

Date: 10/26/2016 Drawn by: BB

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

RESPONSIBILITIES

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

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

SUPPORTS

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

DIMENSIONS

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

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

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[M][F]

GABLE STUDS SPACED AT 2'-0" OC.

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 / 29	-77.3	-77.3	0.10 (1)	10.00	4-11	-367 / 0	0.36 (1)	
2-3	-295 / 0	-77.3	-77.3	0.20 (1)	6.25	11-5	-396 / 0	0.19 (1)	
3-4	0 / 47	-77.3	-77.3	0.27 (1)	10.00	9-5	0 / 78	0.03 (4)	
4-5	0 / 106	-77.3	-77.3	0.28 (1)	10.00	3-11	-411 / 0	0.35 (1)	
5-6	-149 / 0	-77.3	-77.3	0.20 (1)	6.25	12-3	0 / 94	0.03 (4)	
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00	2-12	0 / 272	0.06 (1)	
13-2	-481 / 0	0.0	0.0	0.05 (1)	7.81	9-6	0 / 148	0.03 (1)	
8-6	-371 / 0	0.0	0.0	0.04 (1)	7.81				
13-12	0 / 0	-17.5	-17.5	0.11 (4)	10.00				
12-11	0 / 265	-17.5	-17.5	0.12 (4)	10.00				
11-10	0 / 144	-17.5	-17.5	0.08 (4)	10.00				
10-9	0 / 144	-17.5	-17.5	0.08 (4)	10.00				
9-8	0 / 0	-17.5	-17.5	0.08 (4)	10.00				

JSI GRIP= 0.82 (5) (INPUT = 0.90)
JSI METAL= 0.14 (2) (INPUT = 1.00)

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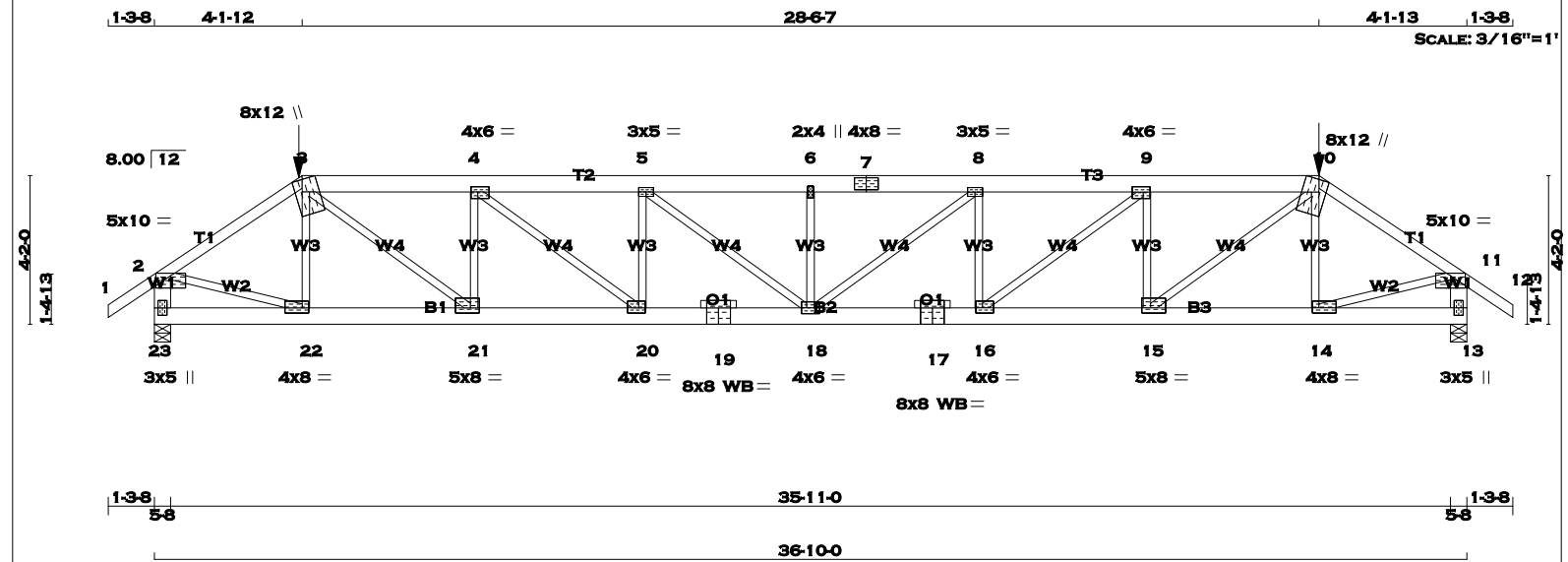
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
PT0317-170	GAB01	1	1	LECCO RIDGE-JUNIPER 7 EL 3	

KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 09:03:54 2017 Page 2

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 7	2x6	DRY	No.2
7 - 10	2x6	DRY	No.2
10 - 12	2x4	DRY	No.2
23 - 2	2x6	DRY	No.2
13 - 11	2x6	DRY	No.2
23 - 19	2x6	DRY	2100F 1.8E
19 - 17	2x6	DRY	2100F 1.8E
17 - 13	2x6	DRY	2100F 1.8E
ALL WEBS EXCEPT	2x3	DRY	No.2

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-p	MT20	5.0	10.0	Edge
3	TTWW+m	MT20	8.0	12.0	Edge 3.25
4	TMWW-t	MT20	4.0	6.0	1.75 2.25
5	TMWW-t	MT20	3.0	5.0	
6	TMW+w	MT20	2.0	4.0	
7	TS-t	MT20	4.0	8.0	
8	TMWW-t	MT20	3.0	5.0	
9	TMWW-t	MT20	4.0	6.0	1.75 2.25
10	TTWW+m	MT20	8.0	12.0	Edge 3.25
11	TMVW-p	MT20	5.0	10.0	Edge
13	BMV1+p	MT20	3.0	5.0	
14	BMWW-t	MT20	4.0	8.0	1.75 2.25
15	BMWW-t	MT20	5.0	8.0	1.75 3.00
16	BMWW-t	MT20	4.0	6.0	1.75 2.25
17	BS-t	MT20	8.0	8.0	
18	BMWW-t	MT20	4.0	6.0	
19	BS-t	MT20	8.0	8.0	
20	BMWW-t	MT20	4.0	6.0	1.75 2.25
21	BMWW-t	MT20	5.0	8.0	1.75 3.00
22	BMWW-t	MT20	4.0	8.0	1.75 2.25
23	BMV1+p	MT20	3.0	5.0	

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.

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	UPLIFT	IN-SX	IN-SX	
23		3356	0	3356	0	0	5-8	5-8	
13		3356	0	3356	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE	
JT		2354	1655 / 0	2354	1655 / 0	0 / 0	0 / 0	0 / 0	0 / 0
23		2354	1655 / 0	2354	1655 / 0	0 / 0	0 / 0	0 / 0	0 / 0
13		2354	1655 / 0	2354	1655 / 0	0 / 0	0 / 0	0 / 0	0 / 0
LOADING									
TOTAL LOAD CASES: (4)									
		CHORDS		WEBS		FACTORED		FACTORED	
		MAX. FORCE		MAX. FORCE		MAX. FORCE		MAX. FORCE	
		(LBS)		(LBS)		(LBS)		(LBS)	
		FR-TO		FR-TO		FR-TO		FR-TO	
1-2		0 / 29	-77.3	-77.3	0.11 (1)	10.00	22-3	-609 / 0	0.15 (1)
2-3		-4064 / 0	-77.3	-77.3	0.58 (1)	3.00	3-21	0 / 3563	0.88 (1)
3-4		-6192 / 0	-145.8	-145.8	0.52 (1)	3.13	21-4	-2047 / 0	0.50 (1)
4-5		-7782 / 0	-145.8	-145.8	0.63 (1)	2.70	4-20	0 / 2022	0.50 (1)
5-6		-8302 / 0	-145.8	-145.8	0.68 (1)	2.56	20-5	-1083 / 0	0.26 (1)
6-7		-8302 / 0	-145.8	-145.8	0.68 (1)	2.56	5-18	0 / 661	0.16 (1)
7-8		-8302 / 0	-145.8	-145.8	0.68 (1)	2.56	18-6	-683 / 0	0.17 (1)
8-9		-7782 / 0	-145.8	-145.8	0.63 (1)	2.70	18-8	0 / 661	0.16 (1)
9-10		-6193 / 0	-145.8	-145.8	0.52 (1)	3.13	16-8	-1083 / 0	0.26 (1)
10-11		-4064 / 0	-77.3	-77.3	0.58 (1)	3.00	16-9	0 / 2022	0.50 (1)
11-12		0 / 29	-77.3	-77.3	0.11 (1)	10.00	15-9	-2047 / 0	0.50 (1)
23-2		-3300 / 0	0.0	0.0	0.24 (1)	5.79	15-10	0 / 3563	0.88 (1)
13-11		-3300 / 0	0.0	0.0	0.24 (1)	5.79	14-10	-610 / 0	0.15 (1)
23-22		0 / 0	-33.0	-33.0	0.04 (4)	10.00	2-22	0 / 3483	0.86 (1)
22-21		0 / 3374	-33.0	-33.0	0.21 (1)	10.00	14-11	0 / 3483	0.86 (1)
21-20		0 / 6192	-33.0	-33.0	0.38 (1)	10.00			
20-19		0 / 7782	-33.0	-33.0	0.48 (1)	10.00			
19-18		0 / 7782	-33.0	-33.0	0.48 (1)	10.00			
18-17		0 / 7782	-33.0	-33.0	0.48 (1)	10.00			
17-16		0 / 7782	-33.0	-33.0	0.48 (1)	10.00			
16-15		0 / 6192	-33.0	-33.0	0.38 (1)	10.00			
15-14		0 / 3375	-33.0	-33.0	0.21 (1)	10.00			
14-13		0 / 0	-33.0	-33.0	0.04 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE
3	4-1-12	-241	-241	---	FRONT
10	32-8-4	-241	-241	---	FRONT

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 4-1-12
RIGHT SETBACK = 4-1-13
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.43")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/588 (0.75")

CSI: TC=0.68 (5-6:1), BC=0.48 (16-18:1), WB=0.88 (3-21:1), SSI=0.27 (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

JSI GRIP= 0.90 (2)
JSI METAL= 0.95

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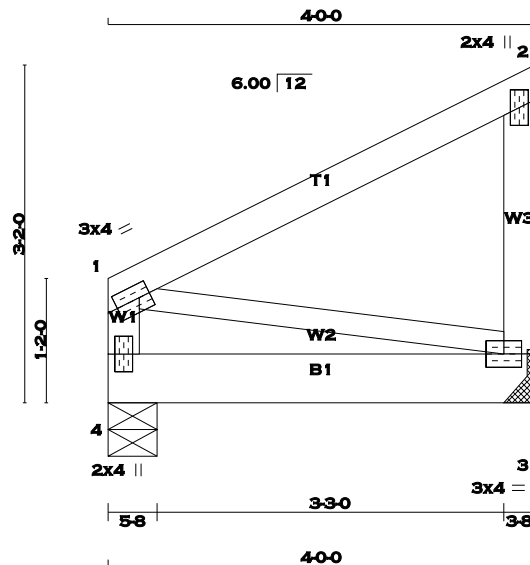
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JSI GRIP= 0.90 (INPUT = 0.0)
JSI METAL= 0.8 (INPUT = 1.0)





SCALE = 1:21.6

TOTAL WEIGHT = 19 lb

LUMBER

N. L. G. A. RULES

CHORDS SIZE

LUMBER

DESCR.

1 - 2

2x4

DRY

No.2

SPF

3 - 2

2x4

DRY

No.2

SPF

4 - 1

2x4

DRY

No.2

SPF

4 - 3

2x6

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	4.0	1.50	1.25
2	TMV+p	MT20	2.0	4.0		
3	BMVW1-t	MT20	3.0	4.0		
4	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	UPLIFT	
3	905	0	0	HANGER BY OTHERS
4	905	0	0	MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
	COMBINED						
3	635	444 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0
4	635	444 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	0 / 0	-77.3	-77.3 0.23 (1)	10.00	1-3	0 / 0	0.00 (1)
3-2	-155 / 0	0.0	0.0 0.02 (1)	7.81			
4-1	-155 / 0	0.0	0.0 0.02 (1)	7.81			
4-3	0 / 0	-375.2	-375.2 0.55 (1)	10.00			

LICENSED PROFESSIONAL ENGINEER

P. J. TREVISAN

100136551

March 23rd, 2017

PROVINCE OF ONTARIO

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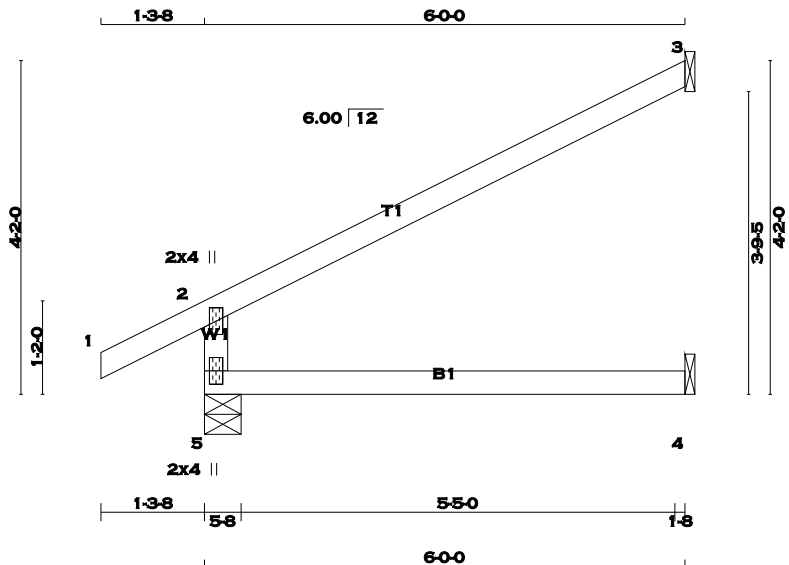
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MAR 29, 2017

JUNIPER 7

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KOTT



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

DESCR.

