



TOWN OF MILTON
PLANNING AND DEVELOPMENT
BUILDING PERMIT: 17-4954

BUILDING: REVIEWED

SCOTT SHERRIFFS APR 19, 2017

PLANS EXAMINER DATE

Neither the issuance of a permit nor carrying out of inspections by the Town of Milton relieves the owner from full responsibility for compliance with the provisions of the Ontario Building Code Act and the Ontario Building Code, both as amended, as well as other applicable statutes and regulations of the Province of Ontario, By-laws of the Region of Halton and Town of Milton

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



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

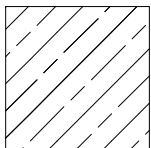
UNDERSIDE OF SOFFIT
FOR PORCHES AT
8' 6" A.F.F.

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

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

HANGER LEGEND:

▼ LUS24 ■ LJS26DS
● HGUS26 × HGUS26-2

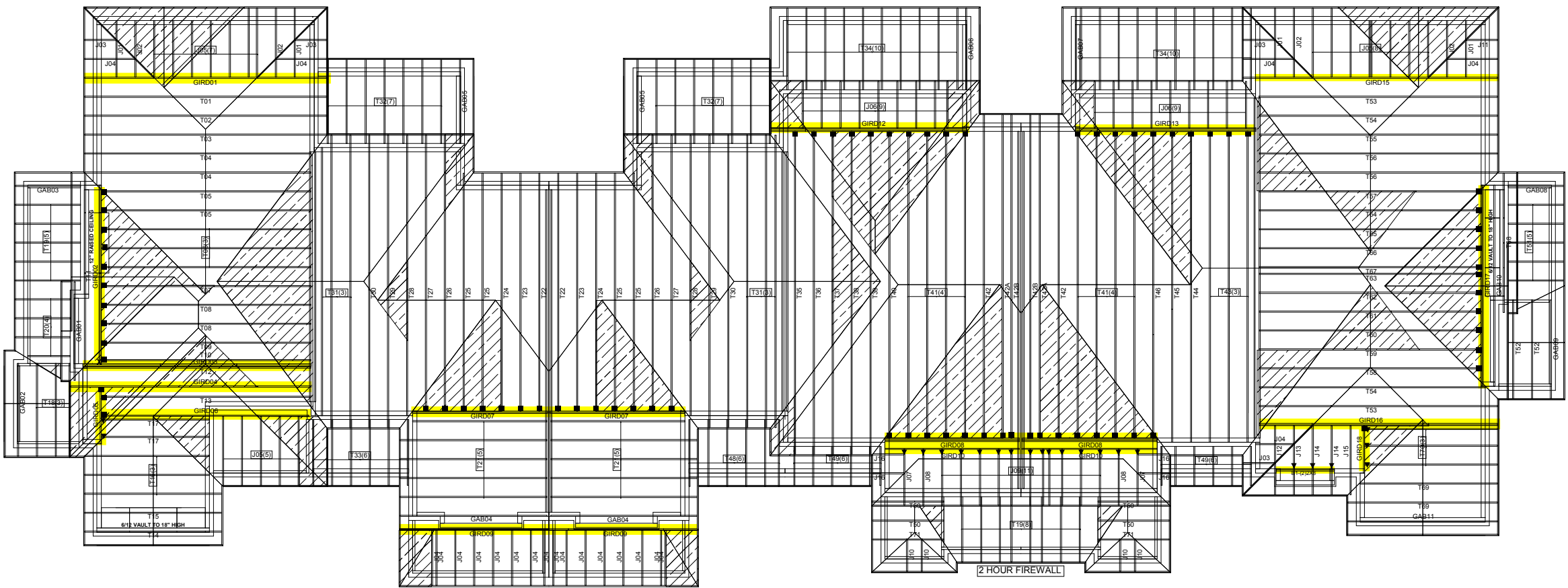


CONVENTIONAL FRAMING BY OTHERS

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

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

Model: **BLOCK 324**
Customer: GREENPARK
Project: LECCO RIDGE
Location: MILTON
Date: 3/9/2017 Drawn by: BB



IVY 11
EL 3
324-1

IVY 1
EL 3
324-2

IVY 1
EL 3
324-3

IVY 3
EL 3
324-4

IVY 3
EL 3
324-5

IVY 12
EL 3
324-6

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")**

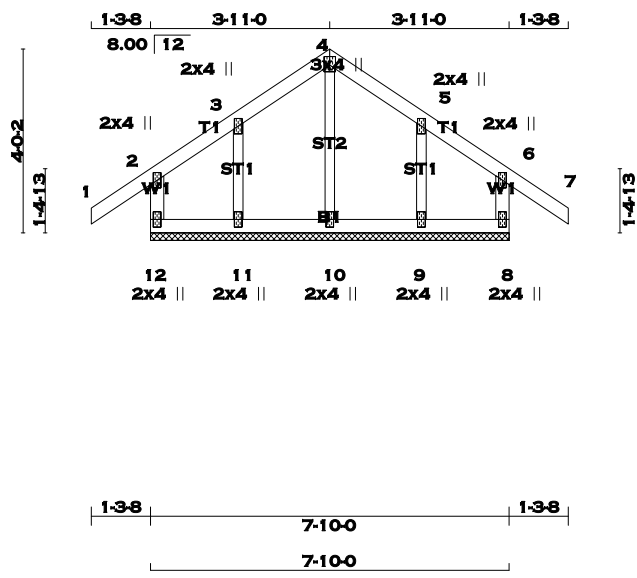
SUPPORTS

- 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 truss.

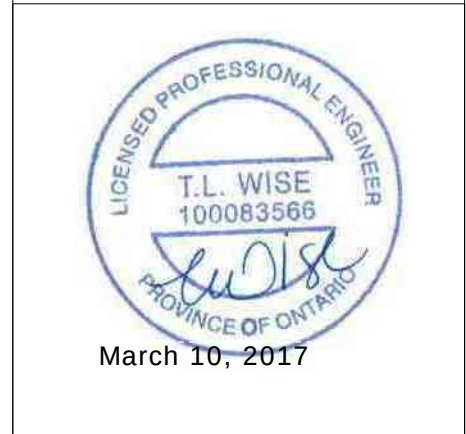




SCALE = 1:50.3

TOTAL WEIGHT = 32 lb [M]

LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER					DESIGN CRITERIA					
N. L. G. A. RULES					BEARINGS					SPECIFIED LOADS:					
CHORDS	SIZE	LUMBER	DESCR.		THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.					TOP CH.	LL	=	23.3	PSF	
12 - 2	2x4	DRY	No.2	SPF						DL	=	3.0	PSF		
1 - 4	2x4	DRY	No.2	SPF	THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.					BOT CH.	LL	=	0.0	PSF	
4 - 7	2x4	DRY	No.2	SPF						DL	=	7.0	PSF		
8 - 6	2x4	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)					TOTAL LOAD	=	33.3	PSF		
12 - 8	2x4	DRY	No.2	SPF						SPACING = 24.0 IN. C/C					
ALL WEBS 2x3 DRY No.2 SPF					BRACING					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010					
ALL GABLE WEBS 2x3 DRY No.2 SPF					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.					THIS DESIGN COMPLIES WITH:					
GABLE STUDS SPACED AT 2'-0" OC.					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.					- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014					
					LOADING					- CSA 086-09					
					TOTAL LOAD CASES: (3)					- TPIC 2011					
PLATES (table is in inches)					CHORDS					WEBS					
JT	TYPE	PLATES	W	LEN	Y	X	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)	
2	TMV+p	MT20	2.0	4.0			FR-TO		FROM	TO		FR-TO			
3	TMW+w	MT20	2.0	4.0			12- 2	-177 / 0	0.0	0.0	0.04 (1)	7.81	10- 4	-205 / 0	0.05 (1)
4	TTW+p	MT20	3.0	4.0	2.25	1.50	1- 2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11- 3	-130 / 0	0.02 (1)
5	TMW+w	MT20	2.0	4.0			2- 3	-2 / 18	-77.3	-77.3	0.07 (1)	10.00	9- 5	-130 / 0	0.02 (1)
6	TMV+p	MT20	2.0	4.0			3- 4	0 / 34	-77.3	-77.3	0.05 (1)	10.00			
8	BMV1+p	MT20	2.0	4.0			4- 5	0 / 34	-77.3	-77.3	0.05 (1)	10.00			
9, 10, 11	BMW1+w	MT20	2.0	4.0			5- 6	-2 / 18	-77.3	-77.3	0.07 (1)	10.00			
12	BMV1+p	MT20	2.0	4.0			6- 7	0 / 29	-77.3	-77.3	0.10 (1)	10.00			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.							8- 6	-177 / 0	0.0	0.0	0.04 (1)	7.81			
							12-11	-22 / 0	-17.5	-17.5	0.01 (3)	6.25			
							11-10	-26 / 0	-17.5	-17.5	0.01 (3)	6.25			
							10- 9	-26 / 0	-17.5	-17.5	0.01 (3)	6.25			
							9- 8	-22 / 0	-17.5	-17.5	0.01 (3)	6.25			
					DESIGN ASSUMPTIONS					- OVERHANG NOT TO BE ALTERED OR CUT OFF.					
										(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD					
										CSI: TC=0.10 (6-7:1) , BC=0.01 (9-10:3) , WB=0.05 (4-10:1) , SSI=0.07 (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= 0.14 (4) (INPUT = 0.90)					
										JSI METAL= 0.07 (4) (INPUT = 1.00)					



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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MAX. FACTORED		FACTORED		MAX. FACTORED			
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
11-1	-97 / 0	0.0	0.0	0.03 (1)	7.81	9-3	-128 / 0
1-2	-34 / 0	-77.3	-77.3	0.04 (1)	6.25	10-2	-169 / 0
2-3	-31 / 0	-77.3	-77.3	0.04 (1)	6.25	8-4	-161 / 0
3-4	-30 / 0	-77.3	-77.3	0.04 (1)	6.25		
4-5	-37 / 0	-77.3	-77.3	0.04 (1)	6.25		
5-6	0 / 25	-77.3	-77.3	0.10 (1)	10.00		
7-5	-208 / 0	0.0	0.0	0.02 (1)	7.81		
11-10	0 / 32	-17.5	-17.5	0.02 (3)	10.00		
10-9	0 / 26	-17.5	-17.5	0.02 (3)	10.00		
9-8	0 / 26	-17.5	-17.5	0.02 (3)	10.00		
8-7	0 / 31	-17.5	-17.5	0.02 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

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

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

CSI: TC=0.10 (5-6:1) , BC=0.02 (10-11:3) ,
WB=0.03 (2-10:1) , SSI=0.07 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (1) (INPUT = 0.90)
JSI METAL= 0.06 (1) (INPUT = 1.00)



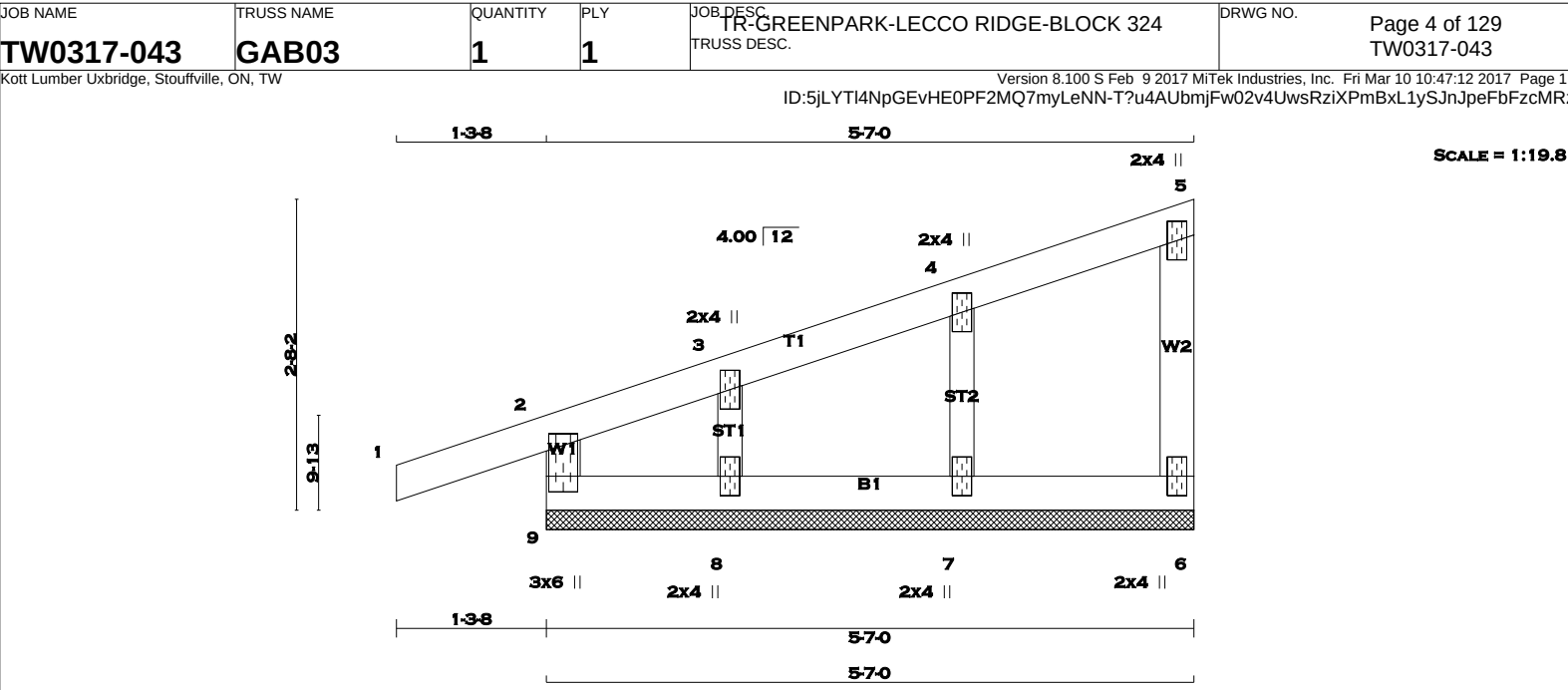
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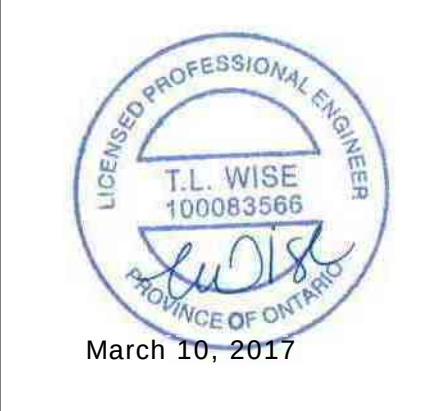
LUMBER

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2						
3	TMW+w	MT20	2.0	4.0		
4	TMW+w	MT20	2.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMV1+w	MT20	2.0	4.0		
8	BMV1+w	MT20	2.0	4.0		
9						
9	TMBMV1+p	MT20	3.0	6.0	3.50	1.50

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



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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
9-2	-195 / 0	0.0	0.0 0.03 (1)	7-8	-177 / 0	0.0	0.0 0.03 (1)
1-2	0 / 16	-77.3	-77.3 0.10 (1)	8-3	-97 / 0	0.0	0.0 0.01 (1)
2-3	-24 / 0	-77.3	-77.3 0.07 (1)				
3-4	-7 / 0	-77.3	-77.3 0.04 (1)				
4-5	-9 / 0	-77.3	-77.3 0.04 (1)				
6-5	-66 / 0	0.0	0.0 0.01 (1)				
9-8	0 / 15	-17.5	-17.5 0.03 (1)				
8-7	0 / 10	-17.5	-17.5 0.02 (3)				
7-6	0 / 5	-17.5	-17.5 0.02 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

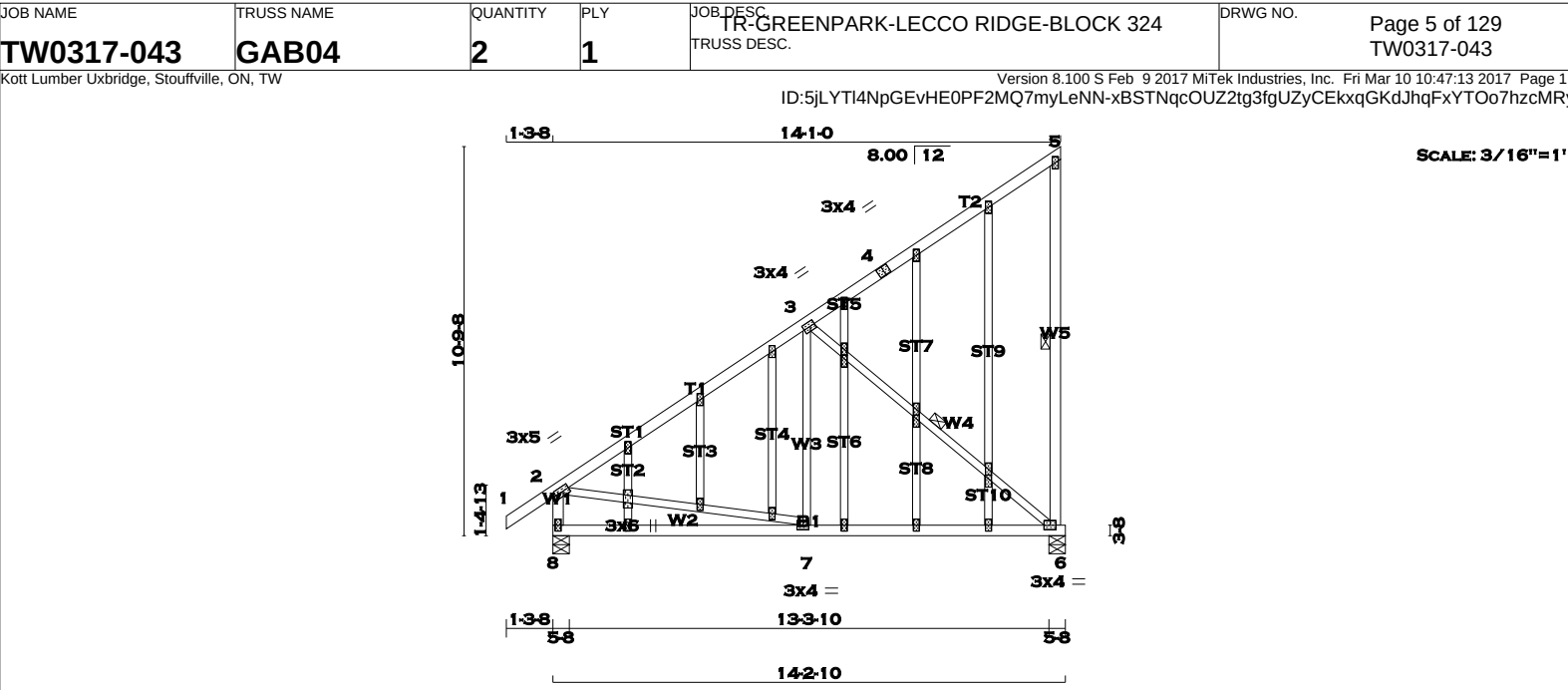
JSI GRIP= 0.17 (9) (INPUT = 0.90)

JSI METAL= 0.03 (7) (INPUT = 1.00)



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

1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
8 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMVW1-t	MT20	3.0	4.0		
7	BMWW-t	MT20	3.0	4.0		
8	BMV1+p	MT20	2.0	4.0		
9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24	NP+w	MT20	2.0	4.0		
11, 14, 17	NP+w	MT20	2.0	4.0	1.25	1.00
22	WMWW+w	MT20	3.0	6.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
6	668	0	668	0
8	774	0	774	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
6	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0
8	541	392 / 0	0 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 3-6. DBS = 20-0-0 . CBF = 82 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 149	0.05 (3)
2-3	-572 / 0	-77.3 -77.3	0.52 (1)	6.25	3-6	-656 / 0	0.37 (1)
3-4	-37 / 0	-77.3 -77.3	0.51 (1)	6.25	2-7	0 / 513	0.12 (1)
4-5	-37 / 0	-77.3 -77.3	0.51 (1)	6.25			
6-5	-205 / 0	0.0 0.0	0.12 (1)	6.25			
8-2	-727 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.25 (3)	10.00			
7-6	0 / 507	-17.5 -17.5	0.29 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

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

CSI: TC=0.52 (2-3:1) , BC=0.29 (6-7:3) , WB=0.37 (3-6:1) , SSI=0.22 (3-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (7) (INPUT = 0.90)
JSI METAL= 0.23 (2) (INPUT = 1.00)

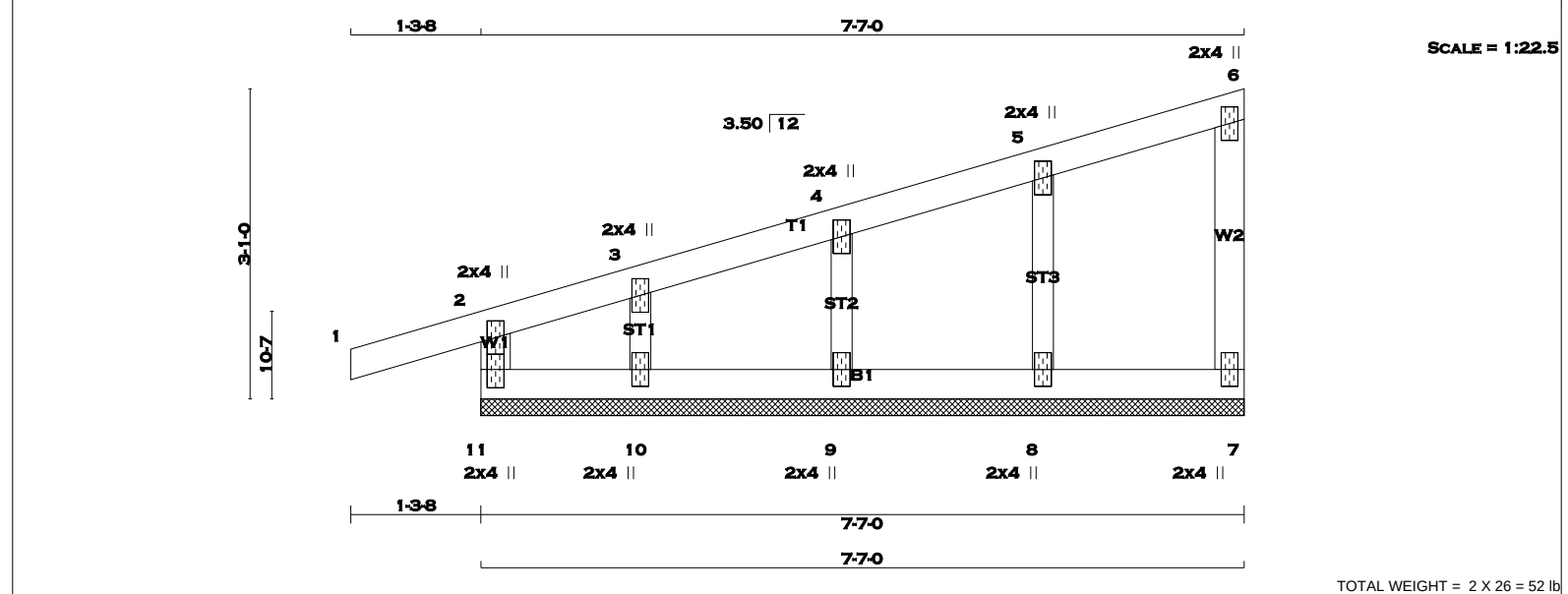


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TOTAL WEIGHT = 2 X 26 = 52 lb [M]

LUMBER

N. L. G. A. RULES

CHORDS SIZE

11- 2 2x4 DRY No.2

1 - 6 2x4 DRY No.2

7 - 6 2x4 DRY No.2

11- 7 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

ALL GABLE WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

DESCR.

SPF

SPF

SPF

SPF

SPF

SPF

SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 4, 5						
3	TMW+w	MT20	2.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8, 9, 10						
8	BMW1+w	MT20	2.0	4.0		
11	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
11- 2	-195 / 0	0.0	0.0 0.03 (1)	7.81	8- 5	-164 / 0	0.03 (1)
1- 2	0 / 14	-77.3	-77.3 0.10 (1)	10.00	9- 4	-161 / 0	0.02 (1)
2- 3	-25 / 0	-77.3	-77.3 0.07 (1)	6.25	10- 3	-100 / 0	0.01 (1)
3- 4	-10 / 0	-77.3	-77.3 0.04 (1)	6.25			
4- 5	-8 / 0	-77.3	-77.3 0.04 (1)	10.00			
5- 6	-8 / 0	-77.3	-77.3 0.04 (1)	10.00			
7- 6	-69 / 0	0.0	0.0 0.01 (1)	7.81			
11-10	0 / 16	-17.5	-17.5 0.03 (1)	10.00			
10- 9	0 / 12	-17.5	-17.5 0.01 (3)	10.00			
9- 8	0 / 8	-17.5	-17.5 0.02 (3)	10.00			
8- 7	0 / 5	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.11 (2) (INPUT = 0.90)

JSI METAL= 0.04 (2) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

T.L. WISE

100083566

PROVINCE OF ONTARIO

March 10, 2017

KOTT

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

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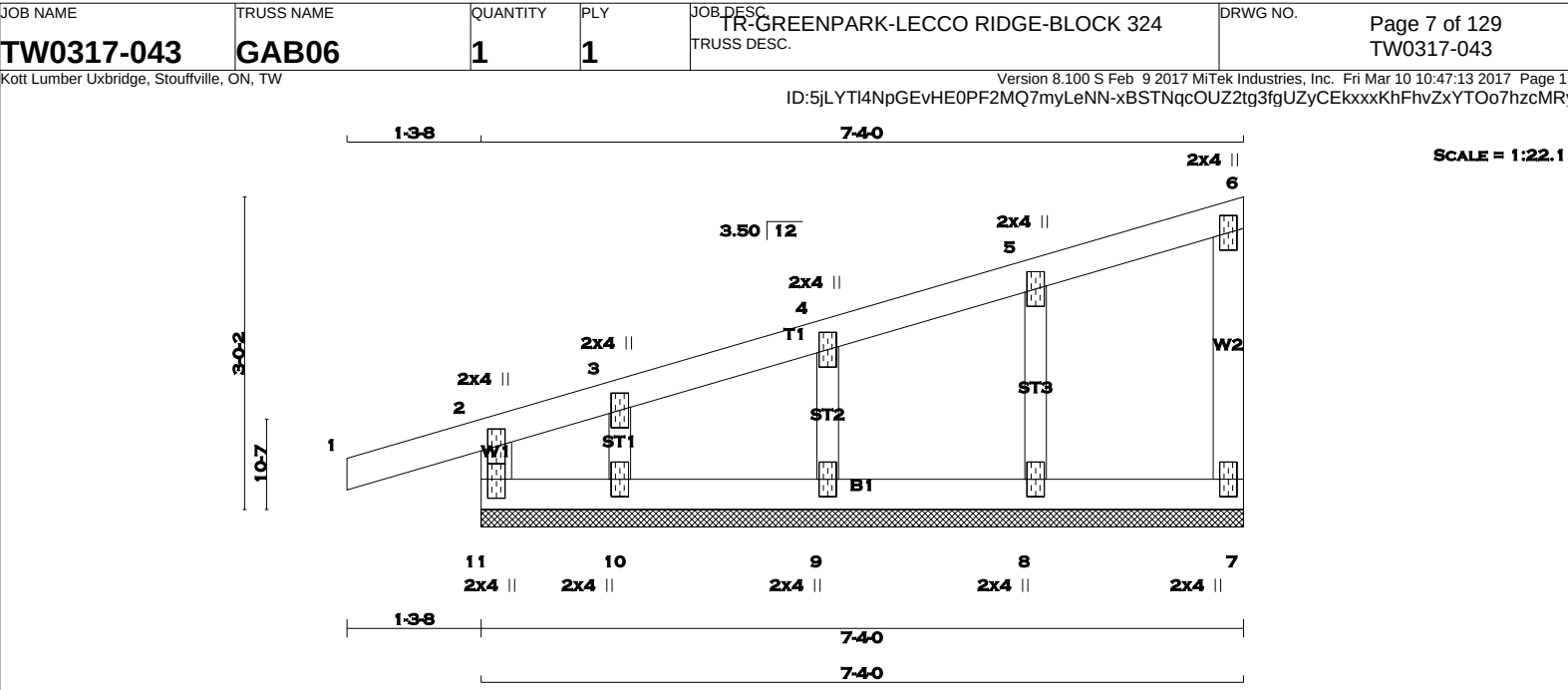


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LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
11 - 2	2x4	DRY	No.2
1 - 6	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
11 - 7	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF

ALL GABLE WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2'-0" OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 4, 5						
3	TMW+w	MT20	2.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8, 9, 10						
8	BMW1+w	MT20	2.0	4.0		
11	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

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)	MAX. FACTORED VERT. LOAD (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
11-2	-192 / 0	0.0	0.0 0.03 (1)	7.81	8-5	-164 / 0	0.03 (1)
1-2	0 / 14	-77.3	-77.3 0.10 (1)	10.00	9-4	-162 / 0	0.02 (1)
2-3	-27 / 0	-77.3	-77.3 0.07 (1)	6.25	10-3	-84 / 0	0.01 (1)
3-4	-11 / 0	-77.3	-77.3 0.04 (1)	6.25			
4-5	-9 / 0	-77.3	-77.3 0.04 (1)	10.00			
5-6	-8 / 0	-77.3	-77.3 0.04 (1)	10.00			
7-6	-69 / 0	0.0	0.0 0.02 (1)	7.81			
11-10	0 / 16	-17.5	-17.5 0.03 (1)	10.00			
10-9	0 / 13	-17.5	-17.5 0.01 (3)	10.00			
9-8	0 / 8	-17.5	-17.5 0.02 (3)	10.00			
8-7	0 / 5	-17.5	-17.5 0.02 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

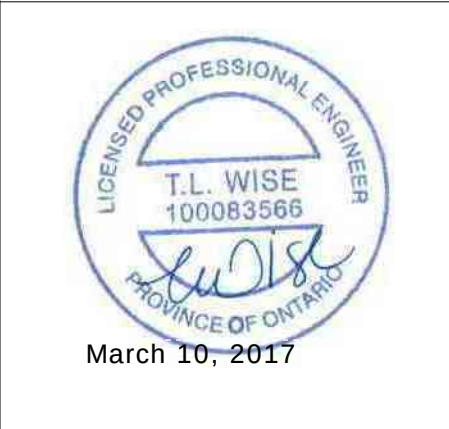
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

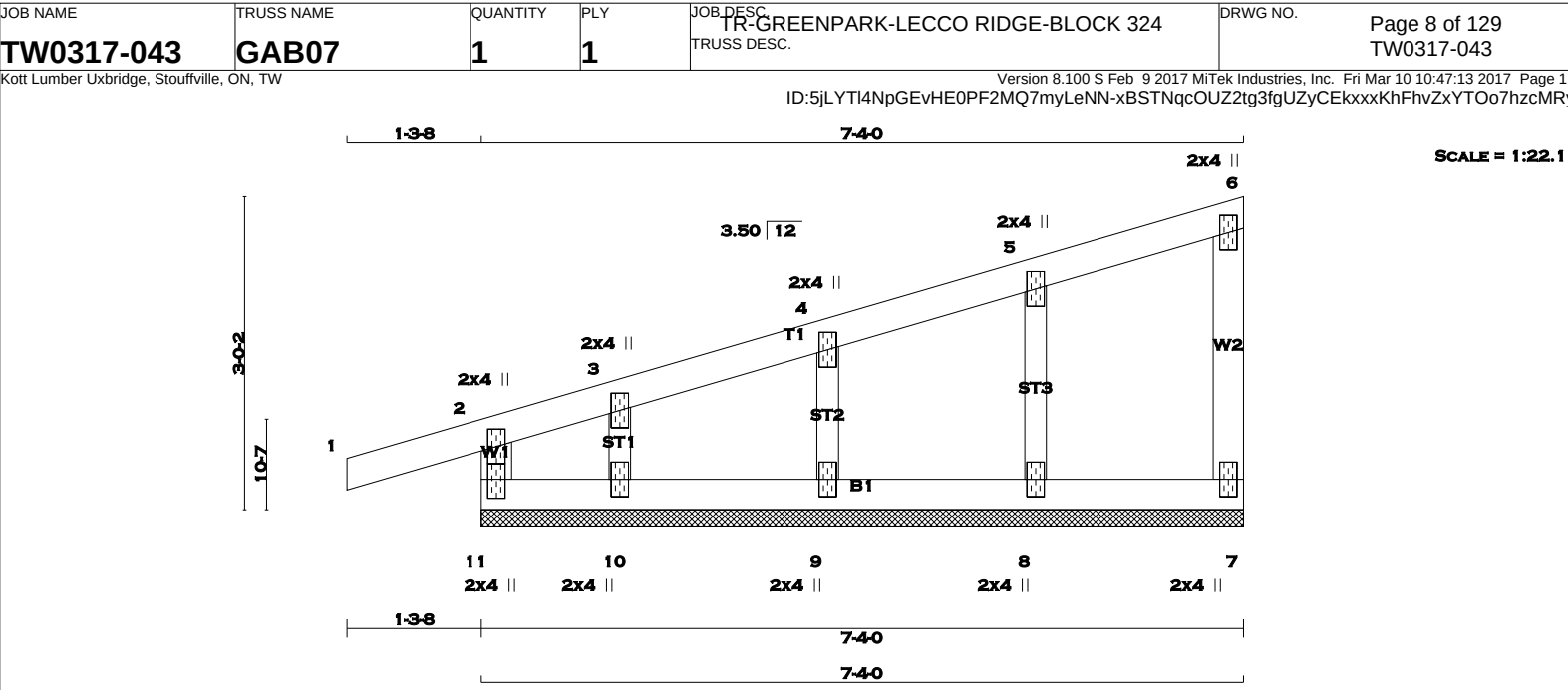
PLATE ROTATION TOL. = 5.0 Deg.

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



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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 4, 5						
3	TMW+w	MT20	2.0	4.0		
6	TMV+p	MT20	2.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8, 9, 10						
8	BMW1+w	MT20	2.0	4.0		
11	BMV1+p	MT20	2.0	4.0	2.25	1.00
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING			
TOTAL LOAD CASES: (3)			
CHORDS		WEBS	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
11-2	-192 / 0	8-5	-164 / 0
1-2	0 / 14	9-4	-162 / 0
2-3	-27 / 0	10-3	-84 / 0
3-4	-11 / 0		
4-5	-9 / 0		
5-6	-8 / 0		
7-6	-69 / 0		
11-10	0 / 16		
10-9	0 / 13		
9-8	0 / 8		
8-7	0 / 5		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

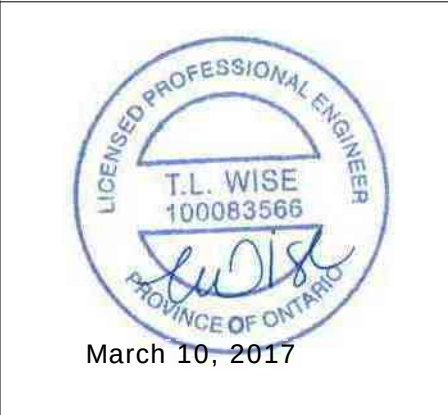
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

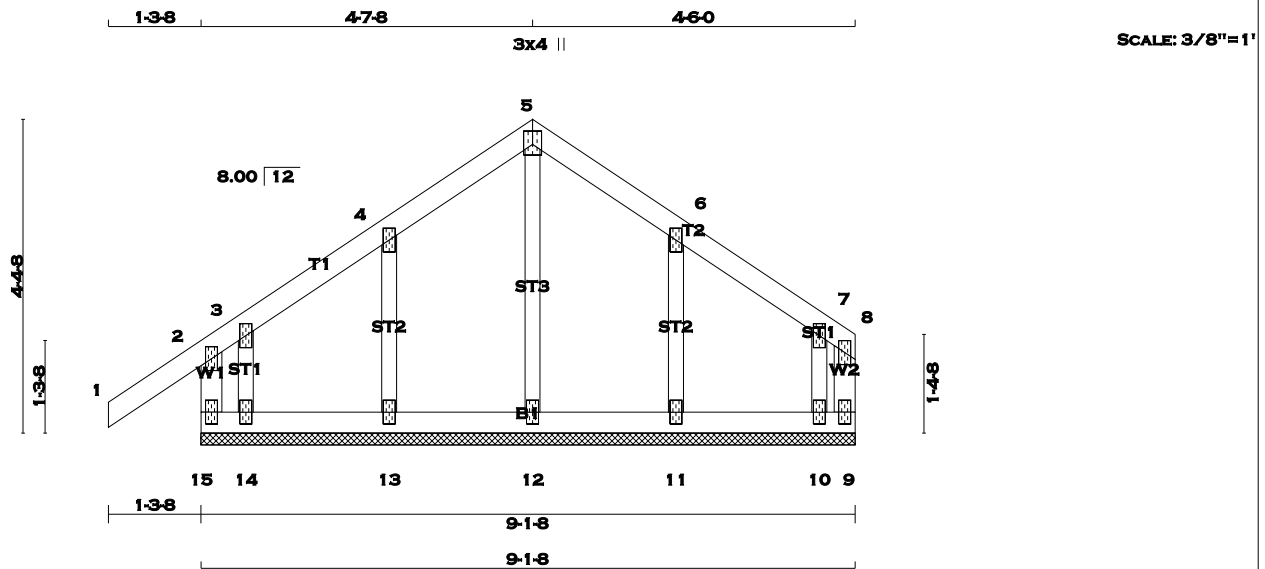


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MAR 29, 2017
17-4954
BUILDING DIVISION



TOTAL WEIGHT = 36 lb [M]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
15 - 2	2x4	DRY	No.2	SPF	
1 - 5	2x4	DRY	No.2	SPF	
5 - 8	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
15 - 9	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3, 4, 6, 7					
3	TMW+w	MT20	2.0	4.0	
5	TTW+p	MT20	3.0	4.0	2.25 1.50
8	TMV+p	MT20	2.0	4.0	
9	BMV1+p	MT20	2.0	4.0	
10, 11, 12, 13, 14					
10	BMW1+w	MT20	2.0	4.0	
15	BMV1+p	MT20	2.0	4.0	
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

PROVIDE ANCHORAGE AT BEARING JOINT 9 FOR 150 LBS. FACTORED UPLIFT BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S).

