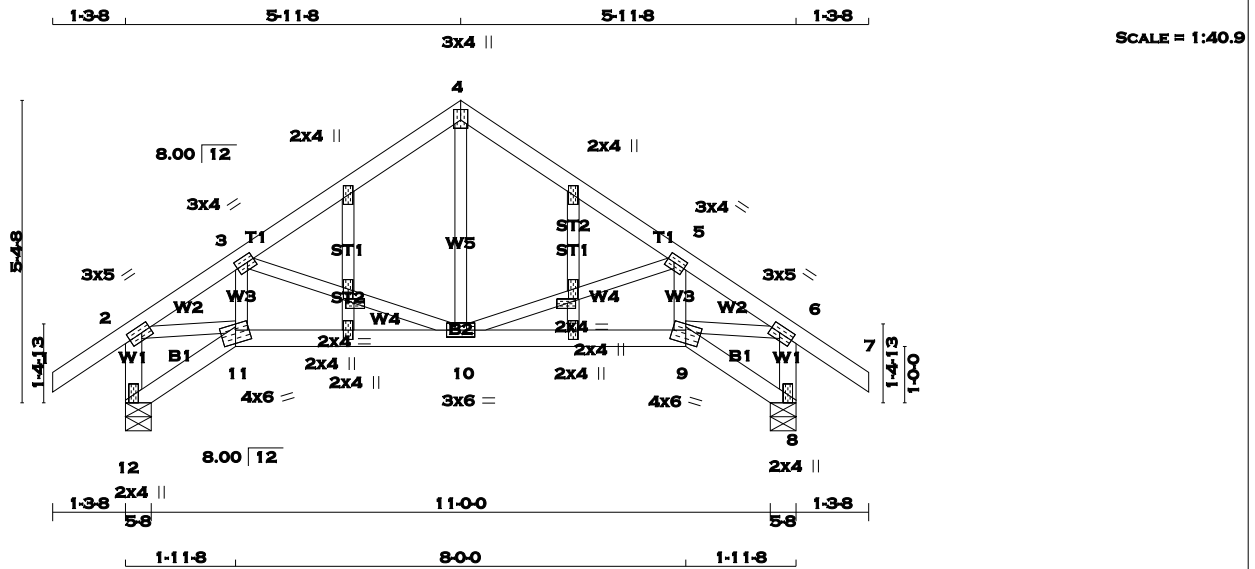
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Kott Lumber Uxbridge, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 10:23:12 2017 Page 1

ID:pF8Cn?9h9uHzAm5tCmIVi5yJJcp-56gn7I_Ejlr7UQg2avhJgUxukNle315wJ5rHAlzbOOj



LUMBER						
N. L. G. A. RULES						
CHORDS		SIZE	LUMBER		DESCR.	
12 - 2		2x4	DRY	No.2	SPF	
1 - 4		2x4	DRY	No.2	SPF	
4 - 7		2x4	DRY	No.2	SPF	
8 - 6		2x4	DRY	No.2	SPF	
12 - 11		2x4	DRY	No.2	SPF	
11 - 9		2x4	DRY	No.2	SPF	
9 - 8		2x4	DRY	No.2	SPF	
ALL WEBS			2x3	DRY	No.2	SPF
ALL GABLE WEBS			2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.						
GABLE STUDS SPACED AT 2-0-0 OC.						

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	3.0	5.0	1.50	2.00
8	BMV1+p	MT20	2.0	4.0	Edge	
9	BBWW-m	MT20	4.0	6.0	2.75	2.75
10	BMWWW-t	MT20	3.0	6.0		
11	BBWW-m	MT20	4.0	6.0	2.75	2.75
12	BMV1+p	MT20	2.0	4.0	Edge	
13	NP-p	MT20	2.0	4.0	1.00	1.75
13, 14, 15, 16, 17, 18						
13	NP+w	MT20	2.0	4.0		
18	NP-p	MT20	2.0	4.0	1.00	1.75
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.						
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
12		671	0	671	0	0	5-8	5-8	
8		671	0	671	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE COMBINED		MAX./MIN. SNOW		LIVE		PERM.LIVE	
JT									
12		469	341 / 0	0 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
8		469	341 / 0	0 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED	MAX.	MEMB.	MAX. FACTORED
		FORCE	VERT. LOAD	LC1 MAX	FORCE	FORCE	UNBRAC	FORCE	FORCE
		(LBS)	(PLF)	CSI (LC)	(LBS)	(LBS)	LENGTH	(LBS)	(LBS)
			FROM TO				FR-TO		
12-2		-654 / 0	0.0	0.0	0.07 (1)	7.81	10-4	0 / 309	0.07 (1)
1-2		0 / 29	-77.3	-77.3	0.10 (1)	10.00	10-5	-327 / 0	0.10 (1)
2-3		-855 / 0	-77.3	-77.3	0.10 (1)	6.25	9-5	0 / 43	0.01 (3)
3-4		-522 / 0	-77.3	-77.3	0.14 (1)	6.25	9-6	0 / 732	0.16 (1)
4-5		-522 / 0	-77.3	-77.3	0.14 (1)	6.25	3-10	-327 / 0	0.10 (1)
5-6		-855 / 0	-77.3	-77.3	0.10 (1)	6.25	11-3	0 / 43	0.01 (3)
6-7		0 / 29	-77.3	-77.3	0.10 (1)	10.00	2-11	0 / 732	0.16 (1)
8-6		-654 / 0	0.0	0.0	0.07 (1)	7.81			
12-11		0 / 0	-17.5	-17.5	0.02 (3)	10.00			
11-10		0 / 730	-17.5	-17.5	0.16 (1)	10.00			
10-9		0 / 730	-17.5	-17.5	0.16 (1)	10.00			
9-8		0 / 0	-17.5	-17.5	0.02 (3)	10.00			

[M][F]

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

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 (0.40")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")

ALLOWABLE DEFL.(TL)= L/360 (0.40")

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

CSI: TC=0.14 (4-5:1) , BC=0.16 (10-11:1) , WB=0.16 (6-9:1) , SSI=0.11 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (11) (INPUT = 0.90)

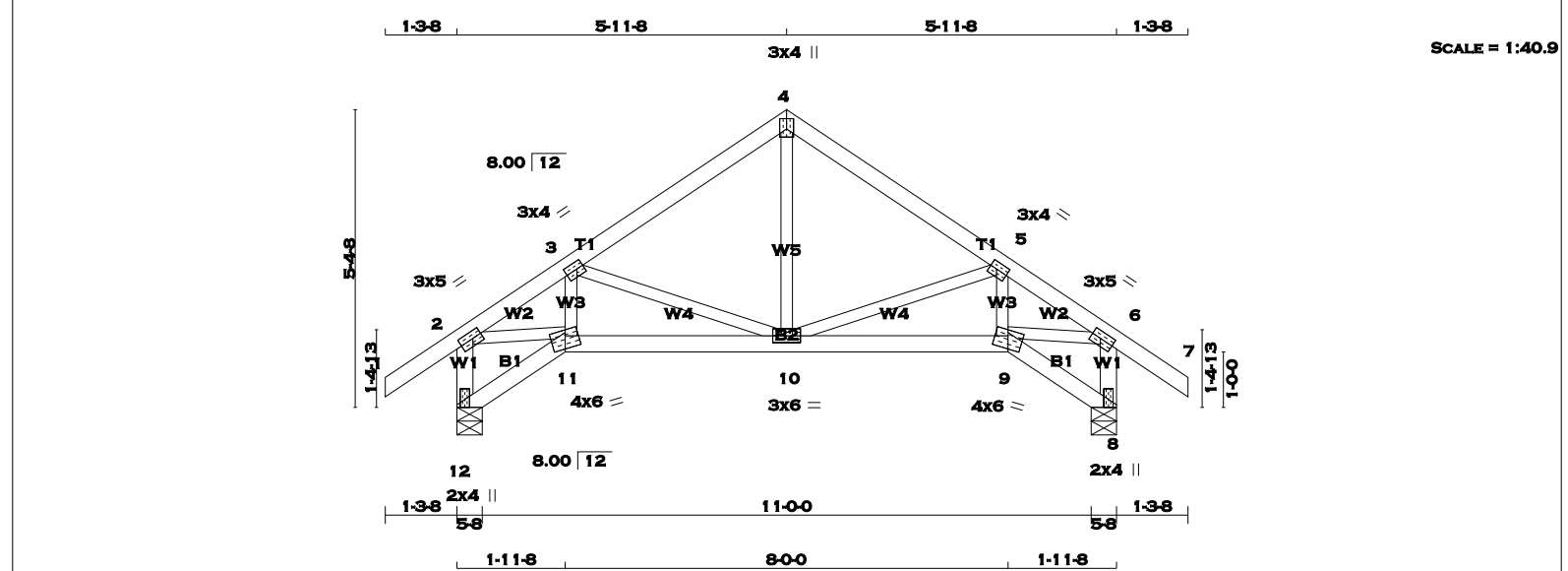
JSI METAL= 0.29 (6) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

12 - 2

2x4

DRY

No.2

SPF

1 - 4

2x4

DRY

No.2

SPF

4 - 7

2x4

DRY

No.2

SPF

8 - 6

2x4

DRY

No.2

SPF

12 - 11

2x4

DRY

No.2

SPF

11 - 9

2x4

DRY

No.2

SPF

9 - 8

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
12	671	0	671	0
8	671	0	671	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	COMPONENT LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
8	469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (3)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
12-2	-654 / 0	0.0	0.0	0.07 (1)	7.81	10-4	0 / 309
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	10-5	-327 / 0
2-3	-855 / 0	-77.3	-77.3	0.10 (1)	6.25	9-5	0 / 43
3-4	-522 / 0	-77.3	-77.3	0.14 (1)	6.25	9-6	0 / 732
4-5	-522 / 0	-77.3	-77.3	0.14 (1)	6.25	3-10	-327 / 0
5-6	-855 / 0	-77.3	-77.3	0.10 (1)	6.25	11-3	0 / 43
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00	2-11	0 / 732
8-6	-654 / 0	0.0	0.0	0.07 (1)	7.81		
12-11	0 / 0	-17.5	-17.5	0.02 (3)	10.00		
11-10	0 / 730	-17.5	-17.5	0.16 (1)	10.00		
10-9	0 / 730	-17.5	-17.5	0.16 (1)	10.00		
9-8	0 / 0	-17.5	-17.5	0.02 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

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THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.40")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")

ALLOWABLE DEFL.(TL)= L/360 (0.40")

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

CSI: TC=0.14 (4-5:1) , BC=0.16 (10-11:1) , WB=0.16 (6-9:1) , SSI=0.11 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (11) (INPUT = 0.90)

JSI METAL= 0.29 (2) (INPUT = 1.00)

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

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

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LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

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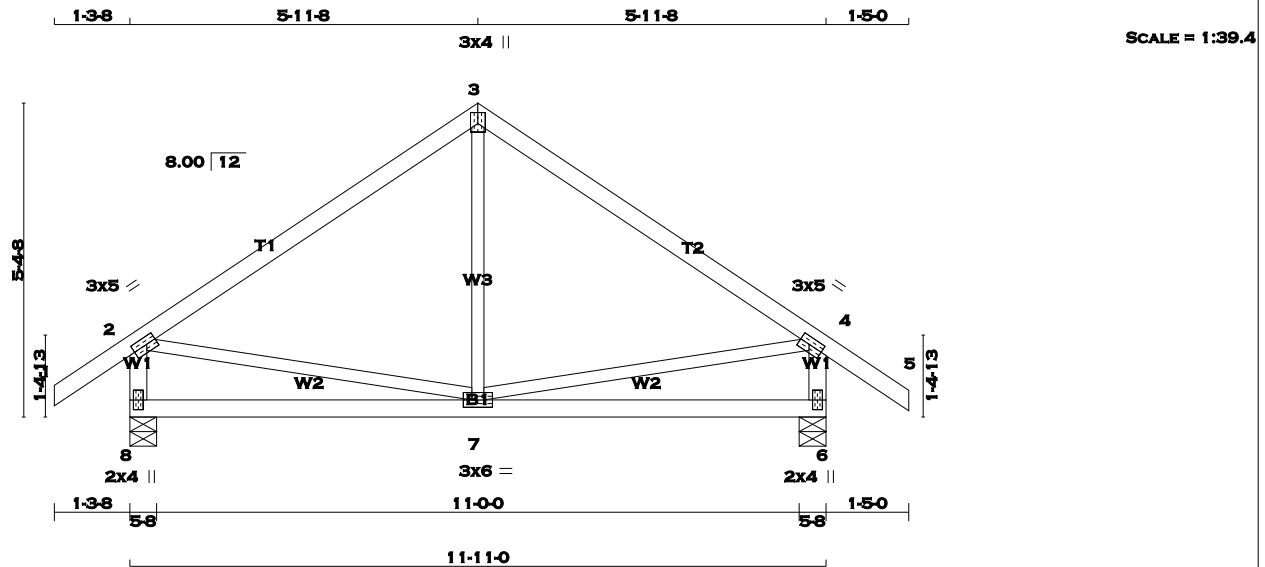
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TOTAL WEIGHT = 3 X 49 = 148 lb
[M][F]

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR.
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
8 - 2	2x4	DRY	No.2	SPF	
6 - 4	2x4	DRY	No.2	SPF	
8 - 6	2x4	DRY	No.2	SPF	
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	5.0	1.50	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8		671	0	671	0	0	5-8	5-8	
6		681	0	681	0	0	5-8	5-8	

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0	
6		475	347 / 0	0 / 0	0 / 0	0 / 0	128 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.		FACTORED		MEMB.		FACTORED	
		FORCE (LBS)	VERT. LOAD (PLF)			FORCE (LBS)	MAX CSI (LC)
FR-TO			FROM TO	FR-TO			
1-2		0 / 29	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 104 0.04 (3)
2-3		-418 / 0	-77.3 -77.3	0.35 (1)	6.25	2-7	0 / 353 0.08 (1)
3-4		-418 / 0	-77.3 -77.3	0.35 (1)	6.25	7-4	0 / 353 0.08 (1)
4-5		0 / 32	-77.3 -77.3	0.12 (1)	10.00		
8-2		-631 / 0	0.0 0.0	0.07 (1)	7.81		
6-4		-641 / 0	0.0 0.0	0.07 (1)	7.81		
8-7		0 / 0	-17.5 -17.5	0.18 (3)	10.00		
7-6		0 / 0	-17.5 -17.5	0.18 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
	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
- TPC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.35 (3-4:1), BC=0.18 (6-7:3), WB=0.08 (2-7:1), SSI=0.15 (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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

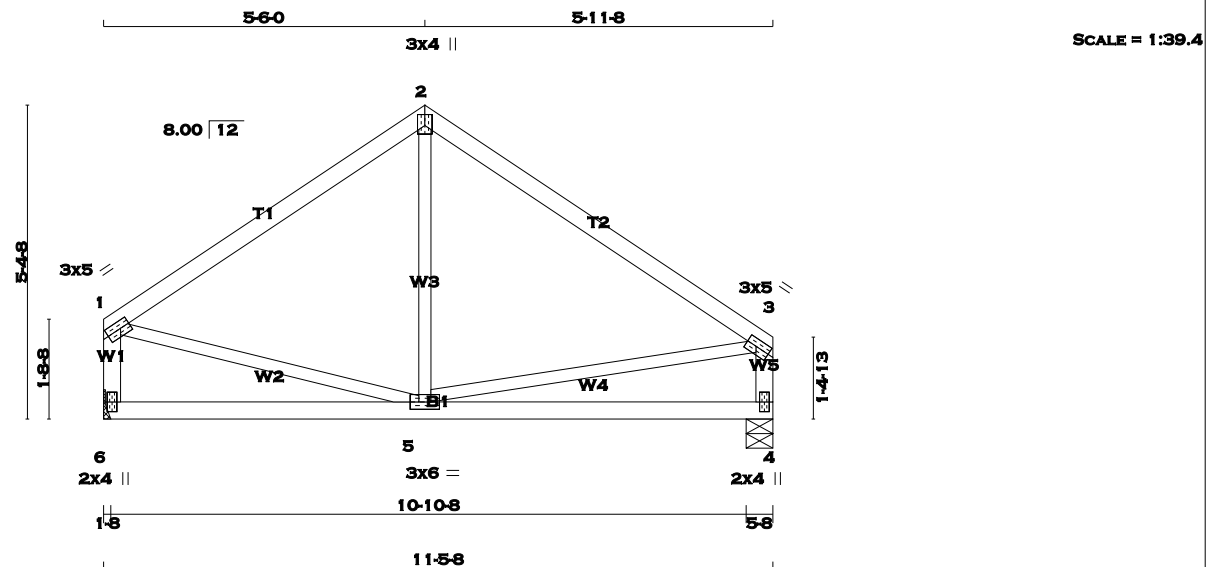
JSI GRIP= 0.76 (7) (INPUT = 0.90)
JSI METAL= 0.18 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 44 = 89 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	5.0	1.50	2.00
2	TTW+p	MT20	3.0	4.0	2.25	1.50
3	TMVW-t	MT20	3.0	5.0	1.50	2.00
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		
6	543	0		543	0	0			
4	543	0		543	0	0			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	381	267 / 0	0 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0
4	381	267 / 0	0 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-385 / 0	-77.3	-77.3 0.30 (1)	6.25	5-2	-16 / 94	0.03 (3)
2-3	-386 / 0	-77.3	-77.3 0.35 (1)	6.25	1-5	0 / 331	0.07 (1)
6-1	-510 / 0	0.0	0.0 0.05 (1)	7.81	5-3	0 / 326	0.07 (1)
4-3	-500 / 0	0.0	0.0 0.05 (1)	7.81			
6-5	0 / 0	-17.5	-17.5 0.17 (3)	10.00			
5-4	0 / 0	-17.5	-17.5 0.17 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3 PSF
	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 (0.38")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.35 (2-3:1) , BC=0.17 (5-6:3) , WB=0.07 (1-5:1) , SSI=0.15 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

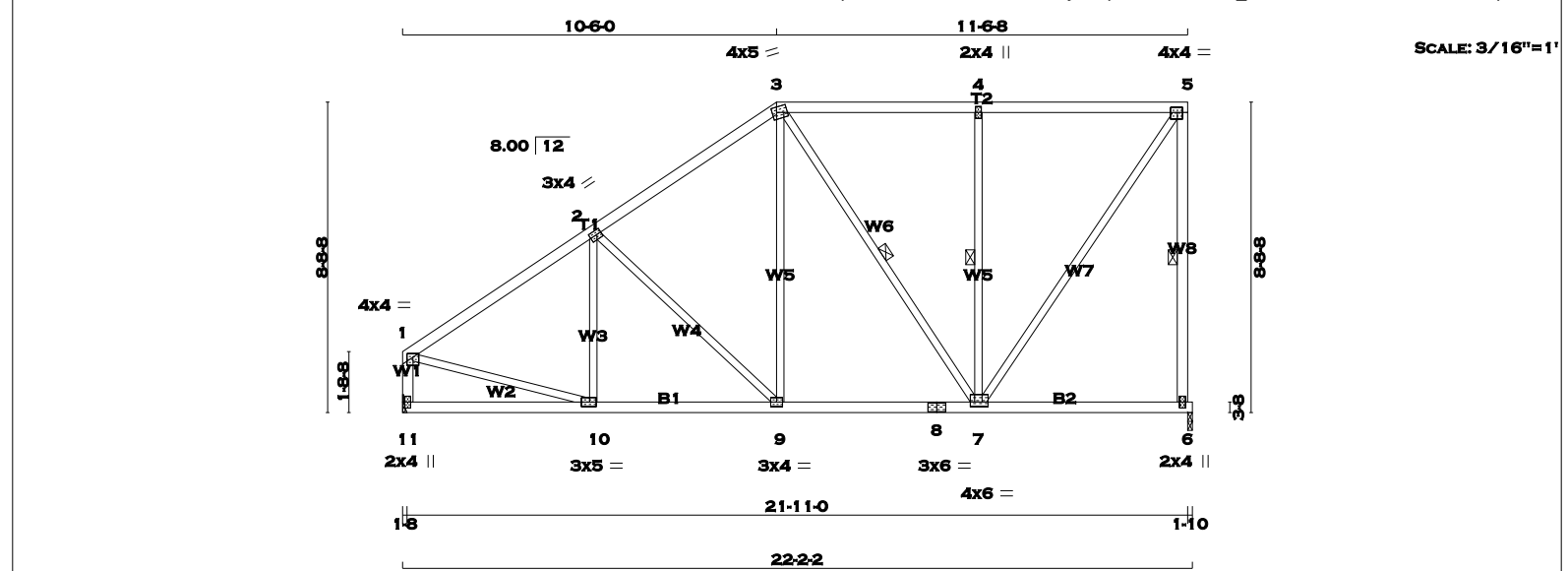
JSI GRIP= 0.70 (5) (INPUT = 0.90)
JSI METAL= 0.15 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 107 lb

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

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		UPLIFT	INPUT BRG	REQRD BRG		
	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX		
6	1045	0	1045	0	0	1-10	1-10		
11	1045	0	1045	0	0	HANGER BY OTHERS			
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
6	734	513 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
11	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 69 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: (3)				
C H O R D S					W E B S				
MEMB.	MAX. FACTORED		FACTORED		MEMB.	MAX. FACTORED		FACTORED	
	FORCE (LBS)	VERT. LOAD	LC1 MAX	CSI (LC)		FORCE (LBS)	VERT. LOAD	LC1 MAX	CSI (LC)
FR-TO		FROM TO			FR-TO		FROM TO		
1-2	-1074 / 0	-77.3 -77.3	0.40 (1)	5.55	10-2	-134 / 48	0.06 (1)		
2-3	-852 / 0	-77.3 -77.3	0.39 (1)	6.07	2-9	-317 / 0	0.32 (1)		
3-4	-579 / 0	-77.3 -77.3	0.45 (1)	6.25	9-3	0 / 307	0.07 (1)		
4-5	-579 / 0	-77.3 -77.3	0.45 (1)	6.25	3-7	-197 / 0	0.14 (1)		
6-5	-1003 / 0	0.0 0.0	0.35 (1)	6.24	7-4	-553 / 0	0.27 (1)		
11-1	-1006 / 0	0.0 0.0	0.11 (1)	7.80	7-5	0 / 1011	0.23 (1)		
					1-10	0 / 946	0.21 (1)		
11-10	0 / 0	-17.5 -17.5	0.12 (3)	10.00					
10-9	0 / 916	-17.5 -17.5	0.21 (1)	10.00					
9-8	0 / 689	-17.5 -17.5	0.20 (3)	10.00					
8-7	0 / 689	-17.5 -17.5	0.20 (3)	10.00					
7-6	0 / 0	-17.5 -17.5	0.14 (3)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.73")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.45 (4-5:1) , BC=0.21 (9-10:1) , WB=0.32 (2-9:1) , 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

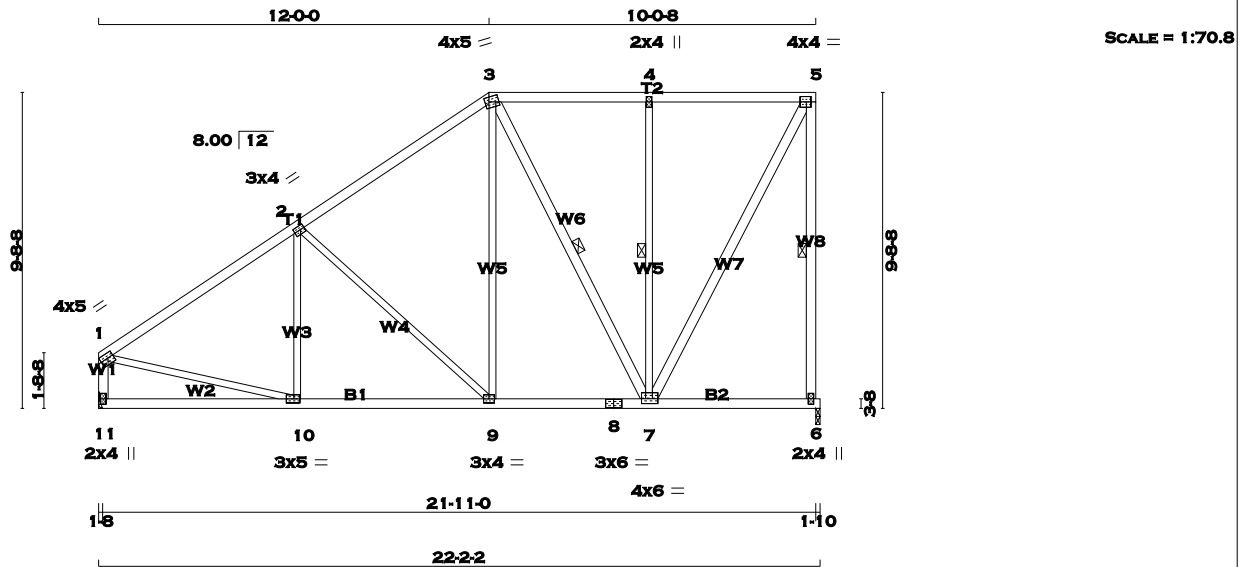
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (1) (INPUT = 0.90)
JSI METAL= 0.32 (1) (INPUT = 1.00)

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TOTAL WEIGHT = 119 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.75	Edge
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TMW+w	MT20	2.0	4.0		
5	TMVW-t	MT20	4.0	4.0	2.00	1.75
6	BMV1+p	MT20	2.0	4.0		
7	BMVWV-t	MT20	4.0	6.0	1.75	1.50
8	BS-t	MT20	3.0	6.0		
9	BMVW-t	MT20	3.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	2.25
11	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
				GROSS REACTION				GROSS REACTION				BRG				BRG			
JT	COMBINED	SNOW	LIVE	DOWN	HORZ	UPLIFT	IN-SX	DOWN	HORZ	UPLIFT	IN-SX	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10
6	1045	0	1045	0	0	0	1-10	1045	0	0	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10
11	1045	0	1045	0	0	0	HANGER BY OTHERS	1045	0	0	HANGER BY OTHERS	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10
												MIN. SEAT SIZE: 1-8							

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS									
JT	COMBINED	SNOW	LIVE	PERM.	LIVE	WIND	DEAD	SOIL			
6	734	513 / 0	0 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0			
11	734	513 / 0	0 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0			

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.60 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 60 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.		MAX. FACTORED		MEMB.		MAX. FACTORED	
		FORCE (LBS)				FORCE (LBS)	
		FACTORED				FACTORED	
		VERT. LOAD					
		(PLF)					
		CSI (LC)					
		UNBRAC					
		LENGTH					
		FR-TO					
1-2	-1074 / 0	-77.3	-77.3 0.39 (1)	5.60	10-2	-88 / 76	0.05 (1)
2-3	-763 / 0	-77.3	-77.3 0.37 (1)	6.25	2-9	-421 / 0	0.59 (1)
3-4	-465 / 0	-77.3	-77.3 0.25 (1)	6.25	9-3	0 / 372	0.08 (1)
4-5	-466 / 0	-77.3	-77.3 0.25 (1)	6.25	3-7	-316 / 0	0.19 (1)
6-5	-1008 / 0	0.0	0.0 0.45 (1)	6.24	7-4	-480 / 0	0.30 (1)
11-1	-1002 / 0	0.0	0.0 0.11 (1)	7.81	7-5	0 / 974	0.16 (1)
					1-10	0 / 943	0.21 (1)
11-10	0 / 0	-17.5	-17.5 0.16 (3)	10.00			
10-9	0 / 919	-17.5	-17.5 0.23 (1)	10.00			
9-8	0 / 612	-17.5	-17.5 0.15 (1)	10.00			
8-7	0 / 612	-17.5	-17.5 0.15 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.10 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.73")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.45 (5-6:1) , BC=0.23 (9-10:1) , WB=0.59 (2-9:1) , SSI=0.19 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

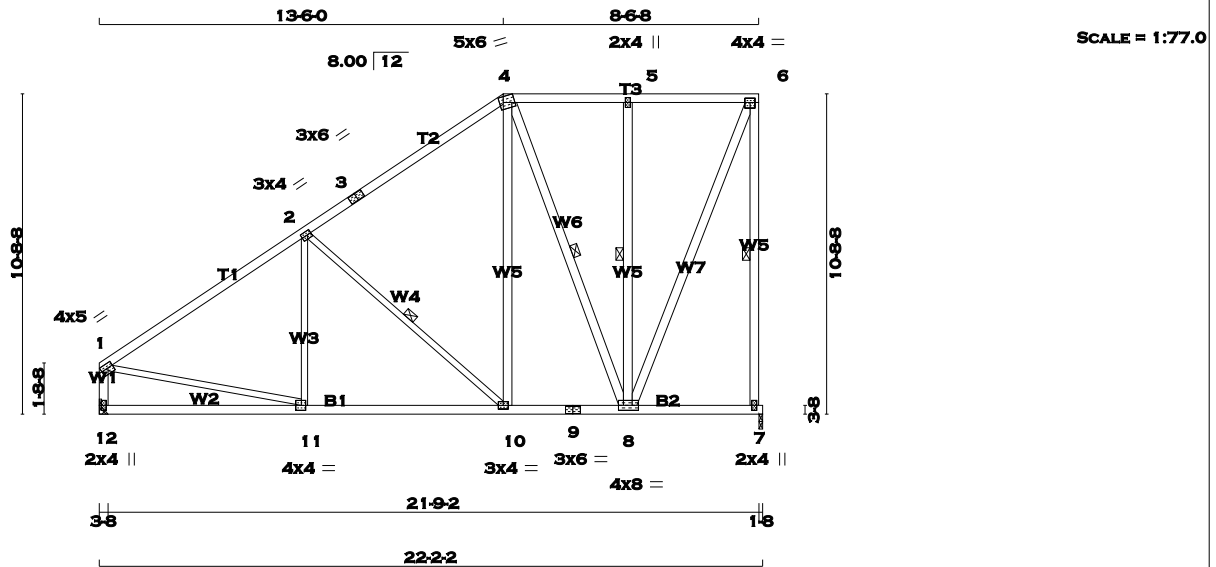
JSI GRIP= 0.89 (5) (INPUT = 0.90)
JSI METAL= 0.36 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 132 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
1 - 3	2x4	DRY	No.2	SPF	
3 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
12 - 1	2x4	DRY	No.2	SPF	
12 - 9	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT				SPF	
11 - 2	2x3	DRY	No.2	SPF	
2 - 10	2x3	DRY	No.2	SPF	
1 - 11	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	1.75 Edge
2	TMVW-t	MT20	3.0	4.0	1.50 1.50
3	TS-t	MT20	3.0	6.0	
4	TTWW-m	MT20	5.0	6.0	2.25 1.50
5	TMW-w	MT20	2.0	4.0	
6	TMVW-t	MT20	4.0	4.0	1.75 2.00
7	BMV1+p	MT20	2.0	4.0	
8	BMVW-t	MT20	4.0	8.0	2.00 2.00
9	BS-t	MT20	3.0	6.0	
10	BMVW-t	MT20	3.0	4.0	
11	BMVW-t	MT20	4.0	4.0	2.00 1.75
12	BMV1+p	MT20	2.0	4.0	

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

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

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

BEARINGS							
		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD		
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
7		1045	0	1045	0	0	1-8
12		1045	0	1045	0	0	1-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0
12	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 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 = 5.42 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 14-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-10, 4-8, 5-8. DBS = 20-0-0 . CBF = 65 LBS.

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

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

LOADING							
TOTAL LOAD CASES: (3)							
		CHORDS				WEBS	
		MAX. FACTORED	FACTORED			MAX. FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD LC1	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. UNBRAC
FR-TO			(PLF)	CSI (LC)	FR-TO		CSI (LC)
1-2	-1065 / 0	-77.3	-77.3	0.51 (1)	5.42	11-2	-48 / 102
2-3	-667 / 0	-77.3	-77.3	0.47 (1)	6.25	2-10	-521 / 0
3-4	-667 / 0	-77.3	-77.3	0.47 (1)	6.25	10-4	0 / 437
4-5	-370 / 0	-77.3	-77.3	0.18 (1)	6.25	4-8	-431 / 0
5-6	-370 / 0	-77.3	-77.3	0.18 (1)	6.25	8-5	-407 / 0
7-6	-1012 / 0	0.0	0.0	0.59 (1)	6.23	8-6	0 / 956
12-1	-997 / 0	0.0	0.0	0.11 (1)	7.81	1-11	0 / 934
12-11	0 / 0	-17.5	-17.5	0.21 (3)	10.00		
11-10	0 / 916	-17.5	-17.5	0.27 (3)	10.00		
10-9	0 / 530	-17.5	-17.5	0.14 (1)	10.00		
9-8	0 / 530	-17.5	-17.5	0.14 (1)	10.00		
8-7	0 / 0	-17.5	-17.5	0.07 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.73")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.59 (6-7:1) , BC=0.27 (10-11:3) , WB=0.29 (4-8:1) , SSI=0.21 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.36 (1) (INPUT = 1.00)



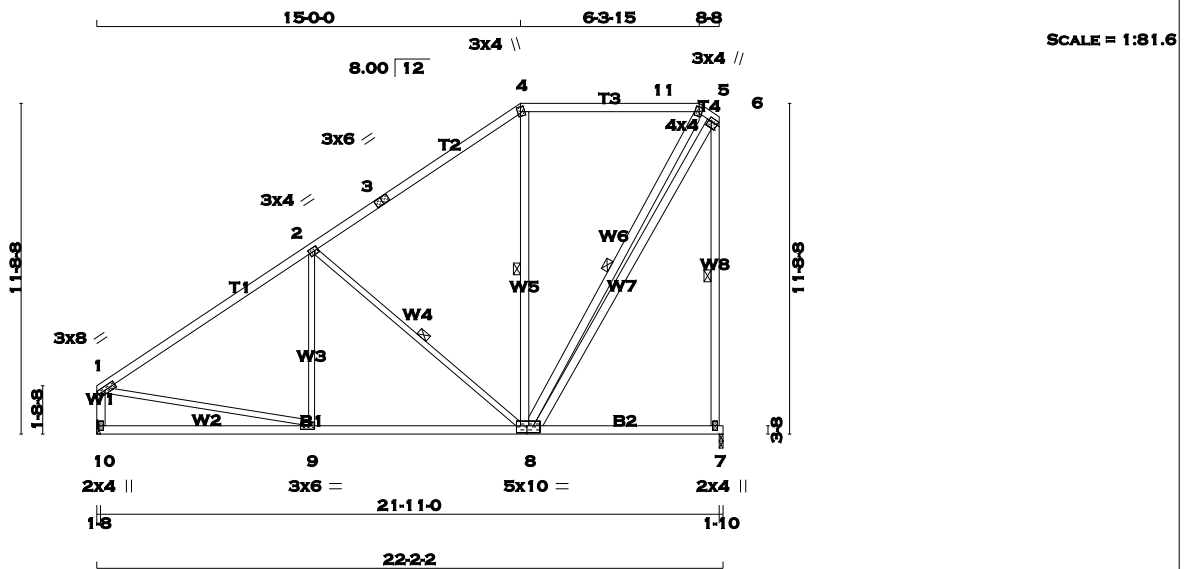
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ID:pF8Cn?9h9uHzAm5tCmIV5yJJCP-1VoYYz0VFM5qjkqRhKknmv05NAPIXtOCnPKOEdbzOOh



TOTAL WEIGHT = 4 X 128 = 514 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	3.0	8.0	Edge
2	TMWW-t	MT20	3.0	4.0	1.50 1.50
3	TS-t	MT20	3.0	6.0	
4	TTW+m	MT20	3.0	4.0	2.00 1.25
5	TTW+m	MT20	3.0	4.0	2.00 1.25
6	TMVW-t	MT20	4.0	4.0	1.50 1.00
7	BMV1+p	MT20	2.0	4.0	
8	BSWWWW*-i	MT20	5.0	10.0	3.00 4.50
9	BMVW-t	MT20	3.0	6.0	1.50 2.50
10	BMV1+p	MT20	2.0	4.0	

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

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

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	DOWN	HORZ	JT	DOWN	HORZ	UPLIFT	JT	DOWN
10	1054	0	0	1054	0	0	0	1054	0
7	1084	0	0	1084	0	0	0	1084	0

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	JT	COMBINED
10	740	513 / 0	0 / 0	10	740
7	765	513 / 0	0 / 0	7	765

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-8, 4-8, 5-8. DBS = 20-0-0 . CBF = 77 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 14-0-0 . CBF = 91 LBS.

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

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

LOADING		TOTAL LOAD CASES: (3)	
C H O R D S		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
1-2	-1060 / 0	1-2	-18 / 118
2-3	-576 / 0	2-3	-613 / 0
3-4	-576 / 0	3-4	-184 / 21
4-11	-440 / 0	4-11	0 / 37
11-5	-440 / 0	11-5	0 / 930
5-6	-531 / 0	5-6	0 / 834
10-1	-1000 / 0	10-1	0 / 834
7-6	-1038 / 0	7-6	0 / 834
10-9	0 / 0	10-9	0 / 0
9-8	0 / 915	9-8	0 / 0
8-7	0 / 0	8-7	0 / 0

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON PIGGYBACK TRUSS WITH SLOPES OF 8.00/12 AND -8.00/12 AND RESPECTIVE WALL HEIGHTS OF 0-0 AND 0-0 AND AN ADDITIONAL DEAD LOAD OF 3.0 P.S.F.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.73")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.71 (6-7:1) , BC=0.31 (8-9:3) , WB=0.43 (2-8:1) , SSI=0.24 (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.

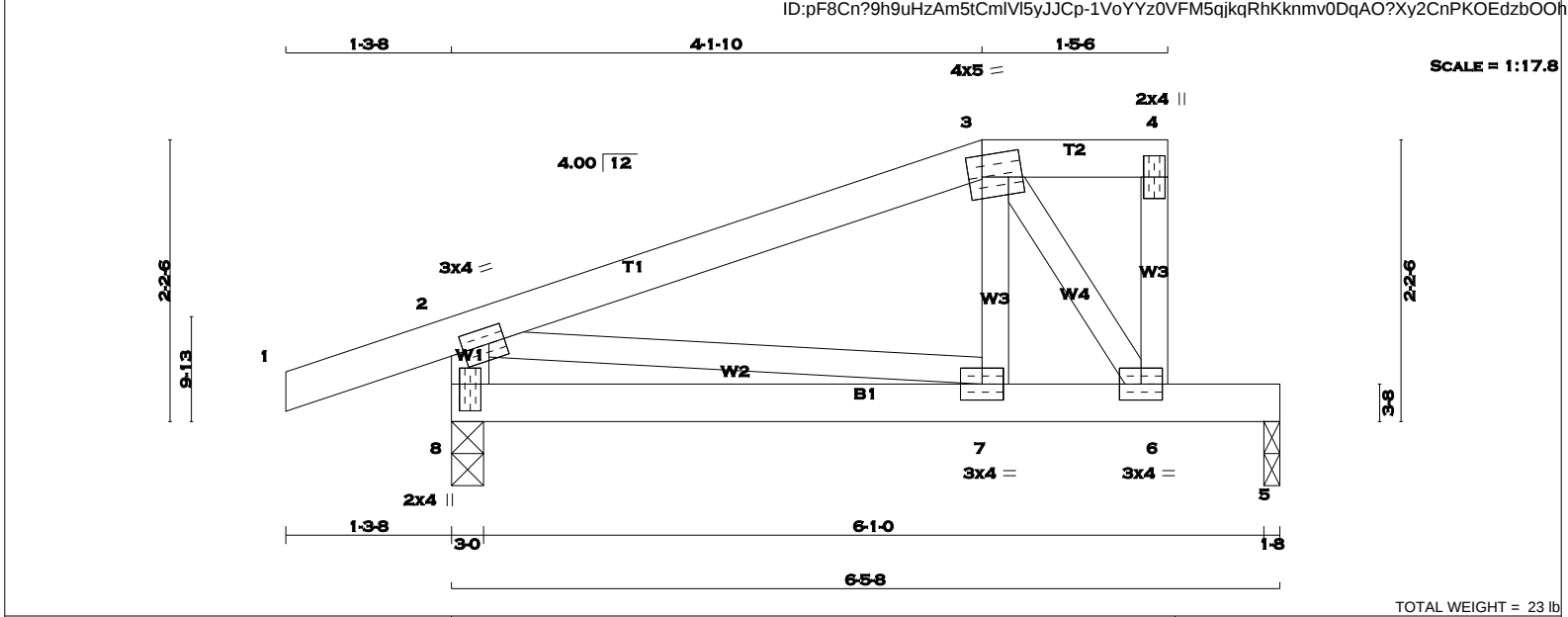
JSI GRIP= 0.90 (1) (INPUT = 0.90)
JSI METAL= 0.30 (6) (INPUT = 1.00)



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

6 - 4

2x3

DRY

No.2

SPF

8 - 2

2x4

DRY

No.2

SPF

8 - 5

2x4

DRY

No.2

SPF

ALL WEBS EXCEPT

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

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

8

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

5

306

0

410

0

0

3-0

3-0

1-8

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

8

285

213 / 0

0 / 0

0 / 0

0 / 0

73 / 0

0 / 0

5

215

150 / 0

0 / 0

0 / 0

0 / 0

65 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

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

CSI: TC=0.23 (2-3:1), BC=0.36 (6-7:1), WB=0.07 (3-6:1), SSI=0.24 (5-6:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE

GRIP(DRY)

SHEAR

SECTION

(PSI)

(PLI)

(PLI)

(PLI)

MAX

MIN

MAX

MT20

618

354

1667

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.64 (3) (INPUT = 0.90)

JSI METAL= 0.16 (3) (INPUT = 1.00)

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTWW-m	MT20	4.0	5.0	2.00	1.25
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0		
7	BMVW-t	MT20	3.0	4.0		
8	BMV1+p	MT20	2.0	4.0	2.50	1.00

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MEMB.
1-2	0 / 16	-77.3	-77.3 0.10 (1)	10.00	7-3	0 / 233	0.05 (1)
2-3	-277 / 0	-77.3	-77.3 0.23 (1)	6.25	3-6	-454 / 0	0.07 (1)
3-4	0 / 0	-77.3	-77.3 0.03 (1)	10.00	2-7	0 / 264	0.06 (1)
6-4	-56 / 0	0.0	0.0 0.01 (1)	7.81			
8-2	-383 / 0	0.0	0.0 0.04 (1)	7.81			
8-7	0 / 0	-17.5	-17.5 0.08 (3)	10.00			
7-6	0 / 275	-17.5	-17.5 0.36 (1)	10.00			
6-5	0 / 0	-94.8	-94.8 0.32 (1)	10.00			

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

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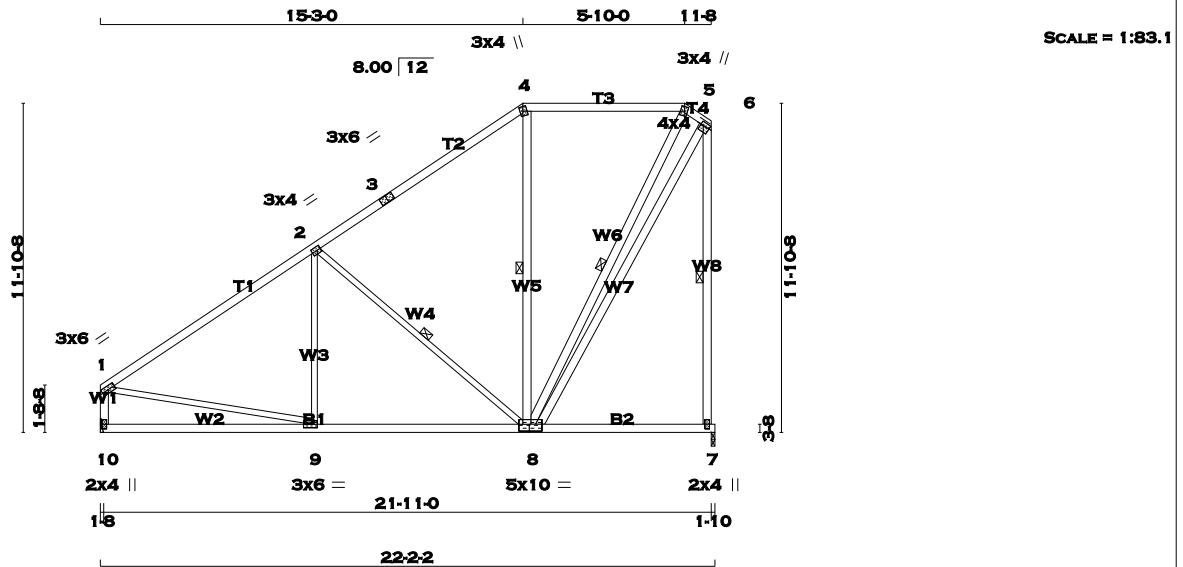
BUILDING DIVISION

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Kott Lumber Uxbridge, Stouffville, ON, CGC

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ID:pF8Cn?9h9uHzAm5tCmlVl5yJJcp-VhMwJ070gDhLuPdF1F0l6ZHWakrGJBM?34xn4zbOOg



TOTAL WEIGHT = 129 lb
[M][F]

LUMBER				
N. L. G. A. RULES		LUMBER	DESCR.	
CHORDS	SIZE			
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
10 - 1	2x4	DRY	No.2	SPF
7 - 6	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF

ALL WEBS EXCEPT	2x4	DRY	No.2	SPF
9 - 2	2x3	DRY	No.2	SPF
2 - 8	2x3	DRY	No.2	SPF
1 - 9	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	3.0	6.0	
2	TMWW-t	MT20	3.0	4.0	1.50 1.50
3	TS-t	MT20	3.0	6.0	
4	TTW+m	MT20	3.0	4.0	2.00 1.25
5	TTW+m	MT20	3.0	4.0	2.00 1.25
6	TMVW-t	MT20	4.0	4.0	1.50 1.00
7	BMV1+p	MT20	2.0	4.0	
8	BSWWWW*-i	MT20	5.0	10.0	3.00 4.50
9	BMWW-t	MT20	3.0	6.0	1.50 2.50
10	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS					
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		REQRD BRG
	VERT	HORZ	DOWN	HORZ	
10	1045	0	1045	0	0
7	1045	0	1045	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
10	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0
7	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-8, 4-8, 5-8. DBS = 20-0-0 . CBF = 79 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 14-0-0 . CBF = 88 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO					FR-TO		
1-2	-1046 / 0	-77.3	-77.3 0.67 (1)	5.14	9-2	-10 / 124	0.04 (3)
2-3	-545 / 0	-77.3	-77.3 0.62 (1)	6.25	2-8	-631 / 0	0.46 (1)
3-4	-545 / 0	-77.3	-77.3 0.62 (1)	6.25	8-4	-162 / 38	0.12 (1)
4-5	-415 / 0	-77.3	-77.3 0.34 (1)	6.25	8-5	0 / 50	0.01 (3)
5-6	-493 / 0	-77.3	-77.3 0.01 (1)	6.25	1-9	0 / 918	0.21 (1)
10-1	-991 / 0	0.0	0.0 0.11 (1)	7.81	8-6	0 / 798	0.13 (1)
7-6	-1001 / 0	0.0	0.0 0.68 (1)	6.25			
10-9	0 / 0	-17.5	-17.5 0.25 (3)	10.00			
9-8	0 / 903	-17.5	-17.5 0.32 (3)	10.00			
8-7	0 / 0	-17.5	-17.5 0.20 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.73")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.68 (6-7:1), BC=0.32 (8-9:3), WB=0.46 (2-8:1), SSI=0.24 (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.

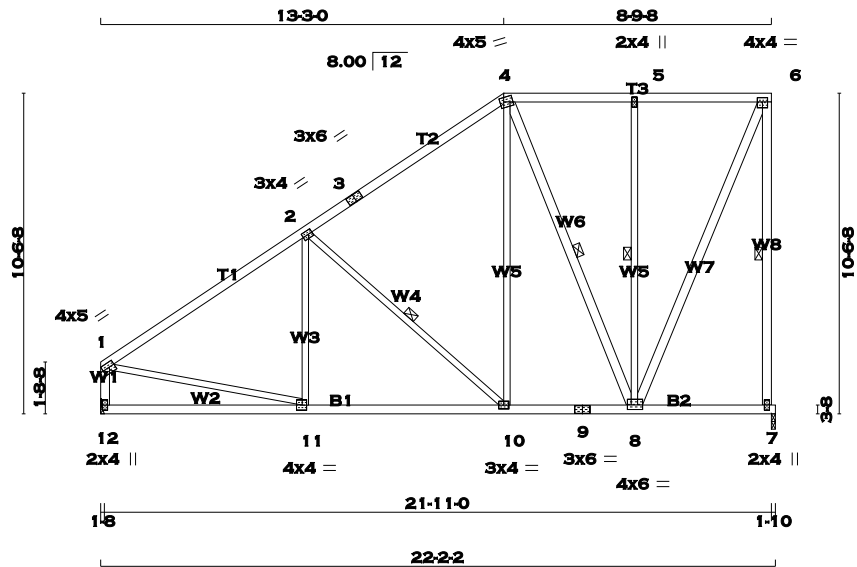
JSI GRIP= 0.90 (1) (INPUT = 0.90)
JSI METAL= 0.30 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 124 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	
7 - 6	2x4	DRY	No.2	SPF	
12 - 1	2x4	DRY	No.2	SPF	
12 - 9	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	

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

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

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

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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	1045	0	1045	0	0	1-10	1-10
12	1045	0	1045	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	DEAD	SOIL	DEAD	SOIL	DEAD	SOIL
7	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0	220 / 0	0 / 0	220 / 0	0 / 0	220 / 0	0 / 0
12	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0	220 / 0	0 / 0	220 / 0	0 / 0	220 / 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 = 5.46 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 14-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-10, 4-8, 5-8. DBS = 20-0-0 . CBF = 63 LBS.

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

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

LOADING		TOTAL LOAD CASES: (3)		C H O R D S		W E B S	
MEMB.		MAX. FACTORED		MAX. FACTORED		MAX. FACTORED	
FORCE (LBS)		VERT. LOAD		VERT. LOAD		FORCE (LBS)	
FROM TO		PLF		PLF		FROM TO	
1-2	-1067 / 0	-77.3	-77.3 0.49 (1)	5.46	11-2	-54 / 97	0.03 (3)
2-3	-685 / 0	-77.3	-77.3 0.45 (1)	6.25	2-10	-504 / 0	0.27 (1)
3-4	-685 / 0	-77.3	-77.3 0.45 (1)	6.25	10-4	0 / 426	0.10 (1)
4-5	-385 / 0	-77.3	-77.3 0.19 (1)	6.25	4-8	-411 / 0	0.28 (1)
5-6	-385 / 0	-77.3	-77.3 0.19 (1)	6.25	8-5	-419 / 0	0.33 (1)
7-6	-1012 / 0	0.0	0.0 0.56 (1)	6.23	8-6	0 / 958	0.15 (1)
12-1	-998 / 0	0.0	0.0 0.11 (1)	7.81	1-11	0 / 936	0.21 (1)
12-11	0 / 0	-17.5	-17.5 0.20 (3)	10.00			
11-10	0 / 917	-17.5	-17.5 0.27 (3)	10.00			
10-9	0 / 544	-17.5	-17.5 0.14 (1)	10.00			
9-8	0 / 544	-17.5	-17.5 0.14 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.07 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.73")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.56 (6-7:1) , BC=0.27 (10-11:3) , WB=0.33 (5-8:1) , SSI=0.21 (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.

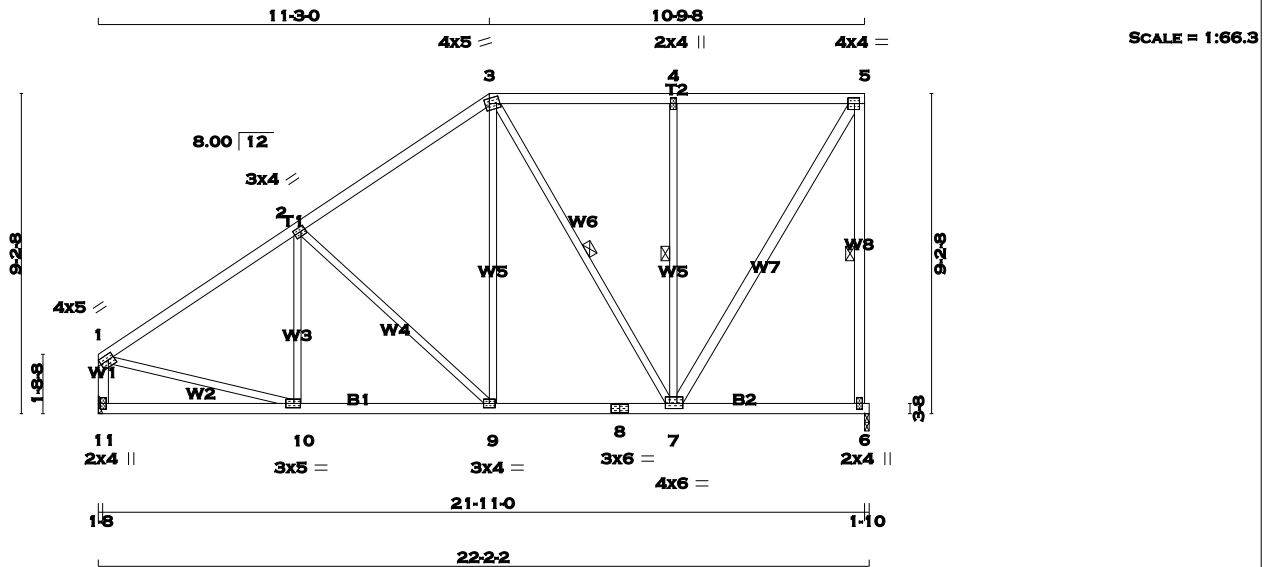
JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.36 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 113 lb
[M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.75	Edge
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TMVW-w	MT20	2.0	4.0		
5	TMVW-t	MT20	4.0	4.0	2.00	1.75
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	4.0	6.0	1.75	1.50
8	BS-t	MT20	3.0	6.0		
9	BMVW-t	MT20	3.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	2.25
11	BMV1+p	MT20	2.0	4.0		

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
6	1045	0	1045	0	0	1-10	1-10		
11	1045	0	1045	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8			

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
6	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0
11	734	513 / 0	0 / 0	0 / 0	0 / 0	220 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 65 LBS.