SPF

SPF

5 - 2

2x4

DRY

No.2

1 - 3

2x4

DRY

No.2

5 - 4

2x4

DRY

No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMV+p

MT20

2.0

4.0

5

BMV1+p

MT20

2.0

4.0

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

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

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

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

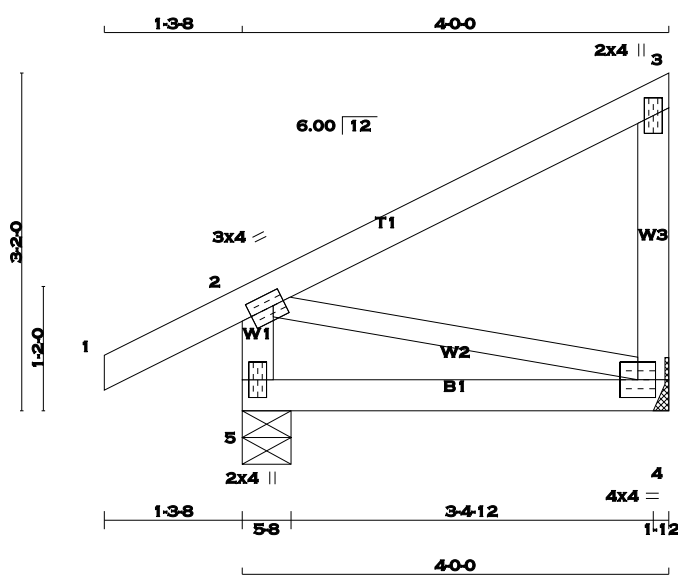
PLATE PLACEMENT TOL. = 0.250 inches

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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TOTAL WEIGHT = 6 X 18 = 108 lb [M]

LUMBER
N. L. G. A. RULES

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	4.0	4.0		
5	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
4	190	0	190	0	0	IN-SX
5	295	0	295	0	0	IN-SX

MIN. SEAT SIZE: 1-12

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	133	93 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0
5	204	156 / 0	0 / 0	0 / 0	0 / 0	48 / 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		MAX. UNBRACED LENGTH	MEMB.	WEBS	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. (LC)			MAX. FORCE (LBS)	MAX. FACTORED (LC)
FR-TO						FR-TO		
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	2-4	0 / 0	0.00 (1)
2-3	0 / 0	-77.3	-77.3	0.21 (1)	10.00			
4-3	-155 / 0	0.0	0.0	0.02 (1)	7.81			
5-2	-260 / 0	0.0	0.0	0.03 (1)	7.81			
5-4	0 / 0	-17.5	-17.5	0.08 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.21 (2-3:1) , BC=0.08 (4-5:4) , WB=0.00 (2-4:1) , SSI=0.11 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

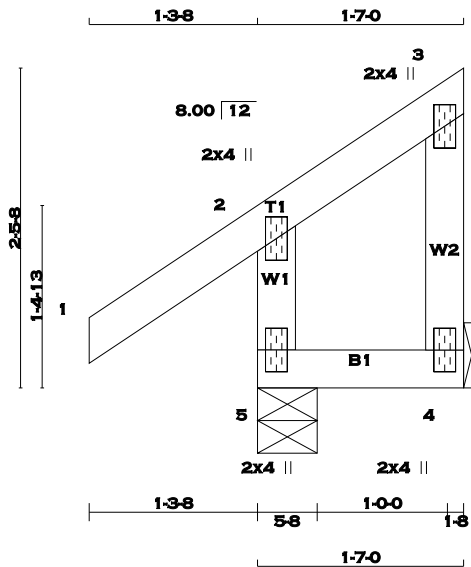
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (2) (INPUT = 0.90)
JSI METAL= 0.05 (5) (INPUT = 1.00)



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SCALE = 1:17.7

TOTAL WEIGHT = 5 X 9 = 46 lb [M]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
5 - 2	2x4	DRY	No.2		SPF
1 - 3	2x4	DRY	No.2		SPF
5 - 4	2x4	DRY	No.2		SPF
ALL WEBS 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		
3	TMV+w	MT20	2.0	4.0		
4	BMW1+w	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	225	0	225	0	5-8
4	11	0	14	0	-35 1-8

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

PROVIDE ANCHORAGE AT BEARING JOINT 4 FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	154	128 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0
4	9	0 / -31	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (5)

CHORDS		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB. FR-TO	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
MEMB.										
5-2	-201 / 0	0.0	0.0	0.03 (5)	7.81	4-3	-10 / 34	0.01 (5)		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00					
2-3	-24 / 0	-77.3	-77.3	0.08 (1)	6.25					
5-4	-1 / 0	-17.5	-17.5	0.03 (5)	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=0.03 (4-5:5) , WB=0.01 (3-4:5) , SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE 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

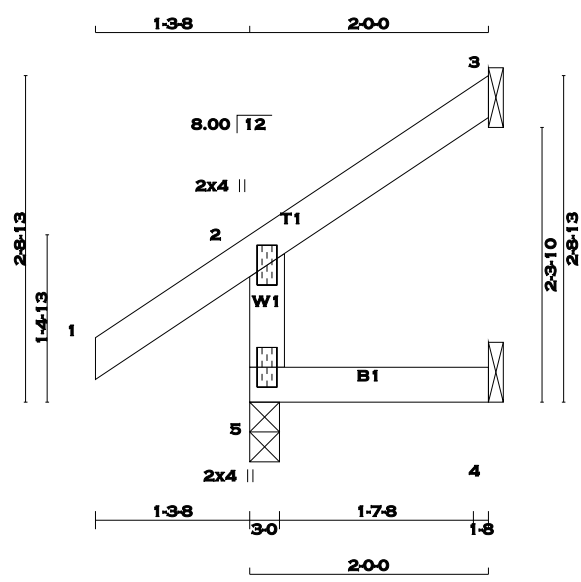
PLATE ROTATION TOL. = 5.0 Deg.

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



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TOTAL WEIGHT = 3 X 8 = 24 lb [M]

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		222	0	222	0	0	3-0	3-0	
3		59	0	59	0	0	1-8	1-8	
4		16	0	18	0	0	1-8	1-8	

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

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

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

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

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

LOADING				
TOTAL LOAD CASES: (5)				
		CHORDS		WEBS
		MAX. FACTORED	FACTORED	MAX. FACTORED
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	MEMB. FORCE (LBS)
			LC1	MAX. UNBRAC
			CSI (LC)	LENGTH
FR-TO				FR-TO
5-2		-202 / 0	0.0	0.0 0.01 (4)
1-2		0 / 29	-77.3	-77.3 0.10 (1)
2-3		-10 / 0	-77.3	-77.3 0.05 (1)
5-4		0 / 0	-17.5	-17.5 0.02 (4)

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

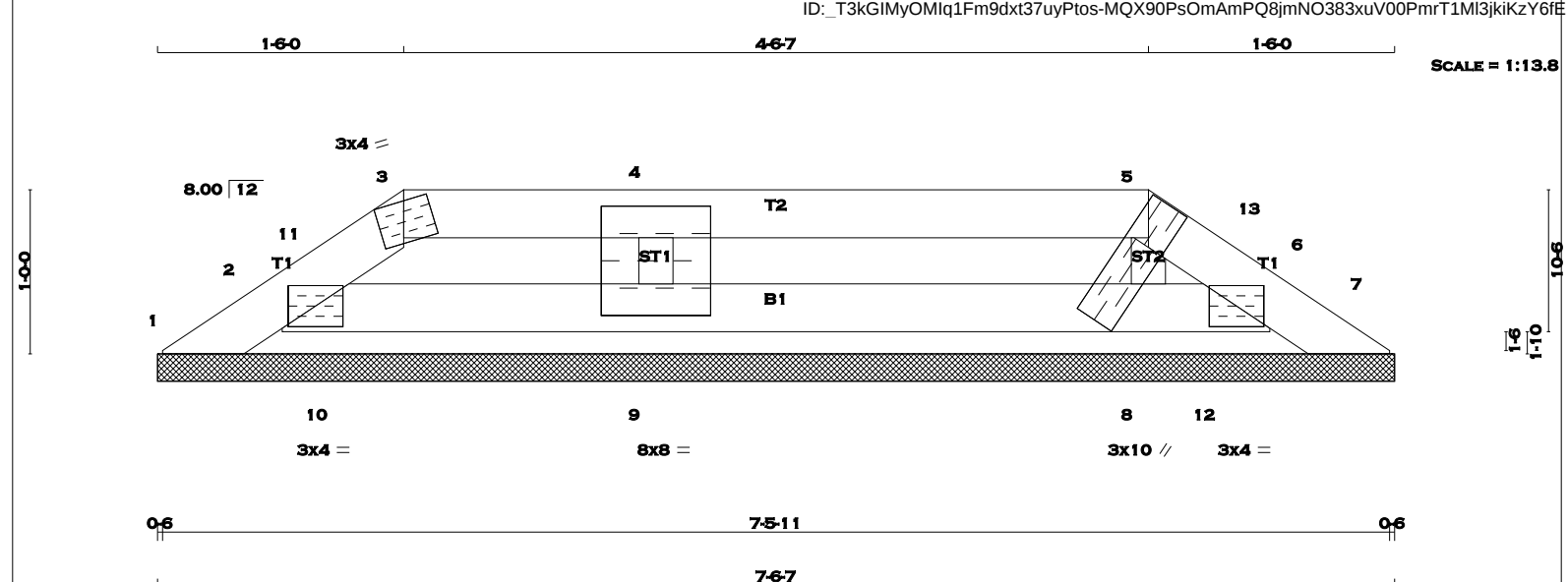
PLATE ROTATION TOL. = 5.0 Deg.

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



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TOTAL WEIGHT = 2 X 17 = 33 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
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-l	MT20	3.0	4.0		
3	TT-m	MT20	3.0	4.0	Edge	
4, 5, 8, 9						
4						
6	TMB1-l	MT20	3.0	4.0		
8	TTBW1*+h	MT20	3.0	10.0	3.50	3.75
9	TMBMW1-l	MT20	8.0	8.0		
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
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
1-2	0 / 10	-94.8	-94.8 0.02 (1)	10.00	8-5	-80 / 0	0.01 (1)
2-11	-62 / 0	-77.3	-77.3 0.02 (1)	6.25	9-4	-240 / 0	0.03 (1)
11-3	-46 / 0	-77.3	-77.3 0.01 (1)	6.25	10-11	-6 / 17	0.00 (1)
3-4	-33 / 0	-77.3	-77.3 0.09 (1)	6.25	12-13	-35 / 0	0.00 (1)
4-5	-33 / 0	-77.3	-77.3 0.09 (1)	6.25			
5-13	-45 / 0	-77.3	-77.3 0.01 (4)	6.25			
13-6	-42 / 0	-77.3	-77.3 0.01 (4)	6.25			
6-7	0 / 2	-94.8	-94.8 0.01 (1)	10.00			
2-10	0 / 33	-17.5	-17.5 0.01 (1)	10.00			
10-9	0 / 33	-17.5	-17.5 0.03 (4)	10.00			
9-8	0 / 33	-17.5	-17.5 0.03 (4)	10.00			
8-12	0 / 33	-17.5	-17.5 0.03 (4)	10.00			
12-6	0 / 33	-17.5	-17.5 0.01 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

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

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

(55 % OF 27.2 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=0.09 (4-5:1), BC=0.03 (8-9:4), WB=0.03 (4-9:1), 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

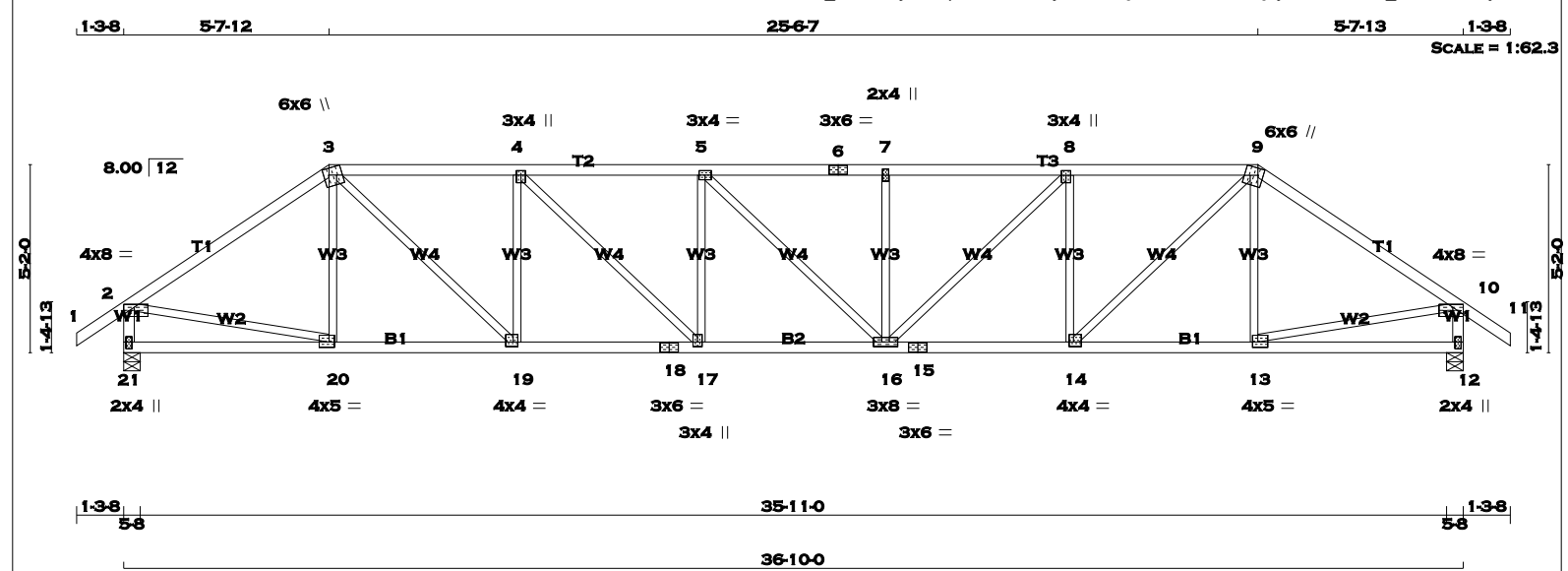
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (8) (INPUT = 0.90)
JSI METAL= 0.02 (2) (INPUT = 1.00)