BRACING

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

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

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

LOADING							
TOTAL LOAD CASES: (3)							
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO		FROM TO			FR-TO		
15-2	-205 / 0	0.0	0.0 0.02 (1)	7.81	12-5	-167 / 0	0.05 (1)
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	13-4	-163 / 0	0.03 (1)
2-3	-42 / 0	-77.3	-77.3 0.08 (1)	6.25	14-3	-13 / 0	0.00 (1)
3-4	0 / 6	-77.3	-77.3 0.04 (1)	10.00	11-6	-162 / 0	0.03 (1)
4-5	0 / 7	-77.3	-77.3 0.04 (1)	10.00	10-7	-114 / 0	0.02 (1)
5-6	0 / 7	-77.3	-77.3 0.04 (1)	10.00			
6-7	0 / 5	-77.3	-77.3 0.04 (1)	10.00			
7-8	0 / 11	-77.3	-77.3 0.03 (1)	10.00			
9-8	0 / 11	0.0	0.0 0.01 (1)	10.00			
15-14	0 / 0	-17.5	-17.5 0.02 (1)	10.00			
14-13	-2 / 0	-17.5	-17.5 0.01 (3)	10.00			
13-12	-7 / 0	-17.5	-17.5 0.01 (3)	10.00			
12-11	-7 / 0	-17.5	-17.5 0.01 (3)	10.00			
11-10	-2 / 0	-17.5	-17.5 0.01 (3)	10.00			
10-9	0 / 5	-17.5	-17.5 0.01 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.10 (1-2:1), BC=0.02 (14-15:1), WB=0.05 (5-12:1), SS=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

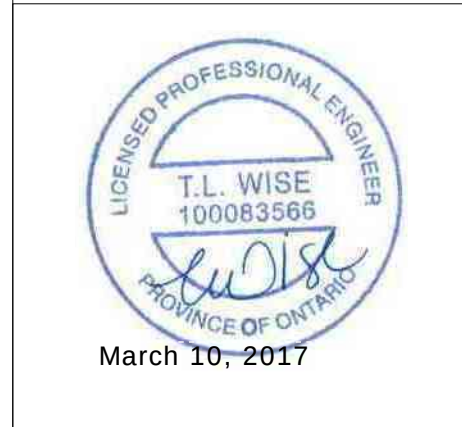
PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
	MAX	MIN	MAX MIN
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.13 (2) (INPUT = 0.90)

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



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

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MAR 29, 2017

17-4954

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DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= $L/360$ (0.71")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.71")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.14")

CSI: TC=0.23 (6-7:1) , BC=0.34 (12-13:1) ,
WB=0.75 (3-11:1) , SSI=0.15 (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

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

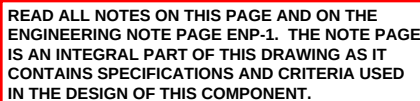
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.36 (1) (INPUT = 1.00)

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

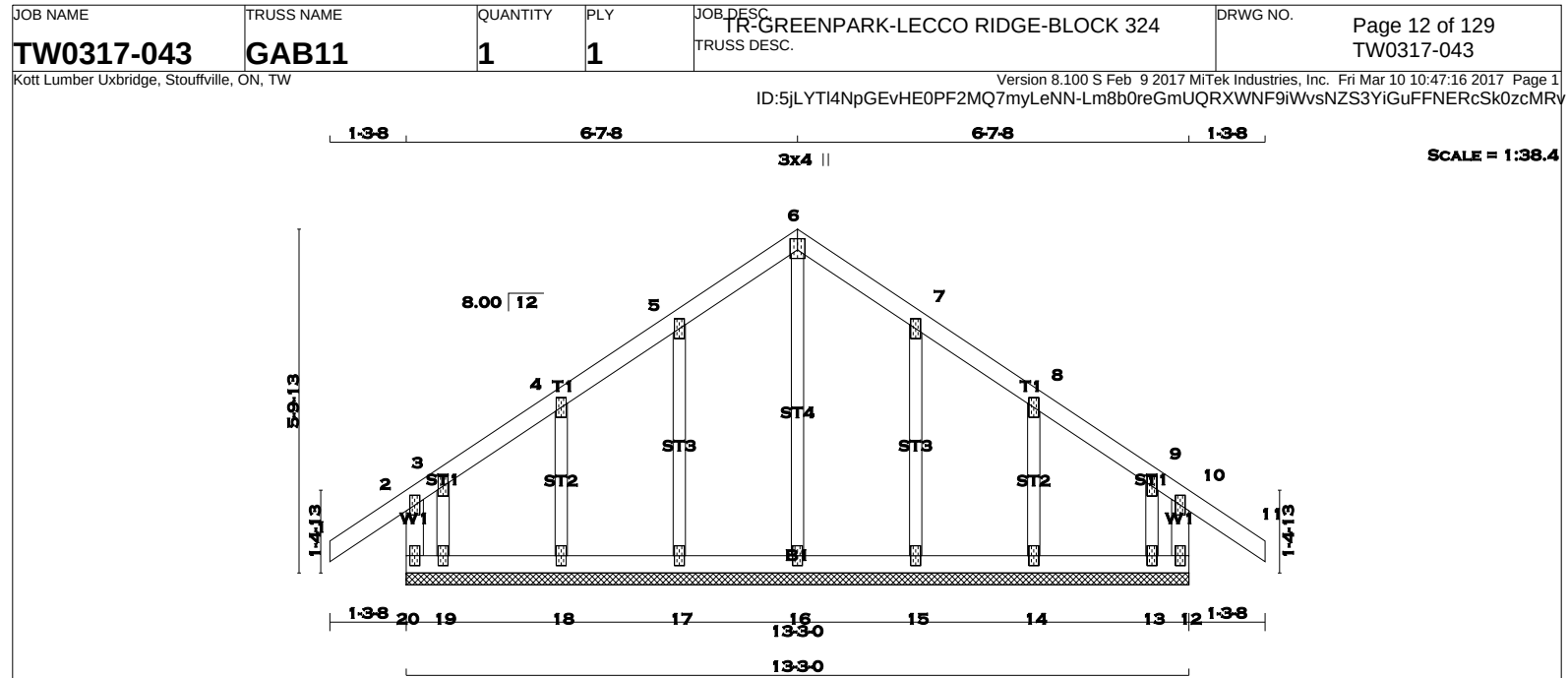
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.



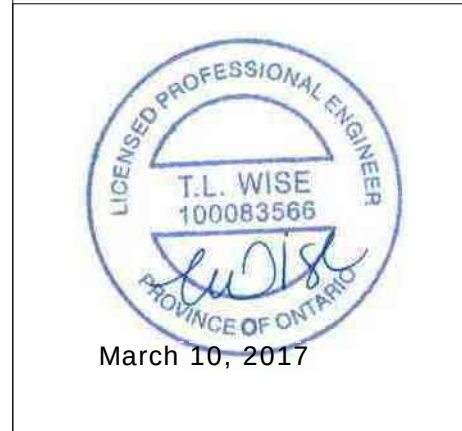
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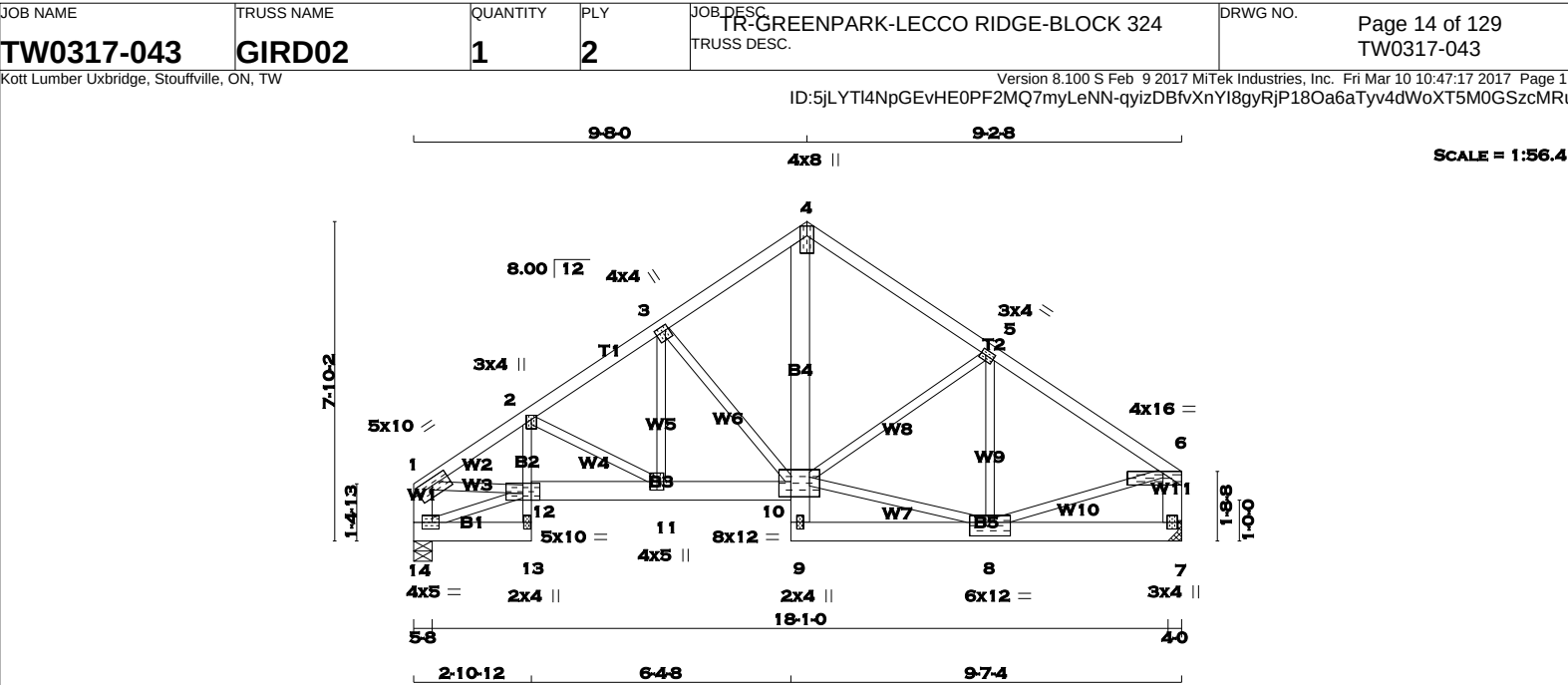
TOTAL WEIGHT = 56 lb										[M]				
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 20 - 2 2x4 DRY No.2 SPF 1 - 6 2x4 DRY No.2 SPF 6 - 11 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 20 - 12 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF ALL GABLE WEBS 2x3 DRY No.2 SPF DRY: SEASONED LUMBER. GABLE STUDS SPACED AT 2-0-0 OC.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS. THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE. BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.					DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 DESIGN ASSUMPTIONS -OVERHANG NOT TO BE ALTERED OR CUT OFF. (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD CSI: TC=0.10 (1-2:1) , BC=0.01 (14-15:3) , WB=0.09 (6-16:1) , 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= 0.12 (6) (INPUT = 0.90) JSI METAL= 0.06 (6) (INPUT = 1.00)				
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMV+p MT20 2.0 4.0 3, 4, 5, 7, 8, 9 3 TMW+w MT20 2.0 4.0 6 TTW+p MT20 3.0 4.0 2.25 1.50 10 TMV+p MT20 2.0 4.0 12 BMV1+p MT20 2.0 4.0 13, 14, 15, 16, 17, 18, 19 13 BMW1+w MT20 2.0 4.0 20 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					LOADING TOTAL LOAD CASES: (3) C H O R D S MAX. FACTORED FACTORED WEBS MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. MAX. FACTORED (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 20- 2 -189 / 0 0.0 0.0 0.02 (1) 7.81 16- 6 -185 / 0 0.09 (1) 1- 2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 17- 5 -157 / 0 0.05 (1) 2- 3 -25 / 0 -77.3 -77.3 0.07 (1) 6.25 18- 4 -156 / 0 0.03 (1) 3- 4 0 / 17 -77.3 -77.3 0.04 (1) 10.00 19- 3 -24 / 0 0.00 (1) 4- 5 0 / 20 -77.3 -77.3 0.04 (1) 10.00 15- 7 -157 / 0 0.05 (1) 5- 6 0 / 23 -77.3 -77.3 0.04 (1) 10.00 14- 8 -156 / 0 0.03 (1) 6- 7 0 / 23 -77.3 -77.3 0.04 (1) 10.00 13- 9 -24 / 0 0.00 (1) 7- 8 0 / 20 -77.3 -77.3 0.04 (1) 10.00 8- 9 0 / 17 -77.3 -77.3 0.04 (1) 10.00 9-10 -25 / 0 -77.3 -77.3 0.07 (1) 6.25 10-11 0 / 29 -77.3 -77.3 0.10 (1) 10.00 12-10 -189 / 0 0.0 0.0 0.02 (1) 7.81 20-19 -11 / 0 -17.5 -17.5 0.01 (3) 6.25 19-18 -12 / 0 -17.5 -17.5 0.01 (3) 6.25 18-17 -16 / 0 -17.5 -17.5 0.01 (3) 6.25 17-16 -20 / 0 -17.5 -17.5 0.01 (3) 6.25 16-15 -20 / 0 -17.5 -17.5 0.01 (3) 6.25 15-14 -16 / 0 -17.5 -17.5 0.01 (3) 6.25 14-13 -12 / 0 -17.5 -17.5 0.01 (3) 6.25 13-12 -11 / 0 -17.5 -17.5 0.01 (3) 6.25									



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

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 14- 1 2x6 DRY No.2 SPF 7 - 6 2x6 DRY No.2 SPF 14- 13 2x6 DRY No.2 SPF 13- 2 2x3 DRY No.2 SPF 12- 10 2x6 DRY No.2 SPF 9 - 4 2x6 DRY No.2 SPF 9 - 7 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. DESIGN CONSISTS OF <u>2</u> TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS: CHORDS #ROWS SURFACE SPACING (IN) LOAD(PLF) TOP CHORDS : (0.122"x3") SPIRAL NAILS 1- 4 1 12 TOP 4- 6 1 12 TOP 14- 1 2 12 TOP 7- 6 2 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 14- 13 2 9 SIDE(237.7) 12- 10 2 9 SIDE(237.7) 4- 9 2 12 TOP 9- 7 2 9 SIDE(237.7) 13- 2 1 12 TOP WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 NAILS TO BE DRIVEN FROM ONE SIDE ONLY. TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY. SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP. PLATES (table is in inches) JT TYPE PLATES W LEN Y X 1 TMVW-t MT20 5.0 10.0 2.00 4.75 2 TMVW+p MT20 3.0 4.0 1.25 1.50						DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th></th><th>FACTORED GROSS REACTION</th><th>MAXIMUM FACTORED GROSS REACTION</th><th>INPUT BRG</th><th>REQRD BRG</th></tr><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>UP</th></tr><tr><td>7</td><td>5382</td><td>0</td><td>5382</td><td>0</td></tr><tr><td>14</td><td>5382</td><td>0</td><td>5382</td><td>0</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX./MIN.</th><th>COMPONENT REACTIONS</th><th></th></tr><tr><th></th><th>COMBINED</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th></tr><tr><td>7</td><td>3777</td><td>2642 / 0</td><td>0 / 0</td><td>0 / 0</td></tr><tr><td>14</td><td>3777</td><td>2642 / 0</td><td>0 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.22 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) <table><tr><th>CHORDS</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. LC1</th><th>MAX. UNBRAC</th><th>WEBS</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. CSI (LC)</th></tr><tr><th>FR-TO</th><th></th><th></th><th>FROM</th><th>TO</th><th>LENGTH</th><th>FR-TO</th><th></th><th></th><th></th></tr><tr><td>1- 2</td><td>-8192 / 0</td><td>-77.3</td><td>-77.3</td><td>0.32 (1)</td><td>3.22</td><td>11- 3</td><td>0 / 2616</td><td>0.32 (1)</td><td></td></tr><tr><td>2- 3</td><td>-6708 / 0</td><td>-77.3</td><td>-77.3</td><td>0.25 (1)</td><td>3.61</td><td>3-10</td><td>-2473 / 0</td><td>0.56 (1)</td><td></td></tr><tr><td>3- 4</td><td>-4832 / 0</td><td>-77.3</td><td>-77.3</td><td>0.16 (1)</td><td>4.28</td><td>2-11</td><td>-1436 / 0</td><td>0.19 (1)</td><td></td></tr><tr><td>4- 5</td><td>-4615 / 0</td><td>-77.3</td><td>-77.3</td><td>0.22 (1)</td><td>4.31</td><td>10- 5</td><td>-925 / 0</td><td>0.25 (1)</td><td></td></tr><tr><td>5- 6</td><td>-5474 / 0</td><td>-77.3</td><td>-77.3</td><td>0.28 (1)</td><td>3.98</td><td>10- 8</td><td>0 / 4303</td><td>0.53 (1)</td><td></td></tr><tr><td>14- 1</td><td>-4661 / 0</td><td>0.0</td><td>0.0</td><td>0.17 (1)</td><td>6.69</td><td>8- 5</td><td>0 / 624</td><td>0.08 (1)</td><td></td></tr><tr><td>7- 6</td><td>-4460 / 0</td><td>0.0</td><td>0.0</td><td>0.16 (1)</td><td>6.81</td><td>8- 6</td><td>0 / 4741</td><td>0.59 (1)</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>14-12</td><td>-97 / 0</td><td>0.01 (1)</td><td></td></tr><tr><td>14-13</td><td>0 / 92</td><td>-493.0</td><td>-493.0</td><td>0.18 (1)</td><td>10.00</td><td>1-12</td><td>0 / 6804</td><td>0.84 (1)</td><td></td></tr><tr><td>13-12</td><td>0 / 688</td><td>0.0</td><td>0.0</td><td>0.22 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>12- 2</td><td>0 / 1344</td><td>0.0</td><td>0.0</td><td>0.30 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 6854</td><td>-493.0</td><td>-493.0</td><td>0.62 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 5603</td><td>-493.0</td><td>-493.0</td><td>0.56 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>9-10</td><td>0 / 910</td><td>0.0</td><td>0.0</td><td>0.19 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>10- 4</td><td>0 / 4971</td><td>0.0</td><td>0.0</td><td>0.46 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>9- 8</td><td>0 / 362</td><td>-493.0</td><td>-493.0</td><td>0.44 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>8- 7</td><td>0 / 0</td><td>-493.0</td><td>-493.0</td><td>0.41 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr></table>							FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	JT	VERT	HORZ	DOWN	UP	7	5382	0	5382	0	14	5382	0	5382	0	JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS			COMBINED	SNOW	LIVE	PERM.LIVE	7	3777	2642 / 0	0 / 0	0 / 0	14	3777	2642 / 0	0 / 0	0 / 0	CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1	MAX. UNBRAC	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	FR-TO			FROM	TO	LENGTH	FR-TO				1- 2	-8192 / 0	-77.3	-77.3	0.32 (1)	3.22	11- 3	0 / 2616	0.32 (1)		2- 3	-6708 / 0	-77.3	-77.3	0.25 (1)	3.61	3-10	-2473 / 0	0.56 (1)		3- 4	-4832 / 0	-77.3	-77.3	0.16 (1)	4.28	2-11	-1436 / 0	0.19 (1)		4- 5	-4615 / 0	-77.3	-77.3	0.22 (1)	4.31	10- 5	-925 / 0	0.25 (1)		5- 6	-5474 / 0	-77.3	-77.3	0.28 (1)	3.98	10- 8	0 / 4303	0.53 (1)		14- 1	-4661 / 0	0.0	0.0	0.17 (1)	6.69	8- 5	0 / 624	0.08 (1)		7- 6	-4460 / 0	0.0	0.0	0.16 (1)	6.81	8- 6	0 / 4741	0.59 (1)								14-12	-97 / 0	0.01 (1)		14-13	0 / 92	-493.0	-493.0	0.18 (1)	10.00	1-12	0 / 6804	0.84 (1)		13-12	0 / 688	0.0	0.0	0.22 (1)	10.00					12- 2	0 / 1344	0.0	0.0	0.30 (1)	10.00					12-11	0 / 6854	-493.0	-493.0	0.62 (1)	10.00					11-10	0 / 5603	-493.0	-493.0	0.56 (1)	10.00					9-10	0 / 910	0.0	0.0	0.19 (1)	10.00					10- 4	0 / 4971	0.0	0.0	0.46 (1)	10.00					9- 8	0 / 362	-493.0	-493.0	0.44 (1)	10.00					8- 7	0 / 0	-493.0	-493.0	0.41 (1)	10.00					DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 22-2-2 END DISTANCE = 18-10-8 END SPAN CARRIED = 22-2-2 END WALL WIDTH = 1-8 APPLIED TO FRONT SIDE OF BOTTOM CHORD. - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.63") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (0.63") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.17") CSI: TC=0.32 (1-2:1) , BC=0.62 (11-12:1) , WB=0.84 (1-12:1) , SSI=0.46 (7-8:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00 COMPANION LIVE LOAD FACTOR = 0.50 AUTOSOLVE HEELS OFF TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG																																																																																																																																																																																																																																																			
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3- 4	-4832 / 0	-77.3	-77.3	0.16 (1)	4.28	2-11	-1436 / 0	0.19 (1)																																																																																																																																																																																																																																															
4- 5	-4615 / 0	-77.3	-77.3	0.22 (1)	4.31	10- 5	-925 / 0	0.25 (1)																																																																																																																																																																																																																																															
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14- 1	-4661 / 0	0.0	0.0	0.17 (1)	6.69	8- 5	0 / 624	0.08 (1)																																																																																																																																																																																																																																															
7- 6	-4460 / 0	0.0	0.0	0.16 (1)	6.81	8- 6	0 / 4741	0.59 (1)																																																																																																																																																																																																																																															
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14-13	0 / 92	-493.0	-493.0	0.18 (1)	10.00	1-12	0 / 6804	0.84 (1)																																																																																																																																																																																																																																															
13-12	0 / 688	0.0	0.0	0.22 (1)	10.00																																																																																																																																																																																																																																																		
12- 2	0 / 1344	0.0	0.0	0.30 (1)	10.00																																																																																																																																																																																																																																																		
12-11	0 / 6854	-493.0	-493.0	0.62 (1)	10.00																																																																																																																																																																																																																																																		
11-10	0 / 5603	-493.0	-493.0	0.56 (1)	10.00																																																																																																																																																																																																																																																		
9-10	0 / 910	0.0	0.0	0.19 (1)	10.00																																																																																																																																																																																																																																																		
10- 4	0 / 4971	0.0	0.0	0.46 (1)	10.00																																																																																																																																																																																																																																																		
9- 8	0 / 362	-493.0	-493.0	0.44 (1)	10.00																																																																																																																																																																																																																																																		
8- 7	0 / 0	-493.0	-493.0	0.41 (1)	10.00																																																																																																																																																																																																																																																		



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
3	TMWW+t	MT20	4.0	4.0	1.50	1.00
4	TTV+p	MT20	4.0	8.0	Edge	
5	TMWW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-p	MT20	4.0	16.0	Edge	5.50
7	BMV1+p	MT20	3.0	4.0		
8	BMWWWW-t	MT20	6.0	12.0	4.00	6.00
9	BMV+p	MT20	2.0	4.0		
10	BVMWWWW-l	MT20	8.0	12.0	4.50	3.50
11	BMWW+t	MT20	4.0	5.0		
12	BVMWW-l	MT20	5.0	10.0	Edge	
13	BMV+p	MT20	2.0	4.0		
14	BMVW1-t	MT20	4.0	5.0	2.00	2.00

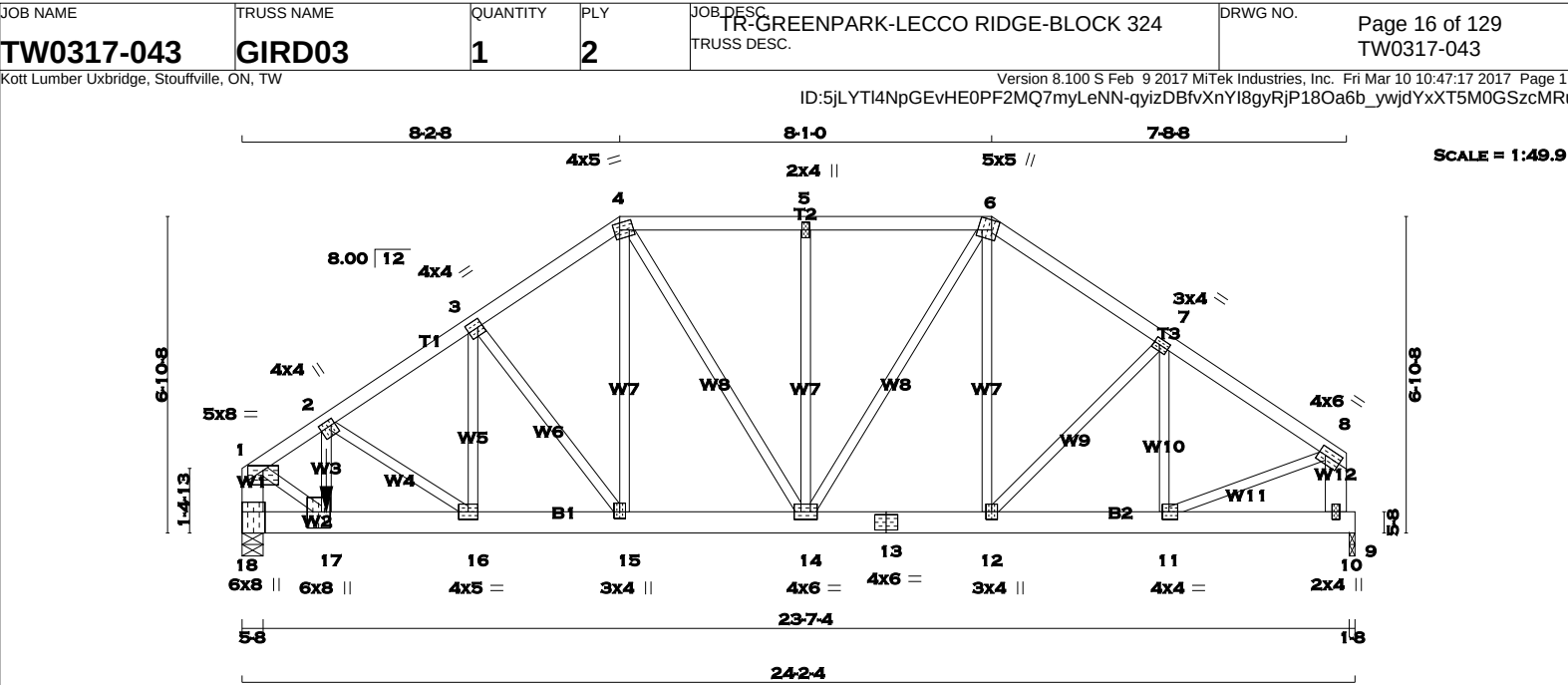
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

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



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

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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
18 - 1	2x6	DRY	No.2
10 - 8	2x6	DRY	No.2
18 - 13	2x6	DRY	No.2
13 - 9	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-4	12	TOP
4-6	12	TOP
6-8	12	TOP
18-1	2	TOP
10-8	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
18-13	2	TOP
13-9	2	TOP
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	TOP

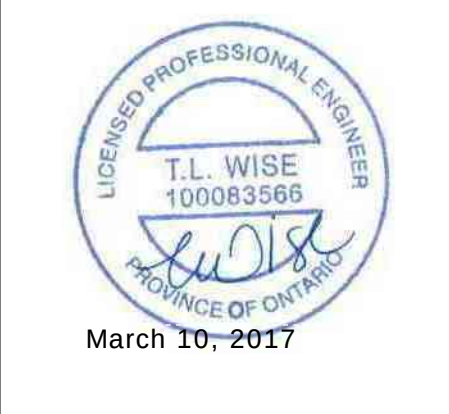
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMWW-p	MT20	5.0	8.0	1.25	4.00
2	TMWW+t	MT20	4.0	4.0	1.50	1.00
3	TMWW-t	MT20	4.0	4.0	2.00	1.25



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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	HORZ	JT	IN-SX	JT	IN-SX
18	6807	0	6807	0	5-8	5-8	
9	1568	0	1568	0	1-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
18	4778	3342 / 0	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	1100	768 / 0	0 / 0	0 / 0	0 / 0	1435 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 9

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

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO		LENGTH	
1-2	-6032 / 0	-77.3	-77.3 0.16 (1)	3.87	17-2	0 / 2611	0.32 (1)
2-3	-3582 / 0	-77.3	-77.3 0.12 (1)	4.88	2-16	-2445 / 0	0.33 (1)
3-4	-2436 / 0	-77.3	-77.3 0.09 (1)	5.69	16-3	0 / 1641	0.20 (1)
4-5	-1892 / 0	-77.3	-77.3 0.12 (1)	6.21	3-15	-1641 / 0	0.41 (1)
5-6	-1892 / 0	-77.3	-77.3 0.12 (1)	6.21	15-4	0 / 1349	0.17 (1)
6-7	-1791 / 0	-77.3	-77.3 0.11 (1)	6.25	4-14	-263 / 0	0.15 (1)
7-8	-1774 / 0	-77.3	-77.3 0.11 (1)	6.25	14-5	-370 / 0	0.14 (1)
18-1	-6157 / 0	0.0	0.0 0.22 (1)	5.97	14-6	0 / 792	0.10 (1)
10-8	-1615 / 0	0.0	0.0 0.06 (1)	7.81	12-6	0 / 77	0.01 (3)
					12-7	-28 / 0	0.01 (1)
18-17	0 / 0	-406.8	-406.8 0.19 (1)	10.00	11-7	-338 / 0	0.05 (1)
17-16	0 / 5007	-17.5	-17.5 0.51 (1)	10.00	1-17	0 / 5699	0.71 (1)
16-15	0 / 3000	-17.5	-17.5 0.21 (1)	10.00	11-8	0 / 1573	0.19 (1)
15-14	0 / 2031	-17.5	-17.5 0.14 (1)	10.00			
14-13	0 / 1473	-17.5	-17.5 0.10 (1)	10.00			
13-12	0 / 1473	-17.5	-17.5 0.10 (1)	10.00			
12-11	0 / 1491	-17.5	-17.5 0.11 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.11 (1)	10.00			
10-9	0 / 0	-17.5	-17.5 0.11 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE DIR.
17	1-10-0	-5382	-5382	---	FRONT VERT

DESIGN CRITERIA

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

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.81")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.81")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.22 (1-18:1), BC=0.51 (16-17:1), WB=0.71 (1-17:1), SSI=0.52 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TMW+w	MT20	2.0	4.0		
6	TTWW+m	MT20	5.0	5.0	2.50	1.50
7	TMWW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	6.0	2.00	1.75
10	BMV+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	4.0	2.00	1.75
12	BMWW+t	MT20	3.0	4.0		
13	BS-t	MT20	4.0	6.0		
14	BMWWWW-t	MT20	4.0	6.0		
15	BMWW+t	MT20	3.0	4.0	1.75	1.50
16	BMWW-t	MT20	4.0	5.0		
17	BMWW+t	MT20	6.0	8.0	4.25	2.25
18	BMV1+t	MT20	6.0	8.0	5.50	

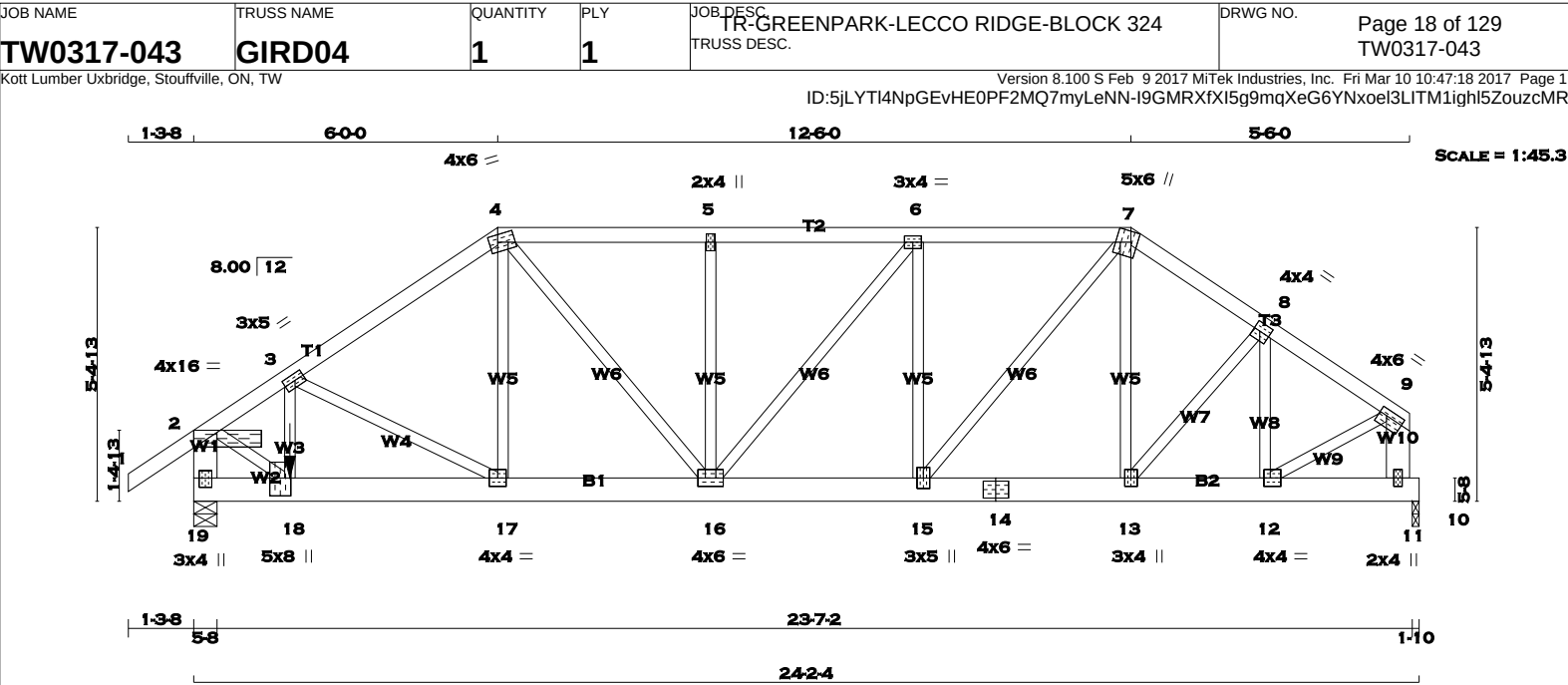
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

- HANGERS NOTES
- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 5381.8 lbs. FACTORED DOWN AT 1-10-0 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

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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

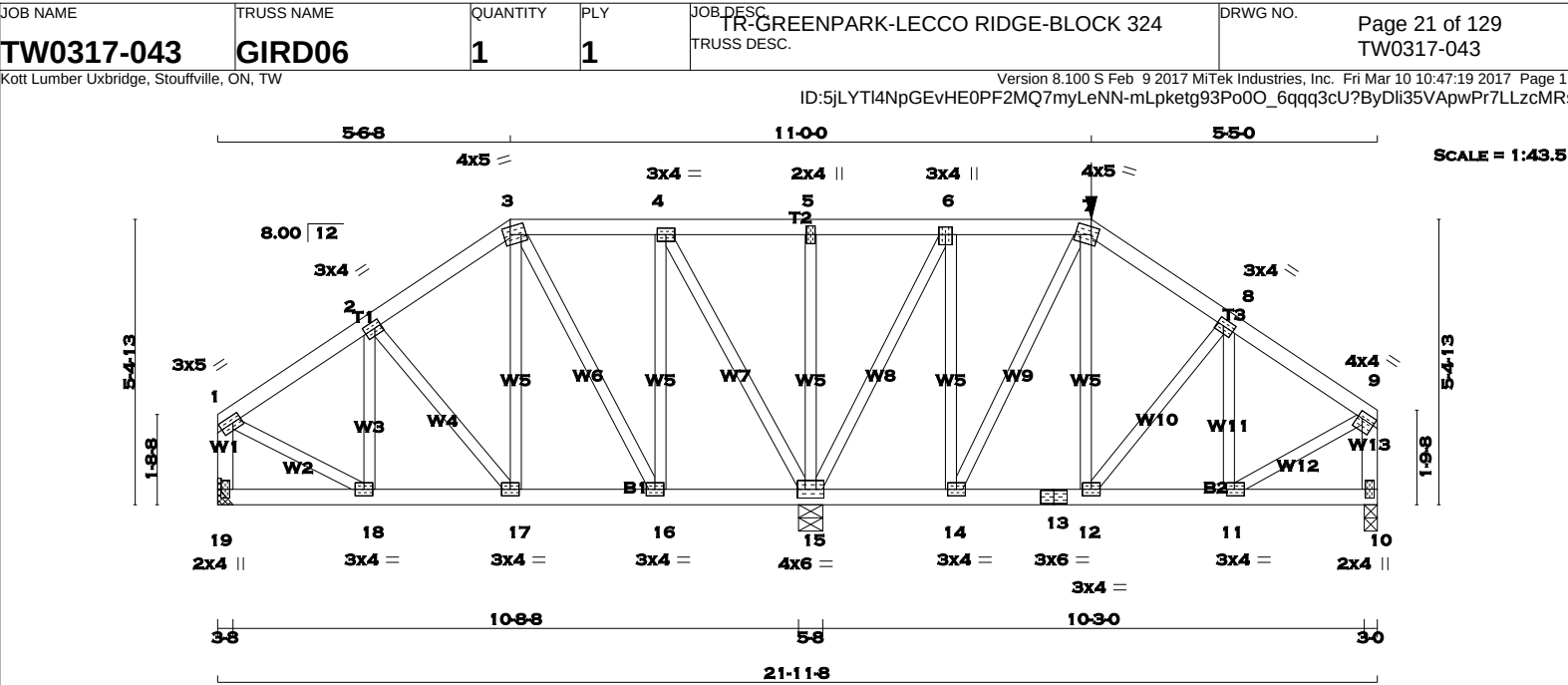
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (4) (INPUT = 0.90)
JSI METAL= 0.49 (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
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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.

