

Model: **JUNIPER 7 EL 2**
Customer: **GREENPARK**
Project: **LECCO RIDGE**
Location: **MILTON**
Date: **10/25/2016** 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.

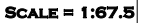
DIMENSIONS

- 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

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

01/29/2013



TOTAL WEIGHT = 97 lb

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

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

THIS DESIGN COMPLIES WITH:

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

CHORDS				WEB S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	10-4	0 / 492
2-3	0 / 22	-77.3	-77.3	0.25 (1)	10.00	10-5	-219 / 0
3-4	-704 / 0	-77.3	-77.3	0.20 (1)	6.25	3-10	-219 / 0
4-5	-704 / 0	-77.3	-77.3	0.20 (1)	6.25	11-3	-982 / 0
5-6	0 / 22	-77.3	-77.3	0.25 (1)	10.00	5-8	-982 / 0
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00		
11-2	-241 / 0	0.0	0.0	0.02 (1)	7.81		
8-6	-241 / 0	0.0	0.0	0.02 (1)	7.81		
11-10	0 / 728	-17.5	-17.5	0.46 (4)	10.00		
10-9	0 / 728	-17.5	-17.5	0.46 (4)	10.00		
9-8	0 / 728	-17.5	-17.5	0.46 (4)	10.00		

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

ALLOWABLE DEFL.(LL)= L/360 (0.60")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.60")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.25 (2-3:1), BC=0.46 (8-10:4), WB=0.63 (3-11:1), SSI=0.14 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

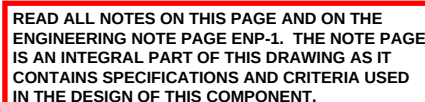
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

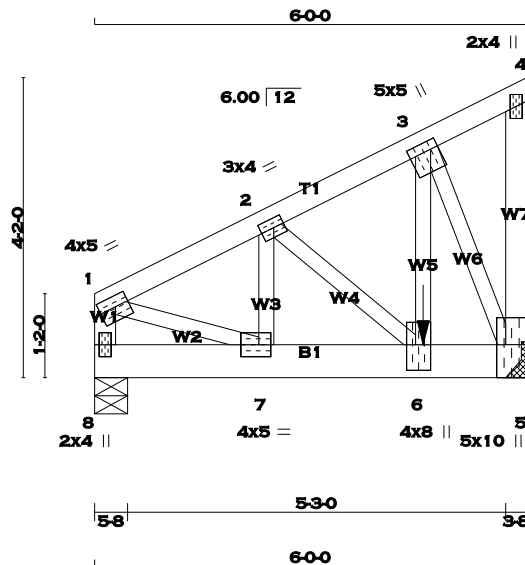
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.28 (9) (INPUT = 1.00)



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





SCALE: 3/8"=1'

TOTAL WEIGHT = 33 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
8 - 1		2x4	DRY	No.2	SPF
8 - 5		2x6	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.75	2.25
2	TMVW-t	MT20	3.0	4.0	1.50	1.75
3	TMVW-t	MT20	5.0	5.0	1.50	1.25
4	TMV+p	MT20	2.0	4.0		
5	BMVW1+t	MT20	5.0	10.0	Edge	1.50
6	BMVW+t	MT20	4.0	8.0	4.25	1.50
7	BMVW-t	MT20	4.0	5.0	2.00	2.00
8	BMV1+p	MT20	2.0	4.0		

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

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

HANGERS NOTES

- SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 3079.2 lbs FACTORED DOWN AT 4-6-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		2695	0	2695	0	0	HANGER BY OTHERS		
8		1135	0	1135	0	0	MIN. SEAT SIZE: 3-8		

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5		1892	1323 / 0	0 / 0	0 / 0	0 / 0	568 / 0	0 / 0	
8		797	557 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRAC LENGTH (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-1344 / 0	-77.3	-77.3 0.10 (1)	5.46	7-2	-17 / 33	0.01 (4)
2-3	-1216 / 0	-77.3	-77.3 0.08 (1)	5.70	2-6	-156 / 0	0.03 (1)
3-4	0 / 1	-77.3	-77.3 0.03 (1)	10.00	6-3	0 / 2716	0.67 (1)
5-4	-55 / 0	0.0	0.0 0.01 (1)	7.81	3-5	-2555 / 0	0.56 (1)
8-1	-1083 / 0	0.0	0.0 0.12 (1)	7.55	1-7	0 / 1265	0.31 (1)
8-7	0 / 0	-57.5	-57.5 0.03 (1)	10.00			
7-6	0 / 1203	-57.5	-57.5 0.49 (1)	10.00			
6-5	0 / 1087	-17.5	-17.5 0.48 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
6	4-6-12	-3079	-3079	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 3-8-4
END DISTANCE = 4-6-12
END SPAN CARRIED = 3-8-4
END WALL WIDTH = 0-0
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDT'L LOADS BASED ON 55 % OF GSL.

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

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

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

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

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

CSI: TC=0.12 (1-8:1) , BC=0.49 (6-7:1) , WB=0.67 (3-6:1) , SSI=0.22 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

MAX M
MT20 618 3

PLATE PLACEM

PLATE ROTATIO

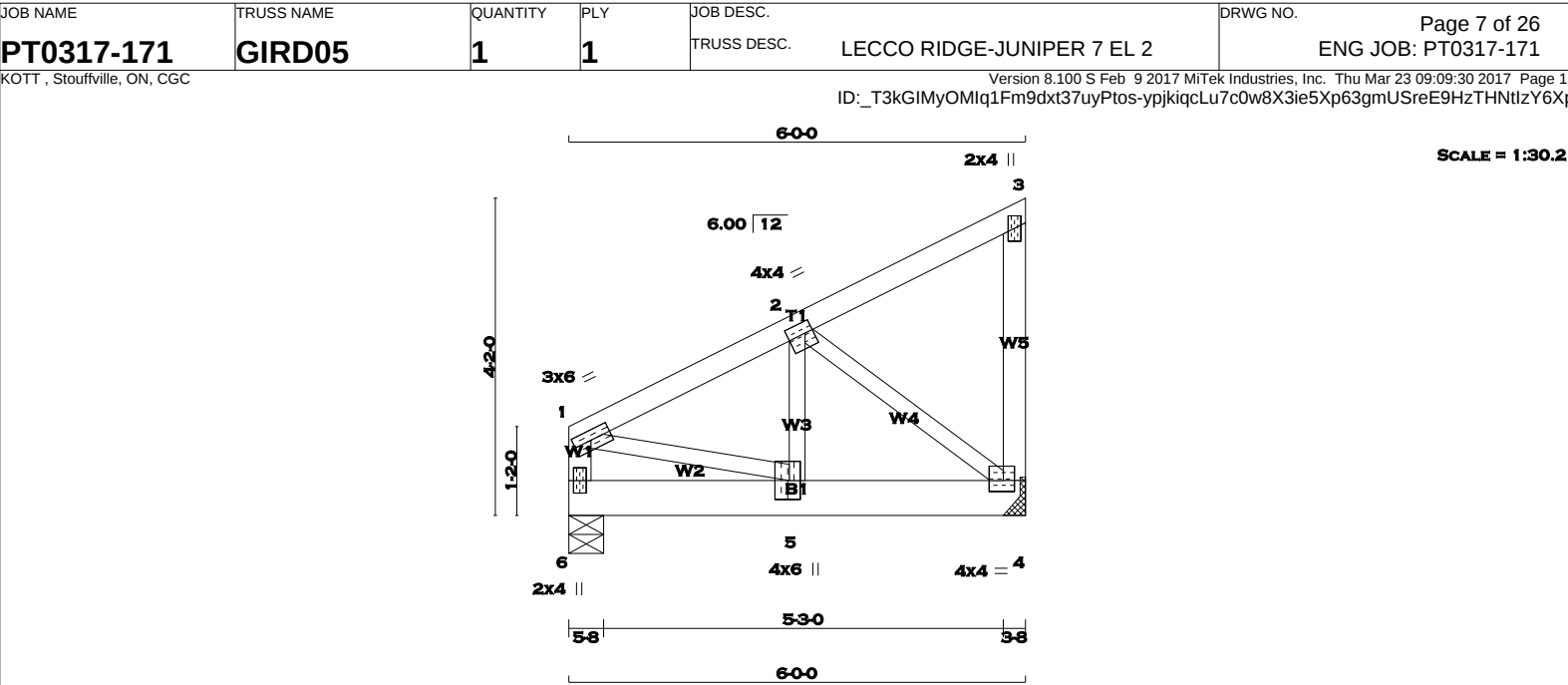
JSI GRIP= 0.89 (

JSI METAL= 0.48

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

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





DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 17-6-8

END DISTANCE = 6-0-0

END SPAN CARRIED = 17-6-8

END WALL WIDTH = 5-8

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

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

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

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

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

RECEIVED

TOWN OF MILTON

MAR 29, 2017

JUNIPER 7

BUILDING DIVISION

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

LICENSED PROFESSIONAL ENGINEER

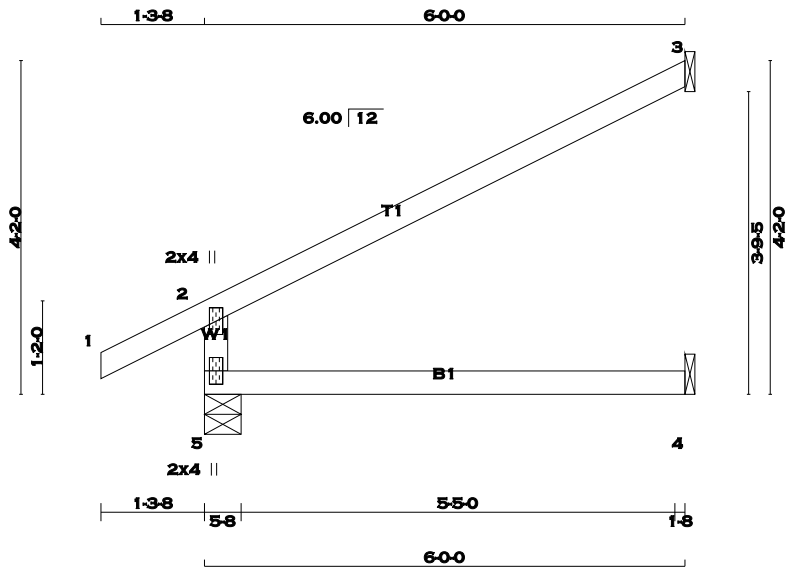
P. M. TREVISAN

100136551

March 23rd, 2017

PROVINCE OF ONTARIO

KOTT



TOTAL WEIGHT = 26 X 17 = 445 lb [M]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