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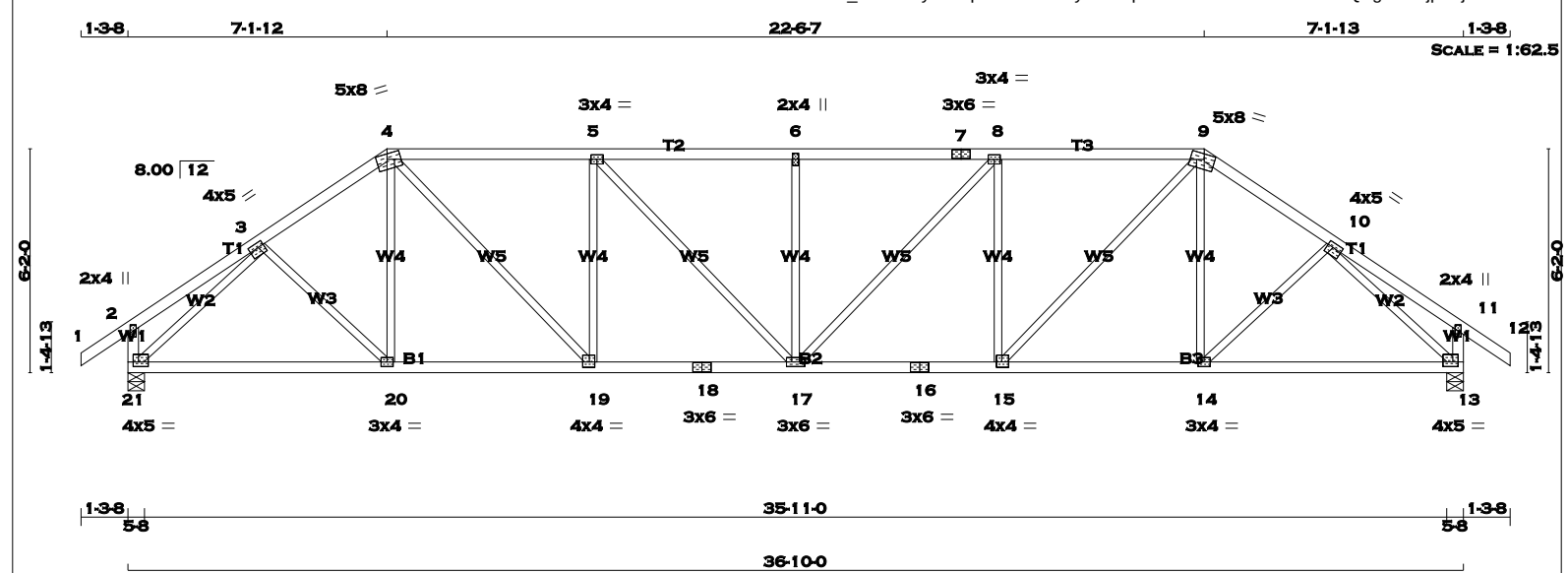


[M]									
TOTAL WEIGHT = 151 LB									
LUMBER									
N. L. G. A. RULES									
CHORDS SIZE LUMBER DESCR.									
1 - 3 2x4 DRY No.2 SPF									
3 - 6 2x4 DRY No.2 SPF									
6 - 9 2x4 DRY No.2 SPF									
9 - 11 2x4 DRY No.2 SPF									
21- 2 2x4 DRY No.2 SPF									
12- 10 2x4 DRY No.2 SPF									
21- 18 2x4 DRY No.2 SPF									
18- 15 2x4 DRY No.2 SPF									
15- 12 2x4 DRY No.2 SPF									
ALL WEBS 2x3 DRY No.2 SPF									
EXCEPT									
DRY: SEASONED LUMBER.									
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED MAXIMUM FACTORED INPUT REQD									
GROSS REACTION GROSS REACTION BRG BRG									
JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX									
21 1853 0 1853 0 0 5-8 5-8									
12 1853 0 1853 0 0 5-8 5-8									
UNFACTORED REACTIONS									
1ST LCASE MAX./MIN. COMPONENT REACTIONS									
JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL									
21 1298 921 / 0 0 / 0 0 / 0 377 / 0 0 / 0									
12 1298 921 / 0 0 / 0 0 / 0 377 / 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 = 3.48 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS WEBS									
MAX. FACTORED FACTORED MAX. FACTORED									
MEMB. FORCE VERT. LOAD LC1 MAX MEMB. FORCE MAX									
(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)									
FR-TO FROM TO LENGTH FR-TO									
1- 2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 20- 3 -216 / 25 0.09 (1)									
2- 3 -2088 / 0 -77.3 -77.3 0.60 (1) 4.09 3-19 0 / 1445 0.33 (1)									
3- 4 -2783 / 0 -77.3 -77.3 0.44 (1) 3.79 19- 4 -908 / 0 0.36 (1)									
4- 5 -3272 / 0 -77.3 -77.3 0.50 (1) 3.48 4-17 0 / 678 0.15 (1)									
5- 6 -3271 / 0 -77.3 -77.3 0.41 (1) 3.59 17- 5 -380 / 0 0.15 (1)									
6- 7 -3271 / 0 -77.3 -77.3 0.41 (1) 3.59 5-16 -2 / 0 0.00 (1)									
7- 8 -3271 / 0 -77.3 -77.3 0.50 (1) 3.48 16- 7 -380 / 0 0.15 (1)									
8- 9 -2783 / 0 -77.3 -77.3 0.44 (1) 3.78 16- 8 0 / 676 0.15 (1)									
9-10 -2088 / 0 -77.3 -77.3 0.60 (1) 4.09 14- 8 -907 / 0 0.36 (1)									
10-11 0 / 29 -77.3 -77.3 0.10 (1) 10.00 14- 9 0 / 1445 0.33 (1)									
21- 2 -1812 / 0 0.0 0.0 0.19 (1) 6.21 13- 9 -216 / 25 0.09 (1)									
12-10 -1812 / 0 0.0 0.0 0.19 (1) 6.21 2-20 0 / 1765 0.40 (1)									
13-10 0 / 1765 0.40 (1)									
21-20 0 / 0 -17.5 -17.5 0.13 (4) 10.00									
20-19 0 / 1730 -17.5 -17.5 0.35 (1) 10.00									
19-18 0 / 2783 -17.5 -17.5 0.49 (1) 10.00									
18-17 0 / 2783 -17.5 -17.5 0.49 (1) 10.00									
17-16 0 / 3272 -17.5 -17.5 0.57 (1) 10.00									
16-15 0 / 2784 -17.5 -17.5 0.49 (1) 10.00									
15-14 0 / 2784 -17.5 -17.5 0.49 (1) 10.00									
14-13 0 / 1730 -17.5 -17.5 0.35 (1) 10.00									
13-12 0 / 0 -17.5 -17.5 0.13 (4) 10.00									
DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH. LL = 23.3 PSF									
DL = 3.0 PSF									
BOT CH. LL = 0.0 PSF									
DL = 7.0 PSF									
TOTAL LOAD = 33.3 PSF									
SPACING = 24.0 IN. C/C									
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010									
THIS DESIGN COMPLIES WITH:									
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014									
- CSA 086-09									
- TPIC 2011									
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD									
ALLOWABLE DEFL.(LL)= L/360 (1.23")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.22")									
ALLOWABLE DEFL.(TL)= L/360 (1.23")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.38")									
CSI: TC=0.60 (2-3:1), BC=0.57 (16-17:1), WB=0.40 (2-20:1), SSI=0.19 (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									



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TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION





TOTAL WEIGHT = 2 X 157 = 313 lb
[M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
9 - 12	2x4	DRY	No.2
21 - 2	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2
21 - 18	2x4	DRY	No.2
18 - 16	2x4	DRY	No.2
16 - 13	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMWW-t	MT20	4.0	5.0	1.50 2.00
4	TTWW-m	MT20	5.0	8.0	1.75 3.50
5	TMWW-t	MT20	3.0	4.0	
6	TMW+w	MT20	2.0	4.0	
7	TS-t	MT20	3.0	6.0	
8	TMWW-t	MT20	3.0	4.0	
9	TTWW-m	MT20	5.0	8.0	1.75 3.50
10	TMWW-t	MT20	4.0	5.0	1.50 2.00
11	TMV+p	MT20	2.0	4.0	
13	BMVW1-t	MT20	4.0	5.0	1.50 1.75
14	BMWW-t	MT20	3.0	4.0	
15	BMWW-t	MT20	4.0	4.0	1.75 1.75
16	BS-t	MT20	3.0	6.0	
17	BMWW-t	MT20	3.0	6.0	
18	BS-t	MT20	3.0	6.0	
19	BMWW-t	MT20	4.0	4.0	1.75 1.75
20	BMWW-t	MT20	3.0	4.0	
21	BMVW1-t	MT20	4.0	5.0	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	UPLIFT
21	1853	0	0
13	1853	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX SNOW	MIN LIVE	PERM. LIVE	WIND	DEAD	SOIL
21	1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0
13	1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21, 13

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	UNBRACED LENGTH
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-20	0 / 134	0.03 (4)
2-3	0 / 15	-77.3	-77.3 0.13 (1)	10.00	20-4	0 / 89	0.03 (4)
3-4	-2100 / 0	-77.3	-77.3 0.20 (1)	4.52	4-19	0 / 1152	0.26 (1)
4-5	-2534 / 0	-77.3	-77.3 0.52 (1)	3.85	19-5	-740 / 0	0.44 (1)
5-6	-2771 / 0	-77.3	-77.3 0.54 (1)	3.68	5-17	0 / 344	0.08 (1)
6-7	-2771 / 0	-77.3	-77.3 0.54 (1)	3.68	17-6	-398 / 0	0.24 (1)
7-8	-2771 / 0	-77.3	-77.3 0.54 (1)	3.68	17-8	0 / 344	0.08 (1)
8-9	-2534 / 0	-77.3	-77.3 0.52 (1)	3.85	15-8	-740 / 0	0.44 (1)
9-10	-2100 / 0	-77.3	-77.3 0.20 (1)	4.52	15-9	0 / 1152	0.26 (1)
10-11	0 / 15	-77.3	-77.3 0.13 (1)	10.00	14-9	0 / 89	0.03 (4)
11-12	0 / 29	-77.3	-77.3 0.10 (1)	10.00	14-10	0 / 134	0.03 (4)
21-2	-217 / 0	0.0	0.0 0.02 (1)	7.81	21-3	-2275 / 0	0.90 (1)
13-11	-217 / 0	0.0	0.0 0.02 (1)	7.81	10-13	-2275 / 0	0.90 (1)
21-20	0 / 1633	-17.5	-17.5 0.37 (1)	10.00			
20-19	0 / 1732	-17.5	-17.5 0.39 (1)	10.00			
19-18	0 / 2534	-17.5	-17.5 0.46 (1)	10.00			
18-17	0 / 2534	-17.5	-17.5 0.46 (1)	10.00			
17-16	0 / 2534	-17.5	-17.5 0.46 (1)	10.00			
16-15	0 / 2534	-17.5	-17.5 0.46 (1)	10.00			
15-14	0 / 1732	-17.5	-17.5 0.39 (1)	10.00			
14-13	0 / 1633	-17.5	-17.5 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 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.16")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.29")

CSI: TC=0.54 (6-8:1), BC=0.46 (15-17:1), WB=0.90 (10-13:1), SSI=0.21 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

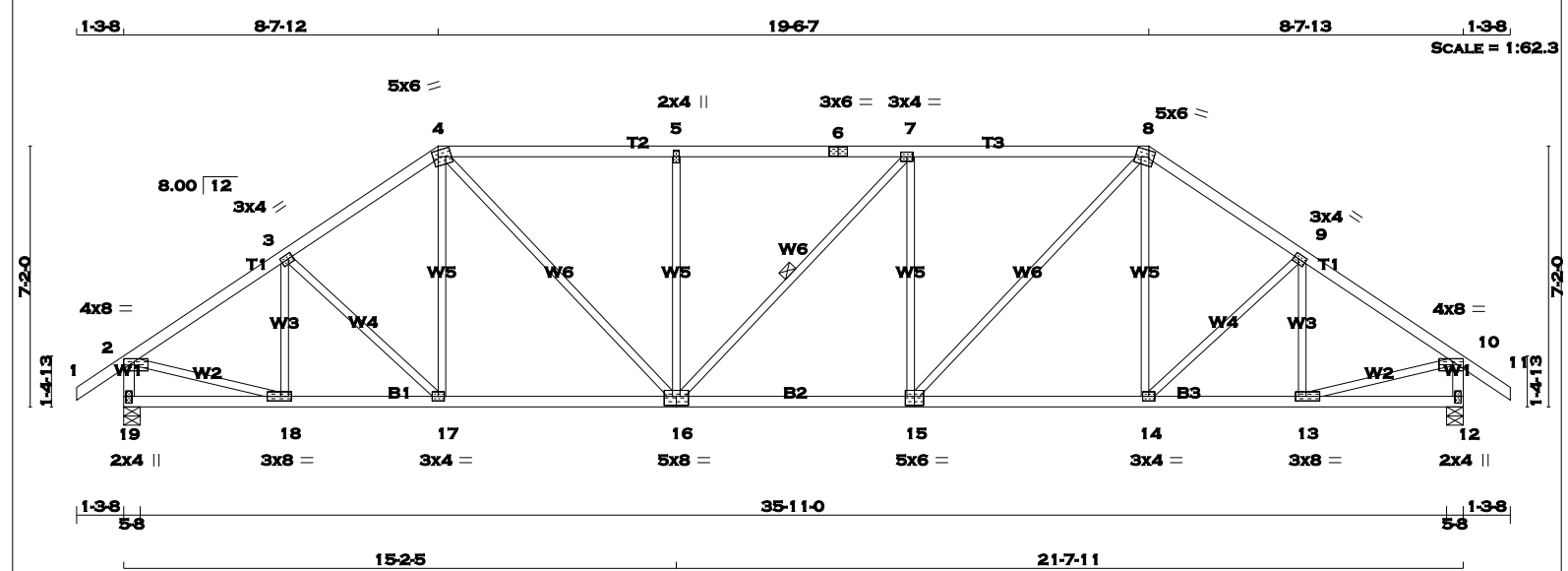
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.71 (18) (INPUT = 1.00)





TOTAL WEIGHT = 2 X 160 = 320 lb [M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 11	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 15	2x4	DRY	No.2
15 - 12	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	8.0	1.00	3.50
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW-m	MT20	5.0	6.0	2.00	1.75
5	TMW-w	MT20	2.0	4.0		
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0		
8	TTWW-m	MT20	5.0	6.0	2.00	1.75
9	TMWW-t	MT20	3.0	4.0	1.50	1.50
10	TMVW-p	MT20	4.0	8.0	1.00	3.50
12	BMV1+p	MT20	2.0	4.0	2.25	1.00
13	BMWW-t	MT20	3.0	8.0	1.50	3.50
14	BMWW-t	MT20	3.0	4.0		
15	BSWW-l	MT20	5.0	6.0	3.00	3.00
16	BSWWW-l	MT20	5.0	8.0	3.00	4.00
17	BMWW-t	MT20	3.0	4.0		
18	BMWW-t	MT20	3.0	8.0	1.50	3.50
19	BMV1+p	MT20	2.0	4.0	2.25	1.00

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
19		1853	0	1853	0	0	5-8	5-8	
12		1853	0	1853	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
19		1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0	
12		1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 12									