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

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

LOADING				TOTAL LOAD CASES: (3)			
C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED UNBRAC LENGTH FR-TO	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	-1075 / 0	-77.3 -77.3	0.34 (1)	5.67	10-2	-110 / 62	0.05 (1)
2-3	-809 / 0	-77.3 -77.3	0.32 (1)	6.25	2-9	-370 / 0	0.44 (1)
3-4	-520 / 0	-77.3 -77.3	0.29 (1)	6.25	9-3	0 / 340	0.08 (1)
4-5	-520 / 0	-77.3 -77.3	0.29 (1)	6.25	3-7	-257 / 0	0.20 (1)
6-5	-1006 / 0	0.0 0.0	0.40 (1)	6.24	7-4	-517 / 0	0.29 (1)
11-1	-1004 / 0	0.0 0.0	0.11 (1)	7.80	7-5	0 / 991	0.16 (1)
					1-10	0 / 945	0.21 (1)
11-10	0 / 0	-17.5 -17.5	0.14 (3)	10.00			
10-9	0 / 919	-17.5 -17.5	0.22 (1)	10.00			
9-8	0 / 651	-17.5 -17.5	0.17 (3)	10.00			
8-7	0 / 651	-17.5 -17.5	0.17 (3)	10.00			
7-6	0 / 0	-17.5 -17.5	0.12 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.73")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.73")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.40 (5-6:1), BC=0.22 (9-10:1), WB=0.44 (2-9:1), 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.

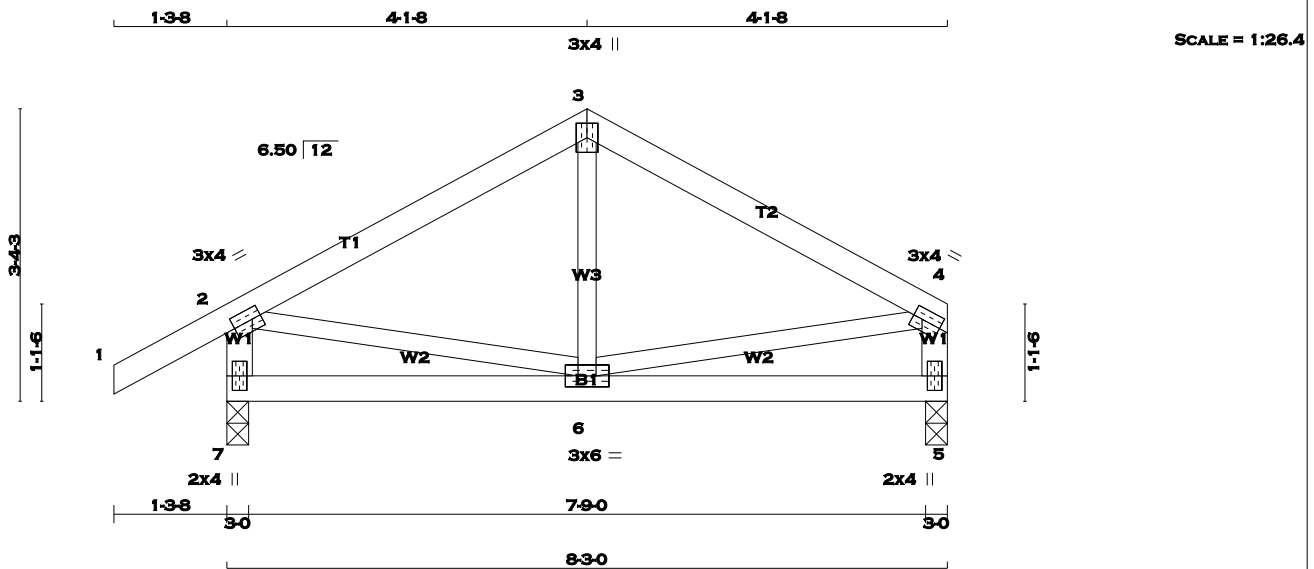
JSI GRIP= 0.89 (5) (INPUT = 0.90)
JSI METAL= 0.36 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 32 = 96 lb
[M][F]

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

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
7	497	0	497	0	0
5	391	0	391	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
7	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	346	255 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0
5	275	192 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0

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

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

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

LOADING									
TOTAL LOAD CASES: (3)									
CHORDS					WEBS				
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC1 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED MAX	LC1 (LC)	
FR-TO		FROM TO			FR-TO				
1-2	0 / 25	-77.3	-77.3	0.10 (1)	10.00	6-3	-20 / 64	0.02 (3)	
2-3	-314 / 0	-77.3	-77.3	0.17 (1)	6.25	2-6	0 / 281	0.06 (1)	
3-4	-314 / 0	-77.3	-77.3	0.17 (1)	6.25	6-4	0 / 281	0.06 (1)	
7-2	-468 / 0	0.0	0.0	0.05 (1)	7.81				
5-4	-363 / 0	0.0	0.0	0.04 (1)	7.81				
7-6	0 / 0	-17.5	-17.5	0.08 (3)	10.00				
6-5	0 / 0	-17.5	-17.5	0.08 (3)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.17 (3-4:1) , BC=0.08 (6-7:3) , WB=0.06 (2-6:1) , 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.

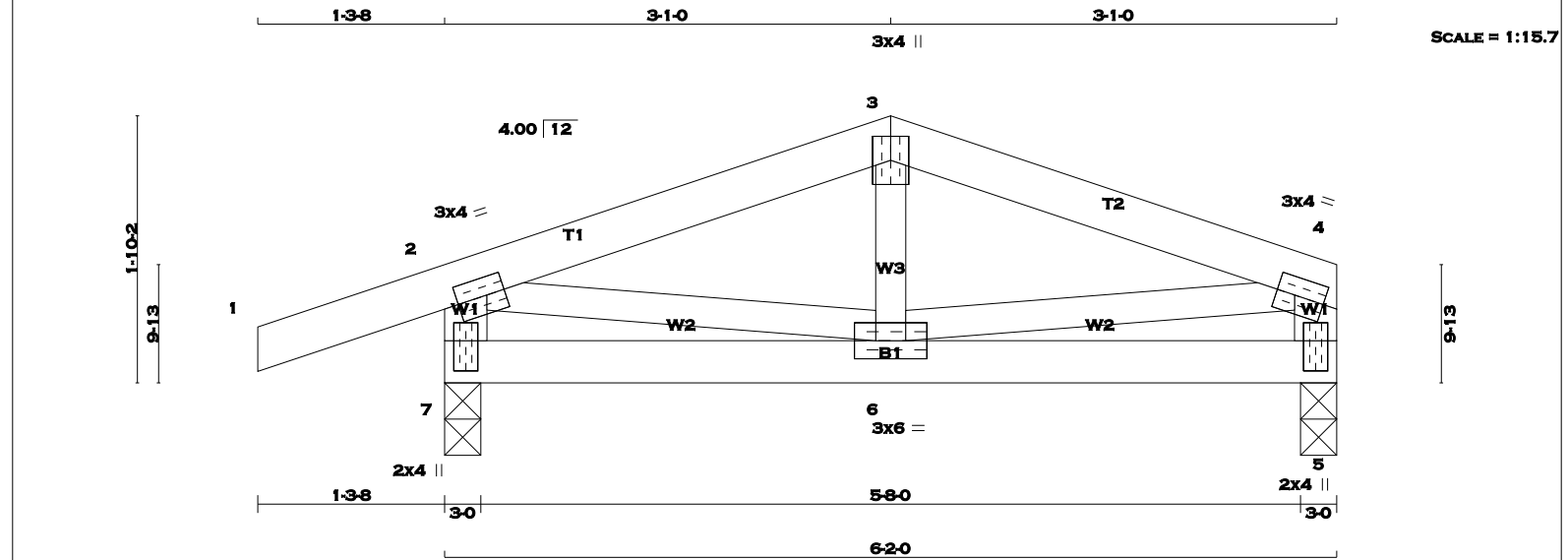
JSI GRIP= 0.68 (2) (INPUT = 0.90)
JSI METAL= 0.16 (2) (INPUT = 1.00)



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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	BMV1+p	MT20	2.0	4.0	2.50	1.00
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0	2.50	1.00

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		396	0	396	0	0	3-0	3-0	
5		292	0	292	0	0	3-0	3-0	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
7		276	206 / 0	0 / 0	0 / 0	0 / 0	70 / 0
5		205	144 / 0	0 / 0	0 / 0	0 / 0	62 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (3)						WEBS					
CHORDS			FACTORED			MAX. FACTORED			MEMB.		
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	CSI (LC)	MEMB.	FORCE (LBS)	MAX	FORCE (LBS)	MAX	CSI (LC)
FR-TO		FROM	TO			FR-TO		LENGTH	FR-TO		
1-2	0 / 16	-77.3	-77.3	0.10 (1)	10.00	6-3	-40 / 40	0.01 (3)			
2-3	-314 / 0	-77.3	-77.3	0.09 (1)	6.25	2-6	0 / 302	0.07 (1)			
3-4	-314 / 0	-77.3	-77.3	0.09 (1)	6.25	6-4	0 / 302	0.07 (1)			
7-2	-372 / 0	0.0	0.0	0.04 (1)	7.81						
5-4	-269 / 0	0.0	0.0	0.03 (1)	7.81						
7-6	0 / 0	-17.5	-17.5	0.04 (3)	10.00						
6-5	0 / 0	-17.5	-17.5	0.04 (3)	10.00						

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.10 (1-2:1) , BC=0.04 (6-7:3) , WB=0.07 (4-6:1) , SSI=0.09 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

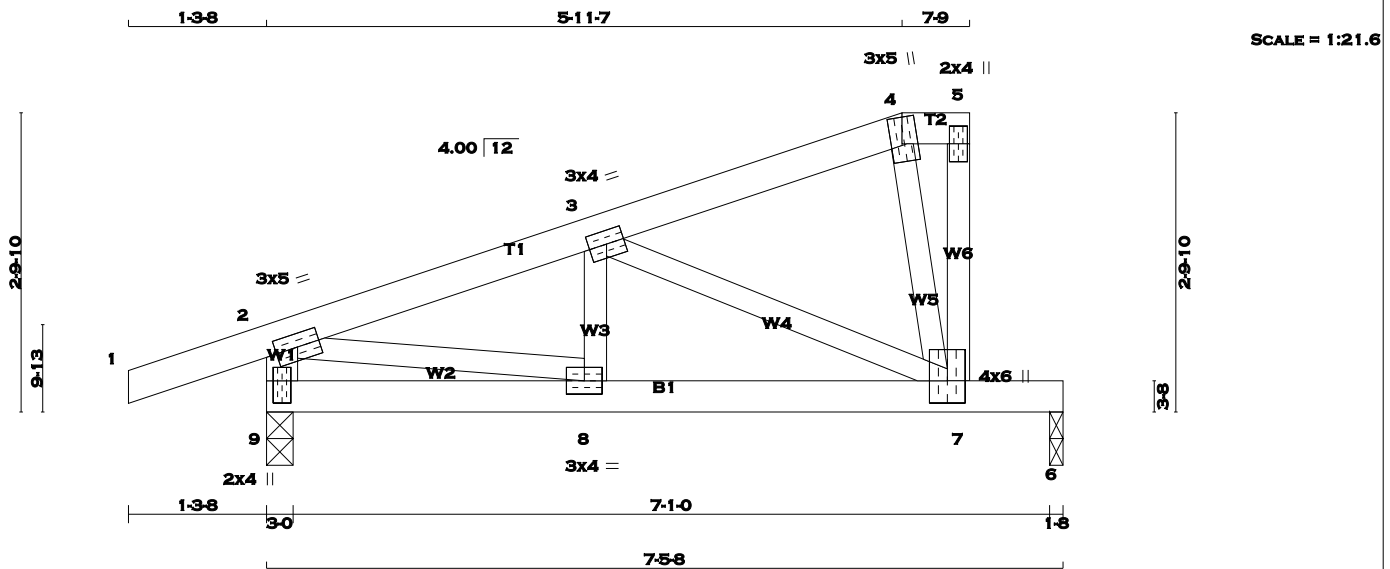
JSI GRIP= 0.60 (2) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)

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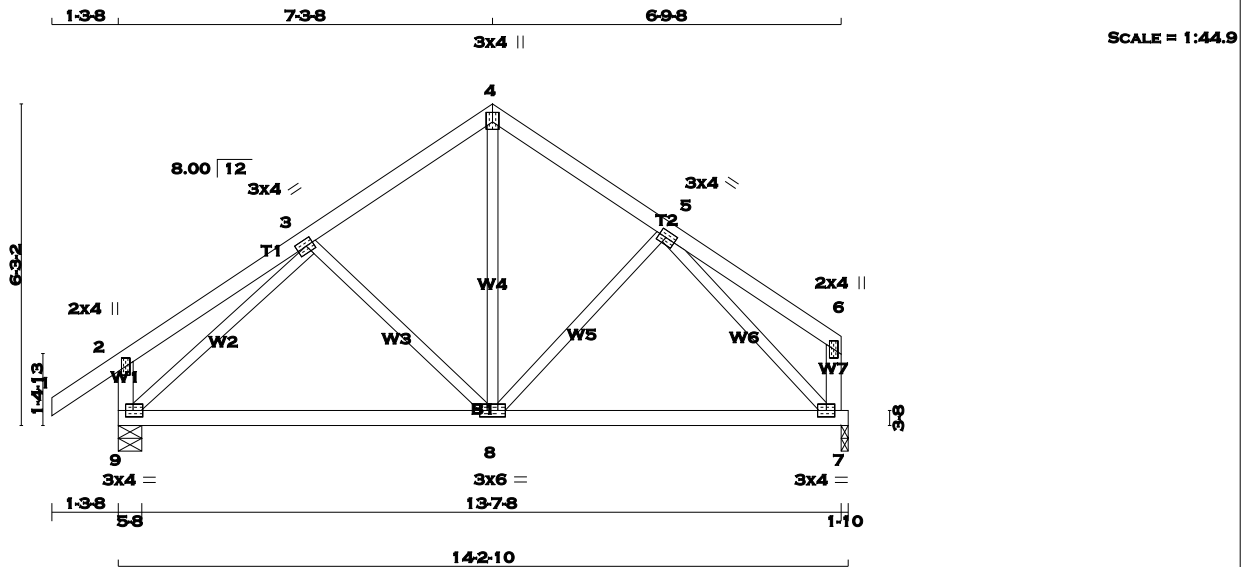
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 7 - 5 2x3 DRY No.2 9 - 2 2x4 DRY No.2 9 - 6 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.						DESCR. SPF SPF SPF SPF SPF SPF																																																																																																																																																																																																															
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 3.0 5.0 3 TMVW-t MT20 3.0 4.0 4 TTW+m MT20 3.0 5.0 1.25 1.50 5 TMV+p MT20 2.0 4.0 7 BMVWW+p MT20 4.0 6.0 2.50 2.00 8 BMVW-t MT20 3.0 4.0 9 BMV1+p MT20 2.0 4.0 2.50 1.00 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.												DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th rowspan="2">JT</th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">MAXIMUM FACTORED GROSS REACTION</th><th colspan="2">INPUT BRG</th><th colspan="2">REQRD BRG</th></tr><tr><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th></tr><tr><td>9</td><td>457</td><td>0</td><td>457</td><td>0</td><td>0</td><td>3-0</td><td>3-0</td></tr><tr><td>6</td><td>354</td><td>0</td><td>354</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th rowspan="2">JT</th><th colspan="2">1ST LCASE COMBINED</th><th colspan="2">MAX/MIN. SNOW</th><th colspan="2">LIVE</th><th colspan="2">PERM. LIVE</th><th colspan="2">WIND</th><th colspan="2">DEAD</th><th colspan="2">SOIL</th></tr><tr><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><td>9</td><td>319</td><td>236 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>83 / 0</td><td>0 / 0</td><td>75 / 0</td><td>0 / 0</td><td>0 / 0</td></tr><tr><td>6</td><td>248</td><td>174 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>75 / 0</td><td>0 / 0</td><td>75 / 0</td><td>0 / 0</td><td>0 / 0</td></tr></table> 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: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th rowspan="2">MEMB.</th><th rowspan="2">MAX. FORCE (LBS)</th><th rowspan="2">FACTORED VERT. LOAD (PLF)</th><th rowspan="2">LC1 MAX (LC)</th><th rowspan="2">MEMB.</th><th rowspan="2">MAX. FORCE (LBS)</th><th rowspan="2">FACTORED VERT. LOAD (LBS)</th><th rowspan="2">LC1 MAX (LC)</th></tr><tr></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td>FR-TO</td><td></td><td>FROM</td><td>TO</td></tr><tr><td>1- 2</td><td>0 / 16</td><td>-77.3</td><td>-77.3 0.10 (1)</td><td>10.00</td><td>8- 3</td><td>0 / 97</td><td>0.03 (3)</td></tr><tr><td>2- 3</td><td>-528 / 0</td><td>-77.3</td><td>-77.3 0.09 (1)</td><td>6.25</td><td>3- 7</td><td>-526 / 0</td><td>0.13 (1)</td></tr><tr><td>3- 4</td><td>-35 / 0</td><td>-77.3</td><td>-77.3 0.09 (1)</td><td>6.25</td><td>4- 7</td><td>-107 / 0</td><td>0.02 (1)</td></tr><tr><td>4- 5</td><td>0 / 0</td><td>-77.3</td><td>-77.3 0.01 (1)</td><td>10.00</td><td>2- 8</td><td>0 / 514</td><td>0.12 (1)</td></tr><tr><td>7- 5</td><td>-24 / 0</td><td>0.0</td><td>0.0 0.00 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>9- 2</td><td>-455 / 0</td><td>0.0</td><td>0.0 0.05 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>9- 8</td><td>0 / 0</td><td>-17.5</td><td>-17.5 0.11 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>8- 7</td><td>0 / 507</td><td>-17.5</td><td>-17.5 0.45 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>7- 6</td><td>0 / 0</td><td>-94.8</td><td>-94.8 0.37 (1)</td><td>10.00</td><td></td><td></td><td></td></tr></table>												JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	9	457	0	457	0	0	3-0	3-0	6	354	0	354	0	0	1-8	1-8	JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL															9	319	236 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0	75 / 0	0 / 0	0 / 0	6	248	174 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	75 / 0	0 / 0	75 / 0	0 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	FR-TO		FROM	TO	FR-TO		FROM	TO	1- 2	0 / 16	-77.3	-77.3 0.10 (1)	10.00	8- 3	0 / 97	0.03 (3)	2- 3	-528 / 0	-77.3	-77.3 0.09 (1)	6.25	3- 7	-526 / 0	0.13 (1)	3- 4	-35 / 0	-77.3	-77.3 0.09 (1)	6.25	4- 7	-107 / 0	0.02 (1)	4- 5	0 / 0	-77.3	-77.3 0.01 (1)	10.00	2- 8	0 / 514	0.12 (1)	7- 5	-24 / 0	0.0	0.0 0.00 (1)	7.81				9- 2	-455 / 0	0.0	0.0 0.05 (1)	7.81				9- 8	0 / 0	-17.5	-17.5 0.11 (1)	10.00				8- 7	0 / 507	-17.5	-17.5 0.45 (1)	10.00				7- 6	0 / 0	-94.8	-94.8 0.37 (1)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/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 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.25") CALCULATED VERT. DEFL.(TL) = L/ 940 (0.10") CSI: TC=0.10 (1-2:1), BC=0.45 (7-8:1), WB=0.13 (3-7:1), SSI=0.28 (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= 0.82 (8) (INPUT = 0.90) JSI METAL= 0.19 (8) (INPUT = 1.00)					
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG																																																																																																																																																																																																														
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																																														
9	457	0	457	0	0	3-0	3-0																																																																																																																																																																																																														
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FR-TO		FROM	TO	FR-TO		FROM	TO																																																																																																																																																																																																														
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7- 5	-24 / 0	0.0	0.0 0.00 (1)	7.81																																																																																																																																																																																																																	
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TOTAL WEIGHT = 3 X 60 = 180 lb
[M][F]

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

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

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

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

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

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 7

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

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

LOADING				TOTAL LOAD CASES: (3)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-8	-161 / 3	0.07 (1)
2-3	0 / 18	-77.3	-77.3 0.16 (1)	10.00	8-4	0 / 339	0.08 (1)
3-4	-514 / 0	-77.3	-77.3 0.13 (1)	6.25	8-5	-102 / 16	0.04 (1)
4-5	-512 / 0	-77.3	-77.3 0.11 (1)	6.25	9-3	-735 / 0	0.30 (1)
5-6	0 / 16	-77.3	-77.3 0.14 (1)	10.00	5-7	-710 / 0	0.28 (1)
9-2	-215 / 0	0.0	0.0 0.02 (1)	7.81			
7-6	-102 / 0	0.0	0.0 0.01 (1)	7.81			
9-8	0 / 529	-17.5	-17.5 0.28 (3)	10.00			
8-7	0 / 482	-17.5	-17.5 0.28 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

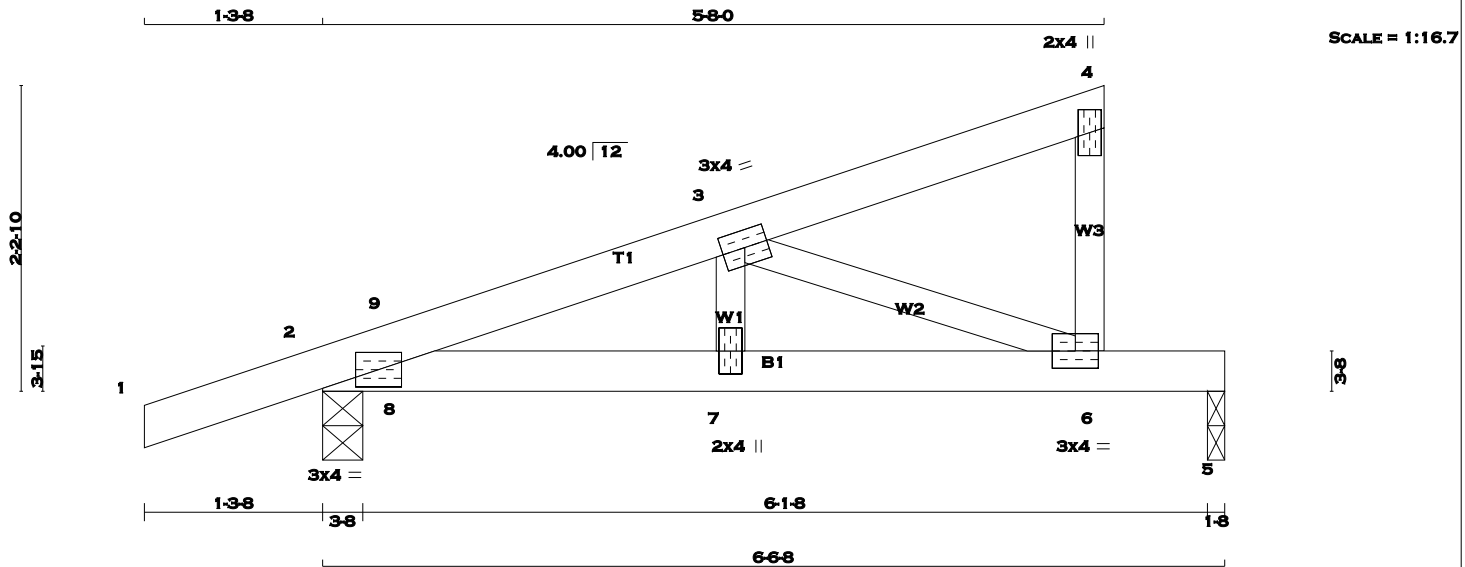


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TOTAL WEIGHT = 18 X 20 = 358 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMB1-I	MT20	3.0	4.0	
3	TMBW-t	MT20	3.0	4.0	
4	TMBV+p	MT20	2.0	4.0	
6	TMBW-t	MT20	3.0	4.0	
7	TMBW+w	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
2	409	0	409	0	0
5	247	0	247	0	0

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

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

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

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

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

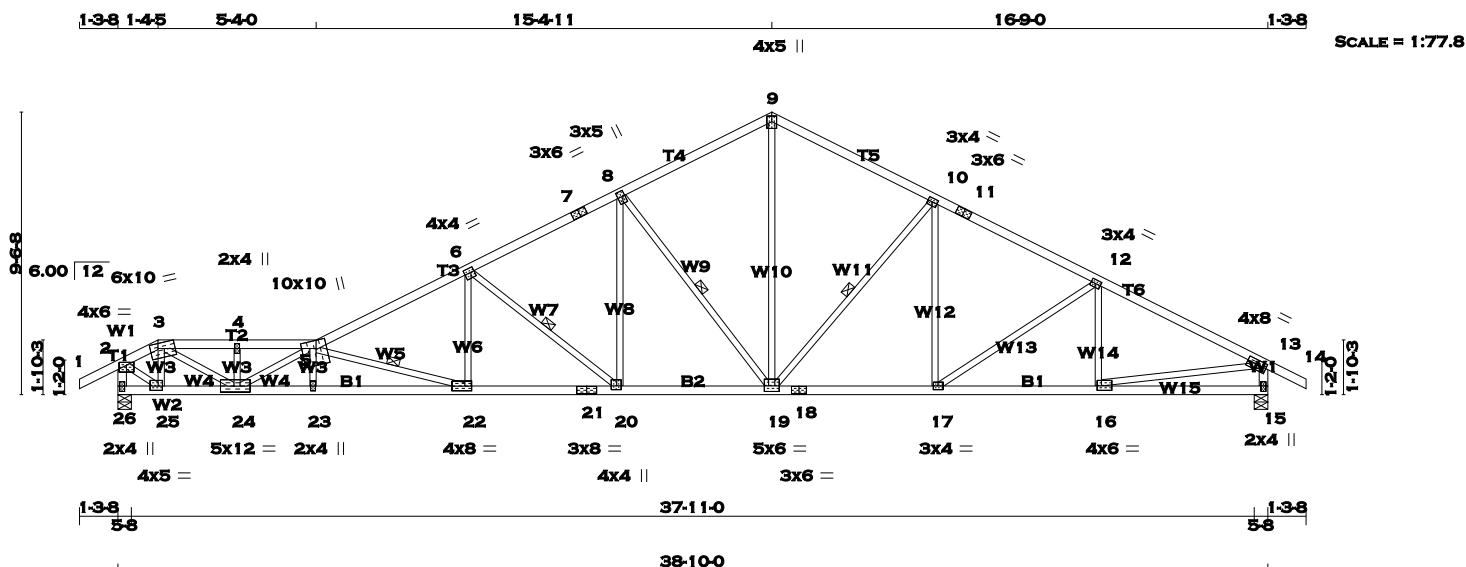
JSI GRIP= 0.86 (6) (INPUT = 0.90)
JSI METAL= 0.21 (6) (INPUT = 1.00)



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TOTAL WEIGHT = 163 lb

LUMBER

N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
9 - 11	2x4	DRY	No.2	SPF
11 - 14	2x4	DRY	No.2	SPF
26 - 2	2x4	DRY	No.2	SPF
15 - 13	2x4	DRY	No.2	SPF
26 - 21	2x4	DRY	1650F 1.5E	SPF
21 - 18	2x4	DRY	1650F 1.5E	SPF
18 - 15	2x4	DRY	1650F 1.5E	SPF

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

IT	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	6.0	1.25 3.00
3	TTWW-m	MT20	6.0	10.0	Edge 6.75
4	TMW+w	MT20	2.0	4.0	
5	TTWWW+m	MT20	10.0	10.0	3.25 4.25
6	TMWw-t	MT20	4.0	4.0	1.75 1.25
7	TS-t	MT20	3.0	6.0	
8	BMWW+t	MT20	3.0	5.0	2.25 0.75
9	TTW+p	MT20	4.0	5.0	2.25 2.00
10	TMWw-t	MT20	3.0	4.0	1.50 1.75
11	TS-t	MT20	3.0	6.0	
12	TMWw-t	MT20	3.0	4.0	1.50 1.75
13	TMVW-t	MT20	4.0	8.0	1.75 3.00
15	BMV1+p	MT20	2.0	4.0	2.25 1.00
16	BMWW-t	MT20	4.0	6.0	1.75 1.75
17	BMWW-t	MT20	3.0	4.0	
18	BS-t	MT20	3.0	6.0	
19	BMWWW-t	MT20	5.0	6.0	2.25 3.00
20	BMWW+t	MT20	4.0	4.0	1.50 1.75
21	BS-t	MT20	3.0	8.0	
22	BMWW-t	MT20	4.0	8.0	2.00 2.75
23	BMW+w	MT20	2.0	4.0	
24	BMWWW-t	MT20	5.0	12.0	2.50 5.50
25	BMWW-t	MT20	4.0	5.0	1.75 1.75
26	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

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



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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
26	1948	0	1948	0	0	5-8	5-8
15	1945	0	1945	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
26	1365	968 / 0	0 / 0	0 / 0	0 / 0	397 / 0	0 / 0
15	1363	966 / 0	0 / 0	0 / 0	0 / 0	396 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 26, 15

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.13 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 5-22. DBS = 4-0-0 . CBF = 71 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-20. DBS = 10-0-0 . CBF = 86 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-19. DBS = 12-0-0 . CBF = 94 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-19. DBS = 20-0-0 . CBF = 78 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"X3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5. 3 FOR 2x6. 4 FOR 2x8. 5 FOR 2x10. AND 6 FOR 2x12.

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MEMB.		MAX. FACTORED		
MEMB.	FORCE	VERT.	LOAD	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	LC1	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	25-3	-850 / 0	0.12 (1)	
2-3	-1823 / 0	-77.3	-77.3	0.11 (1)	4.88	3-24	0 / 3080	0.69 (1)	
3-4	-4212 / 0	-77.3	-77.3	0.27 (1)	3.27	24-4	-182 / 0	0.03 (1)	
4-5	-4212 / 0	-77.3	-77.3	0.27 (1)	3.27	24-5	-2616 / 0	0.50 (1)	
5-6	-4162 / 0	-77.3	-77.3	0.52 (1)	3.13	23-5	-3 / 61	0.02 (3)	
6-7	-2977 / 0	-77.3	-77.3	0.35 (1)	3.80	5-22	-2857 / 0	0.66 (1)	
7-8	-2977 / 0	-77.3	-77.3	0.35 (1)	3.80	22-6	0 / 961	0.22 (1)	
8-9	-2144 / 0	-77.3	-77.3	0.30 (1)	4.39	6-20	-1379 / 0	0.41 (1)	
9-10	-2145 / 0	-77.3	-77.3	0.35 (1)	4.34	20-8	0 / 934	0.21 (1)	
10-11	-2579 / 0	-77.3	-77.3	0.36 (1)	4.02	8-19	-1247 / 0	0.60 (1)	
11-12	-2579 / 0	-77.3	-77.3	0.36 (1)	4.02	19-9	0 / 1568	0.35 (1)	
12-13	-2758 / 0	-77.3	-77.3	0.44 (1)	3.83	19-10	-624 / 0	0.31 (1)	
13-14	0 / 23	-77.3	-77.3	0.10 (1)	10.00	17-10	0 / 211	0.05 (3)	
26-2	-1962 / 0	0.0	0.0	0.20 (1)	6.01	17-12	-212 / 0	0.17 (1)	
15-13	-1900 / 0	0.0	0.0	0.19 (1)	6.10	16-12	-268 / 13	0.07 (1)	
						2-25	0 / 1860	0.42 (1)	
26-25	0 / 0	-17.5	-17.5	0.04 (1)	10.00	16-13	0 / 2510	0.56 (1)	
25-24	0 / 1548	-17.5	-17.5	0.22 (1)	10.00				
24-23	0 / 6475	-17.5	-17.5	0.90 (1)	10.00				
23-22	0 / 6475	-17.5	-17.5	0.90 (1)	10.00				
22-21	0 / 3740	-17.5	-17.5	0.51 (1)	10.00				
21-20	0 / 3740	-17.5	-17.5	0.51 (1)	10.00				
20-19	0 / 2663	-17.5	-17.5	0.37 (1)	10.00				
19-18	0 / 2307	-17.5	-17.5	0.33 (1)	10.00				
18-17	0 / 2307	-17.5	-17.5	0.33 (1)	10.00				
17-16	0 / 2307	-17.5	-17.5	0.33 (1)	10.00				
16-15	0 / 2307	-17.5	-17.5	0.33 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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 (1.29")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.40")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 653 (0.71")

CSI: TC=0.52 (5-6:1) , BC=0.90 (22-23:1) ,
WB=0.69 (3-24:1) , SSI=0.18 (12-13:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

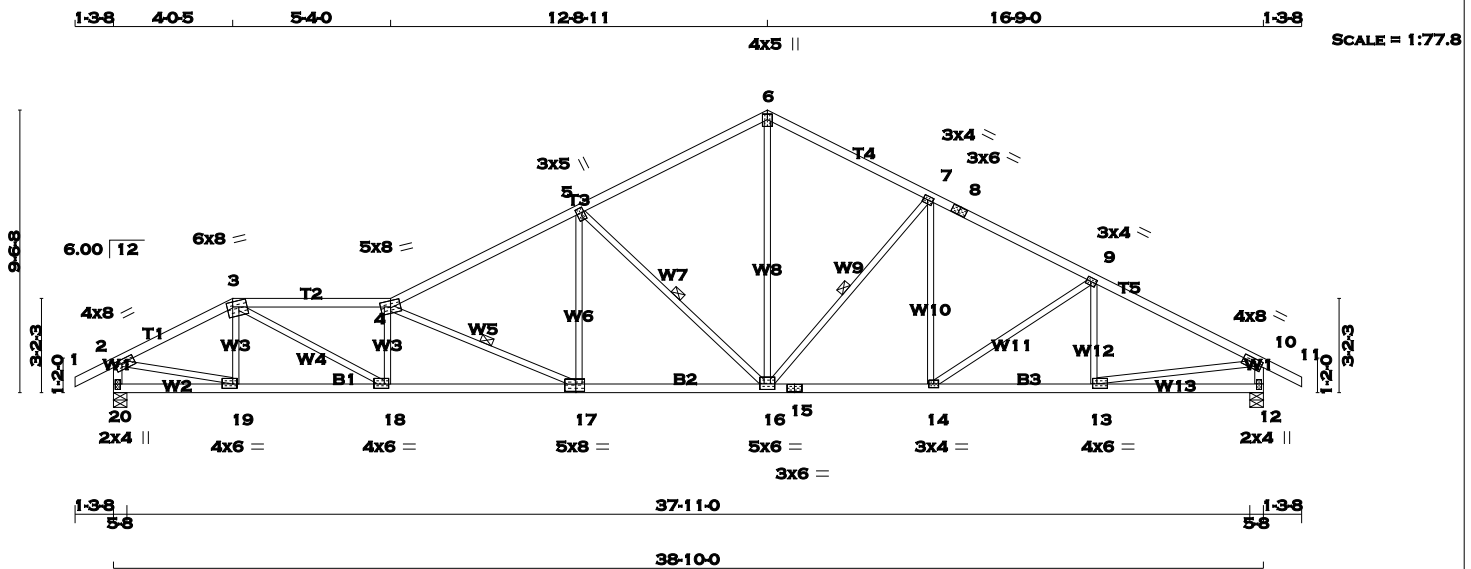
NAIL VALUES					
PLATE	GRIP(DRY)		SHEAR		SECTION
	(PSI)		(PLI)		(PLI)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (20) (INPUT = 0.90)
JSI METAL= 0.96 (21) (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.**



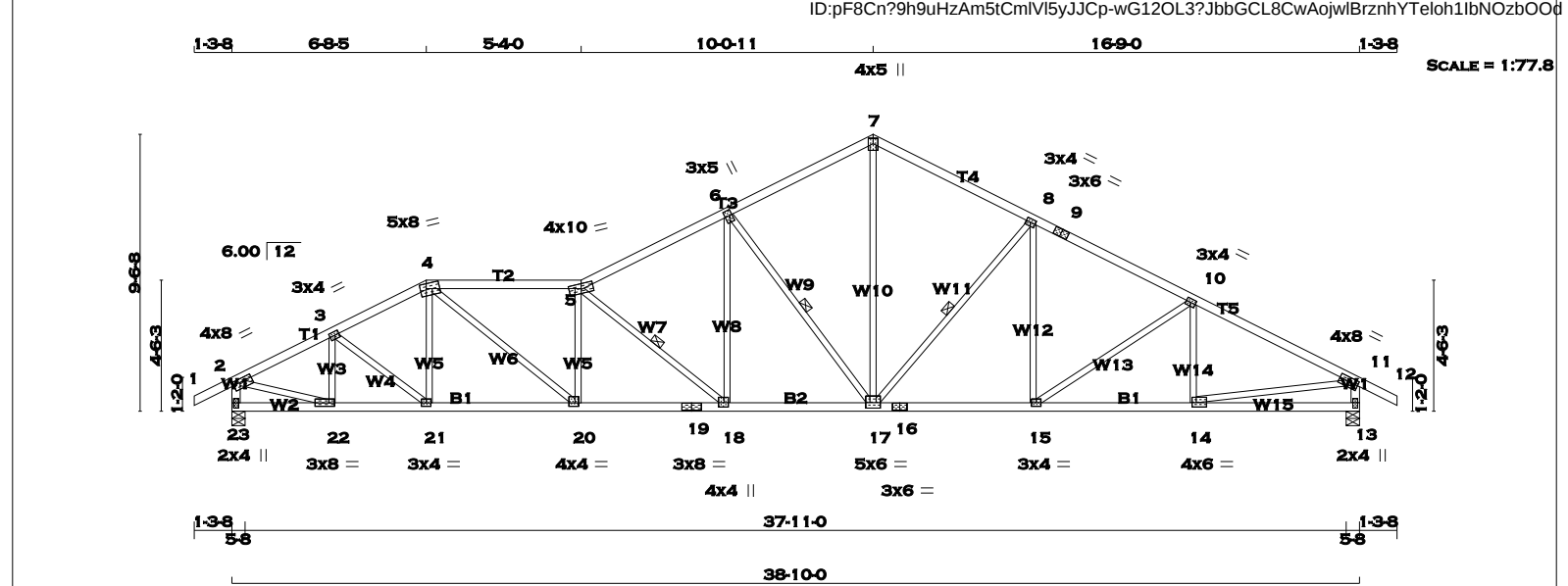
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 11 2x4 DRY No.2 SPF 20 - 2 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 20 - 17 2x4 DRY No.2 SPF 17 - 15 2x4 DRY No.2 SPF 15 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 20 1947 0 1947 0 0 5-8 5-8 12 1947 0 1947 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 20 1364 967 / 0 0 / 0 0 / 0 396 / 0 0 / 0 12 1364 967 / 0 0 / 0 0 / 0 396 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 12 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.89 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-17. DBS = 8-0-0 . CBF = 89 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-16. DBS = 10-0-0 . CBF = 87 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 20-0-0 . CBF = 78 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 19-3 -385 / 0 0.07 (1) 2-3 -2616 / 0 -77.3 -77.3 0.25 (1) 4.08 3-18 0 / 2481 0.56 (1) 3-4 -4497 / 0 -77.3 -77.3 0.58 (1) 2.89 18-4 -1117 / 0 0.21 (1) 4-5 -3236 / 0 -77.3 -77.3 0.64 (1) 3.37 4-17 -1776 / 0 0.60 (1) 5-6 -2157 / 0 -77.3 -77.3 0.51 (1) 4.14 17-5 0 / 857 0.19 (1) 6-7 -2149 / 0 -77.3 -77.3 0.35 (1) 4.34 5-16 -1399 / 0 0.74 (1) 7-8 -2583 / 0 -77.3 -77.3 0.36 (1) 4.02 16-6 0 / 1546 0.35 (1) 8-9 -2583 / 0 -77.3 -77.3 0.36 (1) 4.02 16-7 -623 / 0 0.31 (1) 9-10 -2761 / 0 -77.3 -77.3 0.44 (1) 3.83 14-7 0 / 211 0.05 (3) 10-11 0 / 23 -77.3 -77.3 0.10 (1) 10.00 14-9 -212 / 0 0.17 (1) 20-2 -1920 / 0 0.0 0.0 0.19 (1) 6.07 13-9 -268 / 13 0.07 (1) 12-10 -1902 / 0 0.0 0.0 0.19 (1) 6.09 2-19 0 / 2388 0.54 (1) 13-10 0 / 2513 0.57 (1) 20-19 0 / 0 -17.5 -17.5 0.08 (3) 10.00 19-18 0 / 2324 -17.5 -17.5 0.43 (1) 10.00 18-17 0 / 4538 -17.5 -17.5 0.82 (1) 10.00 17-16 0 / 2919 -17.5 -17.5 0.55 (1) 10.00 16-15 0 / 2310 -17.5 -17.5 0.44 (1) 10.00 15-14 0 / 2310 -17.5 -17.5 0.44 (1) 10.00 14-13 0 / 2485 -17.5 -17.5 0.45 (1) 10.00 13-12 0 / 0 -17.5 -17.5 0.12 (3) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.3 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 (0.31") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL) = L/ 832 (0.56") CSI: TC=0.64 (4-5:1), BC=0.82 (17-18:1), WB=0.74 (5-16:1), 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 (19) (INPUT = 0.90) JSI METAL= 0.93 (17) (INPUT = 1.00)			
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READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





											TOTAL WEIGHT = 166 lb								
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER								DESIGN CRITERIA							
N. L. G. A. RULES				BEARINGS								[M][F]							
CHORDS SIZE																			
LUMBER				DESCR.								SPECIFIED LOADS:							
1 - 4	2x4	DRY	No.2	SPF	FACTORED			MAXIMUM FACTORED			INPUT		REQRD						
4 - 5	2x4	DRY	No.2	SPF	GROSS REACTION			GROSS REACTION			BRG		BRG						
5 - 7	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		DL = 3.0 PSF					
7 - 9	2x4	DRY	No.2	SPF	23	1947	0	1947	0	0	5-8	5-8		BOT CH. LL = 0.0 PSF					
9 - 12	2x4	DRY	No.2	SPF	13	1947	0	1947	0	0	5-8	5-8		DL = 7.0 PSF					
23 - 2	2x4	DRY	No.2	SPF	TOTAL LOAD = 33.3 PSF														
13 - 11	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS														
23 - 19	2x4	DRY	No.2	SPF															
19 - 16	2x4	DRY	No.2	SPF	MAX./MIN. COMPONENT REACTIONS														
16 - 13	2x4	DRY	No.2	SPF	JT	1ST LCASE		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	
ALL WEBS 2x3 DRY No.2 SPF				LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12															

PLATES (table is in inches)				BRACING			
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	TTWW-m	MT20	5.0	8.0	2.00	2.50	
5	TTWW-m	MT20	4.0	10.0			
6	TMWW-t	MT20	3.0	5.0	2.25	0.75	
7	TTW+p	MT20	4.0	5.0	2.25	2.00	
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	BMWW-t	MT20	5.0	6.0	2.25	3.00	
18	BMWW-t	MT20	4.0	4.0	1.75	1.75	
19	BS-t	MT20	3.0	8.0			
20	BMWW-t	MT20	4.0	4.0	1.50	1.50	
21	BMWW-t	MT20	3.0	4.0			
22	BMWW-t	MT20	3.0	8.0	1.50	2.25	
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.

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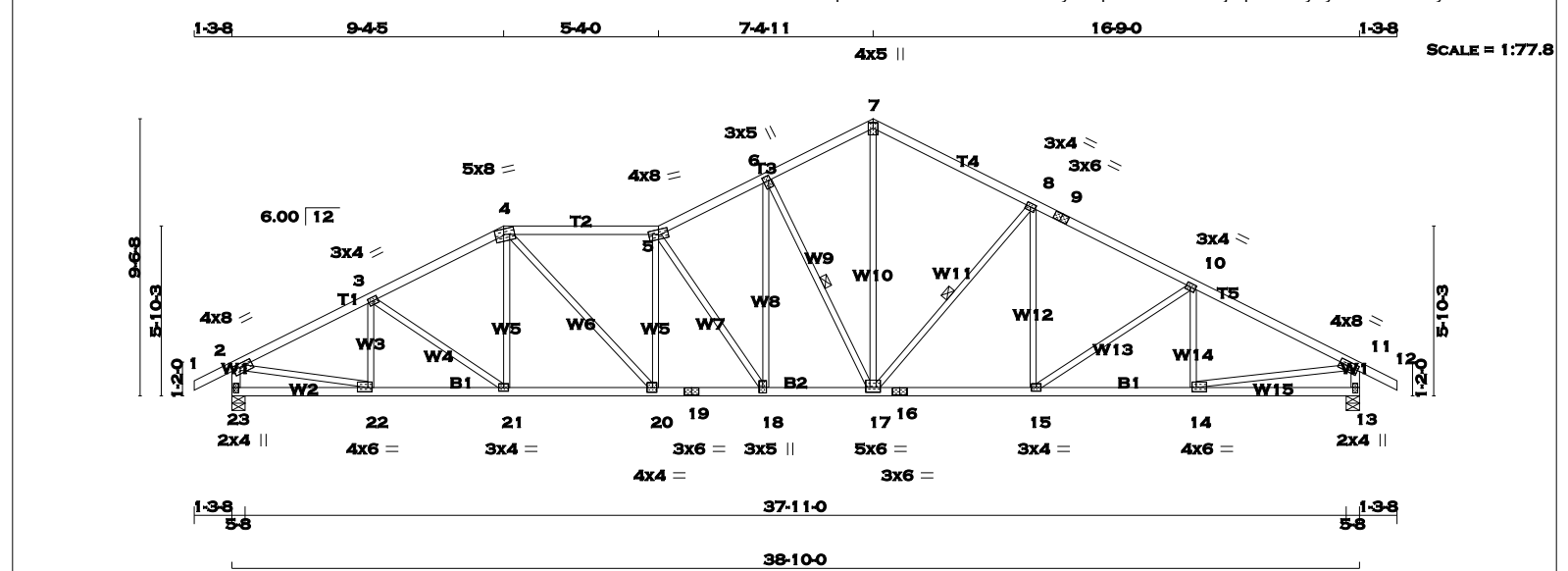
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BUILDING DIVISION

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TOTAL WEIGHT = 172 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2	4 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2	5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2	7 - 9	2x4	DRY	No.2
9 - 12	2x4	DRY	No.2	9 - 12	2x4	DRY	No.2
23 - 2	2x4	DRY	No.2	23 - 2	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2	13 - 11	2x4	DRY	No.2
23 - 19	2x4	DRY	No.2	23 - 19	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2	19 - 16	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2	16 - 13	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			

DRY: SEASONED LUMBER.

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

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



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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
GROSS REACTION				GROSS REACTION				GROSS REACTION				BRG				BRG			
JT	VERT	HORZ		JT	VERT	HORZ		JT	DOWN	HORZ	UPLIFT	JT	IN-SX			JT	IN-SX		
23	1947	0		23	1947	0		23	1947	0	0	23	5-8			23	5-8		
13	1947	0		13	1947	0		13	1947	0	0	13	5-8			13	5-8		

UNFACTORED 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 = 3.67 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-17. DBS = 12-0-0. CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-17. DBS = 20-0-0. CBF = 78 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	22-3	-359 / 0	0.08 (1)
2-3	-2706 / 0	-77.3 -77.3	0.31 (1)	3.98	3-21	-87 / 0	0.05 (1)
3-4	-2663 / 0	-77.3 -77.3	0.29 (1)	4.02	21-4	0 / 148	0.04 (3)
4-5	-3023 / 0	-77.3 -77.3	0.42 (1)	3.67	4-20	0 / 956	0.22 (1)
5-6	-2698 / 0	-77.3 -77.3	0.21 (1)	4.07	20-5	-616 / 0	0.32 (1)
6-7	-2144 / 0	-77.3 -77.3	0.17 (1)	4.52	5-18	-1095 / 0	0.89 (1)
7-8	-2148 / 0	-77.3 -77.3	0.35 (1)	4.34	18-6	0 / 953	0.21 (1)
8-9	-2583 / 0	-77.3 -77.3	0.36 (1)	4.02	6-17	-1167 / 0	0.54 (1)
9-10	-2583 / 0	-77.3 -77.3	0.36 (1)	4.02	17-7	0 / 1620	0.36 (1)
10-11	-2761 / 0	-77.3 -77.3	0.44 (1)	3.83	17-8	-624 / 0	0.31 (1)
11-12	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-8	0 / 212	0.05 (3)
23-2	-1906 / 0	0.0	0.0	6.09	15-10	-212 / 0	0.17 (1)
13-11	-1902 / 0	0.0	0.0	6.09	14-10	-268 / 13	0.07 (1)
					2-22	0 / 2475	0.56 (1)
					14-11	0 / 2513	0.57 (1)
23-22	0 / 0	-17.5 -17.5	0.08 (3)	10.00			
22-21	0 / 2436	-17.5 -17.5	0.45 (1)	10.00			
21-20	0 / 2367	-17.5 -17.5	0.44 (1)	10.00			
20-19	0 / 3034	-17.5 -17.5	0.53 (1)	10.00			
19-18	0 / 3034	-17.5 -17.5	0.53 (1)	10.00			
18-17	0 / 2428	-17.5 -17.5	0.46 (1)	10.00			
17-16	0 / 2310	-17.5 -17.5	0.44 (1)	10.00			
16-15	0 / 2310	-17.5 -17.5	0.44 (1)	10.00			
15-14	0 / 2485	-17.5 -17.5	0.45 (1)	10.00			
14-13	0 / 0	-17.5 -17.5	0.12 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.22")
ALLOWABLE DEFL.(TL)= L/360 (1.29")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.39")

CSI: TC=0.44 (10-11:1), BC=0.53 (18-20:1), WB=0.89 (5-18:1), SSI=0.18 (10-11:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

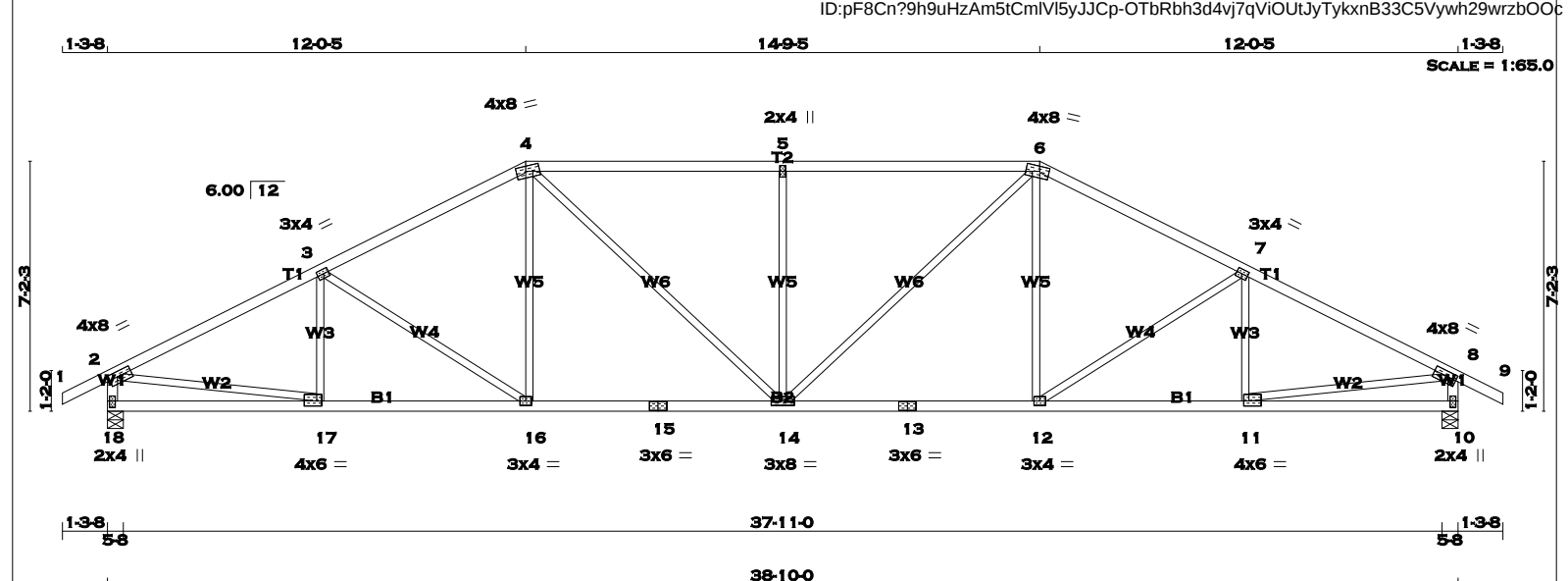
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (5) (INPUT = 0.90)
JSI METAL= 0.80 (19) (INPUT = 1.00)

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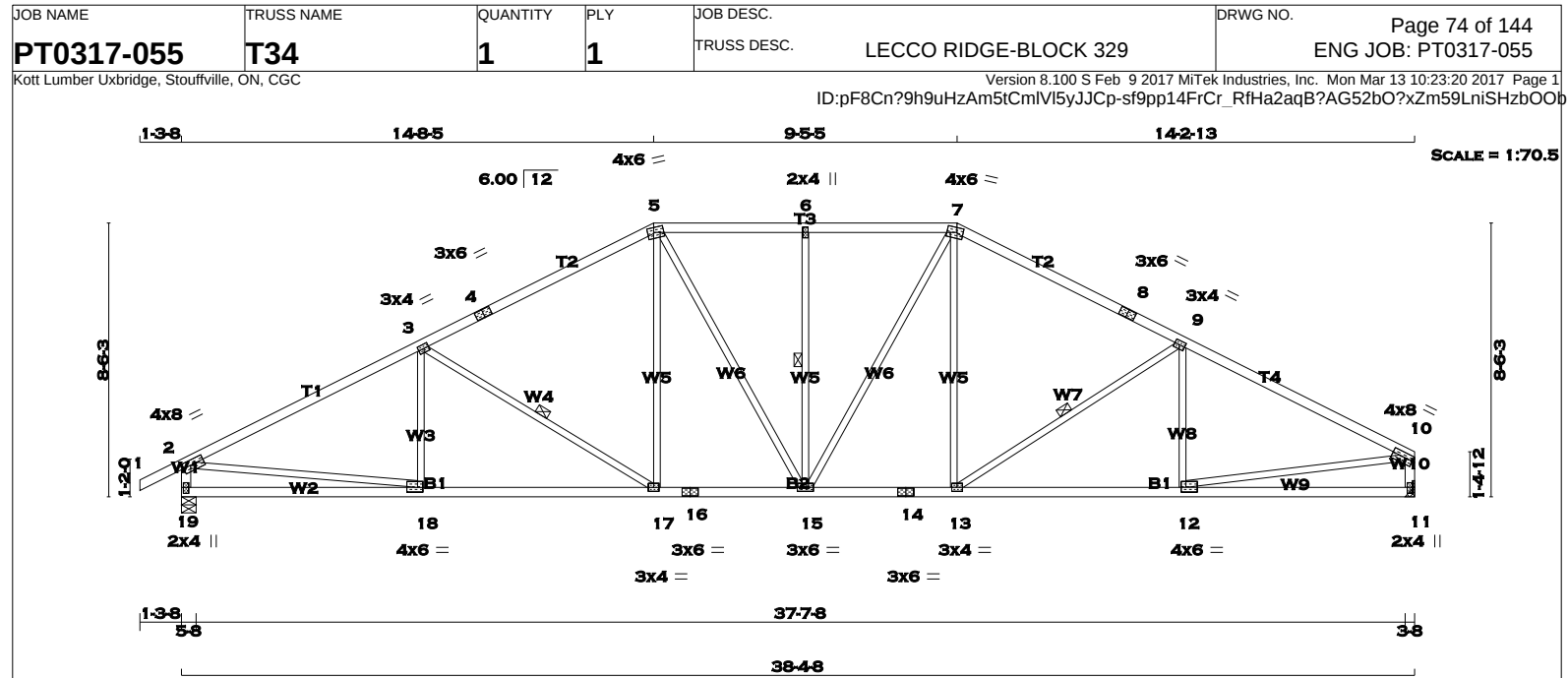
LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										TOTAL WEIGHT = 155 lb	
N. L. G. A. RULES															[M][F]	
CHORDS		SIZE	LUMBER	DESCR.												
1 - 4	2x4	DRY	No.2	SPF												
4 - 6	2x4	DRY	No.2	SPF												
6 - 9	2x4	DRY	No.2	SPF												
18 - 2	2x4	DRY	No.2	SPF												
10 - 8	2x4	DRY	No.2	SPF												
18 - 15	2x4	DRY	No.2	SPF												
15 - 13	2x4	DRY	No.2	SPF												
13 - 10	2x4	DRY	No.2	SPF												
ALL WEBS 2x3 DRY No.2 SPF																
EXCEPT																
DRY: SEASONED LUMBER.																
DESIGN CRITERIA																
SPECIFIED LOADS:																
TOP CH. LL = 23.3 PSF																
DL = 3.0 PSF																
BOT CH. LL = 0.0 PSF																
DL = 7.0 PSF																
TOTAL LOAD = 33.3 PSF																
SPACING = 24.0 IN. C/C																
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12																
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010																
THIS DESIGN COMPLIES WITH:																
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014																
- CSA 086-09																
- TPIC 2011																
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD																
ALLOWABLE DEFL.(LL)= L/360 (1.29")																
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.18")																
ALLOWABLE DEFL.(TL)= L/360 (1.29")																
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.33")																
CSI: TC=0.73 (4-5:1), BC=0.49 (11-12:1), WB=0.63 (5-14:1), SSI=0.28 (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																