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

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
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)	MEMB. FORCE (LBS)	MAX. CSI (LC)	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 MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

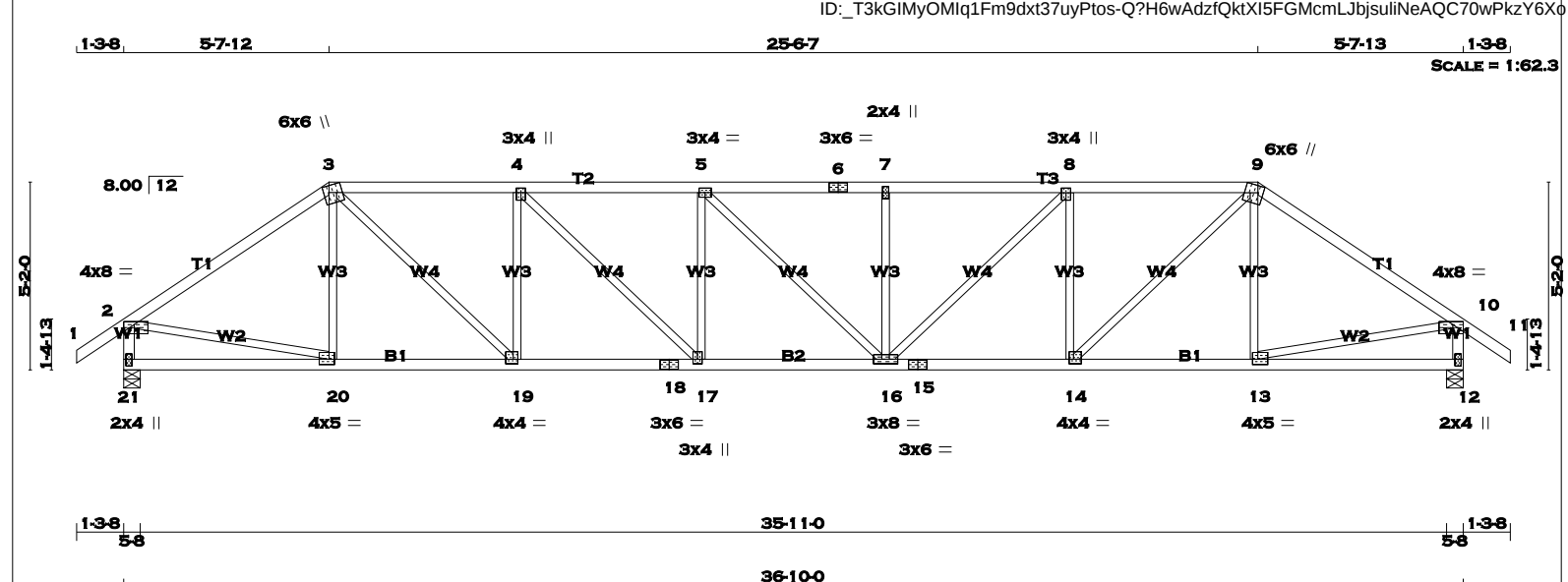
JSI GRIP= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (2) (INPUT = 1.00)



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

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





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

TOTAL WEIGHT = 2 X 151 = 302 lb

[M]

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
		VERT		DOWN		HORZ		UPLIFT	
		IN-SX		IN-SX		IN-SX		IN-SX	
JT	21	1853	0	1853	0	0	5-8	5-8	5-8
JT	12	1853	0	1853	0	0	5-8	5-8	5-8
UNFACTORED REACTIONS									
1ST LCASE MAX./MIN. COMPONENT REACTIONS									
		COMBINED		SNOW		LIVE		PERM.LIVE	
		WIND		DEAD		SOIL			
JT	21	1298	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0
JT	12	1298	921 / 0	0 / 0	0 / 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				
MEMB.		MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 MAX (PLF)		MEMB.		MAX. FACTORED FORCE (LBS)	
				CSI (LC)					
				UNBRAC LENGTH					
FR-TO		FROM TO				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)	
21-20	0 / 0	-17.5	-17.5	0.13 (4)	10.00	13-10	0 / 1765	0.40 (1)	
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				

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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

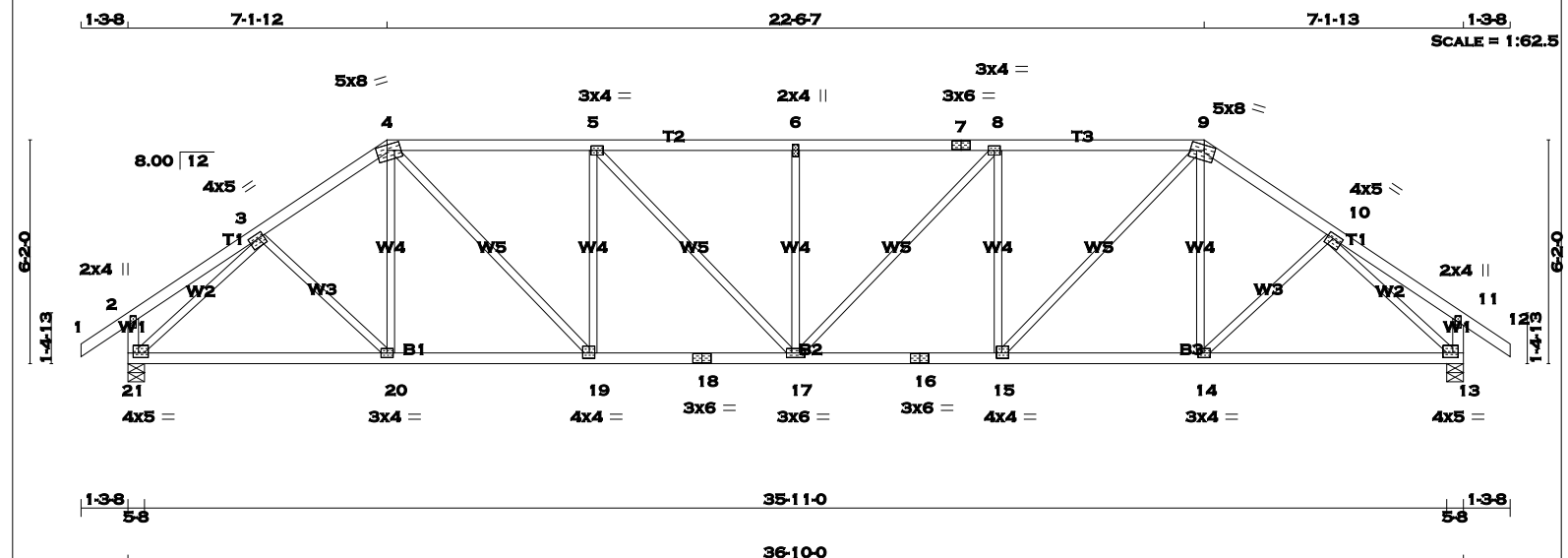
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (4) (INPUT = 0.90)

JSI METAL= 0.71 (15) (INPUT = 1.00)



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

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMWW-t	MT20	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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
21	1853	0	1853	0	0
13	1853	0	1853	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. 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

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

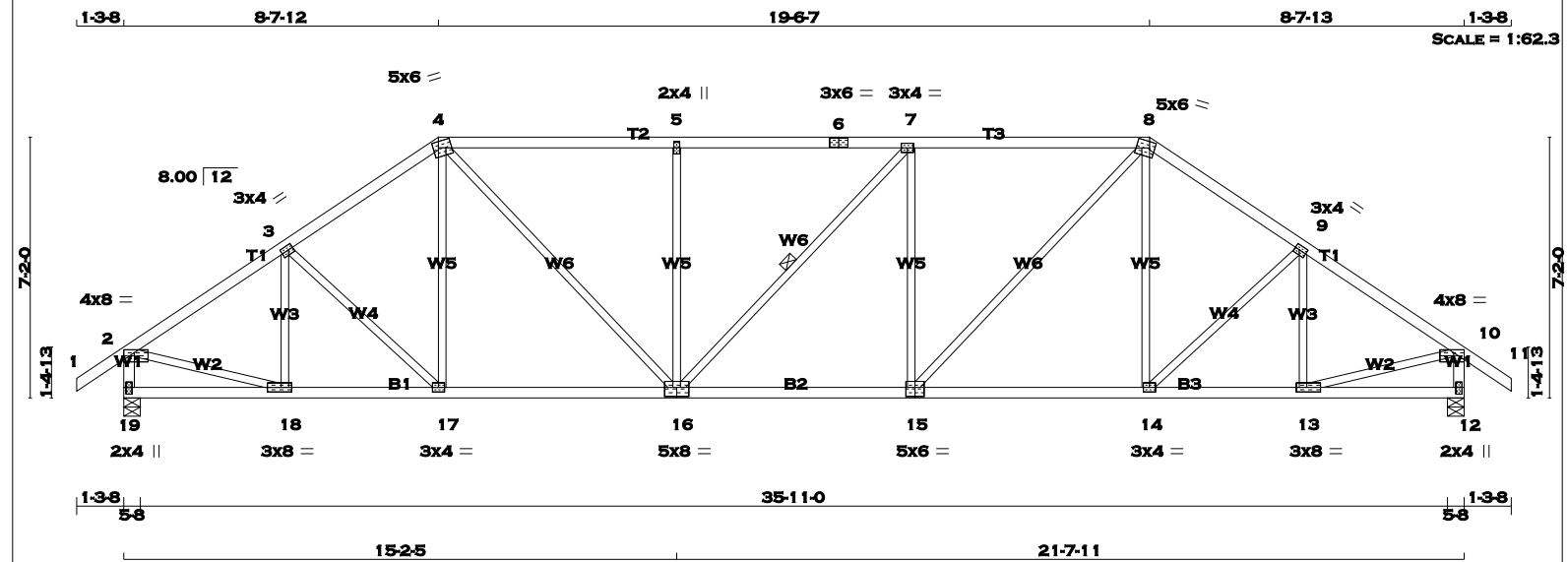
PLATE ROTATION TOL. = 5.0 Deg.