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.86 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.		MAX. FACTORED FORCE (LBS)
			FROM TO	MAX. UNBRACED LENGTH (LC)			MAX. FACTORED FORCE (LBS)
FR-TO					FR-TO		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	18-3	-352 / 0
2-3	-2060 / 0	-77.3	-77.3	0.31 (1)	4.43	3-17	-55 / 0
3-4	-2057 / 0	-77.3	-77.3	0.31 (1)	4.44	17-4	0 / 140
4-5	-2321 / 0	-77.3	-77.3	0.64 (1)	3.87	4-16	0 / 910
5-6	-2321 / 0	-77.3	-77.3	0.64 (1)	3.86	16-5	-545 / 0
6-7	-2321 / 0	-77.3	-77.3	0.64 (1)	3.86	16-7	-2 / 0
7-8	-2322 / 0	-77.3	-77.3	0.65 (1)	3.86	15-7	-545 / 0
8-9	-2057 / 0	-77.3	-77.3	0.31 (1)	4.44	15-8	0 / 912
9-10	-2060 / 0	-77.3	-77.3	0.31 (1)	4.43	14-8	0 / 139
10-11	0 / 29	-77.3	-77.3	0.10 (1)	10.00	14-9	-55 / 0
19-2	-1817 / 0	0.0	0.0	0.19 (1)	6.21	13-9	-352 / 0
12-10	-1817 / 0	0.0	0.0	0.19 (1)	6.21	2-18	0 / 1782
						13-10	0 / 1782
19-18	0 / 0	-17.5	-17.5	0.07 (4)	10.00		
18-17	0 / 1731	-17.5	-17.5	0.35 (1)	10.00		
17-16	0 / 1693	-17.5	-17.5	0.34 (1)	10.00		
16-15	0 / 2322	-17.5	-17.5	0.45 (1)	10.00		
15-14	0 / 1693	-17.5	-17.5	0.35 (1)	10.00		
14-13	0 / 1731	-17.5	-17.5	0.34 (1)	10.00		
13-12	0 / 0	-17.5	-17.5	0.07 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.65 (7-8:1) , BC=0.45 (15-16:1) , WB=0.49 (7-15:1) , 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

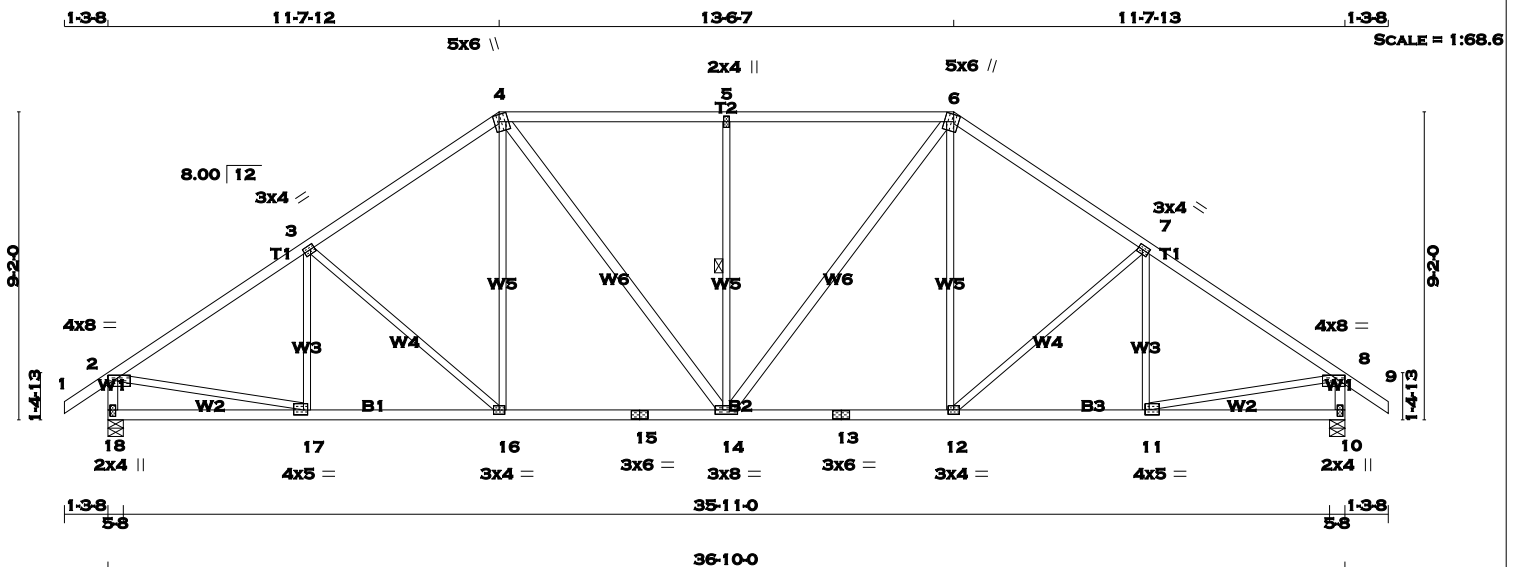
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90)
JSI METAL= 0.50 (15) (INPUT = 1.00)

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TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION



	RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 7 BUILDING DIVISION 
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LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2	4 - 6	2x4	DRY	No.2
6 - 9	2x4	DRY	No.2	6 - 9	2x4	DRY	No.2
18 - 2	2x4	DRY	No.2	18 - 2	2x4	DRY	No.2
10 - 8	2x4	DRY	No.2	10 - 8	2x4	DRY	No.2
18 - 15	2x4	DRY	No.2	18 - 15	2x4	DRY	No.2
15 - 13	2x4	DRY	No.2	15 - 13	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2	13 - 10	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2	ALL WEBS	2x3	DRY	No.2
EXCEPT				EXCEPT			
4 - 14	2x4	DRY	No.2	4 - 14	2x4	DRY	No.2
14 - 6	2x4	DRY	No.2	14 - 6	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	8.0	1.00	3.50
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW+m	MT20	5.0	6.0	Edge	1.75
5	TMVW+w	MT20	2.0	4.0		
6	TTWW+m	MT20	5.0	6.0	Edge	1.75
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-p	MT20	4.0	8.0	1.00	3.50
10	BMV1+p	MT20	2.0	4.0	2.25	1.00
11	BMVW-t	MT20	4.0	5.0	1.75	1.50
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	5.0	1.75	1.50
18	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	GROSS REACTION	FACTORED	DOWN	HORZ	GROSS REACTION	FACTORED	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX	BRG	IN-SX	BRG	IN-SX
18	1853	0	1853	0	1853	0	0	1853	0	1853	0	5-8	5-8	5-8	5-8	5-8	5-8	5-8	5-8
10	1853	0	1853	0	1853	0	0	1853	0	1853	0	5-8	5-8	5-8	5-8	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	SNOW	LIVE	PERM.	LIVE	WIND
18	1298	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	377 / 0
10	1298	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	377 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-14. DBS = 20-0-0 . CBF = 80 LBS.

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

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

LOADING				TOTAL LOAD CASES: (4)			
C H O R D S				W E B S			
MEMB.	MAX. FACTORED	FACTORED	MAX.	MEMB.	MAX. FACTORED	FACTORED	MAX.
FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	FR-TO	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	17-3	-219 / 31	0.09 (1)
2-3	-2131 / 0	-77.3	-77.3 0.44 (1)	4.25	3-16	-296 / 0	0.36 (1)
3-4	-1924 / 0	-77.3	-77.3 0.41 (1)	4.46	16-4	0 / 303	0.07 (1)
4-5	-1868 / 0	-77.3	-77.3 0.53 (1)	4.33	4-14	0 / 480	0.08 (1)
5-6	-1868 / 0	-77.3	-77.3 0.53 (1)	4.33	14-5	-643 / 0	0.35 (1)
6-7	-1924 / 0	-77.3	-77.3 0.41 (1)	4.46	14-6	0 / 480	0.08 (1)
7-8	-2131 / 0	-77.3	-77.3 0.44 (1)	4.25	12-6	0 / 303	0.07 (1)
8-9	0 / 29	-77.3	-77.3 0.10 (1)	10.00	12-7	-296 / 0	0.36 (1)
18-2	-1809 / 0	0.0	0.0 0.19 (1)	6.22	11-7	-219 / 31	0.09 (1)
10-8	-1809 / 0	0.0	0.0 0.19 (1)	6.22	2-17	0 / 1827	0.41 (1)
18-17	0 / 0	-17.5	-17.5 0.14 (4)	10.00	11-8	0 / 1827	0.41 (1)
17-16	0 / 1798	-17.5	-17.5 0.36 (1)	10.00			
16-15	0 / 1577	-17.5	-17.5 0.34 (1)	10.00			
15-14	0 / 1577	-17.5	-17.5 0.34 (1)	10.00			
14-13	0 / 1577	-17.5	-17.5 0.34 (1)	10.00			
13-12	0 / 1577	-17.5	-17.5 0.34 (1)	10.00			
12-11	0 / 1798	-17.5	-17.5 0.36 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.53 (4-5:1) , BC=0.36 (11-12:1) , WB=0.41 (2-17:1) , 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 .

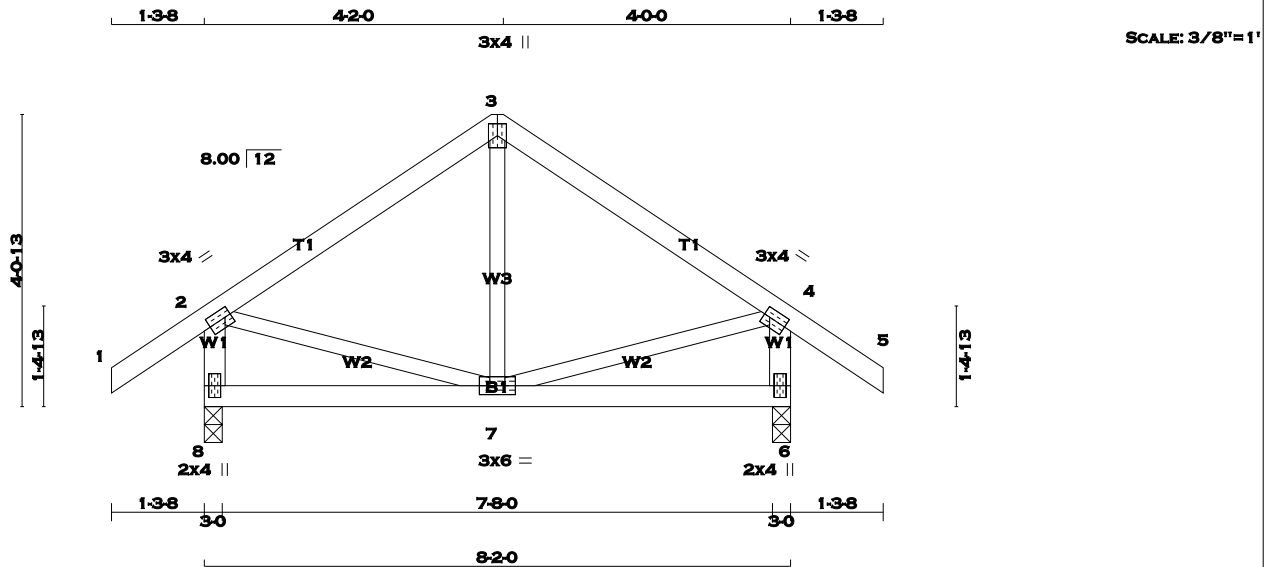
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (2) (INPUT = 0.90)
JSI METAL= 0.54 (11) (INPUT = 1.00)





TOTAL WEIGHT = 36 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	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	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	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	IN-SX
8	493	0	493	0	0	0	3-0	3-0	
6	493	0	493	0	0	0	3-0	3-0	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
8	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0		
6	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0		

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

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

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

LOADING		TOTAL LOAD CASES: (4)							
CHORDS		MEMB.		WEBS		MEMB.		WEBS	
FR-TO	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	FR-TO	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	FR-TO	MAX. FACTORED FORCE (LBS)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	2-7	0 / 224	0.05 (1)		
2-3	-260 / 0	-77.3	-77.3 0.17 (1)	6.25	7-4	0 / 224	0.05 (1)		
3-4	-260 / 0	-77.3	-77.3 0.17 (1)	6.25	7-3	-27 / 61	0.02 (4)		
4-5	0 / 29	-77.3	-77.3 0.10 (1)	10.00					
8-2	-466 / 0	0.0	0.0 0.05 (1)	7.81					
6-4	-466 / 0	0.0	0.0 0.05 (1)	7.81					
8-7	0 / 0	-17.5	-17.5 0.08 (4)	10.00					
7-6	0 / 0	-17.5	-17.5 0.08 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

CSI: TC=0.17 (3-4:1) , BC=0.08 (7-8:4) , WB=0.05 (2-7:1) , SSI=0.10 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

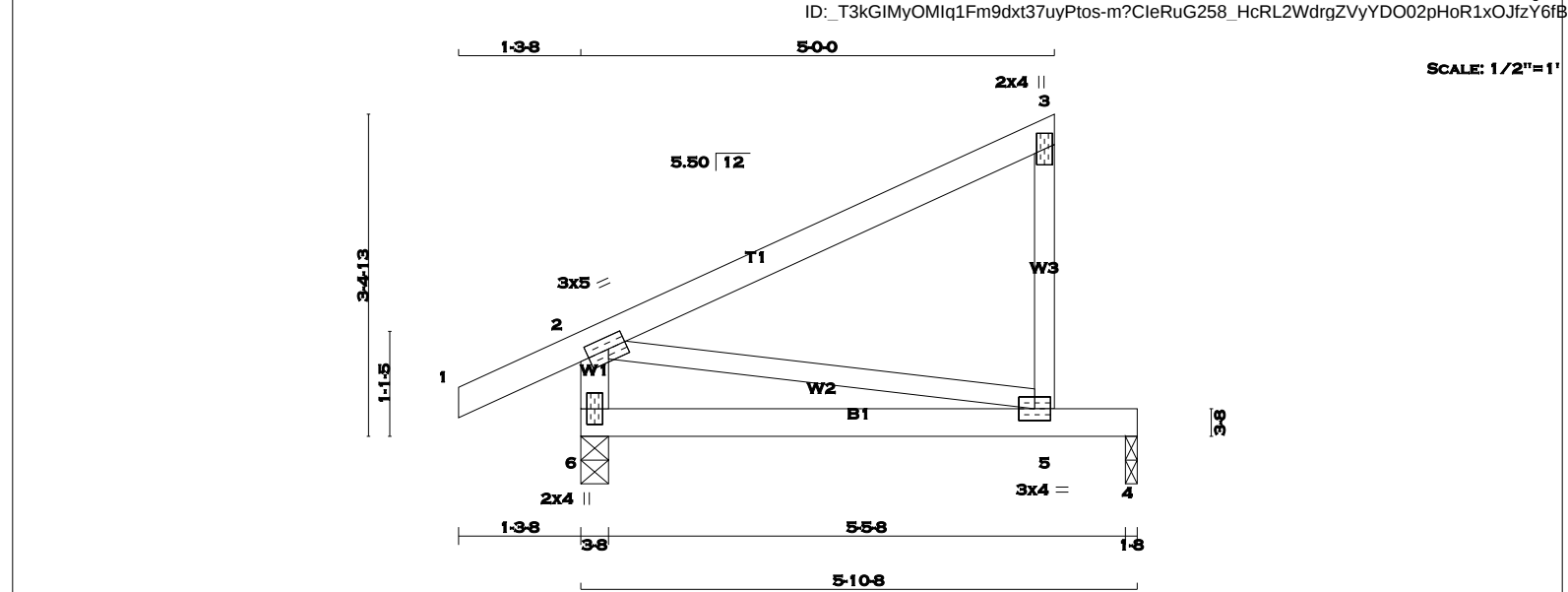
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.73 (4) (INPUT = 0.90)
JSI METAL= 0.15 (4) (INPUT = 1.00)



RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION





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.