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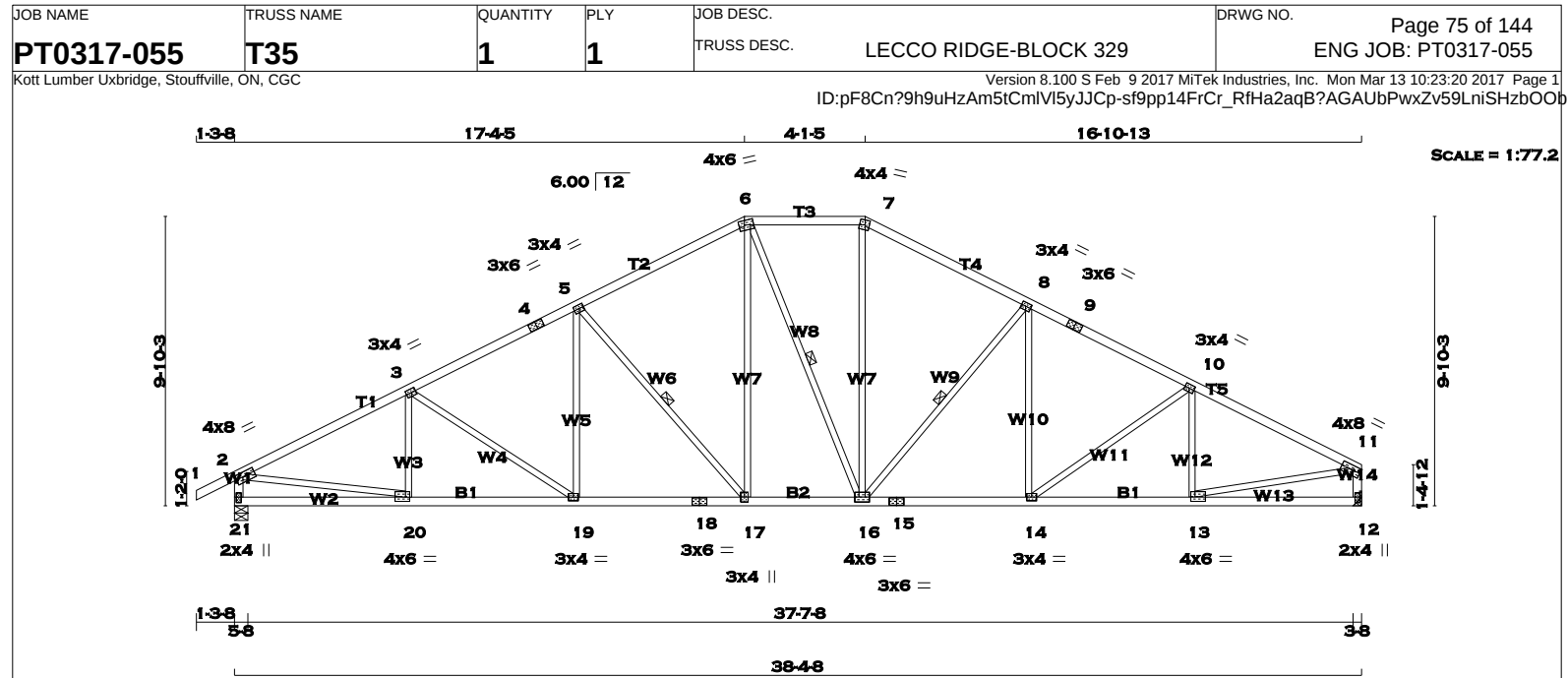




LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 5 2x4 DRY No.2 SPF 5 - 7 2x4 DRY No.2 SPF 7 - 8 2x4 DRY No.2 SPF 8 - 10 2x4 DRY No.2 SPF 19 - 2 2x4 DRY No.2 SPF 11 - 10 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 14 2x4 DRY No.2 SPF 14 - 11 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 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 = 3.39 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-17, 6-15, 9-13. DBS = 20-0-0. CBF = 74 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: (3) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 18-3 -146 / 82 0.05 (1) 2-3 -2777 / 0 -77.3 -77.3 0.82 (1) 3.39 3-17 -589 / 0 0.30 (1) 3-4 -2281 / 0 -77.3 -77.3 0.71 (1) 3.79 17-5 0 / 423 0.10 (1) 4-5 -2281 / 0 -77.3 -77.3 0.71 (1) 3.79 5-15 0 / 266 0.06 (1) 5-6 -2149 / 0 -77.3 -77.3 0.27 (1) 4.40 15-6 -443 / 0 0.20 (1) 6-7 -2149 / 0 -77.3 -77.3 0.27 (1) 4.40 15-7 0 / 317 0.07 (1) 7-8 -2252 / 0 -77.3 -77.3 0.65 (1) 3.88 13-7 0 / 373 0.08 (1) 8-9 -2252 / 0 -77.3 -77.3 0.65 (1) 3.88 13-9 -480 / 0 0.24 (1) 9-10 -2640 / 0 -77.3 -77.3 0.74 (1) 3.56 12-9 -220 / 56 0.08 (1) 19-2 -1870 / 0 0.0 0.0 0.19 (1) 6.13 2-18 0 / 2528 0.57 (1) 11-10 -1767 / 0 0.0 0.0 0.18 (1) 6.27 12-10 0 / 2414 0.54 (1) 19-18 0 / 0 -17.5 -17.5 0.23 (3) 10.00 18-17 0 / 2511 -17.5 -17.5 0.51 (1) 10.00 17-16 0 / 2017 -17.5 -17.5 0.40 (1) 10.00 16-15 0 / 2017 -17.5 -17.5 0.40 (1) 10.00 15-14 0 / 1991 -17.5 -17.5 0.39 (1) 10.00 14-13 0 / 1991 -17.5 -17.5 0.39 (1) 10.00 13-12 0 / 2388 -17.5 -17.5 0.49 (1) 10.00 12-11 0 / 0 -17.5 -17.5 0.22 (3) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.28") CALCULATED VERT. DEFL.(LL) = L/999 (0.15") ALLOWABLE DEFL.(TL)= L/360 (1.28") CALCULATED VERT. DEFL.(TL) = L/999 (0.29") CSI: TC=0.82 (2-3:1), BC=0.51 (17-18:1), WB=0.57 (2-18:1), SSI=0.25 (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 (18) (INPUT = 0.90) JSI METAL= 0.63 (18) (INPUT = 1.00)			
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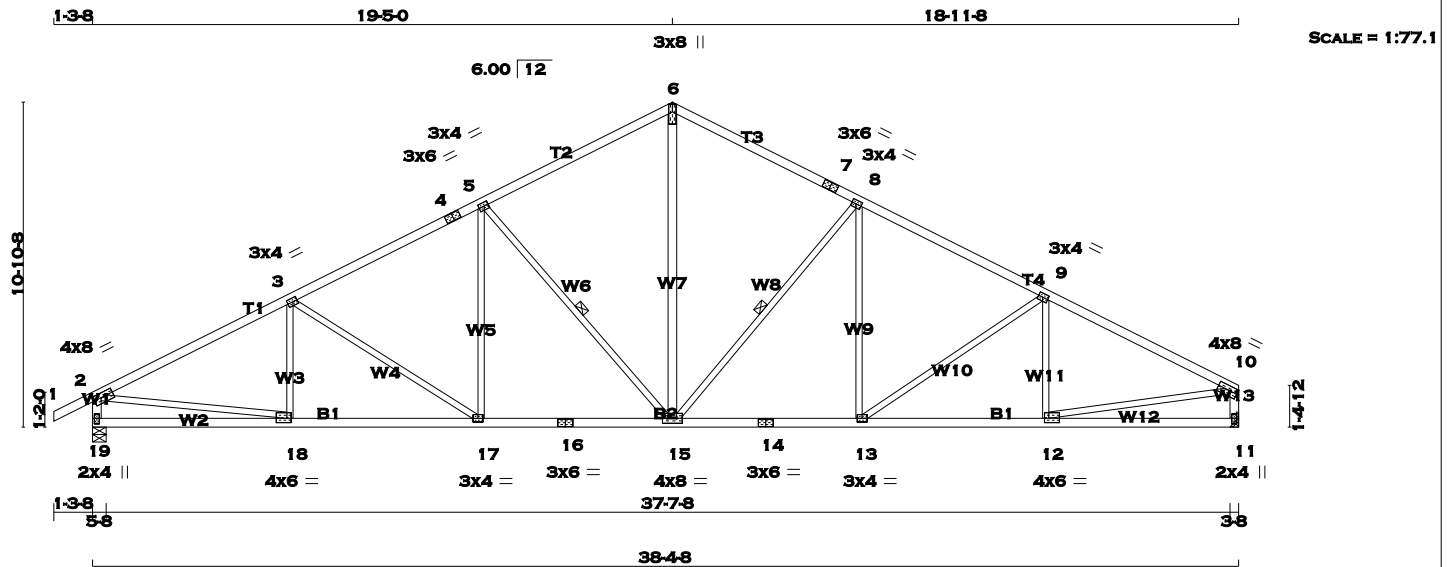
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 9 - 11 2x4 DRY No.2 SPF 21 - 2 2x4 DRY No.2 SPF 12 - 11 2x4 DRY No.2 SPF 21 - 18 2x4 DRY No.2 SPF 18 - 15 2x4 DRY No.2 SPF 15 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 21 1925 0 1925 0 0 5-8 5-8 12 1820 0 1820 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1349 957 / 0 0 / 0 0 / 0 0 / 0 392 / 0 0 / 0 12 1277 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 = 3.81 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-17, 6-16, 8-16. DBS = 20-0-0. CBF = 84 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 20-3 -249 / 21 0.06 (1) 2-3 -2732 / 0 -77.3 -77.3 0.47 (1) 3.81 3-19 -249 / 0 0.22 (1) 3-4 -2519 / 0 -77.3 -77.3 0.39 (1) 4.05 19-5 0 / 243 0.05 (1) 4-5 -2519 / 0 -77.3 -77.3 0.39 (1) 4.05 5-17 -675 / 0 0.37 (1) 5-6 -2043 / 0 -77.3 -77.3 0.37 (1) 4.41 17-6 0 / 589 0.13 (1) 6-7 -1808 / 0 -77.3 -77.3 0.21 (1) 4.79 6-16 -21 / 0 0.02 (1) 7-8 -2034 / 0 -77.3 -77.3 0.35 (1) 4.44 16-7 0 / 571 0.13 (1) 8-9 -2450 / 0 -77.3 -77.3 0.36 (1) 4.11 16-8 -607 / 0 0.32 (1) 9-10 -2450 / 0 -77.3 -77.3 0.36 (1) 4.11 14-8 0 / 185 0.05 (3) 10-11 -2569 / 0 -77.3 -77.3 0.43 (1) 3.96 14-10 -151 / 0 0.13 (1) 21-2 -1879 / 0 0.0 0.0 0.19 (1) 6.12 13-10 -330 / 0 0.09 (1) 12-11 -1776 / 0 0.0 0.0 0.18 (1) 6.26 2-20 0 / 2485 0.56 (1) 13-12 0 / 0 -17.5 -17.5 0.12 (3) 10.00 13-11 0 / 2355 0.53 (1) 21-20 0 / 0 -17.5 -17.5 0.13 (3) 10.00 20-19 0 / 2460 -17.5 -17.5 0.45 (1) 10.00 19-18 0 / 2253 -17.5 -17.5 0.42 (1) 10.00 18-17 0 / 2253 -17.5 -17.5 0.42 (1) 10.00 17-16 0 / 1816 -17.5 -17.5 0.35 (1) 10.00 16-15 0 / 2191 -17.5 -17.5 0.41 (1) 10.00 15-14 0 / 2191 -17.5 -17.5 0.41 (1) 10.00 14-13 0 / 2314 -17.5 -17.5 0.42 (1) 10.00 13-12 0 / 0 -17.5 -17.5 0.12 (3) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF 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 (0.28") CSI: TC=0.47 (2-3:1), BC=0.45 (19-20:1), WB=0.56 (2-20:1), 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= 0.89 (7) (INPUT = 0.90) JSI METAL= 0.62 (18) (INPUT = 1.00)			
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TOTAL WEIGHT = 6 X 164 = 982 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2
7 - 10	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 11	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
15 - 6	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMWV-t	MT20	4.0	8.0	1.75 3.00
3, 5, 8, 9					
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
6	TTW+p	MT20	3.0	8.0	Edge
7	TS-t	MT20	3.0	6.0	
10	TMWV-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	6.0	1.75 1.75
13	BMWW-t	MT20	3.0	4.0	
14	BS-t	MT20	3.0	6.0	
15	BMWW-t	MT20	4.0	8.0	
16	BS-t	MT20	3.0	6.0	
17	BMWW-t	MT20	3.0	4.0	
18	BMWW-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.

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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	UP
19	1925	0	0
11	1820	0	0

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 = 3.69 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15. DBS = 18-0-0. CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-15. DBS = 20-0-0. CBF = 91 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED 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	-199 / 48	0.06 (1)
2-3	-2751 / 0	-77.3 -77.3	0.60 (1)	3.69	3-17	-365 / 0	0.43 (1)
3-4	-2430 / 0	-77.3 -77.3	0.48 (1)	4.02	17-5	0 / 308	0.07 (1)
4-5	-2430 / 0	-77.3 -77.3	0.48 (1)	4.02	5-15	-785 / 0	0.53 (1)
5-6	-1875 / 0	-77.3 -77.3	0.46 (1)	4.46	15-6	0 / 1264	0.20 (1)
6-7	-1875 / 0	-77.3 -77.3	0.43 (1)	4.49	15-8	-724 / 0	0.49 (1)
7-8	-1875 / 0	-77.3 -77.3	0.43 (1)	4.49	13-8	0 / 258	0.06 (1)
8-9	-2375 / 0	-77.3 -77.3	0.45 (1)	4.08	13-9	-270 / 0	0.31 (1)
9-10	-2603 / 0	-77.3 -77.3	0.55 (1)	3.82	12-9	-274 / 24	0.09 (1)
19-2	-1875 / 0	0.0	0.0 0.19 (1)	6.13	2-18	0 / 2500	0.56 (1)
11-10	-1772 / 0	0.0	0.0 0.18 (1)	6.27	12-10	0 / 2379	0.54 (1)
19-18	0 / 0	-17.5	-17.5 0.17 (3)	10.00			
18-17	0 / 2480	-17.5	-17.5 0.47 (1)	10.00			
17-16	0 / 2174	-17.5	-17.5 0.44 (1)	10.00			
16-15	0 / 2174	-17.5	-17.5 0.44 (1)	10.00			
15-14	0 / 2124	-17.5	-17.5 0.43 (1)	10.00			
14-13	0 / 2124	-17.5	-17.5 0.43 (1)	10.00			
13-12	0 / 2346	-17.5	-17.5 0.45 (1)	10.00			
12-11	0 / 0	-17.5	-17.5 0.16 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.29")

CSI: TC=0.60 (2-3:1), BC=0.47 (17-18:1), WB=0.56 (2-18:1), SSI=0.21 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

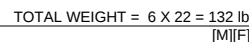
JSI GRIP= 0.88 (5) (INPUT = 0.90)
JSI METAL= 0.62 (18) (INPUT = 1.00)

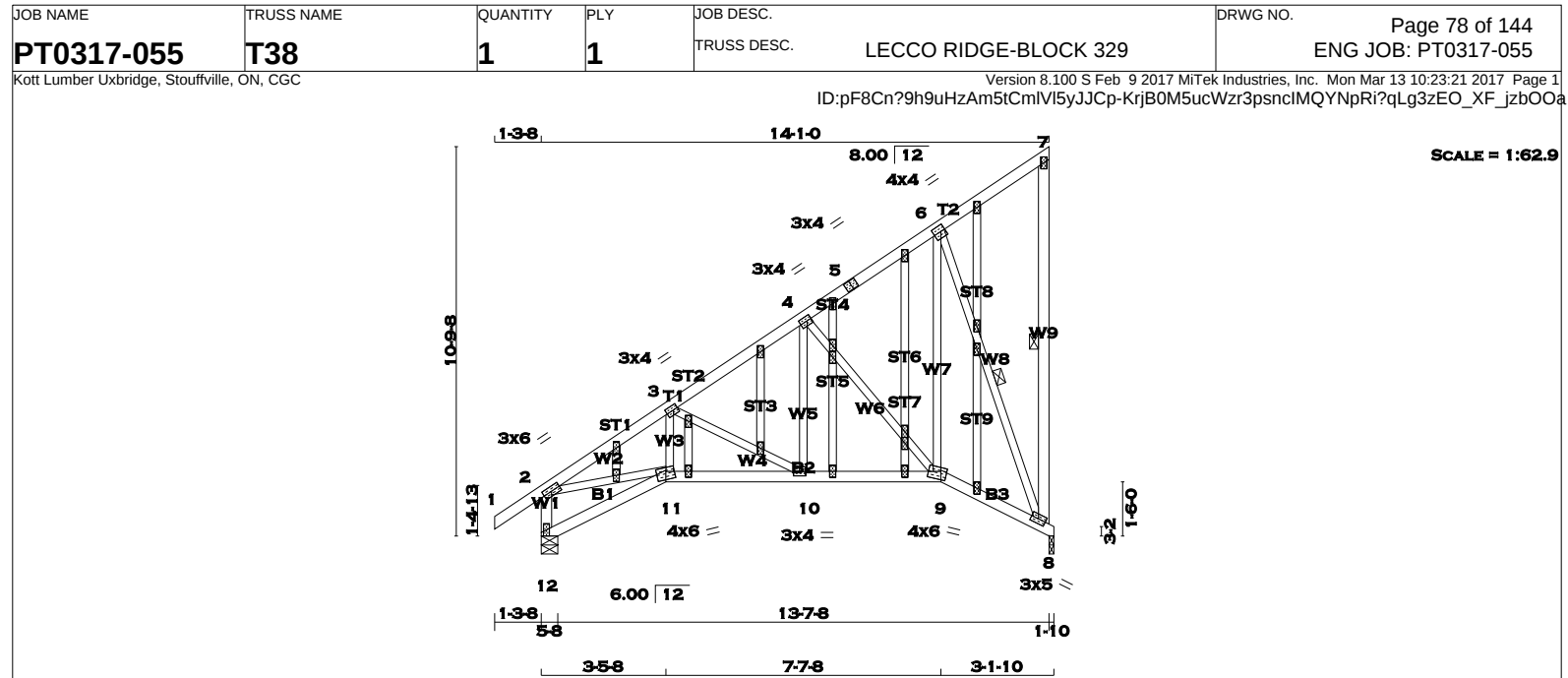


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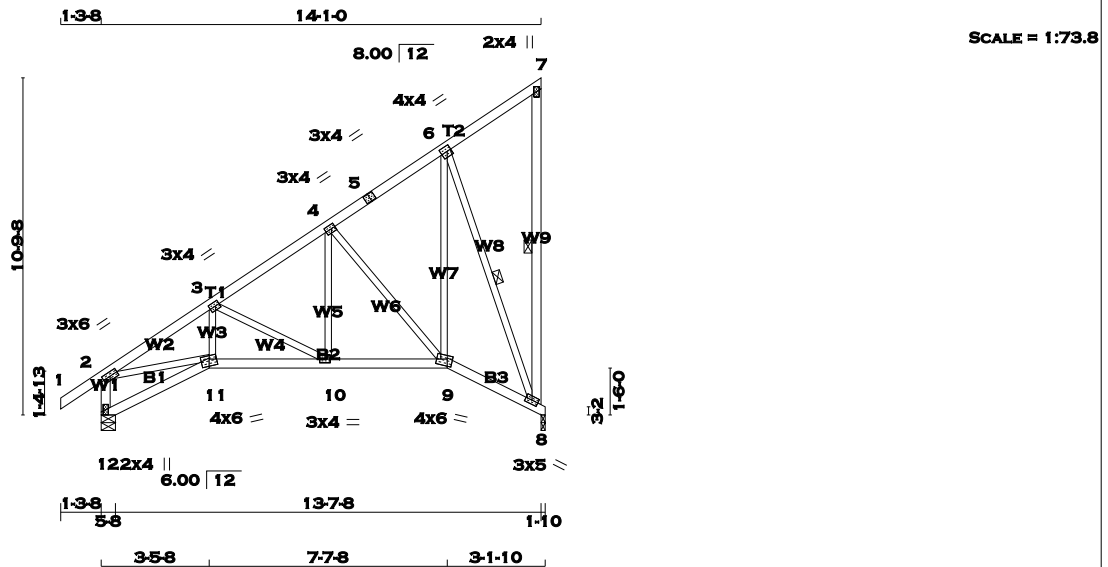
TOTAL WEIGHT = 98 lb										[M][F]																																																																																																																																																																																																			
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.																																																																																																																																																																																																													
1 - 5	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
5 - 7	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
8 - 7	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
12 - 2	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
12 - 11	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
11 - 9	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
9 - 8	2x4	DRY	No.2	SPF																																																																																																																																																																																																									
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2	TMVW-t	MT20	3.0	6.0																																																																																																																																																																																																									
3	TMVW-t	MT20	3.0	4.0	1.50	1.50																																																																																																																																																																																																							
4	TMVW-t	MT20	3.0	4.0	1.50	1.50																																																																																																																																																																																																							
5	TS-t	MT20	3.0	4.0																																																																																																																																																																																																									
6	TMVW-t	MT20	4.0	4.0	2.00	1.50																																																																																																																																																																																																							
7	TMV+p	MT20	2.0	4.0																																																																																																																																																																																																									
8	BMVW1-t	MT20	3.0	5.0																																																																																																																																																																																																									
9	BBWW-m	MT20	4.0	6.0	2.75	2.00																																																																																																																																																																																																							
10	BMVW-t	MT20	3.0	4.0																																																																																																																																																																																																									
11	BBWW-m	MT20	4.0	6.0	2.75	2.75																																																																																																																																																																																																							
12	BMV1+p	MT20	2.0	4.0																																																																																																																																																																																																									
13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27																																																																																																																																																																																																													
13	NP+w	MT20	2.0	4.0																																																																																																																																																																																																									
18	NP+w	MT20	2.0	4.0	2.00	1.00																																																																																																																																																																																																							
21	NP+w	MT20	2.0	4.0	2.00	1.00																																																																																																																																																																																																							
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JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																																						
12	774	0	774	0	0	5-8	5-8																																																																																																																																																																																																						
8	668	0	668	0	0	1-10	1-10																																																																																																																																																																																																						
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JT	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0																																																																																																																																																																																																						
12	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0																																																																																																																																																																																																						
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END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW																																																																																																																																																																																																													
LOADING																																																																																																																																																																																																													
TOTAL LOAD CASES: (3)																																																																																																																																																																																																													
<table><tr><th colspan="5">CHORDS</th><th colspan="7">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED UNBRACED LENGTH (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED UNBRACED LENGTH (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED UNBRACED LENGTH (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED UNBRACED LENGTH (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>11-3</td><td>0 / 179</td><td>0.04 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>2-3</td><td>-1146 / 0</td><td>-77.3 -77.3</td><td>0.12 (1)</td><td>5.82</td><td>3-10</td><td>-452 / 0</td><td>0.13 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3-4</td><td>-667 / 0</td><td>-77.3 -77.3</td><td>0.09 (1)</td><td>6.25</td><td>10-4</td><td>0 / 287</td><td>0.06 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4-5</td><td>-289 / 0</td><td>-77.3 -77.3</td><td>0.09 (1)</td><td>6.25</td><td>4-9</td><td>-480 / 0</td><td>0.27 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5-6</td><td>-289 / 0</td><td>-77.3 -77.3</td><td>0.09 (1)</td><td>6.25</td><td>9-6</td><td>0 / 542</td><td>0.12 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6-7</td><td>-15 / 0</td><td>-77.3 -77.3</td><td>0.09 (1)</td><td>6.25</td><td>6-8</td><td>-718 / 0</td><td>0.38 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>-92 / 0</td><td>0.0 0.0</td><td>0.05 (1)</td><td>6.25</td><td>2-11</td><td>0 / 972</td><td>0.22 (1)</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>12-2</td><td>-744 / 0</td><td>0.0 0.0</td><td>0.08 (1)</td><td>7.81</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.06 (3)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 955</td><td>-17.5 -17.5</td><td>0.19 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 555</td><td>-17.5 -17.5</td><td>0.12 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 278</td><td>-17.5 -17.5</td><td>0.07 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>												CHORDS					WEBS							MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	FR-TO		FROM TO		FR-TO			FR-TO			FR-TO			1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	11-3	0 / 179	0.04 (1)						2-3	-1146 / 0	-77.3 -77.3	0.12 (1)	5.82	3-10	-452 / 0	0.13 (1)						3-4	-667 / 0	-77.3 -77.3	0.09 (1)	6.25	10-4	0 / 287	0.06 (1)						4-5	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	4-9	-480 / 0	0.27 (1)						5-6	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	9-6	0 / 542	0.12 (1)						6-7	-15 / 0	-77.3 -77.3	0.09 (1)	6.25	6-8	-718 / 0	0.38 (1)						8-7	-92 / 0	0.0 0.0	0.05 (1)	6.25	2-11	0 / 972	0.22 (1)						12-2	-744 / 0	0.0 0.0	0.08 (1)	7.81									12-11	0 / 0	-17.5 -17.5	0.06 (3)	10.00									11-10	0 / 955	-17.5 -17.5	0.19 (1)	10.00									10-9	0 / 555	-17.5 -17.5	0.12 (1)	10.00									9-8	0 / 278	-17.5 -17.5	0.07 (1)	10.00								
CHORDS					WEBS																																																																																																																																																																																																								
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FR-TO		FROM TO		FR-TO			FR-TO			FR-TO																																																																																																																																																																																																			
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2-3	-1146 / 0	-77.3 -77.3	0.12 (1)	5.82	3-10	-452 / 0	0.13 (1)																																																																																																																																																																																																						
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4-5	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	4-9	-480 / 0	0.27 (1)																																																																																																																																																																																																						
5-6	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	9-6	0 / 542	0.12 (1)																																																																																																																																																																																																						
6-7	-15 / 0	-77.3 -77.3	0.09 (1)	6.25	6-8	-718 / 0	0.38 (1)																																																																																																																																																																																																						
8-7	-92 / 0	0.0 0.0	0.05 (1)	6.25	2-11	0 / 972	0.22 (1)																																																																																																																																																																																																						
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12-11	0 / 0	-17.5 -17.5	0.06 (3)	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																																																																																																																																																																																																													
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010																																																																																																																																																																																																													
THIS DESIGN COMPLIES WITH:																																																																																																																																																																																																													
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014																																																																																																																																																																																																													
- CSA 086-09																																																																																																																																																																																																													
- TPIC 2011																																																																																																																																																																																																													
(55 % OF 27.2 P.S.F. G.S.L. 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 (0.03")																																																																																																																																																																																																													
ALLOWABLE DEFL.(TL)= L/360 (0.47")																																																																																																																																																																																																													
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")																																																																																																																																																																																																													
CSI: TC=0.12 (2-3:1) , BC=0.19 (10-11:1) , WB=0.38 (6-8:1) , SSI=0.10 (2-3:1)																																																																																																																																																																																																													
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10																																																																																																																																																																																																													
COMP=1.10 SHEAR=1.10 TENS= 1.10																																																																																																																																																																																																													
COMPANION LIVE LOAD FACTOR = 0.50																																																																																																																																																																																																													
AUTOSOLVE RIGHT HEEL ONLY																																																																																																																																																																																																													
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .																																																																																																																																																																																																													
NAIL VALUES																																																																																																																																																																																																													
PLATE	GRIP(DRY)	SHEAR	SECTION																																																																																																																																																																																																										
	(PSI)	(PLI)	(PLI)																																																																																																																																																																																																										
	MAX MIN	MAX MIN	MAX MIN																																																																																																																																																																																																										
MT20	618 354	1667 822	2284 1656																																																																																																																																																																																																										
PLATE PLACEMENT TOL. = 0.250 inches																																																																																																																																																																																																													
PLATE ROTATION TOL. = 5.0 Deg.																																																																																																																																																																																																													
JSI GRIP= 0.88 (8) (INPUT = 0.90)																																																																																																																																																																																																													



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5001
BUILDING DIVISION

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





TOTAL WEIGHT = 79 lb

LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
1 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF
12 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TMVW-t	MT20	3.0	4.0	1.50 1.50
5	TS-t	MT20	3.0	4.0	
6	TMVW-t	MT20	4.0	4.0	2.00 1.50
7	TMV+p	MT20	2.0	4.0	
8	BMVW1-t	MT20	3.0	5.0	
9	BBWW-m	MT20	4.0	6.0	2.75 2.00
10	BMVW-t	MT20	3.0	4.0	
11	BBWW-m	MT20	4.0	6.0	2.75 2.75
12	BMV1+p	MT20	2.0	4.0	

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

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
12	774	0	774	0	0	5-8	5-8
8	668	0	668	0	0	1-10	1-10

UNFACTORED REACTIONS							
1ST LCASE MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0
8	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8, 6-8. DBS = 20-0-0 . CBF = 90 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MAX. FACTORED				MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	11-3	0 / 179	0.04 (1)
2-3	-1146 / 0	-77.3 -77.3	0.12 (1)	5.82	3-10	-452 / 0	0.13 (1)
3-4	-667 / 0	-77.3 -77.3	0.09 (1)	6.25	10-4	0 / 287	0.06 (1)
4-5	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	4-9	-480 / 0	0.27 (1)
5-6	-289 / 0	-77.3 -77.3	0.09 (1)	6.25	9-6	0 / 542	0.12 (1)
6-7	-15 / 0	-77.3 -77.3	0.09 (1)	6.25	6-8	-718 / 0	0.38 (1)
8-7	-92 / 0	0.0 0.0	0.05 (1)	6.25	2-11	0 / 972	0.22 (1)
12-2	-744 / 0	0.0 0.0	0.08 (1)	7.81			
12-11	0 / 0	-17.5 -17.5	0.06 (3)	10.00			
11-10	0 / 955	-17.5 -17.5	0.19 (1)	10.00			
10-9	0 / 555	-17.5 -17.5	0.12 (1)	10.00			
9-8	0 / 278	-17.5 -17.5	0.07 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.12 (2-3:1) , BC=0.19 (10-11:1) , WB=0.38 (6-8:1) , SSI=0.10 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

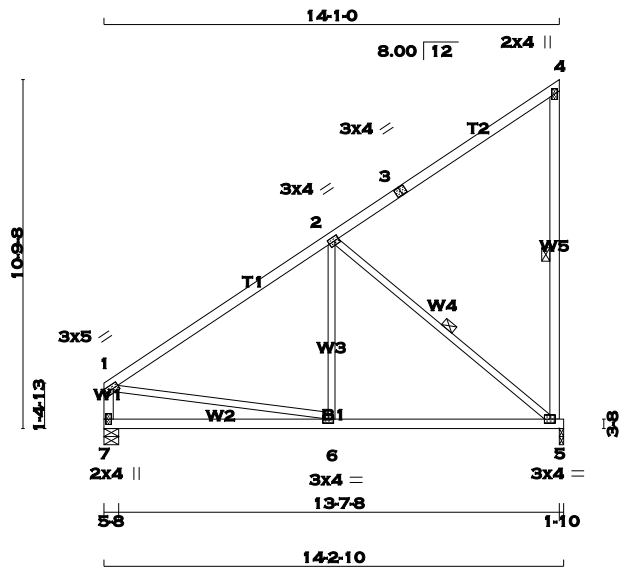
JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.32 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 8 X 65 = 523 lb
[M][F]

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

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

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

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

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

UNFACTORED REACTIONS

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5		469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0	
7		469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0	

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

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

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

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

LOADING

TOTAL LOAD CASES: (3)

		C H O R D S				W E B S			
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	MAX. UNBRAC (LC)	MEMB.	FORCE (LBS)	MAX. UNBRAC (LC)	
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2		-572 / 0	-77.3	-77.3	0.52 (1)	6-2	0 / 149	0.05 (3)	
2-3		-37 / 0	-77.3	-77.3	0.51 (1)	6-25	-656 / 0	0.37 (1)	
3-4		-37 / 0	-77.3	-77.3	0.51 (1)	6-25	1-6	0 / 513	0.12 (1)
5-4		-205 / 0	0.0	0.0	0.12 (1)	6-25			
7-1		-621 / 0	0.0	0.0	0.06 (1)	7.81			
7-6		0 / 0	-17.5	-17.5	0.25 (3)	10.00			
6-5		0 / 507	-17.5	-17.5	0.29 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

CSI: TC=0.52 (1-2:1) , BC=0.29 (5-6:3) , WB=0.37 (2-5:1) , SSI=0.22 (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.

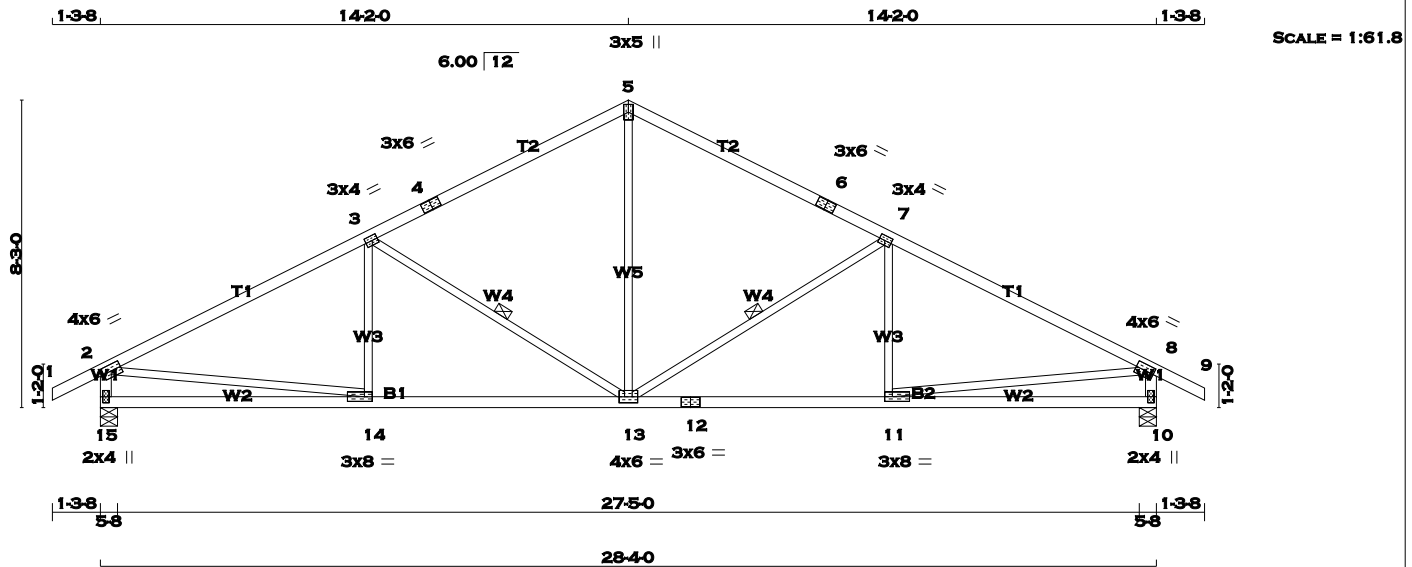
JSI GRIP= 0.87 (6) (INPUT = 0.90)
JSI METAL= 0.22 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 111 = 332 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	2.00	2.75
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	5.0		
6	TS-t	MT20	3.0	6.0		
7	TMVW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	2.00	2.75
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	3.0	8.0	1.50	2.50
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	4.0	6.0		
14	BMVW-t	MT20	3.0	8.0	1.50	2.50
15	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MIITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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

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

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
15	1014	723	0	0	0	0	291
10	1014	723	0	0	0	0	291

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

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

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

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

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

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

LOADING
TOTAL LOAD CASES: (3)

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	13-5	0 / 801	0.18 (1)
2-3	-1917 / 0	-77.3 -77.3	0.62 (1)	4.17	13-7	-633 / 0	0.30 (1)
3-4	-1379 / 0	-77.3 -77.3	0.55 (1)	4.84	11-7	-72 / 96	0.03 (3)
4-5	-1379 / 0	-77.3 -77.3	0.55 (1)	4.84	3-13	-633 / 0	0.30 (1)
5-6	-1379 / 0	-77.3 -77.3	0.55 (1)	4.84	14-3	-72 / 96	0.03 (3)
6-7	-1379 / 0	-77.3 -77.3	0.55 (1)	4.84	2-14	0 / 1753	0.39 (1)
7-8	-1917 / 0	-77.3 -77.3	0.62 (1)	4.17	11-8	0 / 1753	0.39 (1)
8-9	0 / 23	-77.3 -77.3	0.10 (1)	10.00			
15-2	-1396 / 0	0.0	0.0	0.14 (1)	6.89		
10-8	-1396 / 0	0.0	0.0	0.14 (1)	6.89		
15-14	0 / 0	-17.5	-17.5	0.21 (3)	10.00		
14-13	0 / 1741	-17.5	-17.5	0.38 (1)	10.00		
13-12	0 / 1741	-17.5	-17.5	0.38 (1)	10.00		
12-11	0 / 1741	-17.5	-17.5	0.38 (1)	10.00		
11-10	0 / 0	-17.5	-17.5	0.21 (3)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

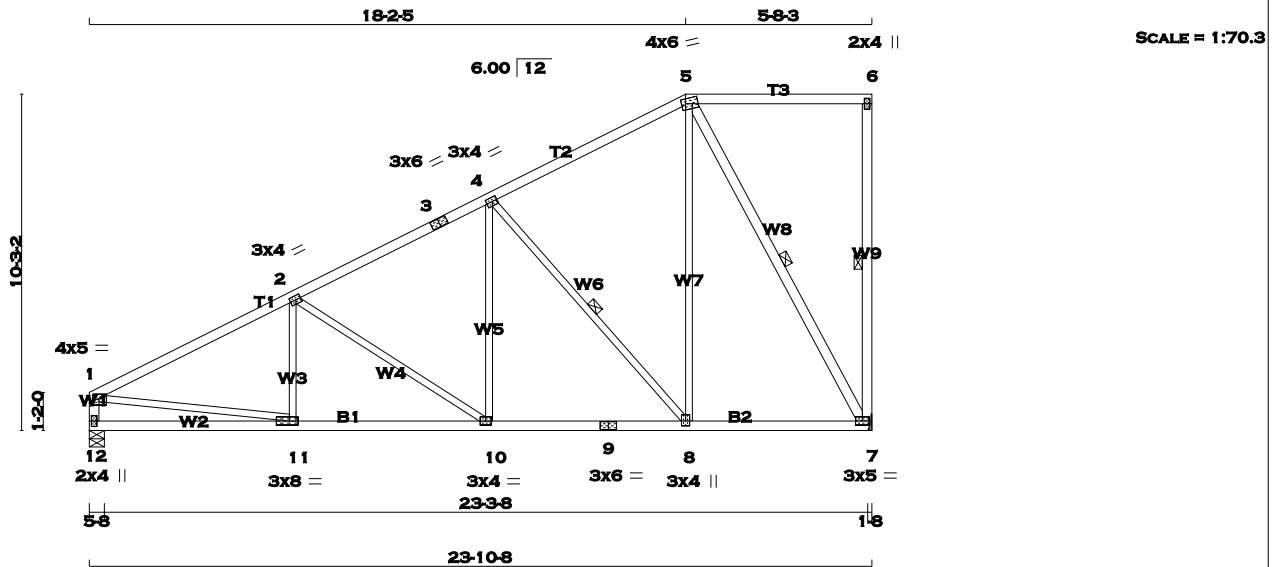
JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.52 (8) (INPUT = 1.00)



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-p	MT20	4.0	5.0	1.50 2.25
2	TMVW-t	MT20	3.0	4.0	1.50 1.75
3	TS-t	MT20	3.0	6.0	
4	TMVW-t	MT20	3.0	4.0	1.50 1.75
5	TTWW-m	MT20	4.0	6.0	1.75 1.50
6	TMV+p	MT20	2.0	4.0	
7	BMVW1-t	MT20	3.0	5.0	
8	BMVW-t	MT20	3.0	4.0	1.75 1.50
9	BS-t	MT20	3.0	6.0	
10	BMVW-t	MT20	3.0	4.0	
11	BMVW-t	MT20	3.0	8.0	1.50 3.25
12	BMV1+p	MT20	2.0	4.0	

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 20-0-0 . CBF = 27 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8. DBS = 18-0-0 . CBF = 90 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-7. DBS = 14-0-0 . CBF = 88 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

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	-1542 / 0	-77.3 -77.3	0.40 (1)	4.88	11-2	-76 / 78	0.03 (3)
2-3	-1137 / 0	-77.3 -77.3	0.32 (1)	5.59	2-10	-456 / 0	0.45 (1)
3-4	-1137 / 0	-77.3 -77.3	0.32 (1)	5.59	10-4	0 / 353	0.08 (1)
4-5	-570 / 0	-77.3 -77.3	0.32 (1)	6.25	4-8	-797 / 0	0.48 (1)
5-6	0 / 0	-77.3 -77.3	0.43 (1)	10.00	8-5	0 / 714	0.16 (1)
7-6	-220 / 0	0.0 0.0	0.11 (1)	6.25	5-7	-1006 / 0	0.72 (1)
12-1	-1087 / 0	0.0 0.0	0.11 (1)	7.58	1-11	0 / 1410	0.32 (1)
12-11	0 / 0	-17.5 -17.5	0.15 (3)	10.00			
11-10	0 / 1397	-17.5 -17.5	0.30 (1)	10.00			
10-9	0 / 1016	-17.5 -17.5	0.24 (1)	10.00			
9-8	0 / 1016	-17.5 -17.5	0.24 (1)	10.00			
8-7	0 / 499	-17.5 -17.5	0.18 (3)	10.00			

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (7) (INPUT = 0.90)

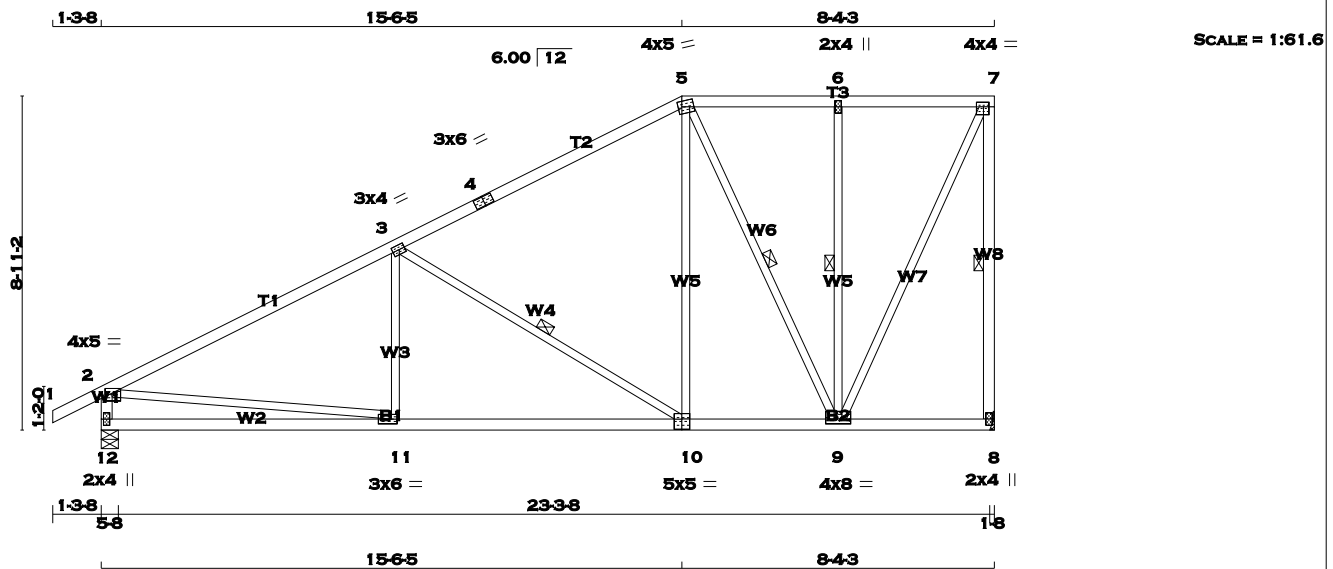
JSI METAL= 0.39 (1) (INPUT = 1.00)



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LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 4	2x4	No.2			
4 - 5	2x4	No.2			
5 - 7	2x4	No.2			
8 - 7	2x4	No.2			
12 - 2	2x4	No.2			
12 - 10	2x4	No.2			
10 - 8	2x4	No.2			
ALL WEBS EXCEPT		2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	5.0	1.75	1.25
6	TMVW-w	MT20	2.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMVWV-t	MT20	4.0	8.0	1.50	4.00
10	BSWW-t	MT20	5.0	5.0	3.25	2.50
11	BMVW-t	MT20	3.0	6.0	1.50	1.75
12	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						



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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-10. DBS = 18-0-0 . CBF = 89 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9, 6-9. DBS = 20-0-0 . CBF = 71 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	11-3	0 / 134	0.05 (3)
2-3	-1519 / 0	-77.3 -77.3	0.72 (1)	4.37	3-10	-792 / 0	0.46 (1)
3-4	-831 / 0	-77.3 -77.3	0.64 (1)	5.63	10-5	0 / 523	0.12 (1)
4-5	-831 / 0	-77.3 -77.3	0.64 (1)	5.63	5-9	-569 / 0	0.37 (1)
5-6	-472 / 0	-77.3 -77.3	0.17 (1)	6.25	9-6	-397 / 0	0.20 (1)
6-7	-472 / 0	-77.3 -77.3	0.17 (1)	6.25	9-7	0 / 1084	0.24 (1)
8-7	-1100 / 0	0.0 0.0	0.40 (1)	6.04	2-11	0 / 1395	0.31 (1)
12-2	-1182 / 0	0.0 0.0	0.12 (1)	7.34			
12-11	0 / 0	-17.5 -17.5	0.27 (3)	10.00			
11-10	0 / 1387	-17.5 -17.5	0.37 (3)	10.00			
10-9	0 / 719	-17.5 -17.5	0.19 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.06 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

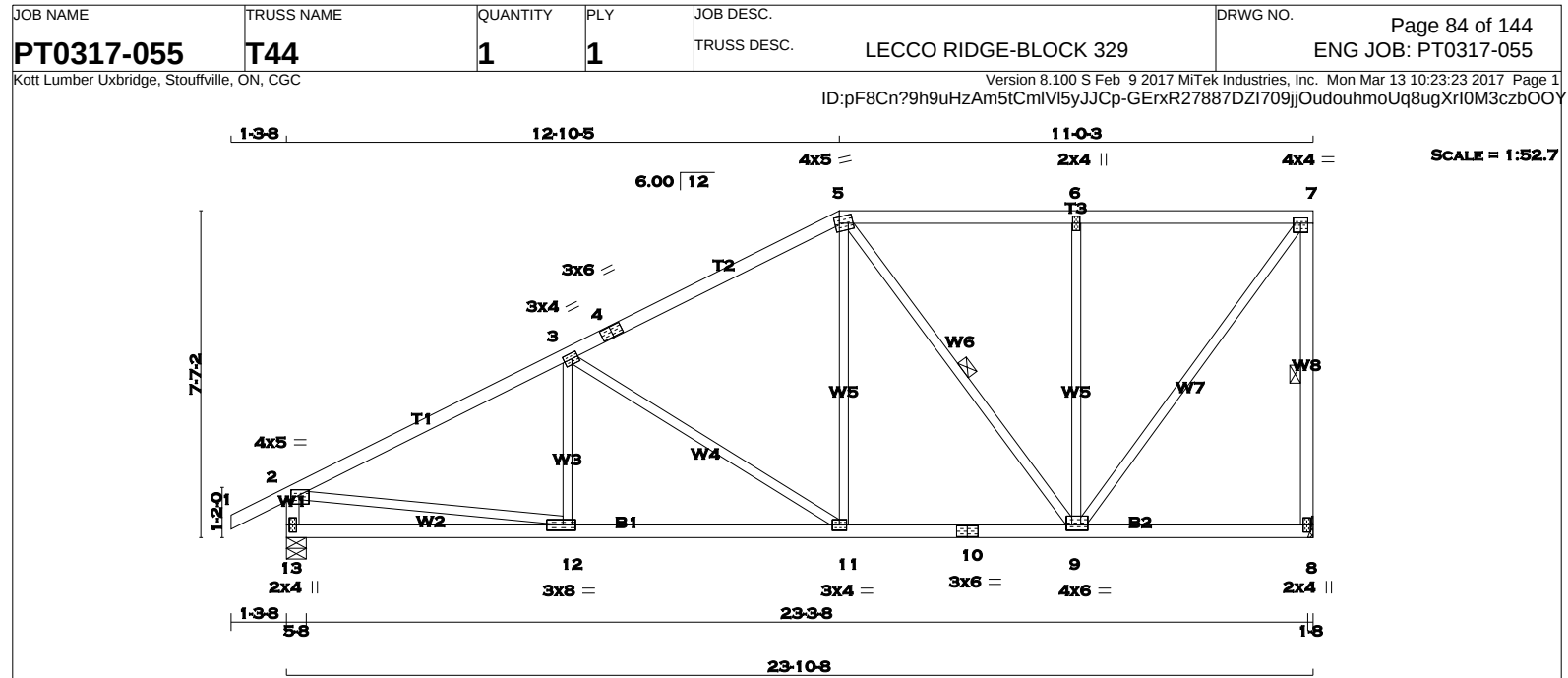
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)

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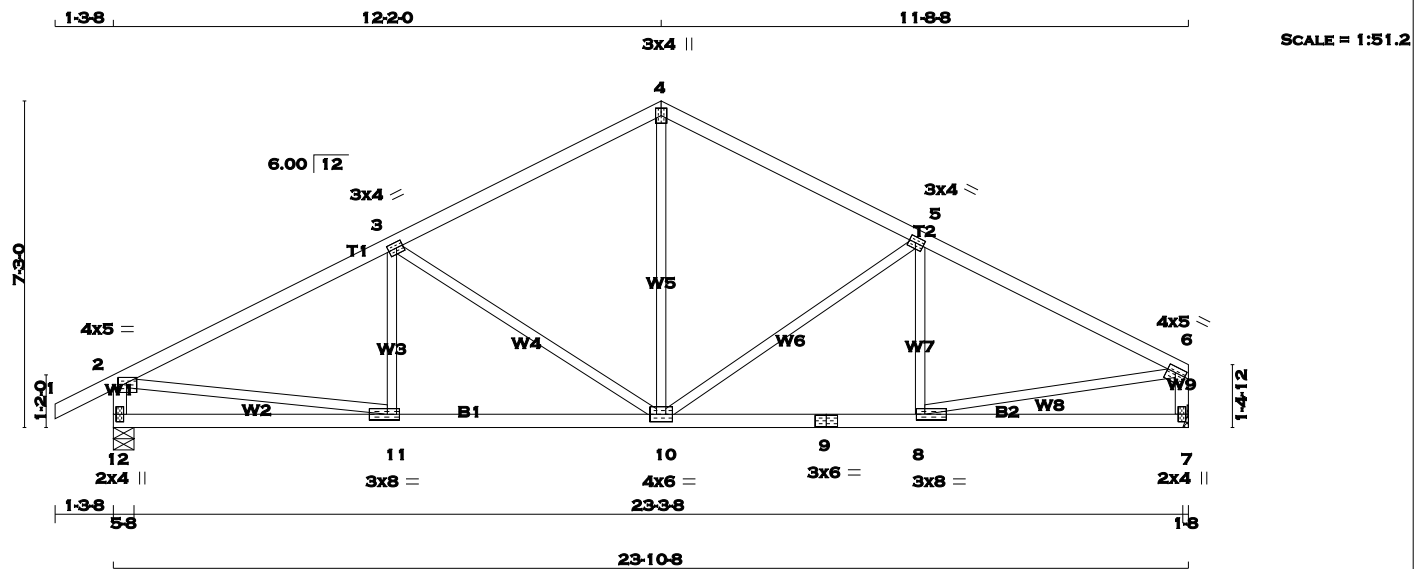
LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 8 - 7 2x4 DRY No.2 13 - 2 2x4 DRY No.2 13 - 10 2x4 DRY No.2 10 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 8 1132 0 13 1237 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1132 0 0 1237 0 0 INPUT BRG IN-SX HANGER BY OTHERS MIN. SEAT SIZE: 1-8 5-8 5-8 REQRD BRG IN-SX 5-8 5-8										TOTAL WEIGHT = 107 lb [M][F]
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-p MT20 4.0 5.0 1.50 2.25 3 TMVW-t MT20 3.0 4.0 1.50 1.75 4 TS-t MT20 3.0 6.0 5 TTWW-m MT20 4.0 5.0 1.75 1.25 6 TMW-w MT20 2.0 4.0 7 TMVW-t MT20 4.0 4.0 1.50 2.00 8 BMV1+p MT20 2.0 4.0 9 BMVWW-t MT20 4.0 6.0 1.50 1.50 10 BS-t MT20 3.0 6.0 11 BMVW-t MT20 3.0 4.0 12 BMVW-t MT20 3.0 8.0 1.50 3.50 13 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 8 795 556 / 0 0 / 0 0 / 0 239 / 0 0 / 0 13 866 619 / 0 0 / 0 0 / 0 247 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 20-0-0 . CBF = 47 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) C H O R D S MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE (LBS) WEBS FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 12-3 -59 / 91 0.03 (3) 2-3 -1552 / 0 -77.3 -77.3 0.47 (1) 4.75 3-11 -582 / 0 0.69 (1) 3-4 -1058 / 0 -77.3 -77.3 0.43 (1) 5.56 11-5 0 / 415 0.09 (1) 4-5 -1058 / 0 -77.3 -77.3 0.43 (1) 5.56 5-9 -375 / 0 0.21 (1) 5-6 -702 / 0 -77.3 -77.3 0.30 (1) 6.25 9-6 -528 / 0 0.56 (1) 6-7 -702 / 0 -77.3 -77.3 0.30 (1) 6.25 9-7 0 / 1166 0.26 (1) 8-7 -1092 / 0 0.0 0.0 0.28 (1) 6.05 2-12 0 / 1424 0.32 (1) 13-2 -1190 / 0 0.0 0.0 0.12 (1) 7.32 13-12 0 / 0 -17.5 -17.5 0.18 (3) 10.00 12-11 0 / 1411 -17.5 -17.5 0.31 (1) 10.00 11-10 0 / 928 -17.5 -17.5 0.21 (1) 10.00 10-9 0 / 928 -17.5 -17.5 0.21 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.12 (3) 10.00										DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.80") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.80") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11") CSI: TC=0.47 (2-3:1), BC=0.31 (11-12:1), WB=0.69 (3-11:1), SSI=0.22 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (7) (INPUT = 0.90) JSI METAL= 0.40 (2) (INPUT = 1.00)				



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IN THE DESIGN OF THIS COMPONENT.