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

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

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





TOTAL WEIGHT = 2 X 160 = 320 LBS										[M]																						
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 11 2x4 DRY No.2 SPF 19 - 2 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 15 2x4 DRY No.2 SPF 15 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.											DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQRD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 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 MAX. FACTORED FACTORED VERT. LOAD LC1 MAX MAX. MEMB. MAX. FORCE MAX CS I (LC) MEMB. MAX. FORCE MAX CS I (LC) FR-TO FROM TO 1-2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 18-3 -352 / 0 0.10 (1) 2-3 -2060 / 0 -77.3 -77.3 0.31 (1) 4.43 3-17 -55 / 0 0.03 (1) 3-4 -2057 / 0 -77.3 -77.3 0.31 (1) 4.44 17-4 0 / 140 0.04 (1) 4-5 -2321 / 0 -77.3 -77.3 0.64 (1) 3.87 4-16 0 / 910 0.20 (1) 5-6 -2321 / 0 -77.3 -77.3 0.64 (1) 3.86 16-5 -545 / 0 0.49 (1) 6-7 -2321 / 0 -77.3 -77.3 0.64 (1) 3.86 16-7 -2 / 0 0.00 (1) 7-8 -2322 / 0 -77.3 -77.3 0.65 (1) 3.86 15-7 -545 / 0 0.49 (1) 8-9 -2057 / 0 -77.3 -77.3 0.31 (1) 4.44 15-8 0 / 912 0.21 (1) 9-10 -2060 / 0 -77.3 -77.3 0.31 (1) 4.43 14-8 0 / 139 0.04 (1) 10-11 0 / 29 -77.3 -77.3 0.10 (1) 10.00 14-9 -55 / 0 0.03 (1) 19-2 -1817 / 0 0.0 0.0 0.19 (1) 6.21 13-9 -352 / 0 0.10 (1) 12-10 -1817 / 0 0.0 0.0 0.19 (1) 6.21 2-18 0 / 1782 0.40 (1) 13-10 0 / 1782 0.40 (1) 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)										

LICENSED PROFESSIONAL ENGINEER

P. M. TREVISAN

100136551

March 23rd, 2017

PROVINCE OF ONTARIO

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

RECEIVED

TOWN OF MILTON

MAR 29, 2017

JUNIPER 7

BUILDING DIVISION

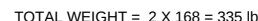
KOTT

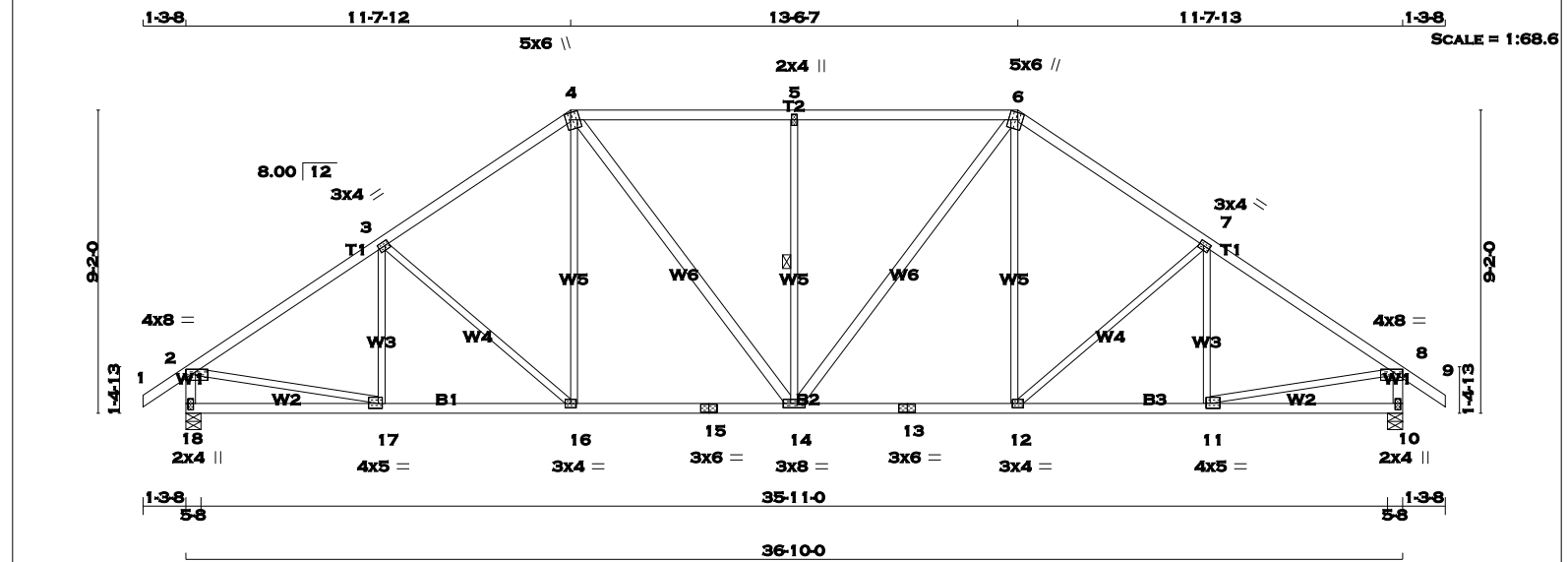


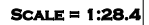
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

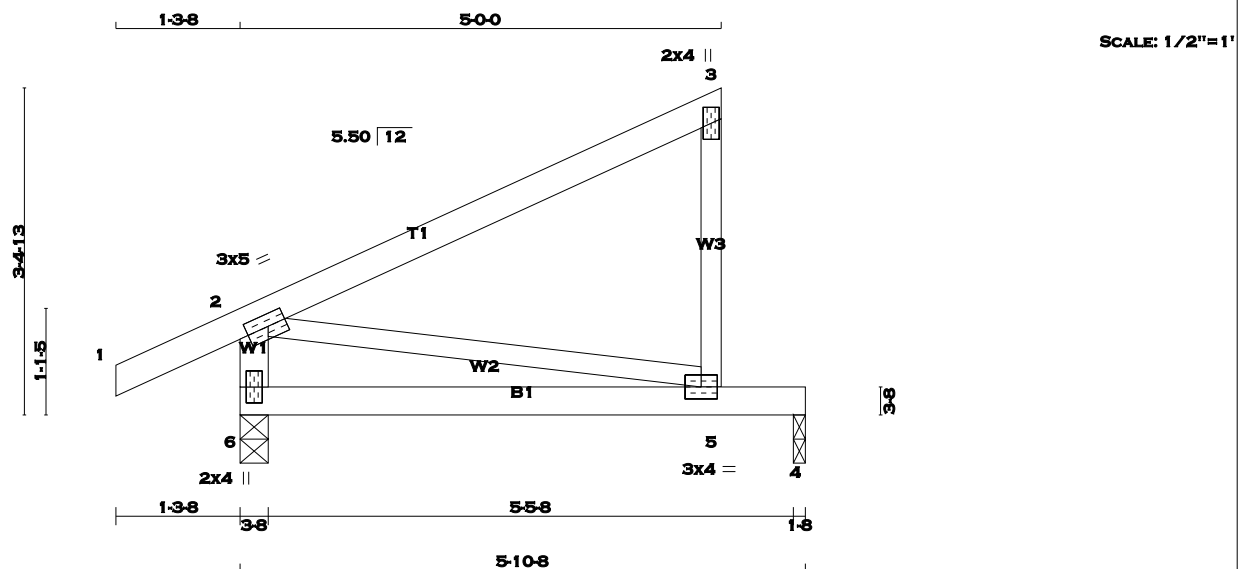
RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 7
BUILDING DIVISION











TOTAL WEIGHT = 7 X 21 = 150 lb
[M][F]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	No.2	SPF
5 - 3	2x3	No.2	SPF
6 - 2	2x4	No.2	SPF
6 - 4	2x4	No.2	SPF

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

PLATES (table is in inches)

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX
6	378	0	378	0	0	3-8
4	216	0	216	0	0	1-8

UNFACTORED REACTIONS

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

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	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.