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
6	378	0	378	0
4	216	0	216	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	WIND	DEAD	SOIL
6	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
6	263	197 / 0	0 / 0	0 / 0	66 / 0
4	153	99 / 0	0 / 0	0 / 0	54 / 0

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.25
3	TMV+p	MT20	2.0	4.0		
5	BMVW-t	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0		

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO			FROM	TO		FR-TO			
1-2		0 / 22	-77.3	-77.3	0.10 (1)	10.00	2-5	0 / 0	0.00 (1)
2-3		0 / 0	-77.3	-77.3	0.33 (1)	10.00			
5-3		-193 / 0	0.0	0.0	0.05 (1)	7.81			
6-2		-298 / 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	0.25 (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/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")

ALLOWABLE DEFL.(TL)= L/360 (0.20")

CALCULATED VERT. DEFL.(TL) = L/ 565 (0.12")

CSI: TC=0.33 (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

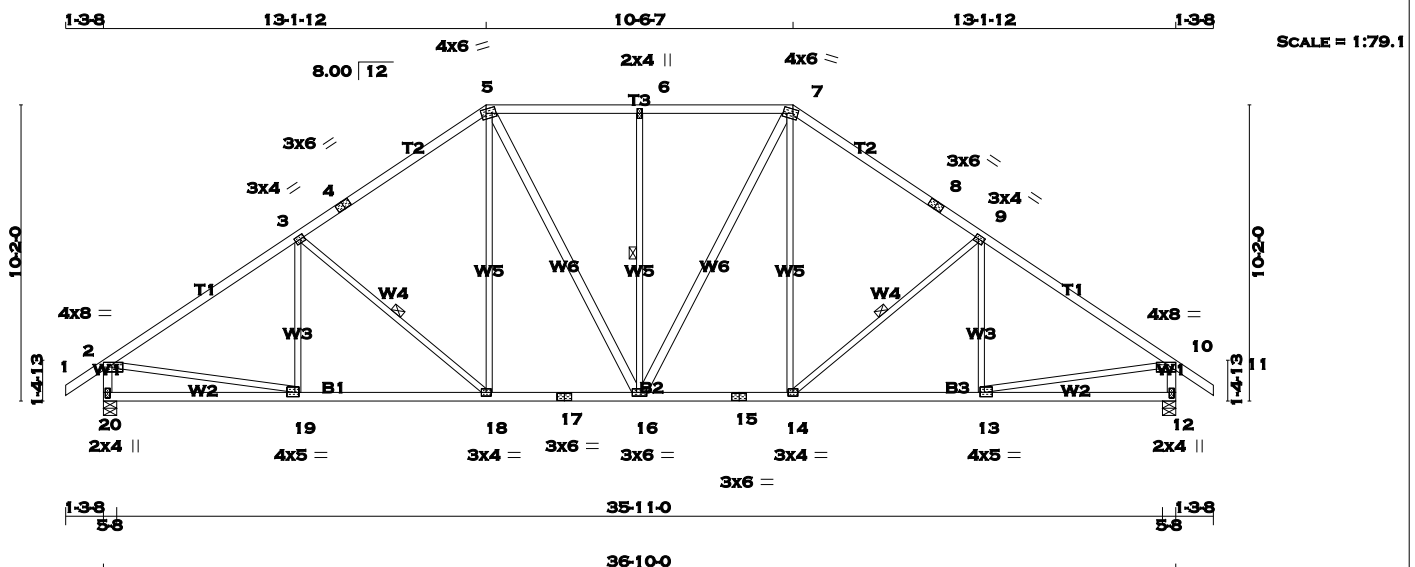
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.26 (2) (INPUT = 0.90)

JSI METAL= 0.05 (6) (INPUT = 1.00)



TOTAL WEIGHT = 2 X 177 = 353 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 8	2x4	DRY	No.2	SPF
8 - 11	2x4	DRY	No.2	SPF
20 - 2	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
20 - 17	2x4	DRY	No.2	SPF
17 - 15	2x4	DRY	No.2	SPF
15 - 12	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
5 - 16	2x4	DRY	No.2	SPF
16 - 7	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
3	TMWV-p	MT20	4.0	8.0	1.00	3.50
4	TMWV-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.00
6	TMW-w	MT20	2.0	4.0		
7	TTWW-m	MT20	4.0	6.0	1.75	2.00
8	TS-t	MT20	3.0	6.0		
9	TMWV-t	MT20	3.0	4.0	1.50	1.50
10	TMWV-p	MT20	4.0	8.0	1.00	3.50
12	BMV1+p	MT20	2.0	4.0	2.25	1.00
13	BMWV-t	MT20	4.0	5.0	1.75	1.75
14	BMWV-t	MT20	3.0	4.0		
15	BS-t	MT20	3.0	6.0		
16	BMWVW-t	MT20	3.0	6.0		
17	BS-t	MT20	3.0	6.0		
18	BMWV-t	MT20	3.0	4.0		
19	BMWV-t	MT20	4.0	5.0	1.75	1.75
20	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
20	1853	0	1853	0	0	5-8	5-8
12	1853	0	1853	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1298	921/0	0/0	0/0	0/0	377/0	0/0
12	1298	921/0	0/0	0/0	0/0	377/0	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 = 4.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 3-18, 6-16, 9-14. DBS = 20-0-0 . CBF = 62 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	19-3	-164 / 63	0.09 (1)
2-3	-2144 / 0	-77.3	-77.3 0.59 (1)	4.08	3-18	-409 / 0	0.21 (1)
3-4	-1838 / 0	-77.3	-77.3 0.53 (1)	4.39	18-5	0 / 366	0.08 (1)
4-5	-1838 / 0	-77.3	-77.3 0.53 (1)	4.39	5-16	0 / 329	0.05 (1)
5-6	-1658 / 0	-77.3	-77.3 0.31 (1)	4.84	16-6	-496 / 0	0.35 (1)
6-7	-1658 / 0	-77.3	-77.3 0.31 (1)	4.84	16-7	0 / 329	0.05 (1)
7-8	-1838 / 0	-77.3	-77.3 0.53 (1)	4.39	14-7	0 / 366	0.08 (1)
8-9	-1838 / 0	-77.3	-77.3 0.53 (1)	4.39	14-9	-409 / 0	0.21 (1)
9-10	-2144 / 0	-77.3	-77.3 0.59 (1)	4.08	13-9	-164 / 63	0.09 (1)
10-11	0 / 29	-77.3	-77.3 0.10 (1)	10.00	2-19	0 / 1836	0.41 (1)
20-2	-1805 / 0	0.0	0.0 0.19 (1)	6.23	13-10	0 / 1836	0.41 (1)
12-10	-1805 / 0	0.0	0.0 0.19 (1)	6.23			
20-19	0 / 0	-17.5	-17.5 0.19 (4)	10.00			
19-18	0 / 1812	-17.5	-17.5 0.38 (1)	10.00			
18-17	0 / 1503	-17.5	-17.5 0.31 (1)	10.00			
17-16	0 / 1503	-17.5	-17.5 0.31 (1)	10.00			
16-15	0 / 1503	-17.5	-17.5 0.31 (1)	10.00			
15-14	0 / 1503	-17.5	-17.5 0.31 (1)	10.00			
14-13	0 / 1812	-17.5	-17.5 0.38 (1)	10.00			
13-12	0 / 0	-17.5	-17.5 0.19 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE
OF 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.59 (9-10:1) , BC=0.38 (13-14:1) ,
WB=0.41 (10-13:1) , SSI=0.21 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

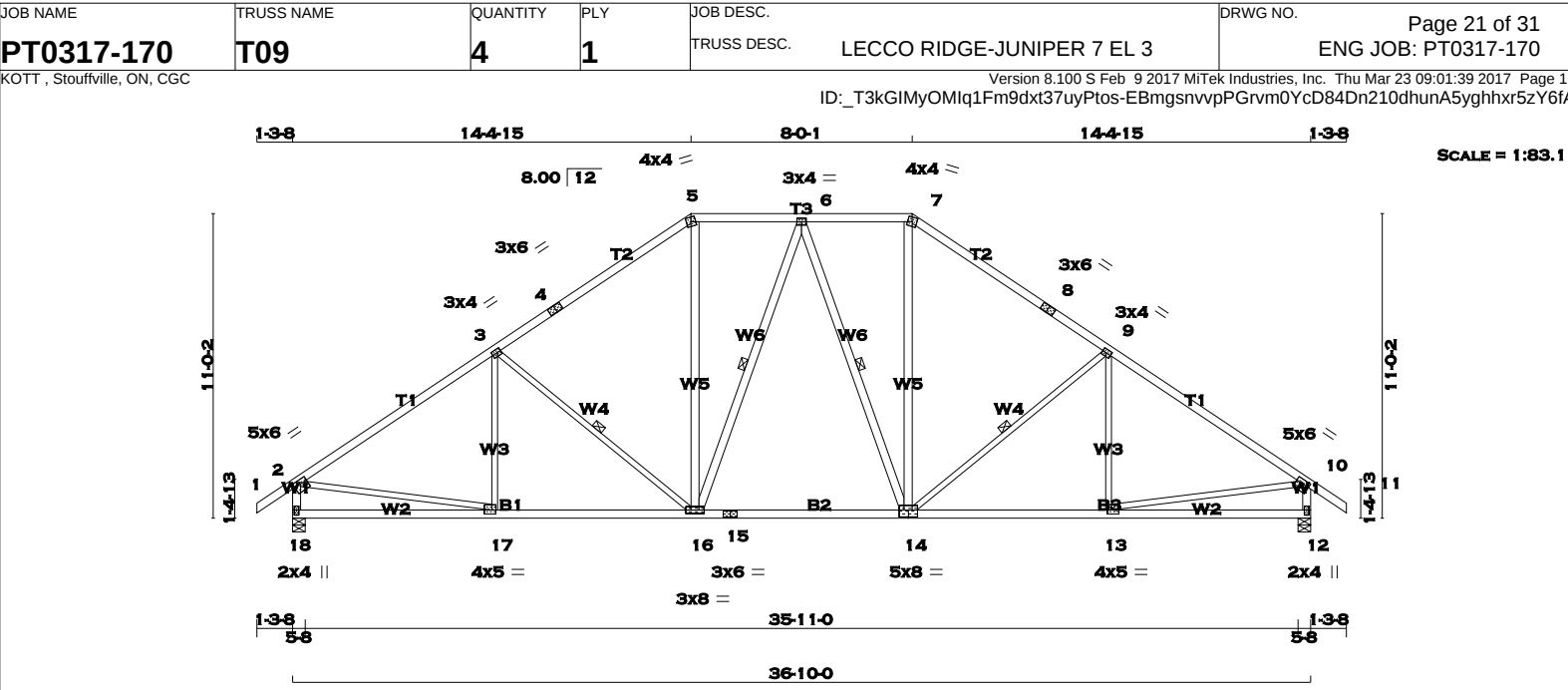
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.54 (19) (INPUT = 1.00)



RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION





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 - 11	2x4	DRY	No.2	SPF	
18 - 2	2x4	DRY	No.2	SPF	
12 - 10	2x4	DRY	No.2	SPF	
18 - 15	2x4	DRY	No.2	SPF	
15 - 14	2x4	DRY	No.2	SPF	
14 - 12	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
16 - 5	2x4	DRY	No.2	SPF	
6 - 6	2x4	DRY	No.2	SPF	
6 - 14	2x4	DRY	No.2	SPF	
14 - 7	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	5.0	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-m	MT20	4.0	4.0		
6	TMVW-t	MT20	3.0	4.0		
7	TTW-m	MT20	4.0	4.0		
8	TS-t	MT20	3.0	6.0		
9	TMVW-t	MT20	3.0	4.0	1.50	1.50
10	TMVW-t	MT20	5.0	6.0	1.75	3.00
12	BMV1+p	MT20	2.0	4.0	2.25	1.00
13	BMVW-t	MT20	4.0	5.0	1.75	1.75
14	BSWWW-I	MT20	5.0	8.0	3.00	4.00
15	BS-t	MT20	3.0	6.0		
16	BMVW-t	MT20	3.0	8.0		
17	BMVW-t	MT20	4.0	5.0	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.