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

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
JT	COMBINED	SNOW	LIVE	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	BRG	BRG	BRG	BRG	BRG	BRG	BRG	BRG
12	1237	0	1237	0	0	1237	0	0	5-8	5-8	5-8								
7	1132	0	1132	0	0	1132	0	0											

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	11-3	-80 / 78	0.03 (3)
2-3	-1555 / 0	-77.3	-77.3 0.42 (1)	4.83	3-10	-519 / 0	0.51 (1)
3-4	-1121 / 0	-77.3	-77.3 0.38 (1)	5.51	10-4	0 / 638	0.14 (1)
4-5	-1120 / 0	-77.3	-77.3 0.36 (1)	5.56	10-5	-434 / 0	0.41 (1)
5-6	-1468 / 0	-77.3	-77.3 0.38 (1)	4.99	8-5	-133 / 58	0.04 (1)
12-2	-1191 / 0	0.0	0.0 0.12 (1)	7.32	2-11	0 / 1426	0.32 (1)
7-6	-1088 / 0	0.0	0.0 0.11 (1)	7.58	8-6	0 / 1357	0.31 (1)
12-11	0 / 0	-17.5	-17.5 0.15 (3)	10.00			
11-10	0 / 1413	-17.5	-17.5 0.30 (1)	10.00			
10-9	0 / 1334	-17.5	-17.5 0.28 (1)	10.00			
9-8	0 / 1334	-17.5	-17.5 0.28 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.14 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3 PSF
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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

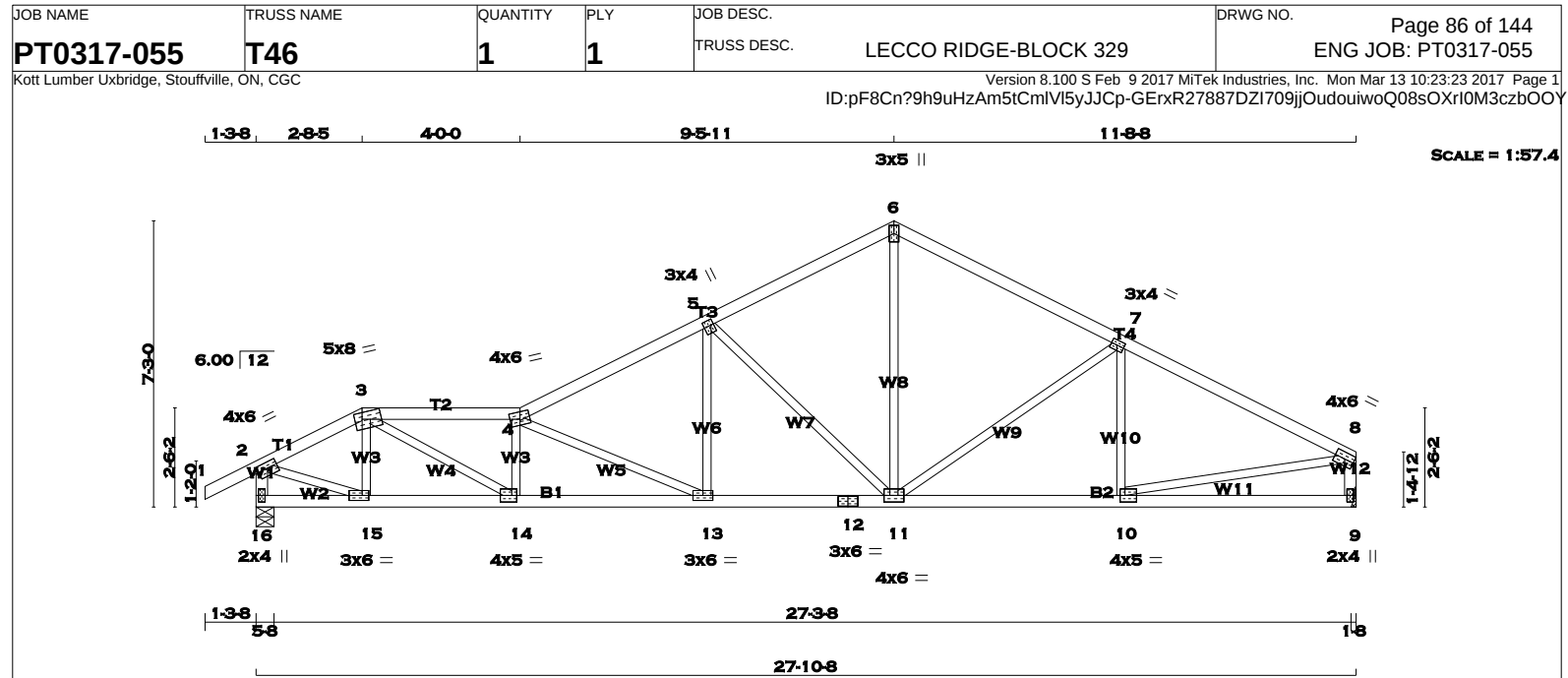
JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.47 (6) (INPUT = 1.00)



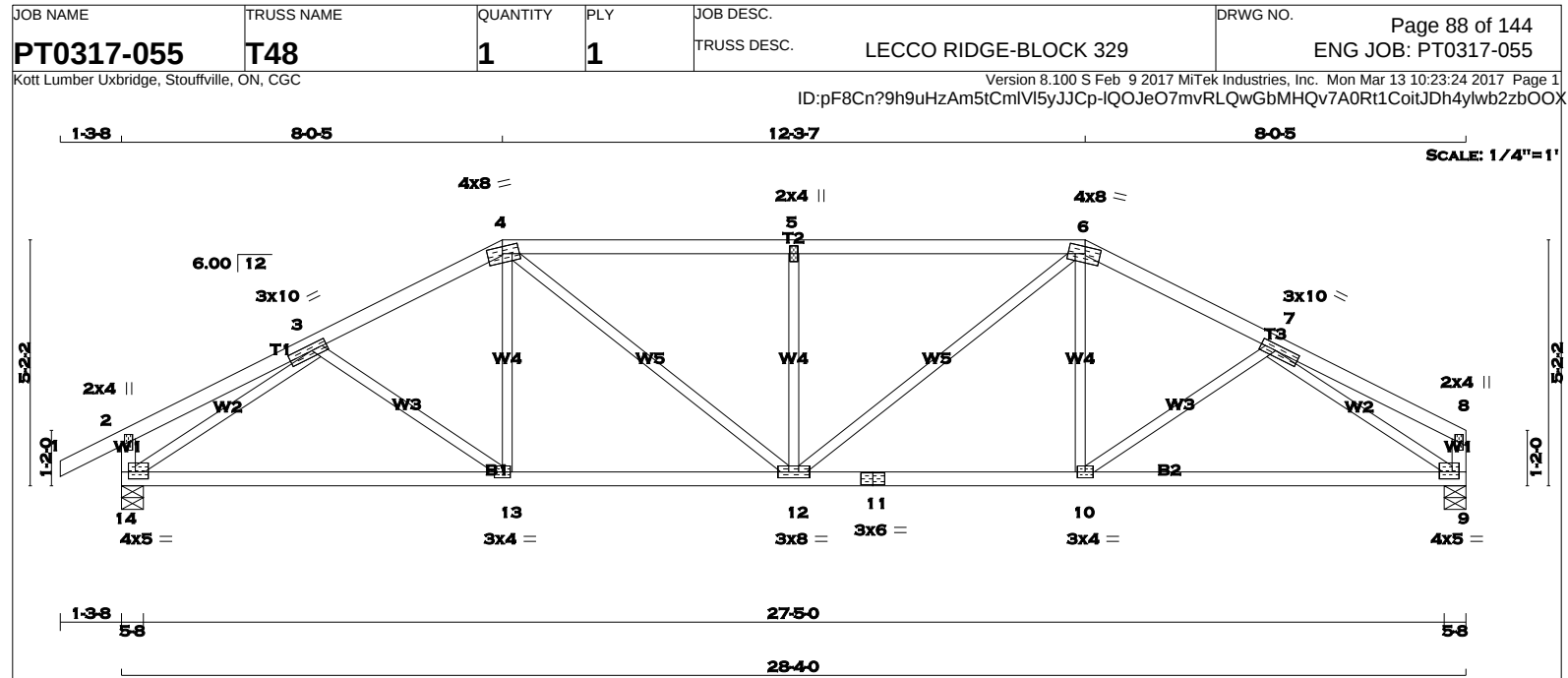
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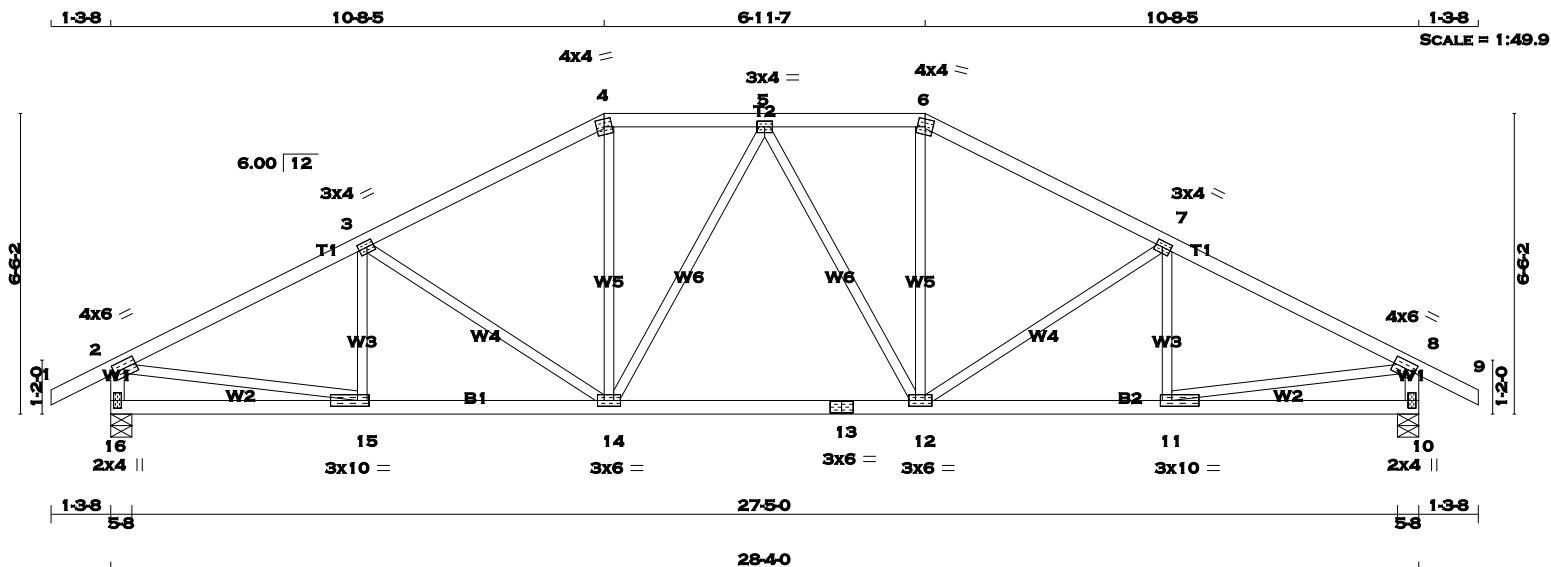
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			DESIGN CRITERIA		
1 - 3	2x4	DRY	No.2	SPF		SPECIFIED LOADS:		
3 - 4	2x4	DRY	No.2	SPF		TOP CH. LL = 23.3 PSF		
4 - 6	2x4	DRY	No.2	SPF		DL = 3.0 PSF		
6 - 8	2x4	DRY	No.2	SPF		BOT CH. LL = 0.0 PSF		
16 - 2	2x4	DRY	No.2	SPF		DL = 7.0 PSF		
9 - 8	2x4	DRY	No.2	SPF		TOTAL LOAD = 33.3 PSF		
16 - 12	2x4	DRY	No.2	SPF		SPACING = 24.0 IN. C/C		
12 - 9	2x4	DRY	No.2	SPF		LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12		
ALL WEBS	2x3	DRY	No.2	SPF		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
EXCEPT						THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011		
DRY: SEASONED LUMBER.			UNFACTORED REACTIONS			(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD		
			1ST LCASE MAX./MIN. COMPONENT REACTIONS			ALLOWABLE DEFL.(LL)= L/360 (0.93")		
			JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL			CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")		
			16 999 712 / 0 0 / 0 0 / 0 0 / 0 287 / 0 0 / 0			ALLOWABLE DEFL.(TL)= L/360 (0.93")		
			9 928 649 / 0 0 / 0 0 / 0 0 / 0 279 / 0 0 / 0			CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")		
			BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16			CSI: TC=0.40 (7-8:1), BC=0.56 (13-14:1), WB=0.77 (5-11:1), SSI=0.20 (7-8:1)		
			BRACING			DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10		
			TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.83 FT.			COMPANION LIVE LOAD FACTOR = 0.50		
			MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.			TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.		
			ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.			NAIL VALUES		
			LOADING			PLATE GRIP(DRY) SHEAR SECTION		
			TOTAL LOAD CASES: (3)			(PSI) (PLI) (PLI)		
			CHORDS			MAX MIN MAX MIN MAX MIN		
			MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX			MT20 618 354 1667 822 2284 1656		
			(LBS) (PLF) CSI (LC) UNBRAC			PLATE PLACEMENT TOL. = 0.250 inches		
			FR-TO FROM TO LENGTH FR-TO			PLATE ROTATION TOL. = 5.0 Deg.		
			1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 15-3 -376 / 0 0.06 (1)			JSI GRIP= 0.89 (10) (INPUT = 0.90)		
			2-3 -1662 / 0 -77.3 -77.3 0.10 (1) 5.07 3-14 0 / 1749 0.39 (1)			JSI METAL= 0.49 (12) (INPUT = 1.00)		
			3-4 -2988 / 0 -77.3 -77.3 0.26 (1) 3.83 14-4 -814 / 0 0.13 (1)					
			4-5 -2216 / 0 -77.3 -77.3 0.29 (1) 4.34 4-13 -1132 / 0 0.53 (1)					
			5-6 -1472 / 0 -77.3 -77.3 0.24 (1) 5.15 13-5 0 / 572 0.13 (1)					
			6-7 -1477 / 0 -77.3 -77.3 0.37 (1) 4.99 5-11 -975 / 0 0.77 (1)					
			7-8 -1778 / 0 -77.3 -77.3 0.40 (1) 4.61 11-6 0 / 991 0.22 (1)					
			16-2 -1412 / 0 0.0 0.0 0.14 (1) 6.86 11-7 -383 / 0 0.36 (1)					
			9-8 -1278 / 0 0.0 0.0 0.13 (1) 7.13 10-7 -182 / 44 0.05 (1)					
			16-15 0 / 0 -17.5 -17.5 0.04 (3) 10.00 10-8 0 / 1553 0.35 (1)					
			15-14 0 / 1467 -17.5 -17.5 0.28 (1) 10.00 2-15 0 / 1638 0.37 (1)					
			14-13 0 / 3027 -17.5 -17.5 0.56 (1) 10.00					
			13-12 0 / 2000 -17.5 -17.5 0.38 (1) 10.00					
			12-11 0 / 2000 -17.5 -17.5 0.38 (1) 10.00					
			11-10 0 / 1611 -17.5 -17.5 0.32 (1) 10.00					
			10-9 0 / 0 -17.5 -17.5 0.14 (3) 10.00					
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.								
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.								
			RECEIVED TOWN OF MILTON MAR 29, 2017 17-5001 BUILDING DIVISION			READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.		



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS										DESIGN CRITERIA			
1 - 4 2x4 DRY No.2 SPF						FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG										SPECIFIED LOADS:			
4 - 6 2x4 DRY No.2 SPF						JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										TOP CH. LL = 23.3 PSF			
14 - 2 2x4 DRY No.2 SPF						14 1449 0 1449 0 0 5-8 5-8										DL = 3.0 PSF			
9 - 8 2x4 DRY No.2 SPF						9 1344 0 1344 0 0 5-8 5-8										BOT CH. LL = 0.0 PSF			
14 - 11 2x4 DRY No.2 SPF																DL = 7.0 PSF			
11 - 9 2x4 DRY No.2 SPF																TOTAL LOAD = 33.3 PSF			
ALL WEBS 2x3 DRY No.2 SPF						UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C			
EXCEPT						1ST LCASE MAX./MIN. COMPONENT REACTIONS													
DRY: SEASONED LUMBER.						JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12			
						14 1014 723 / 0 0 / 0 0 / 0 0 / 0 291 / 0 0 / 0										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
						9 943 660 / 0 0 / 0 0 / 0 0 / 0 283 / 0 0 / 0										THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011			
						BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD			
						BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										ALLOWABLE DEFL.(LL)= L/360 (0.94") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (0.94") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")			
						ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										CSI: TC=0.44 (4-5:1) , BC=0.40 (13-14:1) , WB=0.79 (3-14:1) , SSI=0.23 (4-5:1)			
						LOADING TOTAL LOAD CASES: (3)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10			
						CHORDS WEBS										COMPANION LIVE LOAD FACTOR = 0.50			
						MAX. FACTORED FACTORED MAX. FACTORED										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
						MEMB. FORCE VERT. LOAD LC1 MAX UNBRAC MEMB. FORCE MAX										NAIL VALUES			
						(LBS) (PLF) CSI (LC) LENGTH FR-TO (LBS) CSI (LC)										PLATE GRIP(DRY) SHEAR SECTION			
						FR-TO FROM TO										(PSI) (PLI) (PLI)			
						1- 2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 3-13 -31 / 56 0.02 (3)										MAX MIN MAX MIN MAX MIN			
						2- 3 0 / 14 -77.3 -77.3 0.18 (1) 10.00 13- 4 0 / 169 0.05 (3)										MT20 618 354 1667 822 2284 1656			
						3- 4 -1808 / 0 -77.3 -77.3 0.18 (1) 4.83 4-12 0 / 530 0.12 (1)										PLATE PLACEMENT TOL. = 0.250 inches			
						4- 5 -2022 / 0 -77.3 -77.3 0.44 (1) 4.32 12- 5 -583 / 0 0.23 (1)										PLATE ROTATION TOL. = 5.0 Deg.			
						5- 6 -2022 / 0 -77.3 -77.3 0.44 (1) 4.32 12- 6 0 / 530 0.12 (1)										JSI GRIP= 0.90 (7) (INPUT = 0.90)			
						6- 7 -1808 / 0 -77.3 -77.3 0.18 (1) 4.83 10- 6 0 / 169 0.05 (3)										JSI METAL= 0.49 (14) (INPUT = 1.00)			
						7- 8 0 / 14 -77.3 -77.3 0.18 (1) 10.00 10- 7 -31 / 56 0.02 (3)													
						14- 2 -229 / 0 0.0 0.0 0.02 (1) 7.81 14- 3 -2000 / 0 0.79 (1)													
						9- 8 -124 / 0 0.0 0.0 0.01 (1) 7.81 7- 9 -2000 / 0 0.79 (1)													
						14-13 0 / 1628 -17.5 -17.5 0.40 (1) 10.00													
						13-12 0 / 1607 -17.5 -17.5 0.40 (1) 10.00													
						12-11 0 / 1607 -17.5 -17.5 0.40 (1) 10.00													
						11-10 0 / 1607 -17.5 -17.5 0.40 (1) 10.00													
						10- 9 0 / 1628 -17.5 -17.5 0.40 (1) 10.00													

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5001
BUILDING DIVISION

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TOTAL WEIGHT = 117 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 9	2x4	DRY	No.2
16 - 2	2x4	DRY	No.2
10 - 8	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	4.0	6.0	2.00 2.75
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TTW-m	MT20	4.0	4.0	
5	TMVW-t	MT20	3.0	4.0	
6	TTW-m	MT20	4.0	4.0	
7	TMVW-t	MT20	3.0	4.0	1.50 1.75
8	TMVW-t	MT20	4.0	6.0	2.00 2.75
10	BMV1+p	MT20	2.0	4.0	
11	BMVW-t	MT20	3.0	10.0	1.50 3.00
12	BMVW-t	MT20	3.0	6.0	
13	BS-t	MT20	3.0	6.0	
14	BMVW-t	MT20	3.0	6.0	
15	BMVW-t	MT20	3.0	10.0	1.50 3.00
16	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
16	1449	0	1449	0	0
10	1449	0	1449	0	0
UNFACTORED REACTIONS		1ST LCASE	MAX/MIN	COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
16	1014	723 / 0	0 / 0	0 / 0	291 / 0
10	1014	723 / 0	0 / 0	0 / 0	291 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	15-3	-178 / 32	0.04 (1)
2-3	-1913 / 0	-77.3	-77.3 0.34 (1)	4.55	3-14	-343 / 0	0.26 (1)
3-4	-1638 / 0	-77.3	-77.3 0.31 (1)	4.86	14-4	0 / 462	0.10 (1)
4-5	-1453 / 0	-77.3	-77.3 0.13 (1)	5.31	14-5	-182 / 0	0.17 (1)
5-6	-1453 / 0	-77.3	-77.3 0.13 (1)	5.31	5-12	-182 / 0	0.17 (1)
6-7	-1638 / 0	-77.3	-77.3 0.31 (1)	4.86	12-6	0 / 462	0.10 (1)
7-8	-1913 / 0	-77.3	-77.3 0.34 (1)	4.55	12-7	-343 / 0	0.26 (1)
8-9	0 / 23	-77.3	-77.3 0.10 (1)	10.00	11-7	-178 / 32	0.04 (1)
16-2	-1406 / 0	0.0	0.0 0.14 (1)	6.87	2-15	0 / 1751	0.39 (1)
10-8	-1406 / 0	0.0	0.0 0.14 (1)	6.87	11-8	0 / 1751	0.39 (1)
16-15	0 / 0	-17.5	-17.5 0.11 (3)	10.00			
15-14	0 / 1730	-17.5	-17.5 0.35 (1)	10.00			
14-13	0 / 1539	-17.5	-17.5 0.32 (1)	10.00			
13-12	0 / 1539	-17.5	-17.5 0.32 (1)	10.00			
12-11	0 / 1730	-17.5	-17.5 0.35 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.11 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.34 (2-3:1), BC=0.35 (14-15:1), WB=0.39 (2-15:1), SSI=0.18 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

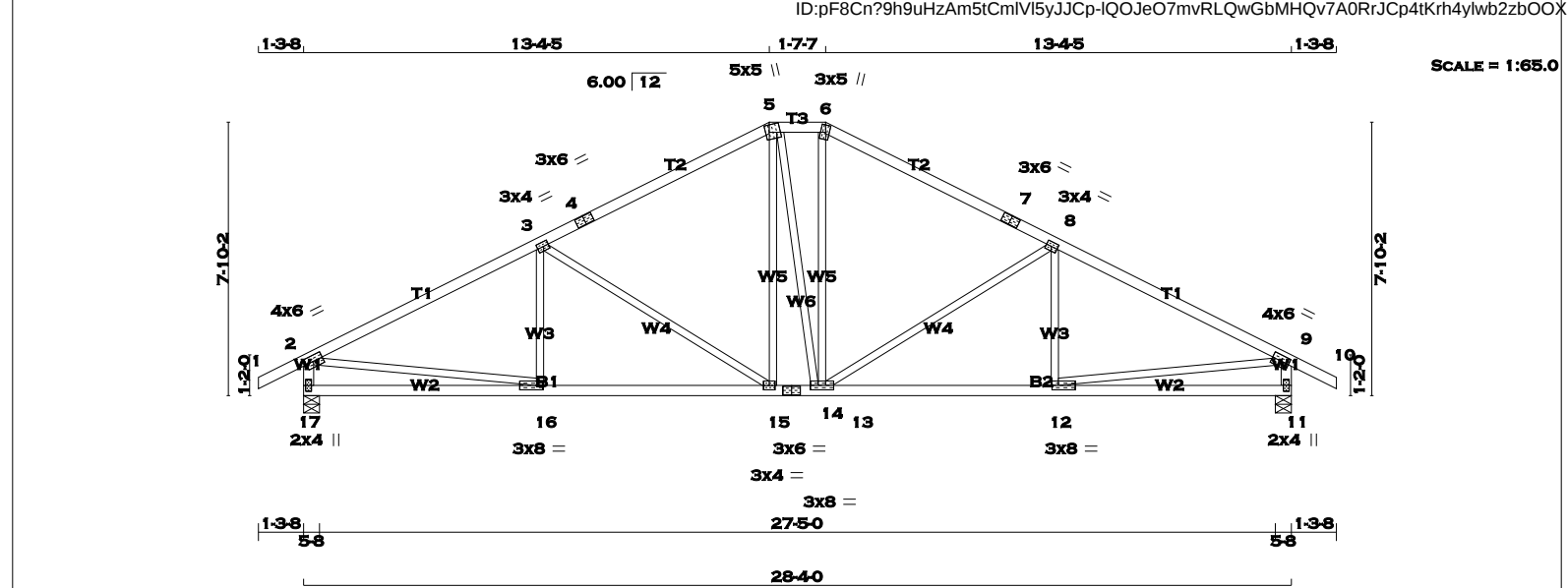
JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.51 (2) (INPUT = 1.00)



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

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY No.2	SPF
4 - 5	2x4	DRY No.2	SPF
5 - 6	2x4	DRY No.2	SPF
6 - 7	2x4	DRY No.2	SPF
7 - 10	2x4	DRY No.2	SPF
17 - 2	2x4	DRY No.2	SPF
11 - 9	2x4	DRY No.2	SPF
17 - 14	2x4	DRY No.2	SPF
14 - 11	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

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

SPACING = 24.0 IN./C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

RECEIVED TOWN OF MILTON
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MAR 29, 2017
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BUILDING DIVISION

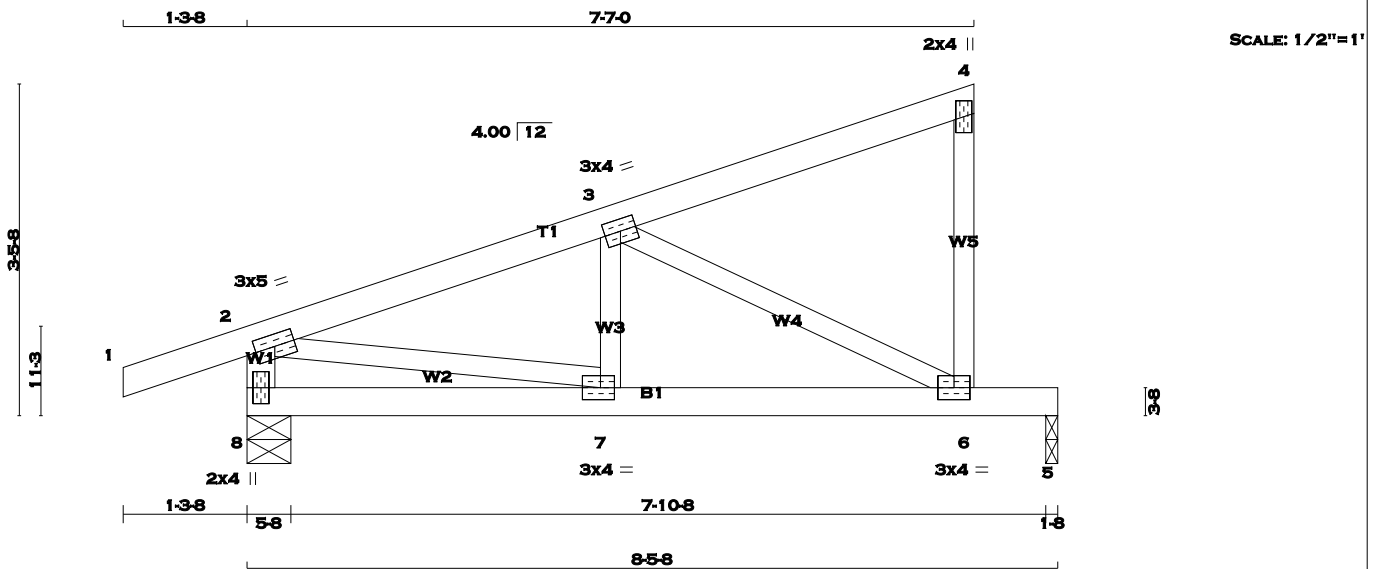
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RECEIVED TOWN OF MILTON
MAR 29, 2017
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BUILDING DIVISION



TOTAL WEIGHT = 8 X 30 = 244 lb

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

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

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

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

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

		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		349	257 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0	
5		238	158 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0	

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

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

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

LOADING

		CHORDS				WEBS			
		MAX. FORCE	FACTORED	VERT. LOAD	LC1 MAX	MAX. MEMB.	MAX. FORCE	FACTORED	MAX
		(LBS)	(PLF)	CSI (LC)	UNBRAC	LENGTH	(LBS)	CSI (LC)	
FR-TO			FROM TO			FR-TO			
1-2		0 / 16	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 98	0.03 (3)	
2-3		-565 / 0	-77.3 -77.3	0.13 (1)	6.25	3-6	-610 / 0	0.18 (1)	
3-4		-10 / 0	-77.3 -77.3	0.13 (1)	6.25	2-7	0 / 554	0.12 (1)	
6-4		-114 / 0	0.0 0.0	0.03 (1)	7.81				
8-2		-491 / 0	0.0 0.0	0.05 (1)	7.81				
8-7		0 / 0	-17.5 -17.5	0.12 (1)	10.00				
7-6		0 / 546	-17.5 -17.5	0.48 (1)	10.00				
6-5		0 / 0	-17.5 -17.5	0.39 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 896 (0.11")

CSI: TC=0.13 (2-3:1) , BC=0.48 (6-7:1) , WB=0.18 (3-6:1) , SSI=0.26 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

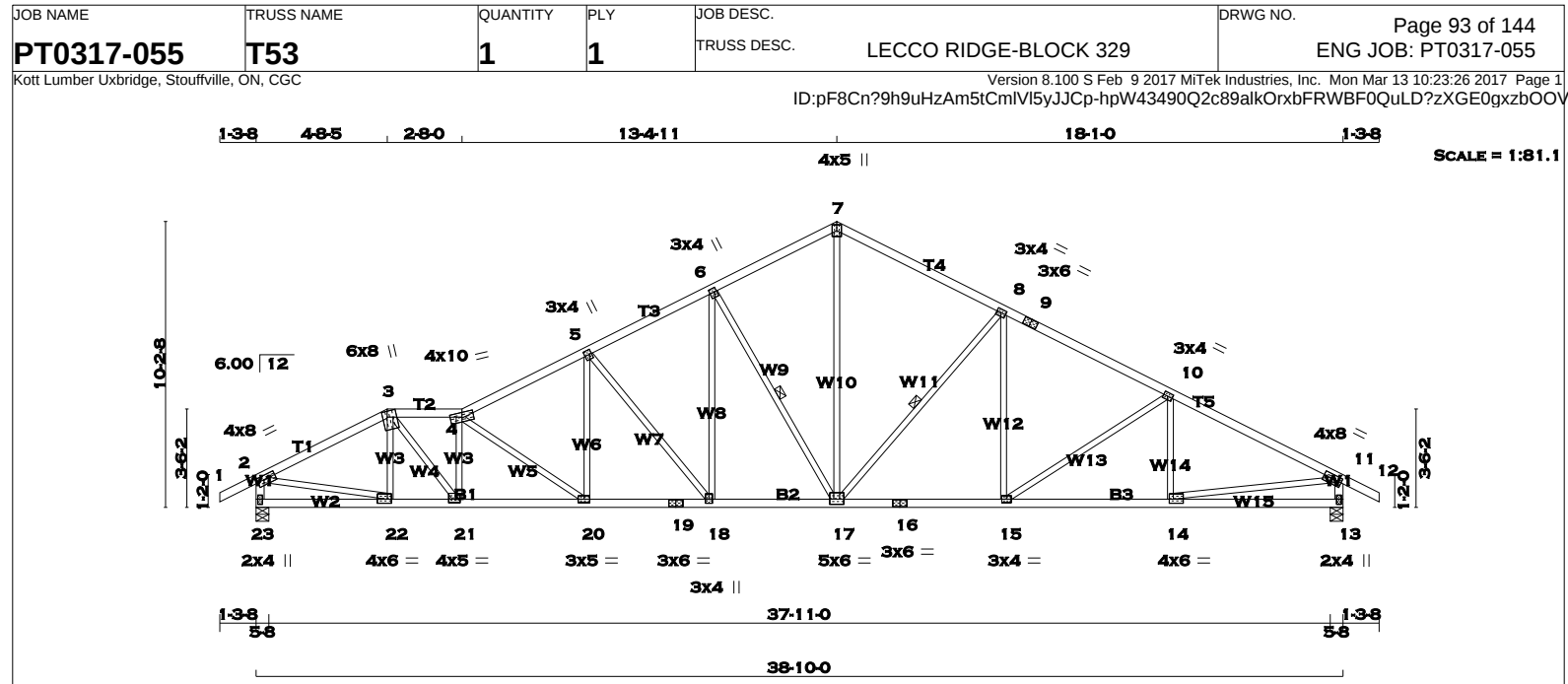
JSI GRIP= 0.83 (6) (INPUT = 0.90)
JSI METAL= 0.20 (6) (INPUT = 1.00)



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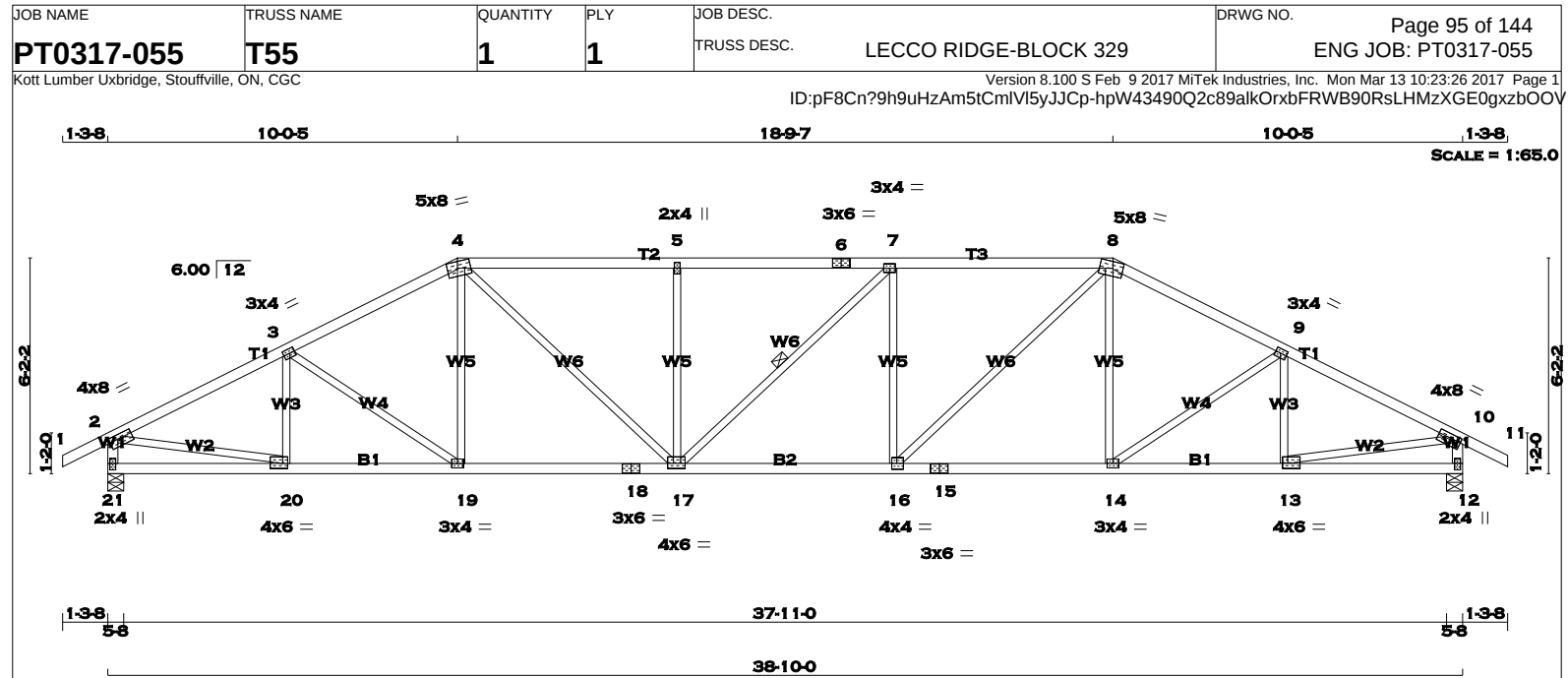
READ ALL NOTES ON THIS PAGE AND ON THE
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 IS AN INTEGRAL PART OF THIS DRAWING AS IT
 CONTAINS SPECIFICATIONS AND CRITERIA USED
 IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 171 [M][F]									
LUMBER N. L. G. A. RULES CHORDS SIZE DRY No.2 SPF 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 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 - 19 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 13 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DESCR. SPF									

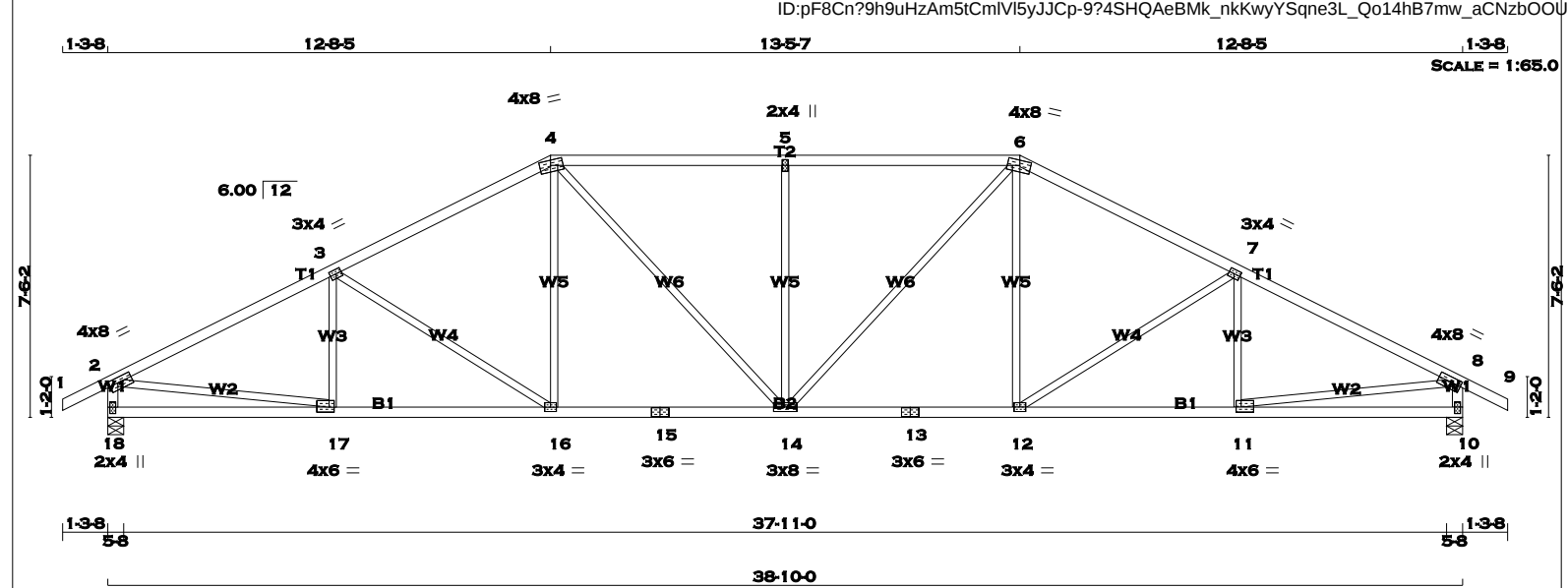




LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 11 2x4 DRY No.2 SPF 21 - 2 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 21 - 18 2x4 DRY No.2 SPF 18 - 15 2x4 DRY No.2 SPF 15 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT REQRD JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 21 1947 0 1947 0 0 5-8 5-8 12 1947 0 1947 0 0 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX/MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1364 967 / 0 0 / 0 0 / 0 396 / 0 0 / 0 12 1364 967 / 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 = 3.58 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-17. DBS = 20-0-0, CBF = 0 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 20-3 -329 / 0 0.07 (1) 2-3 -2734 / 0 -77.3 -77.3 0.35 (1) 3.92 3-19 -152 / 0 0.10 (1) 3-4 -2633 / 0 -77.3 -77.3 0.33 (1) 4.00 19-4 0 / 192 0.05 (3) 4-5 -3016 / 0 -77.3 -77.3 0.53 (1) 3.58 4-17 0 / 926 0.21 (1) 5-6 -3016 / 0 -77.3 -77.3 0.48 (1) 3.64 17-5 -524 / 0 0.32 (1) 6-7 -3016 / 0 -77.3 -77.3 0.48 (1) 3.64 17-7 -2 / 0 0.00 (1) 7-8 -3017 / 0 -77.3 -77.3 0.53 (1) 3.58 16-7 -524 / 0 0.32 (1) 8-9 -2633 / 0 -77.3 -77.3 0.33 (1) 4.00 16-8 0 / 928 0.21 (1) 9-10 -2734 / 0 -77.3 -77.3 0.35 (1) 3.92 14-8 0 / 191 0.04 (3) 10-11 0 / 23 -77.3 -77.3 0.10 (1) 10.00 14-9 -153 / 0 0.10 (1) 21-2 -1904 / 0 0.0 0.0 0.19 (1) 6.09 13-9 -328 / 0 0.07 (1) 12-10 -1905 / 0 0.0 0.0 0.19 (1) 6.09 2-20 0 / 2496 0.56 (1) 13-12 0 / 0 -17.5 -17.5 0.09 (3) 10.00 13-10 0 / 2496 0.56 (1) 21-20 0 / 0 -17.5 -17.5 0.09 (3) 10.00 20-19 0 / 2462 -17.5 -17.5 0.46 (1) 10.00 19-18 0 / 2339 -17.5 -17.5 0.44 (1) 10.00 18-17 0 / 2339 -17.5 -17.5 0.44 (1) 10.00 17-16 0 / 3017 -17.5 -17.5 0.55 (1) 10.00 16-15 0 / 2339 -17.5 -17.5 0.44 (1) 10.00 15-14 0 / 2339 -17.5 -17.5 0.44 (1) 10.00 14-13 0 / 2462 -17.5 -17.5 0.46 (1) 10.00 13-12 0 / 0 -17.5 -17.5 0.09 (3) 10.00			DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.29") CALCULATED VERT. DEFL.(LL) = L/999 (0.21") ALLOWABLE DEFL.(TL)= L/360 (1.29") CALCULATED VERT. DEFL.(TL) = L/999 (0.38") CSI: TC=0.53 (7-8:1), BC=0.55 (16-17:1), WB=0.56 (10-13:1), SSI=0.23 (7-8:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (13) (INPUT = 0.90) JSI METAL= 0.61 (13) (INPUT = 1.00)		
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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

6 - 9

2x4

DRY

No.2

SPF

18 - 2

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

18 - 15

2x4

DRY

No.2

SPF

15 - 13

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
18	1947	0	1947	0
10	1947	0	1947	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS
JT	COMBINED
18	1364
10	1364

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.65 FT.

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX UNBRAC LENGTH
FR-TO				
1-2	0 / 23	-77.3	-77.3	0.10 (1)
2-3	-2800 / 0	-77.3	-77.3	0.58 (1)
3-4	-2472 / 0	-77.3	-77.3	0.52 (1)
4-5	-2542 / 0	-77.3	-77.3	0.58 (1)
5-6	-2542 / 0	-77.3	-77.3	0.58 (1)
6-7	-2472 / 0	-77.3	-77.3	0.52 (1)
7-8	-2800 / 0	-77.3	-77.3	0.58 (1)
8-9	0 / 23	-77.3	-77.3	0.10 (1)
18-2	-1897 / 0	0.0	0.0	0.19 (1)
10-8	-1897 / 0	0.0	0.0	0.19 (1)

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		
17-3	-219 / 40	0.06 (1)
3-16	-405 / 0	0.46 (1)
16-4	0 / 336	0.08 (1)
4-14	0 / 515	0.12 (1)
14-5	-639 / 0	0.65 (1)
14-6	0 / 515	0.12 (1)
12-6	0 / 336	0.08 (1)
12-7	-405 / 0	0.46 (1)
11-7	-219 / 40	0.06 (1)
2-17	0 / 2549	0.57 (1)
11-8	0 / 2549	0.57 (1)

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	TMVW-w	MT20	2.0	4.0		
6	TTWW-m	MT20	4.0	8.0	1.75	3.75
7	TMVW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	8.0	1.75	3.00
10	BMV1+p	MT20	2.0	4.0	2.25	1.00
11	BMVW-t	MT20	4.0	6.0	1.75	1.75
12	BMVW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMVW-t	MT20	3.0	8.0		
15	BS-t	MT20	3.0	6.0		
16	BMVW-t	MT20	3.0	4.0		
17	BMVW-t	MT20	4.0	6.0	1.75	1.75
18	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.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

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

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

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

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

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

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.32")

CSI: TC=0.58 (7-8:1), BC=0.49 (11-12:1), WB=0.65 (5-14:1), SSI=0.25 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (6) (INPUT = 0.90)

JSI METAL= 0.63 (17) (INPUT = 1.00)

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LICENSED PROFESSIONAL ENGINEER

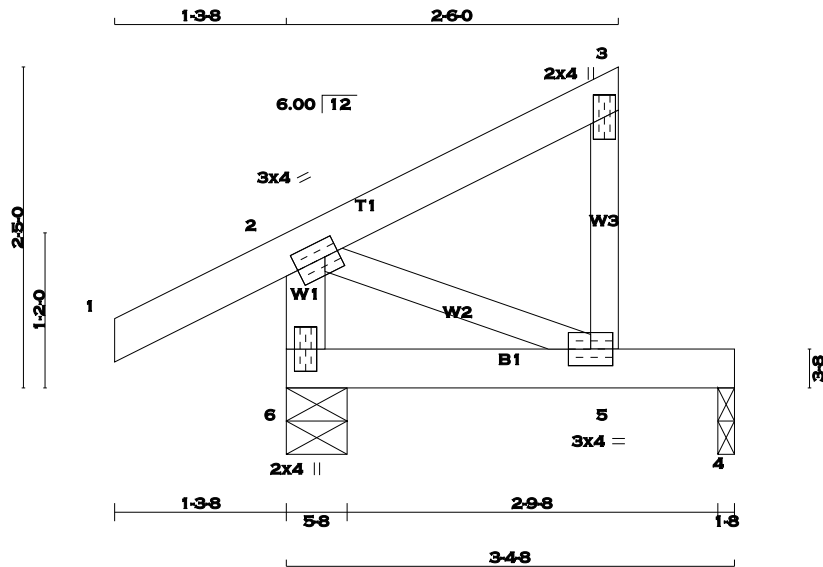
PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

KOTT



SCALE = 1:17.3

TOTAL WEIGHT = 12 X 13 = 154 lb [M]

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

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

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

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX		IN-SX	
6	256	0	256	0	0	5-8		5-8	
4	101	0	101	0	0	1-8		1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
6	178	136 / 0	0 / 0	0 / 0	0 / 0	41 / 0	0 / 0
4	72	43 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	2-5	0 / 0	0.00 (1)	
2-3	0 / 0	-77.3 -77.3	0.08 (1)				
5-3	-97 / 0	0.0 0.0	0.02 (1)				
6-2	-202 / 0	0.0 0.0	0.02 (1)				
6-5	0 / 0	-17.5 -17.5	0.11 (1)				
5-4	0 / 0	-17.5 -17.5	0.11 (1)				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.10 (1-2:1), BC=0.11 (5-6:1), WB=0.00 (2-5:1), SSI=0.08 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

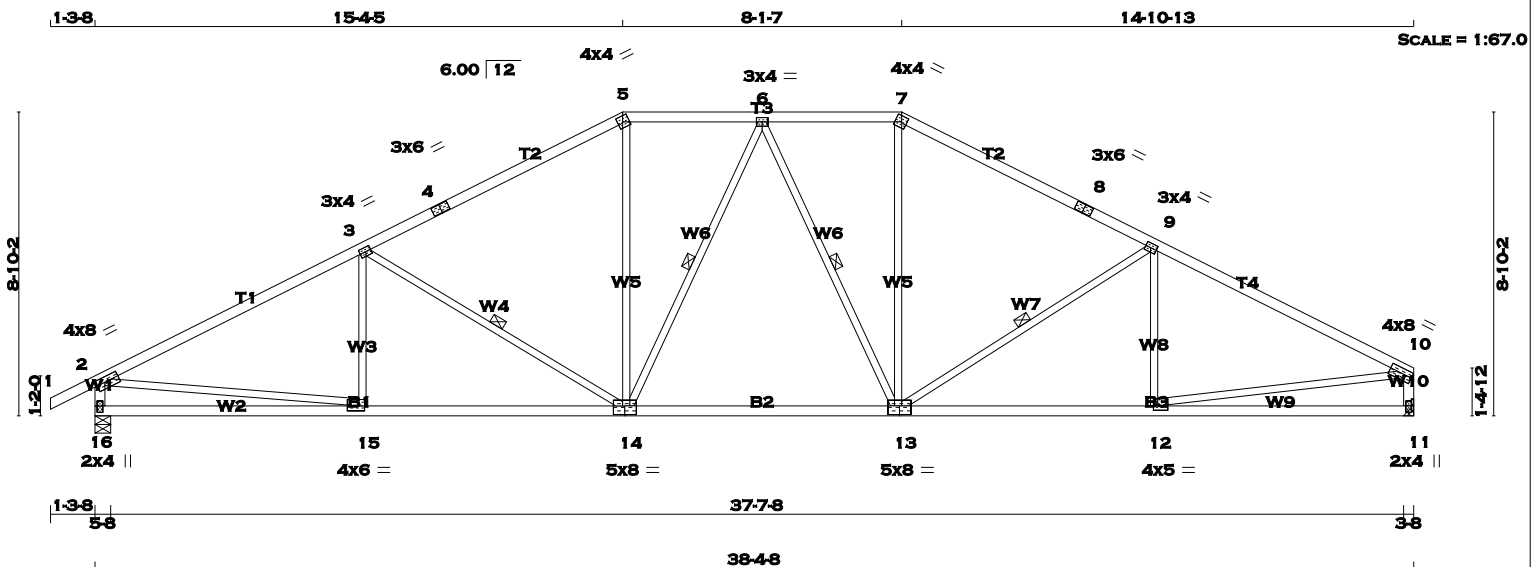
JSI GRIP= 0.18 (2) (INPUT = 0.90)
JSI METAL= 0.04 (6) (INPUT = 1.00)



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

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DOWN	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
16	1925	0	1925	0	5-8	5-8
11	1820	0	1820	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. LIVE		PERM.LIVE		WIND	DEAD	SOIL
	COMBINED	SNOW	COMBINED	SNOW	COMBINED	SNOW			
16	1349	957 / 0	0 / 0	0 / 0	0 / 0	0 / 0	392 / 0	0 / 0	0 / 0
11	1277	893 / 0	0 / 0	0 / 0	0 / 0	0 / 0	384 / 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14, 6-14, 6-13, 9-13. DBS = 20-0-0 . CBF = 80 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

MEMB.	CHORDS MAX. FACTORED		FACTORED		WEBS MAX. FACTORED		FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC
FR-TO					FR-TO			
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	15-3	-131 / 87	0.05 (1)
2-3	-2776 / 0	-77.3	-77.3	0.92 (1)	3.27	3-14	-638 / 0	0.36 (1)
3-4	-2235 / 0	-77.3	-77.3	0.78 (1)	3.71	14-5	0 / 640	0.14 (1)
4-5	-2235 / 0	-77.3	-77.3	0.78 (1)	3.71	14-6	-182 / 0	0.11 (1)
5-6	-1974 / 0	-77.3	-77.3	0.19 (1)	4.64	6-13	-231 / 0	0.15 (1)
6-7	-1953 / 0	-77.3	-77.3	0.19 (1)	4.66	13-7	0 / 636	0.14 (1)
7-8	-2211 / 0	-77.3	-77.3	0.72 (1)	3.81	13-9	-532 / 0	0.29 (1)
8-9	-2211 / 0	-77.3	-77.3	0.72 (1)	3.81	12-9	-203 / 62	0.08 (1)
9-10	-2645 / 0	-77.3	-77.3	0.82 (1)	3.45	2-15	0 / 2526	0.57 (1)
16-2	-1868 / 0	0.0	0.0	0.19 (1)	6.13	12-10	0 / 2417	0.54 (1)
11-10	-1764 / 0	0.0	0.0	0.18 (1)	6.28			
16-15	0 / 0	-17.5	-17.5	0.24 (3)	10.00			
15-14	0 / 2511	-17.5	-17.5	0.52 (1)	10.00			
14-13	0 / 2051	-17.5	-17.5	0.45 (1)	10.00			
13-12	0 / 2393	-17.5	-17.5	0.50 (1)	10.00			
12-11	0 / 0	-17.5	-17.5	0.22 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	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
- TPC 2011

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

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

CSI: TC=0.92 (2-3:1), BC=0.52 (14-15:1), WB=0.57 (2-15:1), SSI=0.26 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

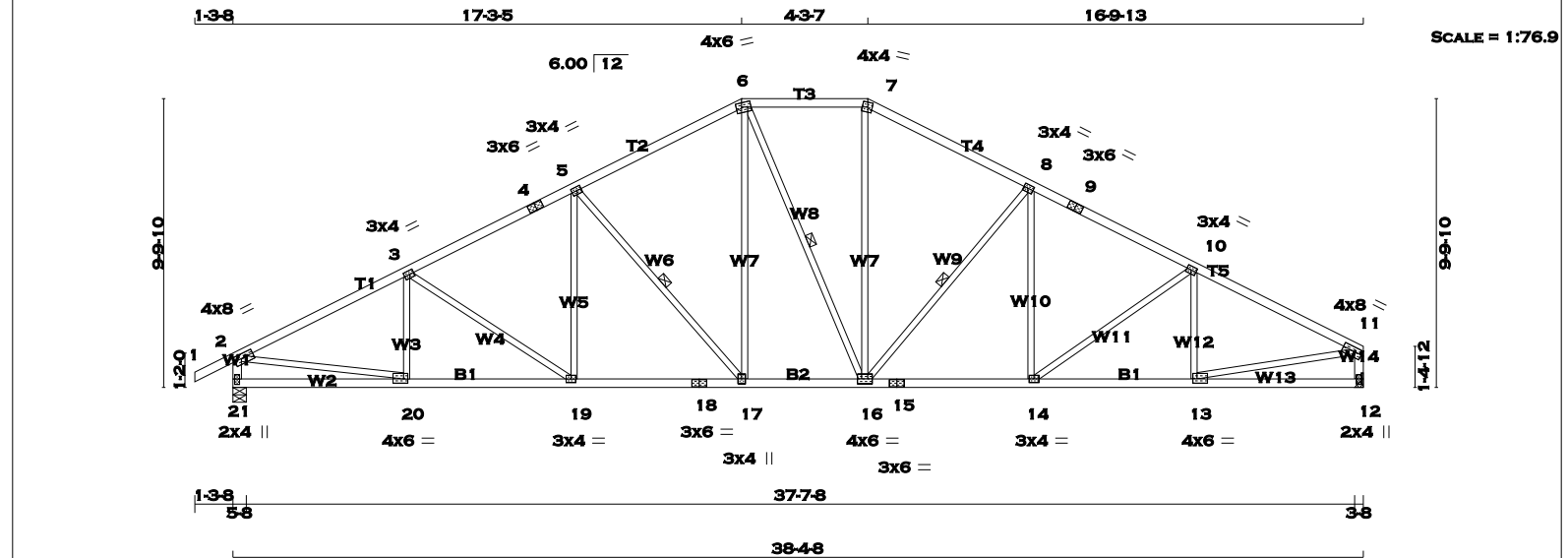
JSI GRIP= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.72 (12) (INPUT = 1.00)



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TOTAL WEIGHT = 169 lb
[M][F]

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

DRY: SEASONED LUMBER.