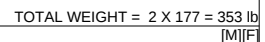
JSI GRIP= 0.26 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)

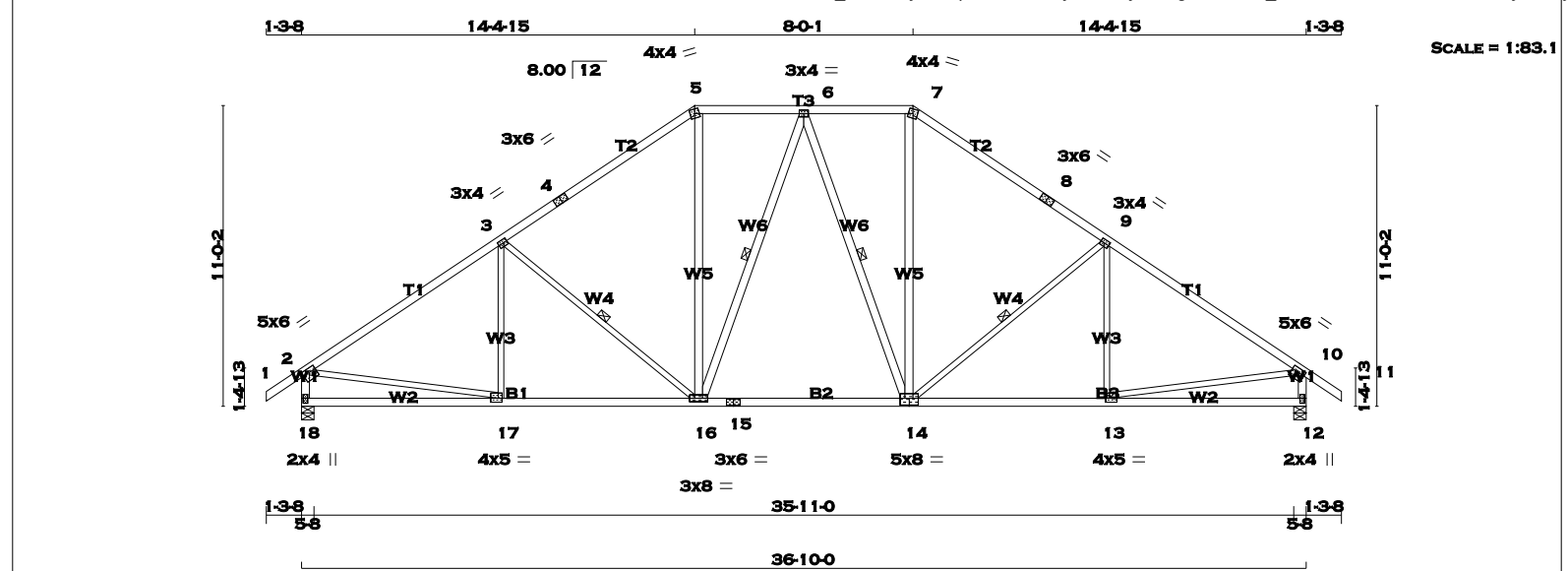


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

RECEIVED
TOWN OF MILTON
MAR 29, 2017
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

2x3

DRY

No.2

SPF

EXCEPT

16 - 5

2x4

DRY

No.2

SPF

16 - 6

2x4

DRY

No.2

SPF

6 - 14

2x4

DRY

No.2

SPF

14 - 7

2x4

DRY

No.2

SPF

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

18

1298

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

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

18

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) 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)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

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 (0.21")

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

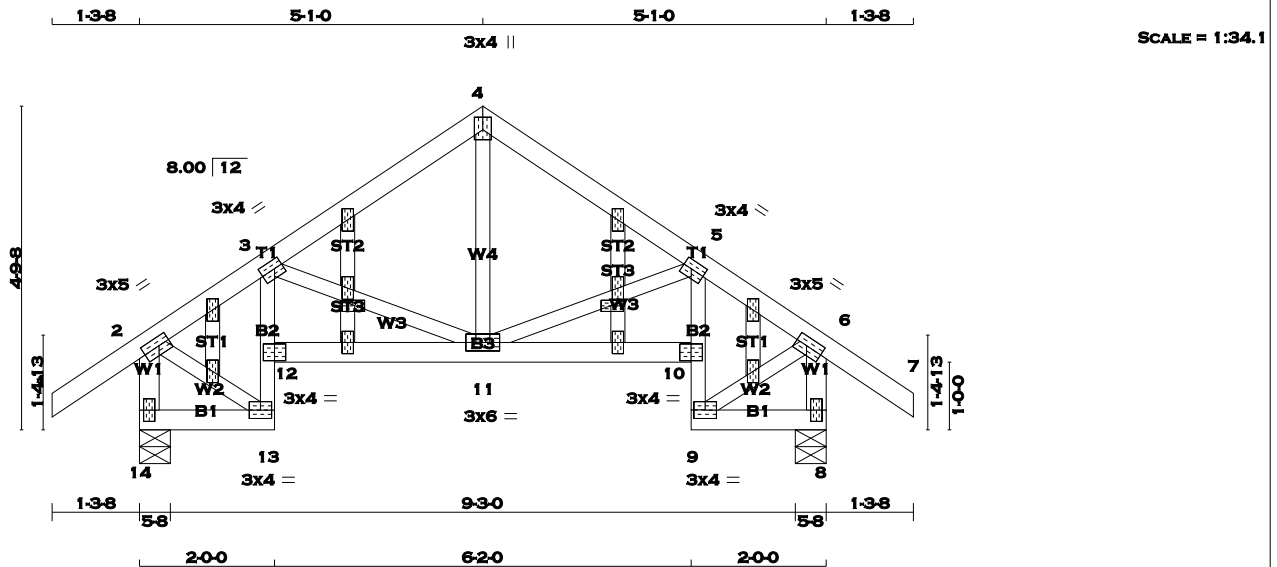
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (13) (INPUT = 0.90)

JSI METAL= 0.59 (2) (INPUT = 1.00)