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
18		1853	0	1853	0	5-8	5-8
12		1853	0	1853	0	5-8	5-8

UNFACTORED REACTIONS							
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
18		1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0
12		1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.90 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-16, 6-16, 6-14, 9-14. DBS = 20-0-0 . CBF = 62 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	17-3	-130 / 80	0.08 (1)
2-3	-2144 / 0	-77.3	-77.3 0.73 (1)	3.90	3-16	-493 / 0	0.30 (1)
3-4	-1763 / 0	-77.3	-77.3 0.65 (1)	4.30	16-5	0 / 628	0.10 (1)
4-5	-1763 / 0	-77.3	-77.3 0.65 (1)	4.30	16-6	-196 / 0	0.14 (1)
5-6	-1442 / 0	-77.3	-77.3 0.17 (1)	5.28	6-14	-196 / 0	0.14 (1)
6-7	-1442 / 0	-77.3	-77.3 0.17 (1)	5.28	14-7	0 / 628	0.10 (1)
7-8	-1764 / 0	-77.3	-77.3 0.65 (1)	4.30	14-9	-493 / 0	0.30 (1)
8-9	-1764 / 0	-77.3	-77.3 0.65 (1)	4.30	13-9	-130 / 80	0.08 (1)
9-10	-2144 / 0	-77.3	-77.3 0.73 (1)	3.90	2-17	0 / 1835	0.41 (1)
10-11	0 / 29	-77.3	-77.3 0.10 (1)	10.00	13-10	0 / 1835	0.41 (1)
18-2	-1800 / 0	0.0	0.0 0.19 (1)	6.23			
12-10	-1800 / 0	0.0	0.0 0.19 (1)	6.23			
18-17	0 / 0	-17.5	-17.5 0.22 (4)	10.00			
17-16	0 / 1815	-17.5	-17.5 0.40 (1)	10.00			
16-15	0 / 1509	-17.5	-17.5 0.35 (1)	10.00			
15-14	0 / 1509	-17.5	-17.5 0.35 (1)	10.00			
14-13	0 / 1815	-17.5	-17.5 0.40 (1)	10.00			
13-12	0 / 0	-17.5	-17.5 0.22 (4)	10.00			

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.73 (2-3:1), BC=0.40 (16-17:1), WB=0.41 (2-17:1), SSI=0.23 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

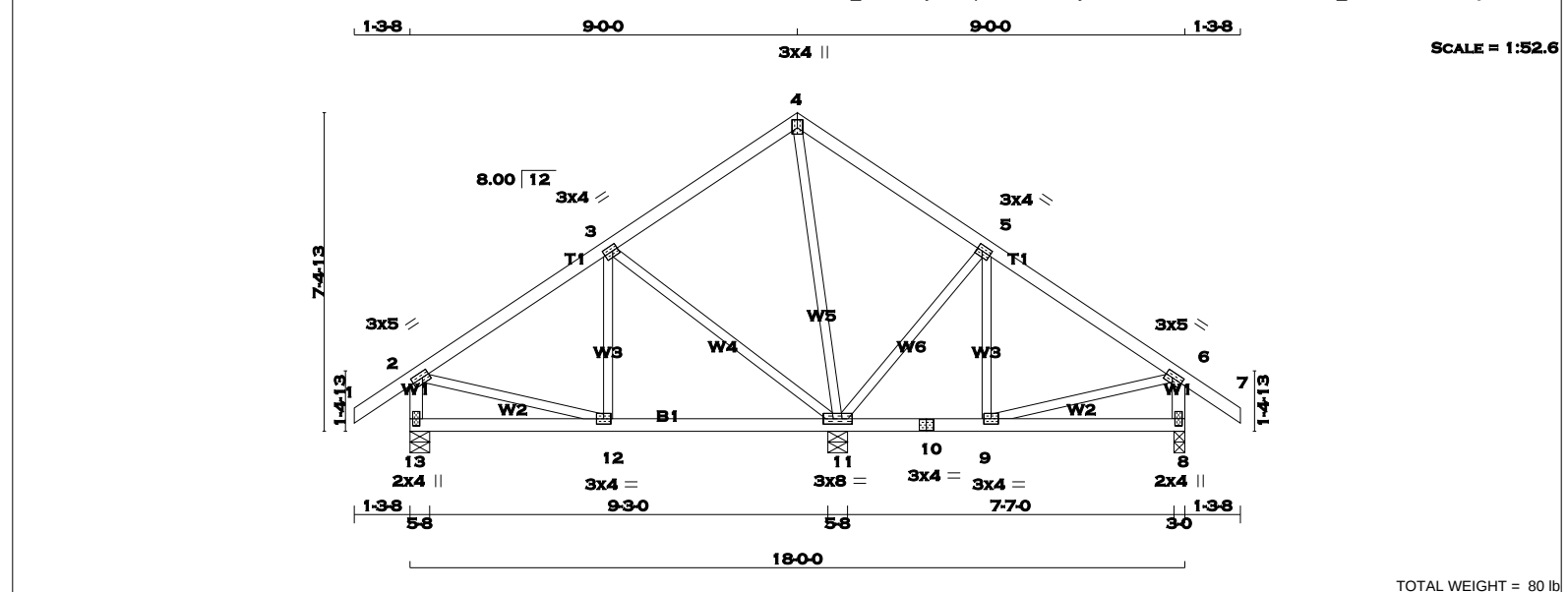
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (13) (INPUT = 0.90)
JSI METAL= 0.59 (2) (INPUT = 1.00)

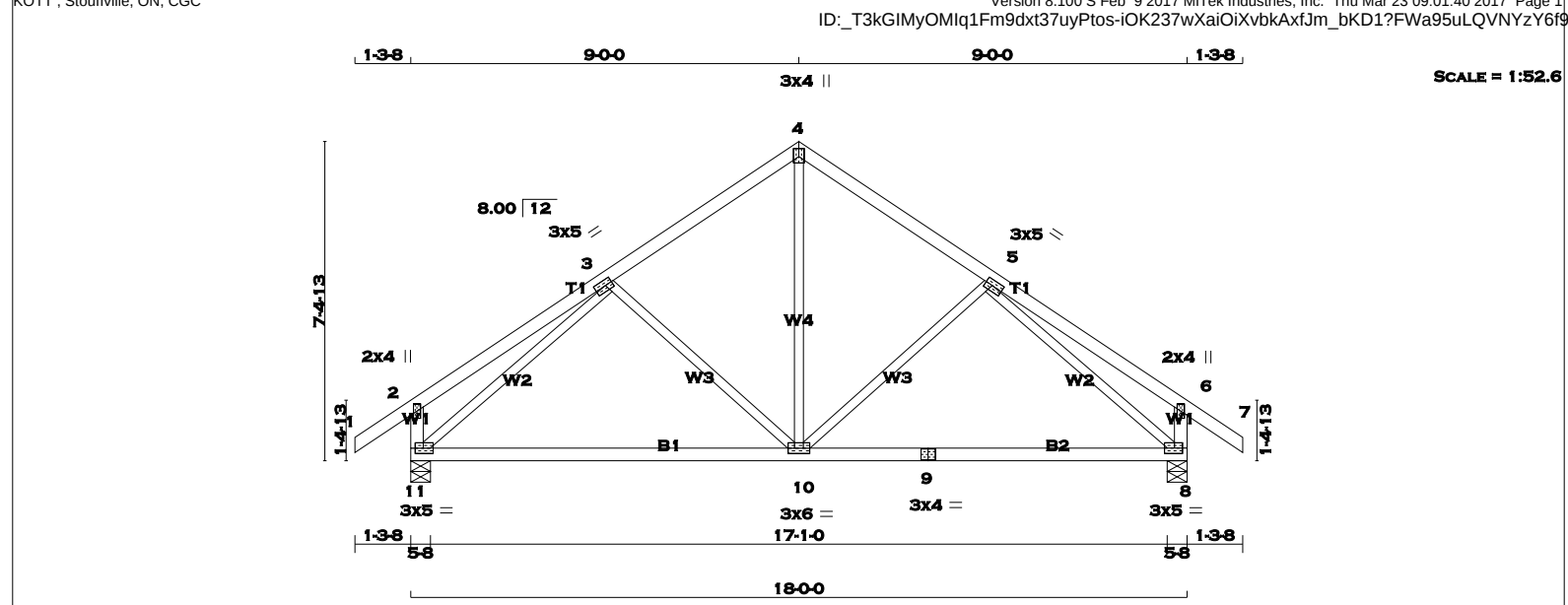
RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION





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 DRY: SEASONED LUMBER.										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th colspan="2">FACTORED GROSS REACTION</th><th colspan="2">MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th></tr><tr><td>13</td><td>513</td><td>0</td><td>513</td><td>0</td><td>0</td><td>5-8</td></tr><tr><td>11</td><td>1000</td><td>0</td><td>1000</td><td>0</td><td>0</td><td>5-8</td></tr><tr><td>8</td><td>406</td><td>0</td><td>406</td><td>0</td><td>0</td><td>3-0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th colspan="6">MAX./MIN. COMPONENT REACTIONS</th></tr><tr><th></th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>13</td><td>357</td><td>266 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>91 / 0</td><td>0 / 0</td></tr><tr><td>11</td><td>703</td><td>485 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>219 / 0</td><td>0 / 0</td></tr><tr><td>8</td><td>282</td><td>215 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>67 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 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: (4) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. CSI (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. CSI (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>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>4-11</td><td>-367 / 0</td><td>0.36 (1)</td></tr><tr><td>2- 3</td><td>-295 / 0</td><td>-77.3 -77.3</td><td>0.20 (1)</td><td>6.25</td><td>11- 5</td><td>-396 / 0</td><td>0.19 (1)</td></tr><tr><td>3- 4</td><td>0 / 47</td><td>-77.3 -77.3</td><td>0.27 (1)</td><td>10.00</td><td>9- 5</td><td>0 / 78</td><td>0.03 (4)</td></tr><tr><td>4- 5</td><td>0 / 106</td><td>-77.3 -77.3</td><td>0.28 (1)</td><td>10.00</td><td>3-11</td><td>-411 / 0</td><td>0.35 (1)</td></tr><tr><td>5- 6</td><td>-149 / 0</td><td>-77.3 -77.3</td><td>0.20 (1)</td><td>6.25</td><td>12- 3</td><td>0 / 94</td><td>0.03 (4)</td></tr><tr><td>6- 7</td><td>0 / 29</td><td>-77.3 -77.3</td><td>0.10 (1)</td><td>10.00</td><td>2-12</td><td>0 / 272</td><td>0.06 (1)</td></tr><tr><td>13- 2</td><td>-481 / 0</td><td>0.0 0.0</td><td>0.05 (1)</td><td>7.81</td><td>9- 6</td><td>0 / 148</td><td>0.03 (1)</td></tr><tr><td>8- 6</td><td>-371 / 0</td><td>0.0 0.0</td><td>0.04 (1)</td><td>7.81</td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.11 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 265</td><td>-17.5 -17.5</td><td>0.12 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 144</td><td>-17.5 -17.5</td><td>0.08 (4)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10- 9</td><td>0 / 144</td><td>-17.5 -17.5</td><td>0.08 (4)</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>0.08 (4)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	13	513	0	513	0	0	5-8	11	1000	0	1000	0	0	5-8	8	406	0	406	0	0	3-0	JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS							COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	13	357	266 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0	11	703	485 / 0	0 / 0	0 / 0	0 / 0	219 / 0	0 / 0	8	282	215 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	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	4-11	-367 / 0	0.36 (1)	2- 3	-295 / 0	-77.3 -77.3	0.20 (1)	6.25	11- 5	-396 / 0	0.19 (1)	3- 4	0 / 47	-77.3 -77.3	0.27 (1)	10.00	9- 5	0 / 78	0.03 (4)	4- 5	0 / 106	-77.3 -77.3	0.28 (1)	10.00	3-11	-411 / 0	0.35 (1)	5- 6	-149 / 0	-77.3 -77.3	0.20 (1)	6.25	12- 3	0 / 94	0.03 (4)	6- 7	0 / 29	-77.3 -77.3	0.10 (1)	10.00	2-12	0 / 272	0.06 (1)	13- 2	-481 / 0	0.0 0.0	0.05 (1)	7.81	9- 6	0 / 148	0.03 (1)	8- 6	-371 / 0	0.0 0.0	0.04 (1)	7.81				13-12	0 / 0	-17.5 -17.5	0.11 (4)	10.00				12-11	0 / 265	-17.5 -17.5	0.12 (4)	10.00				11-10	0 / 144	-17.5 -17.5	0.08 (4)	10.00				10- 9	0 / 144	-17.5 -17.5	0.08 (4)	10.00				9- 8	0 / 0	-17.5 -17.5	0.08 (4)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.33") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00") ALLOWABLE DEFL.(TL)= L/360 (0.27") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02") CSI: TC=0.28 (4-5:1) , BC=0.12 (11-12:4) , WB=0.36 (4-11:1) , SSI=0.14 (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= 0.78 (12) (INPUT = 0.90) JSI METAL= 0.14 (2) (INPUT = 1.00)									
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG																																																																																																																																																																																																																																		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX																																																																																																																																																																																																																																		
13	513	0	513	0	0	5-8																																																																																																																																																																																																																																		
11	1000	0	1000	0	0	5-8																																																																																																																																																																																																																																		
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13	357	266 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0																																																																																																																																																																																																																																	
11	703	485 / 0	0 / 0	0 / 0	0 / 0	219 / 0	0 / 0																																																																																																																																																																																																																																	
8	282	215 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0																																																																																																																																																																																																																																	
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TOTAL WEIGHT = 2 X 76 = 151 lb
[M][F]

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

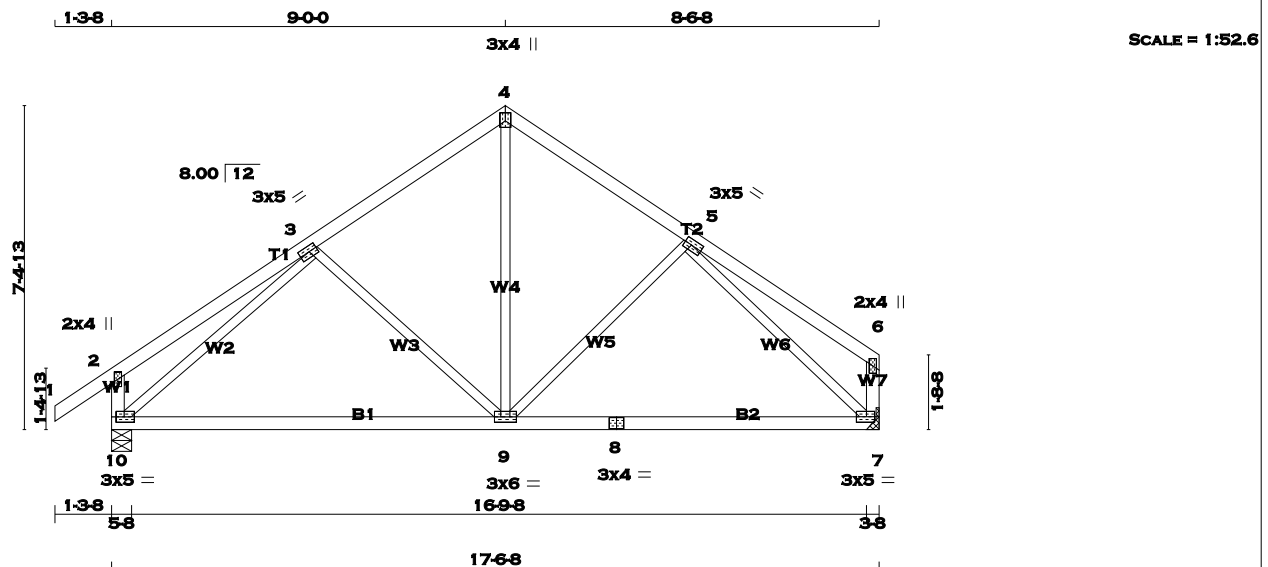
PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMV+p	MT20	2.0	4.0			
3	TMVW-t	MT20	3.0	5.0	1.50	2.00	
4	TTW+p	MT20	3.0	4.0	2.25	1.50	
5	TMVW-t	MT20	3.0	5.0	1.50	2.00	
6	TMV+p	MT20	2.0	4.0			
8	BMVW1-t	MT20	3.0	5.0	1.50	2.25	
9	BS-t	MT20	3.0	4.0			
10	BMVW-t	MT20	3.0	6.0			
11	BMVW1-t	MT20	3.0	5.0	1.50	2.25	