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

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN
21	1925	0	1925	0	0	0	0	21	1925	0	1925	0	0	0	0	21	1925	0	1925
12	1820	0	1820	0	0	0	0	12	1820	0	1820	0	0	0	0	12	1820	0	1820

UNFACTORED REACTIONS

1ST LCASE				MAX./MIN. COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	JT	COMBINED	SNOW	LIVE
21	1349	957 / 0	0 / 0	21	1349	957 / 0	0 / 0
12	1277	893 / 0	0 / 0	12	1277	893 / 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 = 3.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-17, 6-16, 8-16. DBS = 20-0-0. CBF = 84 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD
FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	CSI (LC)	FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	CSI (LC)
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10-11	-2567 / 0	-77.3	-77.3 0.43 (1)
2-3	-2731 / 0	-77.3	-77.3 0.47 (1)	11-12	-1879 / 0	0.0	0.0 0.19 (1)
3-4	-2522 / 0	-77.3	-77.3 0.38 (1)	12-11	-1776 / 0	0.0	0.0 0.18 (1)
4-5	-2522 / 0	-77.3	-77.3 0.38 (1)	21-20	0 / 0	-17.5	-17.5 0.13 (3)
5-6	-2051 / 0	-77.3	-77.3 0.37 (1)	20-19	0 / 2459	-17.5	-17.5 0.45 (1)
6-7	-1814 / 0	-77.3	-77.3 0.22 (1)	19-18	0 / 2256	-17.5	-17.5 0.42 (1)
7-8	-2041 / 0	-77.3	-77.3 0.35 (1)	18-17	0 / 2256	-17.5	-17.5 0.42 (1)
8-9	-2453 / 0	-77.3	-77.3 0.36 (1)	17-16	0 / 1822	-17.5	-17.5 0.35 (1)
9-10	-2453 / 0	-77.3	-77.3 0.36 (1)	16-15	0 / 2194	-17.5	-17.5 0.41 (1)
10-11	-2567 / 0	-77.3	-77.3 0.43 (1)	15-14	0 / 2194	-17.5	-17.5 0.41 (1)
11-12	-1879 / 0	0.0	0.0 0.19 (1)	14-13	0 / 2312	-17.5	-17.5 0.42 (1)
12-11	-1776 / 0	0.0	0.0 0.18 (1)	13-12	0 / 0	-17.5	-17.5 0.12 (3)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
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 (0.28")

CSI: TC=0.47 (2-3:1), BC=0.45 (19-20:1), WB=0.56 (2-20:1), 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.

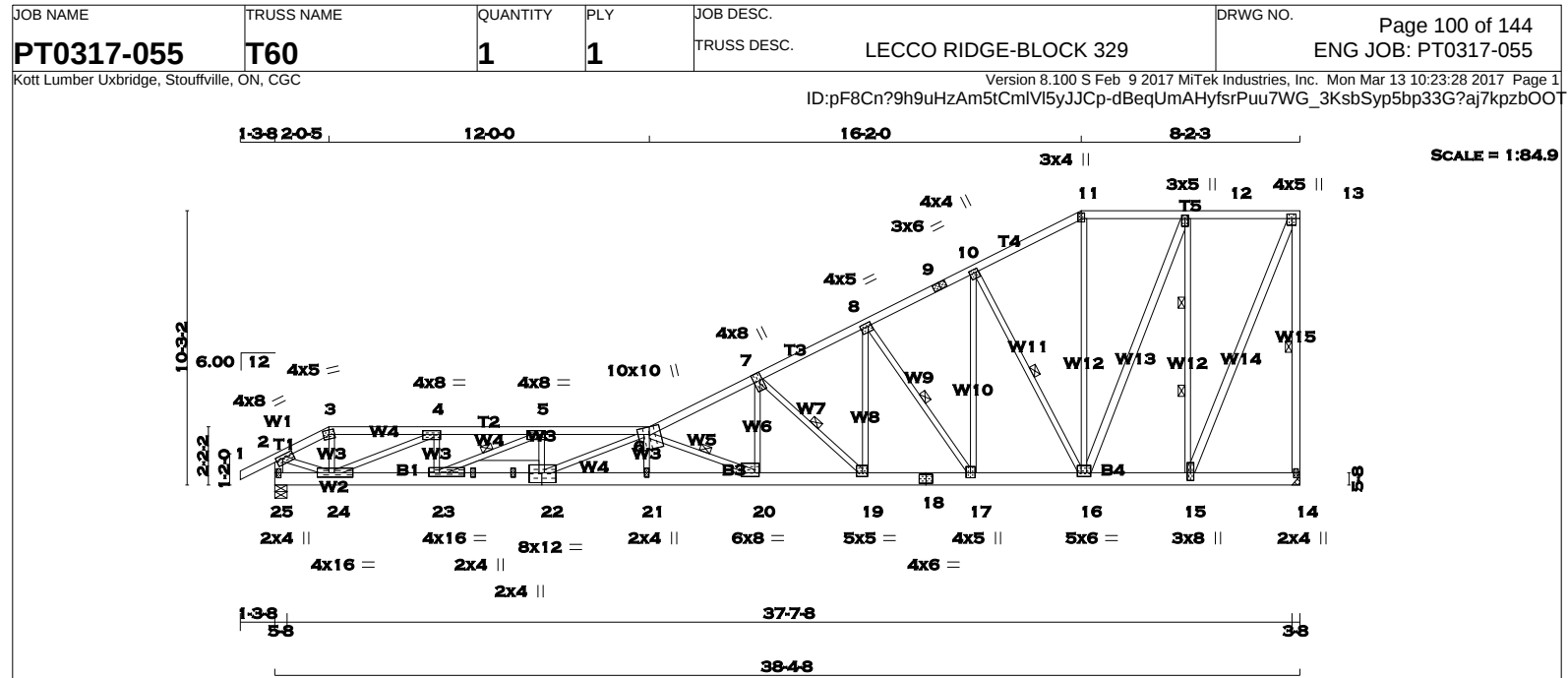
JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.61 (20) (INPUT = 1.00)



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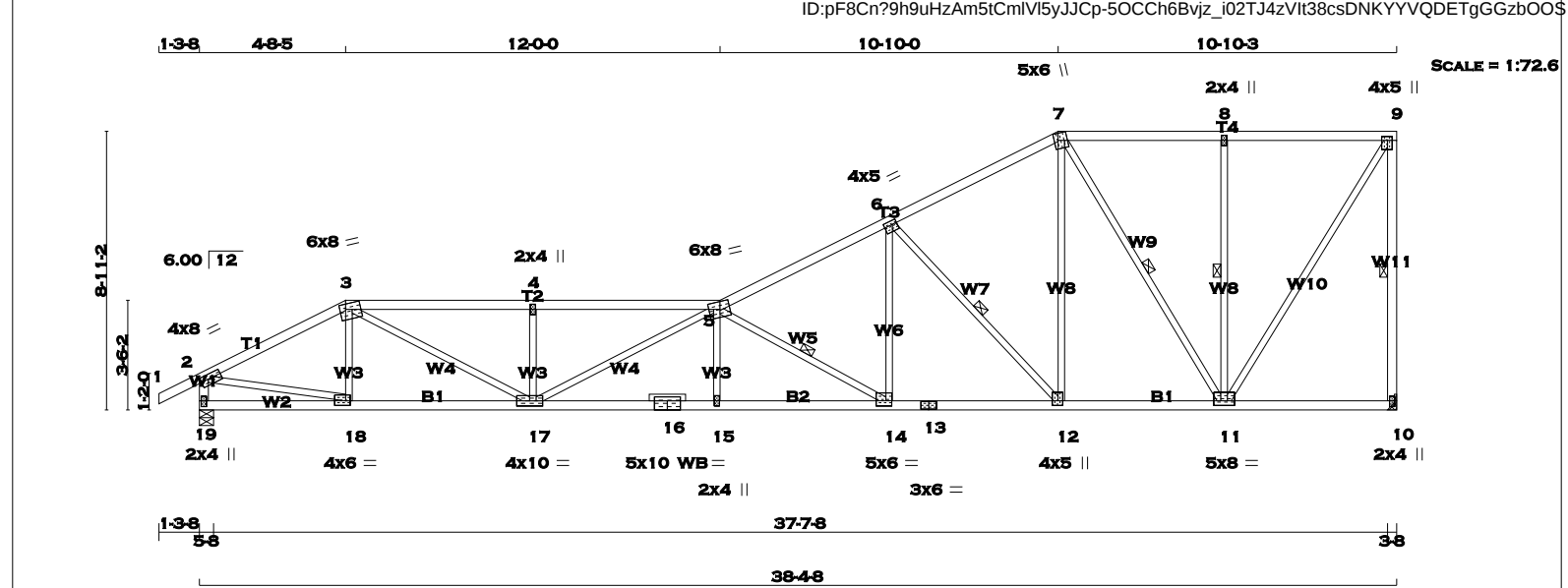


LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 3 2x4 DRY 1650F 1.5E 3 - 6 2x4 DRY 1650F 1.5E 6 - 9 2x4 DRY 1650F 1.5E 9 - 11 2x4 DRY 1650F 1.5E 11 - 13 2x4 DRY 1650F 1.5E 14 - 13 2x4 DRY No.2 25 - 2 2x4 DRY No.2 25 - 22 2x6 DRY 2100F 1.8E 23 - 22 2x6 DRY 2100F 1.8E 22 - 18 2x6 DRY 2100F 1.8E 18 - 14 2x6 DRY 2100F 1.8E ALL WEBS 2x3 DRY No.2 EXCEPT 16 - 12 2x4 DRY No.2 15 - 13 2x4 DRY No.2 DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 14 1820 0 25 1925 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1820 0 0 1925 0 0 INPUT BRG IN-SX HANGER BY OTHERS MIN. SEAT SIZE: 3-8 5-8 5-8 REQRD BRG IN-SX 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 14 1277 893 / 0 0 / 0 0 / 0 0 / 0 384 / 0 0 / 0 25 1349 957 / 0 0 / 0 0 / 0 0 / 0 392 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 25 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.55 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 13-14, 8-17, 10-16. DBS = 8-0-0 . CBF = 90 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-23. DBS = 4-0-0 . CBF = 84 LBS. 1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-20. DBS = 6-0-0 . CBF = 175 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-19. DBS = 6-0-0 . CBF = 85 LBS. 2 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/3 LENGTH OF 12-15. DBS = 8-0-0 . CBF = 79 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) CHORDS MAX. FACTORED FORCE (LBS) FR-TO 1-2 0 / 23 2-3 -2300 / 0 3-4 -2101 / 0 4-5 -5035 / 0 5-6 -8206 / 0 6-7 -5118 / 0 7-8 -3284 / 0 8-9 -2169 / 0 9-10 -2169 / 0 10-11 -1325 / 0 11-12 -1174 / 0 12-13 -705 / 0 14-13 -1791 / 0 25-2 -1966 / 0 FACTORED (PLF) FROM TO -77.3 -77.3 0.08 (1) -77.3 -77.3 0.07 (1) -77.3 -77.3 0.15 (1) -77.3 -77.3 0.26 (1) -77.3 -77.3 0.54 (1) -77.3 -77.3 0.31 (1) -77.3 -77.3 0.21 (1) -77.3 -77.3 0.19 (1) -77.3 -77.3 0.19 (1) -77.3 -77.3 0.17 (1) -77.3 -77.3 0.17 (1) -77.3 -77.3 0.16 (1) 0.0 0.0 0.89 (1) 0.0 0.0 0.20 (1) WEBS MAX. FACTORED FORCE (LBS) MEMB. MAX. FACTORED FORCE (LBS) FR-TO 24-3 0 / 824 24-4 -3227 / 0 23-4 0 / 996 23-5 -3375 / 0 22-5 0 / 1136 22-6 -665 / 0 21-6 -443 / 0 6-20 -4657 / 0 20-7 0 / 2031 7-19 -2279 / 0 19-8 0 / 1630 8-17 -1734 / 0 17-10 0 / 1493 10-16 -1659 / 0 16-11 0 / 343 16-12 0 / 1283 15-12 -1576 / 0 15-13 0 / 1805 2-24 0 / 2185 MAX. FACTORED FORCE (LBS) 0.19 (1) 0.99 (1) 0.22 (1) 0.61 (1) 0.26 (1) 0.20 (1) 0.07 (1) 0.87 (1) 0.46 (1) 0.52 (1) 0.37 (1) 0.58 (1) 0.34 (1) 0.89 (1) 0.08 (1) 0.21 (1) 1.00 (1) 0.29 (1) 0.49 (1)				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.28") CALCULATED VERT. DEFL.(LL) = L/ 722 (0.64") ALLOWABLE DEFL.(TL)= L/360 (1.28") CALCULATED VERT. DEFL.(TL) = L/ 408 (1.13") CSI: TC=0.89 (13-14:1) , BC=0.66 (21-22:1) , WB=1.00 (12-15:1) , SSI=0.15 (12-13:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN 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= 0.86 (22) (INPUT = 1.00)
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KOTT
CONTINUED ON PAGE 2



TOTAL WEIGHT = 169 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
10 - 9	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	8.0	1.75	3.00
3	TTWW-m	MT20	6.0	8.0	2.00	2.25
4	TMW+w	MT20	2.0	4.0		
5	TTWWW-m	MT20	6.0	8.0	3.00	3.75
6	TMWW-t	MT20	4.0	5.0	1.50	1.75
7	TTWW+m	MT20	5.0	6.0	Edge	3.50
8	TMW+w	MT20	2.0	4.0		
9	TMVW+p	MT20	4.0	5.0	1.50	1.75
10	BMV1+p	MT20	2.0	4.0	2.25	1.00
11	BMWWW-t	MT20	5.0	8.0	1.75	4.00
12	BMWW+t	MT20	4.0	5.0	1.75	1.75
13	BS-t	MT20	3.0	6.0		
14	BMWW-t	MT20	5.0	6.0	2.00	2.25
15	BMW+w	MT20	2.0	4.0		
16	BS-t	MT20	5.0	10.0		
17	BMWWW-t	MT20	4.0	10.0		
18	BMWW-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.

WB - INDICATES BLOCKING REQUIRED



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
10		1820	0	1820	0	0	HANGER BY OTHERS		
19		1925	0	1925	0	0	MIN. SEAT SIZE: 3-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
10	1277	893 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
19	1349	957 / 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 = 2.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-10. DBS = 8-0-0 . CBF = 89 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14. DBS = 4-0-0 . CBF = 70 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-12. DBS = 6-0-0 . CBF = 72 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-11. DBS = 12-0-0 . CBF = 87 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-11. DBS = 20-0-0 . CBF = 65 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (CSI (LC))	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (CSI (LC))	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	18-3	-316 / 0	0.07 (1)
2-3	-2640 / 0	-77.3 -77.3	0.44 (1)	3.86	3-17	0 / 2397	0.54 (1)
3-4	-4463 / 0	-77.3 -77.3	0.94 (1)	2.61	17-4	-554 / 0	0.11 (1)
4-5	-4463 / 0	-77.3 -77.3	0.94 (1)	2.61	17-5	-1000 / 0	0.83 (1)
5-6	-3260 / 0	-77.3 -77.3	0.66 (1)	3.34	15-5	0 / 107	0.04 (3)
6-7	-1843 / 0	-77.3 -77.3	0.48 (1)	4.43	5-14	-2795 / 0	0.79 (1)
7-8	-1035 / 0	-77.3 -77.3	0.41 (1)	5.59	14-6	0 / 1531	0.34 (1)
8-9	-1035 / 0	-77.3 -77.3	0.41 (1)	5.59	6-12	-1919 / 0	0.85 (1)
10-9	-1781 / 0	0.0	0.0 0.66 (1)	5.00	12-7	0 / 1491	0.34 (1)
19-2	-1892 / 0	0.0	0.0 0.19 (1)	6.10	7-11	-1164 / 0	0.86 (1)
					11-8	-519 / 0	0.27 (1)
19-18	0 / 0	-17.5 -17.5	0.11 (3)	10.00	11-9	0 / 1919	0.43 (1)
18-17	0 / 2349	-17.5 -17.5	0.44 (1)	10.00	2-18	0 / 2397	0.54 (1)
17-16	0 / 5344	-17.5 -17.5	0.95 (1)	10.00			
16-15	0 / 5344	-17.5 -17.5	0.95 (1)	10.00			
15-14	0 / 5342	-17.5 -17.5	0.93 (1)	10.00			
14-13	0 / 2937	-17.5 -17.5	0.53 (1)	10.00			
13-12	0 / 2937	-17.5 -17.5	0.53 (1)	10.00			
12-11	0 / 1646	-17.5 -17.5	0.33 (1)	10.00			
11-10	0 / 0	-17.5 -17.5	0.13 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.44")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/590 (0.78")

CSI: TC=0.94 (4-5:1), BC=0.95 (15-17:1), WB=0.86 (7-11:1), SSI=0.22 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

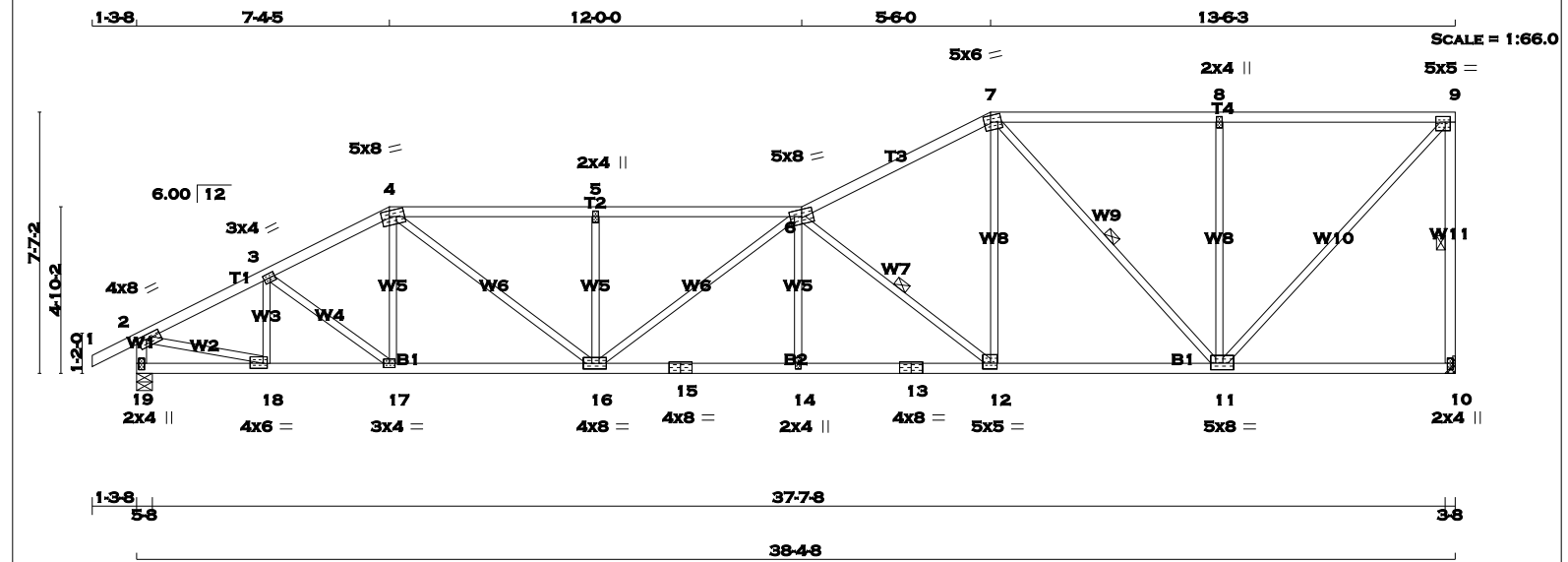
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (17) (INPUT = 0.90)
JSI METAL= 0.99 (16) (INPUT = 1.00)

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17-5001
BUILDING DIVISION

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





TOTAL WEIGHT = 163 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
19 - 2	2x4	DRY	No.2	SPF
19 - 15	2x4	DRY	No.2	SPF
15 - 13	2x4	DRY	No.2	SPF
13 - 10	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	8.0	1.50	3.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TTWW-m	MT20	5.0	8.0	2.00	2.75
5	TMVW-w	MT20	2.0	4.0		
6	TTWWW-m	MT20	5.0	8.0		
7	TTWW-m	MT20	5.0	6.0	2.25	2.25
8	TMVW-w	MT20	2.0	4.0		
9	TMVW-t	MT20	5.0	5.0	2.00	1.75
10	BMV1+p	MT20	2.0	4.0	2.25	1.00
11	BMVWW-t	MT20	5.0	8.0	2.25	1.75
12	BMVW-t	MT20	5.0	5.0	2.00	2.25
13	BS-t	MT20	4.0	8.0		
14	BMVW-w	MT20	2.0	4.0		
15	BS-t	MT20	4.0	8.0		
16	BMVWW-t	MT20	4.0	8.0	2.00	3.00
17	BMVW-t	MT20	3.0	4.0		
18	BMVW-t	MT20	4.0	6.0	1.75	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									
<u>BEARINGS</u>									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG			
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
10	1820	0	1820	0	0	HANGER BY OTHERS			
19	1925	0	1925	0	0	MIN. SEAT SIZE: 3-8		5-8	
<u>UNFACTORED REACTIONS</u>									
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE					
10	1277	893 / 0	0 / 0	0 / 0	0 / 0	0 / 0	384 / 0	0 / 0	
19	1349	957 / 0	0 / 0	0 / 0	0 / 0	0 / 0	392 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.03 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-10. DBS = 8-0-0 . CBF = 89 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-12. DBS = 6-0-0 . CBF = 81 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-11. DBS = 14-0-0 . CBF = 93 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: (3)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. (PLF)	MAX. LOAD LC1	MAX. UNBRACED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	18-3	-473 / 0	0.09 (1)		
2-3	-2547 / 0	-77.3 -77.3	0.23 (1)	4.14	3-17	0 / 128	0.03 (1)		
3-4	-2689 / 0	-77.3 -77.3	0.23 (1)	4.03	17-4	0 / 70	0.02 (3)		
4-5	-3559 / 0	-77.3 -77.3	0.80 (1)	3.03	4-16	0 / 1464	0.33 (1)		
5-6	-3559 / 0	-77.3 -77.3	0.80 (1)	3.03	16-5	-562 / 0	0.19 (1)		
6-7	-2426 / 0	-77.3 -77.3	0.59 (1)	3.84	16-6	-361 / 0	0.39 (1)		
7-8	-1474 / 0	-77.3 -77.3	0.71 (1)	4.39	14-6	0 / 110	0.04 (3)		
8-9	-1474 / 0	-77.3 -77.3	0.72 (1)	4.39	6-12	-2156 / 0	0.77 (1)		
10-9	-1771 / 0	0.0 0.0	0.46 (1)	5.02	12-7	0 / 1464	0.33 (1)		
19-2	-1888 / 0	0.0 0.0	0.19 (1)	6.11	7-11	-1064 / 0	0.73 (1)		
					11-8	-648 / 0	0.68 (1)		
					11-9	0 / 2152	0.48 (1)		
					2-18	0 / 2347	0.53 (1)		
19-18	0 / 0	-17.5 -17.5	0.06 (3)	10.00					
18-17	0 / 2289	-17.5 -17.5	0.43 (1)	10.00					
17-16	0 / 2392	-17.5 -17.5	0.44 (1)	10.00					
16-15	0 / 3847	-17.5 -17.5	0.68 (1)	10.00					
15-14	0 / 3847	-17.5 -17.5	0.68 (1)	10.00					
14-13	0 / 3845	-17.5 -17.5	0.68 (1)	10.00					
13-12	0 / 3845	-17.5 -17.5	0.68 (1)	10.00					
12-11	0 / 2191	-17.5 -17.5	0.46 (1)	10.00					
11-10	0 / 0	-17.5 -17.5	0.20 (3)	10.00					

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.28")
ALLOWABLE DEFL.(TL)= L/360 (1.28")
CALCULATED VERT. DEFL.(TL) = L/ 925 (0.50")

CSI: TC=0.80 (4-5:1), BC=0.68 (14-16:1), WB=0.77 (6-12:1), SSI=0.26 (8-9:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

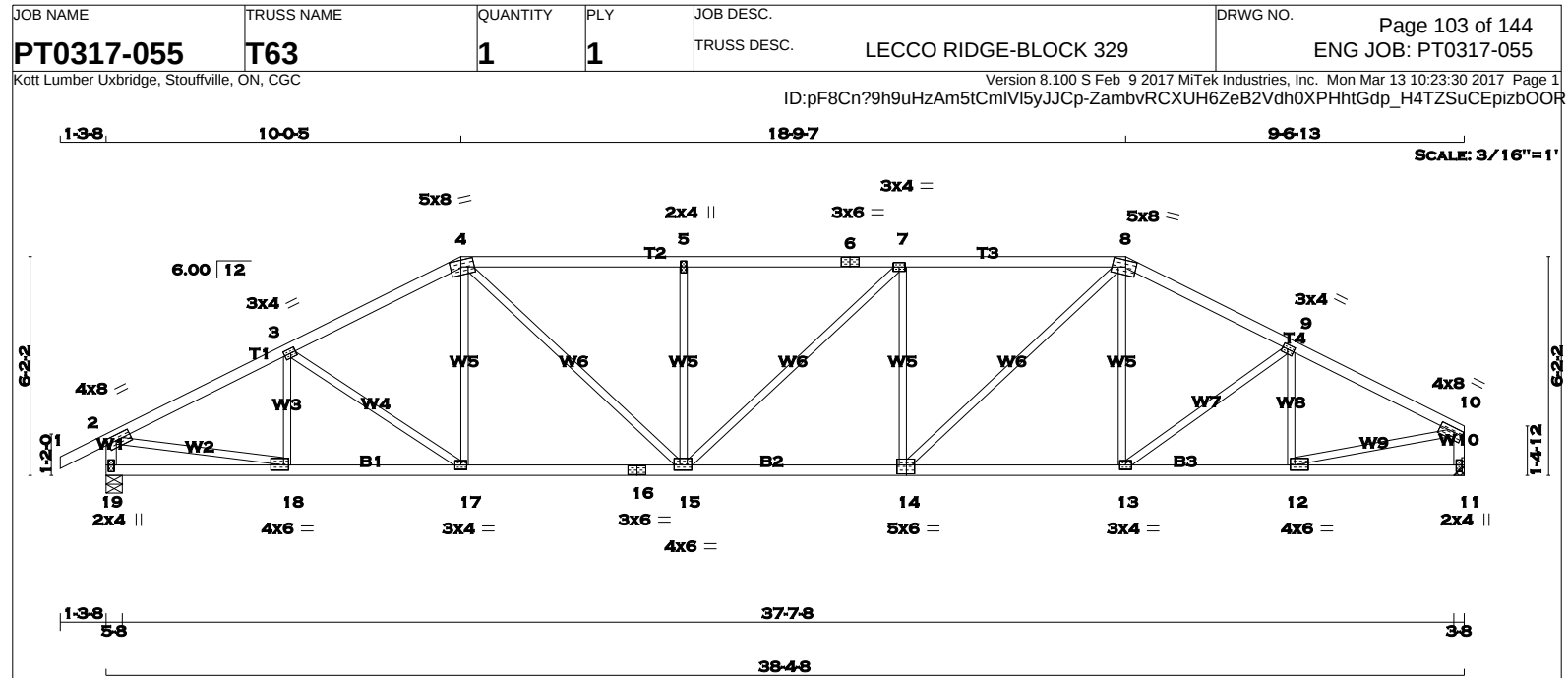
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.77 (15) (INPUT = 1.00)

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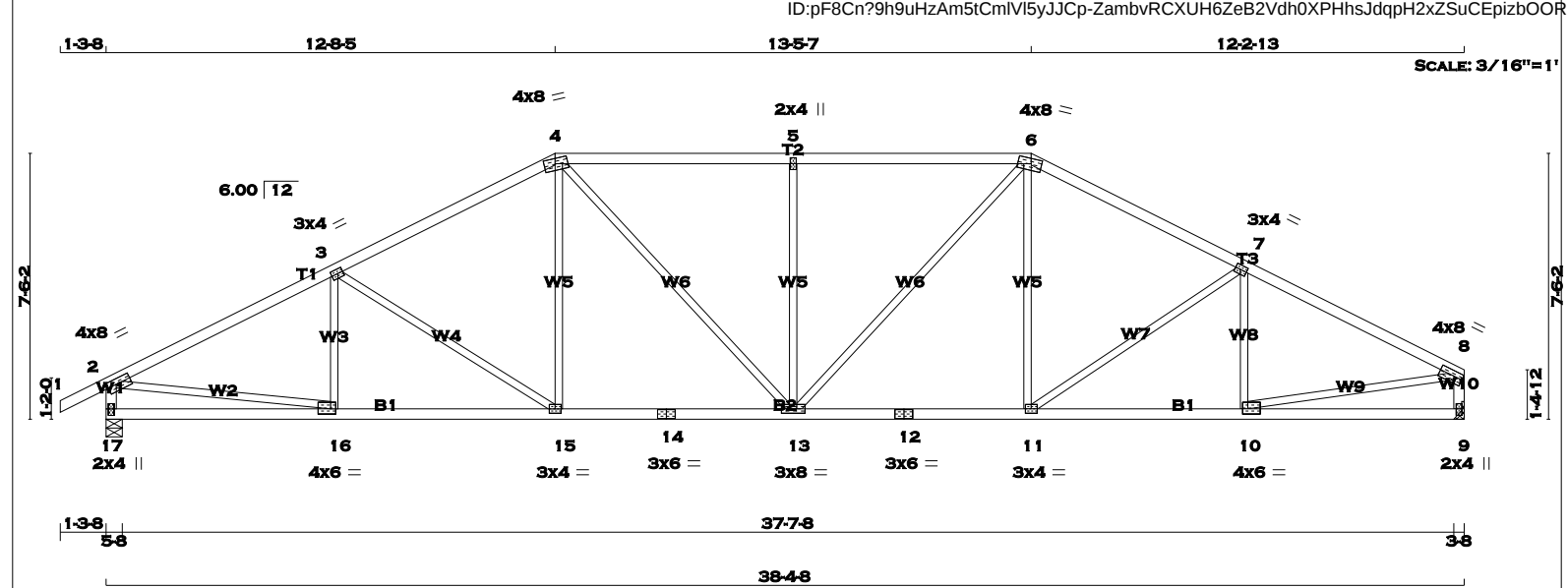
LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA																																																																																																																																																																						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



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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

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

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

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

1

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

11

BMVW-t

MT20

4.0

6.0

1.75

1.75

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

JT	TYPE	PLATES	W	LEN	Y	X
1	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
11	BMVW-t	MT20	4.0	6.0	1.75	1.75
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.

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: (3)

CHORDS

MEMB.

FORCE

VERT. LOAD

LC1

MAX

CS1 (LC)

UNBRAC

MEMB.

FORCE

MAX

CS1 (LC)

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)

17-16

0 / 0

-17.5

-17.5

0.16 (3)

10.00

10-8

0 / 2515

0.57 (1)

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 (3)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

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 (0.16")

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)

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LICENSED PROFESSIONAL ENGINEER

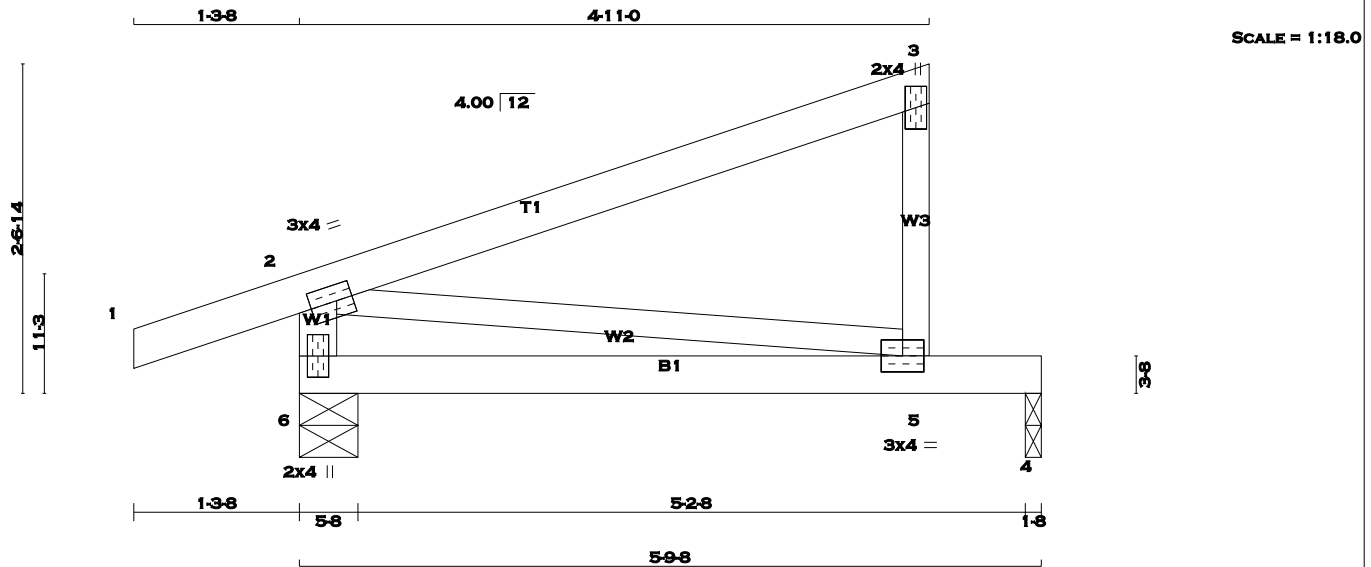
PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

KOTT



TOTAL WEIGHT = 14 X 20 = 278 lb [M]

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

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT		GROSS REACTION		GROSS REACTION		BRG		BRG	
6		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
4		373	0	373	0	5-8		5-8	
4		212	0	212	0	1-8		1-8	

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS							
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND		DEAD	SOIL
6		260	194 / 0	0 / 0	0 / 0	0 / 0		66 / 0	0 / 0
4		150	97 / 0	0 / 0	0 / 0	0 / 0		53 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS		FACTORED		FACTORED		WEBS		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.		FORCE (LBS)	MAX (LC)
FR-TO			FROM TO			FR-TO			
1-2		0 / 16	-77.3	-77.3 0.10 (1)	10.00	2-5		0 / 0	0.00 (1)
2-3		0 / 0	-77.3	-77.3 0.32 (1)	10.00				
5-3		-190 / 0	0.0	0.0 0.03 (1)	7.81				
6-2		-294 / 0	0.0	0.0 0.03 (1)	7.81				
6-5		0 / 0	-17.5	-17.5 0.25 (1)	10.00				
5-4		0 / 0	-17.5	-17.5 0.24 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.32 (2-3:1) , BC=0.25 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.17 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	
MAX MIN	MAX MIN	MAX MIN	
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

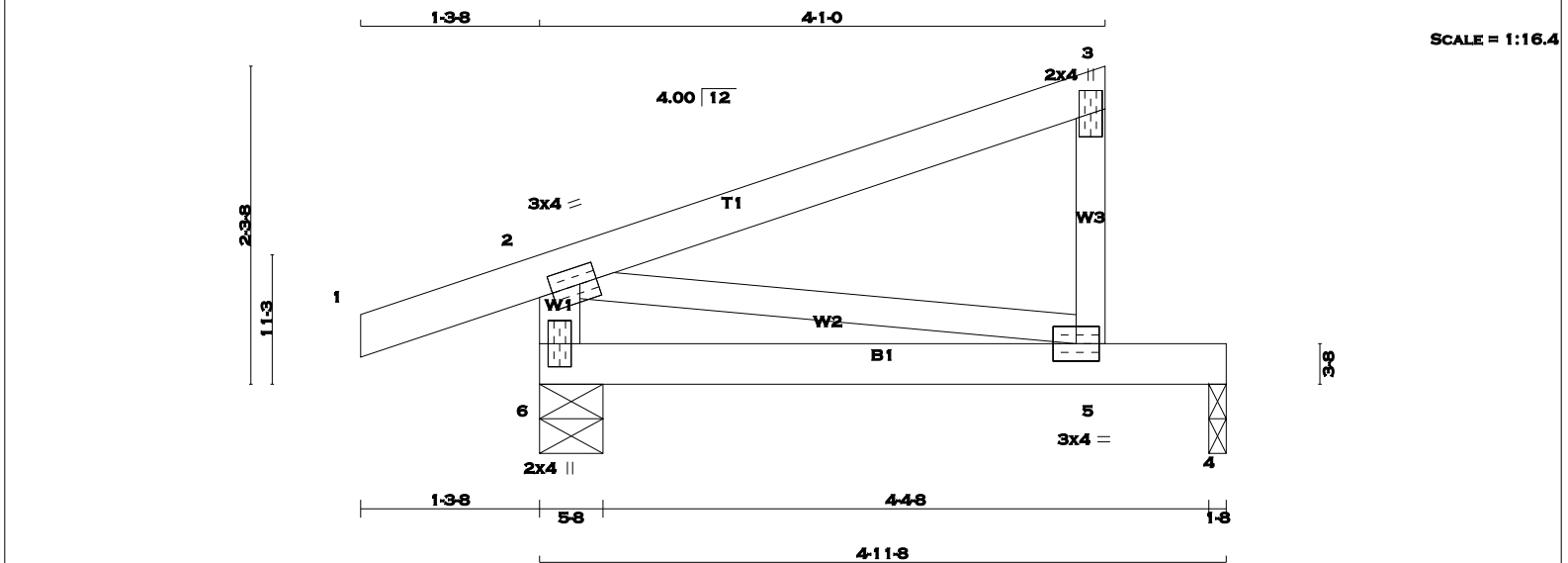
JSI GRIP= 0.27 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)



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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 3 2x4 DRY No.2 SPF
5 - 3 2x3 DRY No.2 SPF
6 - 2 2x4 DRY No.2 SPF
6 - 4 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
DRY: SEASONED LUMBER.

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN./C
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010
THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 872 (0.07")
CSI: TC=0.22 (2-3:1) , BC=0.20 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.14 (4-5:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10
COMPANION LIVE LOAD FACTOR = 0.50
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(P.S.I) (P.LI) (P.LI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.24 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
2 TMVW-t MT20 3.0 4.0 1.50 1.50
3 TMV+p MT20 2.0 4.0
5 BMVW-t MT20 3.0 4.0
6 BMV1+p MT20 2.0 4.0
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

UNFACTORED REACTIONS
1ST LCASE MAX./MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
6 231 174 / 0 0 / 0 0 / 0 0 / 0 57 / 0 0 / 0
4 123 78 / 0 0 / 0 0 / 0 0 / 0 45 / 0 0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 4
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.
LOADING
TOTAL LOAD CASES: (3)
CHORDS WEBS
MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX. UNBRACED LENGTH (LC) FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. UNBRACED LENGTH (LC) FR-TO
1-2 0 / 16 -77.3 -77.3 0.10 (1) 10.00 2-5 0 / 0 0.00 (1)
2-3 0 / 0 -77.3 -77.3 0.22 (1) 10.00
5-3 -158 / 0 0.0 0.0 0.03 (1) 7.81
6-2 -261 / 0 0.0 0.0 0.03 (1) 7.81
6-5 0 / 0 -17.5 -17.5 0.20 (1) 10.00
5-4 0 / 0 -17.5 -17.5 0.20 (1) 10.00

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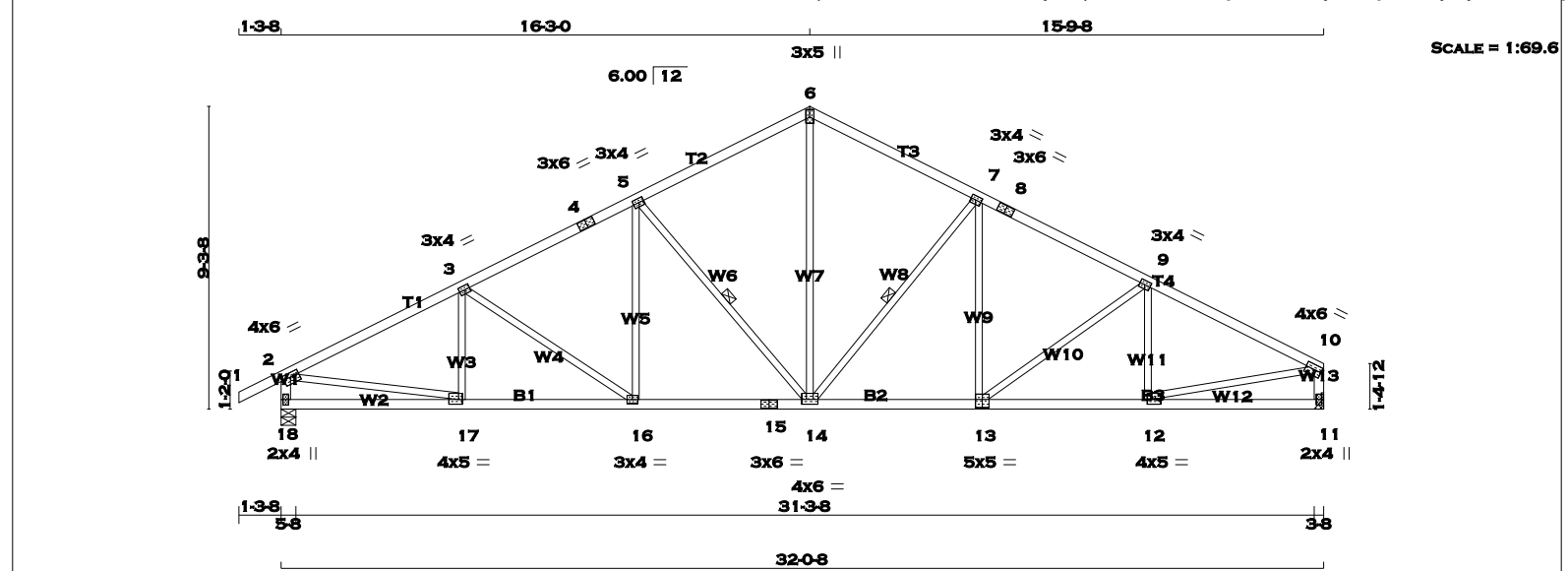
CONTAINS SPECIFICATIONS AND CRITERIA USED

IN THE DESIGN OF THIS COMPONENT.



JSI GRIP= 0.90 (20) (INPUT = 0.90)
JSI METAL= 0.83 (10) (INPUT = 1.00)





TOTAL WEIGHT = 3 X 135 = 405 lb [M][F]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 6	2x4	DRY	No.2	SPF	SPF
6 - 8	2x4	DRY	No.2	SPF	SPF
8 - 10	2x4	DRY	No.2	SPF	SPF
18 - 2	2x4	DRY	No.2	SPF	SPF
11 - 10	2x4	DRY	No.2	SPF	SPF
18 - 15	2x4	DRY	No.2	SPF	SPF
15 - 13	2x4	DRY	No.2	SPF	SPF
13 - 11	2x4	DRY	No.2	SPF	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	2.75
3, 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	5.0	2.75	1.50
8	TS-t	MT20	3.0	6.0		
10	TMVW-t	MT20	4.0	6.0	1.75	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMVW-t	MT20	4.0	5.0	1.75	1.50
13	BSVW-t	MT20	5.0	5.0	3.00	2.50
14	BMVWVW-t	MT20	4.0	6.0	1.75	3.00
15	BS-t	MT20	3.0	6.0		
16	BMVW-t	MT20	3.0	4.0		
17	BMVW-t	MT20	4.0	5.0	1.75	1.50
18	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
<u>BEARINGS</u>							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
18	1624	0	1624	0	0	5-8	5-8
11	1520	0	1520	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 3-8							

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
18	1138	809 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
11	1066	746 / 0	0 / 0	0 / 0	0 / 0	320 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14, 7-14. DBS = 20-0-0 . CBF = 79 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.		MAX. FACTORED	FACTORED	MEMB.		MAX. FACTORED	FACTORED
		FORCE (LBS)	VERT. LOAD (PLF)			FORCE (LBS)	MAX (LC)
FR-TO			FROM TO	FR-TO			UNBRAC LENGTH
1-2		0 / 23	-77.3 -77.3	10.00	17-3	-205 / 29	0.05 (1)
2-3		-2205 / 0	-77.3 -77.3	0.36 (1)	4.28	3-16	-262 / 0
3-4		-1980 / 0	-77.3 -77.3	0.30 (1)	4.55	16-5	0 / 238
4-5		-1980 / 0	-77.3 -77.3	0.30 (1)	4.55	5-14	-636 / 0
5-6		-1538 / 0	-77.3 -77.3	0.29 (1)	5.02	14-6	0 / 1029
6-7		-1537 / 0	-77.3 -77.3	0.27 (1)	5.04	14-7	-576 / 0
7-8		-1927 / 0	-77.3 -77.3	0.28 (1)	4.61	13-7	0 / 190
8-9		-1927 / 0	-77.3 -77.3	0.28 (1)	4.61	13-9	-175 / 0
9-10		-2067 / 0	-77.3 -77.3	0.33 (1)	4.43	12-9	-275 / 6
18-2		-1582 / 0	0.0	0.0	0.16 (1)	6.56	2-17
11-10		-1478 / 0	0.0	0.0	0.15 (1)	6.74	12-10
18-17		0 / 0	-17.5 -17.5	0.12 (3)	10.00		
17-16		0 / 1987	-17.5 -17.5	0.36 (1)	10.00		
16-15		0 / 1771	-17.5 -17.5	0.35 (1)	10.00		
15-14		0 / 1771	-17.5 -17.5	0.35 (1)	10.00		
14-13		0 / 1723	-17.5 -17.5	0.34 (1)	10.00		
13-12		0 / 1864	-17.5 -17.5	0.35 (1)	10.00		
12-11		0 / 0	-17.5 -17.5	0.11 (3)	10.00		

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL	=	23.3 PSF
	DL	=	3.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.0 PSF
TOTAL LOAD = 33.3 PSF			

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.07")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.36 (2-3:1) , BC=0.36 (16-17:1) , WB=0.45 (2-17:1) , 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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

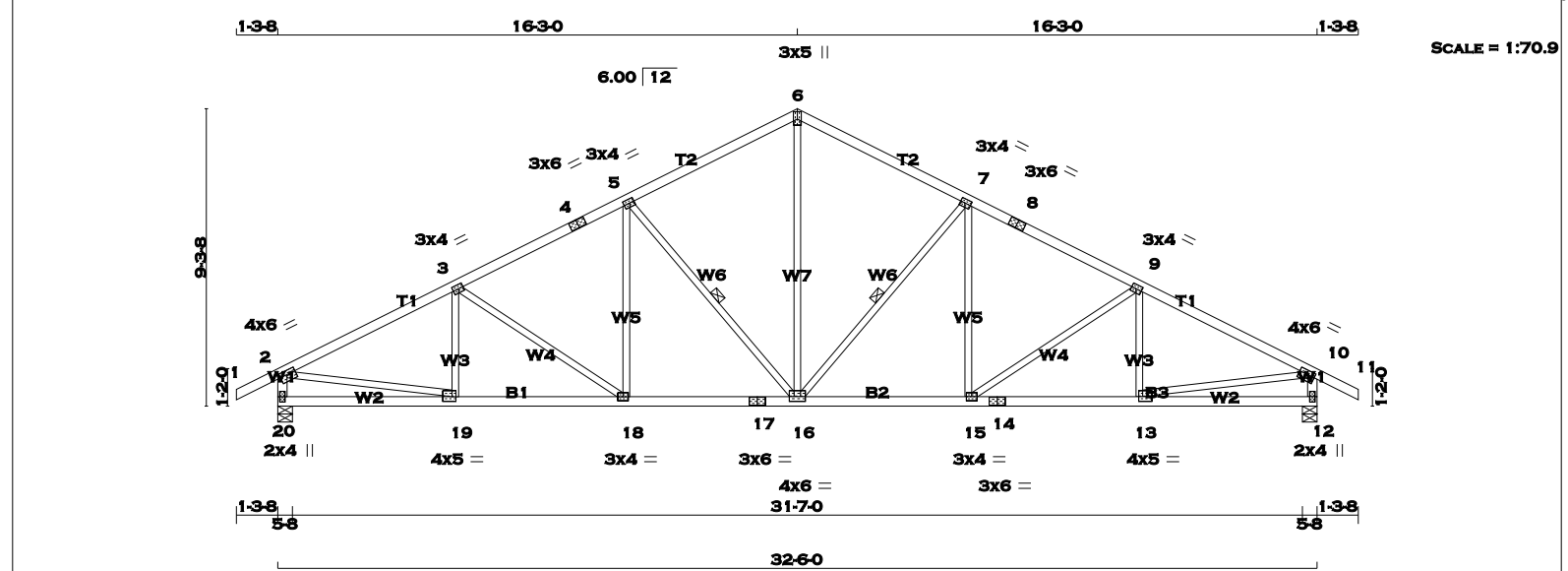
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (12) (INPUT = 0.90)
JSI METAL= 0.60 (17) (INPUT = 1.00)

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READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.





LUMBER		CHORDS		SIZE		LUMBER		DESCR.	
N. L. G. A. RULES		CHORDS		SIZE		LUMBER		DESCR.	
1 - 4		2x4		DRY		No.2		SPF	
4 - 6		2x4		DRY		No.2		SPF	
6 - 8		2x4		DRY		No.2		SPF	
8 - 11		2x4		DRY		No.2		SPF	
20 - 2		2x4		DRY		No.2		SPF	
12 - 10		2x4		DRY		No.2		SPF	
20 - 17		2x4		DRY		No.2		SPF	
17 - 14		2x4		DRY		No.2		SPF	
14 - 12		2x4		DRY		No.2		SPF	
ALL WEBS EXCEPT		2x3		DRY		No.2		SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)		JT		TYPE		PLATES		W		LEN		Y		X	
2		TMVW-t		MT20		4.0		6.0		1.50		2.75			
3, 5, 7, 9		TMVW-t		MT20		3.0		4.0		1.50		1.75			
4		TS-t		MT20		3.0		6.0							
6		TTW+p		MT20		3.0		5.0		2.75		1.50			
8		TS-t		MT20		3.0		6.0							
10		TMVW-t		MT20		4.0		6.0		1.50		2.75			
12		BMV1+p		MT20		2.0		4.0							
13		BMVW-t		MT20		4.0		5.0		1.75		1.50			
14		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		3.00			
17		BS-t		MT20		3.0		6.0							
18		BMVW-t		MT20		3.0		4.0							
19		BMVW-t		MT20		4.0		5.0		1.75		1.50			
20		BMV1+p		MT20		2.0		4.0							

A SIZE FOR SIZE SUBSTITUTION OF MIITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

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DRY: SEASONED LUMBER.

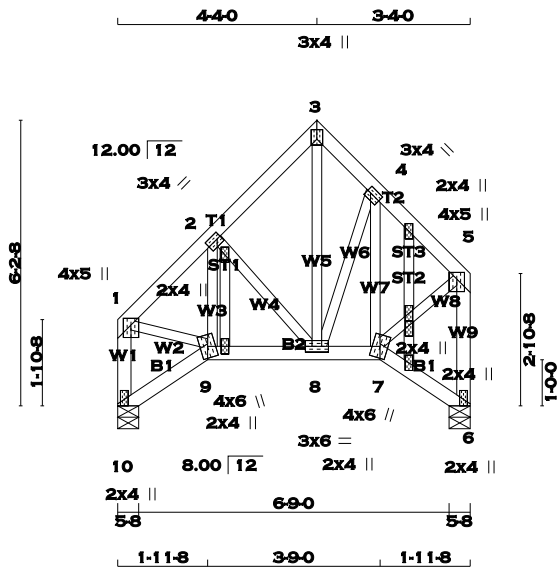
DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.