1 - 3	2x4	DRY	No.2	SPF
3 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
19 - 1	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
19 - 13	2x4	DRY	No.2	SPF
13 - 10	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

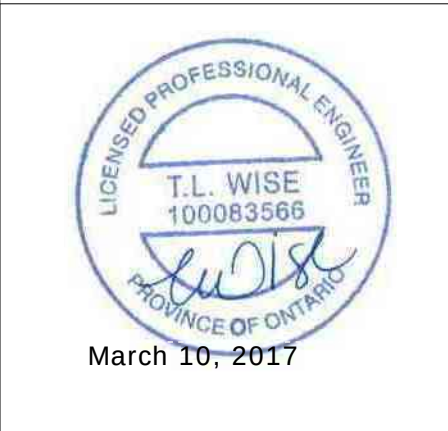
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	5.0	1.50	2.00
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTWW-m	MT20	4.0	5.0	1.75	1.50
4	TMVW-t	MT20	3.0	4.0		
5	TMVW-w	MT20	2.0	4.0		
6	TMVW-t	MT20	3.0	4.0	1.75	1.50
7	TTWW-m	MT20	4.0	5.0	1.75	1.50
8	TMVW-t	MT20	3.0	4.0	1.50	1.50
9	TMVW-t	MT20	4.0	4.0	1.50	1.00
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	3.0	4.0	1.50	1.75
12, 14, 16, 17, 18						
12	BMVW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	4.0	6.0		
19	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 314.2 lbs FACTORED DOWN AT 16-6-8 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
19	495	0	495	0
15	1635	0	1635	0
10	798	0	798	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	348	238 / 0	0 / 0	0 / 0	0 / 0	110 / 0	0 / 0
15	1144	820 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0
10	564	373 / 0	0 / 0	0 / 0	0 / 0	191 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 MAX. (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-390 / 0	-77.3 -77.3	0.10 (1)	6-25	18-2	-109 / 11	0.02 (1)
2-3	-317 / 0	-77.3 -77.3	0.10 (1)	6-25	2-17	-130 / 0	0.04 (1)
3-4	-170 / 0	-77.3 -77.3	0.09 (1)	6-25	17-3	0 / 152	0.04 (1)
4-5	-1 / 60	-77.3 -77.3	0.12 (1)	10.00	3-16	-173 / 0	0.10 (1)
5-6	-1 / 60	-145.8 -145.8	0.17 (1)	10.00	16-4	0 / 178	0.04 (1)
6-7	-367 / 0	-145.8 -145.8	0.16 (1)	6.25	4-15	-473 / 0	0.28 (1)
7-8	-653 / 0	-77.3 -77.3	0.10 (1)	6.25	15-5	-295 / 0	0.13 (1)
8-9	-667 / 0	-77.3 -77.3	0.10 (1)	6.25	15-6	-926 / 0	0.53 (1)
19-1	-472 / 0	0.0 0.0	0.06 (1)	7.81	14-6	0 / 383	0.09 (1)
10-9	-758 / 0	0.0 0.0	0.09 (1)	7.81	14-7	-360 / 0	0.20 (1)
19-18	0 / 0	-17.5 -17.5	0.03 (3)	10.00	12-7	0 / 130	0.05 (3)
18-17	0 / 335	-17.5 -17.5	0.07 (1)	10.00	12-8	-54 / 0	0.02 (1)
17-16	0 / 254	-17.5 -17.5	0.06 (1)	10.00	11-8	-194 / 21	0.05 (1)
16-15	0 / 170	-17.5 -17.5	0.10 (1)	10.00	11-9	0 / 372	0.09 (1)
15-14	0 / 368	-33.0 -33.0	0.14 (1)	10.00		0 / 637	0.16 (1)
14-13	0 / 534	-33.0 -33.0	0.13 (1)	10.00			
13-12	0 / 534	-33.0 -33.0	0.13 (1)	10.00			
12-11	0 / 565	-33.0 -33.0	0.13 (1)	10.00			
11-10	0 / 0	-33.0 -33.0	0.06 (3)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
7	16-6-8	-314	-314	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.17 (5-6-1), BC=0.14 (14-15-1), WB=0.53 (6-15-1), SSI=0.20 (6-7-1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

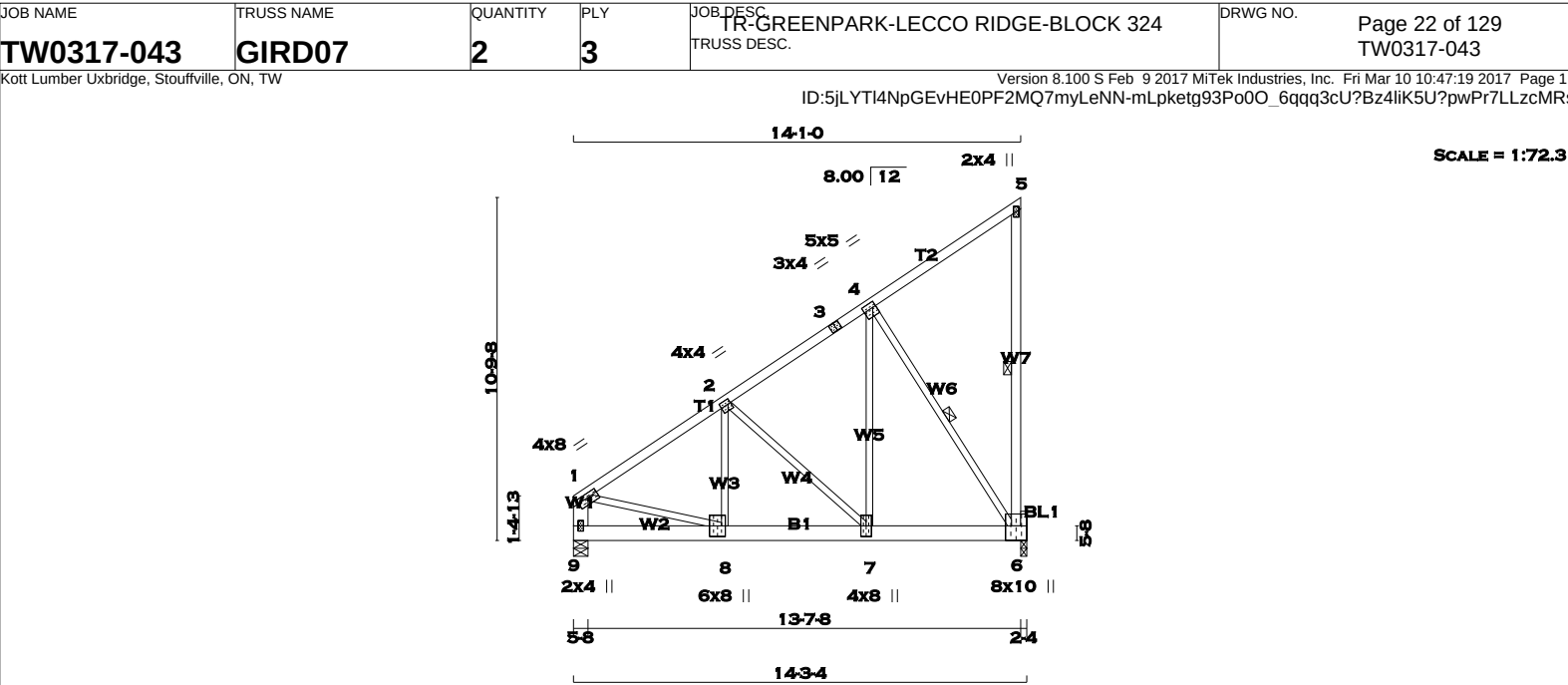
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (11) (INPUT = 0.90)
JSI METAL= 0.27 (9) (INPUT = 1.00)



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

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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 1	2x6	DRY	No.2	SPF
9 - 6	2x6	DRY	2100F 1.8E	SPF
BEARING BLOCKS				
BL1	2x6	DRY	No.2	SPF
ALL WEBS 2x3 DRY No.2 SPF EXCEPT				
DRY: SEASONED LUMBER.				
DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:				
CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)		
TOP CHORDS : (0.122"x3") SPIRAL NAILS				
1- 3	1 12	TOP		
3- 5	1 12	TOP		
5- 6	1 12	TOP		
9- 1	2 12	TOP		
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS				
9- 6	2 6	SIDE(401.8)		
WEBS : (0.122"x3") SPIRAL NAILS				
2x3	1 6			
STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.				
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.				
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.				
PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
1	TMVW-t	MT20	4.0	8.0 1.50 3.75
2	TMWW-t	MT20	4.0	4.0 1.75 1.00
3	TS-t	MT20	3.0	4.0
4	TMWW-t	MT20	5.0	5.0 2.00 1.25
5	TMV+p	MT20	2.0	4.0
6	BMVWK1+p	MT20	8.0	10.0 Edge 4.00

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		4288	0	4288	0	0	2-4	2-4	
9		4574	0	4574	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6		3009	2107 / 0	0 / 0	0 / 0	0 / 0	903 / 0	0 / 0	
9		3210	2246 / 0	0 / 0	0 / 0	0 / 0	965 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.35 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 19 LBS.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 93 LBS.									
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) TO EACH PLY USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.									
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW									
LOADING									
TOTAL LOAD CASES: (3)									
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	-4317 / 0	-77.3 -77.3	0.12 (1)	5.35	8- 2	0 / 2174	0.16 (1)		
2- 3	-2390 / 0	-77.3 -77.3	0.09 (1)	6.25	2- 7	-2180 / 0	0.48 (1)		
3- 4	-2390 / 0	-77.3 -77.3	0.09 (1)	6.25	7- 4	0 / 4038	0.30 (1)		
4- 5	-18 / 0	-77.3 -77.3	0.08 (1)	6.25	4- 6	-3703 / 0	0.60 (1)		
6- 5	-149 / 0	0.0 0.0	0.03 (1)	6.25	1- 8	0 / 3681	0.28 (1)		
9- 1	-3316 / 0	0.0 0.0	0.07 (1)	7.81					
9- 8	0 / 0	-620.2 -620.2	0.15 (1)	10.00					
8- 7	0 / 3603	-525.3 -525.3	0.18 (1)	10.00					
7- 6	0 / 1995	-525.3 -525.3	0.15 (1)	10.00					

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN./C									
GIRDER TYPE: CStdGirder									
START DISTANCE = 4-7-8									
START SPAN CARRIED = 27-10-8									
END DISTANCE = 4-7-8									
END SPAN CARRIED = 27-10-8									
END WALL WIDTH = 5-8									
APPLIED TO FRONT SIDE OF BOTTOM CHORD.									
- ADDTL LOADS BASED ON 55 % OF GSL.									
GIRDER TYPE: CStdGirder									
START DISTANCE = 4-7-8									
START SPAN CARRIED = 23-10-8									
END DISTANCE = 14-2-10									
END SPAN CARRIED = 23-10-8									
END WALL WIDTH = 5-8									
APPLIED TO FRONT SIDE OF BOTTOM CHORD.									
- ADDTL LOADS BASED ON 55 % OF GSL.									
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010									
THIS DESIGN COMPLIES WITH:									
- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014									
- CSA 086-09									
- TPIC 2011									
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD									
ALLOWABLE DEFL.(LL)= L/360 (0.46")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")									
ALLOWABLE DEFL.(TL)= L/360 (0.46")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")									
CSI: TC=0.12 (1-2:1) , BC=0.18 (7-8:1) , WB=0.60 (4-6:1) , SSI=0.34 (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= 0.58 (9) (INPUT = 0.90)									
JSI METAL= 0.28 (1) (INPUT = 1.00)									



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
7	BMWW+t	MT20	4.0	8.0		
8	BMWW+t	MT20	6.0	8.0	4.00	1.50
9	BMV1+p	MT20	2.0	4.0		

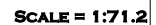
Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD.

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



READ ALL NOTES ON THIS PAGE AND ON THE
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TOTAL WEIGHT = 6 X 80 = 482 lb

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.75	Edge
2	TMWW-t	MT20	4.0	4.0	2.00	1.00
3	TS-t	MT20	3.0	4.0		
4	TMWW-t	MT20	4.0	6.0	1.50	2.00

9- 8	0 / 0	-738.7	-738.7	0.18 (1)	10.00
8- 7	0 / 4792	-738.7	-738.7	0.23 (1)	10.00
7- 6	0 / 2702	-738.7	-738.7	0.21 (1)	10.00

CONTINUED ON PAGE 2

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
5	TMV+p	MT20	2.0	4.0		
6	BMVWK1+p	MT20	8.0	10.0	Edge	3.00
7	BMWW+t	MT20	4.0	6.0	3.00	1.75
8	BMWW-t	MT20	5.0	5.0	2.50	2.25
9	BMV1+p	MT20	2.0	4.0		

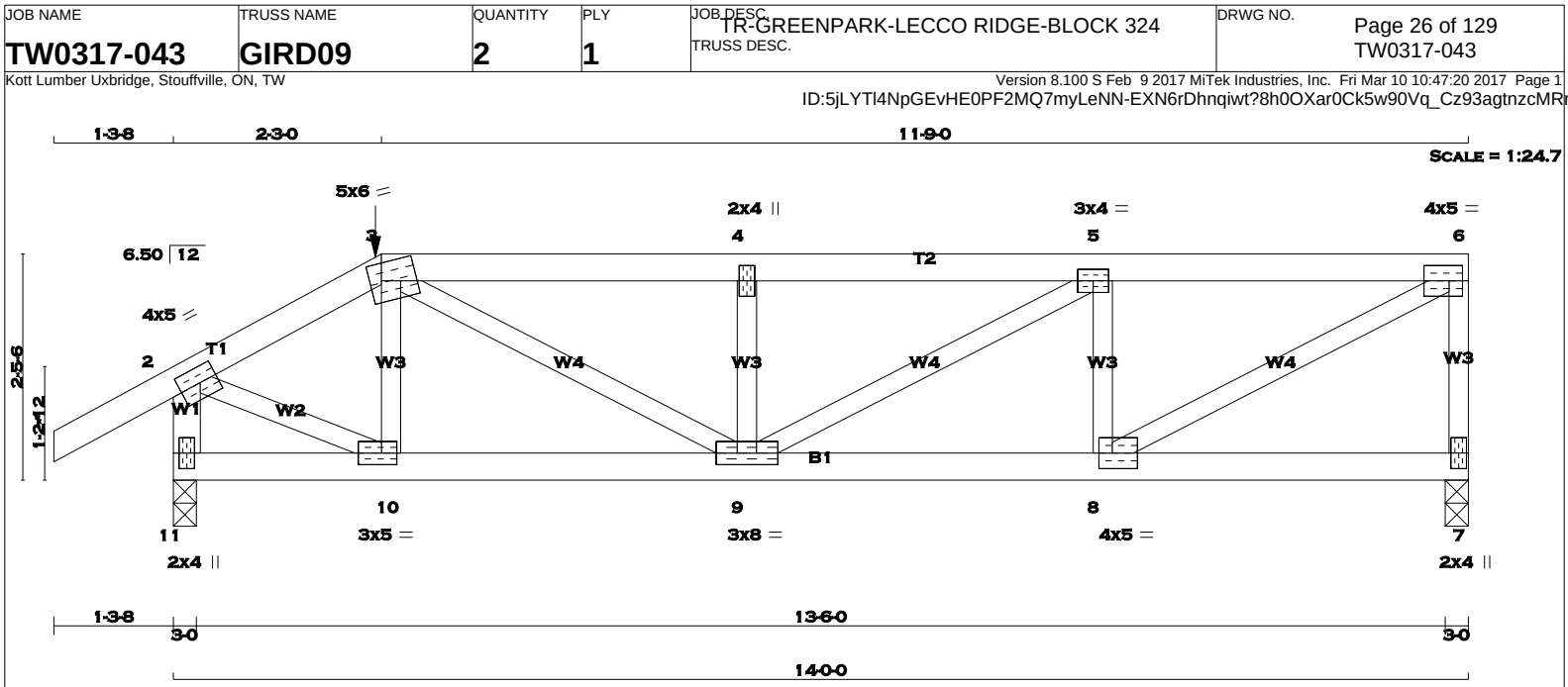
Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD.

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



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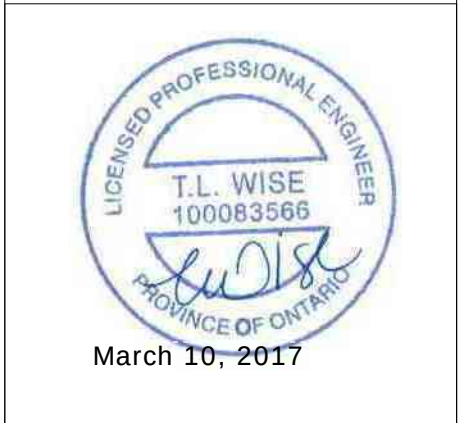


LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 6	2x4	DRY	No.2	SPF
7 - 6	2x3	DRY	No.2	SPF
11 - 2	2x4	DRY	No.2	SPF
11 - 7	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

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

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 88.2 lbs FACTORED DOWN AT 2-3-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		1050	0	1050	0	0	3-0	3-0	
11		1132	0	1132	0	0	3-0	3-0	

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	2ND LCASE SNOW	3RD LCASE LIVE	4TH LCASE PERM.LIVE	5TH LCASE WIND	6TH LCASE DEAD	7TH LCASE SOIL
7	737	516 / 0	0 / 0	0 / 0	0 / 0	221 / 0	0 / 0
11	792	565 / 0	0 / 0	0 / 0	0 / 0	227 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.65 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING									
TOTAL LOAD CASES: (3)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH (FT)	
FR-TO		FROM	TO		FR-TO		FROM	TO	
1-2	0 / 25	-77.3	-77.3	0.11 (1)	10.00	10-3	-279 / 0	0.05 (1)	
2-3	-1121 / 0	-77.3	-77.3	0.09 (1)	5.87	3-9	0 / 914	0.23 (1)	
3-4	-1774 / 0	-121.7	-121.7	0.30 (1)	4.65	9-4	-509 / 0	0.09 (1)	
4-5	-1774 / 0	-121.7	-121.7	0.30 (1)	4.65	9-5	0 / 344	0.09 (1)	
5-6	-1473 / 0	-121.7	-121.7	0.29 (1)	5.03	8-5	-686 / 0	0.12 (1)	
7-6	-1002 / 0	0.0	0.0	0.19 (1)	6.84	8-6	0 / 1678	0.42 (1)	
11-2	-1112 / 0	0.0	0.0	0.12 (1)	7.48	2-10	0 / 1056	0.26 (1)	
11-10	0 / 0	-27.5	-27.5	0.07 (3)	10.00				
10-9	0 / 970	-27.5	-27.5	0.22 (1)	10.00				
9-8	0 / 1473	-27.5	-27.5	0.32 (1)	10.00				
8-7	0 / 0	-27.5	-27.5	0.10 (3)	10.00				

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
3	2-3-0	-88	-88	---	FRONT	VERT	TOTAL		

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-3-0
RIGHT SETBACK = 0-0
END SETBACK = 4-6-8
END WALL WIDTH = 3-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.30 (3-4:1), BC=0.32 (8-9:1), WB=0.42 (6-8:1), SSI=0.24 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

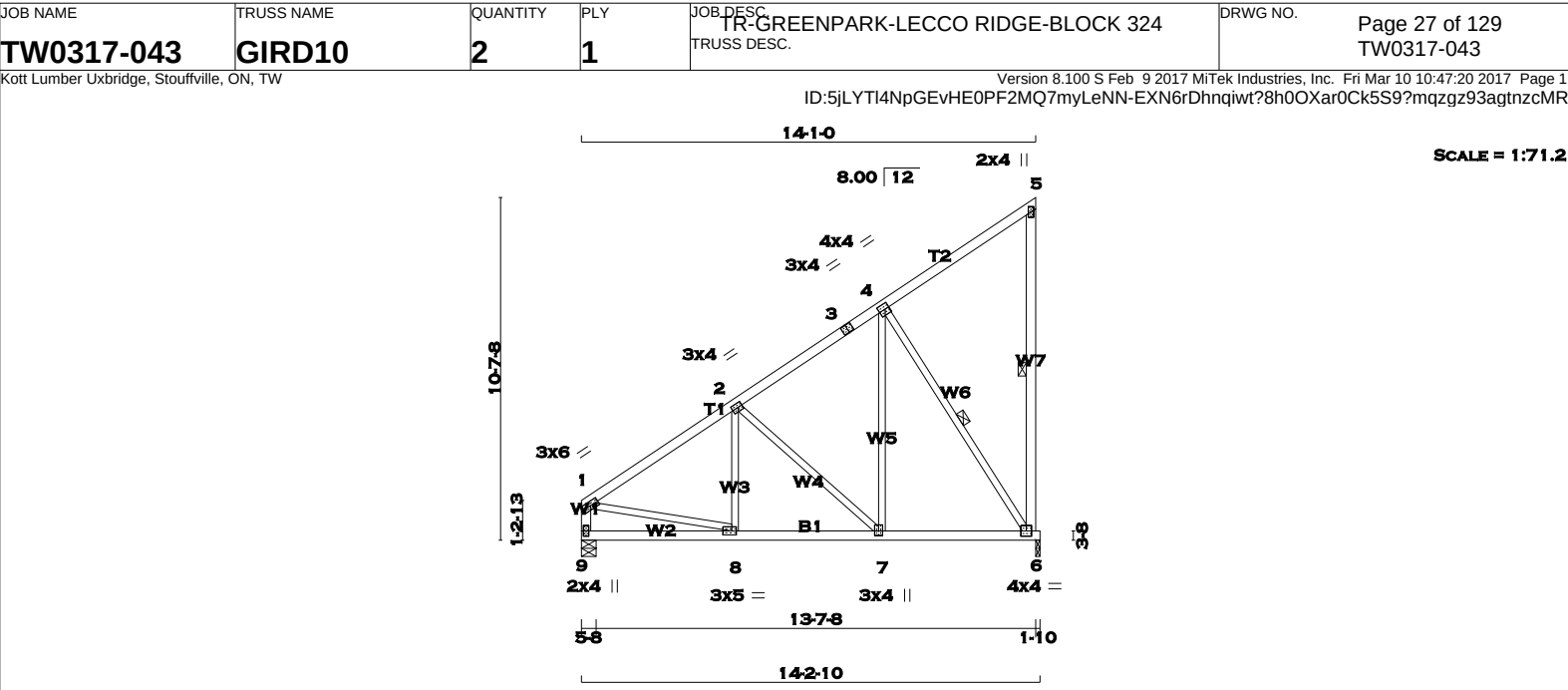
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (6) (INPUT = 0.90)
JSI METAL= 0.44 (8) (INPUT = 1.00)



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

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LUMBER

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

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
6	1023	0	1023	0
9	1023	0	1023	0

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
6	718	502 / 0	0 / 0	0 / 0	0 / 0	216 / 0	0 / 0
9	718	502 / 0	0 / 0	0 / 0	0 / 0	216 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.85 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 19 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 16-0-0 . CBF = 89 LBS.
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING

TOTAL LOAD CASES: (3)

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)	MAX UNBRACED LENGTH	
FR-TO		FROM	TO		FR-TO				
1-2	-1015 / 0	-77.3	-77.3	0.27 (1)	5.85	8-2	0 / 179	0.05 (3)	
2-3	-594 / 0	-77.3	-77.3	0.27 (1)	6.25	2-7	-489 / 0	0.33 (1)	
3-4	-594 / 0	-77.3	-77.3	0.27 (1)	6.25	7-4	0 / 673	0.17 (1)	
4-5	-20 / 0	-77.3	-77.3	0.25 (1)	6.25	4-6	-892 / 0	0.45 (1)	
6-5	-149 / 0	0.0	0.0	0.08 (1)	6.25	1-8	0 / 875	0.22 (1)	
9-1	-890 / 0	0.0	0.0	0.10 (1)	7.81				
9-8	0 / 0	-67.9	-67.9	0.20 (1)	10.00				
8-7	0 / 860	-67.9	-67.9	0.36 (1)	10.00				
7-6	0 / 496	-67.9	-67.9	0.30 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 4-7-0
END DISTANCE = 14-2-10
END SPAN CARRIED = 4-7-0
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.27 (2-4:1) , BC=0.36 (7-8:1) , WB=0.45 (4-6:1) , SSI=0.16 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (8) (INPUT = 0.90)
JSI METAL= 0.28 (1) (INPUT = 1.00)



March 10, 2017



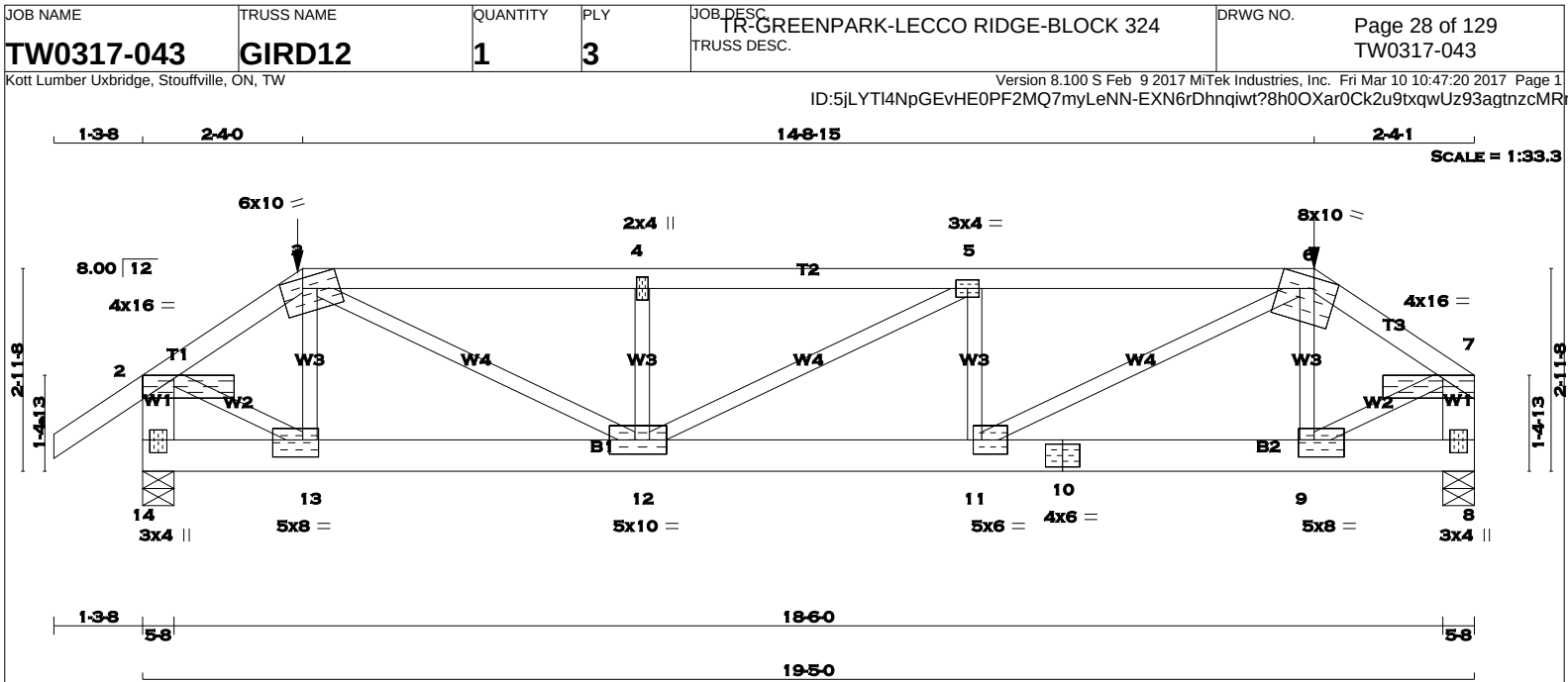
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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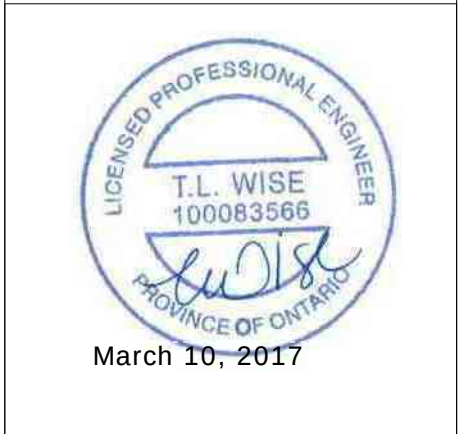
MAR 29, 2017

17-4954

BUILDING DIVISION



LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2
14 - 2	2x6	DRY	No.2
8 - 7	2x6	DRY	No.2
14 - 10	2x6	DRY	No.2
10 - 8	2x6	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			
DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:			
CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)	
TOP CHORDS : (0.122"x3") SPIRAL NAILS			
1-3	1	12	SIDE(8.5)
3-6	1	12	SIDE(14.5)
6-7	1	12	SIDE(8.6)
14-2	2	12	TOP
8-7	2	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
14-10	2	5	SIDE(480.8)
10-8	2	5	SIDE(480.8)
WEBS : (0.122"x3") SPIRAL NAILS			
2x3	1	6	
STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.			
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.			
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.			
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.			
PLATES (table is in inches)			
JT	TYPE	PLATES	W L E N Y X
2	TMVW-p	MT20	4.0 16.0 Edge 5.50
3	TTWW-m	MT20	6.0 10.0 Edge 6.25



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		8300	0	8300	0	0	5-8	5-8	
8		8194	0	8194	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
14		5822	4088 / 0	0 / 0	0 / 0	0 / 0	1734 / 0	0 / 0	
8		5750	4024 / 0	0 / 0	0 / 0	0 / 0	1726 / 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 = 2.89 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MAX. FACTORED	FACTORED			
MEMB.		FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)		
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2		0 / 29	-77.3	-77.3	0.03 (1)	10.00	13-3	0 / 410	0.03 (1)
2-3		-8614 / 0	-77.3	-77.3	0.11 (1)	4.05	3-12	0 / 8628	0.65 (1)
3-4		-14822 / 0	-99.1	-99.1	0.50 (1)	2.89	12-4	-452 / 0	0.03 (1)
4-5		-14822 / 0	-99.1	-99.1	0.45 (1)	2.93	12-5	-67 / 0	0.01 (1)
5-6		-14881 / 0	-99.1	-99.1	0.49 (1)	2.89	11-5	-438 / 0	0.02 (1)
6-7		-8598 / 0	-77.3	-77.3	0.11 (1)	4.05	11-6	0 / 8712	0.65 (1)
14-2		-7925 / 0	0.0	0.0	0.17 (1)	6.41	9-6	0 / 368	0.03 (1)
8-7		-7804 / 0	0.0	0.0	0.17 (1)	6.44	2-13	0 / 7720	0.58 (1)
							9-7	0 / 7705	0.58 (1)
14-13		0 / 0	-743.7	-743.7	0.29 (1)	10.00			
13-12		0 / 7163	-743.7	-743.7	0.57 (1)	10.00			
12-11		0 / 14881	-743.7	-743.7	0.86 (1)	10.00			
11-10		0 / 7148	-743.7	-743.7	0.56 (1)	10.00			
10-9		0 / 7148	-743.7	-743.7	0.56 (1)	10.00			
9-8		0 / 0	-743.7	-743.7	0.28 (1)	10.00			
FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE		
3	2-4-0	-63	-63	---	FRONT	VERT	TOTAL		
6	17-0-15	-63	-63	---	FRONT	VERT	TOTAL		

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN. C/C									
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
GIRDER TYPE: CPrimeHip LEFT SETBACK = 2-4-0 RIGHT SETBACK = 2-4-1 END SETBACK = 3-7-0 END WALL WIDTH = 5-8 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL.									
GIRDER TYPE: CStdGirder START DISTANCE = 0-0 START SPAN CARRIED = 32-10-8 END DISTANCE = 19-5-0 END SPAN CARRIED = 32-10-8 END WALL WIDTH = 5-8 APPLIED TO BACK 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 (0.65") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.19") ALLOWABLE DEFL.(TL)= L/360 (0.65") CALCULATED VERT. DEFL.(TL) = L/ 703 (0.33")									
CSI: TC=0.50 (3-4-1), BC=0.86 (11-12-1), WB=0.65 (6-11-1), SSI=0.38 (12-13-1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10									
COMPANION LIVE LOAD FACTOR = 0.50									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656									
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (3) (INPUT = 0.90) JSI METAL= 0.72 (10) (INPUT = 1.00)									



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
4	TMW+w	MT20	2.0	4.0		
5	TMWW-t	MT20	3.0	4.0		
6	TTWW-m	MT20	8.0	10.0	Edge	4.00
7	TMVW-p	MT20	4.0	16.0	Edge	5.50
8	BMV1+p	MT20	3.0	4.0	2.25	1.50
9	BMWW-t	MT20	5.0	8.0	3.00	2.75
10	BS-t	MT20	4.0	6.0		
11	BMWW-t	MT20	5.0	6.0	2.50	1.50
12	BMWWW-t	MT20	5.0	10.0	2.50	4.50
13	BMWW-t	MT20	5.0	8.0	3.00	2.75
14	BMV1+p	MT20	3.0	4.0	2.25	1.50

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

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 62.8 lbs FACTORED DOWN AT 17-0-15, AND 62.7 lbs FACTORED DOWN AT 2-4-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	16.0	0.50	Edge
2	TTWW-m	MT20	6.0	10.0	Edge	4.25
3	TMWW-t	MT20	3.0	4.0		
4	TMW+w	MT20	2.0	4.0		
5	TS-t	MT20	3.0	8.0		
6	TMWW-t	MT20	4.0	5.0	2.00	1.75
7	TMVW-t	MT20	5.0	8.0	1.75	2.25
8	BMVK1+p	MT20	8.0	10.0	5.50	Edge
9	BMWW-t	MT20	5.0	10.0	2.00	3.25
10	BS-t	MT20	4.0	8.0		
11	BMWWW-t	MT20	4.0	8.0	2.00	2.25
12	BMWW-t	MT20	4.0	8.0	1.75	3.25
13	BMWW-t	MT20	5.0	6.0	2.50	2.00
14	BMV1+p	MT20	3.0	4.0		

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

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

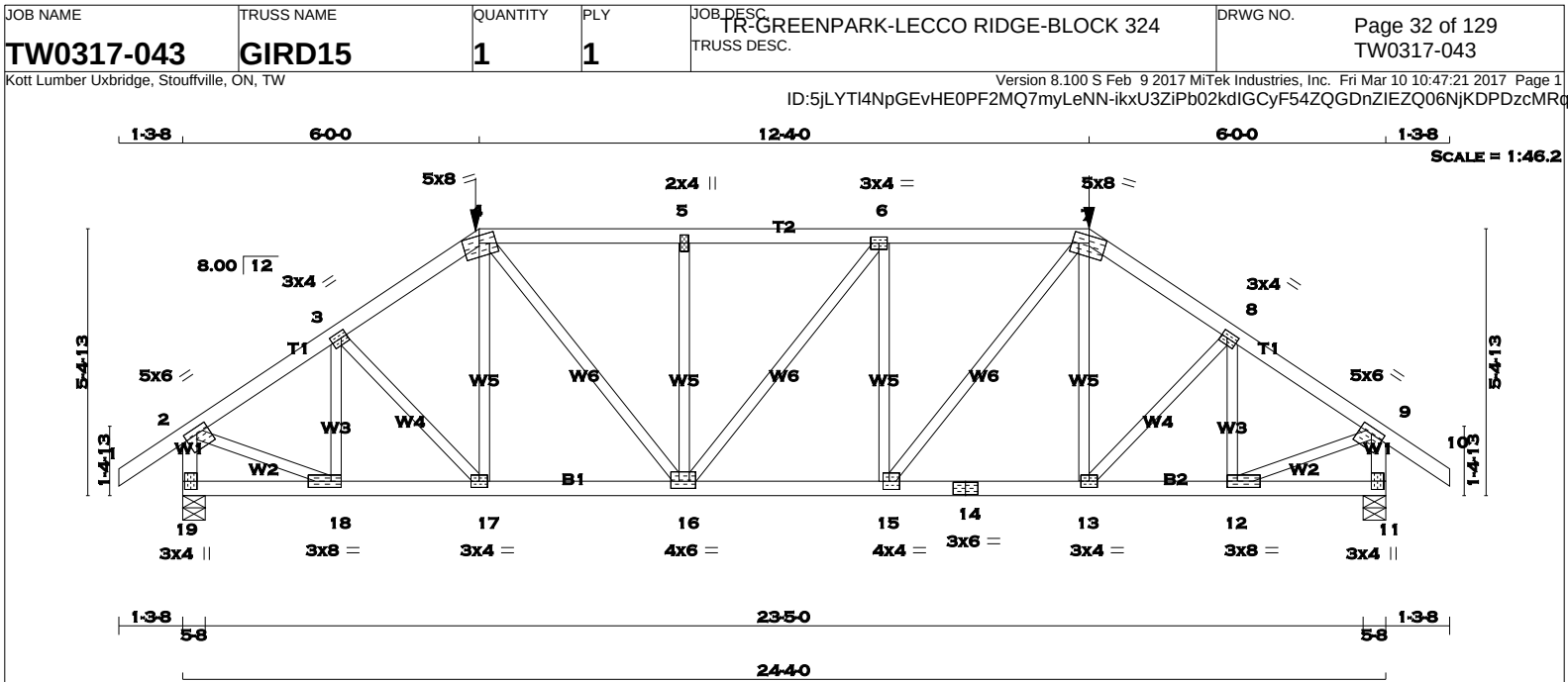
HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 62.7 lbs. FACTORED DOWN AT 2-4-0 ON
TOP CHORD. DESIGN FOR UNSPECIFIED
CONNECTION(S) IS DELEGATED TO THE
BUILDING DESIGNER.