N. L. G. A. RULES					BUILDING DESIGNER					DESIGN CRITERIA				
CHORDS					CHORDS					DESIGN CRITERIA				
SIZE					SIZE					DESIGN CRITERIA				
1 - 4	2x4	DRY	No.2	SPF	FACTORED					REQRD				
4 - 5	2x4	DRY	No.2	SPF	GROSS REACTION					BRG				
5 - 7	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
7 - 8	2x4	DRY	No.2	SPF	18	1853	0	1853	0	0	5-8	5-8		
8 - 11	2x4	DRY	No.2	SPF	12	1853	0	1853	0	0	5-8	5-8		
18 - 2	2x4	DRY	No.2	SPF	UNFACTORED REACTIONS									
12 - 10	2x4	DRY	No.2	SPF	1ST LCASE					MAX./MIN. COMPONENT REACTIONS				
18 - 15	2x4	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
15 - 14	2x4	DRY	No.2	SPF	18	1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0		
14 - 12	2x4	DRY	No.2	SPF	12	1298	921 / 0	0 / 0	0 / 0	0 / 0	377 / 0	0 / 0		
ALL WEBS					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 12									
EXCEPT					BRACING									
16 - 5	2x4	DRY	No.2	SPF	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.90 FT.									
16 - 6	2x4	DRY	No.2	SPF	MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
6 - 14	2x4	DRY	No.2	SPF	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
14 - 7	2x4	DRY	No.2	SPF	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.									
DRY: SEASONED LUMBER.					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. FACTORED					MEMB. FACTORED				
					FORCE (LBS)					FORCE (LBS)				
					VERT. LOAD LC1 MAX					MAX. FACTORED				
					(PLF)					UNBRAC				
					CSI (LC)					LENGTH				
					FR-TO					FR-TO				
					1-2					10.00				
					2-3					17-3				
					3-4					4-30				
					4-5					16-5				
					5-6					16-6				
					6-7					6-14				
					7-8					14-7				
					8-9					14-9				
					9-10					13-9				
					10-11					2-17				
					11-12					13-10				
					18-2					0.08 (1)				
					12-10					0.30 (1)				
					18-17					0.10 (1)				
					17-16					0.14 (1)				
					16-15					0.14 (1)				
					15-14					0.10 (1)				
					14-13					0.30 (1)				
					13-12					0.08 (1)				
					12-11					0.41 (1)				
					11-10					0.41 (1)				
					10-9					6.23				
					9-8					6.23				
					8-7					10.00				
					7-6					10.00				
					6-5					10.00				
					5-4					10.00				
					4-3					10.00				
					3-2					10.00				
					2-1					10.00				
					1-0					10.00				
					0-1					10.00				
					0-2					10.00				
					0-3					10.00				
					0-4					10.00				
					0-5					10.00				
					0-6					10.00				
					0-7					10.00				
					0-8					10.00				
					0-9					10.00				
					0-10					10.00				
					0-11					10.00				
					0-12					10.00				
					0-13					10.00				
					0-14					10.00				
					0-15					10.00				
					0-16					10.00				
					0-17					10.00				
					0-18					10.00				
					0-19					10.00				
					0-20					10.00				
					0-21					10.00				
					0-22					10.00				
					0-23					10.00				
					0-24					10.00				
					0-25					10.00				
					0-26					10.00				
					0-27					10.00				
					0-28					10.00				
					0-29					10.00				
					0-30					10.00				
					0-31					10.00				
					0-32					10.00				
					0-33					10.00				
					0-34					10.00				
					0-35					10.00				
					0-36					10.00				
					0-37					10.00				
					0-38					10.00				
					0-39					10.00				
					0-40					10.00				
					0-41					10.00				
					0-42					10.00				
					0-43					10.00				
					0-44					10.00				
					0-45					10.00				
					0-46					10.00				
					0-47					10.00				
					0-48					10.00				
					0-49					10.00				
					0-50					10.00				
					0-51					10.00				
					0-52					10.00				
					0-53					10.00				
					0-54					10.00				
					0-55					10.00				
					0-56					10.00				
					0-57					10.00				
					0-58					10.00				
					0-59					10.00				
					0-60					10.00				
					0-61					10.00				
					0-62					10.00				
					0-63					10.00				
					0-64					10.00				
					0-65					10.00				
					0-66					10.00				
					0-67					10.00				
					0-68					10.00				
					0-69					10.00				
					0-70					10.00				
					0-71					10.00				
					0-72					10.00				
					0-73					10.00				
					0-74					10.00				
					0-75					10.00				
					0-76					10.00				
					0-77					10.00				
					0-78					10.00				
					0-79					10.00				
					0-80					10.00				
					0-81					10.00				
					0-82					10.00				
					0-83					10.00				
					0-84					10.00				
					0-85					10.00				
					0-86					10.00				
					0-87					10.00				
					0-88					10.00				
					0-89					10.00				
					0-90					10.00				
					0-91					10.00				
					0-92					10.00				
					0-93					10.00				
					0-94					10.00				
					0-95					10.00				
					0-96					10.00				
					0-97					10.00				
					0-98					10.00				
					0-99					10.00				
					0-100					10.00				
					0-101					10.00				
					0-102					10.00				
					0-103					10.00				
					0-104					10.00				
					0-105					10.00				
					0-106					10.00				
					0-107					10.00				
					0-108					10.00				
					0-109					10.00				
					0-110					10.00				
					0-111					10.00				
					0-112					10.00				
					0-113					10.00				
					0-114					10.00				
					0-115					10.00				
					0-116					10.00				
					0-117					10.00				
					0-118					10.00				
					0-119					10.00				
					0-120					10.00				
					0-121					10.00				
					0-122					10.00				
					0-123					10.00				
					0-124					10.00				
					0-125					10.00				
					0-126					10.00				
					0-127					10.00				
					0-128					10.00				
					0-129					10.00				
					0-130					10.00				
					0-131					10.00				
					0-132					10.00				
					0-133					10.00				
					0-134					10.00				
					0-135					10.00				
					0-136					10.00				
					0-137					10.00				
					0-138					10.00				
					0-139					10.00				
					0-140					10.00				
					0-141					10.00				
					0-142					10.00				
					0-143					10.00				
					0-144					10.00				
					0-145					10.00				
					0-146					10.00				
					0-147					10.00				
					0-148					10.00				
					0-149					10.00				
					0-150					10.00				
					0-151					10.00				
					0-152					10.00				
					0-153					10.00				
					0-154					10.00				
					0-155					10.00				
					0-156					10.00				
					0-157					10.00				
					0-158					10.00				
					0-159					10.00				
					0-160					10.00				
					0-161					10.00				
					0-162					10.00				
					0-163					10.00				
					0-164					10.00				
					0-165					10.00				
					0-166					10.00				
					0-167					10.00				
					0-168					10.00				
					0-169					10.00				
					0-170					10.00				
					0-171					10.00				
					0-172					10.00				
					0-173					10.00				
					0-174					10.00				
					0-175					10.00				
					0-176					10.00				
					0-177					10.00				
					0-178					10.00				
					0-179					10.00				
					0-180					10.00				
					0-181					10.00				
					0-182					10.00				
					0-183					10.00				
					0-184					10.00				
					0-185					10.00				
					0-186					10.00				
					0-187					10.00				
					0-188					10.00				
					0-189					10.00				
					0-190					10.00				
					0-191					10.00				
					0-192					10.00				
					0-193					10.00				
					0-194					10.00				
					0-195					10.00				
					0-196					10.00				
					0-197					10.00				
					0-198					10.00				
					0-199					10.00				
					0-200					10.00				
					0-201					10.00				
					0-202					10.00				
					0-203					10.00				
					0-204					10.00				
					0-205					10.00				
					0-206					10.00				
					0-207					10.00				
					0-208					10.00				
					0-209					10.00				
					0-210					10.00				
					0-211					10.00				
					0-212					10.00				
					0-213					10.00				
					0-214					10.00				
					0-215					10.00				
					0-216					10.00				
					0-217					10.00				
					0-218					10.00				
					0-219					10.00				
					0-220					10.00				
					0-221					10.00				
					0-222					10.00				
					0-223					10.00				
					0-224					10.00				
					0-225					10.00				
					0-226					10.00				
					0-227					10.00				
					0-228					10.00				
					0-229					10.00				
					0-230					10.00				
					0-231					10.00				
					0-232					10.00				
					0-233					10.00				
					0-234					10.00				
					0-235					10.00				
					0-236					10.00				
					0-237					10.00				
					0-238					10.00				
					0-239					10.00				
					0-240					10.00				
					0-241					10.00				
					0-242					10.00				
					0-243					10.00				
					0-244					10.00				
					0-245					10.00				
					0-246					10.00				
					0-247					10.00				
					0-248					10.00				
					0-249					10.00				
					0-250					10.00				
					0-251					10.00				
					0-252					10.00				
					0-253					10.00				



TOTAL WEIGHT = 50 lb

LUMBER				N. L. G. A. RULES	
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE
1 - 4	2x4	DRY	No.2	14 - 2	2x4
4 - 7	2x4	DRY	No.2	8 - 6	2x4
14 - 2	2x4	DRY	No.2	14 - 13	2x4
8 - 6	2x4	DRY	No.2	13 - 3	2x3
14 - 13	2x4	DRY	No.2	12 - 10	2x4
13 - 3	2x3	DRY	No.2	9 - 5	2x3
12 - 10	2x4	DRY	No.2	9 - 8	2x4
9 - 5	2x3	DRY	No.2		
9 - 8	2x4	DRY	No.2		
ALL WEBS 2x3 DRY				No.2	
EXCEPT				SPF	
ALL GABLE WEBS				No.2	
2x3 DRY				SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	5.0	1.50 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	TMVW-t	MT20	3.0	4.0	1.50 1.50
6	TMVW-t	MT20	3.0	5.0	1.50 2.00
8	BMV1+p	MT20	2.0	4.0	
9	BMVW-t	MT20	3.0	4.0	
10	BVM-I	MT20	3.0	4.0	
11	BMVWW-t	MT20	3.0	6.0	
12	BVM-I	MT20	3.0	4.0	
13	BMVW-t	MT20	3.0	4.0	
14	BMV1+p	MT20	2.0	4.0	
15	NP-p	MT20	2.0	4.0	1.00 1.75
15, 16, 17, 18, 19, 20, 21, 22, 23, 24					
15	NP+w	MT20	2.0	4.0	
22	NP-p	MT20	2.0	4.0	1.00 1.75
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		588	0	588	0	0	5-8	5-8	
8		588	0	588	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
14		411	301/0	0/0	0/0	0/0	110/0	0/0	
8		411	301/0	0/0	0/0	0/0	110/0	0/0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 8									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
		MEMB. FORCE		VERT. LOAD LC1 MAX		MEMB. FORCE		MAX	
		(LBS)		(PLF)		(LBS)		(LC)	
				FROM TO				LENGTH FR-TO	
FR-TO									
1-2		0/29		-77.3 -77.3		0.10 (1)		10.00	
2-3		-351/0		-77.3 -77.3		0.10 (1)		6.25	
3-4		-394/0		-77.3 -77.3		0.19 (1)		6.25	
4-5		-394/0		-77.3 -77.3		0.19 (1)		6.25	
5-6		-351/0		-77.3 -77.3		0.10 (1)		6.25	
6-7		0/29		-77.3 -77.3		0.10 (1)		10.00	
14-2		-572/0		0.0 0.0		0.06 (1)		7.81	
8-6		-572/0		0.0 0.0		0.06 (1)		7.81	
14-13		0/0		-17.5 -17.5		0.02 (4)		10.00	
13-12		-131/0		0.0 0.0		0.69 (1)		7.81	
12-3		-109/0		0.0 0.0		0.69 (1)		7.81	
12-11		0/451		-17.5 -17.5		0.10 (1)		10.00	
11-10		0/451		-17.5 -17.5		0.10 (1)		10.00	
9-10		-131/0		0.0 0.0		0.69 (1)		7.81	
10-5		-109/0		0.0 0.0		0.69 (1)		7.81	
9-8		0/0		-17.5 -17.5		0.02 (4)		10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN.C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.34")

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

ALLOWABLE DEFL.(TL)= L/360 (0.34")

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

CSI: TC=0.19 (3-4:1) , BC=0.69 (3-12:1) , WB=0.07 (2-13:1) , SSI=0.28 (12-13:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

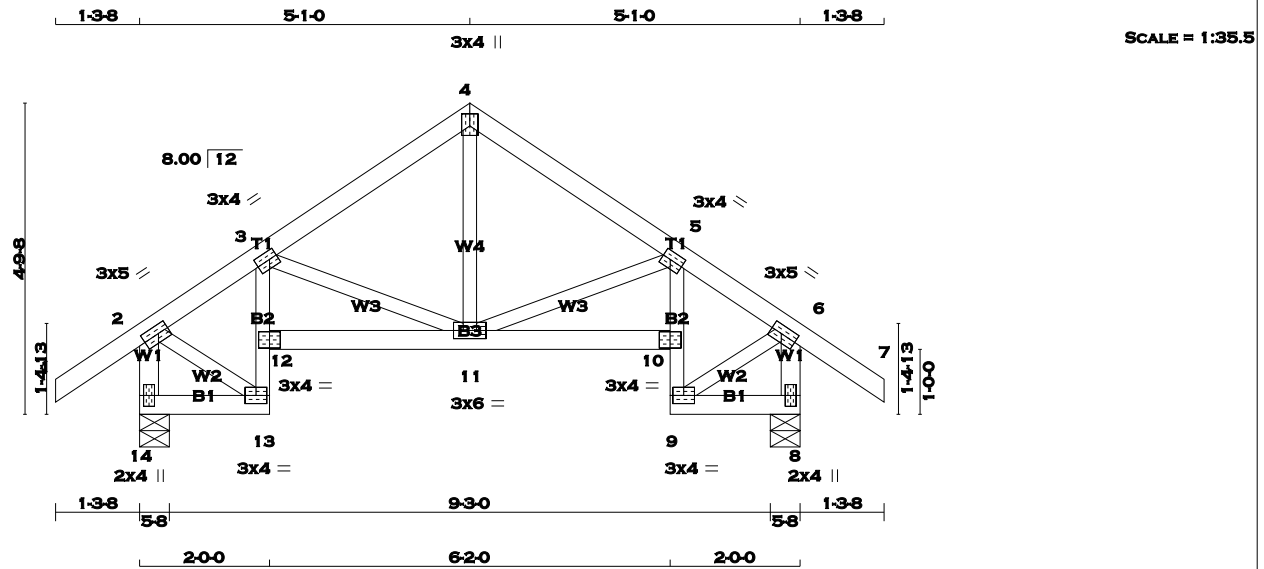
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (13) (INPUT = 0.90)