SCALE = 1:50.1

TOTAL WEIGHT = 2 X 49 = 98 lb

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
10 - 1	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	
10 - 9	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW+p	MT20	4.0	5.0	1.75	2.00
2	TMWW-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0	Edge	
4	TMWW-t	MT20	3.0	4.0	1.50	1.00
5	TMVW+p	MT20	4.0	5.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0	Edge	
7	BBWW+m	MT20	4.0	6.0		
8	BMWWW-t	MT20	3.0	6.0		
9	BBWW+m	MT20	4.0	6.0		
10	BMV1+p	MT20	2.0	4.0	Edge	
11, 12, 13, 14, 15						
11	NP+w	MT20	2.0	4.0		
15	NP+w	MT20	2.0	4.0	1.25	1.00

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	DOWN	UPLIFT	BRG	IN-SX
10	364	0	0	364	0	0	5-8	5-8	5-8
6	364	0	0	364	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
10	255	178 / 0	0 / 0	0 / 0	0 / 0
6	255	178 / 0	0 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 6

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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: (3)		CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB. MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO			
1-2	-307 / 0	-77.3	-77.3 0.04 (1)	6.25	9-2 -21 / 22
2-3	-213 / 0	-77.3	-77.3 0.04 (1)	6.25	2-8 -130 / 0
3-4	-214 / 0	-77.3	-77.3 0.02 (1)	6.25	8-3 0 / 182
4-5	-214 / 0	-77.3	-77.3 0.04 (1)	6.25	8-4 -53 / 0
10-1	-346 / 0	0.0	0.0 0.04 (1)	7.81	7-4 -93 / 0
6-5	-346 / 0	0.0	0.0 0.06 (1)	7.81	1-9 0 / 234
					7-5 0 / 198
10-9	0 / 0	-17.5	-17.5 0.02 (3)	10.00	
9-8	0 / 228	-17.5	-17.5 0.05 (1)	10.00	
8-7	0 / 160	-17.5	-17.5 0.03 (1)	10.00	
7-6	0 / 0	-17.5	-17.5 0.02 (3)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.06 (5-6:1) , BC=0.05 (8-9:1) , WB=0.05 (1-9:1) , SSI=0.06 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

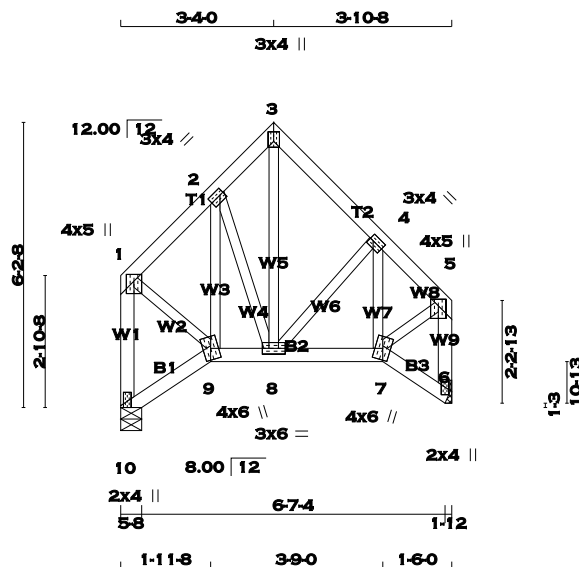
JSI GRIP= 0.58 (3) (INPUT = 0.90)
JSI METAL= 0.08 (10) (INPUT = 1.00)



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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





SCALE = 1:50.2

TOTAL WEIGHT = 2 X 43 = 87 lb

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	SPF	
1 - 3	2x4	DRY	No.2	SPF	
3 - 5	2x4	DRY	No.2	SPF	
10 - 1	2x4	DRY	No.2	SPF	
6 - 5	2x4	DRY	No.2	SPF	
10 - 9	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
7 - 6	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW+p	MT20	4.0	5.0	1.75	2.00
2	TMVW-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0	Edge	
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
5	TMVW+p	MT20	4.0	5.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BBWW+m	MT20	4.0	6.0		
8	BMVW-t	MT20	3.0	6.0		
9	BBWW+m	MT20	4.0	6.0		
10	BMV1+p	MT20	2.0	4.0	Edge	

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
10	342	0	342	0	0
6	342	0	342	0	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	240	168 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
6	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) 10

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: (3)

CHORDS		FACTORED		MAX. FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	FR-TO	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
1-2	-197 / 0	-77.3	-77.3 0.04 (1)	6.25	9-2	-84 / 0	0.02 (1)		
2-3	-193 / 0	-77.3	-77.3 0.03 (1)	6.25	2-8	-61 / 0	0.02 (1)		
3-4	-190 / 0	-77.3	-77.3 0.04 (1)	6.25	8-3	0 / 151	0.03 (1)		
4-5	-233 / 0	-77.3	-77.3 0.04 (1)	6.25	8-4	-78 / 0	0.02 (1)		
10-1	-325 / 0	0.0	0.0 0.06 (1)	7.81	7-4	-80 / 3	0.01 (1)		
6-5	-329 / 0	0.0	0.0 0.04 (1)	7.81	1-9	0 / 183	0.04 (1)		
					7-5	0 / 208	0.05 (1)		
10-9	0 / 0	-17.5	-17.5 0.02 (3)	10.00					
9-8	0 / 147	-17.5	-17.5 0.03 (1)	10.00					
8-7	0 / 178	-17.5	-17.5 0.04 (1)	10.00					
7-6	0 / 0	-17.5	-17.5 0.01 (3)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.01")

CSI: TC=0.06 (1-10:1), BC=0.04 (7-8:1), WB=0.05 (5-7:1), SSI=0.06 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

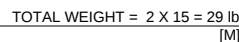
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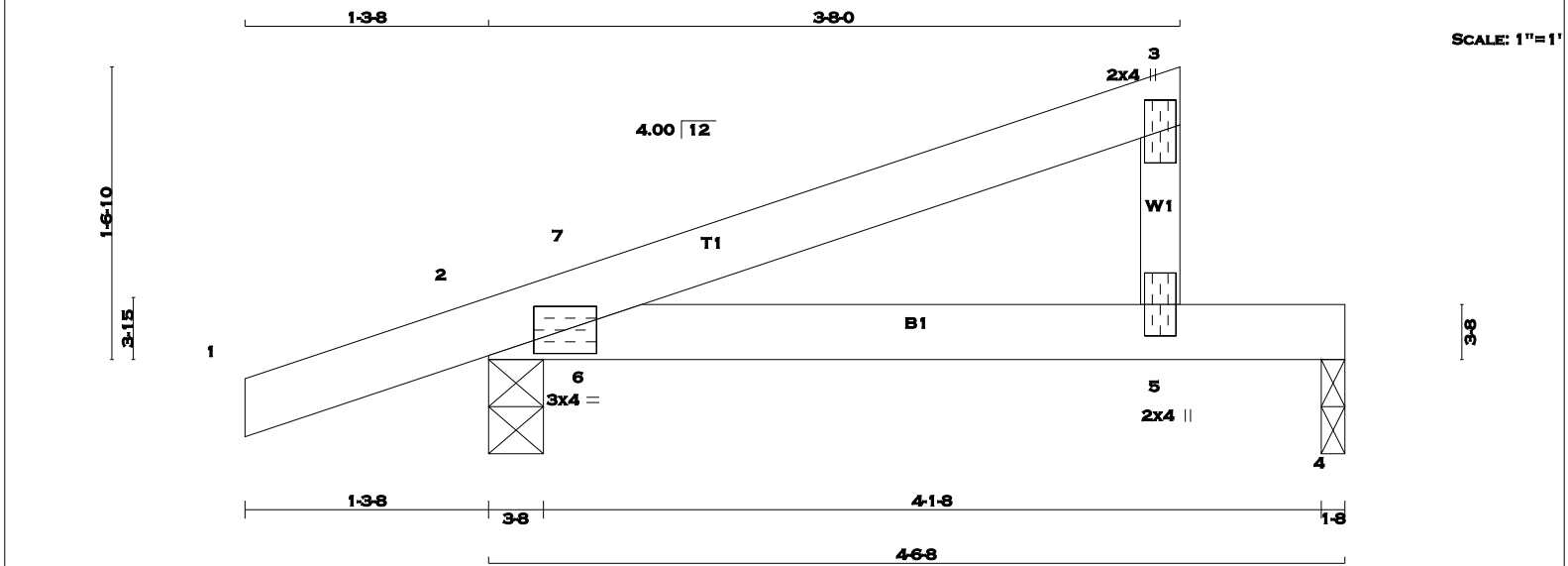


DRY: SEASONED LUMBER.

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 15	-77.3	-77.3 0.10 (1)	10.00	6-7	-91 / 58	0.00 (1)
2-7	-28.0 / 0	-77.3	-77.3 0.09 (3)	6.25			
7-3	0 / 4	-77.3	-77.3 0.25 (1)	10.00			
5-3	-169 / 0	0.0	0.0 0.03 (1)	7.81			
2-6	0 / 0	-17.5	-17.5 0.13 (1)	10.00			
6-5	0 / 0	-17.5	-17.5 0.24 (1)	10.00			
5-4	0 / 0	-17.5	-17.5 0.23 (1)	10.00			





LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
5 - 3	2x3	DRY	No.2	SPF
2 - 4	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMB1-I	MT20	3.0	4.0	
3	TMV+p	MT20	2.0	4.0	
5	BMV+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
2	312	0	312	0	0	3-8	3-8	3-8	3-8
4	154	0	154	0	0	1-8	1-8	1-8	1-8

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
2	217	164 / 0	0 / 0	0 / 0	53 / 0
4	110	69 / 0	0 / 0	0 / 0	41 / 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: (3)	
CHORDS		MEMB.	
FR-TO	MAX. FACTORED FORCE (LBS)	FR-TO	MAX. FACTORED FORCE (LBS)
1-2	0 / 15	6-7	-46 / 43
2-7	-28 / 0		
7-3	0 / 5		
5-3	-134 / 0		
2-6	0 / 0		
6-5	0 / 0		
5-4	0 / 0		

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 978 (0.06")

CSI: TC=0.16 (3-7:1), BC=0.18 (5-6:1), WB=0.00 (6-7:1), SSI=0.12 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

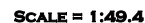
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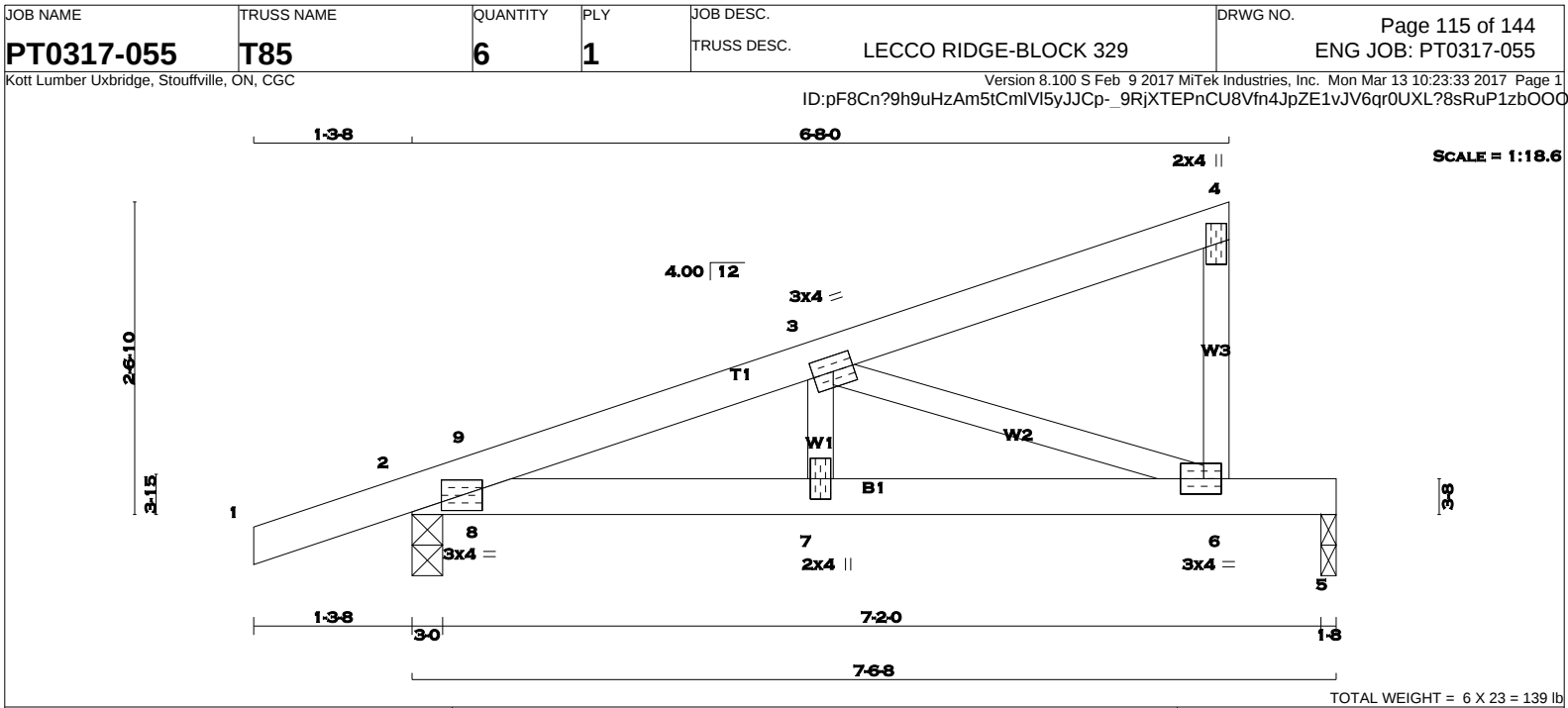


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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 4 2x4 DRY No.2 SPF
6 - 4 2x3 DRY No.2 SPF
2 - 5 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-I	MT20	3.0	4.0		
3	TMVW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0	1.50	1.75
7	BMW+w	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
2	457	0	457	0	3-0	3-0
5	294	0	294	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2	319	236 / 0	0 / 0	0 / 0	0 / 0	83 / 0	0 / 0
5	208	137 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 2, 5

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1 MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 15	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 190	0.04 (1)
2-9	-732 / 0	-77.3 -77.3	0.01 (1)	6.25	3-6	-726 / 0	0.16 (1)
9-3	-717 / 0	-77.3 -77.3	0.07 (1)	6.25	8-9	-84 / 2	0.00 (1)
3-4	-6 / 0	-77.3 -77.3	0.10 (1)	10.00			
6-4	-110 / 0	0.0 0.0	0.02 (1)	7.81			
2-8	0 / 687	-17.5 -17.5	0.17 (1)	10.00			
8-7	0 / 687	-17.5 -17.5	0.20 (1)	10.00			
7-6	0 / 687	-17.5 -17.5	0.45 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.34 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.25")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.10 (3-4:1) , BC=0.45 (6-7:1) , WB=0.16 (3-6:1) , SSI=0.23 (5-6:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

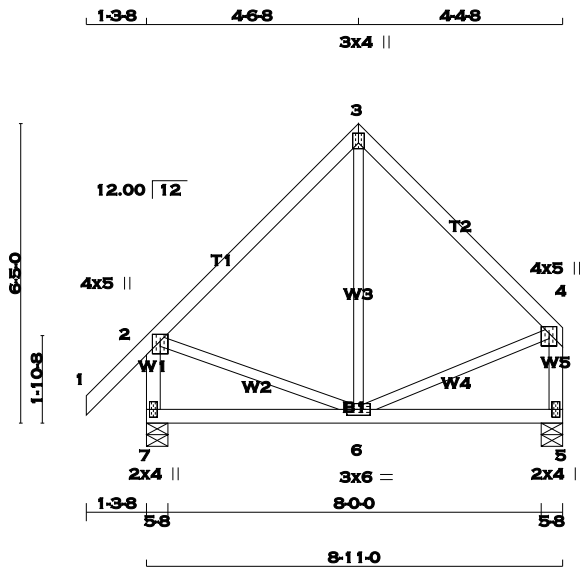
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SCALE = 1:49.4

TOTAL WEIGHT = 4 X 43 = 170 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
3 - 4	2x4	DRY	No.2		SPF
7 - 2	2x4	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
7 - 5	2x4	DRY	No.2		SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW+p	MT20	4.0	5.0	1.75	2.00
3	TTW+p	MT20	3.0	4.0	Edge	
4	TMVW+p	MT20	4.0	5.0	1.75	2.00
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	DOWN	UPLIFT
7	531	0	531	0	0
5	423	0	423	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	370	273 / 0	0 / 0	0 / 0	0 / 0	98 / 0	0 / 0
5	297	208 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL Load CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 38	-77.3 -77.3	0.11 (1)	10.00	6-3	-21 / 70	0.02 (3)
2-3	-229 / 0	-77.3 -77.3	0.20 (1)	6.25	2-6	0 / 171	0.04 (1)
3-4	-229 / 0	-77.3 -77.3	0.19 (1)	6.25	6-4	0 / 174	0.04 (1)
7-2	-500 / 0	0.0 0.0	0.06 (1)	7.81			
5-4	-394 / 0	0.0 0.0	0.05 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.10 (3)	10.00			
6-5	0 / 0	-17.5 -17.5	0.10 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.30")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.30")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.20 (2-3:1) , BC=0.10 (6-7:3) , WB=0.04 (4-6:1) , SSI=0.10 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

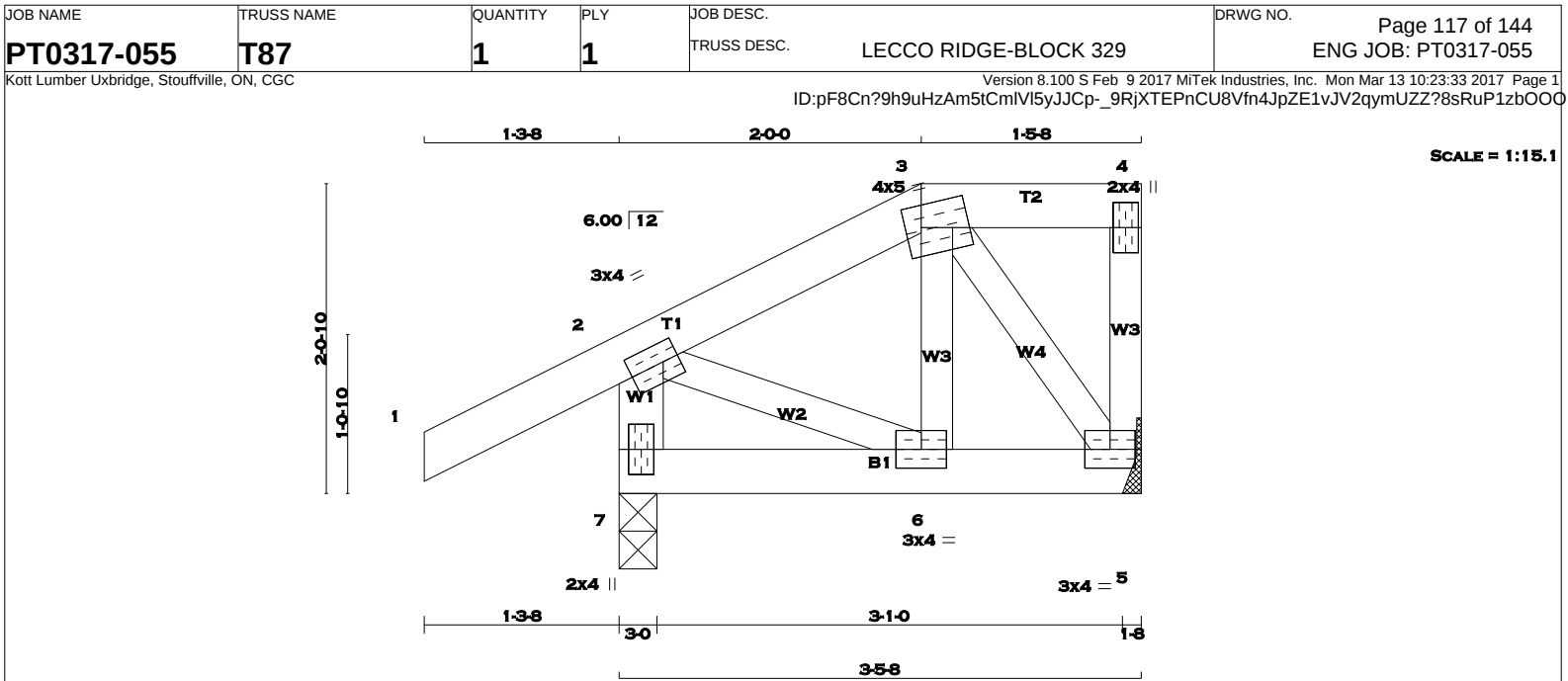
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JSI METAL= 0.09 (7) (INPUT = 1.00)



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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.

1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
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 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TMV+p	MT20	2.0	4.0		
5	BMVW1-t	MT20	3.0	4.0		
6	BMVW-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT DOWN	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
5	164	0	164	0	0	HANGER BY OTHERS
7	269	0	269	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	115	81 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0
7	186	144 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	6-3	0 / 32	0.01 (3)
2-3	-91 / 0	-77.3	-77.3 0.05 (1)	6.25	3-5	-127 / 0	0.02 (1)
3-4	0 / 0	-77.3	-77.3 0.03 (1)	10.00	2-6	0 / 86	0.02 (1)
5-4	-56 / 0	0.0	0.0 0.01 (1)	7.81			
7-2	-252 / 0	0.0	0.0 0.03 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.02 (3)	10.00			
6-5	0 / 81	-17.5	-17.5 0.02 (3)	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

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (1-2:1), BC=0.02 (5-6:3), WB=0.02 (3-5:1), SSI=0.07 (1-2:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

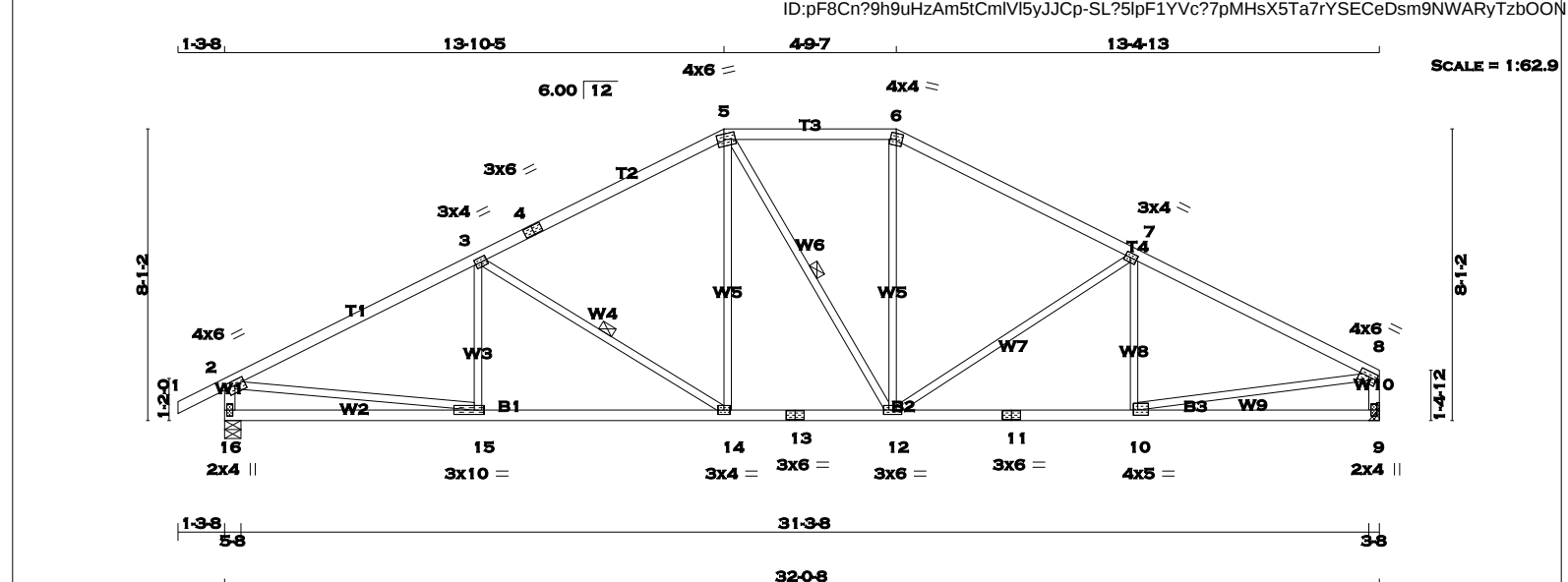
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JSI METAL= 0.06 (2) (INPUT = 1.00)



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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 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 16 - 2 2x4 DRY No.2 SPF 9 - 8 2x4 DRY No.2 SPF 16 - 13 2x4 DRY No.2 SPF 13 - 11 2x4 DRY No.2 SPF 11 - 9 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>FACTORED GROSS REACTION</th> <th>MAXIMUM FACTORED GROSS REACTION</th> <th>INPUT BRG</th> <th>REQRD BRG</th> </tr> </thead> <tbody> <tr> <td>JT VERT</td> <td>1624</td> <td>1624</td> <td>5-8</td> <td>5-8</td> </tr> <tr> <td>16</td> <td>1624</td> <td>1624</td> <td>5-8</td> <td>5-8</td> </tr> <tr> <td>9</td> <td>1520</td> <td>1520</td> <td>HANGER BY OTHERS</td> <td>MIN. SEAT SIZE: 3-8</td> </tr> </tbody> </table> UNFACTORED REACTIONS <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>JT</th> <th>1ST LCASE</th> <th>MAX./MIN. LIVE</th> <th>PERM. LIVE</th> <th>WIND</th> <th>DEAD</th> <th>SOIL</th> </tr> </thead> <tbody> <tr> <td>16</td> <td>1138</td> <td>809 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>329 / 0</td> <td>0 / 0</td> </tr> <tr> <td>9</td> <td>1066</td> <td>746 / 0</td> <td>0 / 0</td> <td>0 / 0</td> <td>320 / 0</td> <td>0 / 0</td> </tr> </tbody> </table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.93 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14, 5-12. DBS = 20-0-0. CBF = 73 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3)		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT VERT	1624	1624	5-8	5-8	16	1624	1624	5-8	5-8	9	1520	1520	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8	JT	1ST LCASE	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL	16	1138	809 / 0	0 / 0	0 / 0	329 / 0	0 / 0	9	1066	746 / 0	0 / 0	0 / 0	320 / 0	0 / 0	DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.07") CALCULATED VERT. DEFL.(LL) = L/999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (1.07") CALCULATED VERT. DEFL.(TL) = L/999 (0.21") CSI: TC=0.63 (2-3:1), BC=0.43 (14-15:1), WB=0.66 (7-12:1), SSI=0.23 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT. NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (15) (INPUT = 0.90) JSI METAL= 0.60 (2) (INPUT = 1.00)
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																							
JT VERT	1624	1624	5-8	5-8																																							
16	1624	1624	5-8	5-8																																							
9	1520	1520	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8																																							
JT	1ST LCASE	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL																																					
16	1138	809 / 0	0 / 0	0 / 0	329 / 0	0 / 0																																					
9	1066	746 / 0	0 / 0	0 / 0	320 / 0	0 / 0																																					

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	2.75
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TTW-m	MT20	4.0	4.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.75	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	4.0	5.0	1.75	1.50
11	BS-t	MT20	3.0	6.0		
12	BMWWW-t	MT20	3.0	6.0		
13	BS-t	MT20	3.0	6.0		
14	BMWW-t	MT20	3.0	4.0		
15	BMWW-t	MT20	3.0	10.0	1.50	3.25
16	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-3	-110 / 86	0.04 (1)
2-3	-2236 / 0	-77.3 -77.3	0.63 (1)	3.93	3-14	-582 / 0	0.27 (1)
3-4	-1745 / 0	-77.3 -77.3	0.56 (1)	4.42	14-5	0 / 407	0.09 (1)
4-5	-1745 / 0	-77.3 -77.3	0.56 (1)	4.42	5-12	-25 / 0	0.01 (1)
5-6	-1526 / 0	-77.3 -77.3	0.26 (1)	5.06	12-6	0 / 386	0.09 (1)
6-7	-1730 / 0	-77.3 -77.3	0.51 (1)	4.50	12-7	-483 / 0	0.66 (1)
7-8	-2122 / 0	-77.3 -77.3	0.57 (1)	4.09	10-7	-175 / 63	0.06 (1)
16-2	-1573 / 0	0.0 0.0	0.16 (1)	6.58	2-15	0 / 2041	0.46 (1)
9-8	-1470 / 0	0.0 0.0	0.15 (1)	6.75	10-8	0 / 1946	0.44 (1)
16-15	0 / 0	-17.5 -17.5	0.21 (3)	10.00			
15-14	0 / 2026	-17.5 -17.5	0.43 (1)	10.00			
14-13	0 / 1539	-17.5 -17.5	0.31 (1)	10.00			
13-12	0 / 1539	-17.5 -17.5	0.31 (1)	10.00			
12-11	0 / 1922	-17.5 -17.5	0.40 (1)	10.00			
11-10	0 / 1922	-17.5 -17.5	0.40 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.20 (3)	10.00			

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

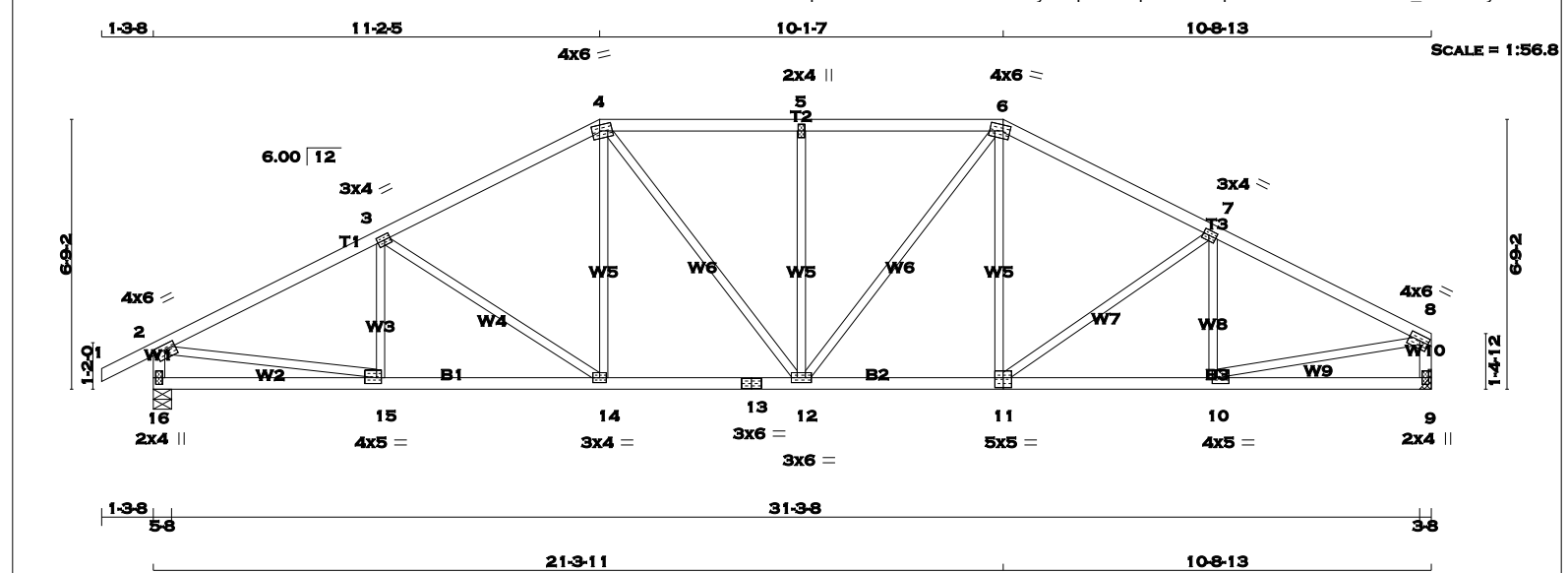
PLATE PLACEMENT TOL. = 0.250 inches

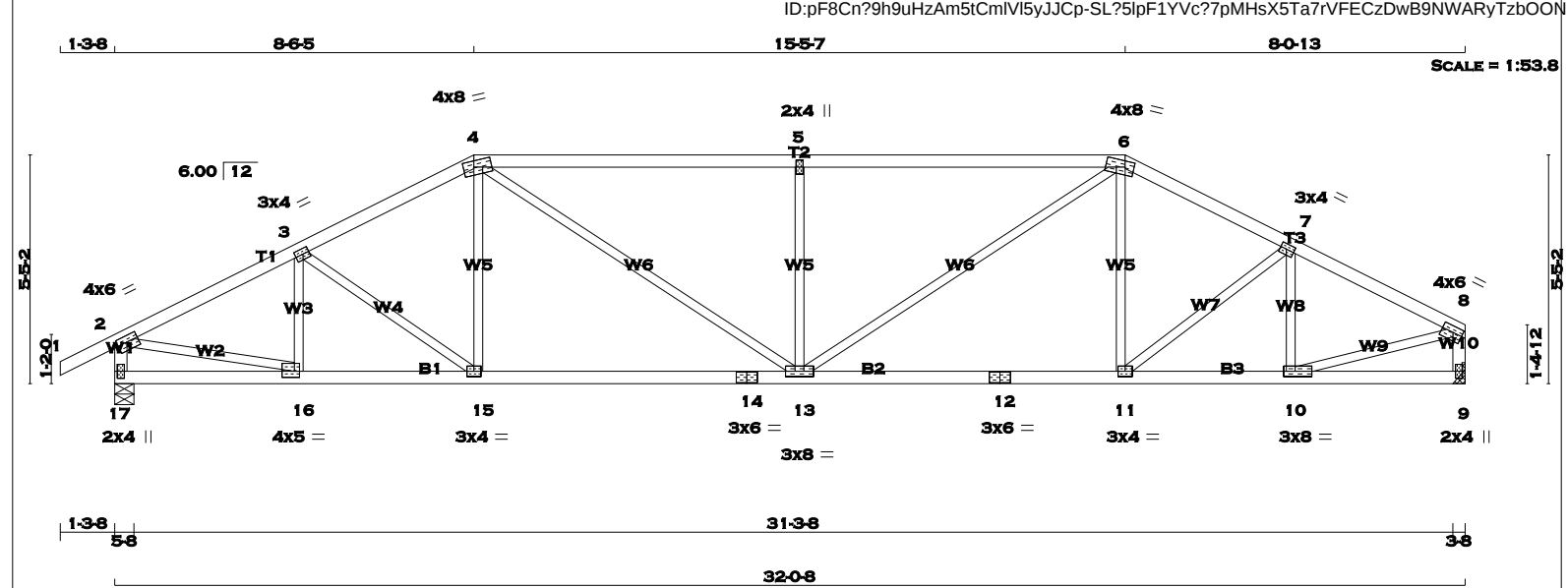
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (15) (INPUT = 0.90)
JSI METAL= 0.60 (2) (INPUT = 1.00)

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TOTAL WEIGHT = 124 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
17 - 2	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
17 - 14	2x4	DRY	No.2
14 - 12	2x4	DRY	No.2
12 - 9	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	4.0	6.0	1.75 2.75
3	TMVW-t	MT20	3.0	4.0	1.50 1.75
4	TTWW-m	MT20	4.0	8.0	1.75 3.00
5	TMW+w	MT20	2.0	4.0	
6	TTWW-m	MT20	4.0	8.0	1.75 2.50
7	TMVW-t	MT20	3.0	4.0	1.50 1.75
8	TMVW-t	MT20	4.0	6.0	1.75 2.75
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	3.0	8.0	1.50 3.25
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	5.0	1.75 1.50
17	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
<u>BEARINGS</u>									
	FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG	
JT	VERT	HORZ		DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
17	1624	0		1624	0	0	5-8	5-8	
9	1520	0		1520	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 3-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
17	1138	809 / 0	0 / 0	PERM.LIVE	WIND	DEAD	SOIL
9	1066	746 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING			
TOTAL LOAD CASES: (3)			
CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO	FR-TO
1-2	0 / 23	-77.3 -77.3	0.10 (1) 10.00
2-3	-2146 / 0	-77.3 -77.3	0.22 (1) 4.46
3-4	-2103 / 0	-77.3 -77.3	0.22 (1) 4.50
4-5	-2493 / 0	-77.3 -77.3	0.77 (1) 3.49
5-6	-2493 / 0	-77.3 -77.3	0.77 (1) 3.49
6-7	-2030 / 0	-77.3 -77.3	0.19 (1) 4.60
7-8	-1972 / 0	-77.3 -77.3	0.19 (1) 4.65
17-2	-1586 / 0	0.0 0.0	0.16 (1) 6.55
9-8	-1483 / 0	0.0 0.0	0.15 (1) 6.73
17-16	0 / 0	-17.5 -17.5	0.08 (3) 10.00
16-15	0 / 1934	-17.5 -17.5	0.40 (1) 10.00
15-14	0 / 1868	-17.5 -17.5	0.41 (1) 10.00
14-13	0 / 1868	-17.5 -17.5	0.41 (1) 10.00
13-12	0 / 1802	-17.5 -17.5	0.40 (1) 10.00
12-11	0 / 1802	-17.5 -17.5	0.40 (1) 10.00
11-10	0 / 1777	-17.5 -17.5	0.37 (1) 10.00
10-9	0 / 0	-17.5 -17.5	0.07 (3) 10.00

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL	=	23.3 PSF
	DL	=	3.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.0 PSF
TOTAL LOAD = 33.3 PSF			

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.07")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.25")

CSI: TC=0.77 (4-5:1), BC=0.41 (13-15:1), WB=0.44 (2-16:1), SSI=0.29 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
	(PSI)	(PLI)	(PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

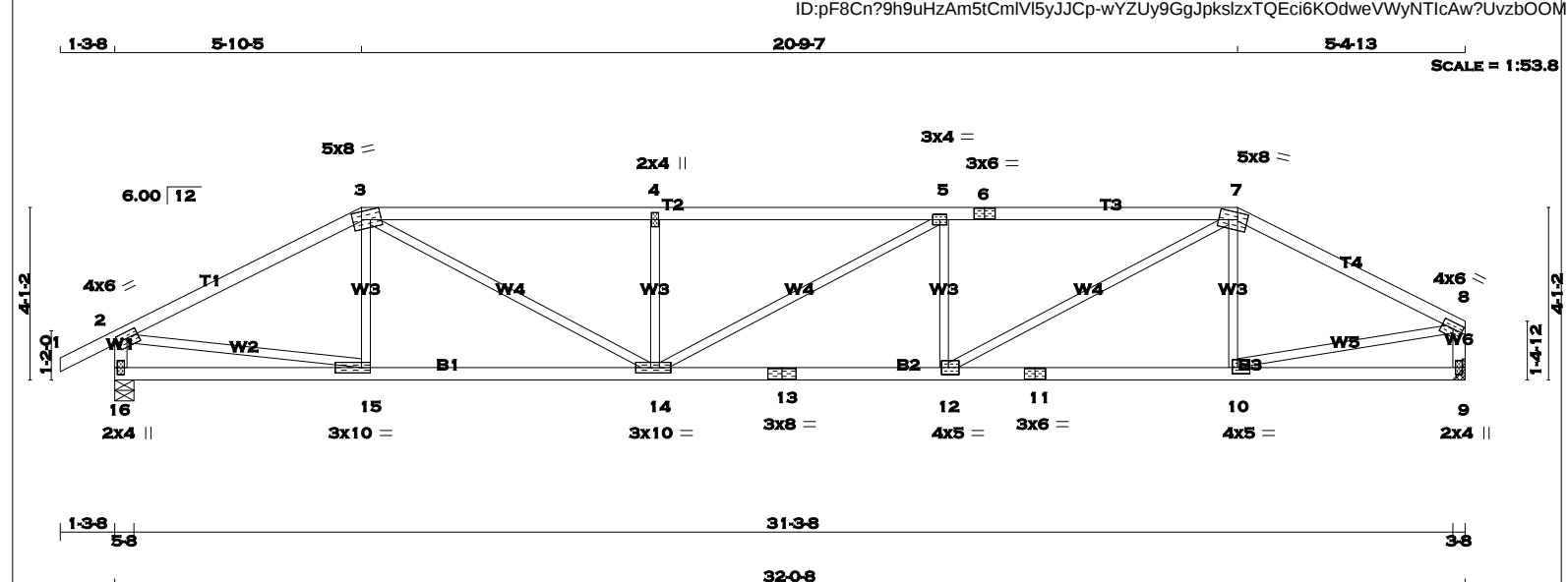
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (6) (INPUT = 0.90)
JSI METAL= 0.58 (16) (INPUT = 1.00)

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TOTAL WEIGHT = 117 lb
[M]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
1 - 3	2x4	DRY	No.2
3 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2
7 - 8	2x4	DRY	No.2
16 - 2	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DESCR. SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	6.0	1.75 2.75
3	TTWW-m	MT20	5.0	8.0	2.25 2.50
4	TMW+w	MT20	2.0	4.0	
5	TMWW-t	MT20	3.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TTWW-m	MT20	5.0	8.0	2.00 2.75
8	TMVW-t	MT20	4.0	6.0	1.75 2.75
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	5.0	1.75 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWW-t	MT20	4.0	5.0	2.00 2.00
13	BS-t	MT20	3.0	8.0	
14	BMWWW-t	MT20	3.0	10.0	1.50 4.25
15	BMWW-t	MT20	3.0	10.0	1.50 2.50
16	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
16	1624	0	1624	0	0
9	1520	0	1520	0	0

HANGER BY OTHERS
MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	LIVE	PERM.LIVE	WIND	DEAD	SOIL
16	1138	809 / 0	0 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
9	1066	746 / 0	0 / 0	0 / 0	0 / 0	0 / 0	320 / 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 = 3.19 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.

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC1)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-3	-153 / 56	0.04 (1)
2-3	-2170 / 0	-77.3 -77.3	0.64 (1)	3.96	3-14	0 / 1413	0.32 (1)
3-4	-3176 / 0	-77.3 -77.3	0.91 (1)	3.19	14-4	-581 / 0	0.15 (1)
4-5	-3176 / 0	-77.3 -77.3	0.89 (1)	3.19	14-5	0 / 44	0.01 (1)
5-6	-3138 / 0	-77.3 -77.3	0.90 (1)	3.21	12-5	-602 / 0	0.15 (1)
6-7	-3138 / 0	-77.3 -77.3	0.90 (1)	3.21	12-7	0 / 1506	0.34 (1)
7-8	-2039 / 0	-77.3 -77.3	0.52 (1)	4.20	10-7	-239 / 26	0.06 (1)
16-2	-1583 / 0	0.0	0.16 (1)	6.56	2-15	0 / 1960	0.44 (1)
9-8	-1483 / 0	0.0	0.15 (1)	6.73	10-8	0 / 1858	0.42 (1)
16-15	0 / 0	-17.5 -17.5	0.17 (3)	10.00			
15-14	0 / 1936	-17.5 -17.5	0.40 (1)	10.00			
14-13	0 / 3138	-17.5 -17.5	0.58 (1)	10.00			
13-12	0 / 3138	-17.5 -17.5	0.58 (1)	10.00			
12-11	0 / 1816	-17.5 -17.5	0.38 (1)	10.00			
11-10	0 / 1816	-17.5 -17.5	0.38 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.15 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
	DL	=	3.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD	=	33.3	PSF	

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.07")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.21")
ALLOWABLE DEFL.(TL)= L/360 (1.07")
CALCULATED VERT. DEFL.(TL) = L/ 977 (0.39")

CSI: TC=0.91 (3-4:1), BC=0.58 (12-14:1), WB=0.44 (2-15:1), SSI=0.25 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

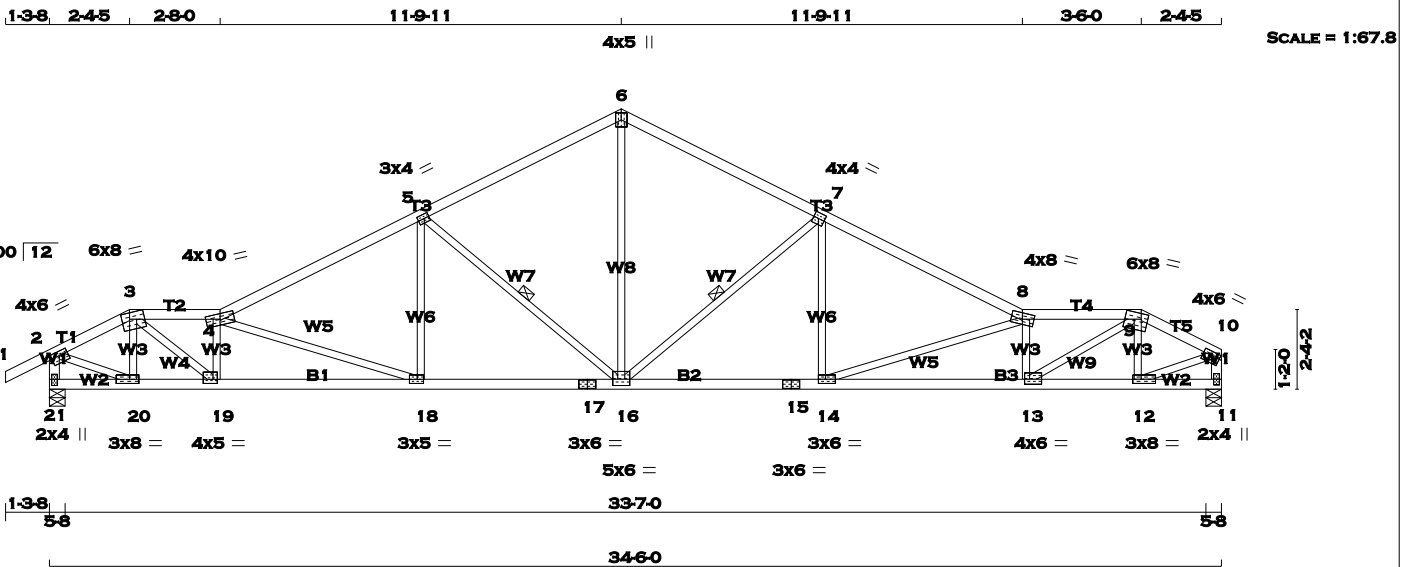
JSI GRIP= 0.90 (15) (INPUT = 0.90)
JSI METAL= 0.89 (13) (INPUT = 1.00)



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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	No.2	SPF
3 - 4	2x4	No.2	SPF
4 - 6	2x4	No.2	SPF
6 - 8	2x4	No.2	SPF
8 - 9	2x4	No.2	SPF
9 - 10	2x4	No.2	SPF
21 - 2	2x4	No.2	SPF
11 - 10	2x4	No.2	SPF
21 - 17	2x4	No.2	SPF
17 - 15	2x4	No.2	SPF
15 - 11	2x4	No.2	SPF
ALL WEBS	2x3	No.2	SPF
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	6.0	1.50 3.00
3	TTWW-m	MT20	6.0	8.0	2.25 2.75
4	TTWW-m	MT20	4.0	10.0	
5	TMWW-t	MT20	3.0	4.0	1.50 1.75
6	TTW+p	MT20	4.0	5.0	
7	TMWW-t	MT20	4.0	4.0	2.00 1.75
8	TTWW-m	MT20	4.0	8.0	2.25 4.00
9	TTWW-m	MT20	6.0	8.0	2.00 2.25
10	TMVW-t	MT20	4.0	6.0	1.50 3.00
11	BMV1+p	MT20	2.0	4.0	
12	BMWW-t	MT20	3.0	8.0	1.50 3.00
13	BMWW-t	MT20	4.0	6.0	1.75 1.75
14	BMWW-t	MT20	3.0	6.0	1.50 2.50
15	BS-t	MT20	3.0	6.0	
16	BMWWW-t	MT20	5.0	6.0	2.25 3.00
17	BS-t	MT20	3.0	6.0	
18	BMWW-t	MT20	3.0	5.0	1.50 2.25
19	BMWW-t	MT20	4.0	5.0	1.50 1.50
20	BMWW-t	MT20	3.0	8.0	1.50 3.25
21	BMV1+p	MT20	2.0	4.0	2.25 1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					
BEARINGS					
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		REQRD BRG
	VERT	HORZ	DOWN	HORZ	
21	1741	0	1741	0	5-8
11	1636	0	1636	0	5-8

UNFACTORED REACTIONS					
JT	1ST LCASE COMBINED		MAX./MIN. SNOW		SOIL
	21	11	866 / 0	803 / 0	
21	1220	866 / 0	0 / 0	0 / 0	353 / 0
11	1148	803 / 0	0 / 0	0 / 0	345 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.41 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-16. DBS = 14-0-0. CBF = 85 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-16. DBS = 12-0-0. CBF = 82 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO					FR-TO		
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	20-3	-565 / 0	0.09 (1)
2-3	-2007 / 0	-77.3	-77.3 0.10 (1)	4.71	3-19	0 / 2040	0.46 (1)
3-4	-3359 / 0	-77.3	-77.3 0.19 (1)	3.70	19-4	-1226 / 0	0.19 (1)
4-5	-2796 / 0	-77.3	-77.3 0.49 (1)	3.74	4-18	-949 / 0	0.69 (1)
5-6	-2016 / 0	-77.3	-77.3 0.42 (1)	4.36	18-5	0 / 429	0.10 (1)
6-7	-2017 / 0	-77.3	-77.3 0.42 (1)	4.36	5-16	-971 / 0	0.39 (1)
7-8	-2901 / 0	-77.3	-77.3 0.51 (1)	3.67	16-6	0 / 1434	0.32 (1)
8-9	-3811 / 0	-77.3	-77.3 0.28 (1)	3.41	16-7	-1095 / 0	0.44 (1)
9-10	-2015 / 0	-77.3	-77.3 0.10 (1)	4.70	14-7	0 / 555	0.12 (1)
21-2	-1724 / 0	0.0	0.0 0.17 (1)	6.34	14-8	-1327 / 0	0.96 (1)
11-10	-1625 / 0	0.0	0.0 0.16 (1)	6.49	13-8	-1182 / 0	0.18 (1)
					13-9	0 / 2381	0.54 (1)
21-20	0 / 0	-17.5	-17.5 0.03 (3)	10.00	12-9	-549 / 0	0.08 (1)
20-19	0 / 1764	-17.5	-17.5 0.32 (1)	10.00	2-20	0 / 1898	0.43 (1)
19-18	0 / 3421	-17.5	-17.5 0.64 (1)	10.00	12-10	0 / 1906	0.43 (1)
18-17	0 / 2524	-17.5	-17.5 0.48 (1)	10.00			
17-16	0 / 2524	-17.5	-17.5 0.48 (1)	10.00			
16-15	0 / 2618	-17.5	-17.5 0.50 (1)	10.00			
15-14	0 / 2618	-17.5	-17.5 0.50 (1)	10.00			
14-13	0 / 3872	-17.5	-17.5 0.72 (1)	10.00			
13-12	0 / 1772	-17.5	-17.5 0.34 (1)	10.00			
12-11	0 / 0	-17.5	-17.5 0.03 (1)	10.00			

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL	=	23.3 PSF
	DL	=	3.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL	=	7.0 PSF
TOTAL LOAD = 33.3 PSF			

SPACING = 24.0 IN./C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.15")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.15")
CALCULATED VERT. DEFL.(TL) = L/988 (0.42")

CSI: TC=0.51 (7-8:1), BC=0.72 (13-14:1), WB=0.96 (8-14:1), SSI=0.20 (7-8:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

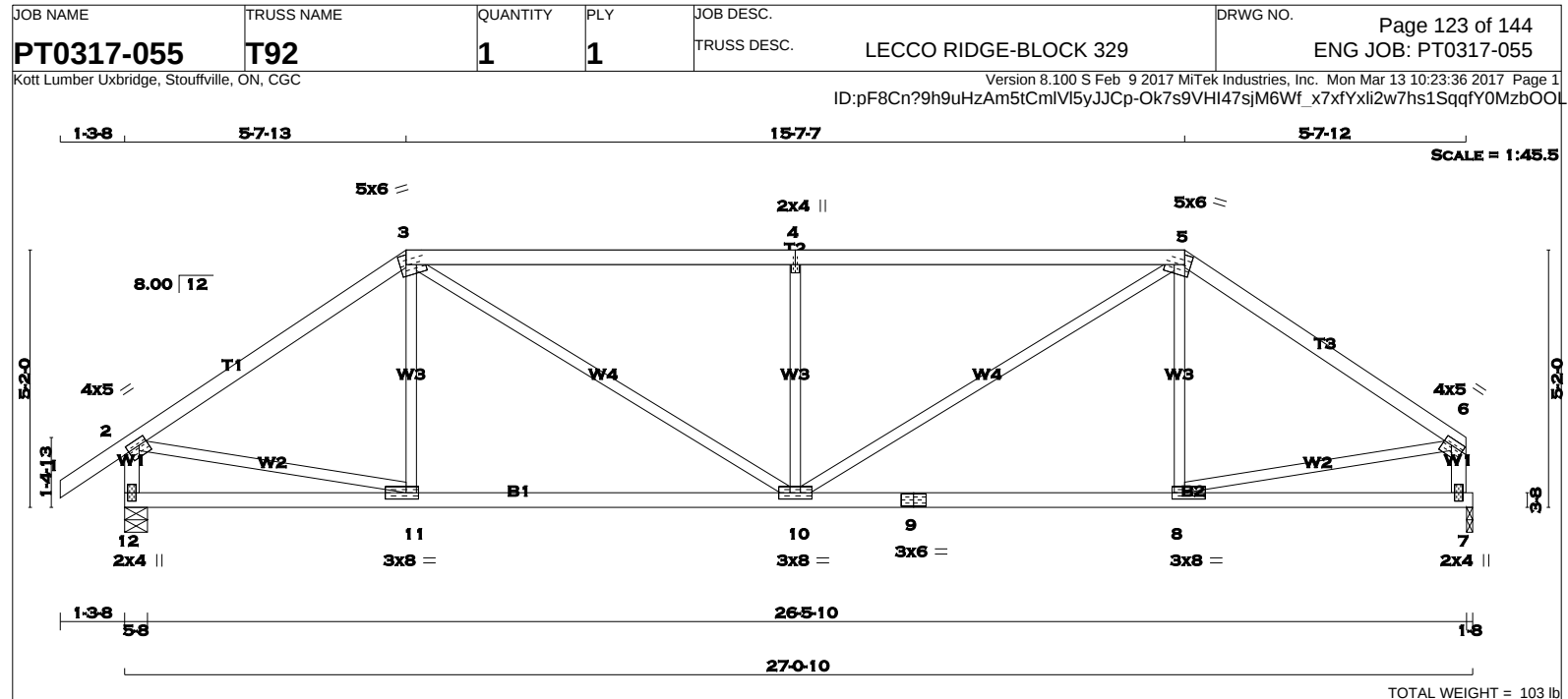
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (20) (INPUT = 0.90)
JSI METAL= 0.68 (15) (INPUT = 1.00)