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LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
7 - 10	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
19 - 14	2x4	DRY	No.2
14 - 11	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

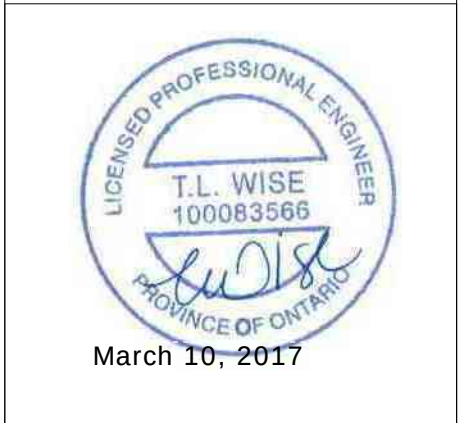
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	5.0	6.0	1.50	3.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW-m	MT20	5.0	8.0	1.75	4.00
5	TMVW-w	MT20	2.0	4.0		
6	TMVW-t	MT20	3.0	4.0		
7	TTWW-m	MT20	5.0	8.0	1.75	4.00
8	TMVW-t	MT20	3.0	4.0	1.50	1.50
9	TMVW-t	MT20	5.0	6.0	1.50	3.00
11	BMV1+p	MT20	3.0	4.0	2.00	
12	BMVW-t	MT20	3.0	8.0	1.50	2.50
13	BMVW-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	4.0	4.0	2.00	1.50
16	BMVW-t	MT20	4.0	6.0	1.75	2.00
17	BMVW-t	MT20	3.0	4.0		
18	BMVW-t	MT20	3.0	8.0	1.50	2.50
19	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 18-4-0, AND 348.1 lbs FACTORED DOWN AT 6-0-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
JT	1556	1094 / 0	0 / 0	462 / 0
19	2219	0	0	5-8
11	2219	0	0	5-8

UNFACTORED REACTIONS

	1ST LCASE COMBINED	MAX / MIN SNOW	MAX / MIN LIVE	MAX / MIN PERM. LIVE	MAX / MIN WIND	MAX / MIN DEAD	MAX / MIN SOIL
JT	1556	1094 / 0	0 / 0	0 / 0	0 / 0	462 / 0	0 / 0
19	2219	0	0	0	5-8	5-8	5-8
11	2219	0	0	0	5-8	5-8	5-8

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.64 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (3)

	CHORDS	WEBS
	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED MEMB. FORCE (LBS)
FR-TO	1-2 0 / 29	18-3 -583 / 0
2-3	-2315 / 0	3-17 0 / 251
3-4	-2553 / 0	4-13 -51 / 102
4-5	-2735 / 0	16-5 0 / 994
5-6	-2735 / 0	4-16 -639 / 0
6-7	-2738 / 0	16-6 -5 / 0
7-8	-2552 / 0	15-6 -641 / 0
8-9	-2315 / 0	15-7 0 / 1000
9-10	0 / 29	13-7 -54 / 101
19-2	-2169 / 0	13-8 0 / 250
11-9	-2169 / 0	12-8 -582 / 0
19-18	0 / 0	2-18 0 / 2049
18-17	0 / 1936	12-9 0 / 2050
17-16	0 / 2108	
16-15	0 / 2739	
15-14	0 / 2107	
14-13	0 / 2107	
13-12	0 / 1936	
12-11	0 / 0	

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
4	6-0-0	-348	-348	---	FRONT	VERT	TOTAL
7	18-4-0	-348	-348	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	23.3	3.0
LL	0.0	7.0

BOT CH. 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
SIDE SETBACK = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.81")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (0.81")
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.49 (6-7:1), BC=0.54 (15-16:1), WB=0.51 (9-12:1), SS=0.31 (6-7:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

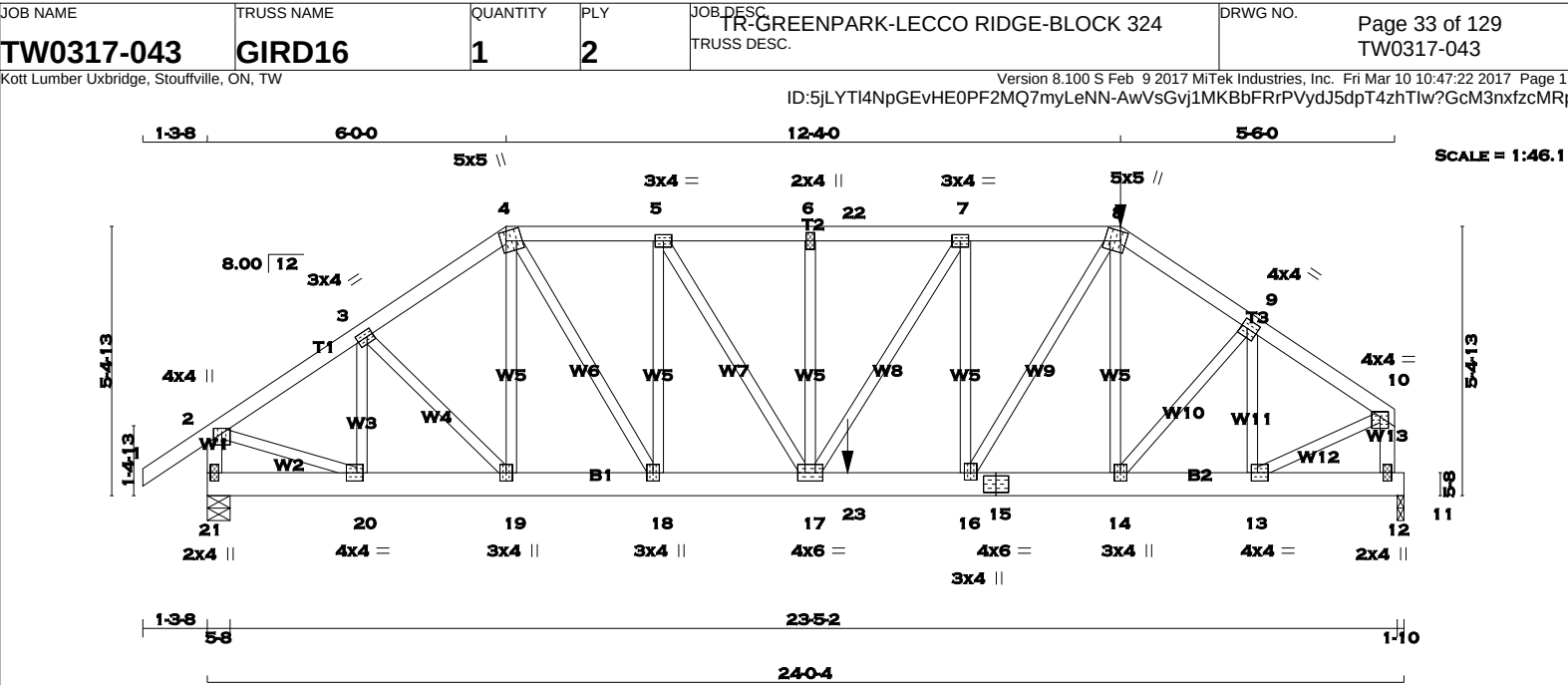
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (9) (INPUT = 0.90)
JSI METAL= 0.61 (9) (INPUT = 1.00)



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PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
5	TMWW-t	MT20	3.0	4.0		
6	TMW+w	MT20	2.0	4.0		
7	TMWW-t	MT20	3.0	4.0		
8	TTWW+m	MT20	5.0	5.0	2.25	1.25
9	TMWW-t	MT20	4.0	4.0	2.00	1.50
10	TMVW-p	MT20	4.0	4.0	1.25	2.00
12	BMV+p	MT20	2.0	4.0		
13	BMWW-t	MT20	4.0	4.0	2.00	1.50
14, 18, 19						
14	BMWW+t	MT20	3.0	4.0		
15	BS-t	MT20	4.0	6.0		
16	BMWW+t	MT20	3.0	4.0	1.75	1.50
17	BMWWW-t	MT20	4.0	6.0		
20	BMWW-t	MT20	4.0	4.0	2.00	1.50
21	BMV1+p	MT20	2.0	4.0		

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

HANGERS NOTES

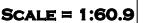
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 330.5 lbs FACTORED DOWN AT 18-4-0 ON TOP CHORD, AND 849.2 lbs FACTORED DOWN AT 12-10-4 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.37 (13) (INPUT = 1.00)



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JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	16.0	0.50	Edge
2	TMWW-t	MT20	4.0	4.0	2.00	1.00
3	TTW+p	MT20	4.0	8.0	Edge	
4	TMWW-t	MT20	4.0	4.0	2.00	1.00
5	TMVW-p	MT20	4.0	16.0	Edge	5.50
6	BMV1+p	MT20	3.0	4.0	2.25	1.50
7	BMWW+t	MT20	6.0	8.0	4.25	1.50
8	BS-t	MT20	4.0	6.0		

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC.	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
1-2	-7104 / 0	-77.3	-77.3 0.50 (1)	3.42	9-3	0 / 5457	0.68 (1)
2-3	-5234 / 0	-77.3	-77.3 0.33 (1)	4.02	9-4	-2125 / 0	0.96 (1)
3-4	-5234 / 0	-77.3	-77.3 0.33 (1)	4.02	7-4	0 / 1982	0.25 (1)
4-5	-7104 / 0	-77.3	-77.3 0.50 (1)	3.42	2-9	-2125 / 0	0.96 (1)
11-1	-5215 / 0	0.0	0.0 0.19 (1)	6.39	10-2	0 / 1982	0.25 (1)
6-5	-5215 / 0	0.0	0.0 0.19 (1)	6.39	1-10	0 / 6028	0.75 (1)
					7-5	0 / 6028	0.75 (1)
11-10	0 / 0	-524.6	-524.6 0.49 (1)	10.00			
10-9	0 / 5928	-524.6	-524.6 0.86 (1)	10.00			
9-8	0 / 5928	-524.6	-524.6 0.86 (1)	10.00			
8-7	0 / 5928	-524.6	-524.6 0.86 (1)	10.00			
7-6	0 / 0	-524.6	-524.6 0.49 (1)	10.00			

JSI GRIP= 0.88 (3) (INPUT = 0.90)
JSI METAL= 0.81 (8) (INPUT = 1.00)



PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
9	BMWWW+t	MT20	6.0	8.0		
10	BMWW+t	MT20	6.0	8.0	4.25	1.50
11	BMV1+p	MT20	3.0	4.0	2.25	1.50

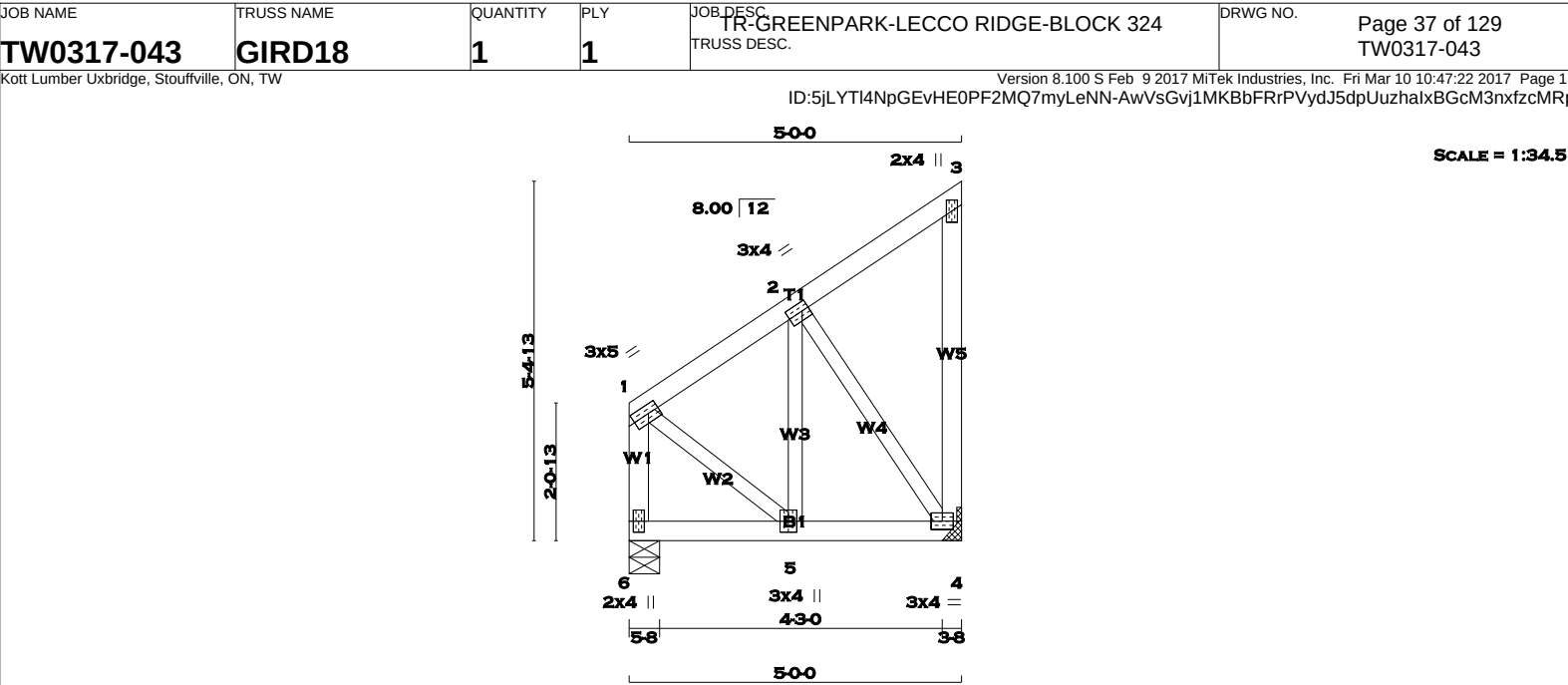
Edge - INDICATES REFERENCE CORNER OF PLATE
TOUCHES EDGE OF CHORD.

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



READ ALL NOTES ON THIS PAGE AND ON THE
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LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
4 - 3	2x4	DRY	No.2
6 - 1	2x4	DRY	No.2
6 - 4	2x4	DRY	No.2

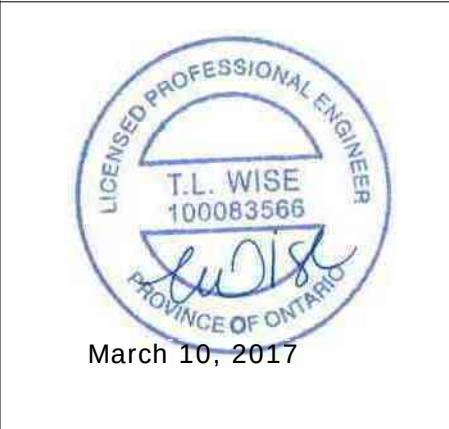
ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	INPUT BRG DOWN	REQRD BRG UPLIFT
4	850	0	850	0
6	850	0	850	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
4	596	417 / 0	0 / 0	0 / 0	0 / 0	179 / 0	0 / 0
6	596	417 / 0	0 / 0	0 / 0	0 / 0	179 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-445 / 0	-77.3	-77.3 0.08 (1)	6.25	5-2	0 / 537	0.13 (1)
2-3	-12 / 0	-77.3	-77.3 0.08 (1)	6.25	2-4	-643 / 0	0.19 (1)
4-3	-76 / 0	0.0	0.0 0.04 (1)	7.81	1-5	0 / 463	0.11 (1)
6-1	-595 / 0	0.0	0.0 0.07 (1)	7.81			
6-5	0 / 0	-262.5	-262.5 0.27 (1)	10.00			
5-4	0 / 380	-262.5	-262.5 0.34 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.08 (1-2:1) , BC=0.34 (4-5:1) , WB=0.19 (2-4:1) , SSI=0.34 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

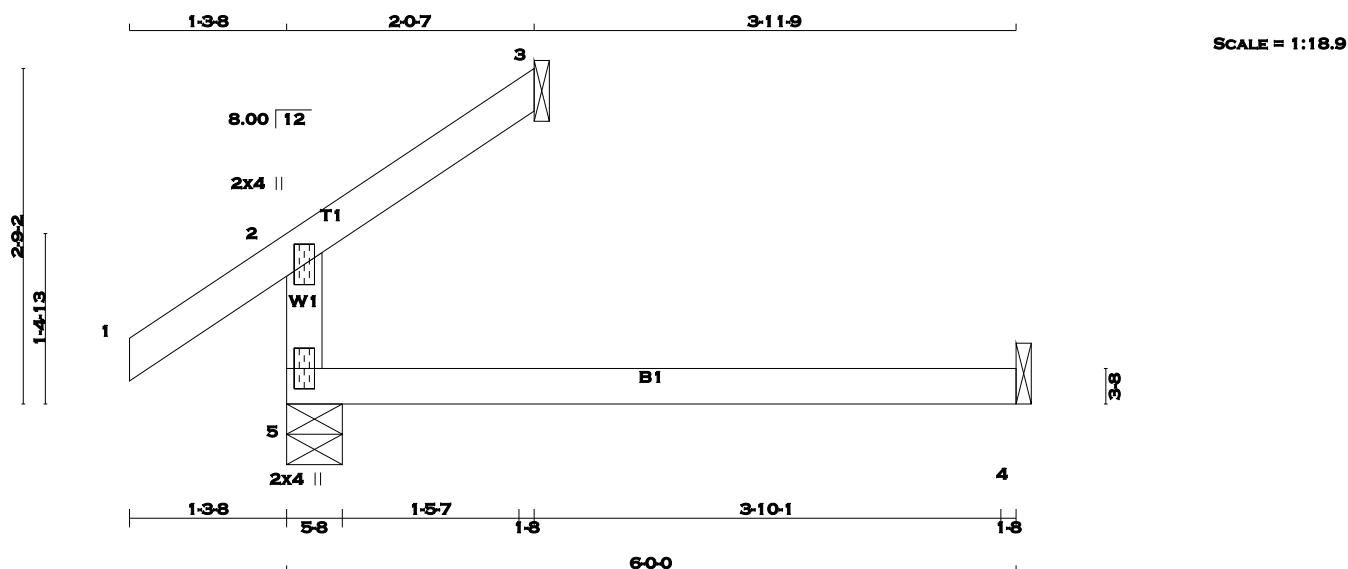
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (1) (INPUT = 0.90)
JSI METAL= 0.20 (5) (INPUT = 1.00)



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TOTAL WEIGHT = 4 X 13 = 51 lb
[M]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	265	0	265	0	5-8	5-8
3	60	0	60	0	1-8	1-8
4	44	0	49	0	1-8	1-8

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX		MAX. FACTORED	FORCE (LBS)
FR-TO							
5-2	-204 / 0		0.0	0.0	0.12 (3)	7.81	
1-2	0 / 29		-77.3	-77.3	0.10 (1)	10.00	
2-3	-11 / 0		-77.3	-77.3	0.05 (1)	6.25	
5-4	0 / 0		-17.5	-17.5	0.13 (3)	10.00	

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.12 (2-5:3), BC=0.13 (4-5:3), WB=0.00 (n/a:0), SSI=0.08 (4-5:3)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

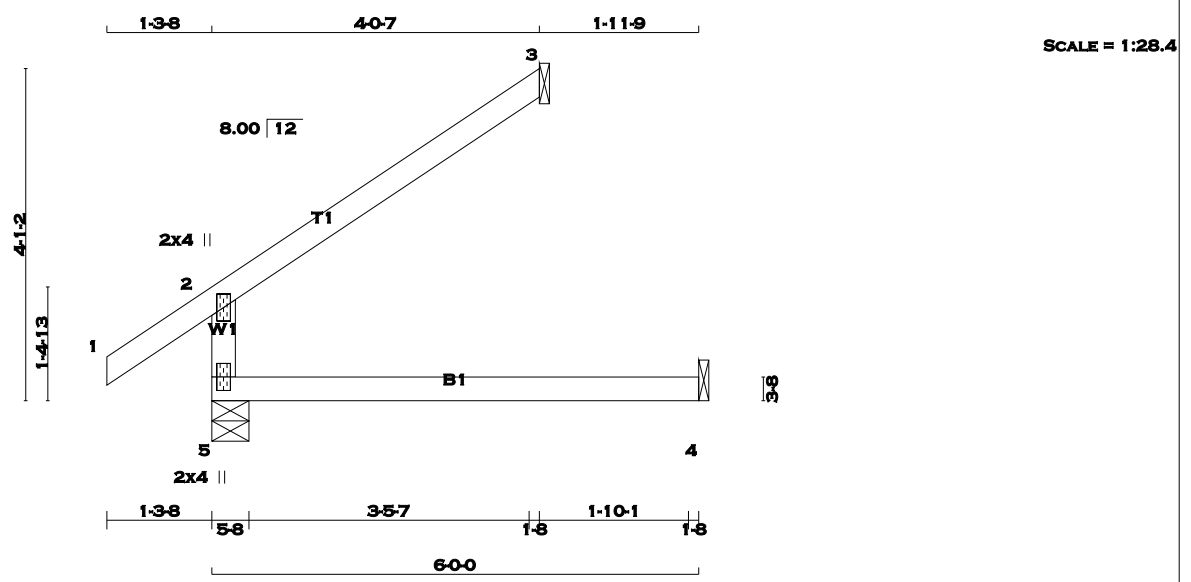


March 10, 2017



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TOTAL WEIGHT = 4 X 15 = 62 lb [M]

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
5	362	0	362	0	0	5-8	5-8		
3	117	0	117	0	0	1-8	1-8		
4	44	0	49	0	0	1-8	1-8		

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

UNFACTORED REACTIONS							
JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	254	181 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0
3	80	71 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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

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

LOADING							
TOTAL LOAD CASES: (3)							
MEMB.	CHORDS		FACTORED		WEBS		
	MAX. FACTORED	FORCE	VERT. LOAD	LC1 MAX	MAX. MEMB.	FACTORED	
	(LBS)	(PLF)	CSI (LC)	UNBRAC	FORCE	MAX	
				LENGTH	FR-TO	CSI (LC)	
FR-TO		FROM TO					
5-2	-301 / 0	0.0 0.0 0.12 (3)	7.81				
1-2	0 / 29	-77.3 -77.3 0.10 (1)	10.00				
2-3	-22 / 0	-77.3 -77.3 0.21 (1)	6.25				
5-4	0 / 0	-17.5 -17.5 0.13 (3)	10.00				

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.21 (2-3:1) , BC=0.13 (4-5:3) , WB=0.00 (n/a:0) , SSI=0.13 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

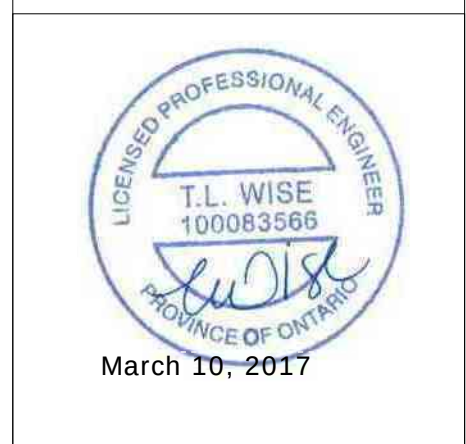
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

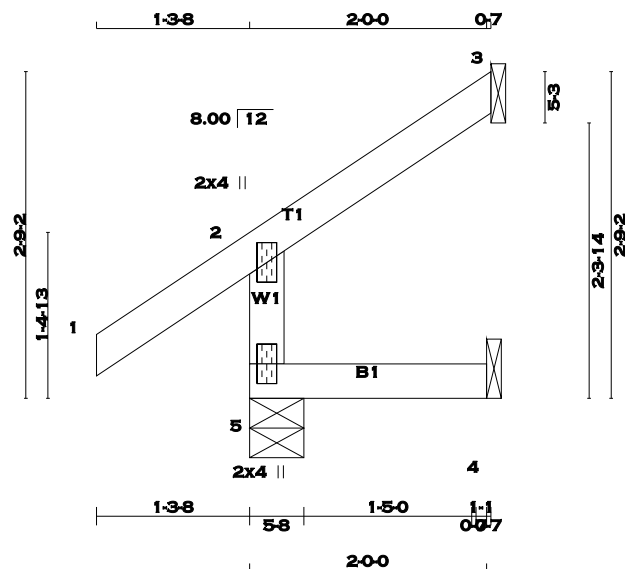
PLATE ROTATION TOL. = 5.0 Deg.

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



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SCALE = 1:19.4

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

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

DRY: SEASONED LUMBER.

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX		IN-SX	
5	223	0	223	0	0	5-8		5-8	
3	60	0	60	0	0	1-8		1-8	
4	16	0	18	0	0	1-8		1-8	

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

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	154	123 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

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

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

LOADING					
TOTAL LOAD CASES: (4)					
CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO	
5-2	-204 / 0	0.0	0.0 (3)	7.81	
1-2	0 / 29	-77.3	-77.3 (1)	10.00	
2-3	-11 / 0	-77.3	-77.3 (1)	6.25	
5-4	0 / 0	-17.5	-17.5 (3)	10.00	

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

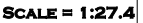


March 10, 2017

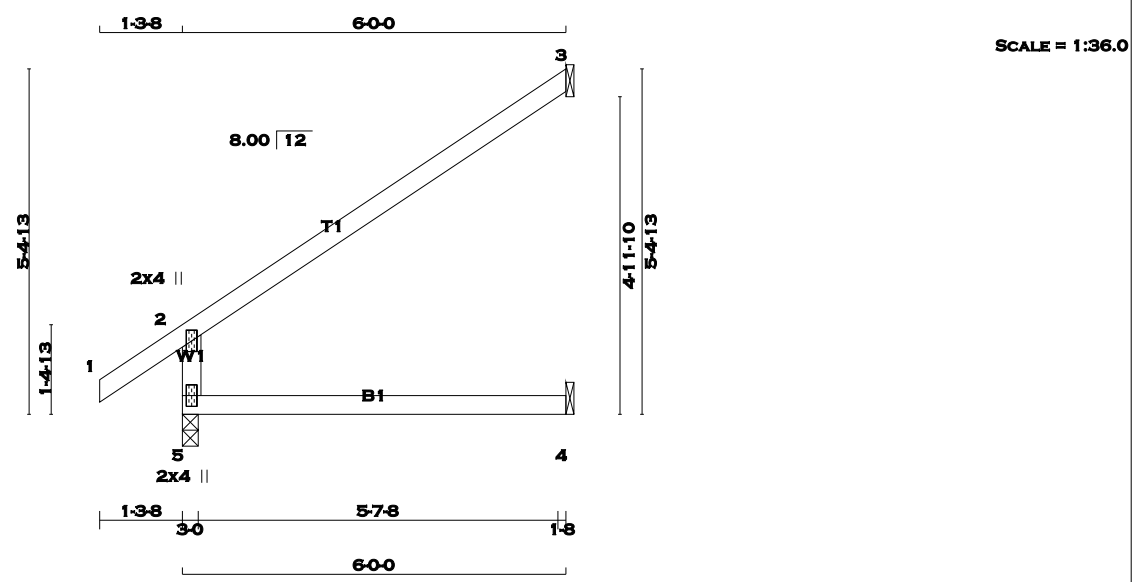


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LUMBER

N. L. G. A. RULES

CHORDS SIZE

5 - 2

2x4

DRY

No.2

1 - 3

2x4

DRY

No.2

5 - 4

2x4

DRY

No.2

DESCR.

SPF

SPF

SPF

DRY: SEASONED LUMBER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG UPLIFT IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
5	457	0	457	0	0	3-0
3	174	0	174	0	0	1-8
4	44	0	49	0	0	1-8

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

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.

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	318	239 / 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: (3)

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

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

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (2) (INPUT = 0.90)

JSI METAL= 0.10 (2) (INPUT = 1.00)

March 10, 2017

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

RECEIVED

TOWN OF MILTON

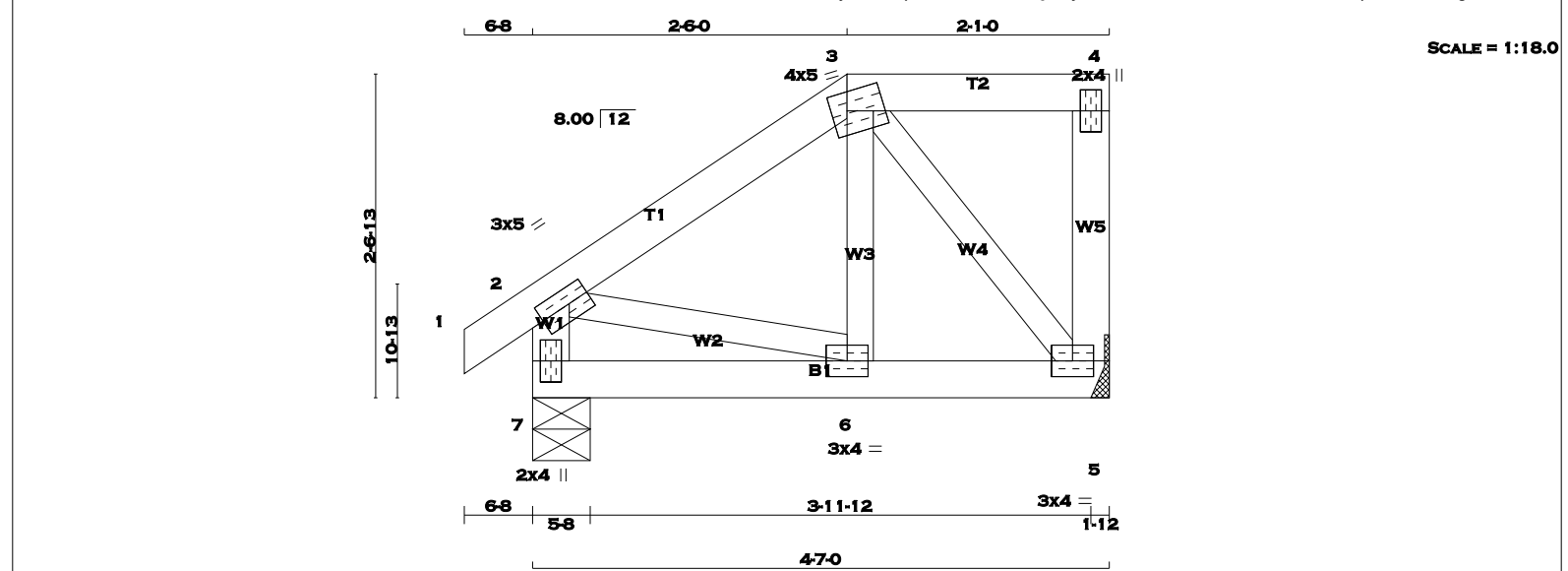
MAR 29, 2017

17-4954

BUILDING DIVISION



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

5 - 4

2x4

DRY

No.2

SPF

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.

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

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.

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

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

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

HANGER BY OTHERS

MIN. SEAT SIZE: 1-12

5-8

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

5

153

107 / 0

0 / 0

0 / 0

0 / 0

46 / 0

0 / 0

7

185

136 / 0

0 / 0

0 / 0

0 / 0

50 / 0

0 / 0

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

BRACING

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

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

WEBS

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

3.0

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 (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=0.06 (2-3:1), BC=0.03 (5-6:3), WB=0.03

(3-5:1), SSI=0.06 (3-4:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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= 0.31 (3) (INPUT = 0.90)

JSI METAL= 0.06 (2) (INPUT = 1.00)

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

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

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

BRACING

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

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

WEBS

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

5

153

107 / 0

0 / 0

0 / 0

0 / 0

46 / 0

0 / 0

7

185

136 / 0

0 / 0

0 / 0

0 / 0

50 / 0

0 / 0

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

BRACING

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

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

WEBS

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

5

153

107 / 0

0 / 0

0 / 0

0 / 0

46 / 0

0 / 0

7

185

136 / 0

0 / 0

0 / 0

0 / 0

50 / 0

0 / 0

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

BRACING

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

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

WEBS

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

5

153

107 / 0

0 / 0

0 / 0

0 / 0

46 / 0

0 / 0

7

185

136 / 0

0 / 0

0 / 0

0 / 0

50 / 0

0 / 0

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

BRACING

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

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

APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MEMB.

MAX. FACTORED

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.02 (3)

10.00

6-5

0 / 113

-17.5

-17.5

0.03 (3)

10.00

WEBS

MEMB.

MAX. FACTORED

FORCE

MAX

FR-TO

1-2

0 / 13

-77.3

-77.3

0.02 (1)

10.00

6-3

0 / 47

0.02 (3)

2-3

-135 / 0

-77.3

-77.3

0.06 (1)

6.25

3-5

-167 / 0

0.03 (1)

3-4

0 / 0

-77.3

-77.3

0.06 (1)

10.00

2-6

0 / 115

0.03 (1)

5-4

-81 / 0

0.0

0.0

0.01 (1)

7.81

7-2

-245 / 0

0.0

0.0

0.02 (1)

7.81

7-6

0 / 0

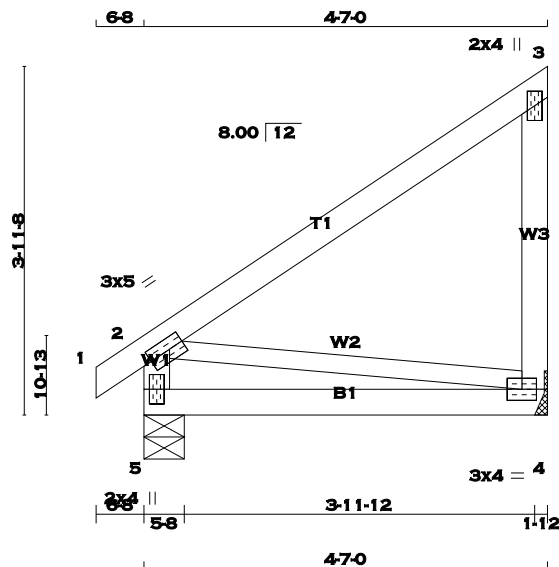
-17.5

-17.5

0.02 (3)

10.00

<



SCALE = 1:26.2

TOTAL WEIGHT = 11 X 20 = 221 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	4.0		
5	BMV1+p	MT20	2.0	4.0		

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

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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
5	266	0	266	0	0	5-8	5-8
4	217	0	217	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 1-12							

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
5	185	136 / 0	0 / 0	0 / 0	0 / 0	50 / 0	0 / 0	
4	153	107 / 0	0 / 0	0 / 0	0 / 0	46 / 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: (3)

CHORDS		FACTORED				WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	MAX	MEMB.	FORCE (LBS)	MAX	MAX
FR-TO		FROM TO		CSI (LC)		FR-TO		CSI (LC)	
5-2	-225 / 0	0.0	0.0	0.02 (1)	7.81	2-4	0 / 0	0.00 (1)	
1-2	0 / 13	-77.3	-77.3	0.02 (1)	10.00				
2-3	0 / 0	-77.3	-77.3	0.28 (1)	10.00				
4-3	-177 / 0	0.0	0.0	0.04 (1)	7.81				
5-4	0 / 0	-17.5	-17.5	0.11 (3)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/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 (0.02")

CSI: TC=0.28 (2-3:1) , BC=0.11 (4-5:3) , WB=0.00 (2-4:1) , SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



March 10, 2017



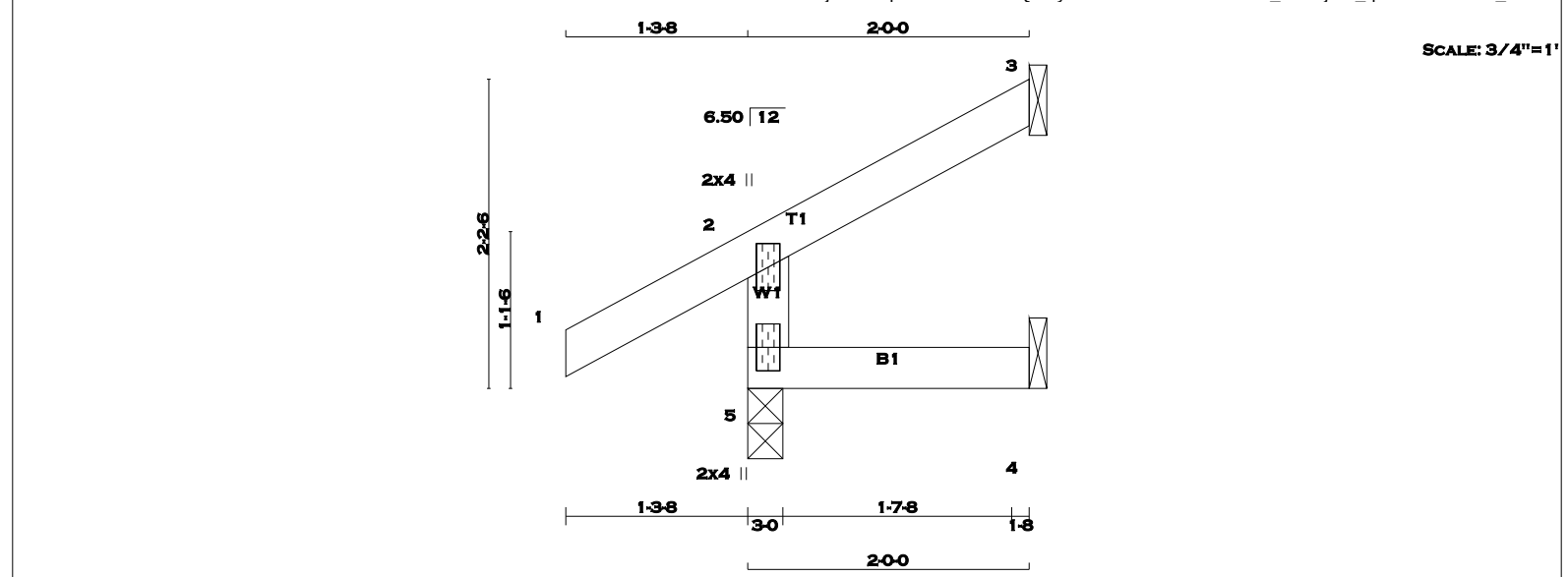
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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LUMBER

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

DRY: SEASONED LUMBER.

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

BEARINGS

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3 PSF
	DL <td>=</td> <td>3.0 PSF</td>	=	3.0 PSF
BOT CH.	LL	=	0.0 PSF
	DL <td>=</td> <td>7.0 PSF</td>	=	7.0 PSF
TOTAL LOAD		=	33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.12 (2) (INPUT = 0.90)

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

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

SPF

2

TMV+p

MT20

2.0

4.0

5

BMV1+p

MT20

2.0

4.0

LUMBER

No.2

SPF

DESCR.

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.

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	221	0	221	0	0	3-0	3-0
3	58	0	58	0	0	1-8	1-8
4	16	0	17	0	0	1-8	1-8

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

UNFACTORED REACTIONS

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

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

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. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO	
5-2	-202 / 0	0.0	0.01 (3)	7.81	
1-2	0 / 25	-77.3	-77.3	0.10 (1)	10.00
2-3	-9 / 0	-77.3	-77.3	0.05 (1)	10.00
5-4	0 / 0	-17.5	-17.5	0.02 (3)	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

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

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

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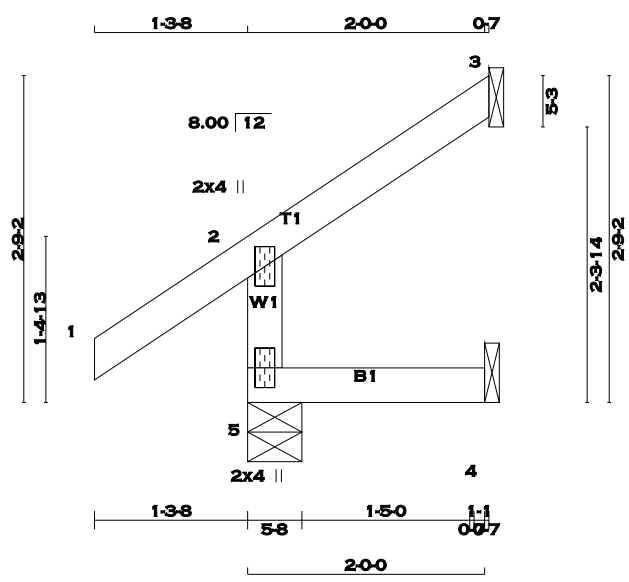
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SCALE = 1:19.4

TOTAL WEIGHT = 8 lb [M]

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	223	0	223	0	5-8	5-8
3	60	0	60	0	1-8	1-8
4	16	0	18	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	154	123 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

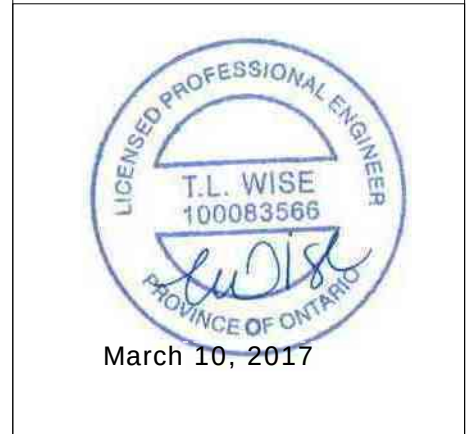
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

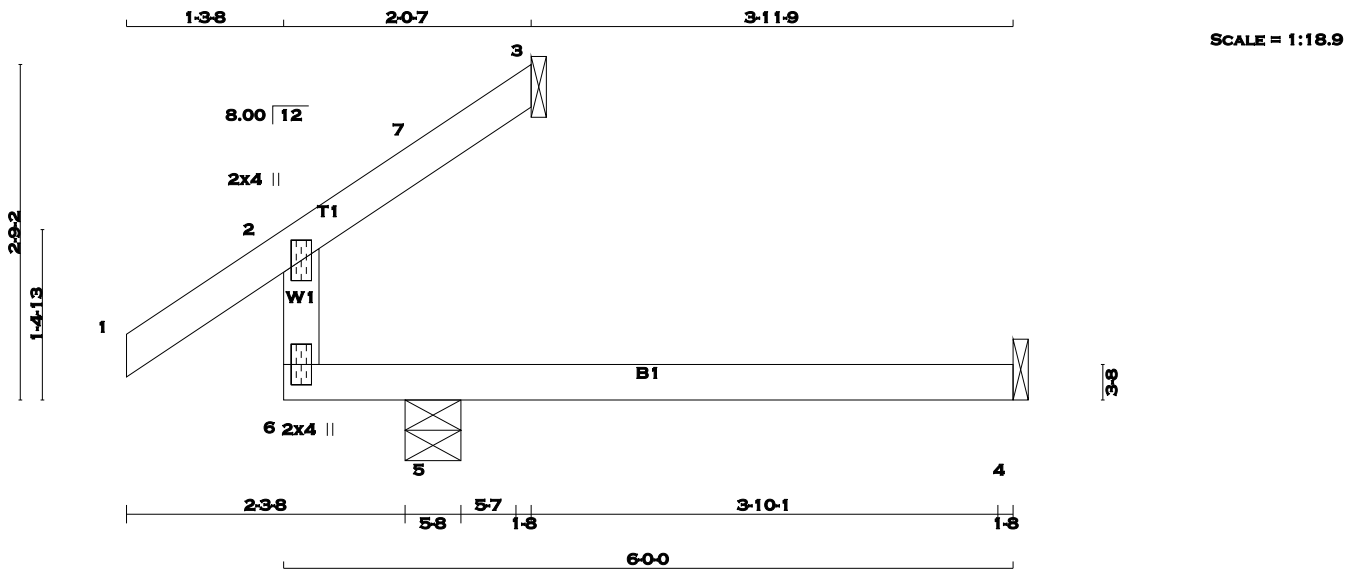
PLATE ROTATION TOL. = 5.0 Deg.