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 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
11	960	0	960	0	0	5-8	5-8
8	960	0	960	0	0	5-8	5-8



TOTAL WEIGHT = 2 X 73 = 146 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
10 - 2	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 2x3 DRY No.2 EXCEPT					SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	5.0	1.50	2.25
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	5.0	1.50	2.00
6	TMV+p	MT20	2.0	4.0		
7	BMVW1-t	MT20	3.0	5.0	1.50	2.25
8	BS-t	MT20	3.0	4.0		
9	BMWW-t	MT20	3.0	6.0		
10	BMVW1-t	MT20	3.0	5.0	1.50	2.25

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 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	
10		938	0	938	0	0	5-8	5-8	
7		832	0	832	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 3-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD
10	656	472 / 0	0 / 0	0 / 0	0 / 0	0 / 0	184 / 0
7	584	408 / 0	0 / 0	0 / 0	0 / 0	0 / 0	175 / 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: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH
FR-TO		FROM TO			FR-TO				
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-9	-224 / 0			0.15 (1)
2-3	0 / 23	-77.3	-77.3 0.25 (1)	10.00	9-4	0 / 456			0.10 (1)
3-4	-669 / 0	-77.3	-77.3 0.20 (1)	6.25	9-5	-165 / 10			0.10 (1)
4-5	-668 / 0	-77.3	-77.3 0.18 (1)	6.25	10-3	-950 / 0			0.60 (1)
5-6	0 / 21	-77.3	-77.3 0.23 (1)	10.00	5-7	-923 / 0			0.56 (1)
10-2	-239 / 0	0.0	0.0 0.02 (1)	7.81					
7-6	-126 / 0	0.0	0.0 0.01 (1)	7.81					
10-9	0 / 704	-17.5	-17.5 0.44 (4)	10.00					
9-8	0 / 655	-17.5	-17.5 0.43 (4)	10.00					
8-7	0 / 655	-17.5	-17.5 0.43 (4)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.58")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.58")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.25 (2-3:1), BC=0.44 (9-10:4), WB=0.60 (3-10:1), SSI=0.14 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

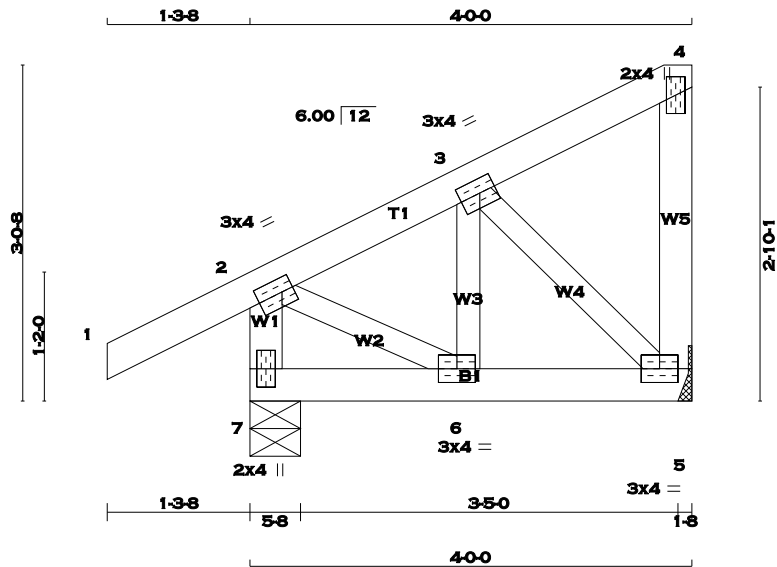
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (5) (INPUT = 0.90)
JSI METAL= 0.27 (3) (INPUT = 1.00)



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SCALE = 1:20.9

TOTAL WEIGHT = 20 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
5 - 4	2x4	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	TMVW-t	MT20	3.0	4.0	1.50	1.75
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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
5		190	0	190	0	0			
7		295	0	295	0	0			

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED												
5	133	93 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	40 / 0	0 / 0				
7	204	156 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	48 / 0	0 / 0				

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	6-3	-15 / 31	0.01 (4)
2-3	-130 / 0	-77.3	-77.3 0.05 (1)	6.25	3-5	-167 / 0	0.03 (1)
3-4	-8 / 0	-77.3	-77.3 0.05 (1)	10.00	2-6	0 / 134	0.03 (1)
5-4	-61 / 0	0.0	0.0 0.01 (1)	7.81			
7-2	-279 / 0	0.0	0.0 0.03 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.02 (4)	10.00			
6-5	0 / 123	-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

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

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

(55 % OF 27.2 P.S.F. G.S.L. 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=0.03 (5-6:1) , WB=0.03 (2-6:1) , SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

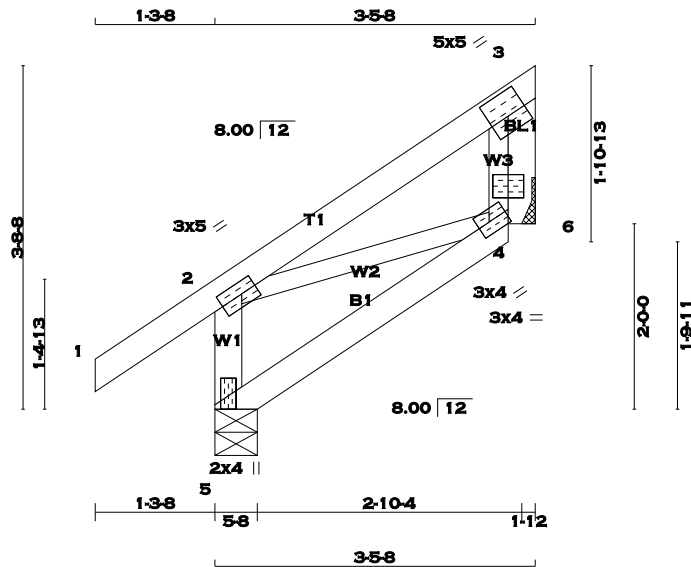
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (2) (INPUT = 0.90)
JSI METAL= 0.08 (2) (INPUT = 1.00)



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SCALE = 1:24.9

TOTAL WEIGHT = 2 X 17 = 35 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
BEARING BLOCKS					
BL1	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY: SEASONED LUMBER.					
	2x3	DRY	No.2		SPF

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	TMVK-t	MT20	5.0	5.0	3.00	2.50
4	BMVW1-t	MT20	3.0	4.0	1.50	1.50
4	KP-p	MT20	3.0	4.0		
5	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
5	266	0	266	0	0
6(4)	140	0	140	0	0

HANGER BY OTHERS
MIN. SEAT SIZE: 1-12

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	184	142 / 0	0 / 0	0 / 0	0 / 0	42 / 0	0 / 0
6(4)	99	69 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
5-2	-238 / 0	0.0	0.0 0.03 (1)	7.81	2-4	0 / 23	0.01 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-6	-142 / 0	0.01 (1)
2-3	-27 / 0	-77.3	-77.3 0.13 (1)	6.25	4-6	0 / 23	0.00 (1)
4-3	0 / 33	0.0	0.0 0.01 (4)	10.00			
5-4	0 / 0	-17.5	-17.5 0.05 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.13 (2-3:1) , BC=0.05 (4-5:4) , WB=0.01 (3-6:1) , SSI=0.08 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE LEFT 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

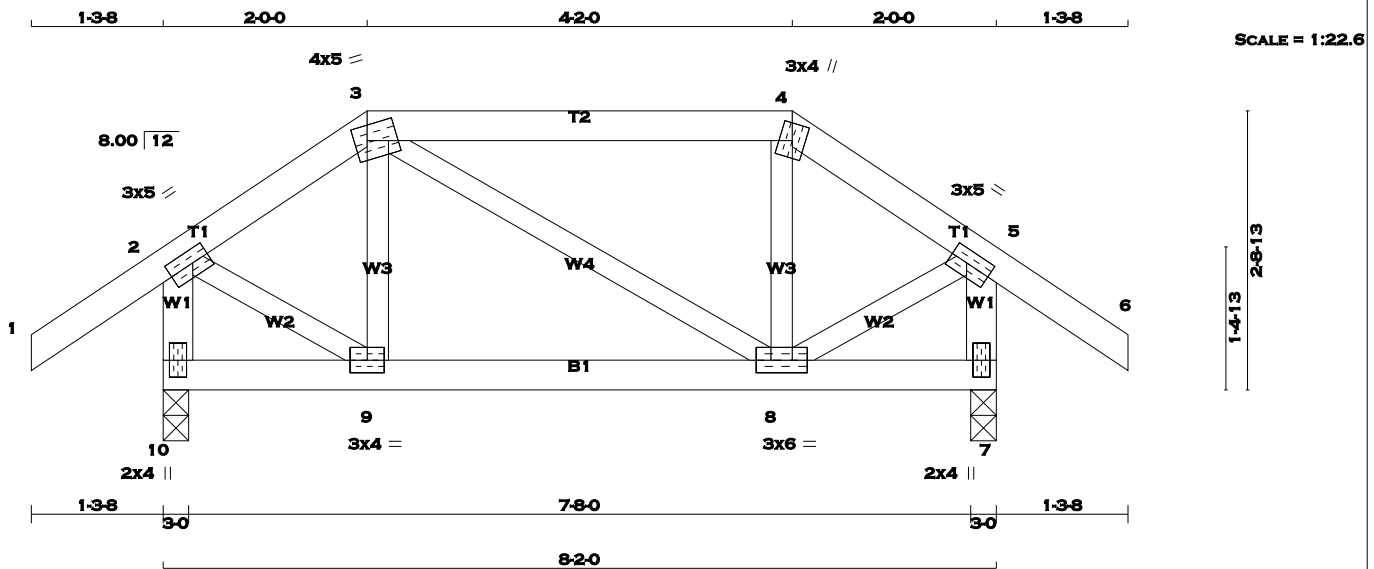
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.22 (2) (INPUT = 0.90)
JSI METAL= 0.06 (5) (INPUT = 1.00)



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LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA				[M]
N. L. G. A. RULES															SPECIFIED LOADS:				
CHORDS															TOP CH. LL = 23.3 PSF				
SIZE															DL = 3.0 PSF				
1 - 3	2x4	DRY	No.2	SPF	FACTORED					MAXIMUM FACTORED					INPUT		REQRD		
3 - 4	2x4	DRY	No.2	SPF	GROSS REACTION					GROSS REACTION					BRG		BRG		
4 - 6	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX							
10 - 2	2x4	DRY	No.2	SPF	10	493	0	493	0	0	3-0	3-0							
7 - 5	2x4	DRY	No.2	SPF	7	493	0	493	0	0	3-0	3-0							
10 - 7	2x4	DRY	No.2	SPF											TOTAL LOAD = 33.3 PSF				
ALL WEBS					2x3		DRY		No.2		SPF		SPACING = 24.0 IN. C/C						
EXCEPT															LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM				
DRY: SEASONED LUMBER.																			
					UNFACTORED REACTIONS														
					1ST LCASE		MAX./MIN. COMPONENT REACTIONS												
					JT	COMBINED		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL						
					10	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0							
					7	344	254 / 0	0 / 0	0 / 0	0 / 0	90 / 0	0 / 0							

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	5.0	1.50	2.00
7	BMV1+p	MT20	2.0	4.0		
8	BMWW-t	MT20	3.0	6.0		
9	BMWW-t	MT20	3.0	4.0		
10	BMV1+p	MT20	2.0	4.0		

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	9-3	-69 / 28	0.01 (1)
2-3	-304 / 0	-77.3	-77.3 0.05 (1)	6.25	3-8	0 / 0	0.00 (1)
3-4	-249 / 0	-77.3	-77.3 0.23 (1)	6.25	8-4	-69 / 28	0.01 (1)
4-5	-304 / 0	-77.3	-77.3 0.05 (1)	6.25	2-9	0 / 283	0.06 (1)
5-6	0 / 29	-77.3	-77.3 0.10 (1)	10.00	8-5	0 / 283	0.06 (1)
10-2	-483 / 0	0.0	0.0 0.05 (1)	7.81			
7-5	-482 / 0	0.0	0.0 0.05 (1)	7.81			
10-9	0 / 0	-17.5	-17.5 0.04 (4)	10.00			
9-8	0 / 249	-17.5	-17.5 0.07 (1)	10.00			
8-7	0 / 0	-17.5	-17.5 0.04 (4)	10.00			



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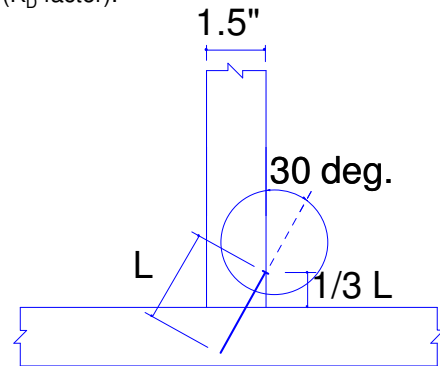
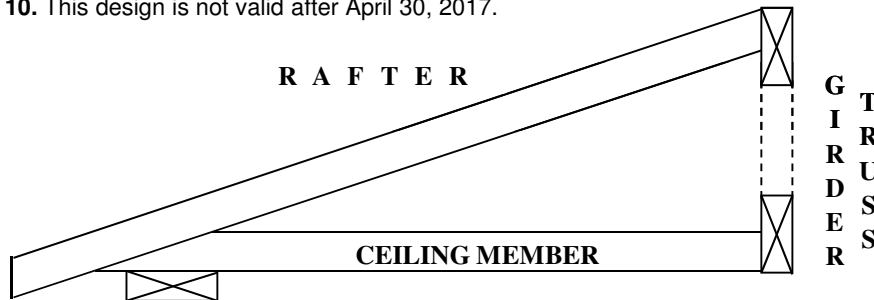
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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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PEO
Certificate No. 10889485



April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

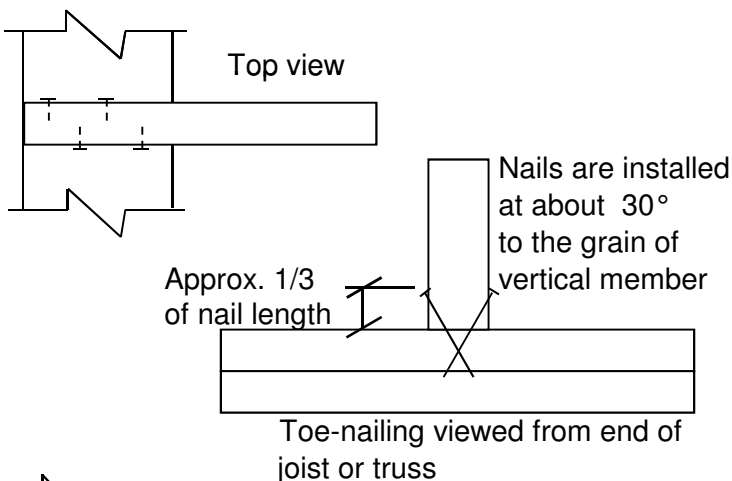
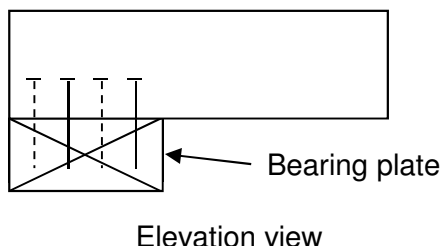
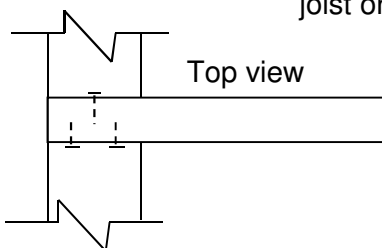
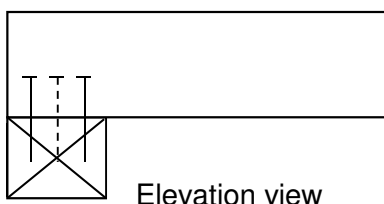
B37579H2

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

Note: If using truss with D. Fir lumber and S-P-F bearing plate, use values in table for S-P-F.

NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-09, section 10.9.5
9. This design is not valid after April 30, 2017

Toe-nailing on 2x6 Bearing Plate**Toe-nailing on 2x4 Bearing Plate**

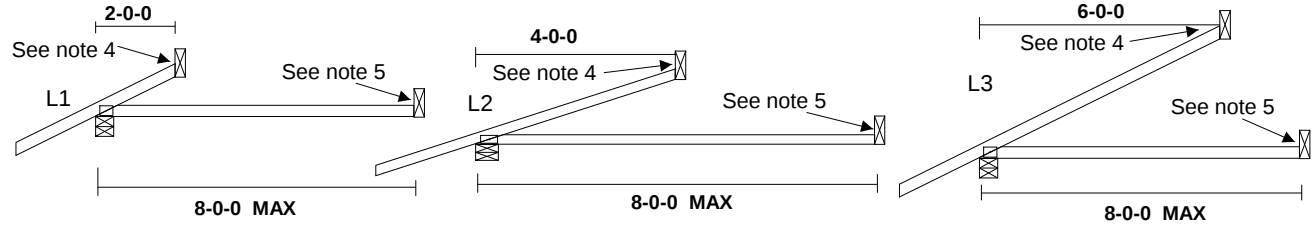
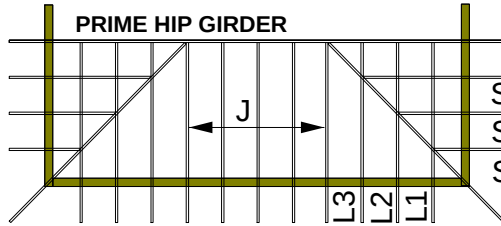
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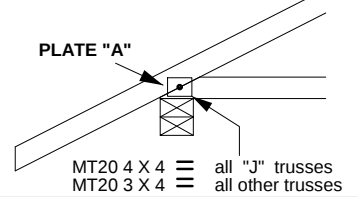
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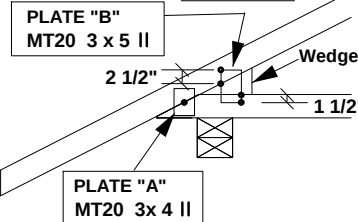
April 24, 2015



DETAIL "A"



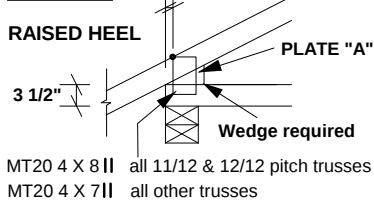
DETAIL "C"



CANTILEVER DETAIL "C"

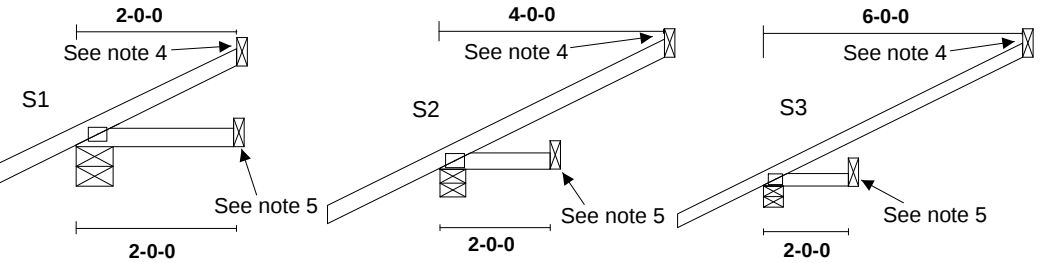
SLOPE	MAX CANTILEVER	PLATE "B"	WEDGE SIZE
3/12	17"	3 X 5	2 X 3
4/12	14"	3 X 5	2 X 3
5/12	12"	3 X 5	2 X 4
6/12	10"	3 X 5	2 X 4
7/12	9"	3 X 5	2 X 6
8/12	8.5"	3 X 5	2 X 6
9/12	8"	3 X 5	2 X 6
10/12	7.5"	3 X 5	2 X 6

DETAIL "B"

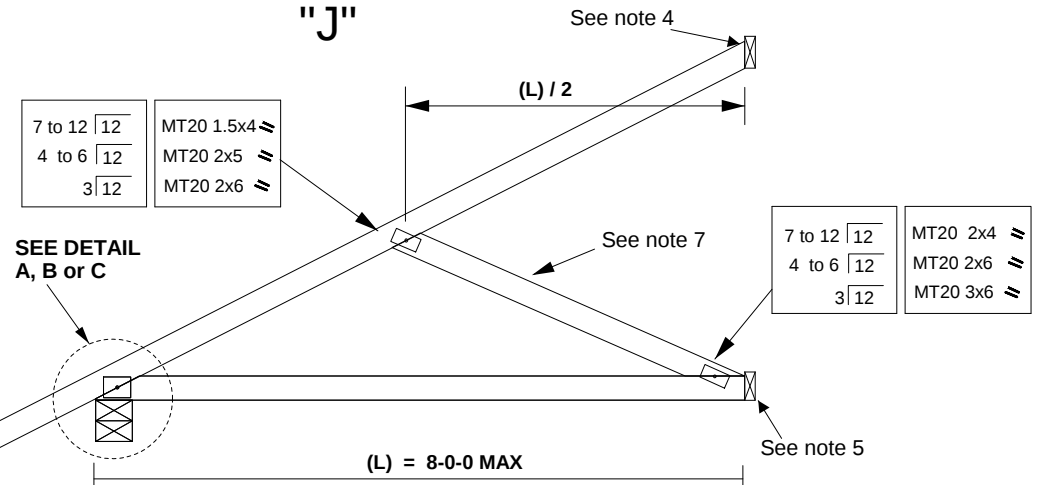


NOTES:

- 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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STANDARD GABLE END DETAIL

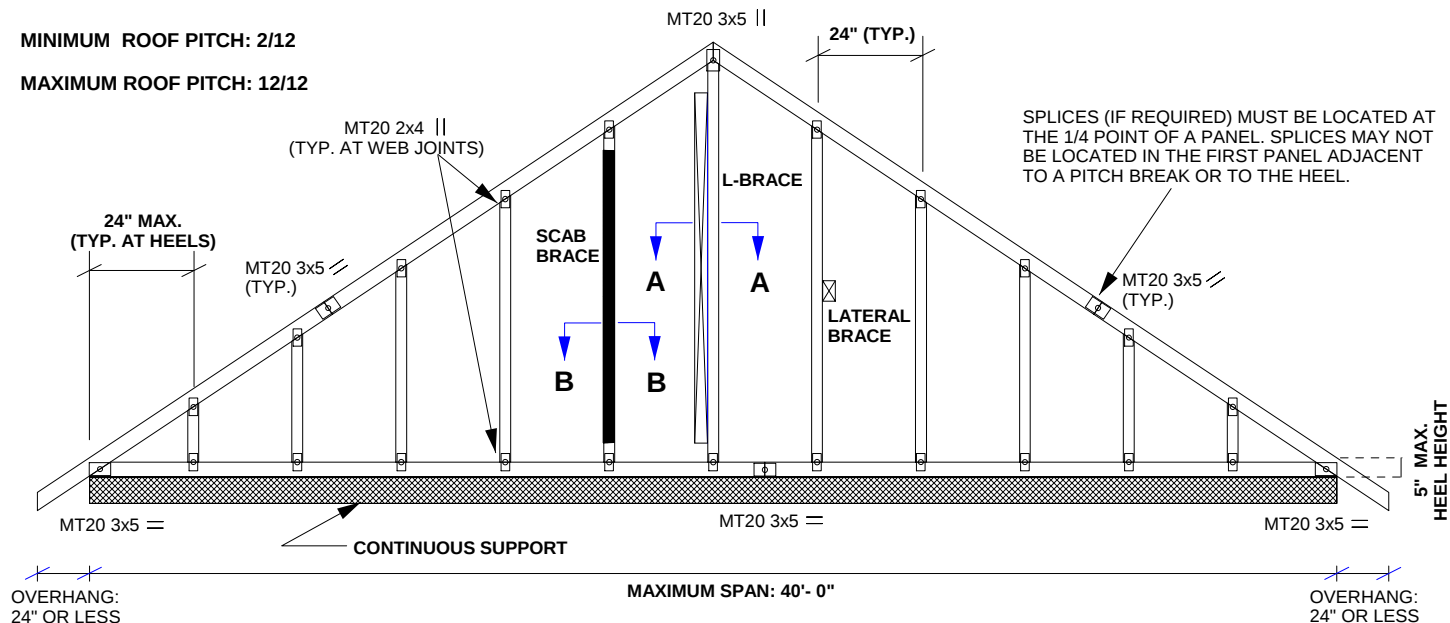
LECCO RIDGE-JUNIPER 7 EL 3

DRAWING NO.: B37579K

ENS 108 PTO 017-170

MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

TOP CHORD: 2 X 4 No. 2 DRY SPF or D- Fir
 BOTTOM CHORD: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir
 GABLE WEB: 2 X 3 or 2 X 4 No. 2 DRY SPF or D- Fir

PLATES

JOINT PLATES
 HEELS MT20 3 X 5
 PEAK MT20 3 X 5
 TC SPLICES MT20 3 X 5
 BC SPLICES MT20 3 X 5
 WEB JOINTS MT20 2 X 4

DESIGN CRITERIA

TOP CHORD LL = 60.0 PSF OR LESS
 TOP CHORD DL = 6.0 PSF OR LESS
 BOTTOM CHORD LL = 0 PSF
 BOTTOM CHORD DL = 7.0 PSF

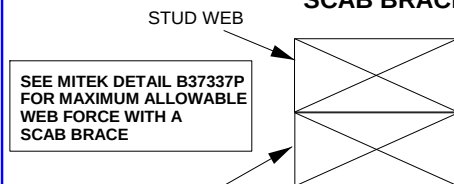
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED.
 WEBS MUST BE LATERALLY BRACED, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

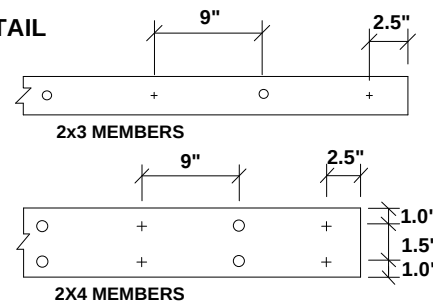
WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

SCAB BRACE DETAIL



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

SECTION B-B

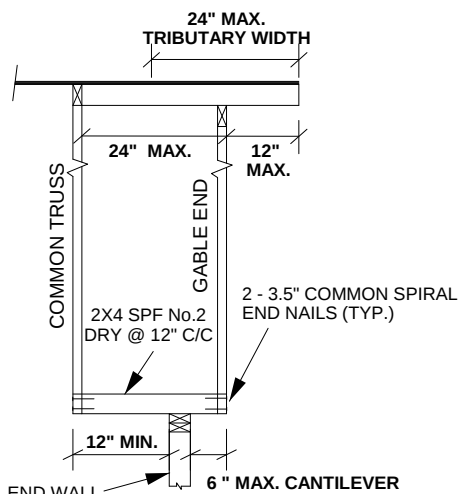


FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

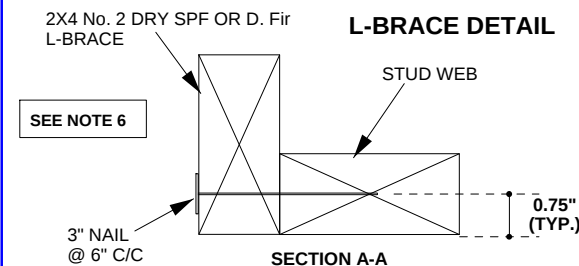
+ NAIL FROM FRONT FACE
 o NAIL FROM BACK FACE

CANTILEVER DETAIL

Note: Gable end may be cantilevered up to 6 inches past end wall as shown. Gable end to be continuously supported by 2x4 SPF No.2 (DRY) members at 12" o.c. along the bottom chord. Roof design loads shall not exceed the loading shown above.



L-BRACE DETAIL



FASTEN L-BRACE TO NARROW EDGE OF WEB WITH ONE ROW OF 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED AT 6" C/C WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

NOTES:

- Gable studs are spaced at 24" C/C (max.) with a max. length of 12 ft.
- All plates specified are MiTek MT20, centered at each joint, and pressed into both faces of truss.
- Truss spacing is 24" C/C, maximum.
- Gable truss is designed for continuous support. Bearing material must be of the same species as chord member and of grade No. 2 or better.
- This truss requires rigid sheathing attached to exposed face.
- 2x3 or 2x4 T-braces shown for gable webs in the MiTek engineering drawings may be replaced by a 2x4 L-brace as shown above.
- This truss is designed for residential or small building requirements, conforming to Part 9, NBCC 2010.
- This detail is not valid after April 30, 2017.

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