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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 5

2x4

DRY

No.2

SPF

5 - 6

2x4

DRY

No.2

SPF

12 - 2

2x4

DRY

No.2

SPF

7 - 6

2x4

DRY

No.2

SPF

12 - 9

2x4

DRY

No.2

SPF

9 - 7

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMVW-t

MT20

4.0

5.0

1.50

2.00

3

TTWW-m

MT20

5.0

6.0

2.25

1.50

4

TMW+w

MT20

2.0

4.0

5

TTWW-m

MT20

5.0

6.0

2.25

1.50

6

TMVW-t

MT20

4.0

5.0

1.50

2.00

7

BMV1+p

MT20

2.0

4.0

8

BMWW-t

MT20

3.0

8.0

1.50

3.00

9

BS-t

MT20

3.0

6.0

10

BMWW-t

MT20

3.0

8.0

11

BMWW-t

MT20

3.0

8.0

1.50

3.00

12

BMV1+p

MT20

2.0

4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

CSI FAILURE: 3-4, 4-5

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

12

1383

0

1383

0

0

5-8

5-8

7

1276

0

1276

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

12

968

691 / 0

0 / 0

0 / 0

0 / 0

277 / 0

0 / 0

7

896

627 / 0

0 / 0

0 / 0

0 / 0

269 / 0

0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 7

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.22 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (3)

CHORDS

WEBS

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 / 78

0.04 (1)

2-3

-1434 / 0

-77.3

-77.3

0.52 (1)

4.82

3-10

0 / 831

0.19 (1)

3-4

-1895 / 0

-77.3

-77.3

1.10 (1)

3.22

10-4

-744 / 0

0.29 (1)

4-5

-1895 / 0

-77.3

-77.3

1.10 (1)

3.22

10-5

0 / 831

0.19 (1)

5-6

-1433 / 0

-77.3

-77.3

0.52 (1)

4.82

8-5

-93 / 77

0.04 (1)

12-2

-1346 / 0

0.0

0.0

0.14 (1)

6.99

2-11

0 / 1212

0.27 (1)

7-6

-1240 / 0

0.0

0.0

0.13 (1)

7.21

8-6

0 / 1212

0.27 (1)

12-11

0 / 0

-17.5

-17.5

0.18 (3)

10.00

11-10

0 / 1190

-17.5

-17.5

0.30 (1)

10.00

10-9

0 / 1189

-17.5

-17.5

0.30 (1)

10.00

9-8

0 / 1189

-17.5

-17.5

0.30 (1)

10.00

8-7

0 / 0

-17.5

-17.5

0.18 (3)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP

CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT

CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING =

24.0

IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014

- CSA 086-09

- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")

ALLOWABLE DEFL.(TL)= L/360 (0.90")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")

CSI: TC=1.10 (3-4:1) , BC=0.30 (10-11:1) , WB=0.29 (4-10:1) , SSI=0.29 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE

GRIP(DRY)

SHEAR

SECTION

(PSI)

(PLI)

(PLI)

MAX

MIN

MAX

MIN

MAX

MIN

MT20

618

354

1667

822

2284

1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (8) (INPUT = 0.90)

JSI METAL= 0.48 (2) (INPUT = 1.00)

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LICENSED PROFESSIONAL ENGINEER

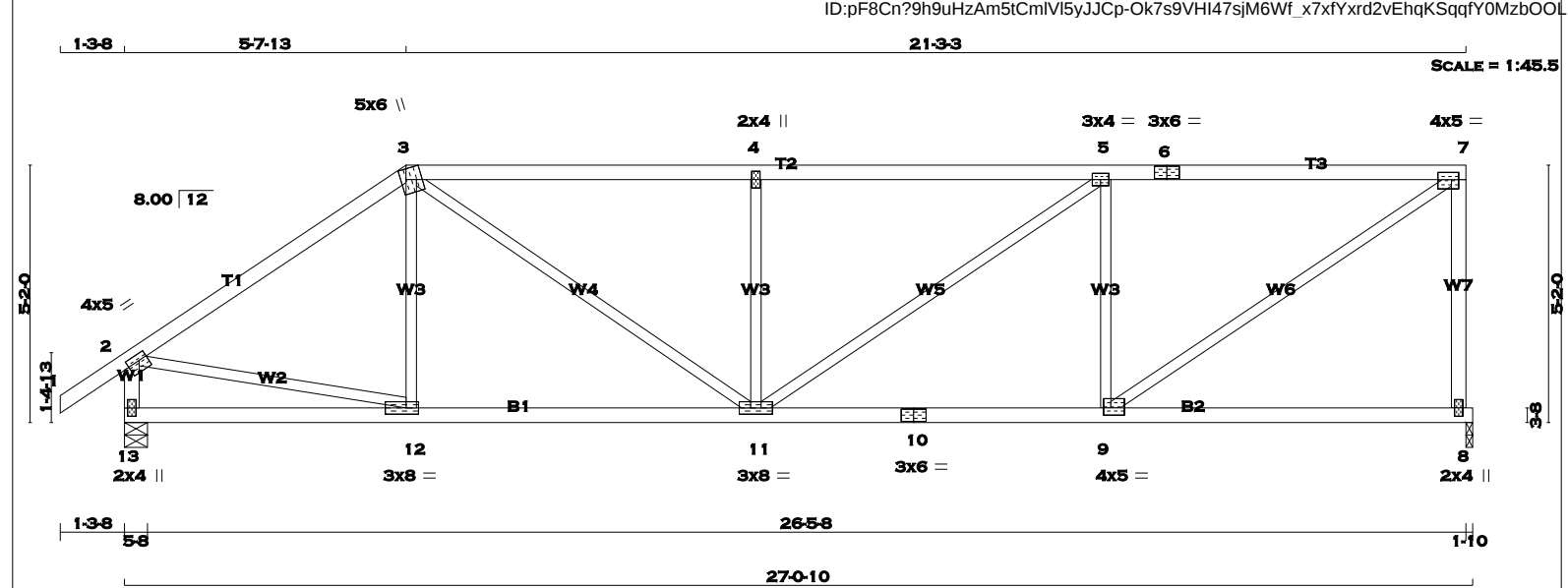
PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

KOTT



LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
1 - 3 2x4 DRY No.2 SPF
3 - 6 2x4 DRY No.2 SPF
6 - 7 2x4 DRY No.2 SPF
8 - 7 2x4 DRY No.2 SPF
13 - 2 2x4 DRY No.2 SPF
10 - 10 2x4 DRY No.2 SPF
10 - 8 2x4 DRY No.2 SPF
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER
BEARINGS
FACTORED GROSS REACTION
JT VERT HORZ
8 1276 0
13 1383 0
MAXIMUM FACTORED GROSS REACTION
DOWN HORZ UPLIFT
1276 0 0
1383 0 0
INPUT BRG IN-SX
1-10 1-10
5-8 5-8
REQRD BRG IN-SX
1-10 1-10
5-8 5-8
UNFACTORED REACTIONS
1ST LCASE MAX/MIN. COMPONENT REACTIONS
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL
8 896 627 / 0 0 / 0 0 / 0 269 / 0 0 / 0
13 968 691 / 0 0 / 0 0 / 0 277 / 0 0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 13
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10 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.
LOADING
TOTAL LOAD CASES: (3)
CHORDS MAX. FACTORED FORCE VERT. LOAD LC1 MAX. FACTORED FORCE VERT. LOAD LC1 MAX. FACTORED FORCE VERT. LOAD LC1
MEMB. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO MEMB. MAX. FACTORED FORCE VERT. LOAD LC1 MAX. FACTORED FORCE VERT. LOAD LC1
(LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO
FR-TO 1-2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 12-3 -98 / 71 0.04 (1)
2-3 -1432 / 0 -77.3 -77.3 0.52 (1) 4.82 3-11 0 / 795 0.18 (1)
3-4 -1841 / 0 -77.3 -77.3 0.68 (1) 4.17 11-4 -587 / 0 0.23 (1)
4-5 -1841 / 0 -77.3 -77.3 0.72 (1) 4.10 11-5 0 / 438 0.10 (1)
5-6 -1482 / 0 -77.3 -77.3 0.67 (1) 4.52 9-5 -858 / 0 0.34 (1)
6-7 -1482 / 0 -77.3 -77.3 0.67 (1) 4.52 9-7 0 / 1787 0.40 (1)
8-7 -1225 / 0 0.0 0.0 0.56 (1) 7.25 2-12 0 / 1211 0.27 (1)
13-2 -1344 / 0 0.0 0.0 0.14 (1) 6.99
13-12 0 / 0 -17.5 -17.5 0.17 (3) 10.00
12-11 0 / 1188 -17.5 -17.5 0.29 (1) 10.00
11-10 0 / 1482 -17.5 -17.5 0.35 (1) 10.00
10-9 0 / 1482 -17.5 -17.5 0.35 (1) 10.00
9-8 0 / 0 -17.5 -17.5 0.22 (3) 10.00

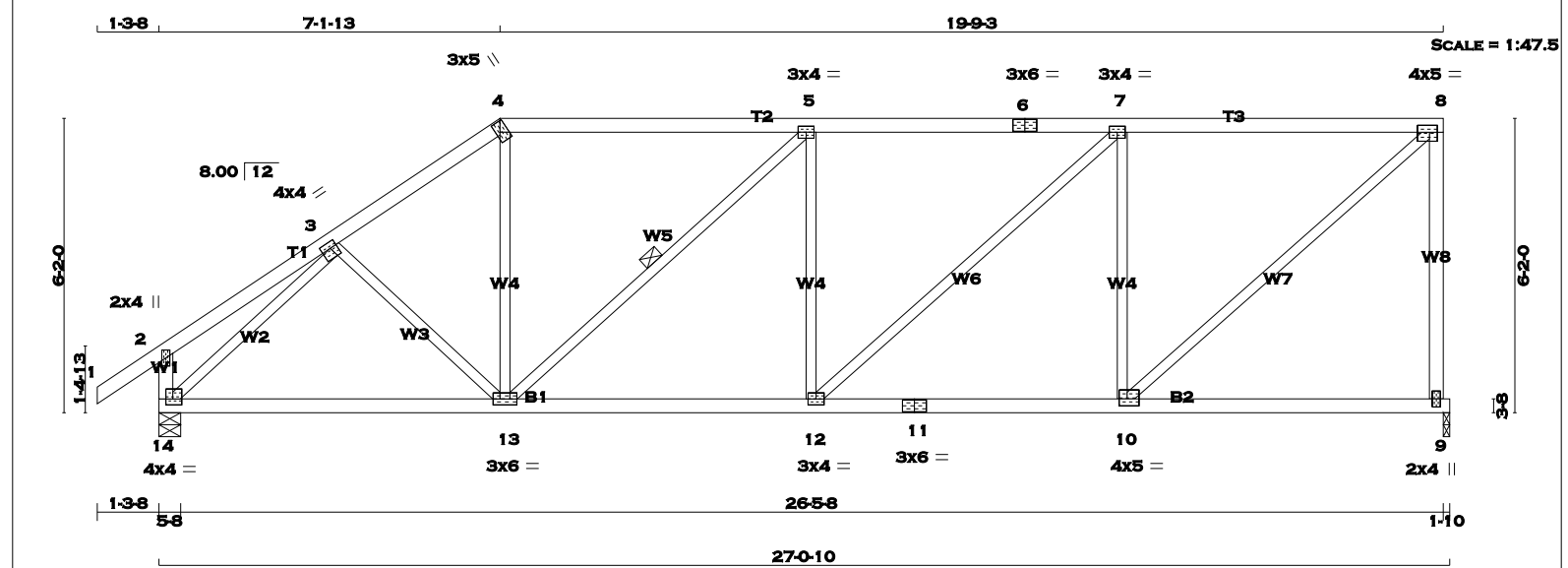
DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN. C/C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010
THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.16")
CSI: TC=0.72 (4-5:1), BC=0.35 (9-11:1), WB=0.40 (7-9:1), SSI=0.26 (5-7:1)
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= 0.48 (2) (INPUT = 1.00)

TOTAL WEIGHT = 107 lb [M]

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TOTAL WEIGHT = 114 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2
14 - 2	2x4	DRY	No.2
11 - 11	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMVW-t	MT20	4.0	4.0	1.50 1.75
4	TTW+h	MT20	3.0	5.0	2.50 1.00
5	TMVW-t	MT20	3.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TMVW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	5.0	1.75 2.00
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	4.0	5.0	1.75 2.00
11	BS-t	MT20	3.0	6.0	
12	BMVW-t	MT20	3.0	4.0	
13	BMVW-t	MT20	3.0	6.0	
14	BMVW1-t	MT20	4.0	4.0	1.50 1.75

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
9		1276	0	1276	0	0	1-10
14		1383	0	1383	0	0	5-8

UNFACTORED REACTIONS							
		1ST LCASE		MAX/MIN. COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9		896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0
14		968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 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 = 4.63 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-13. DBS = 20-0-0. CBF = 61 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: (3)			
C H O R D S		W E B S	
MEMB.		MEMB.	
MAX. FACTORED FORCE (LBS)		MAX. FACTORED FORCE (LBS)	
VERT. LOAD (PLF)		VERT. LOAD (PLF)	
FROM TO		FROM TO	
FR-TO		FR-TO	
1-2	0 / 29	-77.3	-77.3 0.10 (1)
2-3	0 / 16	-77.3	-77.3 0.14 (1)
3-4	-1409 / 0	-77.3	-77.3 0.17 (1)
4-5	-1165 / 0	-77.3	-77.3 0.50 (1)
5-6	-1522 / 0	-77.3	-77.3 0.57 (1)
6-7	-1522 / 0	-77.3	-77.3 0.57 (1)
7-8	-1167 / 0	-77.3	-77.3 0.54 (1)
9-8	-1229 / 0	0.0	0.0 0.91 (1)
14-2	-215 / 0	0.0	0.0 0.02 (1)
14-13	0 / 1151	-17.5	-17.5 0.30 (1)
13-12	0 / 1522	-17.5	-17.5 0.36 (1)
12-11	0 / 1167	-17.5	-17.5 0.29 (1)
11-10	0 / 1167	-17.5	-17.5 0.29 (1)
10-9	0 / 0	-17.5	-17.5 0.19 (3)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")

CSI: TC=0.91 (8-9:1), BC=0.36 (12-13:1), WB=0.63 (3-14:1), SSI=0.24 (7-8:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

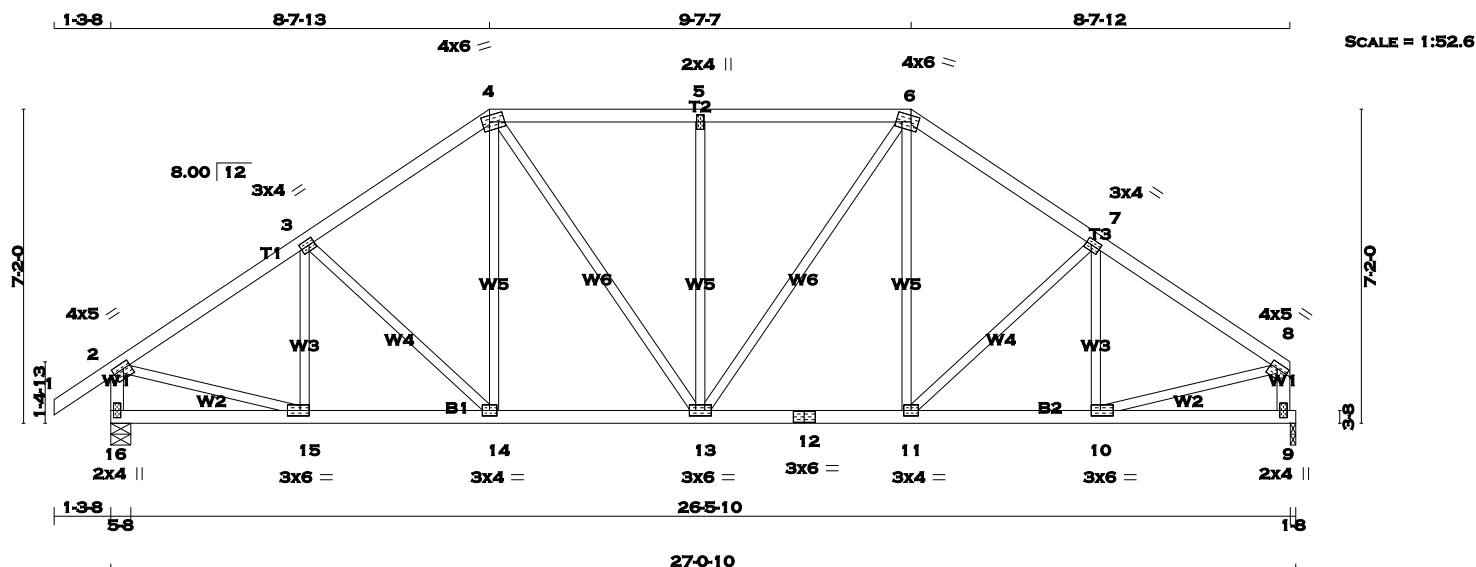
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (14) (INPUT = 0.90)
JSI METAL= 0.59 (3) (INPUT = 1.00)

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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 121 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
16 - 2	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
16 - 12	2x4	DRY	No.2	SPF	
12 - 9	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	5.0	1.50 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTWW-m	MT20	4.0	6.0	1.75 2.00
5	TMW+w	MT20	2.0	4.0	
6	TTWW-m	MT20	4.0	6.0	1.75 2.00
7	TMVW-t	MT20	3.0	4.0	1.50 1.50
8	TMVW-t	MT20	4.0	5.0	1.50 2.00
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	3.0	6.0	1.50 2.50
11	BMVW-t	MT20	3.0	4.0	
12	BS-t	MT20	3.0	6.0	
13	BMVW-t	MT20	3.0	6.0	
14	BMVW-t	MT20	3.0	4.0	
15	BMVW-t	MT20	3.0	6.0	1.50 2.50
16	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
16	1383	0	1383	0	0
9	1276	0	1276	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
16	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
16	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.24 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING				TOTAL LOAD CASES: (3)			
CHORDS		WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10-11	-218 / 7	0.06 (1)	
2-3	-1443 / 0	-77.3	-77.3 0.21 (1)	11-12	-169 / 0	0.10 (1)	
3-4	-1339 / 0	-77.3	-77.3 0.20 (1)	12-13	0 / 197	0.04 (1)	
4-5	-1284 / 0	-77.3	-77.3 0.24 (1)	13-14	0 / 326	0.07 (1)	
5-6	-1284 / 0	-77.3	-77.3 0.24 (1)	14-15	-452 / 0	0.40 (1)	
6-7	-1339 / 0	-77.3	-77.3 0.20 (1)	15-16	0 / 326	0.07 (1)	
7-8	-1442 / 0	-77.3	-77.3 0.21 (1)	16-17	0 / 197	0.04 (1)	
16-2	-1348 / 0	0.0	0.0 0.14 (1)	17-18	-169 / 0	0.10 (1)	
9-8	-1242 / 0	0.0	0.0 0.13 (1)	18-19	-218 / 7	0.06 (1)	
16-15	0 / 0	-17.5	-17.5 0.07 (3)	19-20	0 / 1254	0.28 (1)	
15-14	0 / 1218	-17.5	-17.5 0.24 (1)	20-21	0 / 1253	0.28 (1)	
14-13	0 / 1097	-17.5	-17.5 0.22 (1)				
13-12	0 / 1097	-17.5	-17.5 0.22 (1)				
12-11	0 / 1097	-17.5	-17.5 0.22 (1)				
11-10	0 / 1217	-17.5	-17.5 0.24 (1)				
10-9	0 / 0	-17.5	-17.5 0.07 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.24 (4-5:1), BC=0.24 (14-15:1), WB=0.40 (5-13:1), SSI=0.18 (4-5:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

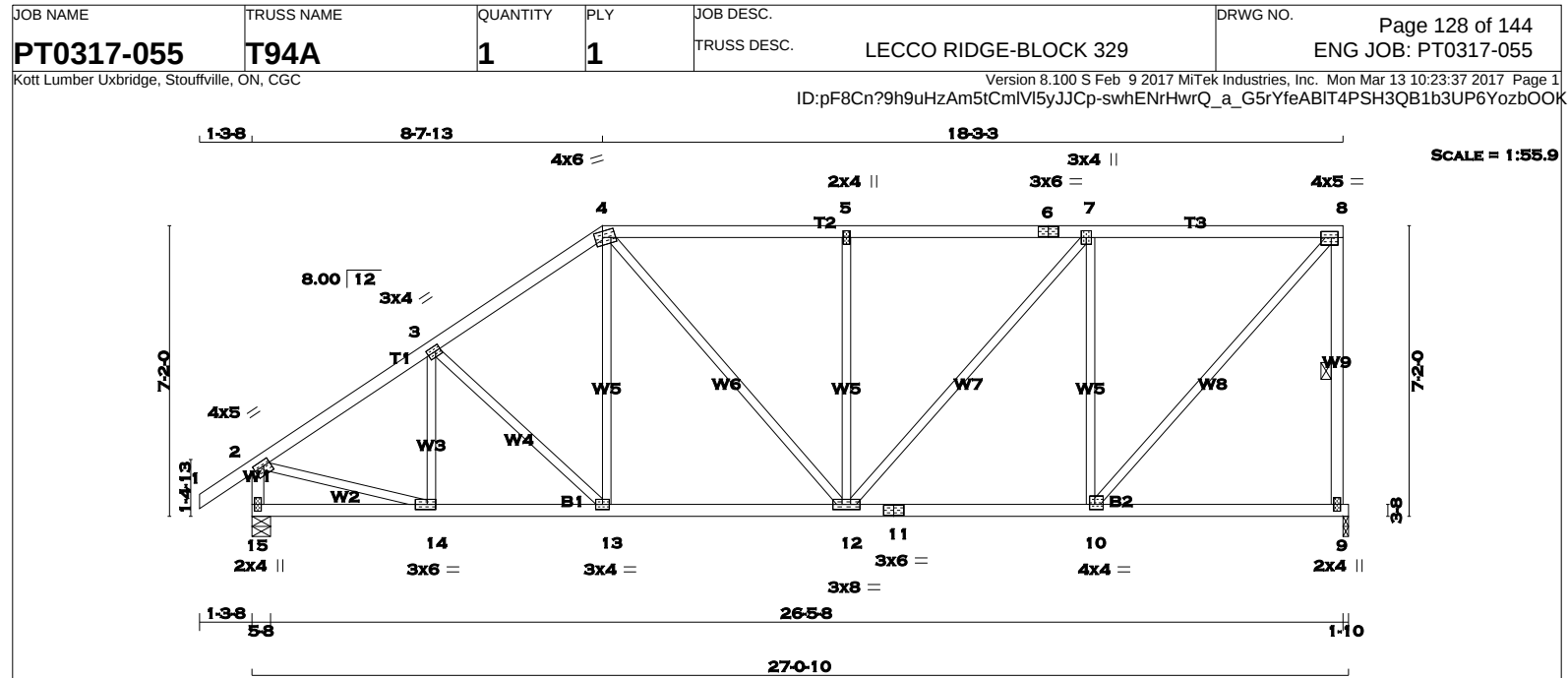
JSI GRIP= 0.87 (13) (INPUT = 0.90)
JSI METAL= 0.48 (2) (INPUT = 1.00)



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READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

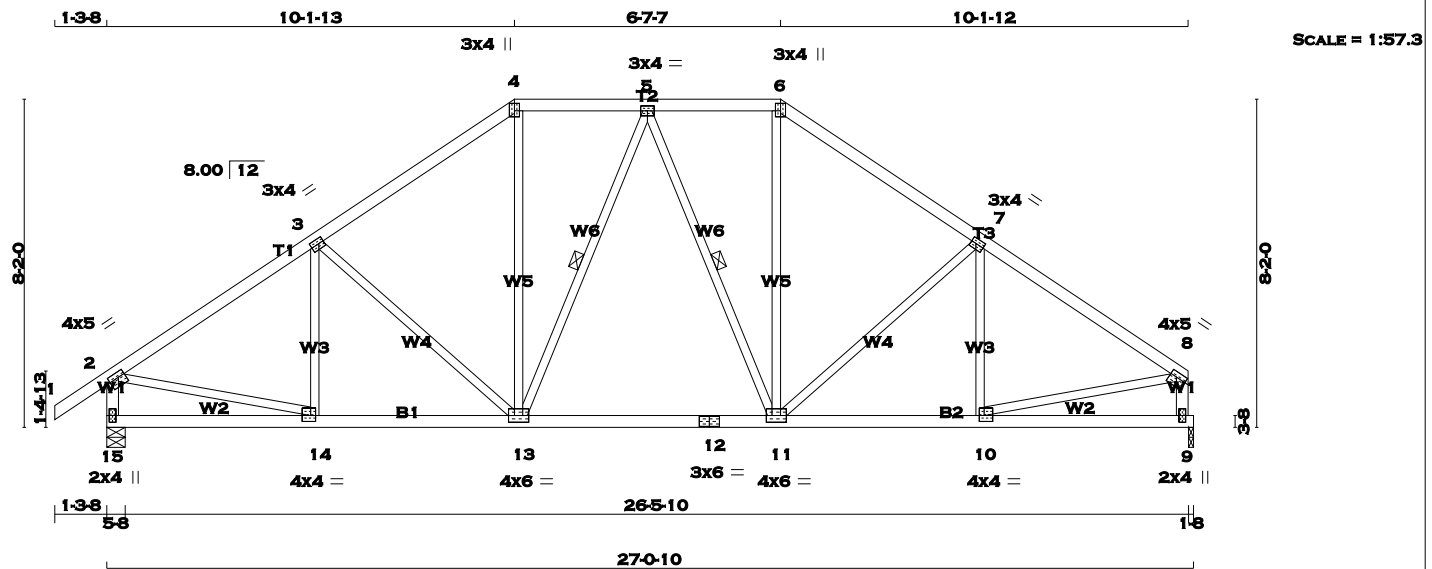




TOTAL WEIGHT = 123 lb		[M]																																																																																																																																																																																															
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 9 - 8 2x4 DRY No.2 SPF 15- 2 2x4 DRY No.2 SPF 15- 11 2x4 DRY No.2 SPF 11- 9 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>9</td><td>1276</td><td>0</td><td>1276</td><td>0</td></tr><tr><td>15</td><td>1383</td><td>0</td><td>1383</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX. SNOW</th><th>MIN. LIVE</th><th>PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>9</td><td>896</td><td>627 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>269 / 0</td><td>0 / 0</td></tr><tr><td>15</td><td>968</td><td>691 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>277 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 15 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.10 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 8-9. DBS = 12-0-0 . CBF = 92 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1 (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. UNBRACED LENGTH</th><th>FR-TO</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1- 2</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>14- 3</td><td>-222 / 2</td><td>0.06 (1)</td></tr><tr><td>2- 3</td><td>-1442 / 0</td><td>-77.3 -77.3</td><td>0.28 (1)</td><td>5.14</td><td>3-13</td><td>-166 / 0</td><td>0.10 (1)</td></tr><tr><td>3- 4</td><td>-1341 / 0</td><td>-77.3 -77.3</td><td>0.27 (1)</td><td>5.29</td><td>13- 4</td><td>0 / 209</td><td>0.05 (1)</td></tr><tr><td>4- 5</td><td>-1284 / 0</td><td>-77.3 -77.3</td><td>0.43 (1)</td><td>5.15</td><td>4-12</td><td>0 / 281</td><td>0.06 (1)</td></tr><tr><td>5- 6</td><td>-1284 / 0</td><td>-77.3 -77.3</td><td>0.46 (1)</td><td>5.10</td><td>12- 5</td><td>-503 / 0</td><td>0.45 (1)</td></tr><tr><td>6- 7</td><td>-1284 / 0</td><td>-77.3 -77.3</td><td>0.46 (1)</td><td>5.10</td><td>12- 7</td><td>0 / 522</td><td>0.12 (1)</td></tr><tr><td>7- 8</td><td>-940 / 0</td><td>-77.3 -77.3</td><td>0.44 (1)</td><td>5.76</td><td>10- 7</td><td>-916 / 0</td><td>0.82 (1)</td></tr><tr><td>9- 8</td><td>-1232 / 0</td><td>0.0 0.0</td><td>0.29 (1)</td><td>5.78</td><td>10- 8</td><td>0 / 1401</td><td>0.32 (1)</td></tr><tr><td>15- 2</td><td>-1348 / 0</td><td>0.0 0.0</td><td>0.14 (1)</td><td>6.99</td><td>2-14</td><td>0 / 1253</td><td>0.28 (1)</td></tr><tr><td>15-14</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.07 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 1217</td><td>-17.5 -17.5</td><td>0.25 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 1099</td><td>-17.5 -17.5</td><td>0.23 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 940</td><td>-17.5 -17.5</td><td>0.24 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 940</td><td>-17.5 -17.5</td><td>0.24 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10- 9</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.16 (3)</td><td>10.00</td><td></td><td></td><td></td></tr></table>			FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	9	1276	0	1276	0	15	1383	0	1383	0	JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL	9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0	15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO	FR-TO		FROM TO		FR-TO				1- 2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	14- 3	-222 / 2	0.06 (1)	2- 3	-1442 / 0	-77.3 -77.3	0.28 (1)	5.14	3-13	-166 / 0	0.10 (1)	3- 4	-1341 / 0	-77.3 -77.3	0.27 (1)	5.29	13- 4	0 / 209	0.05 (1)	4- 5	-1284 / 0	-77.3 -77.3	0.43 (1)	5.15	4-12	0 / 281	0.06 (1)	5- 6	-1284 / 0	-77.3 -77.3	0.46 (1)	5.10	12- 5	-503 / 0	0.45 (1)	6- 7	-1284 / 0	-77.3 -77.3	0.46 (1)	5.10	12- 7	0 / 522	0.12 (1)	7- 8	-940 / 0	-77.3 -77.3	0.44 (1)	5.76	10- 7	-916 / 0	0.82 (1)	9- 8	-1232 / 0	0.0 0.0	0.29 (1)	5.78	10- 8	0 / 1401	0.32 (1)	15- 2	-1348 / 0	0.0 0.0	0.14 (1)	6.99	2-14	0 / 1253	0.28 (1)	15-14	0 / 0	-17.5 -17.5	0.07 (3)	10.00				14-13	0 / 1217	-17.5 -17.5	0.25 (1)	10.00				13-12	0 / 1099	-17.5 -17.5	0.23 (1)	10.00				12-11	0 / 940	-17.5 -17.5	0.24 (1)	10.00				11-10	0 / 940	-17.5 -17.5	0.24 (1)	10.00				10- 9	0 / 0	-17.5 -17.5	0.16 (3)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.90") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.90") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11") CSI: TC=0.46 (5-7:1) , BC=0.25 (13-14:1) , WB=0.82 (7-10:1) , SSI=0.22 (7-8:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.86 (8) (INPUT = 0.90) JSI METAL= 0.48 (2) (INPUT = 1.00)	
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																													
JT	VERT	HORZ	DOWN	HORZ																																																																																																																																																																																													
9	1276	0	1276	0																																																																																																																																																																																													
15	1383	0	1383	0																																																																																																																																																																																													
JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL																																																																																																																																																																																										
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0																																																																																																																																																																																										
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0																																																																																																																																																																																										
CHORDS				WEBS																																																																																																																																																																																													
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO																																																																																																																																																																																										
FR-TO		FROM TO		FR-TO																																																																																																																																																																																													
1- 2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	14- 3	-222 / 2	0.06 (1)																																																																																																																																																																																										
2- 3	-1442 / 0	-77.3 -77.3	0.28 (1)	5.14	3-13	-166 / 0	0.10 (1)																																																																																																																																																																																										
3- 4	-1341 / 0	-77.3 -77.3	0.27 (1)	5.29	13- 4	0 / 209	0.05 (1)																																																																																																																																																																																										
4- 5	-1284 / 0	-77.3 -77.3	0.43 (1)	5.15	4-12	0 / 281	0.06 (1)																																																																																																																																																																																										
5- 6	-1284 / 0	-77.3 -77.3	0.46 (1)	5.10	12- 5	-503 / 0	0.45 (1)																																																																																																																																																																																										
6- 7	-1284 / 0	-77.3 -77.3	0.46 (1)	5.10	12- 7	0 / 522	0.12 (1)																																																																																																																																																																																										
7- 8	-940 / 0	-77.3 -77.3	0.44 (1)	5.76	10- 7	-916 / 0	0.82 (1)																																																																																																																																																																																										
9- 8	-1232 / 0	0.0 0.0	0.29 (1)	5.78	10- 8	0 / 1401	0.32 (1)																																																																																																																																																																																										
15- 2	-1348 / 0	0.0 0.0	0.14 (1)	6.99	2-14	0 / 1253	0.28 (1)																																																																																																																																																																																										
15-14	0 / 0	-17.5 -17.5	0.07 (3)	10.00																																																																																																																																																																																													
14-13	0 / 1217	-17.5 -17.5	0.25 (1)	10.00																																																																																																																																																																																													
13-12	0 / 1099	-17.5 -17.5	0.23 (1)	10.00																																																																																																																																																																																													
12-11	0 / 940	-17.5 -17.5	0.24 (1)	10.00																																																																																																																																																																																													
11-10	0 / 940	-17.5 -17.5	0.24 (1)	10.00																																																																																																																																																																																													
10- 9	0 / 0	-17.5 -17.5	0.16 (3)	10.00																																																																																																																																																																																													

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TOTAL WEIGHT = 122 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
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 EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0		
6	TTW+p	MT20	3.0	4.0	2.25	1.50
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	5.0	1.50	2.00
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	4.0	4.0	1.75	1.50
11	BMVW-t	MT20	4.0	6.0		
12	BS-t	MT20	3.0	6.0		
13	BMVW-t	MT20	4.0	6.0		
14	BMVW-t	MT20	4.0	4.0	1.75	1.50
15	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MIITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS							
		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG		
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
15		1383	0	1383	0	0	5-8
9		1276	0	1276	0	0	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-13, 5-11. DBS = 20-0-0. CBF = 20 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	14-3	-166 / 31	0.06 (1)
2-3	-1461 / 0	-77.3 -77.3	0.29 (1)	5.12	3-13	-277 / 0	0.24 (1)
3-4	-1266 / 0	-77.3 -77.3	0.27 (1)	5.42	13-4	0 / 439	0.10 (1)
4-5	-1036 / 0	-77.3 -77.3	0.11 (1)	6.06	13-5	-162 / 0	0.08 (1)
5-6	-1036 / 0	-77.3 -77.3	0.11 (1)	6.06	5-11	-163 / 0	0.08 (1)
6-7	-1266 / 0	-77.3 -77.3	0.27 (1)	5.42	11-6	0 / 439	0.10 (1)
7-8	-1461 / 0	-77.3 -77.3	0.29 (1)	5.12	11-7	-277 / 0	0.24 (1)
15-2	-1343 / 0	0.0 0.0	0.14 (1)	6.99	10-7	-166 / 31	0.06 (1)
9-8	-1237 / 0	0.0 0.0	0.13 (1)	7.22	2-14	0 / 1264	0.28 (1)
					10-8	0 / 1263	0.28 (1)
15-14	0 / 0	-17.5 -17.5	0.10 (3)	10.00			
14-13	0 / 1237	-17.5 -17.5	0.27 (1)	10.00			
13-12	0 / 1097	-17.5 -17.5	0.24 (1)	10.00			
12-11	0 / 1097	-17.5 -17.5	0.24 (1)	10.00			
11-10	0 / 1236	-17.5 -17.5	0.27 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.10 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")

CSI: TC=0.29 (2-3:1), BC=0.27 (13-14:1), WB=0.28 (2-14:1), SSI=0.16 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

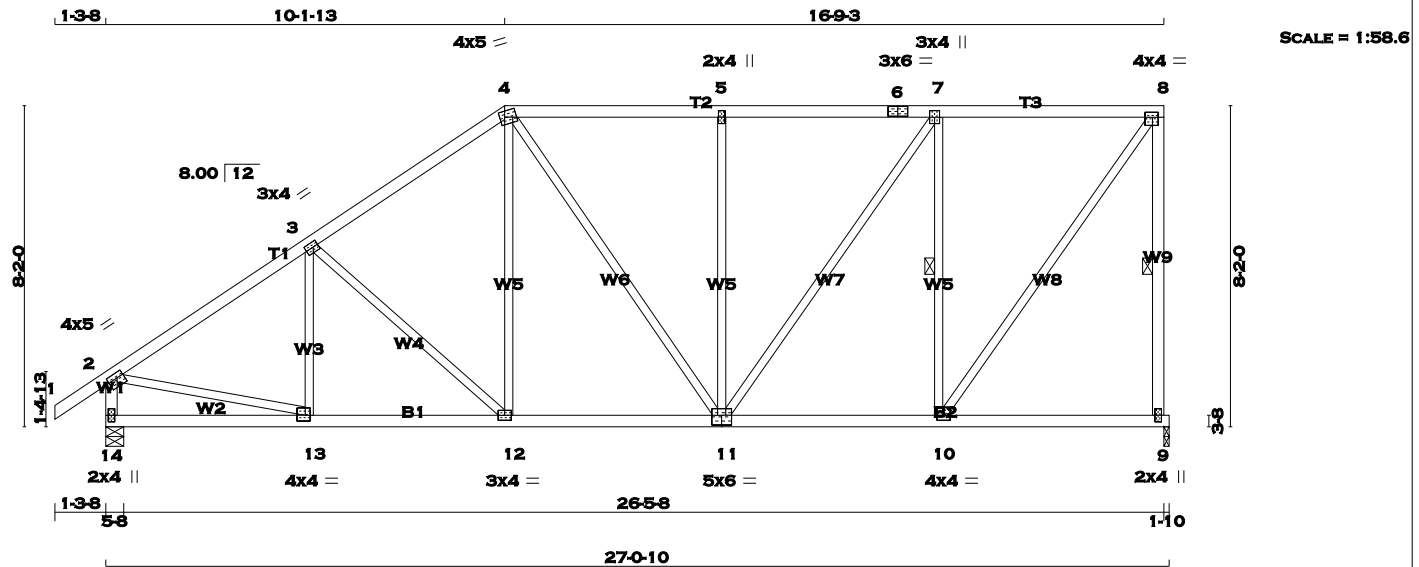
JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.49 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 129 lb [M]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 6	2x4	DRY	No.2	SPF	SPF
6 - 8	2x4	DRY	No.2	SPF	SPF
9 - 8	2x4	DRY	No.2	SPF	SPF
14 - 2	2x4	DRY	No.2	SPF	SPF
14 - 11	2x4	DRY	No.2	SPF	SPF
11 - 9	2x4	DRY	No.2	SPF	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2		SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	4.0	5.0	1.50 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTWW-m	MT20	4.0	5.0	1.75 1.50
5	TMVW-w	MT20	2.0	4.0	
6	TS-t	MT20	3.0	6.0	
7	TMVW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	4.0	1.50 1.75
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	4.0	4.0	1.50 1.75
11	BSWWW-I	MT20	5.0	6.0	3.00 3.00
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	

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
9	1276	0	1276	0	0	1-10	1-10	1-10	1-10
14	1383	0	1383	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0
14	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 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 = 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 8-9. DBS = 12'-0" . CBF = 93 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-10. DBS = 14'-0" . CBF = 83 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: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-163 / 36	0.06 (1)
2-3	-1462 / 0	-77.3 -77.3	0.40 (1)	4.96	3-12	-280 / 0	0.24 (1)
3-4	-1264 / 0	-77.3 -77.3	0.38 (1)	5.26	12-4	0 / 281	0.06 (1)
4-5	-1094 / 0	-77.3 -77.3	0.34 (1)	5.60	4-11	0 / 107	0.02 (1)
5-6	-1094 / 0	-77.3 -77.3	0.37 (1)	5.55	11-5	-461 / 0	0.60 (1)
6-7	-1094 / 0	-77.3 -77.3	0.37 (1)	5.55	11-7	0 / 566	0.13 (1)
7-8	-769 / 0	-77.3 -77.3	0.36 (1)	6.25	10-7	-945 / 0	0.40 (1)
9-8	-1236 / 0	0.0 0.0	0.37 (1)	5.77	10-8	0 / 1307	0.29 (1)
14-2	-1344 / 0	0.0 0.0	0.14 (1)	6.99	2-13	0 / 1264	0.28 (1)
14-13	0 / 0	-17.5 -17.5	0.10 (3)	10.00			
13-12	0 / 1238	-17.5 -17.5	0.25 (1)	10.00			
12-11	0 / 1032	-17.5 -17.5	0.22 (1)	10.00			
11-10	0 / 769	-17.5 -17.5	0.20 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.14 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.10")

CSI: TC=0.40 (2-3:1), BC=0.25 (12-13:1), WB=0.60 (5-11:1), SSI=0.21 (7-8:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
(PSI)	(PLI)	(PLI)	(PLI)		
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

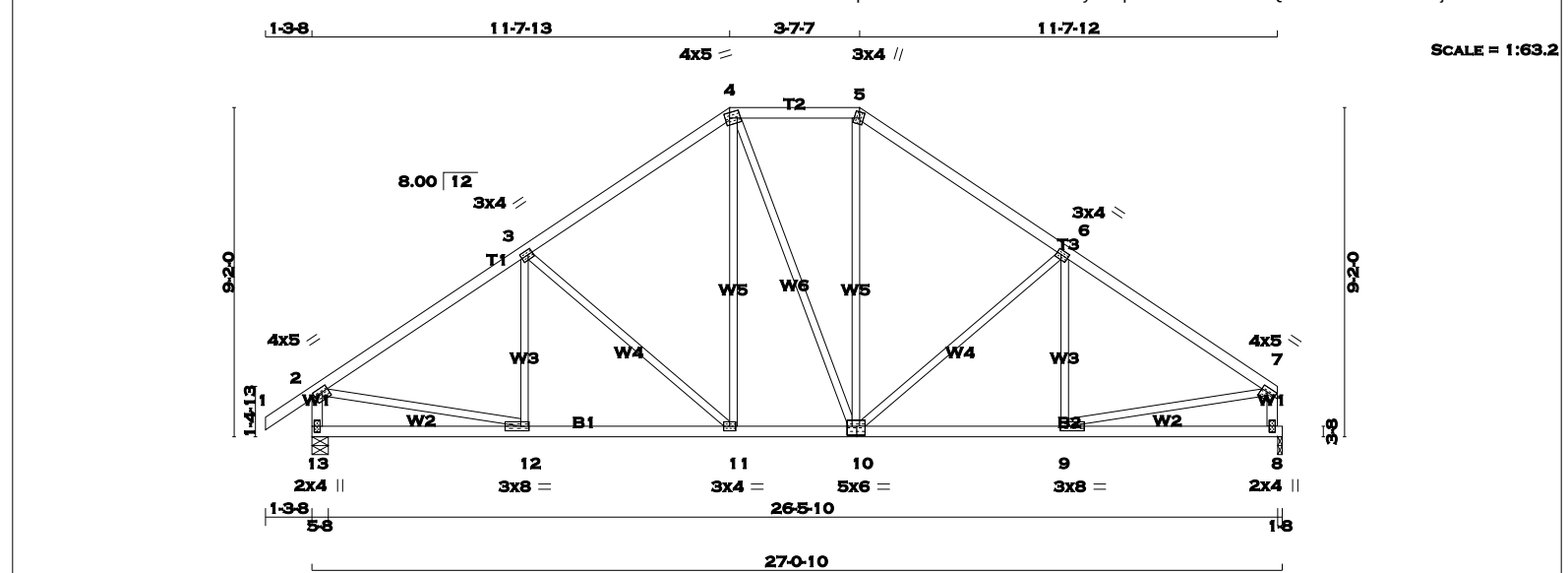
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.49 (2) (INPUT = 1.00)



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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

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
13	1383	0	1383	0
8	1276	0	1276	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN.	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
8	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.99 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	12-3	-110 / 68
2-3	-1469 / 0	-77.3	-77.3	0.39 (1)	4.99	3-11	-390 / 0
3-4	-1176 / 0	-77.3	-77.3	0.36 (1)	5.46	11-4	0 / 329
4-5	-956 / 0	-77.3	-77.3	0.14 (1)	6.20	4-10	0 / 2
5-6	-1177 / 0	-77.3	-77.3	0.36 (1)	5.45	10-5	0 / 332
6-7	-1468 / 0	-77.3	-77.3	0.39 (1)	4.99	10-6	-388 / 0
13-2	-1340 / 0	0.0	0.0	0.14 (1)	7.00	9-6	-112 / 66
8-7	-1234 / 0	0.0	0.0	0.13 (1)	7.23	2-12	0 / 1267
					9-7	0 / 1266	0.28 (1)

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
13-12	0 / 0	-17.5	-17.5	0.15 (3)	10.00
12-11	0 / 1247	-17.5	-17.5	0.28 (1)	10.00
11-10	0 / 955	-17.5	-17.5	0.20 (1)	10.00
10-9	0 / 1246	-17.5	-17.5	0.27 (1)	10.00
9-8	0 / 0	-17.5	-17.5	0.15 (3)	10.00

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	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	1.50	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	8.0	1.50	2.75
10	BSVWV-t	MT20	5.0	6.0	3.00	2.75
11	BMVW-t	MT20	3.0	4.0		
12	BMVW-t	MT20	3.0	8.0	1.50	2.75
13	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
DL	=	3.0	PSF	
BOT CH.	LL	=	0.0	PSF
DL	=	7.0	PSF	
TOTAL LOAD	=	33.3	PSF	

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")

ALLOWABLE DEFL.(TL)= L/360 (0.90")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.39 (2-3:1), BC=0.28 (11-12:1), WB=0.47 (3-11:1), 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)	(PLI)
MAX	MIN	MAX	MIN
MT20	618	354	1667
		822	2284
			1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)

JSI METAL= 0.50 (2) (INPUT = 1.00)

RECEIVED

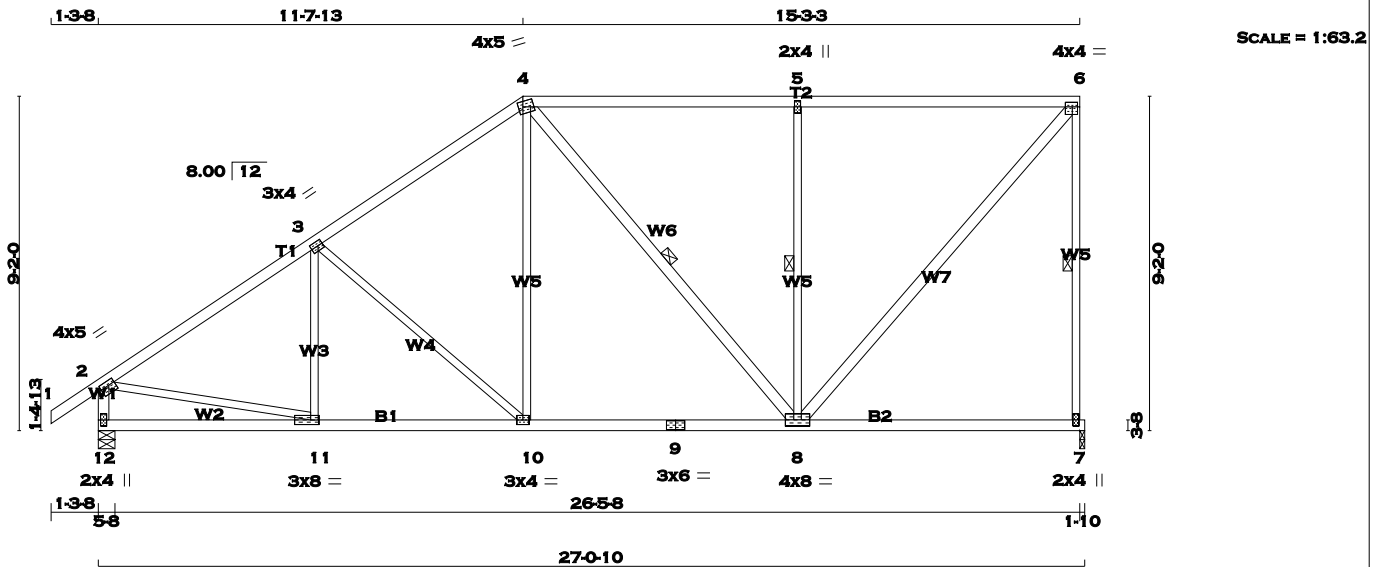
TOWN OF MILTON

MAR 29, 2017

17-5001

BUILDING DIVISION

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TOTAL WEIGHT = 128 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
7 - 6	2x3	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
4 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
1	TMVW-t	MT20	4.0	5.0	1.50 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	BMVWV-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	3.0	8.0	1.50 2.75
12	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		1276	0	1276	0	0	1-10	1-10	
12		1383	0	1383	0	0	5-8	5-8	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
7		896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0
12		968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 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 = 4.75 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-7. DBS = 12-0-0 . CBF = 92 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-8, 5-8. DBS = 20-0-0 . CBF = 92 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING				
TOTAL LOAD CASES: (3)				
CHORDS			WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB. MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00 11-3
2-3	-1467 / 0	-77.3 -77.3	0.55 (1)	4.75 3-10
3-4	-1180 / 0	-77.3 -77.3	0.51 (1)	5.20 10-4
4-5	-867 / 0	-77.3 -77.3	0.85 (1)	4.86 4-8
5-6	-867 / 0	-77.3 -77.3	0.86 (1)	4.86 8-5
6-7	-1222 / 0	0.0 0.0	0.67 (1)	5.09 8-6
12-2	-1339 / 0	0.0 0.0	0.14 (1)	7.00 2-11
12-11	0 / 0	-17.5 -17.5	0.14 (3)	10.00
11-10	0 / 1245	-17.5 -17.5	0.28 (1)	10.00
10-9	0 / 959	-17.5 -17.5	0.33 (3)	10.00
9-8	0 / 959	-17.5 -17.5	0.33 (3)	10.00
8-7	0 / 0	-17.5 -17.5	0.26 (3)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.86 (5-6:1) , BC=0.33 (8-10:3) , WB=0.46 (3-10:1) , SSI=0.29 (5-6:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

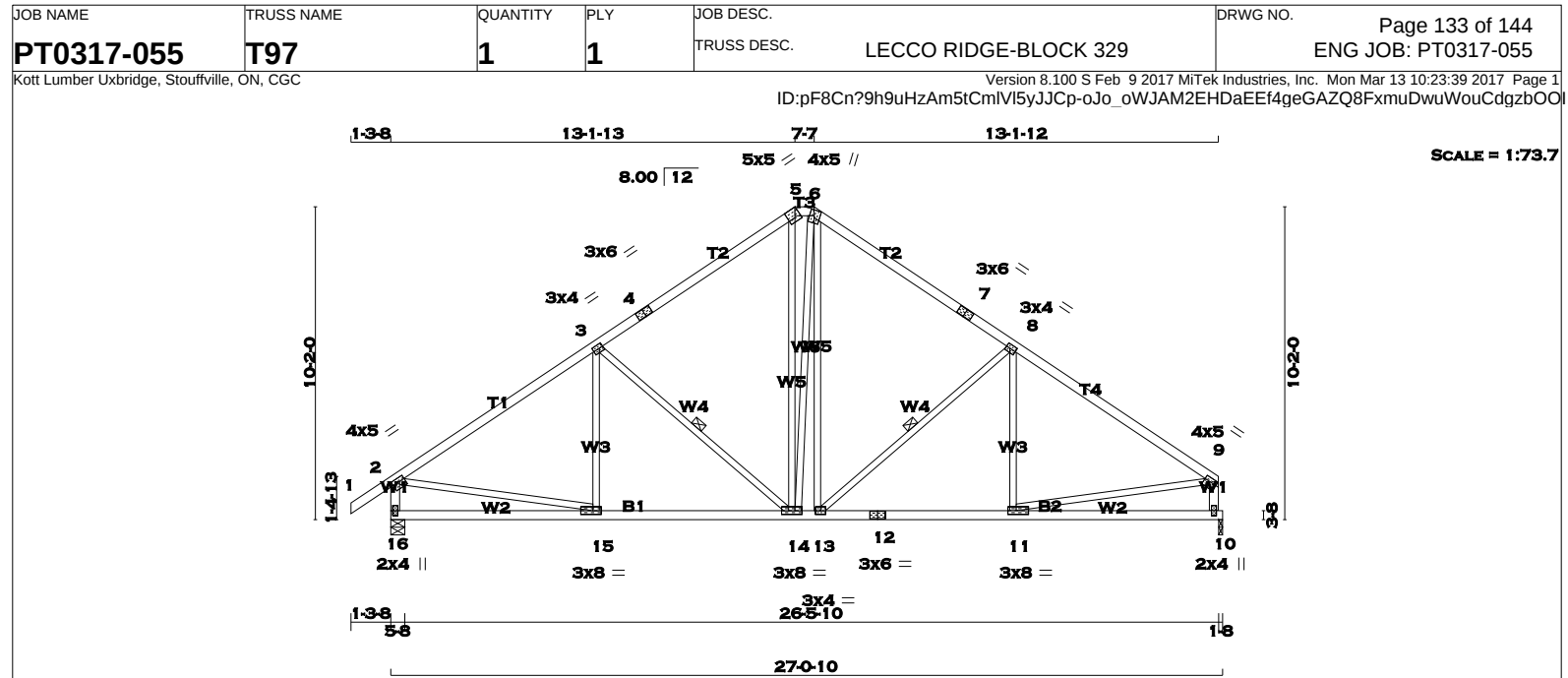
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.50 (2) (INPUT = 1.00)

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TOWN OF MILTON
MAR 29, 2017
17-5001
BUILDING DIVISION