JSI METAL= 0.14 (6) (INPUT = 1.00)



TOTAL WEIGHT = 2 X 46 = 91 lb [M]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2	4 - 7	2x4	DRY	No.2
14 - 2	2x4	DRY	No.2	14 - 2	2x4	DRY	No.2
8 - 6	2x4	DRY	No.2	8 - 6	2x4	DRY	No.2
14 - 13	2x4	DRY	No.2	14 - 13	2x4	DRY	No.2
13 - 3	2x3	DRY	No.2	13 - 3	2x3	DRY	No.2
12 - 10	2x4	DRY	No.2	12 - 10	2x4	DRY	No.2
9 - 5	2x3	DRY	No.2	9 - 5	2x3	DRY	No.2
9 - 8	2x4	DRY	No.2	9 - 8	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2	ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
JT	VERT	HORZ	DOWN	GROSS REACTION	FACTORED	FACTORED	FACTORED	GROSS REACTION	FACTORED	FACTORED	FACTORED	BRG	IN-SX	IN-SX	IN-SX	BRG	IN-SX	IN-SX	IN-SX
14	588	0	588	0	588	0	588	0	588	0	588	5-8	5-8	5-8	5-8	5-8	5-8	5-8	5-8
8	588	0	588	0	588	0	588	0	588	0	588	5-8	5-8	5-8	5-8	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	411	301 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
8	411	301 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 7.81 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED HORZ. LOAD (LBS)	MAX. FACTORED VERT. LOAD (LBS)
FR-TO		FROM	TO	LENGTH	FR-TO		FROM	TO	LENGTH
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-4	0 / 163	0.04 (1)	
2-3	-351 / 0	-77.3	-77.3	0.10 (1)	6.25	11-5	-123 / 0	0.03 (1)	
3-4	-394 / 0	-77.3	-77.3	0.19 (1)	6.25	3-11	-123 / 0	0.03 (1)	
4-5	-394 / 0	-77.3	-77.3	0.19 (1)	6.25	2-13	0 / 298	0.07 (1)	
5-6	-351 / 0	-77.3	-77.3	0.10 (1)	6.25	9-6	0 / 298	0.07 (1)	
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00				
14-2	-572 / 0	0.0	0.0	0.06 (1)	7.81				
8-6	-572 / 0	0.0	0.0	0.06 (1)	7.81				
14-13	0 / 0	-17.5	-17.5	0.02 (4)	10.00				
13-12	-131 / 0	0.0	0.0	0.69 (1)	7.81				
12-3	-109 / 0	0.0	0.0	0.69 (1)	7.81				
12-11	0 / 451	-17.5	-17.5	0.10 (1)	10.00				
11-10	0 / 451	-17.5	-17.5	0.10 (1)	10.00				
9-10	-131 / 0	0.0	0.0	0.69 (1)	7.81				
10-5	-109 / 0	0.0	0.0	0.69 (1)	7.81				
9-8	0 / 0	-17.5	-17.5	0.02 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.19 (3-4:1), BC=0.69 (3-12:1), WB=0.07 (2-13:1), SSI=0.28 (12-13:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

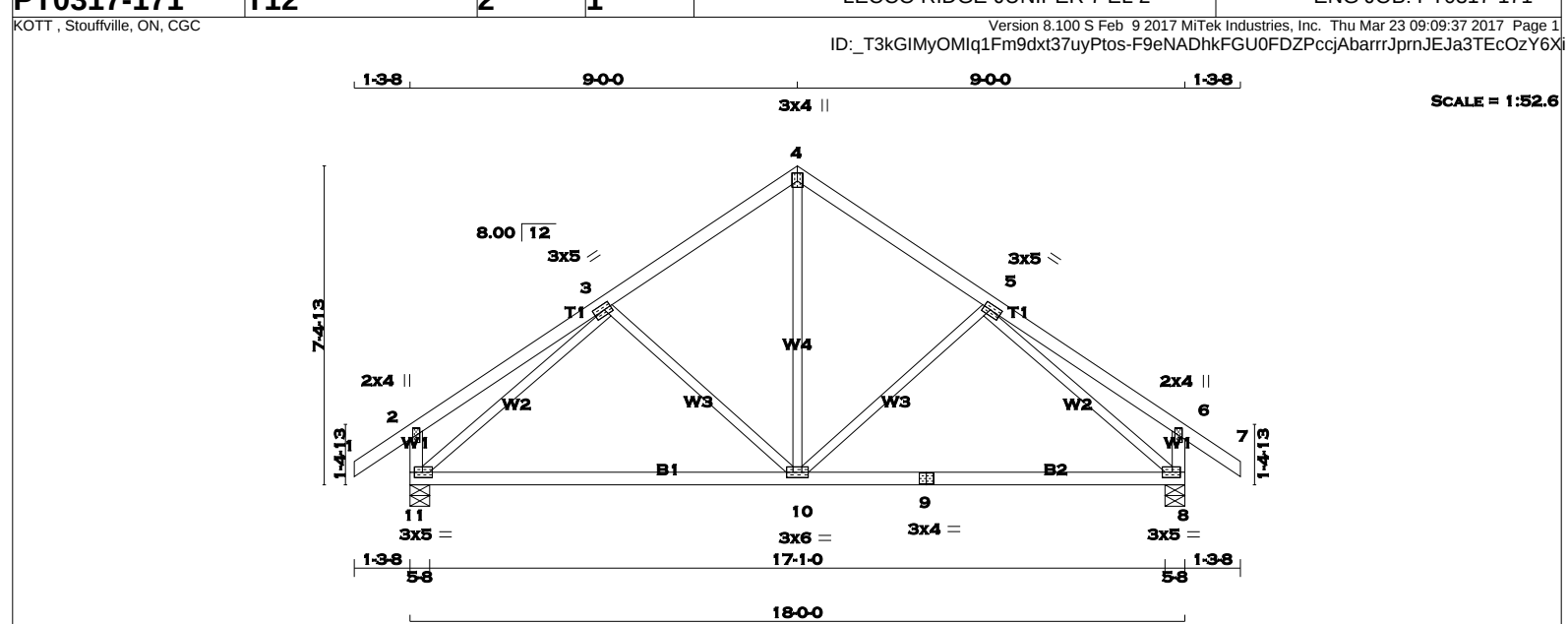
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.70 (13) (INPUT = 0.90)
JSI METAL= 0.14 (6) (INPUT = 1.00)