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



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LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
6 - 2	2x4	DRY	No.2		SPF
1 - 3	2x4	DRY	No.2		SPF
6 - 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		
6	BMV+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
3		104	0	104	0	0	1-8	1-8	
4		18	0	38	0	0	1-8	1-8	
5		246	0	246	0	0	5-8	5-8	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.	LIVE	WIND	DEAD	SOIL	
3	70	67 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 0	0 / 0	
4	17	0 / -10	0 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0	
5	176	102 / 0	0 / 0	0 / 0	0 / 0	0 / 0	74 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	LC1 MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
6-2	-159 / 0	0.0	0.0 0.13 (1)	7.81			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00			
2-7	-2 / 14	-77.3	-77.3 0.10 (1)	6.25			
7-3	-2 / 14	-77.3	-77.3 0.10 (1)	6.25			
6-5	0 / 0	-17.5	-17.5 0.15 (1)	10.00			
5-4	0 / 0	-17.5	-17.5 0.15 (1)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 602 (0.02")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 466 (0.03")

CSI: TC=0.13 (2-6:1) , BC=0.15 (5-6:1) , WB=0.00 (n/a:0) , 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

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)	(PLI)	(PLI)	(PLI)
MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



March 10, 2017



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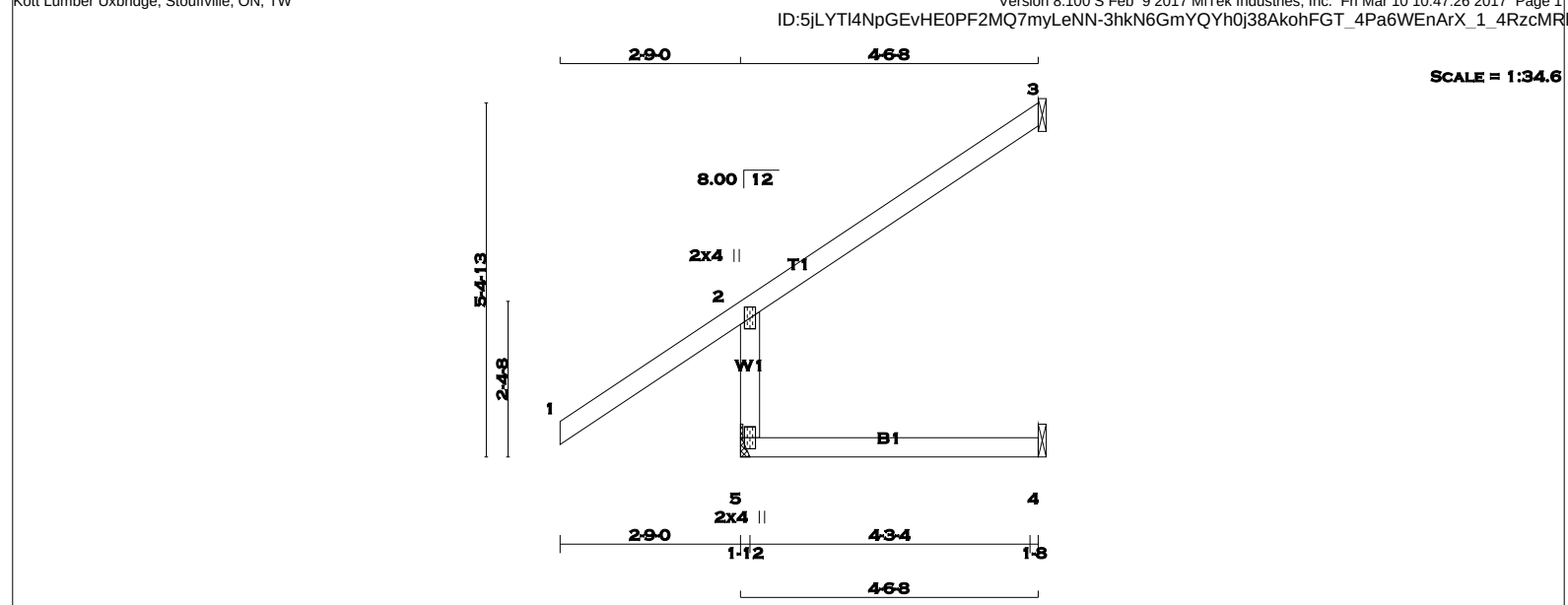
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JSI GRIP= 0.27 (2) (INPUT = 0.90)
JSI METAL= 0.10 (2) (INPUT = 1.00)





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

DRY: SEASONED LUMBER.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

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

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

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

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

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

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

CSI: TC=0.43 (1-2:1) , BC=0.08 (4-5:3) , WB=0.00 (n/a:0) , 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= 0.28 (2) (INPUT = 0.90)
JSI METAL= 0.11 (2) (INPUT = 1.00)

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

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.

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
5	482	0	482	0	0	
3	132	0	132	0	0	
4	36	0	40	0	0	

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DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.43 (1-2:1) , BC=0.08 (4-5:3) , WB=0.00 (n/a:0) , 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

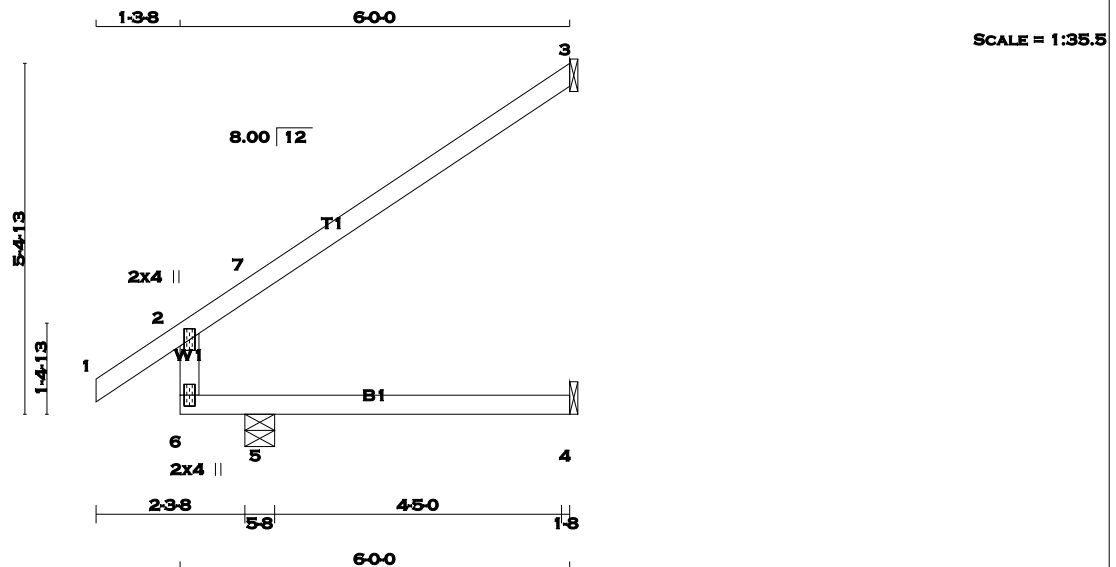
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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= 0.28 (2) (INPUT = 0.90)
JSI METAL= 0.11 (2) (INPUT = 1.00)



TOTAL WEIGHT = 18 lb [M]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE	CHORDS	SIZE		
6 - 2	2x4	DRY	No.2	SPF	SPF
1 - 3	2x4	DRY	No.2		
6 - 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	
6	BMV+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
3	179	0	179	0	0	1-8	1-8	1-8	
4	-8	0	36	0	-8	1-8	1-8	1-8	
5	504	0	504	0	0	5-8	5-8	5-8	

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 3 , 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		
3	122	108 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0		
4	-1	0 / -26	0 / 0	0 / 0	0 / 0	25 / 0	0 / 0		
5	351	262 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO		
6-2	-391 / 0	0.0	0.0 0.35 (1)	7.81			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00			
2-7	-29 / 0	-77.3	-77.3 0.44 (1)	6.25			
7-3	-29 / 0	-77.3	-77.3 0.44 (1)	6.25			
6-5	0 / 0	-17.5	-17.5 0.35 (1)	10.00			
5-4	0 / 0	-17.5	-17.5 0.32 (1)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 235 (0.06")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 171 (0.09")

CSI: TC=0.44 (2-3:1) , BC=0.35 (5-6:1) , WB=0.00 (n/a:0) , SSI=0.32 (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

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

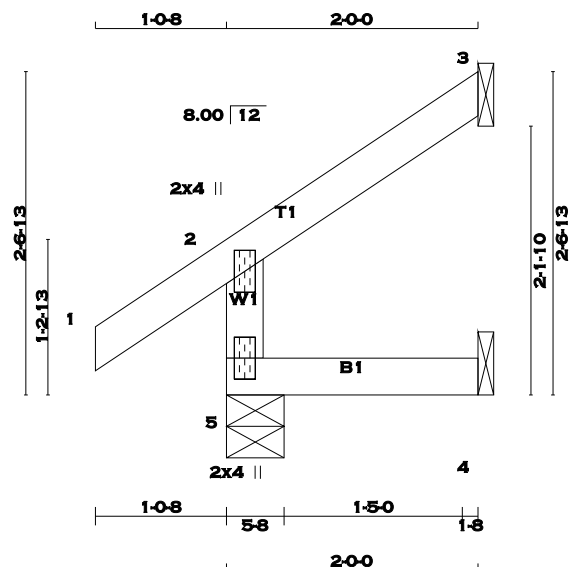


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SCALE = 1:18.3

TOTAL WEIGHT = $2 \times 8 = 15 \text{ lb}$

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX
5	202	0	202	0	0	5-8
3	58	0	58	0	0	1-8
4	16	0	18	0	0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
5	140	110 / 0	0 / 0	0 / 0	0 / 0	30 / 0	0 / 0
3	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
5-2	-183 / 0	0.0	0.0	0.01 (3)	7.81		
1-2	0 / 24	-77.3	-77.3	0.07 (1)	10.00		
2-3	-11 / 0	-77.3	-77.3	0.05 (1)	6.25		
5-4	0 / 0	-17.5	-17.5	0.02 (3)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

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

CSI: TC=0.07 (1-2:1) , BC=0.02 (4-5:3) , WB=0.00 (n/a:0) , SSI=0.06 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



March 10, 2017



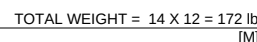
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DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMB1-	MT20	3.0	4.0	

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	UPLIFT	IN-SX
3	153	0	153	0	1-8
2	319	0	319	0	3-0
4	63	0	63	0	1-8

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
3	105	88 / 0	0 / 0	0 / 0	0 / 0	16 / 0	0 / 0
2	221	168 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0
4	47	17 / 0	0 / 0	0 / 0	0 / 0	29 / 0	0 / 0

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.

LOADING
TOTAL LOAD CASES: (3)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)		UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
1-2	0 / 15	-77.3	-77.3	0.10 (1)	10.00	5-6	-170 / 28	0.00 (1)	
2-6	-15 / 0	-77.3	-77.3	0.05 (3)	6.25				
6-3	0 / 2	-77.3	-77.3	0.21 (1)	10.00				
2-5	0 / 0	-17.5	-17.5	0.15 (1)	10.00				
5-4	0 / 0	-17.5	-17.5	0.15 (1)	10.00				

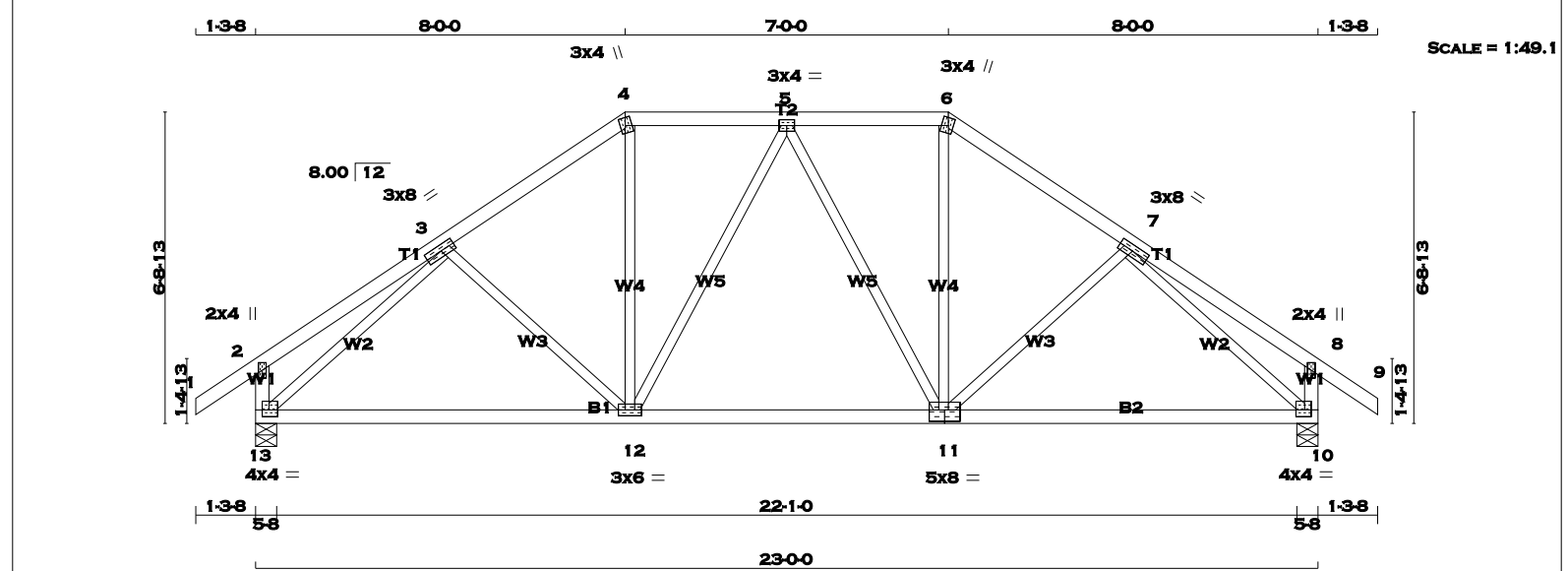
TOP	CH.	LL	=	23.3	PSF
		DL	=	3.0	PSF
BOT	CH.	LL	=	0.0	PSF
		DL	=	7.0	PSF
TOTAL LOAD				=	33.3 PSF

JSI GRIP= 0.18 (2) (INPUT = 0.90)
JSI METAL= 0.06 (2) (INPUT = 1.00)



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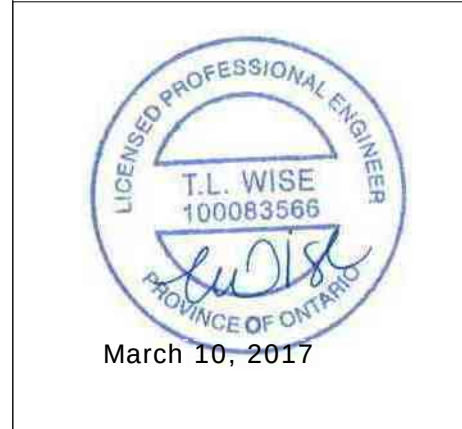


TOTAL WEIGHT = 101 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 4	2x4	No.2			
4 - 6	2x4	No.2			
6 - 9	2x4	No.2			
13 - 2	2x4	No.2			
10 - 8	2x4	No.2			
13 - 11	2x4	No.2			
11 - 10	2x4	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	TMWW-t	MT20	3.0	8.0	1.50 3.75
4	TTW+m	MT20	3.0	4.0	2.00 1.25
5	TMWW-t	MT20	3.0	4.0	
6	TTW+m	MT20	3.0	4.0	2.00 1.25
7	TMWW-t	MT20	3.0	8.0	1.50 3.75
8	TMV+p	MT20	2.0	4.0	
10	BMVW1-t	MT20	4.0	4.0	1.75 1.75
11	BSWWW-l	MT20	5.0	8.0	3.00 4.00
12	BMWWW-t	MT20	3.0	6.0	
13	BMVW1-t	MT20	4.0	4.0	1.75 1.75

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



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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		DOWN		HORZ		BRG		BRG	
JT	VERT	JT	HORZ	JT	UPLIFT	IN-SX	IN-SX	JT	IN-SX
13	1197	0	1197	0	0	5-8	5-8	13	5-8
10	1197	0	1197	0	0	5-8	5-8	10	5-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	838	599 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0
10	838	599 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 10

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.86 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.

LOADING				TOTAL LOAD CASES: (3)			
CHORDS		WEBS		FACTORED		FACTORED	
MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO				LENGTH FR-TO			
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-12	-102 / 25	0.05 (1)
2-3	0 / 19	-77.3	-77.3 0.19 (1)	10.00	12-4	0 / 372	0.08 (1)
3-4	-1100 / 0	-77.3	-77.3 0.16 (1)	5.87	12-5	-183 / 0	0.19 (1)
4-5	-904 / 0	-77.3	-77.3 0.12 (1)	6.25	5-11	-183 / 0	0.19 (1)
5-6	-903 / 0	-77.3	-77.3 0.12 (1)	6.25	11-6	0 / 372	0.08 (1)
6-7	-1100 / 0	-77.3	-77.3 0.16 (1)	5.86	11-7	-101 / 25	0.05 (1)
7-8	0 / 19	-77.3	-77.3 0.19 (1)	10.00	13-3	-1333 / 0	0.65 (1)
8-9	0 / 29	-77.3	-77.3 0.10 (1)	10.00	7-10	-1334 / 0	0.65 (1)
13-2	-226 / 0	0.0	0.0 0.02 (1)	7.81			
10-8	-226 / 0	0.0	0.0 0.02 (1)	7.81			
13-12	0 / 973	-17.5	-17.5 0.30 (3)	10.00			
12-11	0 / 989	-17.5	-17.5 0.31 (3)	10.00			
11-10	0 / 973	-17.5	-17.5 0.30 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/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 (0.77")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.77")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.19 (2-3:1), BC=0.31 (11-12:3), WB=0.65 (7-10:1), SSI=0.13 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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 (3) (INPUT = 0.90)
JSI METAL= 0.36 (13) (INPUT = 1.00)



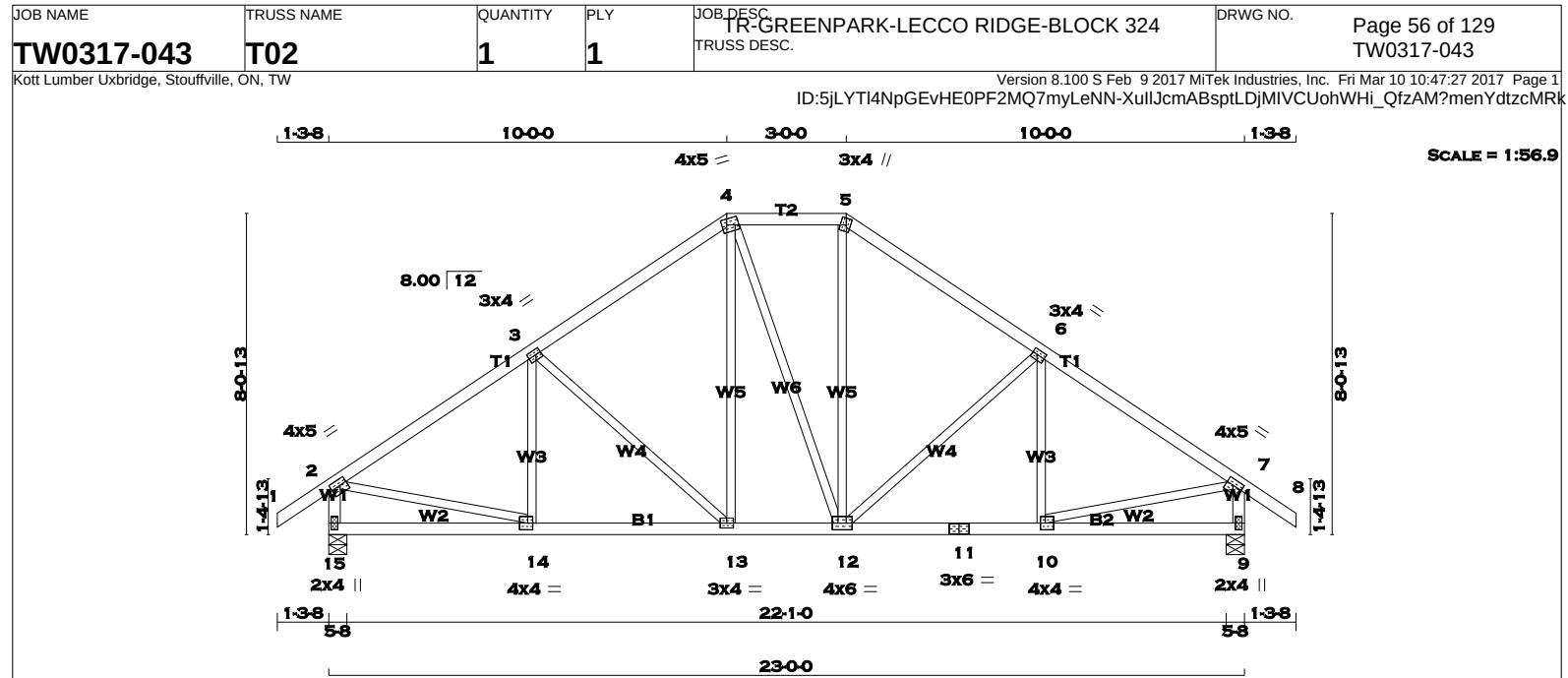
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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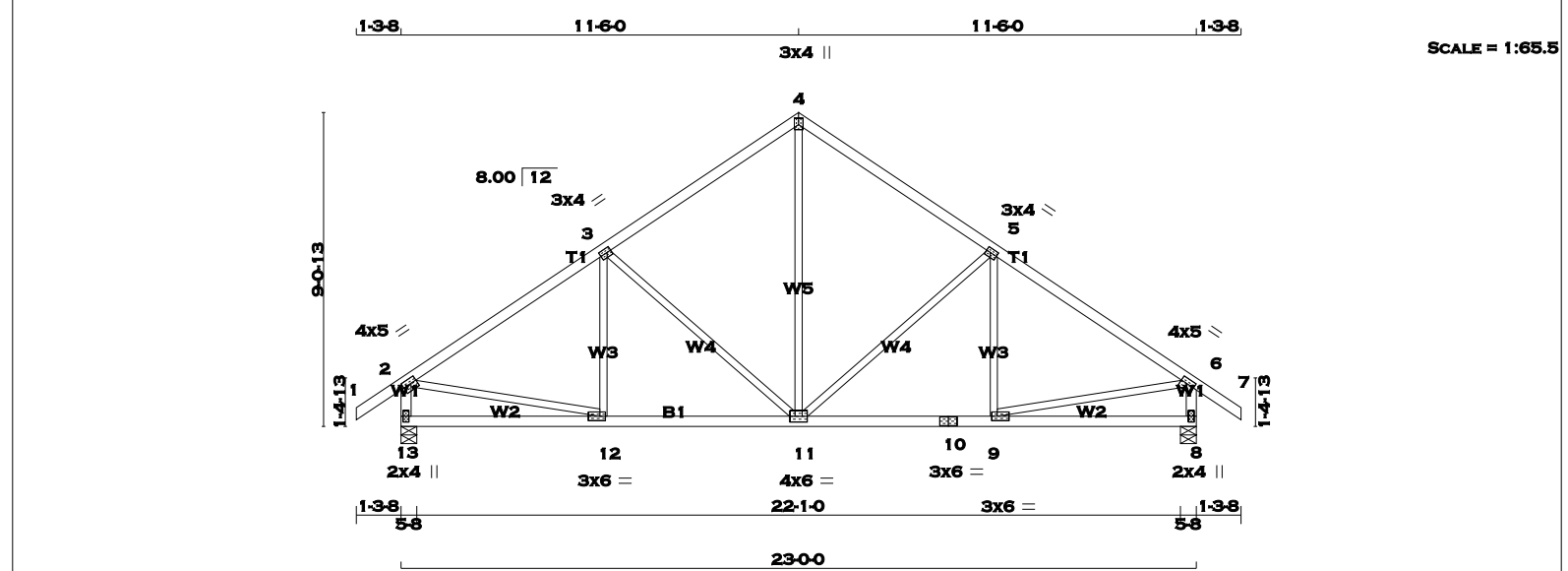
MAR 29, 2017

17-4954

BUILDING DIVISION



LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 8 2x4 DRY No.2 15 - 2 2x4 DRY No.2 9 - 7 2x4 DRY No.2 15 - 11 2x4 DRY No.2 11 - 9 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED GROSS REACTION JT VERT HORZ 15 1197 0 9 1197 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ UPLIFT 1197 0 0 1197 0 0 INPUT BRG IN-SX 5-8 5-8 5-8 REQRD BRG IN-SX 5-8 5-8 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 15 838 599 / 0 0 / 0 0 / 0 238 / 0 0 / 0 9 838 599 / 0 0 / 0 0 / 0 238 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.53 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (LBS) MAX. LC1 (LC) UNBRACED LENGTH FR-TO FROM TO 1-2 0 / 29 -77.3 -77.3 0.10 (1) 10.00 14-3 -117 / 52 0.04 (1) 2-3 -1209 / 0 -77.3 -77.3 0.27 (1) 5.53 3-13 -313 / 0 0.26 (1) 3-4 -981 / 0 -77.3 -77.3 0.26 (1) 5.98 13-4 0 / 270 0.06 (1) 4-5 -798 / 0 -77.3 -77.3 0.10 (1) 6.25 4-12 0 / 3 0.00 (1) 5-6 -982 / 0 -77.3 -77.3 0.26 (1) 5.98 12-5 0 / 274 0.06 (1) 6-7 -1208 / 0 -77.3 -77.3 0.27 (1) 5.53 12-6 -311 / 0 0.26 (1) 7-8 0 / 29 -77.3 -77.3 0.10 (1) 10.00 10-6 -119 / 51 0.04 (1) 15-2 -1160 / 0 0.0 0.0 0.12 (1) 7.39 2-14 0 / 1049 0.24 (1) 9-7 -1160 / 0 0.0 0.0 0.12 (1) 7.40 10-7 0 / 1049 0.24 (1) 15-14 0 / 0 -17.5 -17.5 0.11 (3) 10.00 14-13 0 / 1027 -17.5 -17.5 0.22 (1) 10.00 13-12 0 / 797 -17.5 -17.5 0.16 (1) 10.00 12-11 0 / 1026 -17.5 -17.5 0.22 (1) 10.00 11-10 0 / 1026 -17.5 -17.5 0.22 (1) 10.00 10-9 0 / 0 -17.5 -17.5 0.11 (3) 10.00		DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/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 (0.77") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.77") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07") CSI: TC=0.27 (2-3:1) , BC=0.22 (13-14:1) , WB=0.26 (3-13:1) , SSI=0.16 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.88 (14) (INPUT = 0.90) JSI METAL= 0.41 (2) (INPUT = 1.00)	
 March 10, 2017				READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.	
				RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 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

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

JT

13

8

1197

0

1197

0

0

5-8

5-8

8

1197

0

1197

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

13

8

838

599 / 0

0 / 0

0 / 0

0 / 0

0 / 0

238 / 0

0 / 0

238 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.41 FT.

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

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

LOADING

TOTAL LOAD CASES: (3)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING =

24.0

IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.77")

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

ALLOWABLE DEFL.(TL)= L/360 (0.77")

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

CSI: TC=0.36 (2-3:1) , BC=0.23 (11-12:1) , WB=0.46 (5-11:1) , SSI=0.18 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (9) (INPUT = 0.90)

JSI METAL= 0.42 (2) (INPUT = 1.00)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	4.0	5.0	1.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	6.0	1.50	2.00
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	4.0	6.0		
12	BMVW-t	MT20	3.0	6.0	1.50	2.00
13	BMV1+p	MT20	2.0	4.0		

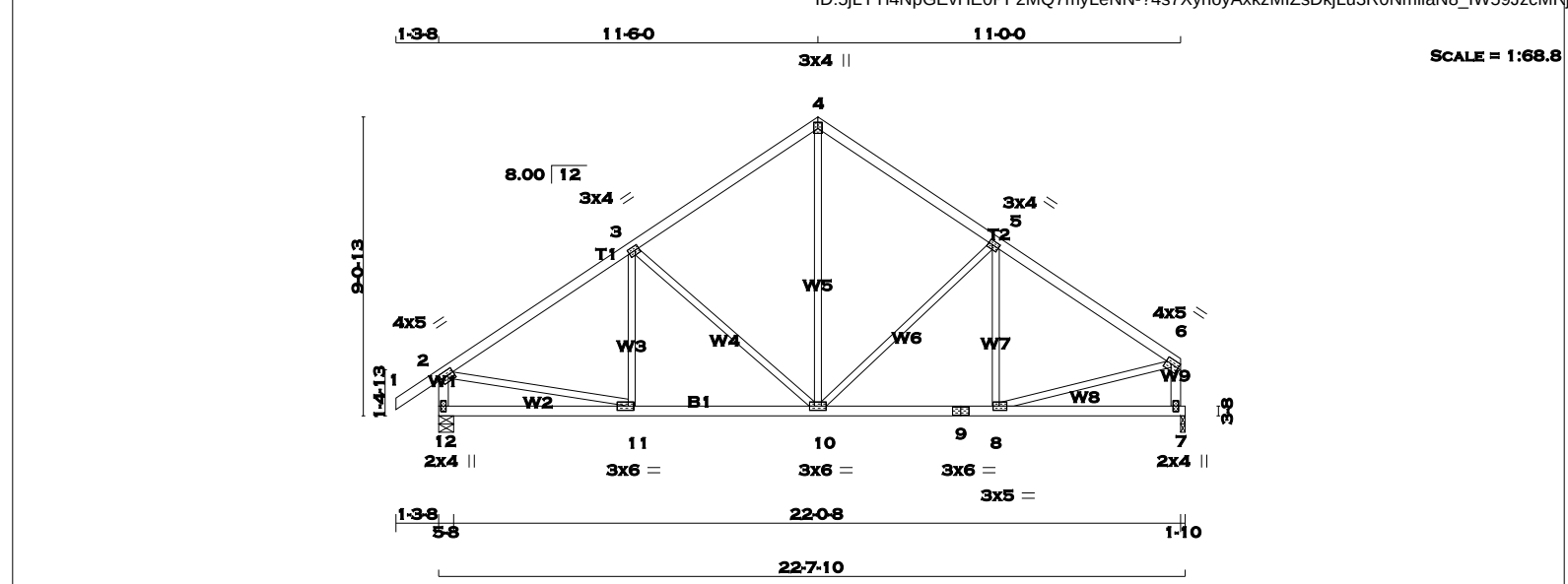
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	4.0	5.0	1.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-t	MT20	3.0	6.0	1.50	2.00
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	4.0	6.0		
12	BMVW-t	MT20	3.0	6.0	1.50	2.00
13	BMV1+p	MT20	2.0	4.0		

March 10, 2017

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

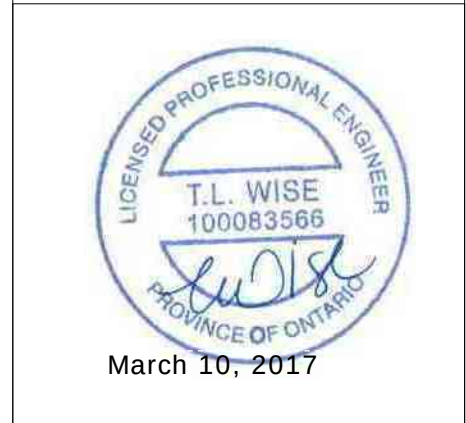
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TOTAL WEIGHT = 2 X 97 = 193 lb [M][F]

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

PLATES (table is in inches)							
JT	TYPE	PLATES	W	LEN	Y	X	
2	TMVW-t	MT20	4.0	5.0	1.75	2.00	
3	TMVW-t	MT20	3.0	4.0	1.50	1.50	
4	TTW+p	MT20	3.0	4.0	2.25	1.50	
5	TMVW-t	MT20	3.0	4.0	1.50	1.50	
6	TMVW-t	MT20	4.0	5.0	1.75	Edge	
7	BMV1+p	MT20	2.0	4.0			
8	BMVW-t	MT20	3.0	5.0	1.50	2.25	
9	BS-t	MT20	3.0	6.0			
10	BMVW-t	MT20	3.0	6.0			
11	BMVW-t	MT20	3.0	6.0	1.50	2.00	
12	BMV1+p	MT20	2.0	4.0			
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.							
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.							



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
12		1173	0	1173	0	0	5-8	5-8	
7		1067	0	1067	0	0	1-10	1-10	
UNFACTORED REACTIONS									
		1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE	
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
12		821	588 / 0	0 / 0	0 / 0	0 / 0	233 / 0	0 / 0	
7		749	524 / 0	0 / 0	0 / 0	0 / 0	225 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 7									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.46 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED	FACTORED		
		FORCE	VERT. LOAD	LC1 MAX	MEMB.	FORCE	MAX		
		(LBS)	(PLF)	CSI (LC)	UNBRAC	(LBS)	CSI (LC)		
			FROM TO		LENGTH	FR-TO			
1-2		0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-3	-73 / 74	0.03 (1)
2-3		-1172 / 0	-77.3	-77.3	0.36 (1)	5.46	3-10	-413 / 0	0.47 (1)
3-4		-860 / 0	-77.3	-77.3	0.34 (1)	6.15	10-4	0 / 600	0.14 (1)
4-5		-859 / 0	-77.3	-77.3	0.31 (1)	6.21	10-5	-340 / 0	0.37 (1)
5-6		-1097 / 0	-77.3	-77.3	0.32 (1)	5.65	8-5	-130 / 53	0.06 (1)
12-2		-1131 / 0	0.0	0.0	0.12 (1)	7.46	2-11	0 / 1017	0.23 (1)
7-6		-1026 / 0	0.0	0.0	0.11 (1)	7.74	8-6	0 / 965	0.22 (1)
12-11		0 / 0	-17.5	-17.5	0.14 (3)	10.00			
11-10		0 / 1000	-17.5	-17.5	0.23 (1)	10.00			
10-9		0 / 936	-17.5	-17.5	0.21 (1)	10.00			
9-8		0 / 936	-17.5	-17.5	0.21 (1)	10.00			
8-7		0 / 0	-17.5	-17.5	0.13 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.36 (2-3:1), BC=0.23 (10-11:1), WB=0.47 (3-10:1), SSI=0.18 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

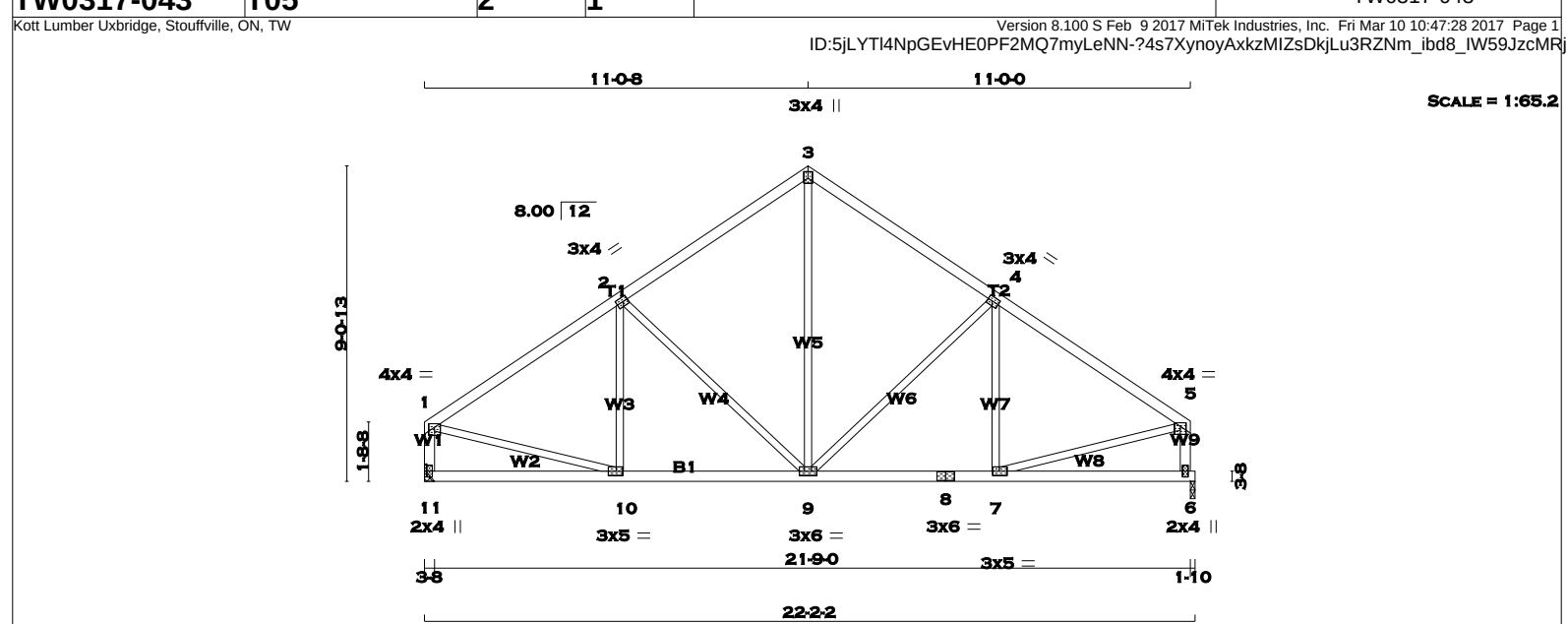
PLATE ROTATION TOL. = 5.0 Deg.