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TOTAL WEIGHT = 127 LB		[M][F]																																																																																																																																																																																																																		
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 5 2x4 DRY No.2 SPF 5 - 6 2x4 DRY No.2 SPF 6 - 7 2x4 DRY No.2 SPF 7 - 9 2x4 DRY No.2 SPF 16 - 2 2x4 DRY No.2 SPF 10 - 9 2x4 DRY No.2 SPF 16 - 12 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th></tr><tr><td>16</td><td>1383</td><td>0</td><td>1383</td><td>0</td></tr><tr><td>10</td><td>1276</td><td>0</td><td>1276</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE COMBINED</th><th>MAX. SNOW</th><th>MIN. LIVE</th><th>COMPONENT REACTIONS</th><th>PERM. LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>16</td><td>968</td><td>691 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>277 / 0</td><td>0 / 0</td></tr><tr><td>10</td><td>896</td><td>627 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>269 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 10 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-14, 8-13. DBS = 20-0-0 . CBF = 61 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: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. UNBRACED LENGTH (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. UNBRACED LENGTH (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10-00</td><td>15-3</td><td>-76 / 87</td><td>0.04 (1)</td></tr><tr><td>2-3</td><td>-1462 / 0</td><td>-77.3 -77.3</td><td>0.51 (1)</td><td>4.82</td><td>3-14</td><td>-482 / 0</td><td>0.23 (1)</td></tr><tr><td>3-4</td><td>-1094 / 0</td><td>-77.3 -77.3</td><td>0.47 (1)</td><td>5.43</td><td>14-5</td><td>0 / 378</td><td>0.09 (1)</td></tr><tr><td>4-5</td><td>-1094 / 0</td><td>-77.3 -77.3</td><td>0.47 (1)</td><td>5.43</td><td>14-6</td><td>0 / 41</td><td>0.01 (1)</td></tr><tr><td>5-6</td><td>-877 / 0</td><td>-77.3 -77.3</td><td>0.01 (1)</td><td>6.25</td><td>13-6</td><td>0 / 334</td><td>0.08 (1)</td></tr><tr><td>6-7</td><td>-1090 / 0</td><td>-77.3 -77.3</td><td>0.47 (1)</td><td>5.44</td><td>13-8</td><td>-488 / 0</td><td>0.24 (1)</td></tr><tr><td>7-8</td><td>-1090 / 0</td><td>-77.3 -77.3</td><td>0.47 (1)</td><td>5.44</td><td>11-8</td><td>-69 / 90</td><td>0.04 (1)</td></tr><tr><td>8-9</td><td>-1463 / 0</td><td>-77.3 -77.3</td><td>0.51 (1)</td><td>4.82</td><td>2-15</td><td>0 / 1261</td><td>0.28 (1)</td></tr><tr><td>16-2</td><td>-1334 / 0</td><td>0.0</td><td>0.0</td><td>14 (1)</td><td>7.01</td><td>11-9</td><td>0 / 1262</td><td>0.28 (1)</td></tr><tr><td>10-9</td><td>-1229 / 0</td><td>0.0</td><td>0.0</td><td>0.13 (1)</td><td>7.23</td><td></td><td></td><td></td></tr><tr><td>16-15</td><td>0 / 0</td><td>-17.5</td><td>-17.5</td><td>0.18 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>15-14</td><td>0 / 1244</td><td>-17.5</td><td>-17.5</td><td>0.29 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 874</td><td>-17.5</td><td>-17.5</td><td>0.22 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 1246</td><td>-17.5</td><td>-17.5</td><td>0.30 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 1246</td><td>-17.5</td><td>-17.5</td><td>0.30 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 0</td><td>-17.5</td><td>-17.5</td><td>0.19 (3)</td><td>10.00</td><td></td><td></td><td></td></tr></table>			FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	16	1383	0	1383	0	10	1276	0	1276	0	JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL	16	968	691 / 0	0 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0	10	896	627 / 0	0 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)		FR-TO		FROM TO		FR-TO				1-2	0 / 29	-77.3 -77.3	0.10 (1)	10-00	15-3	-76 / 87	0.04 (1)	2-3	-1462 / 0	-77.3 -77.3	0.51 (1)	4.82	3-14	-482 / 0	0.23 (1)	3-4	-1094 / 0	-77.3 -77.3	0.47 (1)	5.43	14-5	0 / 378	0.09 (1)	4-5	-1094 / 0	-77.3 -77.3	0.47 (1)	5.43	14-6	0 / 41	0.01 (1)	5-6	-877 / 0	-77.3 -77.3	0.01 (1)	6.25	13-6	0 / 334	0.08 (1)	6-7	-1090 / 0	-77.3 -77.3	0.47 (1)	5.44	13-8	-488 / 0	0.24 (1)	7-8	-1090 / 0	-77.3 -77.3	0.47 (1)	5.44	11-8	-69 / 90	0.04 (1)	8-9	-1463 / 0	-77.3 -77.3	0.51 (1)	4.82	2-15	0 / 1261	0.28 (1)	16-2	-1334 / 0	0.0	0.0	14 (1)	7.01	11-9	0 / 1262	0.28 (1)	10-9	-1229 / 0	0.0	0.0	0.13 (1)	7.23				16-15	0 / 0	-17.5	-17.5	0.18 (3)	10.00				15-14	0 / 1244	-17.5	-17.5	0.29 (1)	10.00				14-13	0 / 874	-17.5	-17.5	0.22 (1)	10.00				13-12	0 / 1246	-17.5	-17.5	0.30 (1)	10.00				12-11	0 / 1246	-17.5	-17.5	0.30 (1)	10.00				11-10	0 / 0	-17.5	-17.5	0.19 (3)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.90") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05") ALLOWABLE DEFL.(TL)= L/360 (0.90") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11") CSI: TC=0.51 (2-3:1) , BC=0.30 (11-13:1) , WB=0.28 (9-11:1) , SSI=0.21 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (9) (INPUT = 0.90) JSI METAL= 0.50 (2) (INPUT = 1.00)	
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																																																
JT	VERT	HORZ	DOWN	HORZ																																																																																																																																																																																																																
16	1383	0	1383	0																																																																																																																																																																																																																
10	1276	0	1276	0																																																																																																																																																																																																																
JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL																																																																																																																																																																																																												
16	968	691 / 0	0 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0																																																																																																																																																																																																												
10	896	627 / 0	0 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0																																																																																																																																																																																																												
CHORDS				WEBS																																																																																																																																																																																																																
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)																																																																																																																																																																																																														
FR-TO		FROM TO		FR-TO																																																																																																																																																																																																																
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10-00	15-3	-76 / 87	0.04 (1)																																																																																																																																																																																																													
2-3	-1462 / 0	-77.3 -77.3	0.51 (1)	4.82	3-14	-482 / 0	0.23 (1)																																																																																																																																																																																																													
3-4	-1094 / 0	-77.3 -77.3	0.47 (1)	5.43	14-5	0 / 378	0.09 (1)																																																																																																																																																																																																													
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6-7	-1090 / 0	-77.3 -77.3	0.47 (1)	5.44	13-8	-488 / 0	0.24 (1)																																																																																																																																																																																																													
7-8	-1090 / 0	-77.3 -77.3	0.47 (1)	5.44	11-8	-69 / 90	0.04 (1)																																																																																																																																																																																																													
8-9	-1463 / 0	-77.3 -77.3	0.51 (1)	4.82	2-15	0 / 1261	0.28 (1)																																																																																																																																																																																																													
16-2	-1334 / 0	0.0	0.0	14 (1)	7.01	11-9	0 / 1262	0.28 (1)																																																																																																																																																																																																												
10-9	-1229 / 0	0.0	0.0	0.13 (1)	7.23																																																																																																																																																																																																															
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11-10	0 / 0	-17.5	-17.5	0.19 (3)	10.00																																																																																																																																																																																																															

LICENSED PROFESSIONAL ENGINEER

PAUL TREVISAN

100136551

March 13th, 2017

PROVINCE OF ONTARIO

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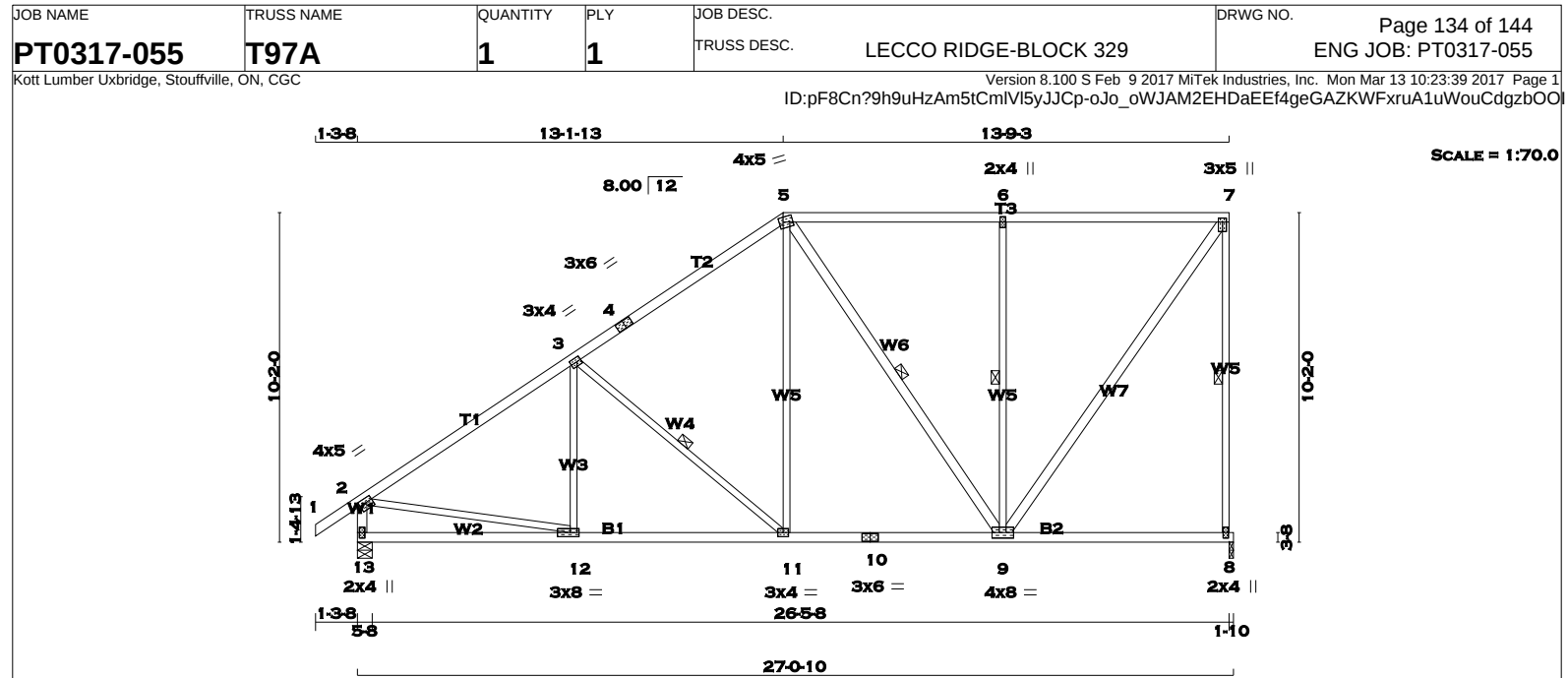
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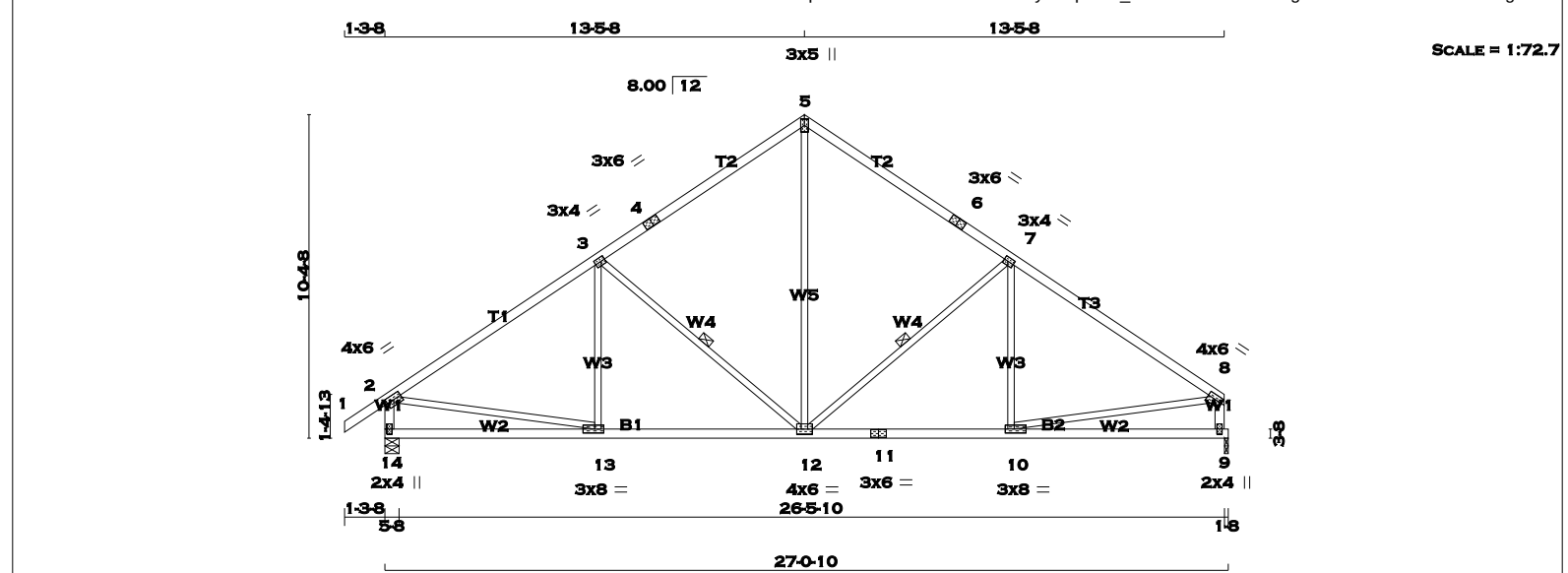


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TOTAL WEIGHT = 2 X 113 = 226 lb
[M][F]

LUMBER					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF	
4 - 5	2x4	DRY	No.2	SPF	
5 - 6	2x4	DRY	No.2	SPF	
6 - 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.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.75	3.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	5.0		
6	TS-t	MT20	3.0	6.0		
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	6.0	1.75	Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	8.0	1.50	3.50
11	BS-t	MT20	3.0	6.0		
12	BMVW-t	MT20	4.0	6.0		
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 GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
14	1383	0	1383	0	0	5-8	5-8		
9	1276	0	1276	0	0	1-8	1-8		

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.79 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-12, 7-12. DBS = 20-0-0 . CBF = 63 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-65 / 92	0.04 (1)
2-3	-1460 / 0	-77.3 -77.3	0.54 (1)	4.79	3-12	-503 / 0	0.26 (1)
3-4	-1069 / 0	-77.3 -77.3	0.49 (1)	5.44	12-5	0 / 763	0.17 (1)
4-5	-1069 / 0	-77.3 -77.3	0.49 (1)	5.44	12-7	-503 / 0	0.26 (1)
5-6	-1069 / 0	-77.3 -77.3	0.49 (1)	5.44	10-7	-66 / 92	0.04 (1)
6-7	-1069 / 0	-77.3 -77.3	0.49 (1)	5.44	2-13	0 / 1259	0.28 (1)
7-8	-1459 / 0	-77.3 -77.3	0.54 (1)	4.79	10-8	0 / 1259	0.28 (1)
14-2	-1334 / 0	0.0	0.0	14 (1)	7.01		
9-8	-1227 / 0	0.0	0.0	0.13 (1)	7.23		
14-13	0 / 0	-17.5 -17.5	0.19 (3)	10.00			
13-12	0 / 1243	-17.5 -17.5	0.30 (1)	10.00			
12-11	0 / 1243	-17.5 -17.5	0.30 (1)	10.00			
11-10	0 / 1243	-17.5 -17.5	0.30 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.19 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.54 (2-3:1) , BC=0.30 (12-13:1) , WB=0.28 (2-13:1) , SSI=0.21 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

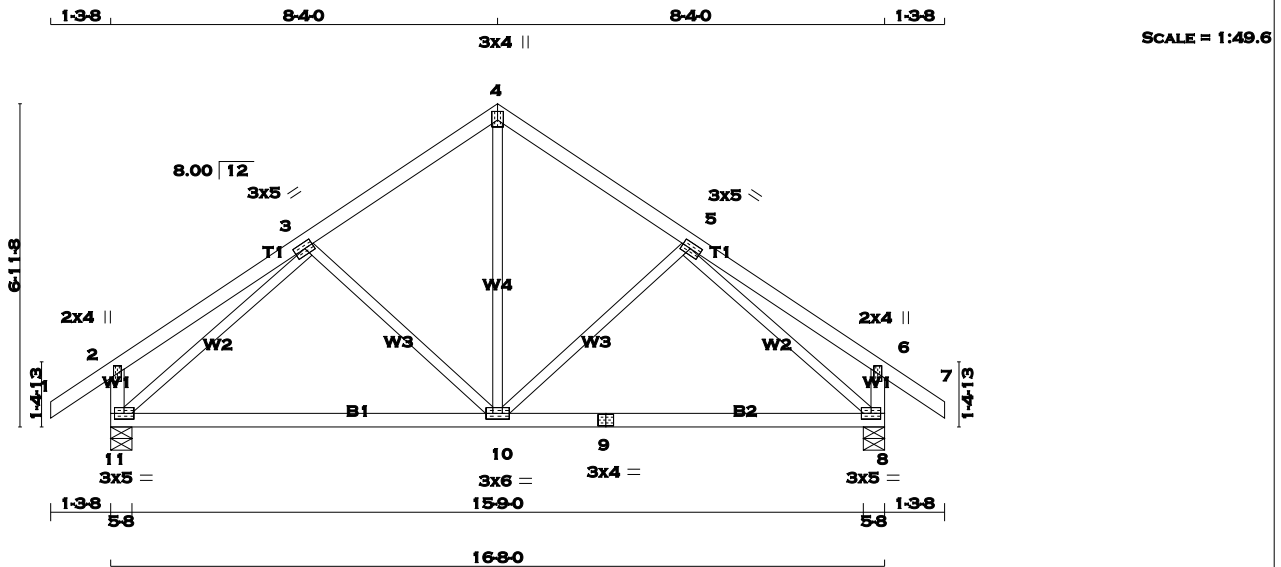
PLATE PLACEMENT TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.42 (8) (INPUT = 1.00)

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TOTAL WEIGHT = 71 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2	4 - 7	2x4	DRY	No.2
11 - 2	2x4	DRY	No.2	11 - 2	2x4	DRY	No.2
8 - 6	2x4	DRY	No.2	8 - 6	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2	11 - 9	2x4	DRY	No.2
9 - 8	2x4	DRY	No.2	9 - 8	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			
DRY: SEASONED LUMBER.				DRY: SEASONED LUMBER.			

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMV+p	MT20	2.0	4.0			
3	TMVW-t	MT20	3.0	5.0	1.50	2.25	
4	TTW+p	MT20	3.0	4.0	2.25	1.50	
5	TMVW-t	MT20	3.0	5.0	1.50	2.25	
6	TMV+p	MT20	2.0	4.0			
8	BMVW1-t	MT20	3.0	5.0			
9	BS-t	MT20	3.0	4.0			
10	BMVW1-t	MT20	3.0	6.0			
11	BMVW1-t	MT20	3.0	5.0			

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	GROSS REACTION	DOWN	UP	BRG
11	897	0	897	0	5-8
8	897	0	897	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
11	627	452 / 0	0 / 0	0 / 0	175 / 0
8	627	452 / 0	0 / 0	0 / 0	175 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11, 8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 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: (3)		CHORDS		WEBS	
MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10-4	0 / 442	0.10 (1)	
2-3	0 / 21	-77.3	-77.3 0.21 (1)	10-5	-193 / 2	0.11 (1)	
3-4	-643 / 0	-77.3	-77.3 0.17 (1)	6-25	-193 / 2	0.11 (1)	
4-5	-643 / 0	-77.3	-77.3 0.17 (1)	6-25	11-3	-900 / 0	0.48 (1)
5-6	0 / 21	-77.3	-77.3 0.21 (1)	10.00	5-8	-900 / 0	0.48 (1)
6-7	0 / 29	-77.3	-77.3 0.10 (1)	10.00			
11-2	-230 / 0	0.0	0.0 0.02 (1)	7.81			
8-6	-230 / 0	0.0	0.0 0.02 (1)	7.81			
11-10	0 / 660	-17.5	-17.5 0.39 (3)	10.00			
10-9	0 / 660	-17.5	-17.5 0.39 (3)	10.00			
9-8	0 / 660	-17.5	-17.5 0.39 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.56")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.21 (2-3:1), BC=0.39 (10-11:3), WB=0.48 (3-11:1), SSI=0.13 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

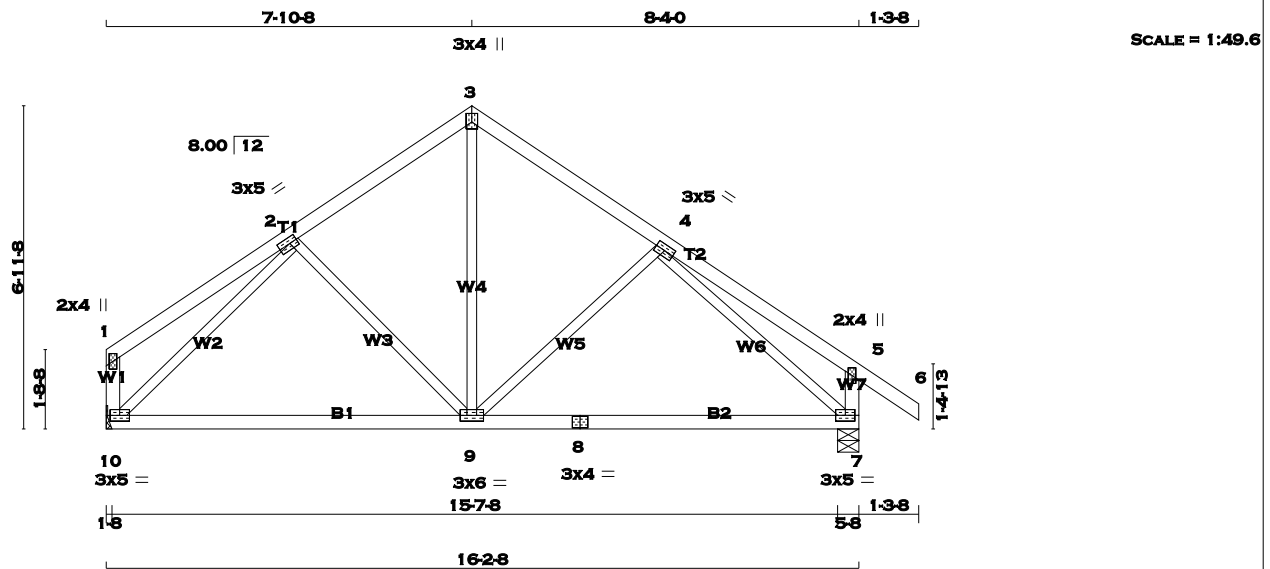
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JSI METAL= 0.25 (3) (INPUT = 1.00)



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TOTAL WEIGHT = 3 X 68 = 203 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 3	2x4	DRY	No.2		SPF
3 - 6	2x4	DRY	No.2		SPF
10 - 1	2x4	DRY	No.2		SPF
7 - 5	2x4	DRY	No.2		SPF
10 - 8	2x4	DRY	No.2		SPF
8 - 7	2x4	DRY	No.2		SPF
ALL WEBS EXCEPT	2x3	DRY	No.2		SPF

DRY: SEASONED LUMBER.

PLATES (table in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	5.0		
5	TMV+p	MT20	2.0	4.0		
7	BMVW1-t	MT20	3.0	5.0		
8	BS-t	MT20	3.0	4.0		
9	BMVWV-t	MT20	3.0	6.0		
10	BMVW1-t	MT20	3.0	5.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQRD	
JT		VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
10		769	0	769	0	0			
7		875	0	875	0	0			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS						
10	539	377 / 0	0 / 0	0 / 0	0 / 0	162 / 0	0 / 0		
7	612	441 / 0	0 / 0	0 / 0	0 / 0	170 / 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: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 20	-77.3	-77.3 0.19 (1)	10.00	2-9	-141 / 12	0.08 (1)
2-3	-608 / 0	-77.3	-77.3 0.15 (1)	6.25	9-3	0 / 411	0.09 (1)
3-4	-609 / 0	-77.3	-77.3 0.17 (1)	6.25	9-4	-199 / 0	0.11 (1)
4-5	0 / 21	-77.3	-77.3 0.22 (1)	10.00	10-2	-841 / 0	0.43 (1)
5-6	0 / 29	-77.3	-77.3 0.10 (1)	10.00	4-7	-867 / 0	0.46 (1)
10-1	-117 / 0	0.0	0.0 0.01 (1)	7.81			
7-5	-229 / 0	0.0	0.0 0.02 (1)	7.81			
10-9	0 / 589	-17.5	-17.5 0.37 (3)	10.00			
9-8	0 / 636	-17.5	-17.5 0.37 (3)	10.00			
8-7	0 / 636	-17.5	-17.5 0.37 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
	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 (0.54")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.54")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.22 (4-5:1), BC=0.37 (7-9:3), WB=0.46 (4-7:1), SSI=0.13 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.24 (4) (INPUT = 1.00)



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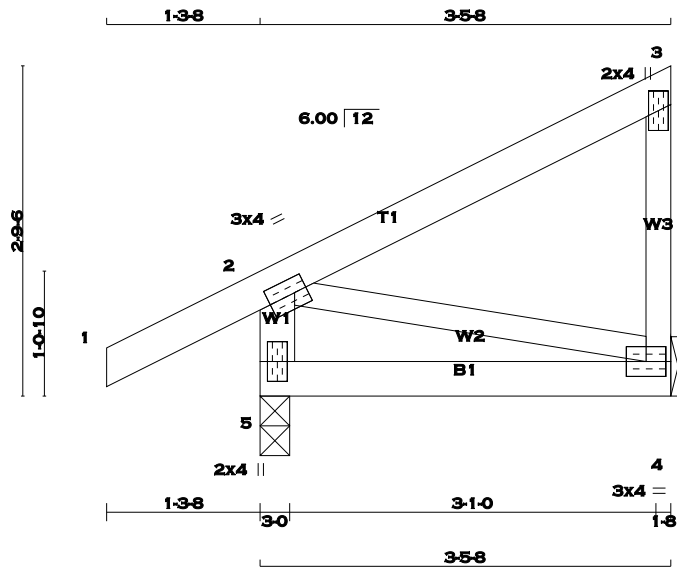
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Kott Lumber Uxbridge, Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Mon Mar 13 10:23:40 2017 Page 1

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SCALE = 1:19.4

TOTAL WEIGHT = 3 X 15 = 45 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
4 - 3	2x3	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY No.2					SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	4.0		
5	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MIK 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	269	0	269	0	0	3-0	3-0	
4	164	0	164	0	0	1-8	1-8	

SEE MIK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 4

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	186	144 / 0	0 / 0	0 / 0	0 / 0	43 / 0	0 / 0
4	115	81 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 5

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		WEBS		MEMB.	FACTORED	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)		MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO		FROM	TO	LENGTH	FR-TO		
5-2	-239 / 0	0.0	0.0	0.02 (1)	7.81	2-4	0 / 0
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00		
2-3	0 / 0	-77.3	-77.3	0.16 (1)	10.00		
4-3	-134 / 0	0.0	0.0	0.03 (1)	7.81		
5-4	0 / 0	-17.5	-17.5	0.06 (3)	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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.16 (2-3:1), BC=0.06 (4-5:3), WB=0.00 (2-4:1), 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	MAX MIN
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

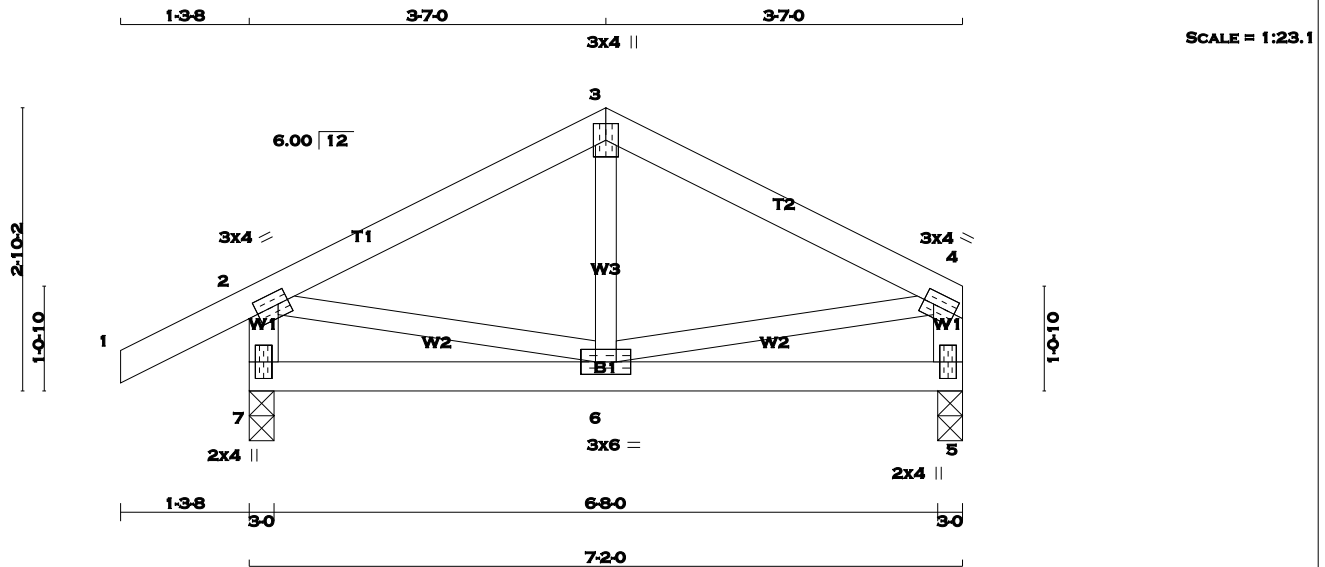
JSI GRIP= 0.22 (2) (INPUT = 0.90)
JSI METAL= 0.04 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 28 = 55 lb [M][F]

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
7 - 2	2x4	DRY	No.2	SPF
5 - 4	2x4	DRY	No.2	SPF
7 - 5	2x4	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2 EXCEPT				SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
7	445	0	445	0	0	3-0	3-0	3-0	3-0
5	340	0	340	0	0	3-0	3-0	3-0	3-0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	310	230 / 0	0 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
5	239	167 / 0	0 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	6-3	-28 / 52	0.02 (3)
2-3	-278 / 0	-77.3 -77.3	0.13 (1)	6.25	2-6	0 / 254	0.06 (1)
3-4	-278 / 0	-77.3 -77.3	0.13 (1)	6.25	6-4	0 / 254	0.06 (1)
7-2	-420 / 0	0.0 0.0	0.04 (1)	7.81			
5-4	-315 / 0	0.0 0.0	0.03 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.06 (3)	10.00			
6-5	0 / 0	-17.5 -17.5	0.06 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	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
 - TPC 2011

(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.24")
 CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
 ALLOWABLE DEFL.(TL)= L/360 (0.24")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.13 (2-3:1), BC=0.06 (5-6:3), WB=0.06 (4-6:1), SSI=0.10 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10
 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES					
PLATE	GRIP(DRY)	SHEAR	SECTION		
(PSI)	(PLI)	(PLI)			
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.62 (2) (INPUT = 0.90)
 JSI METAL= 0.15 (2) (INPUT = 1.00)



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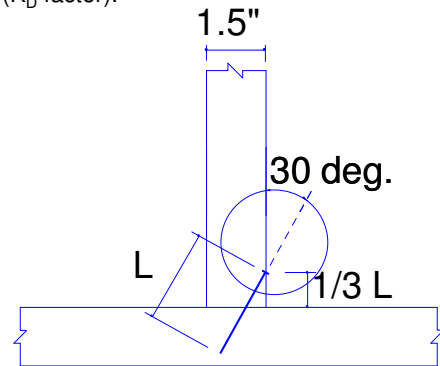
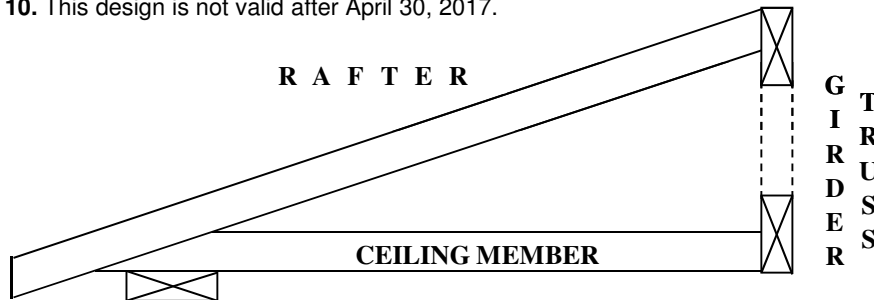
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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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Certificate No. 10889485



April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

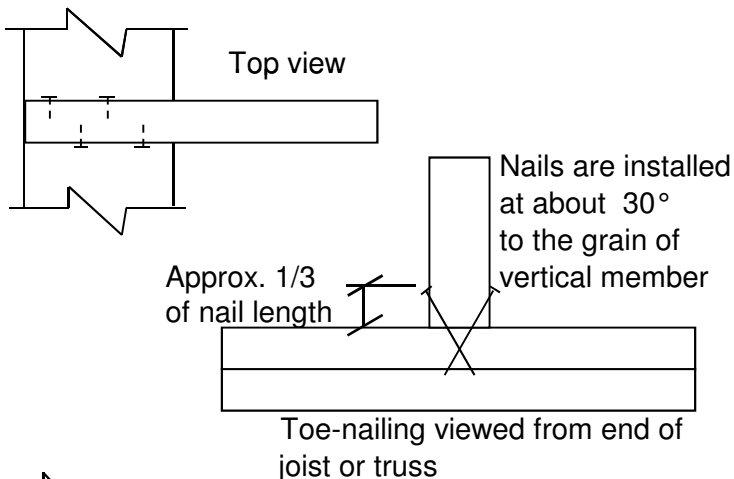
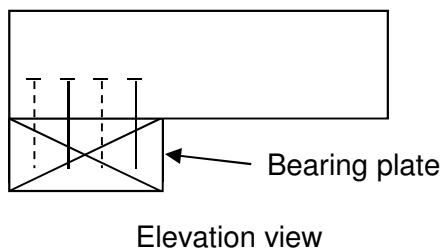
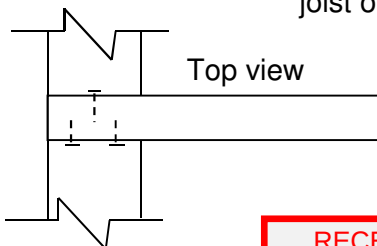
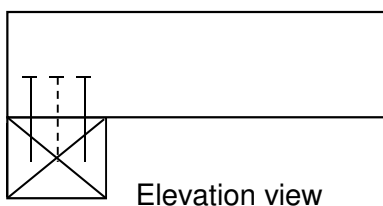
B37579H2

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**

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JOB NAME

JOB DESC.

LECCO RIDGE-BLOCK 329

DRWG NO.

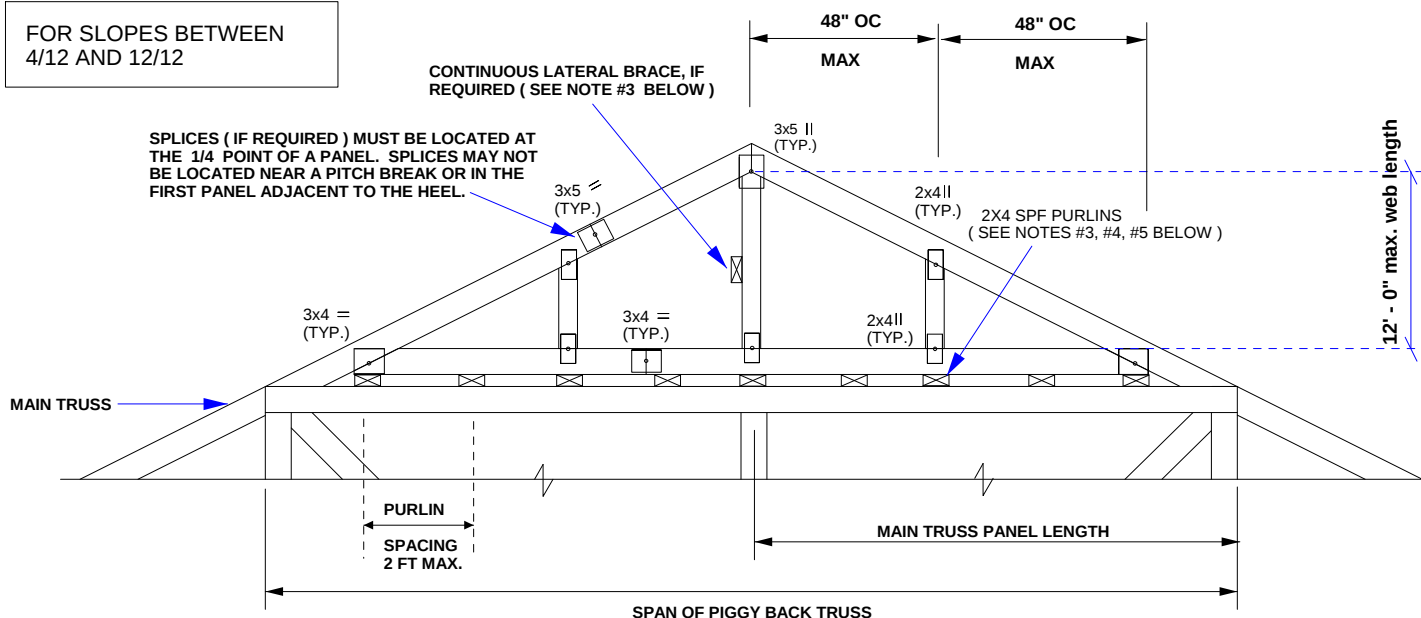
ENC 10B-PT0317-055

DETAILS

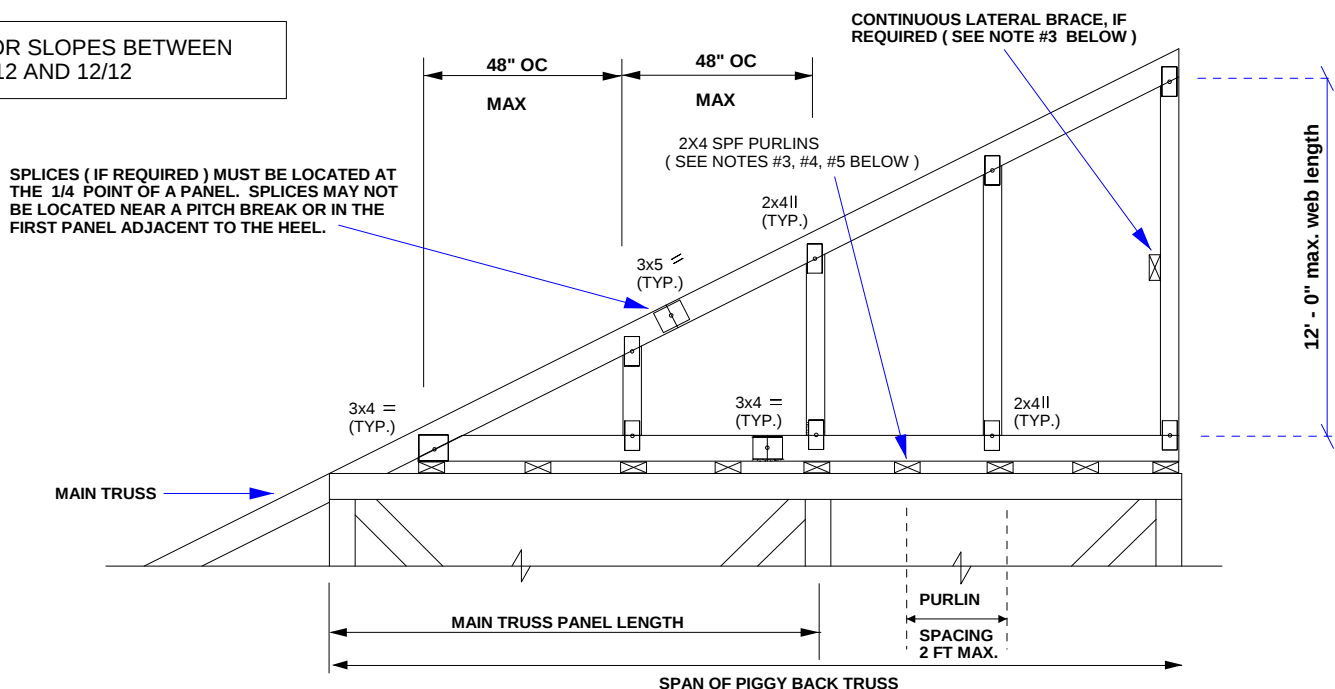
PIGGYBACK TRUSS DETAIL

B375791

FOR SLOPES BETWEEN
4/12 AND 12/12



FOR SLOPES BETWEEN
4/12 AND 12/12



THIS PIGGYBACK DETAIL IS VALID FOR THE
PROJECT DESIGN LOADS LISTED BELOW:

SPECIFIED LOADS:

TOP CHORD	LL =	60.0	PSF OR LESS
	DL =	6.0	PSF OR LESS
BOT CHORD	LL =	0	PSF
	DL =	7.0	PSF
TOTAL LOAD	=	73.0	PSF OR LESS

MAX. SPACING OF TRUSSES NOT TO EXCEED 24" C/C



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Notes:

- Piggyback truss lumber : Top chord = 2x4, Webs = 2x3 or 2x4, Bottom chord = 2x3 or 2x4. All chord/web lumber to be SPF or D. Fir species and No. 2 DRY or better grade.
- Maximum web length is not to exceed 12 ft.
- One continuous lateral brace required at $\frac{1}{2}$ length of any web that exceeds 6 ft in length. Minimum brace (or purlin) size shall be 1x4 as per NBCC 2010, section 9.23.14.11.4 For L-brace or Scab brace connection details see MiTek details B37337K, B37337P.
- Purlins supporting piggyback trusses, as well as overall roof bracing, are specified by building designer.
- Purlin spacing to be equal to main truss maximum unbraced top chord length (as shown on main truss MiTek engineering drawing), but not to exceed 24" c/c.
- This detail is not valid for projects that require a wind analysis to be incorporated into the truss design.
- Piggyback truss must be installed directly on top of each main truss.
- Maximum span of the piggyback is not to exceed 24'-0" (contact MiTek engineering dept. for spans > 24'-0").
- All plates specified are MiTek MT20, centered at each joint, and pressed into both faces of piggyback truss.
- This detail is not valid after April 30, 2017.

April 24, 2015

JOB NAME DETAILS

JOB DESC.

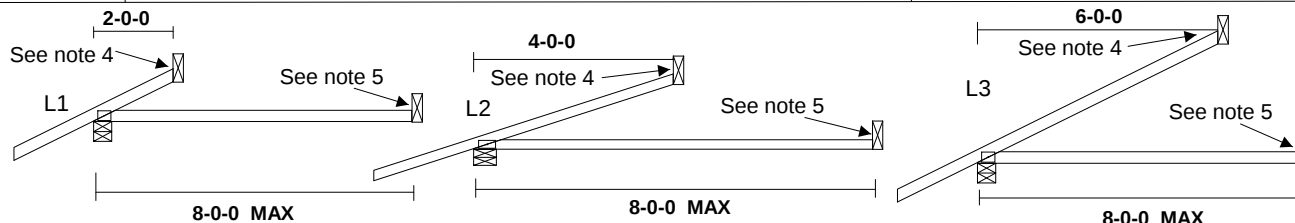
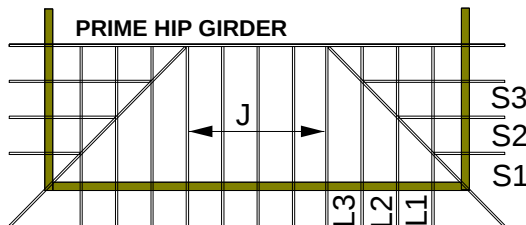
HIP END FRAMING

1000 BRIDGE-BLOCK 329

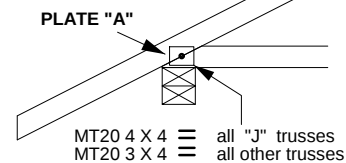
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B37579J

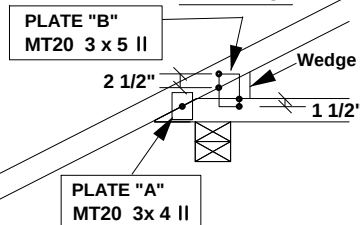
EMC JOB # P10317-055



DETAIL "A"



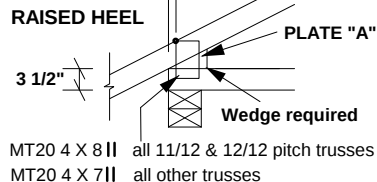
DETAIL "C"



CANTILEVER DETAIL "C"

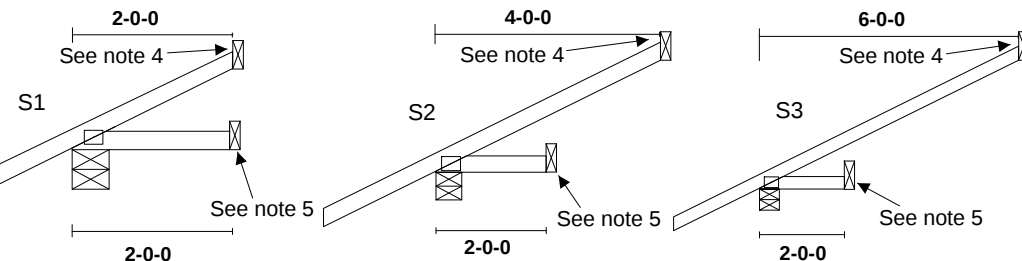
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

DETAIL "B"

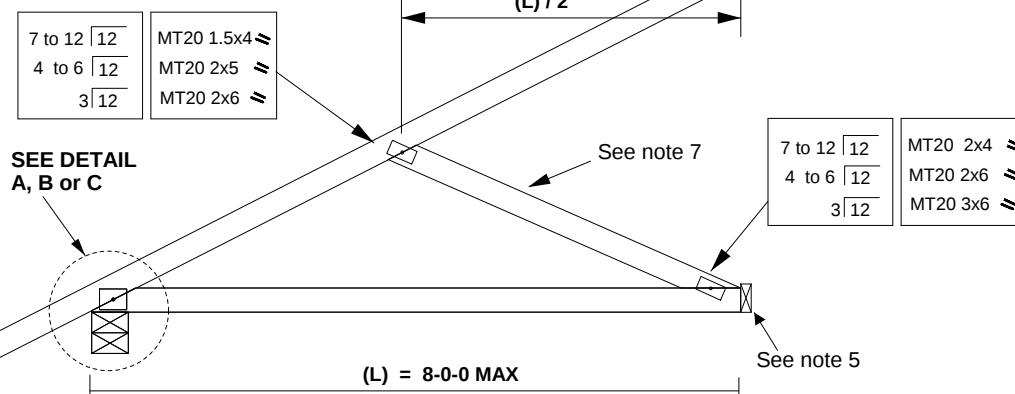


NOTES:

- ALL LUMBER SHALL BE 2x4 SPF OR D. Fir No. 2 DRY OR BETTER.
- THIS TRUSS IS DESIGNED FOR HOUSING AND SMALL BUILDING REQUIREMENTS OF PART 9 NBC 2010, WHERE GROUND SNOW LOAD IS 60.0 PSF OR LESS AND RAIN LOAD DOES NOT EXCEED 12.53 PSF; TOP CHORD DEAD LOAD IS 6 PSF OR LESS; BC LIVE LOAD IS 0 PSF AND BC DEAD LOAD IS 7 PSF.
- HIP RAFTER DESIGN SHALL CONFORM TO SECTION 9.23.14.6 OF NBC 2010.
- FASTEN HIGH END OF RAFTERS USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- FASTEN RIGHT END OF CEILING USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- OVERHANG LENGTH SHALL NOT EXCEED 2 FT.
- WHEN SETBACK IS 6 FT OR LESS, DIAGONAL WEB MAY BE OMITTED AND HIGH END OF TOP CHORD SHALL BE CONNECTED AS PER NOTE 4.
- ALL PLATES SPECIFIED ARE PRESSED INTO BOTH FACES OF THE TRUSS.
- MITEK REFERENCE PAGE MII-7473C FORMS AN INTEGRAL PART OF THIS DETAIL.
- THIS DETAIL IS NOT VALID AFTER APRIL 30, 2017



"J"



SEE DETAIL A, B or C

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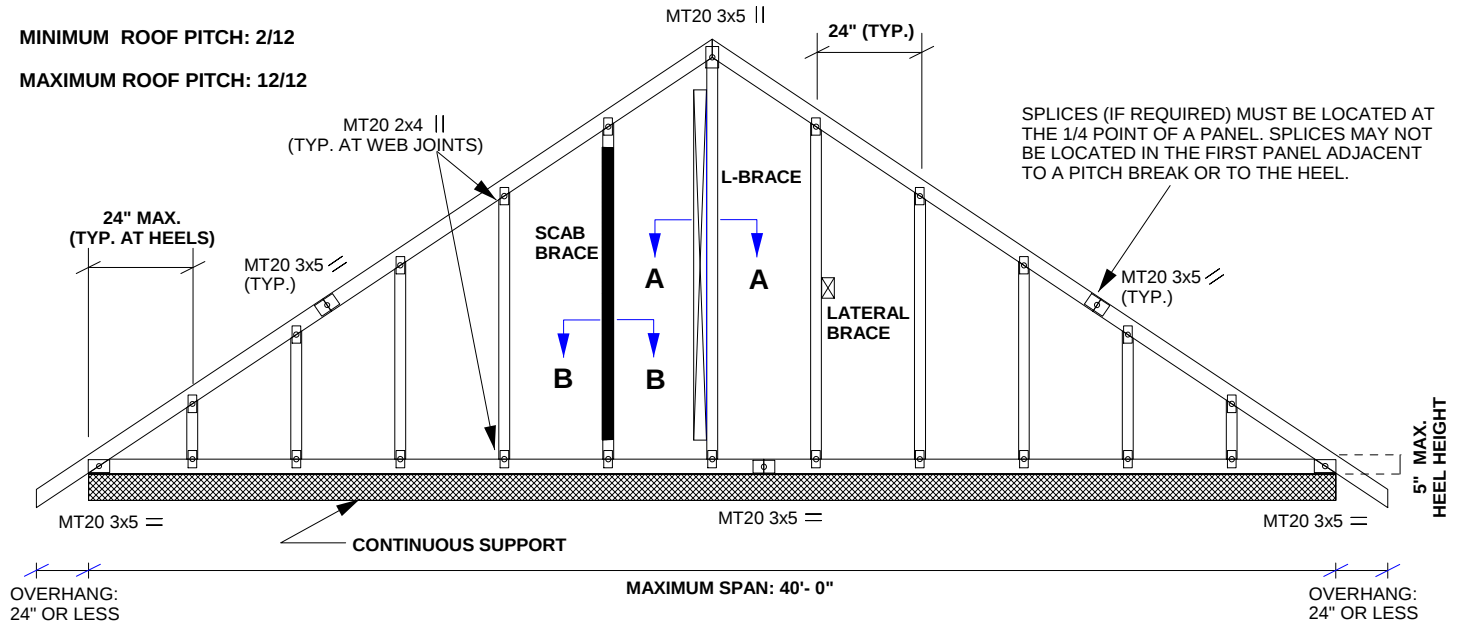
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MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

TOP CHORD: 2 X 4 No. 2 DRY SPF or D- Fir
 BOTTOM CHORD: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir
 GABLE WEB: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir

PLATES

JOINT PLATES
 HEELS MT20 3 X 5
 PEAK MT20 3 X 5
 TC SPLICES MT20 3 X 5
 BC SPLICES MT20 3 X 5
 WEB JOINTS MT20 2 X 4

DESIGN CRITERIA

TOP CHORD LL = 60.0 PSF OR LESS
 TOP CHORD DL = 6.0 PSF OR LESS
 BOTTOM CHORD LL = 0 PSF
 BOTTOM CHORD DL = 7.0 PSF

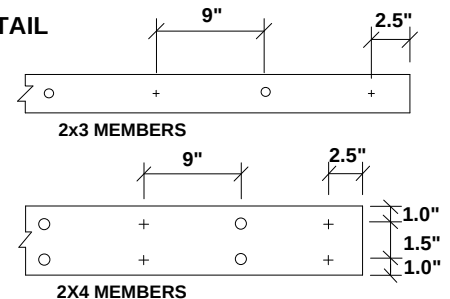
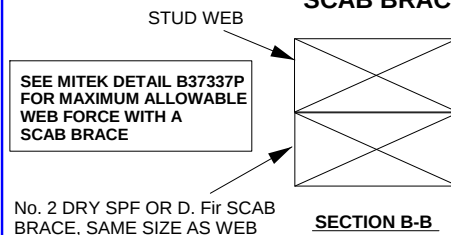
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED.
 WEBS MUST BE LATERALLY BRACED, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

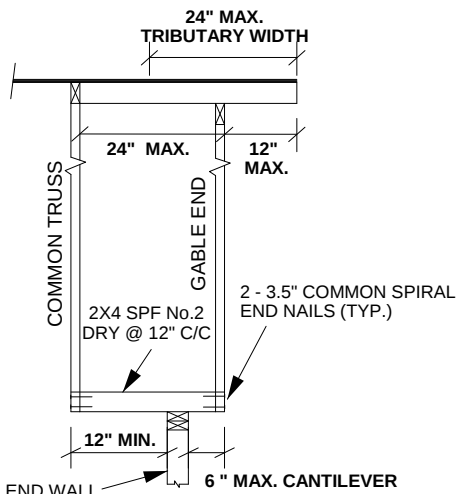
SCAB BRACE DETAIL



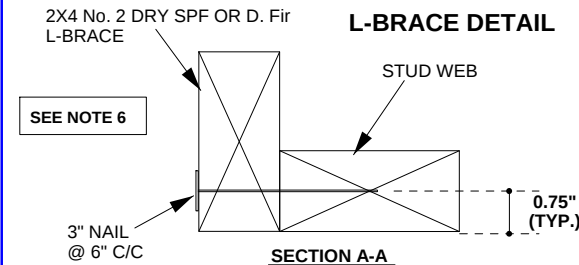
FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

CANTILEVER DETAIL

Note: Gable end may be cantilevered up to 6 inches past end wall as shown. Gable end to be continuously supported by 2x4 SPF No.2 (DRY) members at 12" o.c. along the bottom chord. Roof design loads shall not exceed the loading shown above.



L-BRACE DETAIL



FASTEN L-BRACE TO NARROW EDGE OF WEB WITH ONE ROW OF 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED AT 6" C/C WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

NOTES:

- Gable studs are spaced at 24" C/C (max.) with a max. length of 12 ft.
- All plates specified are MiTek MT20, centered at each joint, and pressed into both faces of truss.
- Truss spacing is 24" C/C, maximum.
- Gable truss is designed for continuous support. Bearing material must be of the same species as chord member and of grade No. 2 or better.
- This truss requires rigid sheathing attached to exposed face.
- 2x3 or 2x4 T-braces shown for gable webs in the MiTek engineering drawings may be replaced by a 2x4 L-brace as shown above.
- This truss is designed for residential or small building requirements, conforming to Part 9, NBCC 2010.
- This detail is not valid after April 30, 2017.

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