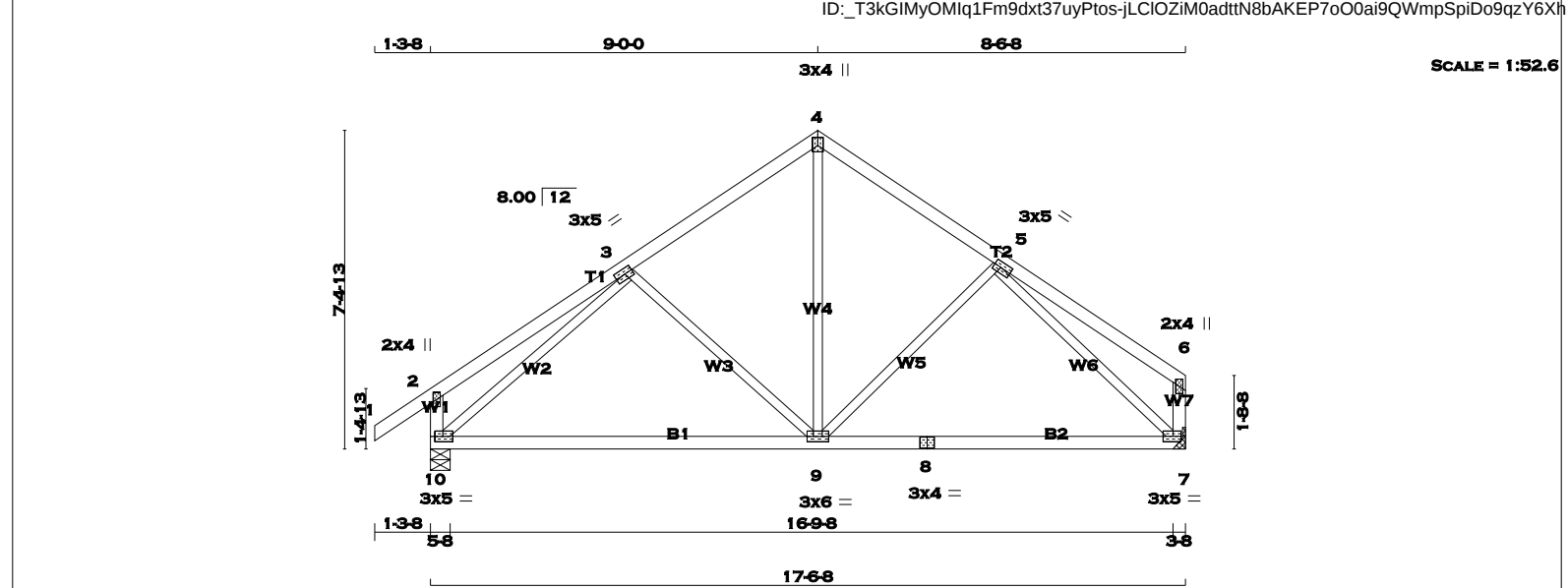
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
1 - 4 2x4 DRY No.2 SPF						BEARINGS										SPECIFIED LOADS:									
4 - 7 2x4 DRY No.2 SPF						FACTORED MAXIMUM FACTORED INPUT REQRD										TOP CH. LL = 23.3 PSF									
11- 2 2x4 DRY No.2 SPF						GROSS REACTION GROSS REACTION BRG BRG										DL = 3.0 PSF									
8 - 6 2x4 DRY No.2 SPF						JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 0.0 PSF									
11- 9 2x4 DRY No.2 SPF						11 960 0 960 0 0 5-8 5-8										DL = 7.0 PSF									
9 - 8 2x4 DRY No.2 SPF						8 960 0 960 0 0 5-8 5-8										TOTAL LOAD = 33.3 PSF									
ALL WEBS 2x3 DRY No.2 SPF						UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
EXCEPT						1ST LCASE MAX./MIN. COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL									
DRY: SEASONED LUMBER.						JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										OR SMALL BUILDING REQUIREMENTS OF									
						11 671 483 / 0 0 / 0 0 / 0 0 / 0 188 / 0 0 / 0										PART 9, NBCC 2010									
						8 671 483 / 0 0 / 0 0 / 0 0 / 0 188 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
						BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 11, 8										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014									
						BRACING										- CSA 086-09									
						TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										- TPIC 2011									
						MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F.									
						ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED									
						LOADING										ROOF LIVE LOAD									
						TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(LL)= L/360 (0.60")									
						C H O R D S W E B S										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")									
						MEMB. MAX. FACTORED FACTORED MAX MAX. MEMB. MAX. FACTORED MAX										ALLOWABLE DEFL.(TL)= L/360 (0.60")									
						FORCE VERT. LOAD LC1 MAX UNBRAC FORCE MAX										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")									
						(LBS) (PLF) CSI (LC) LENGTH (LBS) CSI (LC)										CSI: TC=0.25 (2-3:1) , BC=0.46 (10-11:4) ,									
						FR-TO FROM TO FR-TO										WB=0.62 (3-11:1) , SSI=0.14 (3-4:1)									
						1- 2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 10- 4 0 / 488 0.11 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
						2- 3 0 / 23 -77.3 -77.3 0.25 (1) 10.00 10- 5 -218 / 0 0.14 (1)										COMP=1.10 SHEAR=1.10 TENS= 1.10									
						3- 4 -703 / 0 -77.3 -77.3 0.20 (1) 6.25 3-10 -218 / 0 0.14 (1)										COMPANION LIVE LOAD FACTOR = 0.50									
						4- 5 -703 / 0 -77.3 -77.3 0.20 (1) 6.25 11- 3 -983 / 0 0.62 (1)										TRUSS PLATE MANUFACTURER IS NOT									
						5- 6 0 / 23 -77.3 -77.3 0.25 (1) 10.00 5- 8 -983 / 0 0.62 (1)										RESPONSIBLE FOR QUALITY CONTROL IN THE									
						6- 7 0 / 29 -77.3 -77.3 0.10 (1) 10.00										TRUSS MANUFACTURING PLANT .									
						11- 2 -239 / 0 0.0 0.0 0.02 (1) 7.81										NAIL VALUES									
						8- 6 -239 / 0 0.0 0.0 0.02 (1) 7.81										PLATE GRIP(DRY) SHEAR SECTION									
						11-10 0 / 728 -17.5 -17.5 0.46 (4) 10.00										(PSI) (PLI) (PLI)									
						10- 9 0 / 728 -17.5 -17.5 0.46 (4) 10.00										MAX MIN MAX MIN MAX MIN									
						9- 8 0 / 728 -17.5 -17.5 0.46 (4) 10.00										MT20 618 354 1667 822 2284 1656									
						A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.										PLATE PLACEMENT TOL. = 0.250 inches									
																PLATE ROTATION TOL. = 5.0 Deg.									
																JSI GRIP= 0.90 (8) (INPUT = 0.90)									
																JSI METAL= 0.28 (9) (INPUT = 1.00)									



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

SPF

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

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMV+p

MT20

2.0

4.0

3

TMWW-t

MT20

3.0

5.0

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

BMWWW-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 MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

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

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

10

656

472 / 0

0 / 0

0 / 0

0 / 0

184 / 0

0 / 0

7

584

408 / 0

0 / 0

0 / 0

0 / 0

175 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS

MEMB.

MAX. FACTORED FORCE (LBS)

VERT. LOAD (PLF)

LC1

MAX

CS1 (LC)

UNBRAC 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

WEBS

MEMB.

MAX. FACTORED FORCE (LBS)

MAX

CS1 (LC)

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

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

(55 % OF 27.2 P.S.F. G.S.L. 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

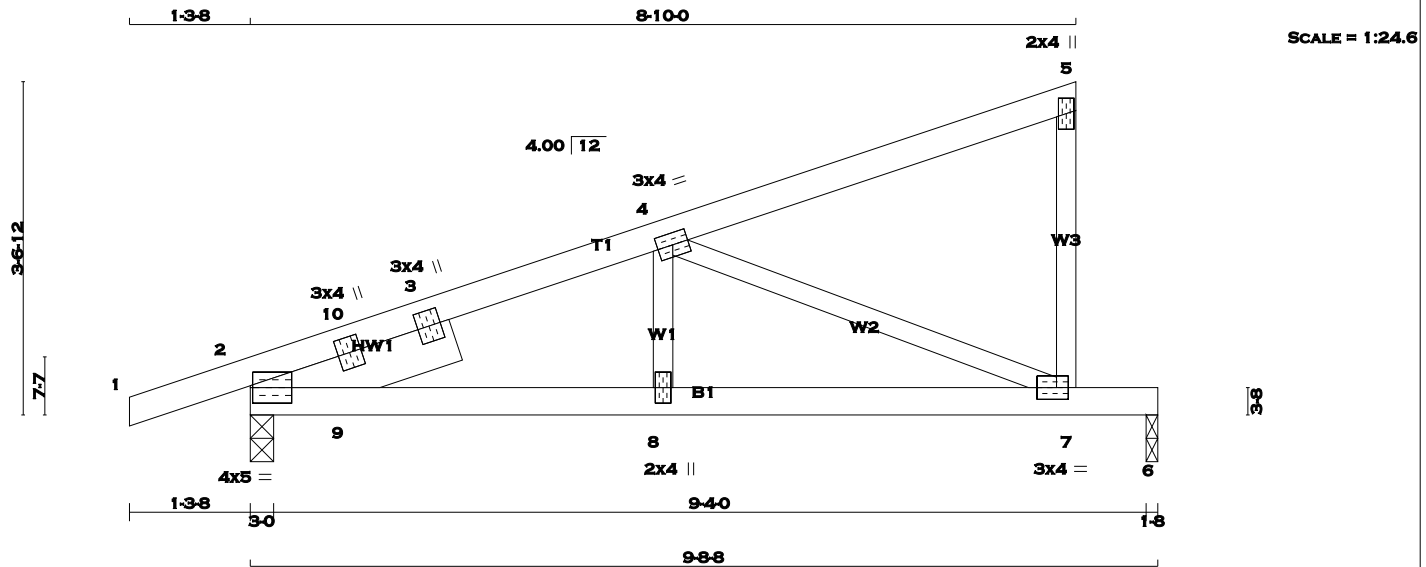
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (5) (INPUT = 0.90)

JSI METAL= 0.27 (3) (INPUT = 1.00)

TOTAL WEIGHT = 3 X 73 = 219 lb

[M][F]



LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 5	2x4	DRY	No.2	SPF
7 - 5	2x3	DRY	No.2	SPF
2 - 6	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
ALL WEBS				
2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMBMR1-I	MT20	4.0	5.0	2.25	0.25
2	RT+t	MT20	3.0	4.0		
2	RT+t	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0		
5	TMV+p	MT20	2.0	4.0		
7	BMVW-t	MT20	3.0	4.0	1.50	1.50
8	BMV+w	MT20	2.0	4.0		

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



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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT		VERT	HORZ	UPLIFT	IN-SX
2		561	0	0	3-0
6		396	0	0	1-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
2		391	286 / 0	0 / 0	0 / 0	0 / 0	105 / 0	0 / 0
6		279	187 / 0	0 / 0	0 / 0	0 / 0	92 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 5	-77.3 -77.3	0.09 (1)	10.00	8-4	0 / 214	0.05 (1)
2-10	-680 / 0	-77.3 -77.3	0.03 (1)	6.25	4-7	-797 / 0	0.29 (1)
10-3	-665 / 0	-77.3 -77.3	0.12 (1)	6.25	9-10	0 / 153	0.00 (1)
3-4	-665 / 0	-77.3 -77.3	0.12 (1)	6.25	9-3	-254 / 0	0.02 (1)
4-5	-8 / 0	-77.3 -77.3	0.18 (1)	10.00			
7-5	-145 / 0	0.0 0.0	0.04 (1)	7.81			
2-9	0 / 565	-17.5 -17.5	0.13 (1)	10.00			
9-8	0 / 739	-17.5 -17.5	0.27 (1)	10.00			
8-7	0 / 739	-17.5 -17.5	0.58 (1)	10.00			
7-6	0 / 0	-17.5 -17.5	0.46 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.32")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.32")
CALCULATED VERT. DEFL.(TL) = L/ 701 (0.17")