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



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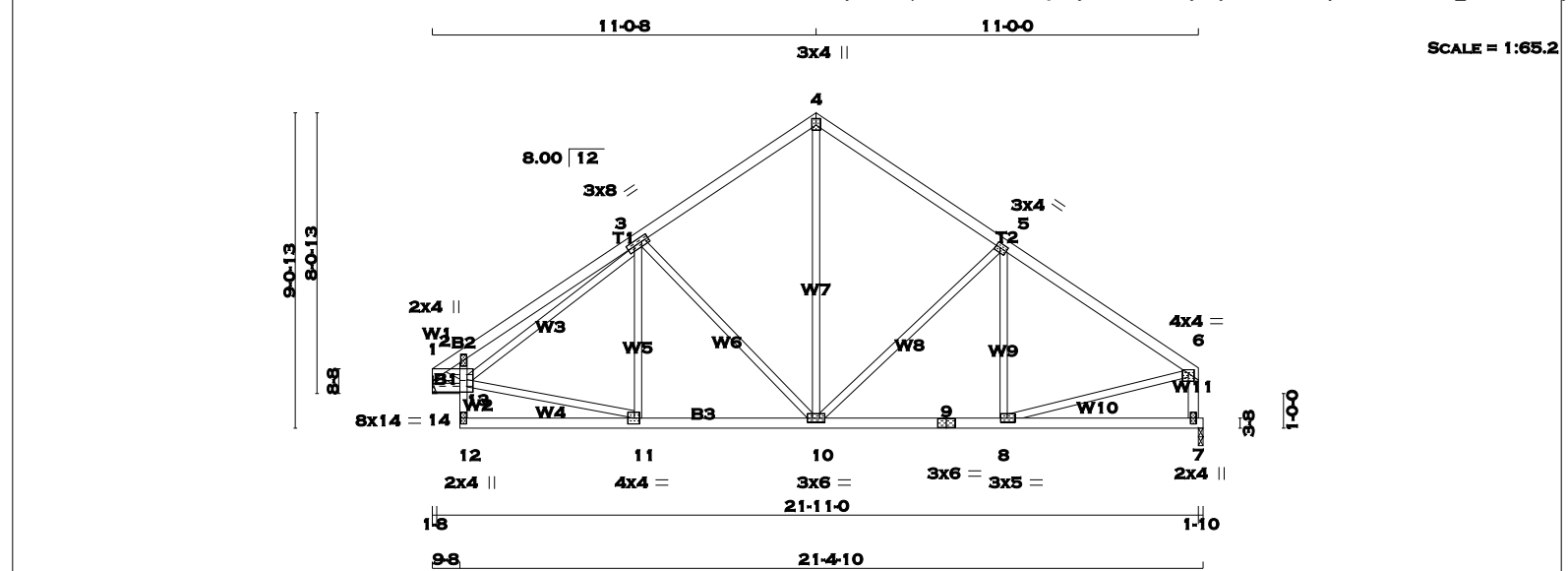


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
1 - 3 2x4 DRY No.2 SPF					BEARINGS										SPECIFIED LOADS:									
3 - 5 2x4 DRY No.2 SPF					FACTORED MAXIMUM FACTORED INPUT REQ'D										TOP CH. LL = 23.3 PSF									
11- 1 2x4 DRY No.2 SPF					GROSS REACTION GROSS REACTION BRG BRG										DL = 3.0 PSF									
6 - 5 2x4 DRY No.2 SPF					JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 0.0 PSF									
11- 8 2x4 DRY No.2 SPF					11 1045 0 1045 0 0 HANGER BY OTHERS										DL = 7.0 PSF									
8 - 6 2x4 DRY No.2 SPF					6 1045 0 1045 0 0 MIN. SEAT SIZE: 3-8										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									
					11 734 513 / 0 0 / 0 0 / 0 0 / 0 220 / 0 0 / 0										PART 9, NBCC 2010									
					6 734 513 / 0 0 / 0 0 / 0 0 / 0 220 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014									
					BRACING										- CSA 086-09									
					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.69 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: (3)										ALLOWABLE DEFL.(LL)= L/360 (0.73")									
					C H O R D S										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")									
					MAX. FACTORED FACTORED W E B S										ALLOWABLE DEFL.(TL)= L/360 (0.73")									
					MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. MAX. FACTORED										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")									
					(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)										CSI: TC=0.33 (1-2:1) , BC=0.21 (9-10:1) , WB=0.39									
					FR-TO FROM TO LENGTH FR-TO										(2-9:1) , SSI=0.17 (1-2:1)									
					1- 2 -1075 / 0 -77.3 -77.3 0.33 (1) 5.69 10- 2 -119 / 57 0.05 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
					2- 3 -826 / 0 -77.3 -77.3 0.31 (1) 6.25 2- 9 -351 / 0 0.39 (1)										COMP=1.10 SHEAR=1.10 TENS= 1.10									
					3- 4 -826 / 0 -77.3 -77.3 0.31 (1) 6.25 9- 3 0 / 570 0.13 (1)										COMPANION LIVE LOAD FACTOR = 0.50									
					4- 5 -1069 / 0 -77.3 -77.3 0.32 (1) 5.71 9- 4 -345 / 0 0.38 (1)										TRUSS PLATE MANUFACTURER IS NOT									
					11- 1 -1005 / 0 0.0 0.0 0.11 (1) 7.80 7- 4 -123 / 55 0.06 (1)										RESPONSIBLE FOR QUALITY CONTROL IN THE									
					6- 5 -1005 / 0 0.0 0.0 0.11 (1) 7.80 1-10 0 / 945 0.21 (1)										TRUSS MANUFACTURING PLANT .									
															NAIL VALUES									
					11-10 0 / 0 -17.5 -17.5 0.13 (3) 10.00 7- 5 0 / 941 0.21 (1)										PLATE GRIP(DRY) SHEAR SECTION									
					10- 9 0 / 918 -17.5 -17.5 0.21 (1) 10.00										(PSI) (PLI) (PLI)									
					9- 8 0 / 912 -17.5 -17.5 0.21 (1) 10.00										MAX MIN MAX MIN MAX MIN									
					8- 7 0 / 912 -17.5 -17.5 0.21 (1) 10.00										MT20 618 354 1667 822 2284 1656									
					7- 6 0 / 0 -17.5 -17.5 0.13 (3) 10.00										PLATE PLACEMENT TOL. = 0.250 inches									
															PLATE ROTATION TOL. = 5.0 Deg.									
															JSI GRIP= 0.90 (1) (INPUT = 0.90)									
															JSI METAL= 0.32 (1) (INPUT = 1.00)									



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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

14 - 1

2x4

DRY

No.2

SPF

7 - 6

2x4

DRY

No.2

SPF

14 - 13

2x4

DRY

No.2

SPF

12 - 2

2x3

DRY

No.2

SPF

12 - 9

2x4

DRY

No.2

SPF

9 - 7

2x4

DRY

No.2

SPF

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
14 - 1	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
14 - 13	2x4	DRY	No.2
12 - 2	2x3	DRY	No.2
12 - 9	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2

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

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)	JT	TYPE	PLATES	W	LEN	Y	X
1, 13, 14							
1							
2	TMV+p	MT20	2.0	4.0			
3	TMVWW-t	MT20	3.0	8.0			
4	TTW+p	MT20	3.0	4.0	2.25	1.50	
5	TMVWW-t	MT20	3.0	4.0	1.50	1.50	
6	TMVW-p	MT20	4.0	4.0	1.25	2.00	
7	BMV1+p	MT20	2.0	4.0			
8	BMVWW-t	MT20	3.0	5.0	1.50	2.25	
9	BS-t	MT20	3.0	6.0			
10	BMVWW-t	MT20	3.0	6.0			
11	BMVWW-t	MT20	4.0	4.0	2.00	1.75	
12	BMV+p	MT20	2.0	4.0			
13	TMBVWWWW-t	MT20	8.0	14.0	3.00	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.

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO						FR-TO			
1-2	-1156 / 0	-77.3	-77.3	0.10 (1)	5.83	13-11	0 / 858	0.19 (1)	
2-3	-1093 / 0	-77.3	-77.3	0.26 (1)	5.75	13-3	-11 / 29	0.01 (3)	
3-4	-821 / 0	-77.3	-77.3	0.25 (1)	6.25	11-3	-69 / 62	0.03 (1)	
4-5	-825 / 0	-77.3	-77.3	0.31 (1)	6.25	3-10	-341 / 0	0.37 (1)	
5-6	-1069 / 0	-77.3	-77.3	0.32 (1)	5.71	10-4	0 / 571	0.13 (1)	
14-1	-1037 / 0	0.0	0.0	0.10 (1)	7.71	10-5	-346 / 0	0.38 (1)	
7-6	-1005 / 0	0.0	0.0	0.11 (1)	7.80	8-5	-123 / 55	0.06 (1)	
14-13	0 / 0	-17.5	-17.5	0.00 (3)	10.00	1-13	0 / 1097	0.25 (1)	
12-13	0 / 39	0.0	0.0	0.17 (1)	10.00	8-6	0 / 941	0.21 (1)	
13-2	-248 / 0	0.0	0.0	0.12 (1)	7.81				
12-11	0 / 59	-17.5	-17.5	0.11 (3)	10.00				
11-10	0 / 900	-17.5	-17.5	0.20 (1)	10.00				
10-9	0 / 913	-17.5	-17.5	0.21 (1)	10.00				
9-8	0 / 913	-17.5	-17.5	0.21 (1)	10.00				
8-7	0 / 0	-17.5	-17.5	0.13 (3)	10.00				

CS: TC=0.32 (5-6:1), BC=0.21 (8-10:1), WB=0.38 (5-10:1), SSI=0.17 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

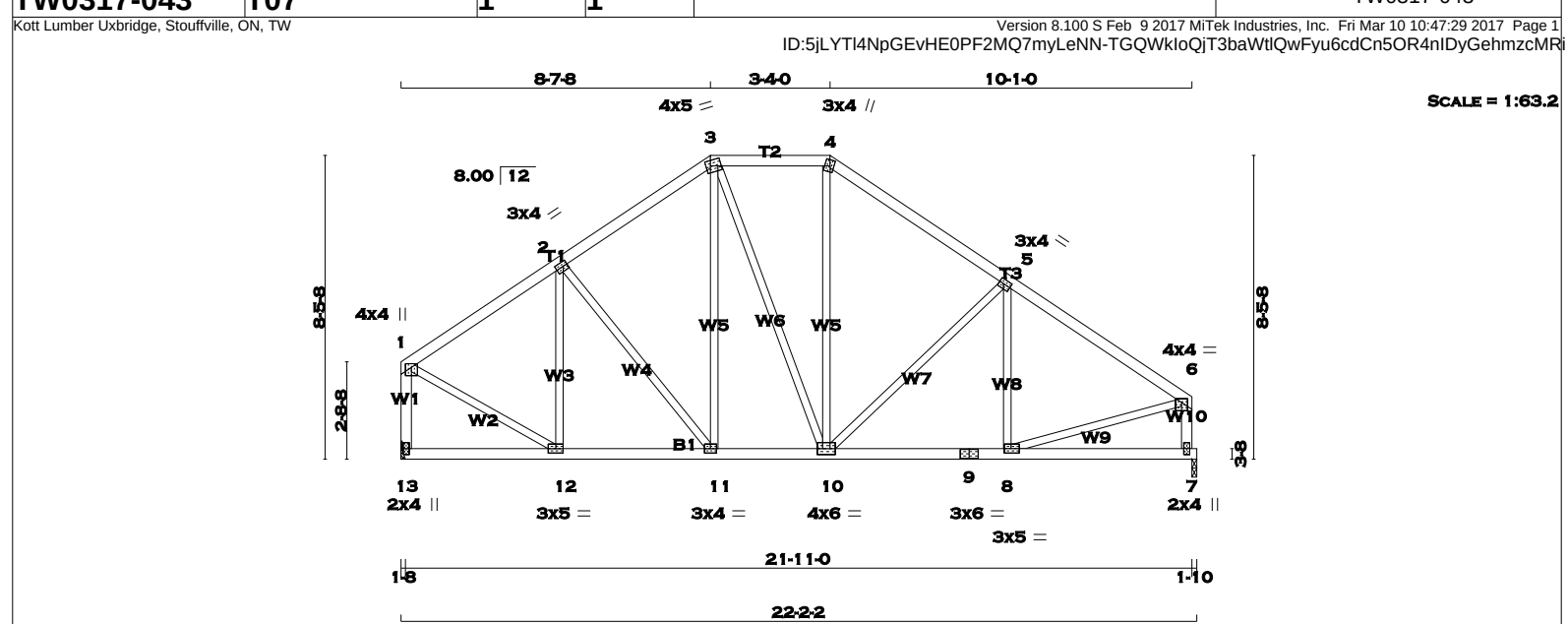
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JSI METAL= 0.32 (6) (INPUT = 1.00)

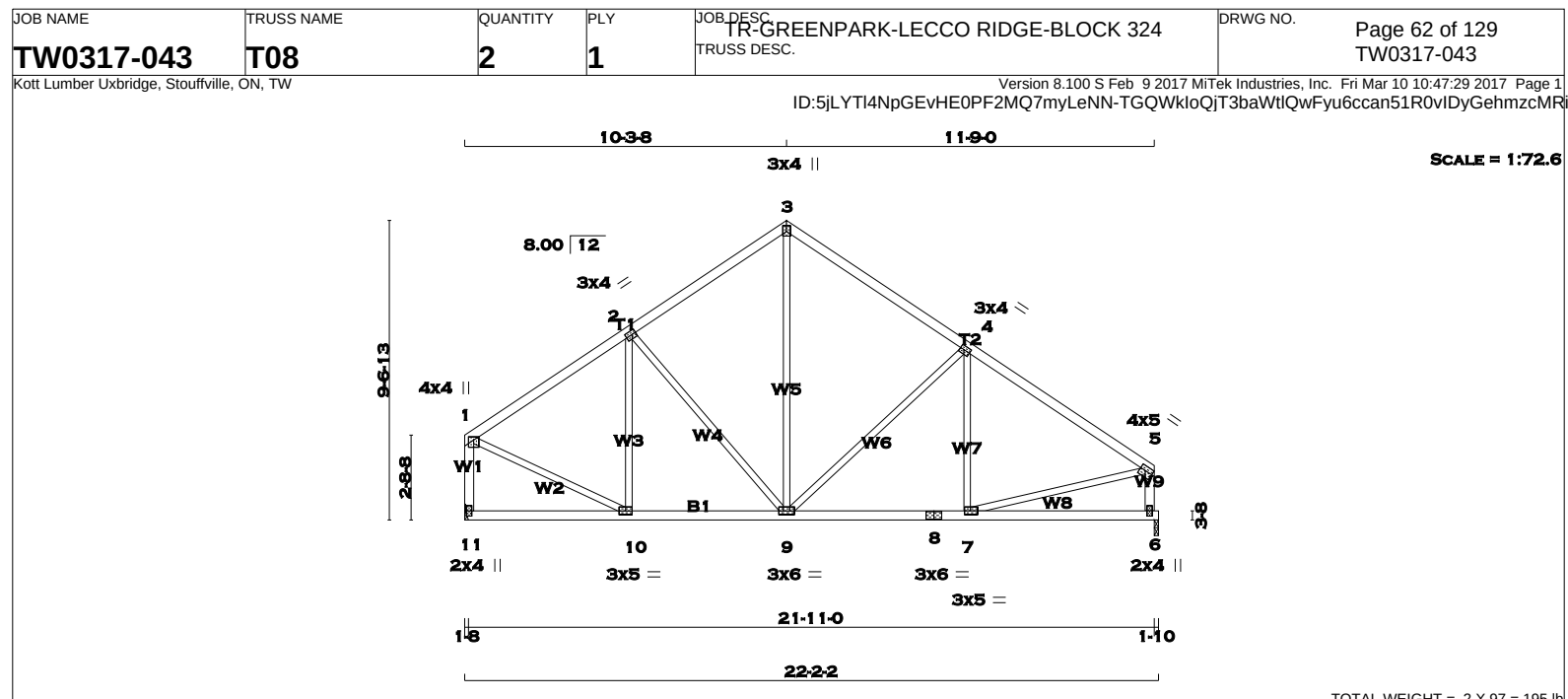
March 10, 2017

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 13- 1 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF 13- 9 2x4 DRY No.2 SPF 9 - 7 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.		DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 13 1045 0 1045 0 0 HANGER BY OTHERS 7 1045 0 1045 0 0 MIN. SEAT SIZE: 1-8 1-10 1-10 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 13 734 513 / 0 0 / 0 0 / 0 0 / 0 220 / 0 0 / 0 7 734 513 / 0 0 / 0 0 / 0 0 / 0 220 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.79 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. LIVE (LC) MAX. UNBRACED LENGTH FR-TO MEMB. MAX. FACTORED FORCE (LBS) MAX. LIVE (LC) FR-TO FROM TO FR-TO 1-2 -857 / 0 -77.3 -77.3 0.19 (1) 6.25 12-2 -307 / 0 0.15 (1) 2-3 -834 / 0 -77.3 -77.3 0.19 (1) 6.25 2-11 -91 / 0 0.08 (1) 3-4 -704 / 0 -77.3 -77.3 0.12 (1) 6.25 11-3 0 / 128 0.03 (1) 4-5 -871 / 0 -77.3 -77.3 0.26 (1) 6.24 3-10 0 / 78 0.02 (1) 5-6 -1066 / 0 -77.3 -77.3 0.27 (1) 5.79 10-4 0 / 198 0.04 (1) 13-1 -1014 / 0 0.0 0.0 0.14 (1) 7.78 10-5 -287 / 0 0.27 (1) 7-6 -1008 / 0 0.0 0.0 0.11 (1) 7.80 8-5 -149 / 42 0.06 (1) 13-12 0 / 0 -17.5 -17.5 0.08 (3) 10.00 1-12 0 / 831 0.19 (1) 12-11 0 / 731 -17.5 -17.5 0.16 (1) 10.00 8-6 0 / 942 0.21 (1) 11-10 0 / 675 -17.5 -17.5 0.14 (1) 10.00 10-9 0 / 908 -17.5 -17.5 0.20 (1) 10.00 9-8 0 / 908 -17.5 -17.5 0.20 (1) 10.00 8-7 0 / 0 -17.5 -17.5 0.11 (3) 10.00		DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/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 (0.73") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02") ALLOWABLE DEFL.(TL)= L/360 (0.73") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05") CSI: TC=0.27 (5-6:1), BC=0.20 (8-10:1), WB=0.27 (5-10:1), SSI=0.16 (5-6:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.88 (6) (INPUT = 0.90) JSI METAL= 0.31 (6) (INPUT = 1.00)	
 March 10, 2017				RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION	
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LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
11 - 1	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
11 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

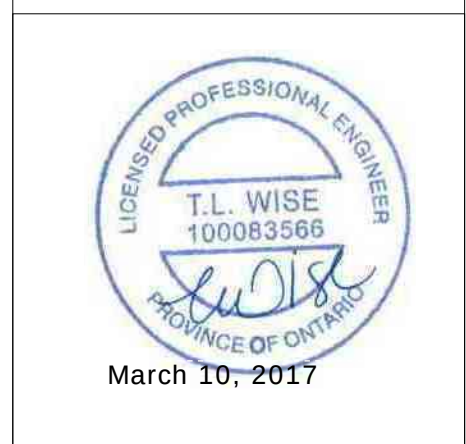
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW+p	MT20	4.0	4.0	1.25	2.00
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.50
5	TMVW-t	MT20	4.0	5.0	1.75	Edge
6	BMV1+p	MT20	2.0	4.0		
7	BMVW-t	MT20	3.0	5.0	1.50	2.25
8	BS-t	MT20	3.0	6.0		
9	BMVW-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	5.0		
11	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	INPUT DOWN	REQRD BRG IN-SX
11	1045	0	1045	0
6	1045	0	1045	0

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.63 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-887 / 0	-77.3	-77.3 0.27 (1)	6.19	10-2	-246 / 12	0.15 (1)
2-3	-777 / 0	-77.3	-77.3 0.27 (1)	6.25	2-9	-208 / 0	0.25 (1)
3-4	-781 / 0	-77.3	-77.3 0.35 (1)	6.25	9-3	0 / 519	0.12 (1)
4-5	-1069 / 0	-77.3	-77.3 0.37 (1)	5.63	9-4	-397 / 0	0.51 (1)
11-1	-1007 / 0	0.0	0.0 0.14 (1)	7.80	7-4	-100 / 69	0.05 (1)
6-5	-1003 / 0	0.0	0.0 0.11 (1)	7.81	1-10	0 / 834	0.19 (1)
					7-5	0 / 939	0.21 (1)
11-10	0 / 0	-17.5	-17.5 0.11 (3)	10.00			
10-9	0 / 760	-17.5	-17.5 0.18 (1)	10.00			
9-8	0 / 914	-17.5	-17.5 0.22 (1)	10.00			
8-7	0 / 914	-17.5	-17.5 0.22 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.15 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.37 (4-5:1), BC=0.22 (7-9:1), WB=0.51 (4-9:1), SSI=0.19 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

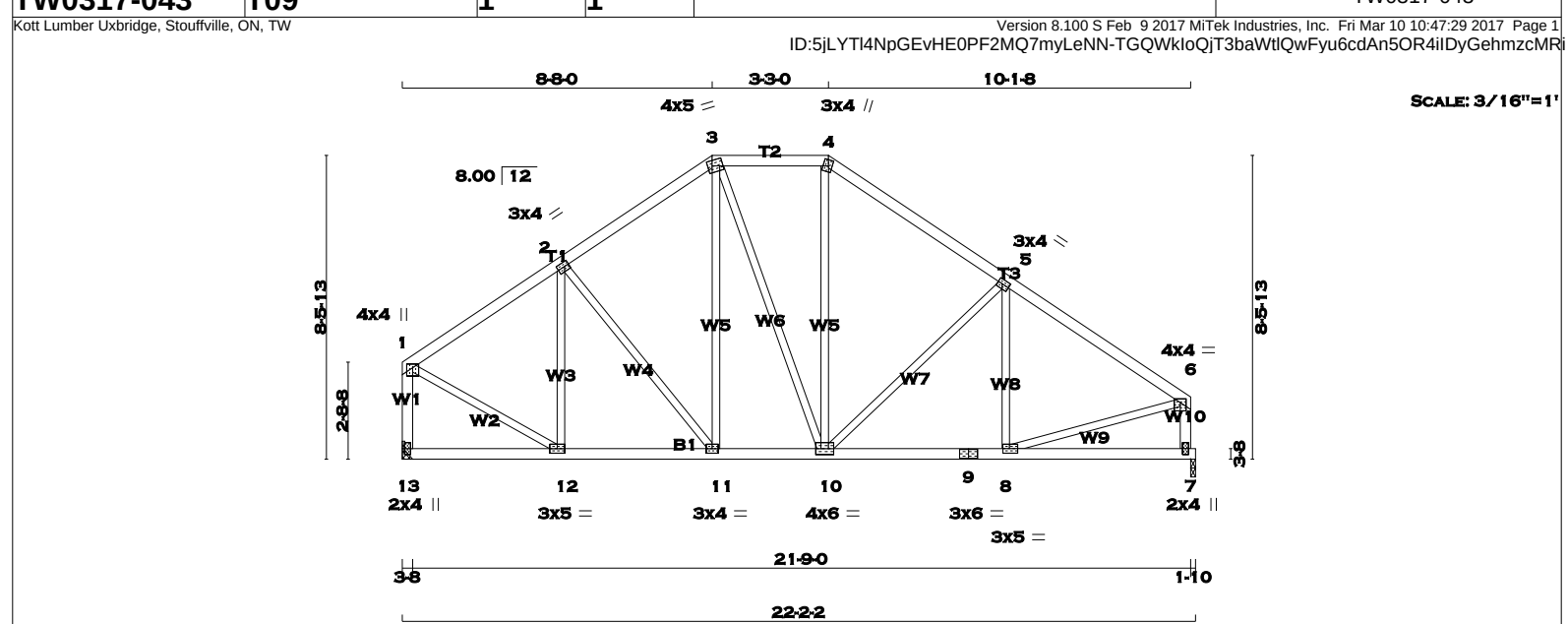
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (10) (INPUT = 0.90)
JSI METAL= 0.36 (5) (INPUT = 1.00)

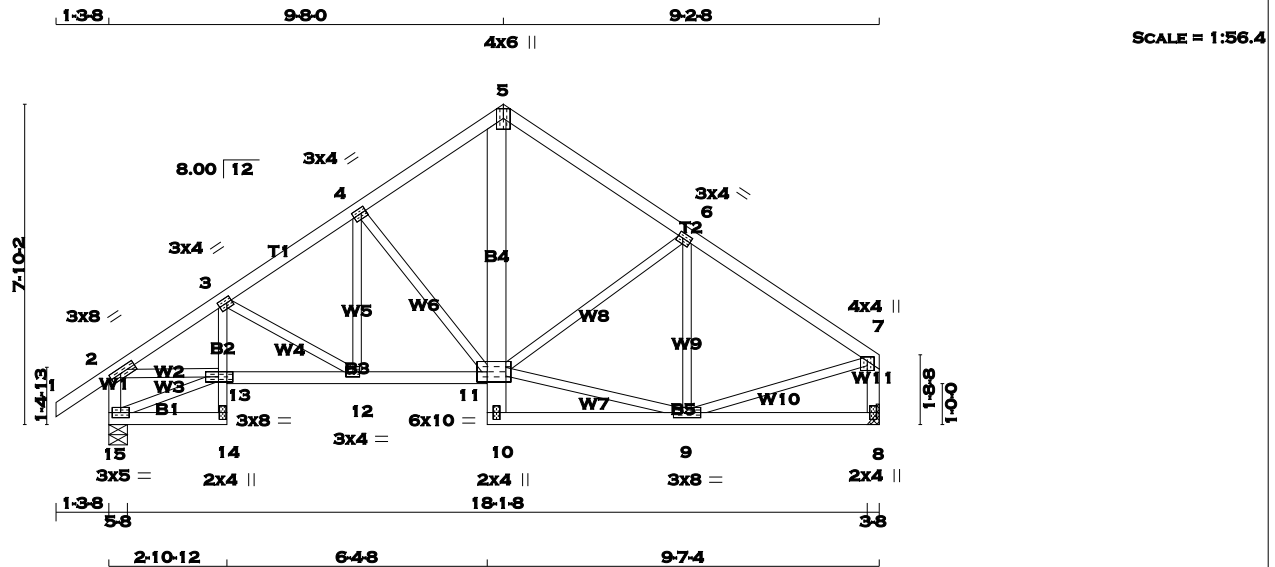


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TOTAL WEIGHT = 105 lb	
[M][F]	
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 13- 1 2x4 DRY No.2 SPF 7 - 6 2x4 DRY No.2 SPF 13- 9 2x4 DRY No.2 SPF 9 - 7 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.	
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 1 TMVW+p MT20 4.0 4.0 1.25 2.00 2 TMVW-t MT20 3.0 4.0 1.50 1.50 3 TTWW-m MT20 4.0 5.0 1.75 1.50 4 TTW+m MT20 3.0 4.0 2.00 1.25 5 TMVW-t MT20 3.0 4.0 1.50 1.50 6 TMVW-p MT20 4.0 4.0 1.25 2.00 7 BMV1+p MT20 2.0 4.0 8 BMWW-t MT20 3.0 5.0 1.50 2.25 9 BS-t MT20 3.0 6.0 10 BMVWW-t MT20 4.0 6.0 11 BMWW-t MT20 3.0 4.0 12 BMWW-t MT20 3.0 5.0 13 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.	
March 10, 2017	
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.	
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LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 5	2x4	No.2			
5 - 7	2x4	No.2			
15 - 2	2x4	No.2			
8 - 7	2x4	No.2			
15 - 14	2x4	No.2			
14 - 3	2x3	No.2			
13 - 11	2x4	No.2			
10 - 5	2x6	No.2			
10 - 8	2x4	No.2			
ALL WEBS EXCEPT	2x3	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		REQRD	
JT		VERT	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
8		895	0	895	0	0	HANGER BY OTHERS		
15		1001	0	1001	0	0	MIN. SEAT SIZE: 3-8		
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
8		628	439 / 0	0 / 0	0 / 0	0 / 0	189 / 0	0 / 0	
15		700	503 / 0	0 / 0	0 / 0	0 / 0	197 / 0	0 / 0	

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

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			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	8.0	1.50 3.25
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TMWW-t	MT20	3.0	4.0	1.50 1.50
5	TTV+p	MT20	4.0	6.0	Edge
6	TMWW-t	MT20	3.0	4.0	1.50 1.50
7	TMVW+p	MT20	4.0	4.0	1.25 2.00
8	BMV1+p	MT20	2.0	4.0	
9	BMWWW-t	MT20	3.0	8.0	
10	BMV+p	MT20	2.0	4.0	
11	BVMWWW-t	MT20	6.0	10.0	3.00 3.00
12	BMWW-t	MT20	3.0	4.0	
13	BVMWW-t	MT20	3.0	8.0	Edge 4.25
14	BMV+p	MT20	2.0	4.0	
15	BMVW1-t	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.

BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.40 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MAX. FACTORED	MAX. FACTORED			
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX. FACTORED (LC)		
FR-TO			FROM	TO	FR-TO				
1-2		0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-6	-151 / 0	0.08 (1)
2-3		-1417 / 0	-77.3	-77.3	0.09 (1)	5.40	9-6	-270 / 4	0.09 (1)
3-4		-1095 / 0	-77.3	-77.3	0.12 (1)	5.93	11-9	0 / 705	0.16 (1)
4-5		-803 / 0	-77.3	-77.3	0.11 (1)	6.25	12-4	0 / 184	0.04 (1)
5-6		-782 / 0	-77.3	-77.3	0.21 (1)	6.25	4-11	-414 / 0	0.19 (1)
6-7		-880 / 0	-77.3	-77.3	0.22 (1)	6.25	3-12	-319 / 0	0.08 (1)
15-2		-971 / 0	0.0	0.0	0.10 (1)	7.81	2-13	0 / 1186	0.27 (1)
8-7		-862 / 0	0.0	0.0	0.09 (1)	7.81	9-7	0 / 783	0.18 (1)
							15-13	-15 / 0	0.00 (1)
15-14		0 / 14	-17.5	-17.5	0.04 (3)	10.00			
14-13		0 / 27	0.0	0.0	0.05 (1)	10.00			
13-3		0 / 108	0.0	0.0	0.07 (1)	10.00			
13-12		0 / 1195	-17.5	-17.5	0.22 (1)	10.00			
12-11		0 / 920	-17.5	-17.5	0.17 (1)	10.00			
10-11		0 / 35	0.0	0.0	0.05 (1)	10.00			
11-5		0 / 616	0.0	0.0	0.11 (1)	10.00			
10-9		0 / 62	-17.5	-17.5	0.11 (3)	10.00			
9-8		0 / 0	-17.5	-17.5	0.11 (3)	10.00			

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.63")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.63")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.22 (6-7:1), BC=0.22 (12-13:1), WB=0.27 (2-13:1), SSI=0.15 (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

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= 0.86 (13) (INPUT = 0.90)
JSI METAL= 0.29 (13) (INPUT = 1.00)

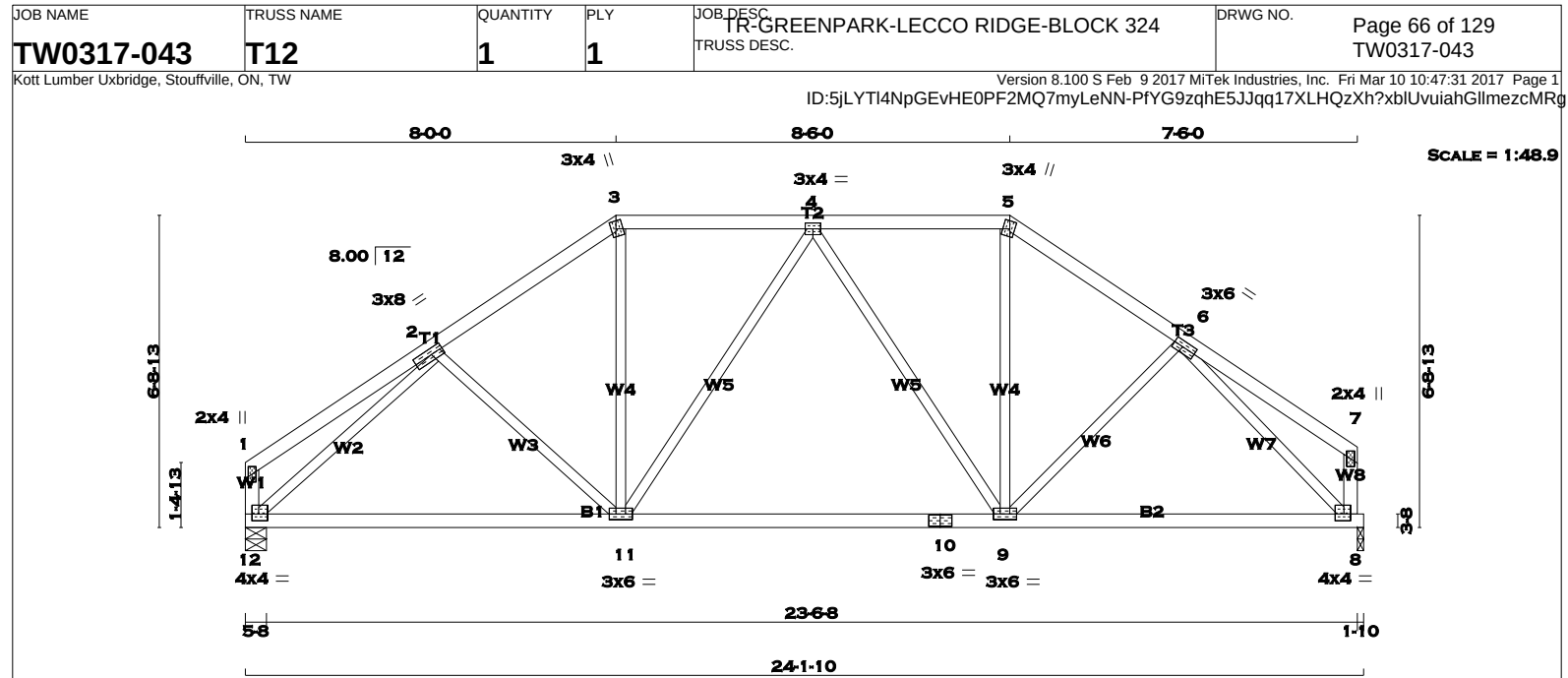


March 10, 2017

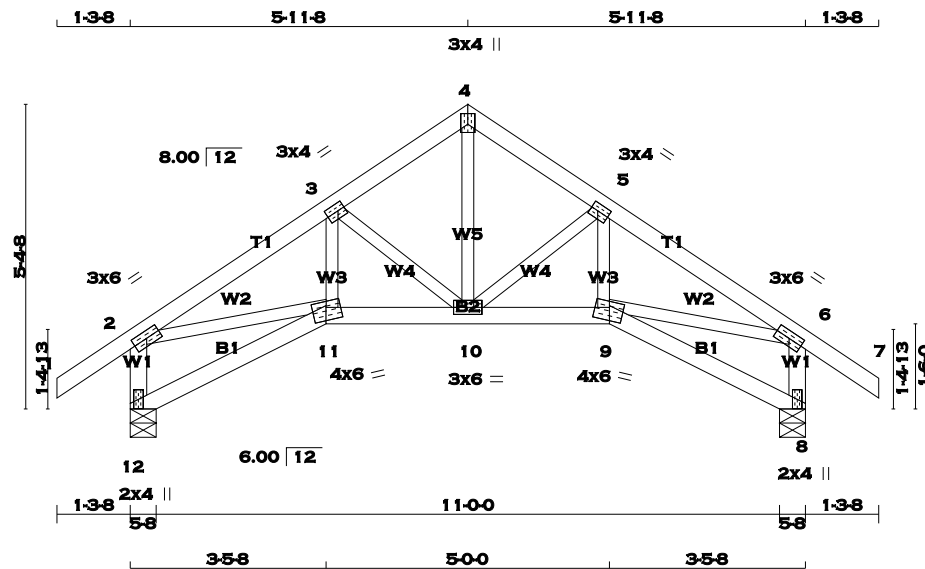


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17-4954
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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF			DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			DESIGN CRITERIA		
1 - 3	2x4	DRY	No.2	SPF		SPECIFIED LOADS:		
3 - 5	2x4	DRY	No.2	SPF		TOP CH. LL = 23.3 PSF		
5 - 7	2x4	DRY	No.2	SPF		DL = 3.0 PSF		
12 - 1	2x4	DRY	No.2	SPF		BOT CH. LL = 0.0 PSF		
8 - 7	2x4	DRY	No.2	SPF		DL = 7.0 PSF		
12 - 10	2x4	DRY	No.2	SPF		TOTAL LOAD = 33.3 PSF		
10 - 8	2x4	DRY	No.2	SPF		SPACING = 24.0 IN. C/C		
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF		LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM		
DRY: SEASONED LUMBER.			BEARINGS			THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010		
			UNFACTORED REACTIONS			THIS DESIGN COMPLIES WITH:		
			1ST LCASE MAX./MIN. COMPONENT REACTIONS			- PART 9 OF OBC 2012, BCBC 2012, ABC 2014		
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	- CSA 086-09
12	799	559 / 0	0 / 0	0 / 0	0 / 0	240 / 0	0 / 0	- TPIC 2011
8	799	559 / 0	0 / 0	0 / 0	0 / 0	240 / 0	0 / 0	(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD
			BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8			ALLOWABLE DEFL.(LL)= L/360 (0.80")		
			BRACING			CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")		
			TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.72 FT.			ALLOWABLE DEFL.(TL)= L/360 (0.80")		
			MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.			CALCULATED VERT. DEFL.(TL) = L/ 999 (0.13")		
			ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.			CSI: TC=0.19 (1-2:1), BC=0.35 (9-11:3), WB=0.69 (2-12:1), SSI=0.16 (3-4:1)		
			LOADING			DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10		
			TOTAL LOAD CASES: (3)			COMP=1.10 SHEAR=1.10 TENS= 1.10		
			CHORDS			COMPANION LIVE LOAD FACTOR = 0.50		
			MEMB. MAX. FACTORED FORCE (LBS)			TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .		
			VERT. LOAD LC1 MAX (PLF)			NAIL VALUES		
			FROM TO			PLATE GRIP(DRY) SHEAR SECTION		
			LENGTH			(PSI) (PLI) (PLI)		
			FR-TO			MAX MIN MAX MIN MAX MIN		
			1-2			MT20 618 354 1667 822 2284 1656		
			2-3			PLATE PLACEMENT TOL. = 0.250 inches		
			3-4			PLATE ROTATION TOL. = 5.0 Deg.		
			4-5			JSI GRIP= 0.88 (11) (INPUT = 0.90)		
			5-6			JSI METAL= 0.38 (12) (INPUT = 1.00)		
			6-7					
			7-8					
			8-7					
			12-11					
			11-10					
			10-9					
			9-8					



SCALE = 1:40.7

TOTAL WEIGHT = 53 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
12 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
12 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	6.0		
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-t	MT20	3.0	4.0	1.50	1.50
6	TMVW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		
9	BBWV-m	MT20	4.0	6.0	2.75	3.00
10	BMVWVW-t	MT20	3.0	6.0		
11	BBWV-m	MT20	4.0	6.0	2.75	3.00
12	BMV1+p	MT20	2.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
12	671	0	671	0	0	5-8	5-8
8	671	0	671	0	0	5-8	5-8

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	10-4	0 / 512	0.12 (1)
2-3	-914 / 0	-77.3	-77.3 0.12 (1)	6.25	10-5	-368 / 0	0.07 (1)
3-4	-590 / 0	-77.3	-77.3 0.08 (1)	6.25	9-5	0 / 146	0.03 (1)
4-5	-590 / 0	-77.3	-77.3 0.08 (1)	6.25	3-10	-368 / 0	0.07 (1)
5-6	-914 / 0	-77.3	-77.3 0.12 (1)	6.25	11-3	0 / 146	0.03 (1)
6-7	0 / 29	-77.3	-77.3 0.10 (1)	10.00	2-11	0 / 776	0.17 (1)
12-2	-641 / 0	0.0	0.0 0.07 (1)	7.81	9-6	0 / 776	0.17 (1)
8-6	-641 / 0	0.0	0.0 0.07 (1)	7.81			
12-11	0 / 0	-17.5	-17.5 0.06 (3)	10.00			
11-10	0 / 762	-17.5	-17.5 0.14 (1)	10.00			
10-9	0 / 762	-17.5	-17.5 0.14 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.06 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.40")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.40")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.12 (5-6:1) , BC=0.14 (10-11:1) ,
WB=0.17 (6-9:1) , SSI=0.10 (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