CSI: TC=0.18 (4-5:1), BC=0.58 (7-8:1), WB=0.29 (4-7:1), SSI=0.31 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.81 (7) (INPUT = 0.90)
JSI METAL= 0.28 (7) (INPUT = 1.00)

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

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



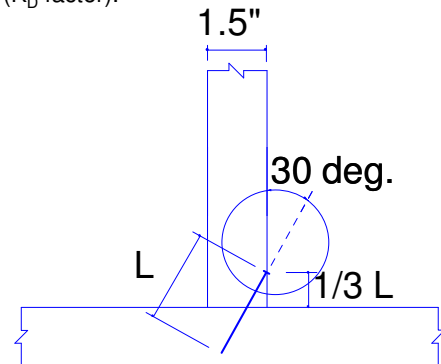
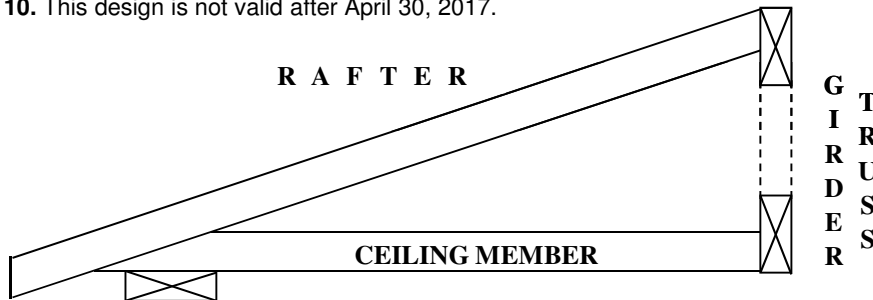
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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

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

PEO
Certificate No. 10889485



April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

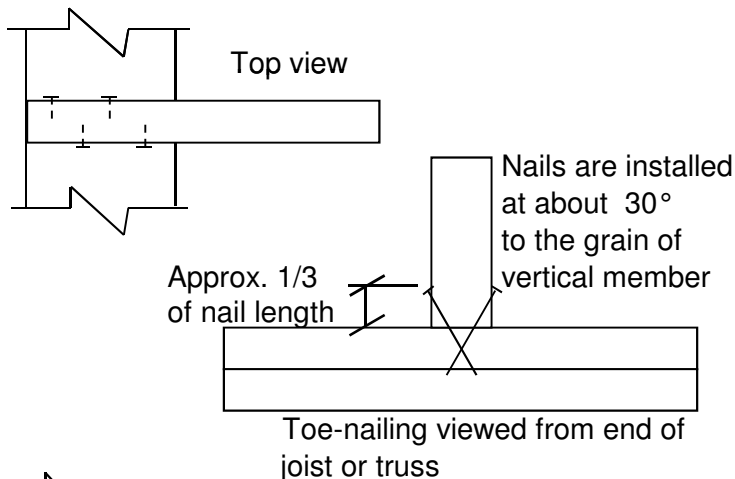
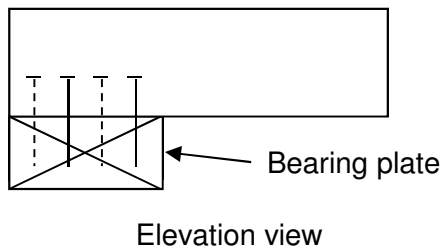
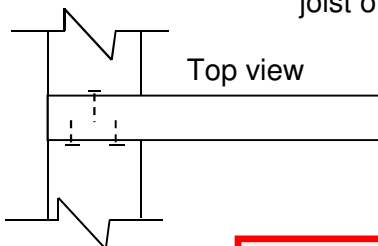
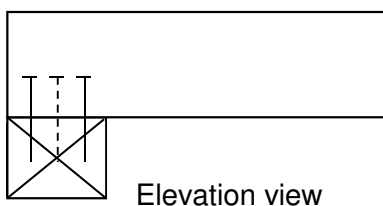
B37579H2

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

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

NOTES:

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

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

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

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



April 24, 2015



STANDARD GABLE END DETAIL

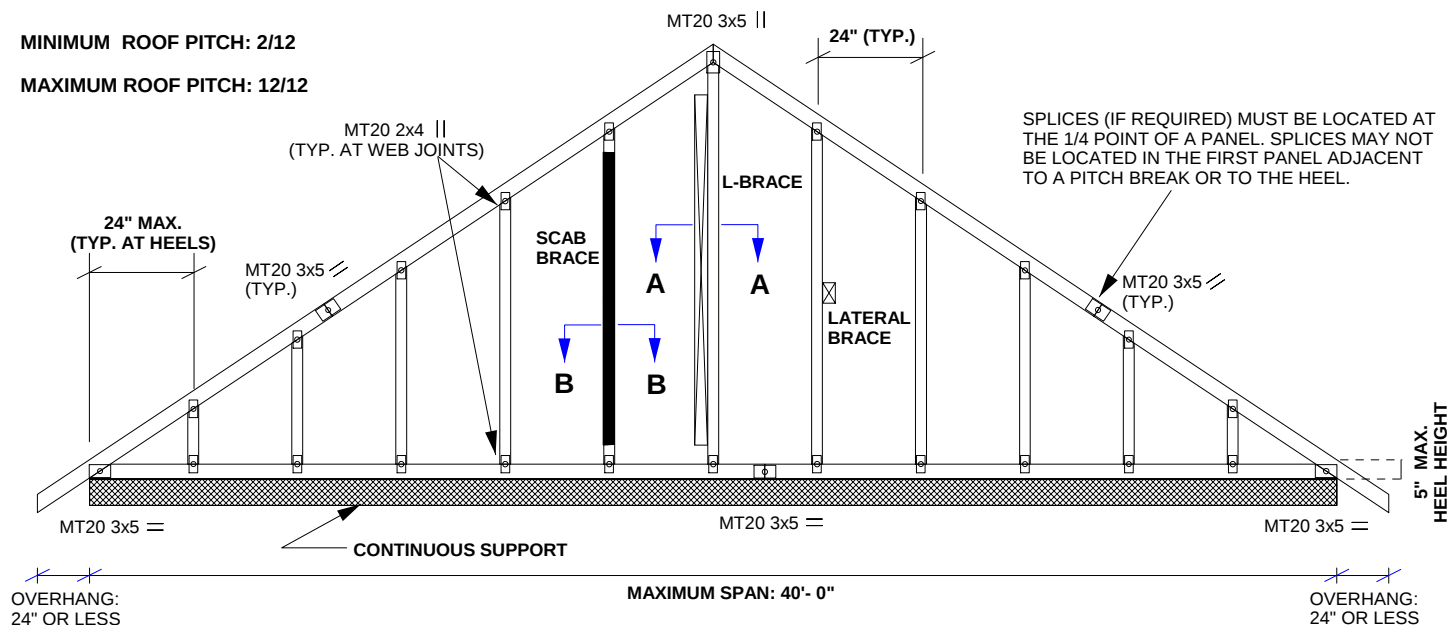
LECCO RIDGE-JUNIPER 7 EL 2

DRAWING NO.: B37579K

ENR 108 PTO 171

MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

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

PLATES

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

DESIGN CRITERIA

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

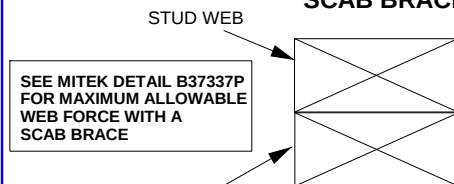
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

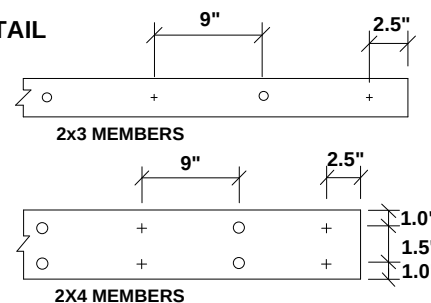
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10 FT. OR RIGID CEILING DIRECTLY APPLIED.
 WEBS MUST BE LATERALLY BRACED, SCAB BRACED OR L-BRACED AS INDICATED IN TABLE BELOW:

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

SCAB BRACE DETAIL



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

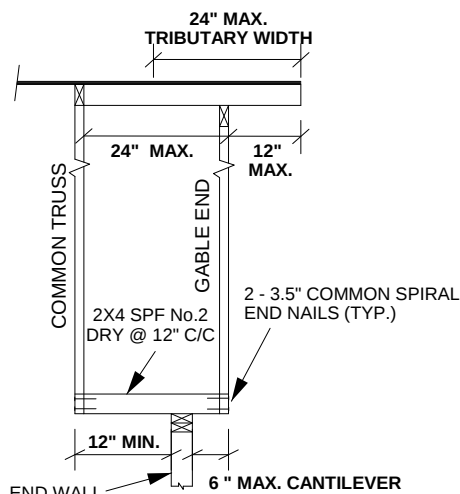


FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

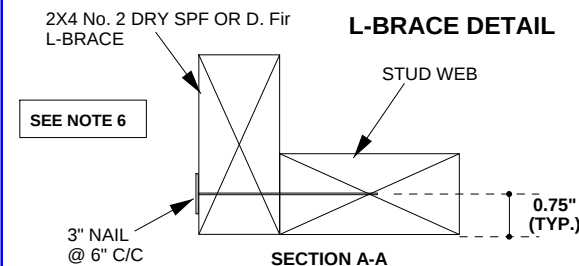
+ NAIL FROM FRONT FACE
 o NAIL FROM BACK FACE

CANTILEVER DETAIL

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



L-BRACE DETAIL



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

NOTES:

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

PEO
 Certificate No. 10889485



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

April 24, 2015



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