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (9) (INPUT = 0.90)
JSI METAL= 0.26 (2) (INPUT = 1.00)



March 10, 2017



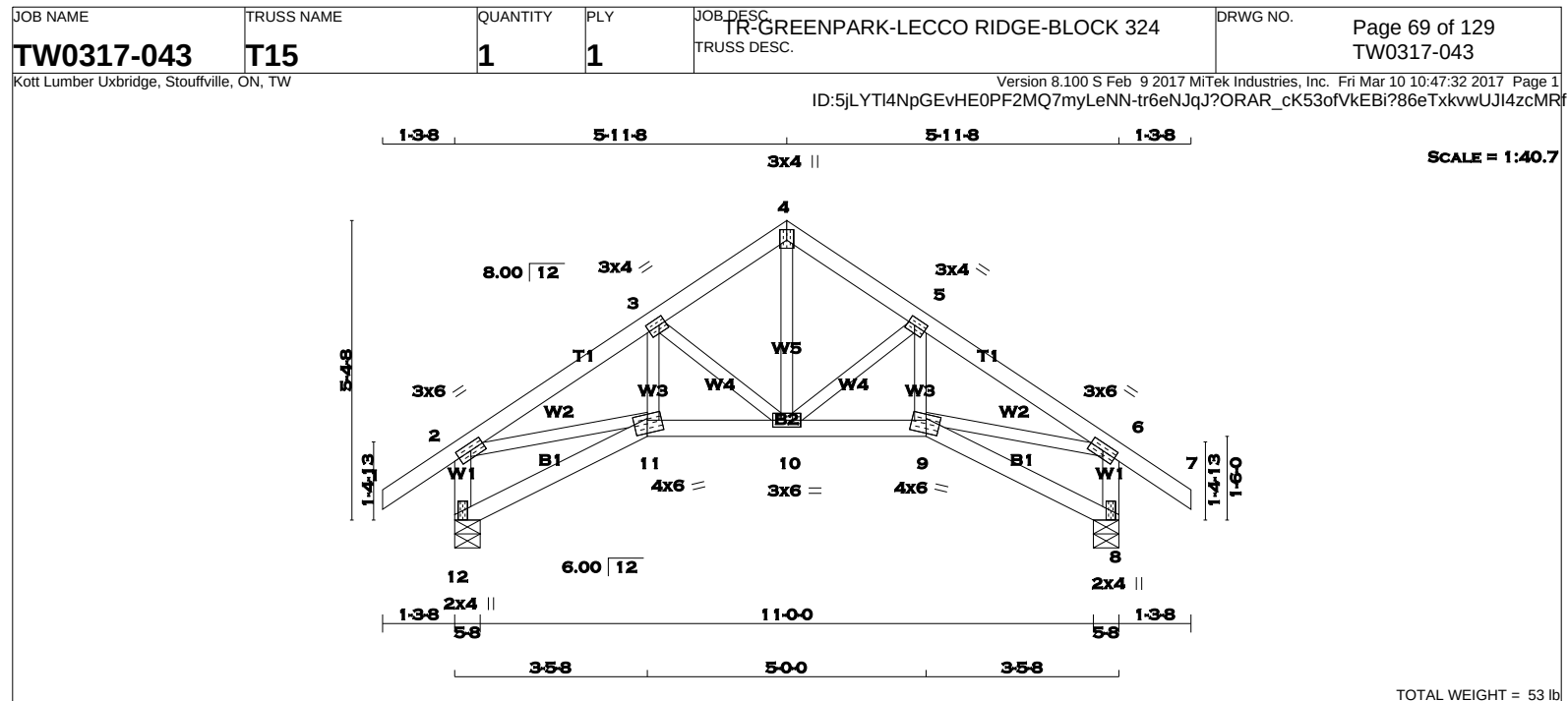
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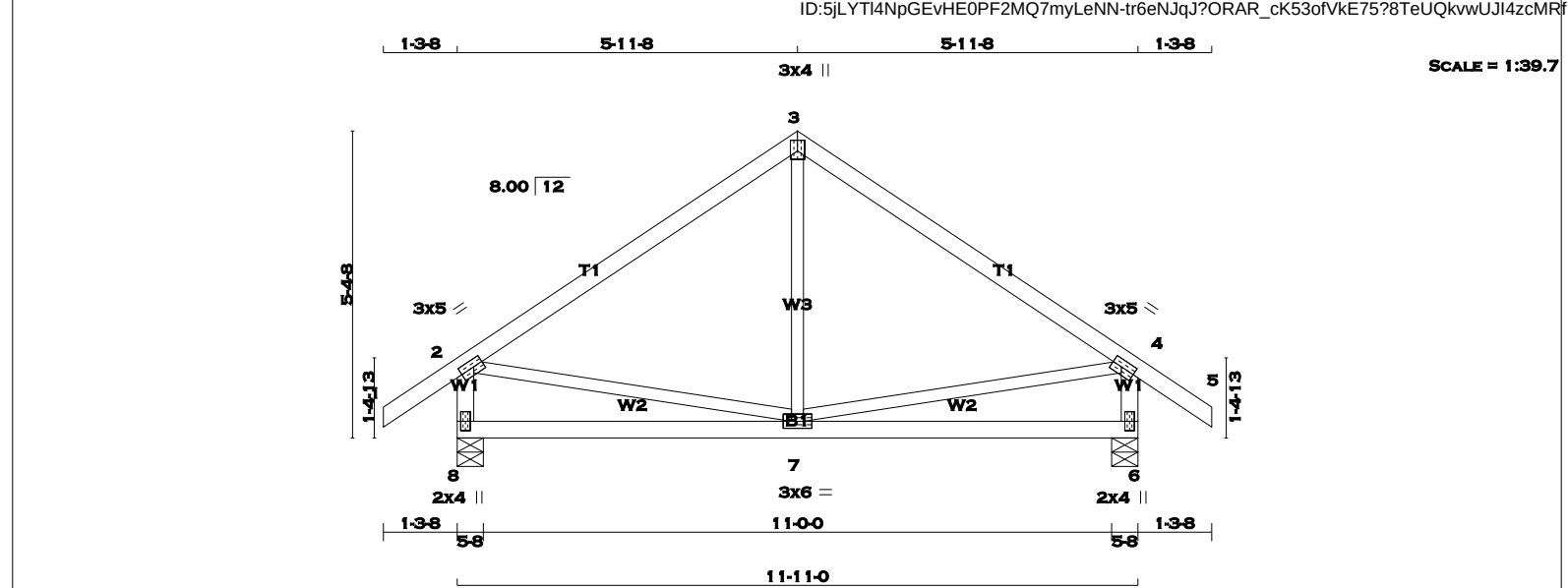


LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
1 - 4	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL	=	23.3 PSF
4 - 7	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	BOT CH.	LL	=	0.0 PSF
12 - 2	2x4	DRY	No.2	JT VERT	DOWN	HORIZ	UPLIFT	DL	=	3.0 PSF	
8 - 6	2x4	DRY	No.2	12 671	0	671	0	DL	=	7.0 PSF	
12 - 11	2x4	DRY	No.2	8 671	0	671	0	TOTAL LOAD	=	33.3 PSF	
11 - 9	2x4	DRY	No.2	UNFACTORED REACTIONS				SPACING = 24.0 IN./C			
9 - 8	2x4	DRY	No.2	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
ALL WEBS 2x3 DRY				JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
EXCEPT				12 469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0	
DRY: SEASONED LUMBER.				8 469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0	
				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8				THIS DESIGN COMPLIES WITH:			
				BRACING				- PART 9 OF OBC 2012, BCBC 2012, ABC 2014			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.				- CSA 086-09			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.				- TPIC 2011			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD			
				LOADING				ALLOWABLE DEFL.(LL)= L/360 (0.40")			
				TOTAL LOAD CASES: (3)				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")			
				CHORDS				ALLOWABLE DEFL.(TL)= L/360 (0.40")			
				MEMB. MAX. FACTORED FORCE (LBS)				CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")			
				VERT. LOAD LC1 MAX				CSI: TC=0.12 (5-6:1), BC=0.14 (10-11:1), WB=0.17 (6-9:1), SSI=0.10 (5-6:1)			
				FROM TO				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
				FR-TO				COMP=1.10 SHEAR=1.10 TENS= 1.10			
				1-2				COMPANION LIVE LOAD FACTOR = 0.50			
				2-3				AUTOSOLVE HEELS OFF			
				3-4				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
				4-5				NAIL VALUES			
				5-6				PLATE GRIP(DRY) SHEAR SECTION			
				6-7				(PSI) (PLI) (PLI)			
				7-8				MAX MIN MAX MIN MAX MIN			
				8-6				MT20 618 354 1667 822 2284 1656			
				12-11				PLATE PLACEMENT TOL. = 0.250 inches			
				11-10				PLATE ROTATION TOL. = 5.0 Deg.			
				10-9				JSI GRIP= 0.80 (9) (INPUT = 0.90)			
				9-8				JSI METAL= 0.26 (2) (INPUT = 1.00)			



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

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MAR 29, 2017
17-4954
BUILDING DIVISION



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.

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

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

8

671

0

671

0

0

5-8

5-8

6

671

0

671

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

8

469

341 / 0

0 / 0

0 / 0

0 / 0

127 / 0

0 / 0

6

469

341 / 0

0 / 0

0 / 0

0 / 0

127 / 0

0 / 0

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING =

24.0

IN. C/C

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

THIS DESIGN COMPLIES WITH:

PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014

CSA 086-09

TPIC 2011

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

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

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

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

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

CSI: TC=0.35 (3-4:1) , BC=0.18 (6-7:3) , WB=0.08 (2-7:1) , SSI=0.15 (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= 0.76 (7) (INPUT = 0.90)

JSI METAL= 0.18 (4) (INPUT = 1.00)

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

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0
6	469	341 / 0	0 / 0	0 / 0	0 / 0	127 / 0	0 / 0

PLATES (table is in inches)

DRY: SEASONED LUMBER.

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

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

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

CSA 086-09

TPIC 2011

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

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

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

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

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

CSI: TC=0.35 (3-4:1) , BC=0.18 (6-7:3) , WB=0.08 (2-7:1) , SSI=0.15 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

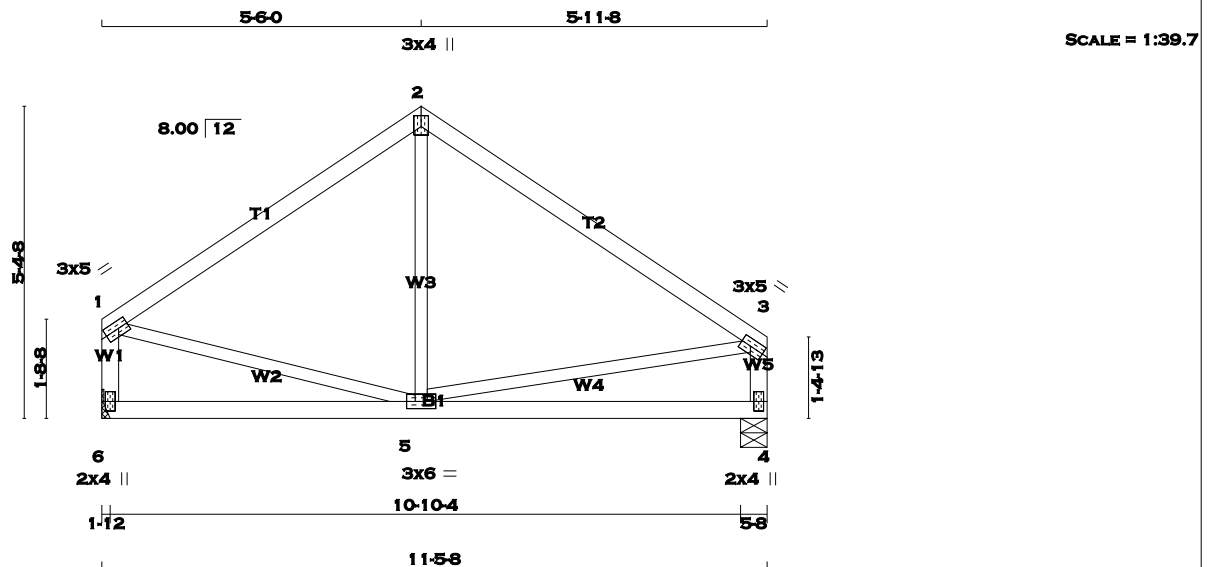
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.76 (7) (INPUT = 0.90)

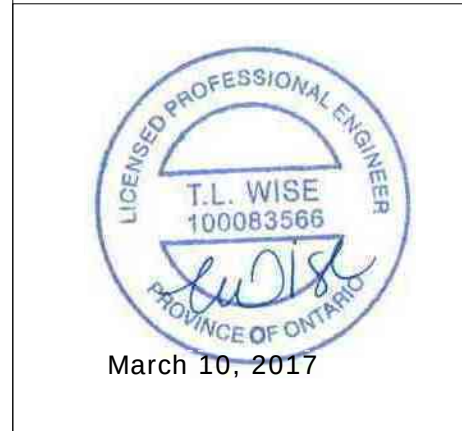
JSI METAL= 0.18 (4) (INPUT = 1.00)

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

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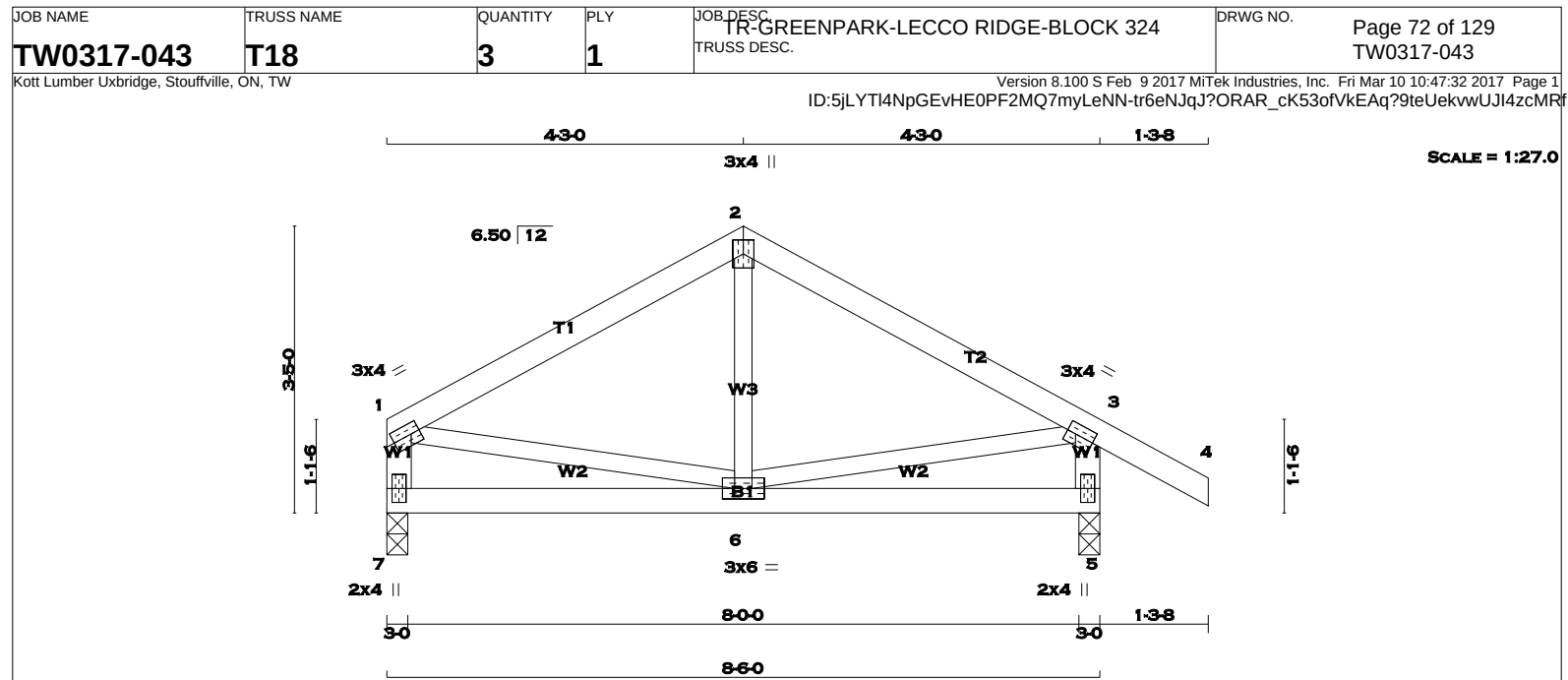


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF 1 - 2 2x4 DRY No.2 2 - 3 2x4 DRY No.2 6 - 1 2x4 DRY No.2 4 - 3 2x4 DRY No.2 6 - 4 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 6 543 0 543 0 0 HANGER BY OTHERS 4 543 0 543 0 0 MIN. SEAT SIZE: 1-12 5-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 6 381 267 / 0 0 / 0 0 / 0 0 / 0 115 / 0 0 / 0 4 381 267 / 0 0 / 0 0 / 0 0 / 0 115 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 4 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) CHORDS WEBS MEMB. MAX. FACTORED FORCE VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FACTORED FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1-2 -385 / 0 -77.3 -77.3 0.30 (1) 6.25 5-2 -16 / 94 0.03 (3) 2-3 -386 / 0 -77.3 -77.3 0.35 (1) 6.25 1-5 0 / 331 0.07 (1) 6-1 -510 / 0 0.0 0.0 0.05 (1) 7.81 5-3 0 / 326 0.07 (1) 4-3 -500 / 0 0.0 0.0 0.05 (1) 7.81 6-5 0 / 0 -17.5 -17.5 0.17 (3) 10.00 5-4 0 / 0 -17.5 -17.5 0.17 (3) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.38") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01") ALLOWABLE DEFL.(TL)= L/360 (0.38") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04") CSI: TC=0.35 (2-3:1) , BC=0.17 (5-6:3) , WB=0.07 (1-5:1) , SSI=0.15 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.70 (5) (INPUT = 0.90) JSI METAL= 0.15 (3) (INPUT = 1.00)			
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TOTAL WEIGHT = 3 X 33 = 99 lb										[M][F]
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.										
1 - 2	2x4	DRY	No.2	SPF						
2 - 4	2x4	DRY	No.2	SPF						
7 - 1	2x4	DRY	No.2	SPF						
5 - 3	2x4	DRY	No.2	SPF						
7 - 5	2x4	DRY	No.2	SPF						
ALL WEBS EXCEPT		2x3	DRY	No.2	SPF					
DRY: SEASONED LUMBER.										
PLATES (table is in inches)										
JT	TYPE	PLATES	W	LEN	Y	X				
1	TMVW-t	MT20	3.0	4.0	1.50	1.25				
2	TTW+p	MT20	3.0	4.0						
3	TMVW-t	MT20	3.0	4.0	1.50	1.25				
5	BMV1+p	MT20	2.0	4.0						
6	BMVWW-t	MT20	3.0	6.0						
7	BMV1+p	MT20	2.0	4.0						
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.										
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										
BEARINGS										
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG						
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX			
7	403	0	403	0	0	3-0	3-0			
5	508	0	508	0	0	3-0	3-0			
UNFACTORED REACTIONS										
	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL			
JT	283	198 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0			
7	354	261 / 0	0 / 0	0 / 0	0 / 0	93 / 0	0 / 0			
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5										
BRACING										
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.										
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										
LOADING										
TOTAL LOAD CASES: (3)										
CHORDS										
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	
FR-TO			FROM	TO		FR-TO				
1-2	-326 / 0	-77.3	-77.3	0.18 (1)	6.25	6-2	-18 / 67	0.02 (3)		
2-3	-326 / 0	-77.3	-77.3	0.18 (1)	6.25	1-6	0 / 292	0.07 (1)		
3-4	0 / 25	-77.3	-77.3	0.10 (1)	10.00	6-3	0 / 292	0.07 (1)		
7-1	-374 / 0	0.0	0.0	0.04 (1)	7.81					
5-3	-479 / 0	0.0	0.0	0.05 (1)	7.81					
7-6	0 / 0	-17.5	-17.5	0.09 (3)	10.00					
6-5	0 / 0	-17.5	-17.5	0.09 (3)	10.00					
DESIGN CRITERIA										
SPECIFIED LOADS:										
TOP	CH.	LL	=	23.3	PSF					
		DL	=	3.0	PSF					
BOT	CH.	LL	=	0.0	PSF					
		DL	=	7.0	PSF					
TOTAL	LOAD	=	33.3	PSF						
SPACING = 24.0 IN. C/C										
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010										
THIS DESIGN COMPLIES WITH:										
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014										
- CSA 086-09										
- TPIC 2011										
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD										
ALLOWABLE DEFL.(LL)= L/360 (0.28")										
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")										
ALLOWABLE DEFL.(TL)= L/360 (0.28")										
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")										
CSI: TC=0.18 (2-3:1) , BC=0.09 (6-7:3) , WB=0.07 (1-6:1) , 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= 0.70 (1) (INPUT = 0.90)										
JSI METAL= 0.17 (3) (INPUT = 1.00)										



March 10, 2017



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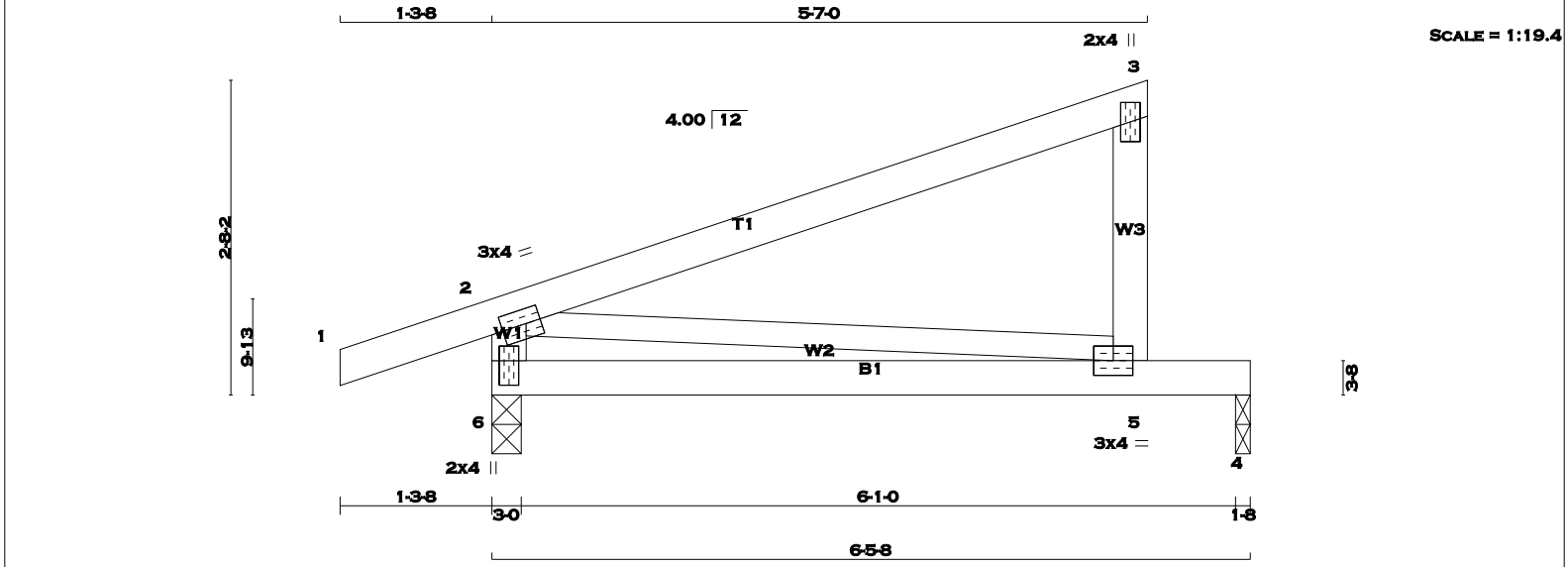


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TOTAL WEIGHT = 13 X 23 = 293 lb [M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.50
3	TMV+p	MT20	2.0	4.0		
5	BMVW-t	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0	2.50	1.00
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						

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

BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	405	0	405	0	0	3-0	3-0
4	243	0	243	0	0	1-8	1-8

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	282	210 / 0	0 / 0	0 / 0	0 / 0	0 / 0	72 / 0
4	172	112 / 0	0 / 0	0 / 0	0 / 0	0 / 0	60 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD (PLF)		MEMB.	MAX. FACTORED FORCE (LBS)		FACTORED MAX. CSI (LC)	
	FR-TO	TO	FROM	TO		FR-TO	TO	LENGTH	FR-TO
1-2	0 / 16	-77.3	-77.3	0.10 (1)	10.00	2-5	0 / 0	0.00 (1)	
2-3	0 / 0	-77.3	-77.3	0.41 (1)	10.00				
5-3	-216 / 0	0.0	0.0	0.03 (1)	7.81				
6-2	-319 / 0	0.0	0.0	0.03 (1)	7.81				
6-5	0 / 0	-17.5	-17.5	0.29 (1)	10.00				
5-4	0 / 0	-17.5	-17.5	0.28 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 444 (0.17")

CSI: TC=0.41 (2-3:1) , BC=0.29 (5-6:1) , WB=0.00 (2-5:1) , SSI=0.19 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

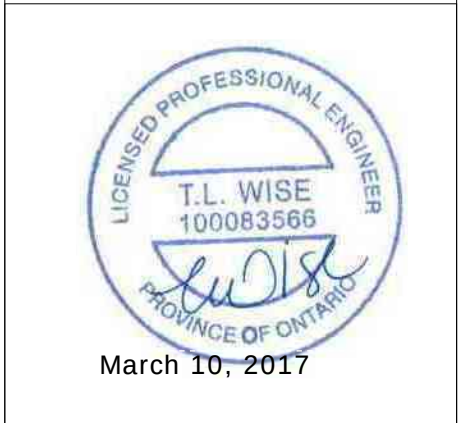
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (2) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)

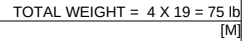


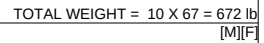
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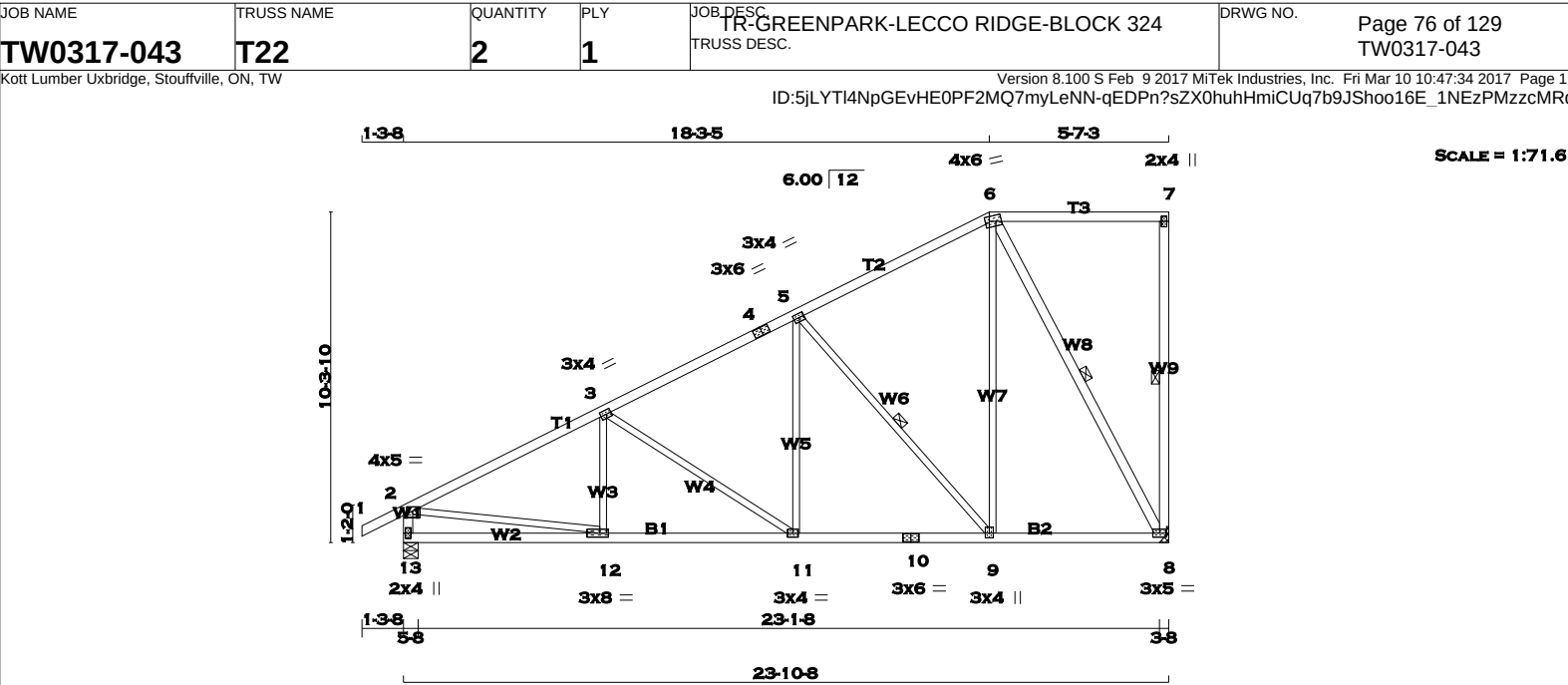


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LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2
8 - 7	2x4	DRY	No.2
13 - 2	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
10 - 8	2x4	DRY	No.2

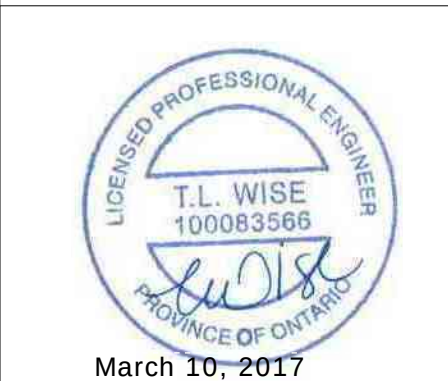
ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
6 - 8 2x4 DRY No.2 SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.75
6	TTWW-m	MT20	4.0	6.0	1.75	1.50
7	TMV+p	MT20	2.0	4.0		
8	BMVW1-t	MT20	3.0	5.0		
9	BMVW-t	MT20	3.0	4.0	1.75	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	4.0		
12	BMVW-t	MT20	3.0	8.0	1.50	3.25
13	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	INPUT DOWN	REQRD BRG IN-SX
8	1132	0	1132	0
13	1237	0	1237	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
8	795	556 / 0	0 / 0	0 / 0	239 / 0	0 / 0
13	866	619 / 0	0 / 0	0 / 0	247 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.88 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 20-0-0 . CBF = 27 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 18-0-0 . CBF = 90 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-8. DBS = 14-0-0 . CBF = 88 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	FACTORED MAX. LC1 (LBS)	FACTORED MAX. UNBRACED LENGTH (LBS)	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	FACTORED MAX. LC1 (LBS)
FR-TO					FR-TO		
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	12-3	-75 / 79	0.03 (3)
2-3	-1541 / 0	-77.3	-77.3 0.40 (1)	4.88	3-11	-460 / 0	0.46 (1)
3-4	-1133 / 0	-77.3	-77.3 0.32 (1)	5.59	11-5	0 / 356	0.08 (1)
4-5	-1133 / 0	-77.3	-77.3 0.32 (1)	5.59	5-9	-802 / 0	0.48 (1)
5-6	-562 / 0	-77.3	-77.3 0.33 (1)	6.25	9-6	0 / 716	0.16 (1)
6-7	0 / 0	-77.3	-77.3 0.41 (1)	10.00	6-8	-1006 / 0	0.72 (1)
8-7	-217 / 0	0.0	0.0 0.11 (1)	6.25	2-12	0 / 1410	0.32 (1)
13-2	-1191 / 0	0.0	0.0 0.12 (1)	7.32			
13-12	0 / 0	-17.5	-17.5 0.15 (3)	10.00			
12-11	0 / 1396	-17.5	-17.5 0.30 (1)	10.00			
11-10	0 / 1013	-17.5	-17.5 0.24 (1)	10.00			
10-9	0 / 1013	-17.5	-17.5 0.24 (1)	10.00			
9-8	0 / 491	-17.5	-17.5 0.18 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
	23.3	PSF

SPECIFIED LOADS:

BOT CH.	LL	PSF
	0.0	PSF

SPECIFIED LOADS:

	DL	PSF
	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 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.41 (6-7:1) , BC=0.30 (11-12:1) , WB=0.72 (6-8:1) , SSI=0.20 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

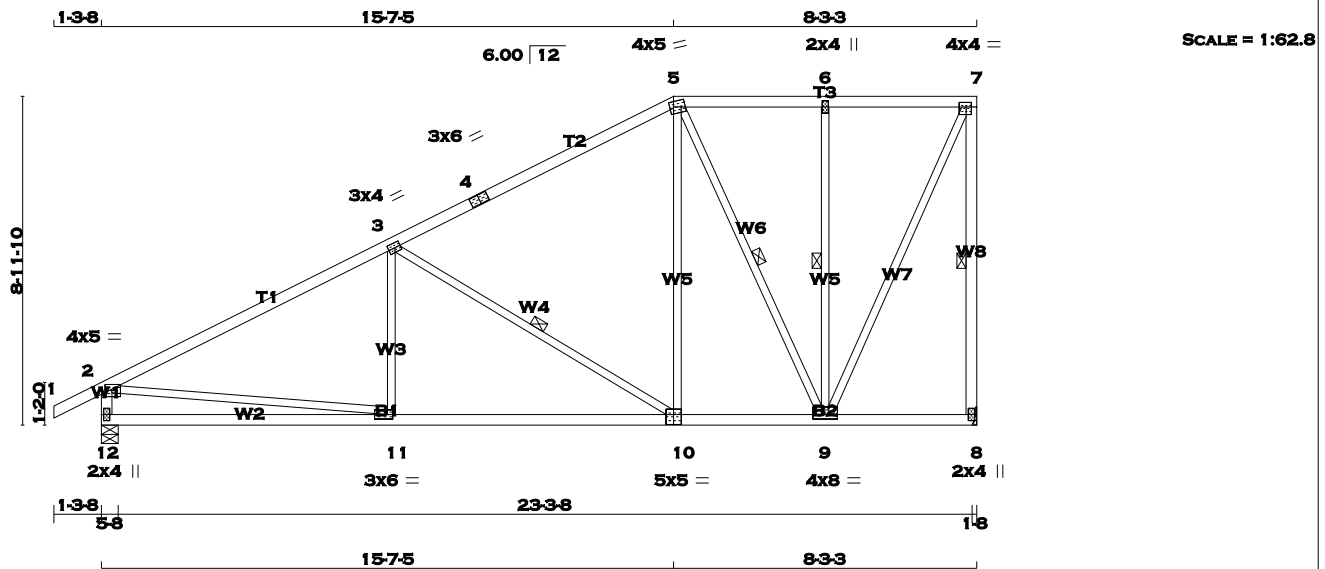
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.40 (2) (INPUT = 1.00)



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

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17-4954
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LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 5

2x4

DRY

No.2

SPF

5 - 7

2x4

DRY

No.2

SPF

8 - 7

2x4

DRY

No.2

SPF

12 - 2

2x4

DRY

No.2

SPF

12 - 10

2x4

DRY

No.2

SPF

10 - 8

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	TMW-p	MT20	4.0	5.0	1.50	2.25
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	5.0	1.75	1.25
6	TMW+w	MT20	2.0	4.0		
7	TMW-t	MT20	4.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMWWW-t	MT20	4.0	8.0	1.50	4.00
10	BSWW-I	MT20	5.0	5.0	3.25	2.50
11	BMWW-t	MT20	3.0	6.0	1.50	1.75
12	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
8	1132	0	1132	0
12	1237	0	1237	0

UNFACTORED REACTIONS

JT	1ST CASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	795	556 / 0	0 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0
12	866	619 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.35 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-10. DBS = 18-0-0 . CBF = 90 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9, 6-9. DBS = 20-0-0 . CBF = 72 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS			WEBS		
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	
1-2	0 / 23	-77.3 -77.3 0.10 (1)	10.00	11-3	0 / 135
2-3	-1517 / 0	-77.3 -77.3 0.73 (1)	4.35	3-10	-799 / 0
3-4	-823 / 0	-77.3 -77.3 0.65 (1)	5.62	10-5	0 / 526
4-5	-823 / 0	-77.3 -77.3 0.65 (1)	5.62	5-9	-575 / 0
5-6	-465 / 0	-77.3 -77.3 0.16 (1)	6.25	9-6	-393 / 0
6-7	-465 / 0	-77.3 -77.3 0.16 (1)	6.25	9-7	0 / 1082
8-7	-1100 / 0	0.0 0.0 0.41 (1)	6.04	2-11	0 / 1394
12-2	-1181 / 0	0.0 0.0 0.12 (1)	7.34		
12-11	0 / 0	-17.5 -17.5 0.27 (3)	10.00		
11-10	0 / 1386	-17.5 -17.5 0.38 (3)	10.00		
10-9	0 / 713	-17.5 -17.5 0.19 (1)	10.00		
9-8	0 / 0	-17.5 -17.5 0.06 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.80")

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

ALLOWABLE DEFL.(TL)= L/360 (0.80")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")

CSI: TC=0.73 (2-3:1) , BC=0.38 (10-11:3) , WB=0.47 (3-10:1) , SSI=0.26 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.40 (2) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

T.L. WISE

100083566

PROVINCE OF ONTARIO

March 10, 2017

KOTT

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

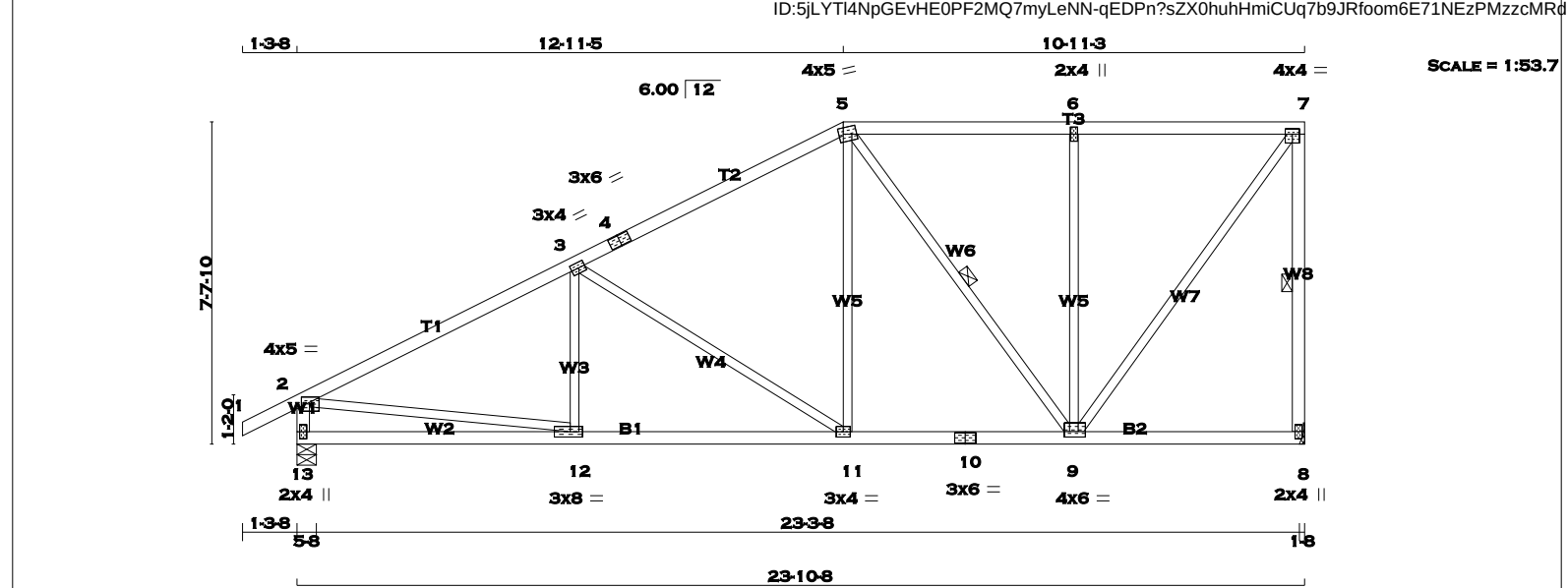
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TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION



TOTAL WEIGHT = 2 X 107 = 214 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	5.0	1.50	2.25
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	5.0	1.75	1.25
6	TMW-w	MT20	2.0	4.0		
7	TMVW-t	MT20	4.0	4.0	1.50	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVWW-t	MT20	4.0	6.0	1.50	1.50
10	BS-t	MT20	3.0	6.0		
11	BMVW-t	MT20	3.0	4.0		
12	BMVW-t	MT20	3.0	8.0	1.50	3.50
13	BMV1+p	MT20	2.0	4.0		
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						



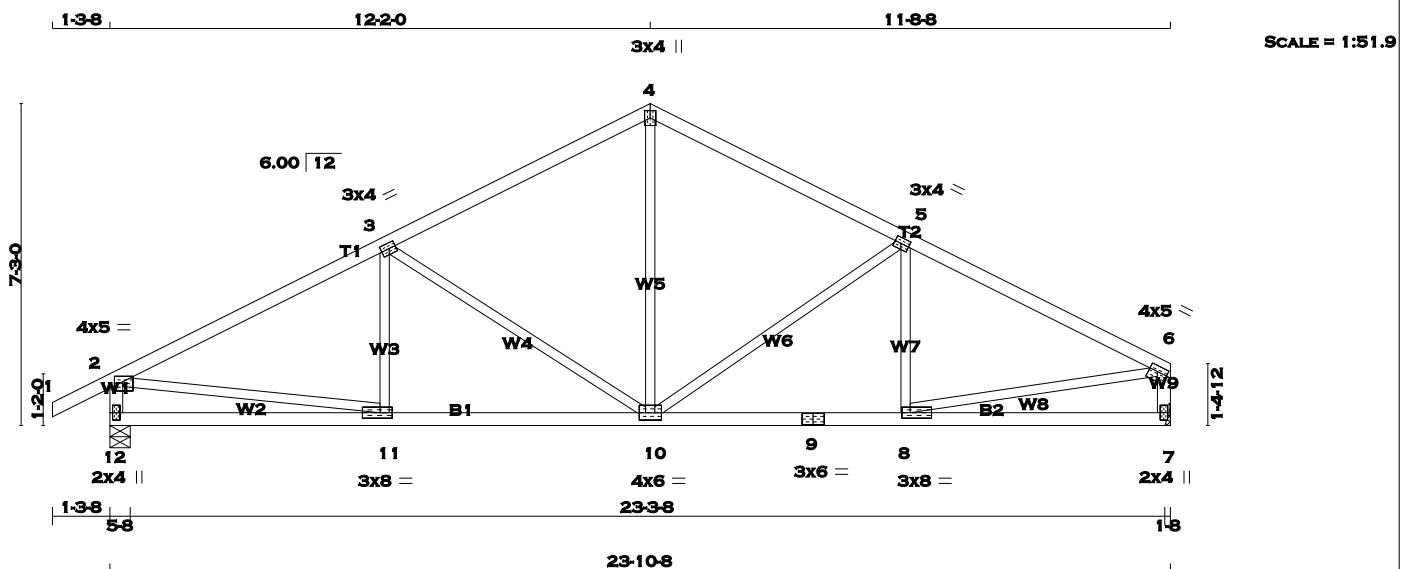
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
8		1132	0	1132	0	0		HANGER BY OTHERS	
13		1237	0	1237	0	0	5-8	MIN. SEAT SIZE: 1-8	5-8
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. LIVE		PERM.LIVE		WIND	
JT		COMBINED	SNOW					DEAD	SOIL
8		795	556 / 0	0 / 0		0 / 0	0 / 0	239 / 0	0 / 0
13		866	619 / 0	0 / 0		0 / 0	0 / 0	247 / 0	0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-8. DBS = 12-0-0 . CBF = 82 LBS.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-9. DBS = 20-0-0 . CBF = 48 LBS.									
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.									
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW									
LOADING									
TOTAL LOAD CASES: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED			
		FORCE	VERT. LOAD	LC1 MAX		FORCE	MAX		
		(LBS)	(PLF)	CSI (LC)	UNBRAC	(LBS)	CSI (LC)		
			FROM TO		LENGTH				
FR-TO									
1-2		0 / 23	-77.3 -77.3	0.10 (1)	10.00	12-3	-57 / 93	0.03 (3)	
2-3		-1551 / 0	-77.3 -77.3	0.48 (1)	4.75	3-11	-589 / 0	0.71 (1)	
3-4		-1051 / 0	-77.3 -77.3	0.43 (1)	5.57	11-5	0 / 418	0.09 (1)	
4-5		-1051 / 0	-77.3 -77.3	0.43 (1)	5.57	5-9	-381 / 0	0.22 (1)	
5-6		-694 / 0	-77.3 -77.3	0.30 (1)	6.25	9-6	-524 / 0	0.56 (1)	
6-7		-694 / 0	-77.3 -77.3	0.30 (1)	6.25	9-7	0 / 1162	0.26 (1)	
8-7		-1093 / 0	0.0 0.0	0.29 (1)	6.05	2-12	0 / 1423	0.32 (1)	
13-2		-1190 / 0	0.0 0.0	0.12 (1)	7.32				
13-12		0 / 0	-17.5 -17.5	0.18 (3)	10.00				
12-11		0 / 1411	-17.5 -17.5	0.32 (1)	10.00				
11-10		0 / 921	-17.5 -17.5	0.21 (1)	10.00				
10-9		0 / 921	-17.5 -17.5	0.21 (1)	10.00				
9-8		0 / 0	-17.5 -17.5	0.12 (3)	10.00				

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN./C/C									
LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.80") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06") ALLOWABLE DEFL.(TL)= L/360 (0.80") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")									
CSI: TC=0.48 (2-3:1) , BC=0.32 (11-12:1) , WB=0.71 (3-11:1) , SSI=0.22 (2-3:1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10									
COMPANION LIVE LOAD FACTOR = 0.50									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656									
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (7) (INPUT = 0.90) JSI METAL= 0.40 (2) (INPUT = 1.00)									



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

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MAR 29, 2017
17-4954
BUILDING DIVISION



TOTAL WEIGHT = 4 X 93 = 374 lb
[M][F]

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

PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Y	X			
2	TMWW-p	MT20	4.0	5.0	1.50	2.25			
3	TMWW-t	MT20	3.0	4.0	1.50	1.75			
4	TTW+p	MT20	3.0	4.0					
5	TMWW-t	MT20	3.0	4.0	1.50	1.75			
6	TMWW-t	MT20	4.0	5.0	1.50	2.25			
7	BMV1+p	MT20	2.0	4.0					
8	BMWW-t	MT20	3.0	8.0	1.50	2.25			
9	BS-t	MT20	3.0	6.0					
10	BMWW-t	MT20	4.0	6.0					
11	BMWW-t	MT20	3.0	8.0	1.50	3.25			
12	BMV1+p	MT20	2.0	4.0					

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



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

FACTORED			MAXIMUM FACTORED			INPUT	REQRD
JT	GROSS REACTION		GROSS REACTION			BRG	BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
12	1237	0	1237	0	0	5-8	5-8
7	1132	0	1132	0	0	HANGER BY OTHERS	
							MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT	REACTIONS			
12	866	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
7	795	556 / 0	0 / 0	0 / 0	0 / 0	239 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	11-3	-80 / 78	0.03 (3)
2-3	-1555 / 0	-77.3 -77.3	0.42 (1)	4.83	3-10	-519 / 0	0.51 (1)
3-4	-1121 / 0	-77.3 -77.3	0.38 (1)	5.51	10-4	0 / 638	0.14 (1)
4-5	-1120 / 0	-77.3 -77.3	0.36 (1)	5.56	10-5	-434 / 0	0.41 (1)
5-6	-1468 / 0	-77.3 -77.3	0.38 (1)	4.99	8-5	-133 / 58	0.04 (1)
12-2	-1191 / 0	0.0 0.0	0.12 (1)	7.32	2-11	0 / 1426	0.32 (1)
7-6	-1088 / 0	0.0 0.0	0.11 (1)	7.58	8-6	0 / 1357	0.31 (1)
12-11	0 / 0	-17.5 -17.5	0.15 (3)	10.00			
11-10	0 / 1413	-17.5 -17.5	0.30 (1)	10.00			
10-9	0 / 1334	-17.5 -17.5	0.28 (1)	10.00			
9-8	0 / 1334	-17.5 -17.5	0.28 (1)	10.00			
8-7	0 / 0	-17.5 -17.5	0.14 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.80")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.80")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.42 (2-3:1), BC=0.30 (10-11:1), WB=0.51 (3-10:1), SS=0.21 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

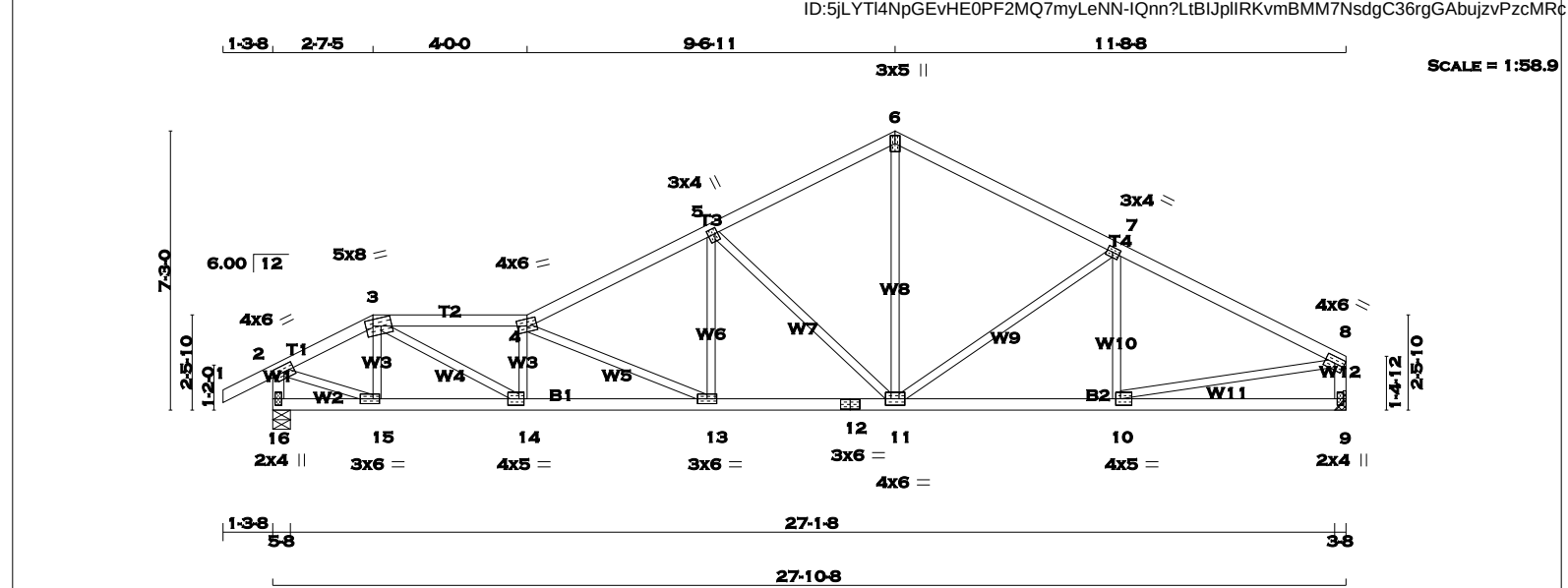
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (8) (INPUT = 0.90)
JSI METAL= 0.47 (6) (INPUT = 1.00)



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

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TOTAL WEIGHT = 2 X 110 = 221 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
16 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
16 - 12	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
DRY: SEASONED LUMBER.				

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	2.00	2.75
3	TTWW-m	MT20	5.0	8.0	2.00	2.25
4	TTWW-m	MT20	4.0	6.0	2.25	3.00
5	TMWW-t	MT20	3.0	4.0	1.75	0.75
6	TTW+p	MT20	3.0	5.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0		Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	4.0	5.0	2.00	1.50
11	BMWW-t	MT20	4.0	6.0		
12	BS-t	MT20	3.0	6.0		
13	BMWW-t	MT20	3.0	6.0		
14	BMWW-t	MT20	4.0	5.0	2.00	1.50
15	BMWW-t	MT20	3.0	6.0	1.50	2.00
16	BMV1+p	MT20	2.0	4.0		
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.						
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.						



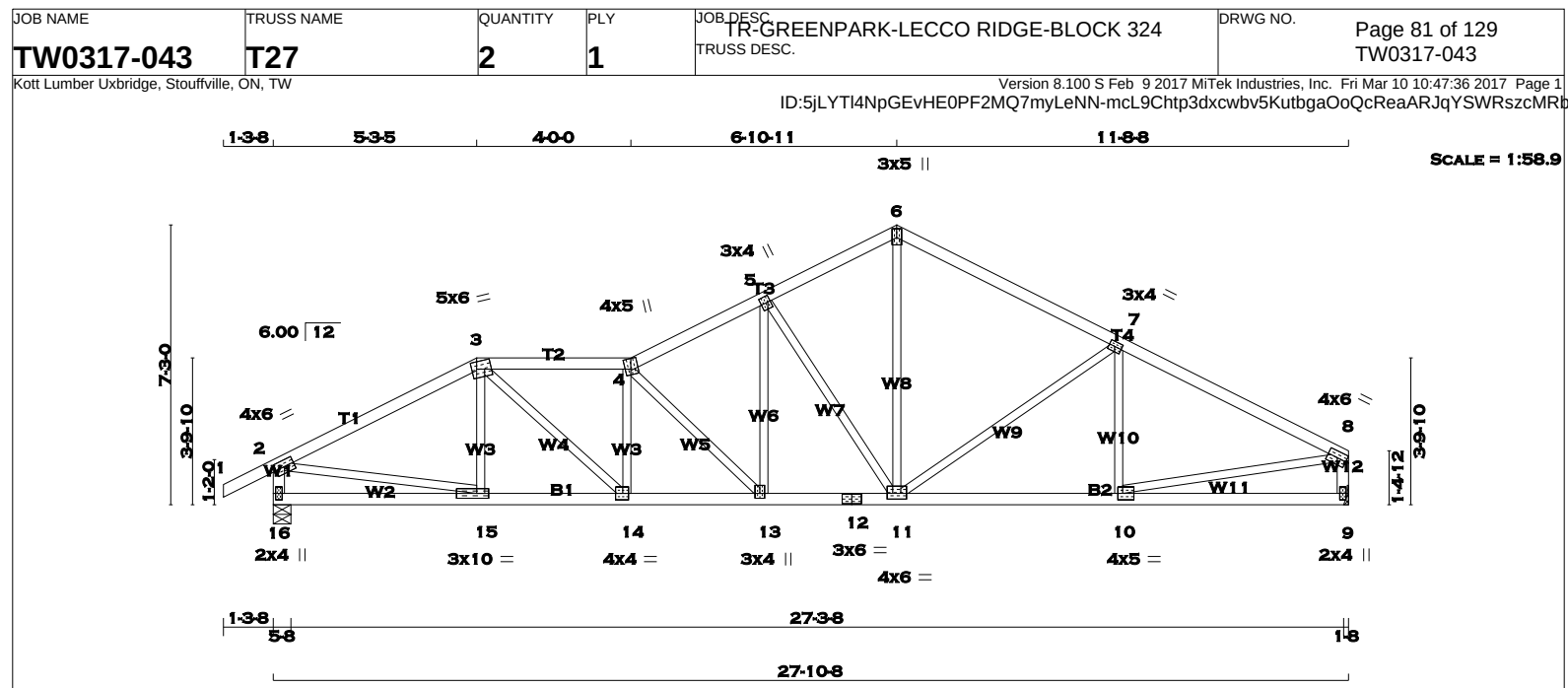
DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
16		1427	0	1427	0	0	5-8	5-8	
9		1322	0	1322	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 3-8									
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
16		999	712 / 0	0 / 0	0 / 0	0 / 0	287 / 0	0 / 0	
9		928	649 / 0	0 / 0	0 / 0	0 / 0	279 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.81 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (3)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MAX. FACTORED				
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX (LC)	
FR-TO			FROM	TO		FR-TO			
1-2		0 / 23	-77.3	-77.3	0.10 (1)	10.00	15-3	-386 / 0	0.06 (1)
2-3		-1649 / 0	-77.3	-77.3	0.10 (1)	5.09	3-14	0 / 1790	0.40 (1)
3-4		-3018 / 0	-77.3	-77.3	0.27 (1)	3.81	14-4	-822 / 0	0.13 (1)
4-5		-2225 / 0	-77.3	-77.3	0.29 (1)	4.33	4-13	-1152 / 0	0.55 (1)
5-6		-1472 / 0	-77.3	-77.3	0.25 (1)	5.15	13-5	0 / 571	0.13 (1)
6-7		-1477 / 0	-77.3	-77.3	0.37 (1)	4.99	5-11	-980 / 0	0.78 (1)
7-8		-1778 / 0	-77.3	-77.3	0.40 (1)	4.61	11-6	0 / 989	0.22 (1)
16-2		-1413 / 0	0.0	0.0	0.14 (1)	6.86	11-7	-383 / 0	0.36 (1)
9-8		-1278 / 0	0.0	0.0	0.13 (1)	7.13	10-7	-182 / 44	0.05 (1)
							2-15	0 / 1545	0.35 (1)
							10-8	0 / 1638	0.37 (1)
16-15		0 / 0	-17.5	-17.5	0.04 (3)	10.00			
15-14		0 / 1455	-17.5	-17.5	0.28 (1)	10.00			
14-13		0 / 3057	-17.5	-17.5	0.56 (1)	10.00			
13-12		0 / 2009	-17.5	-17.5	0.38 (1)	10.00			
12-11		0 / 2009	-17.5	-17.5	0.38 (1)	10.00			
11-10		0 / 1611	-17.5	-17.5	0.32 (1)	10.00			
10-9		0 / 0	-17.5	-17.5	0.14 (3)	10.00			

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH.	LL	=	23.3	PSF					
	DL	=	3.0	PSF					
BOT CH.	LL	=	0.0	PSF					
	DL	=	7.0	PSF					
TOTAL LOAD				=	33.3	PSF			
SPACING = 24.0 IN./C/C									
LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 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 (0.93")									
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")									
ALLOWABLE DEFL.(TL)= L/360 (0.93")									
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.26")									
CSI: TC=0.40 (7-8:1), BC=0.56 (13-14:1), WB=0.78 (5-11:1), SSI=0.20 (7-8:1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10									
COMP=1.10 SHEAR=1.10 TENS= 1.10									
COMPANION LIVE LOAD FACTOR = 0.50									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.									
NAIL VALUES									
PLATE GRIP(DRY)	SHEAR	SECTION							
(PSI)	(PLI)	(PLI)							
MAX MIN	MAX MIN	MAX MIN							
MT20	618	354	1667	822	2284	1656			
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.90 (13) (INPUT = 0.90)									
JSI METAL= 0.50 (12) (INPUT = 1.00)									



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

1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
16 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
16 - 12	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

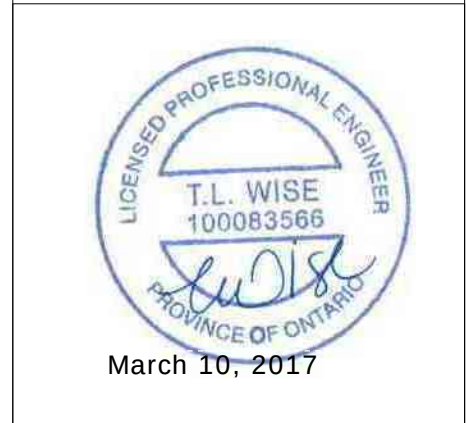
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	2.00	3.00
3	TTWW-m	MT20	5.0	6.0	2.25	1.50
4	TTWW+m	MT20	4.0	5.0	3.25	1.75
5	TMWW+t	MT20	3.0	4.0	2.00	0.75
6	TTW+p	MT20	3.0	5.0	2.75	1.50
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0		Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	4.0	5.0	2.00	1.50
11	BMWWW-t	MT20	4.0	6.0	1.75	3.00
12	BS-t	MT20	3.0	6.0		
13	BMWW+t	MT20	3.0	4.0	1.50	1.50
14	BMWW-t	MT20	4.0	4.0	2.00	1.75
15	BMWW-t	MT20	3.0	10.0	1.50	3.75
16	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD
JT	VERT	HORZ	DOWN	BRG
16	1427	0	1427	0
9	1322	0	1322	0

UPLIFT IN-SX 5-8
HANGER BY OTHERS
MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS
16	999	712 / 0
9	928	649 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MAX. FACTORED UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)
FR-TO						FR-TO			
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	15-3	-161 / 31	0.04 (1)	10.00
2-3	-1824 / 0	-77.3	-77.3	0.33 (1)	4.64	3-14	0 / 928	0.21 (1)	10.00
3-4	-2315 / 0	-77.3	-77.3	0.22 (1)	4.32	14-4	-569 / 0	0.13 (1)	10.00
4-5	-1965 / 0	-77.3	-77.3	0.15 (1)	4.70	4-13	-801 / 0	0.32 (1)	10.00
5-6	-1465 / 0	-77.3	-77.3	0.13 (1)	5.30	13-5	0 / 621	0.14 (1)	10.00
6-7	-1477 / 0	-77.3	-77.3	0.37 (1)	4.99	5-11	-856 / 0	0.59 (1)	10.00
7-8	-1778 / 0	-77.3	-77.3	0.40 (1)	4.61	11-6	0 / 1027	0.23 (1)	10.00
16-2	-1387 / 0	0.0	0.0	0.14 (1)	6.91	11-7	-383 / 0	0.36 (1)	10.00
9-8	-1278 / 0	0.0	0.0	0.13 (1)	7.13	10-7	-183 / 45	0.05 (1)	10.00
						2-15	0 / 1651	0.37 (1)	10.00
						10-8	0 / 1638	0.37 (1)	10.00
16-15	0 / 0	-17.5	-17.5	0.10 (3)	10.00				
15-14	0 / 1626	-17.5	-17.5	0.31 (1)	10.00				
14-13	0 / 2332	-17.5	-17.5	0.42 (1)	10.00				
13-12	0 / 1771	-17.5	-17.5	0.34 (1)	10.00				
12-11	0 / 1771	-17.5	-17.5	0.34 (1)	10.00				
11-10	0 / 1611	-17.5	-17.5	0.32 (1)	10.00				
10-9	0 / 0	-17.5	-17.5	0.14 (3)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 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 (0.93")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.93")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.20")

CSI: TC=0.40 (7-8:1), BC=0.42 (13-14:1), WB=0.59 (5-11:1), SSI=0.20 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

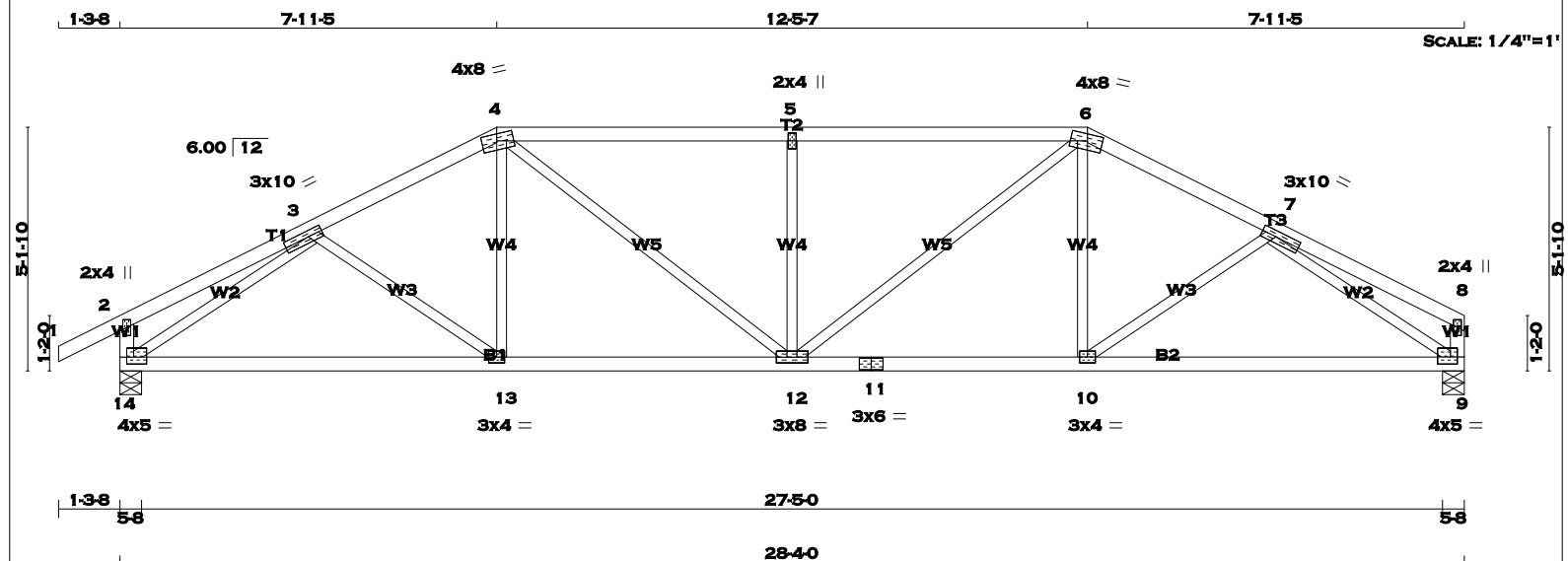
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (13) (INPUT = 0.90)
JSI METAL= 0.49 (2) (INPUT = 1.00)



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

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TOTAL WEIGHT = 2 X 109 = 217 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
14 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY
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	10.0	1.50	3.75
4	TTWW-m	MT20	4.0	8.0	1.75	3.75
5	TMV+w	MT20	2.0	4.0		
6	TTWW-m	MT20	4.0	8.0	1.75	3.75
7	TMWW-t	MT20	3.0	10.0	1.50	3.75
8	TMV+p	MT20	2.0	4.0		
9	BMVW1-t	MT20	4.0	5.0	1.75	1.75
10	BMWW-t	MT20	3.0	4.0		
11	BS-t	MT20	3.0	6.0		
12	BMWWWW-t	MT20	3.0	8.0		
13	BMWW-t	MT20	3.0	4.0		
14	BMVW1-t	MT20	4.0	5.0	1.75	1.75

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

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

BUILDING BEARINGS

	FACTORED		MAXIMUM FACTORED			INPUT	REQD
	GROSS	REACTION	GROSS	REACTION	UPLIFT	BRG	BRG
JT	VERT	HORZ	DOWN	HORZ		IN-SX	IN-SX
14	1449	0	1449	0	0	5-8	5-8
9	1344	0	1344	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	1014	723/0	0/0	0/0	0/0	291/0	0/0
9	943	660/0	0/0	0/0	0/0	283/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEB S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LOAD CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO			
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	3-13	-24 / 58	0.02 (3)
2-3	0 / 14	-77.3	-77.3	0.17 (1)	10.00	13-4	0 / 164	0.05 (3)
3-4	-1812 / 0	-77.3	-77.3	0.17 (1)	4.83	4-12	0 / 547	0.12 (1)
4-5	-2042 / 0	-77.3	-77.3	0.45 (1)	4.28	12-5	-591 / 0	0.23 (1)
5-6	-2042 / 0	-77.3	-77.3	0.45 (1)	4.28	12-6	0 / 547	0.12 (1)
6-7	-1812 / 0	-77.3	-77.3	0.17 (1)	4.83	10-6	0 / 163	0.05 (3)
7-8	0 / 14	-77.3	-77.3	0.17 (1)	10.00	10-7	-24 / 58	0.02 (3)
14-2	-228 / 0	0.0	0.0	0.02 (1)	7.81	14-3	-1999 / 0	0.78 (1)
9-8	-123 / 0	0.0	0.0	0.01 (1)	7.81	7-9	-1999 / 0	0.78 (1)
14-13	0 / 1626	-17.5	-17.5	0.40 (1)	10.00			
13-12	0 / 1610	-17.5	-17.5	0.40 (1)	10.00			
12-11	0 / 1610	-17.5	-17.5	0.40 (1)	10.00			
11-10	0 / 1610	-17.5	-17.5	0.40 (1)	10.00			
10-9	0 / 1626	-17.5	-17.5	0.40 (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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.45 (4-5:1) , BC=0.40 (13-14:1) ,
WB=0.78 (3-14:1) , SSI=0.23 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (4) (INPUT = 0.90)
JSI METAL= 0.49 (14) (INPUT = 1.00)



March 10, 2017



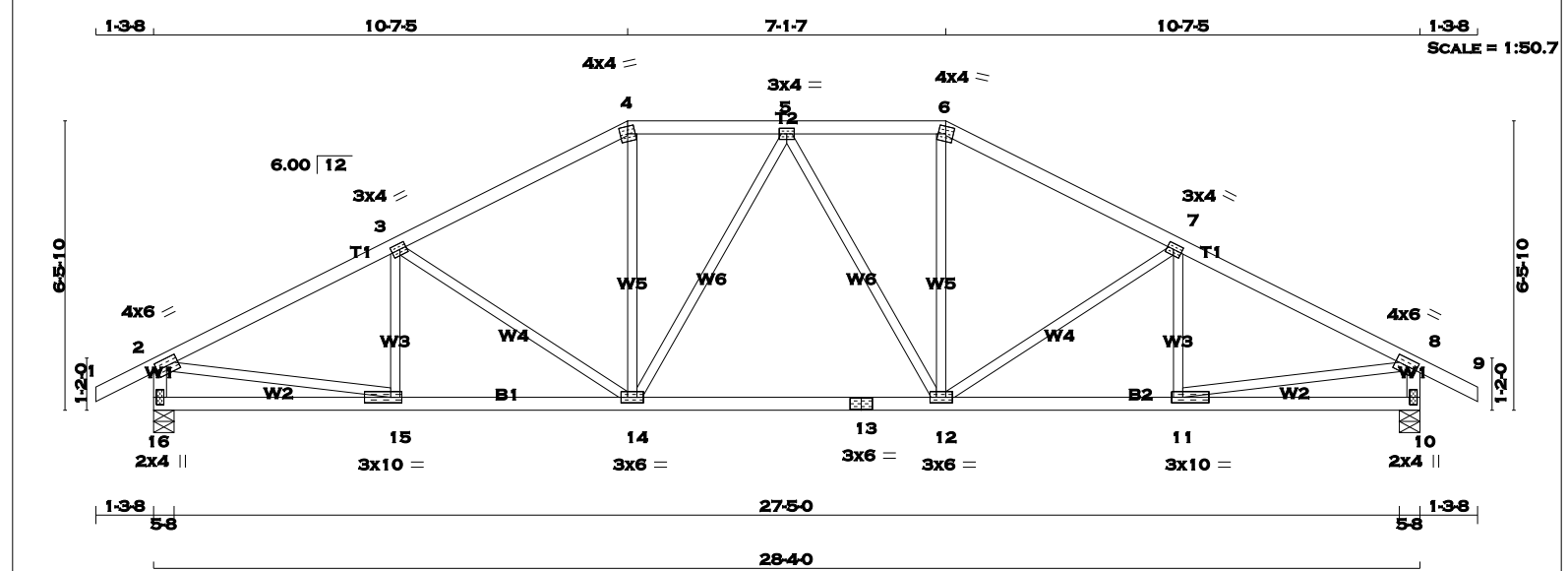
**READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.**

RECEIVED
TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

6 - 9

2x4

DRY

No.2

SPF

16 - 2

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

16 - 13

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

16

1449

0

1449

0

0

5-8

5-8

10

1449

0

1449

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

COMBINED

SNOW

LIVE

PERM. LIVE

WIND

DEAD

SOIL

16

1014

723 / 0

0 / 0

0 / 0

0 / 0

291 / 0

0 / 0

10

1014

723 / 0

0 / 0

0 / 0

0 / 0

291 / 0

0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 10

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MAX. FACTORED

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

FORCE

MAX

(LBS)

(PLF)

CSI (LC)

UNBRAC

(LBS)

CSI (LC)

FR-TO

FROM

TO

LENGTH

FR-TO

1-2

0 / 23

-77.3

-77.3

0.10 (1)

10.00

15-3

-181 / 30

0.04 (1)

2-3

-1912 / 0

-77.3

-77.3

0.33 (1)

4.56

3-14

-335 / 0

0.25 (1)

3-4

-1644 / 0

-77.3

-77.3

0.31 (1)

4.86

14-4

0 / 464

0.10 (1)

4-5

-1458 / 0

-77.3

-77.3

0.14 (1)

5.30

14-5

-188 / 0

0.18 (1)

5-6

-1458 / 0

-77.3

-77.3

0.14 (1)

5.30

5-12

-188 / 0

0.18 (1)

6-7

-1644 / 0

-77.3

-77.3

0.31 (1)

4.86

12-6

0 / 464

0.10 (1)

7-8

-1912 / 0

-77.3

-77.3

0.33 (1)

4.56

12-7

-335 / 0

0.25 (1)

8-9

0 / 23

-77.3

-77.3

0.10 (1)

10.00

11-7

-181 / 30

0.04 (1)

16-2

-1406 / 0

0.0

0.0

0.14 (1)

6.87

2-15

0 / 1750

0.39 (1)

10-8

-1406 / 0

0.0

0.0

0.14 (1)

6.87

11-8

0 / 1750

0.39 (1)

16-15

0 / 0

-17.5

-17.5

0.10 (3)

10.00

15-14

0 / 1729

-17.5

-17.5

0.36 (1)

10.00

14-13

0 / 1550

-17.5

-17.5

0.33 (1)

10.00

13-12

0 / 1550

-17.5

-17.5

0.33 (1)

10.00

12-11

0 / 1729

-17.5

-17.5

0.36 (1)

10.00

11-10

0 / 0

-17.5

-17.5

0.10 (3)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING

=

24.0

IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.94")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")

ALLOWABLE DEFL.(TL)= L/360 (0.94")

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

CSI: TC=0.33 (7-8:1), BC=0.36 (11-12:1), WB=0.39 (8-11:1), SSI=0.18 (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 (15) (INPUT = 0.90)

JSI METAL= 0.51 (8) (INPUT = 1.00)

LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 4

2x4

DRY

No.2

SPF

4 - 6

2x4

DRY

No.2

SPF

6 - 9

2x4

DRY

No.2

SPF

16 - 2

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

16 - 13

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMVW-t

MT20

4.0

6.0

2.00

2.75

3

TMVW-t

MT20

3.0

4.0

1.50

1.75

4

TTW-m

MT20

4.0

4.0

5

TMVW-t

MT20

3.0

4.0

6

TTW-m

MT20

4.0

4.0

7

TMVW-t

MT20

3.0

4.0

1.50

1.75

8

TMVW-t

MT20

4.0

6.0

2.00

2.75

10

BMV1+p

MT20

2.0

4.0

11

BMVW-t

MT20

3.0

10.0

1.50

3.00

12

BMVW-t

MT20

3.0

6.0

13

BS-t

MT20

3.0

6.0

14

BMVW-t

MT20

3.0

6.0

15

BMVW-t

MT20

3.0

10.0

1.50

3.00

16

BMV1+p

MT20

2.0

4.0

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

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

16

1449

0

1449

0

0

5-8

5-8

10

1449

0

1449

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

COMBINED

SNOW

LIVE

PERM. LIVE

WIND

DEAD

SOIL

16

1014

723 / 0

0 / 0

0 / 0

0 / 0

291 / 0

0 / 0

10

1014

723 / 0

0 / 0

0 / 0

0 / 0

291 / 0

0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 10

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MAX. FACTORED

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

FORCE

MAX

(LBS)

(PLF)

CSI (LC)

UNBRAC

(LBS)

CSI (LC)

FR-TO

FROM

TO

LENGTH

FR-TO

1-2

0 / 23

-77.3

-77.3

0.10 (1)

10.00

15-3

-181 / 30

0.04 (1)

2-3

-1912 / 0

-77.3

-77.3

0.33 (1)

4.56

3-14

-335 / 0

0.25 (1)

3-4

-1644 / 0

-77.3

-77.3

0.31 (1)

4.86

14-4

0 / 464

0.10 (1)

4-5

-1458 / 0

-77.3

-77.3

0.14 (1)

5.30

14-5

-188 / 0

0.18 (1)

5-6

-1458 / 0

-77.3

-77.3

0.14 (1)

5.30

5-12

-188 / 0

0.18 (1)

6-7

-1644 / 0

-77.3

-77.3

0.31 (1)

4.86

12-6

0 / 464

0.10 (1)

7-8

-1912 / 0

-77.3

-77.3

0.33 (1)

4.56

12-7

-335 / 0

0.25 (1)

8-9

0 / 23

-77.3

-77.3

0.10 (1)

10.00

11-7

-181 / 30

0.04 (1)

16-2

-1406 / 0

0.0

0.0

0.14 (1)

6.87

2-15

0 / 1750

0.39 (1)

10-8

-1406 / 0

0.0

0.0

0.14 (1)

6.87

11-8

0 / 1750

0.39 (1)

16-15

0 / 0

-17.5

-17.5

0.10 (3)

10.00

15-14

0 / 1729

-17.5

-17.5

0.36 (1)

10.00

14-13

0 / 1550

-17.5

-17.5

0.33 (1)

10.00

13-12

0 / 1550

-17.5

-17.5

0.33 (1)

10.00

12-11

0 / 1729

-17.5

-17.5

0.36 (1)

10.00

11-10

0 / 0

-17.5

-17.5

0.10 (3)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING

=

24.0

IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.94")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")

ALLOWABLE DEFL.(TL)= L/360 (0.94")

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

CSI: TC=0.33 (7-8:1), BC=0.36 (11-12:1), WB=0.39 (8-11:1), SSI=0.18 (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 (15) (INPUT = 0.90)

JSI METAL= 0.51 (8) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

T.L. WISE

100083566

PROVINCE OF ONTARIO

March 10, 2017

KOTT

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

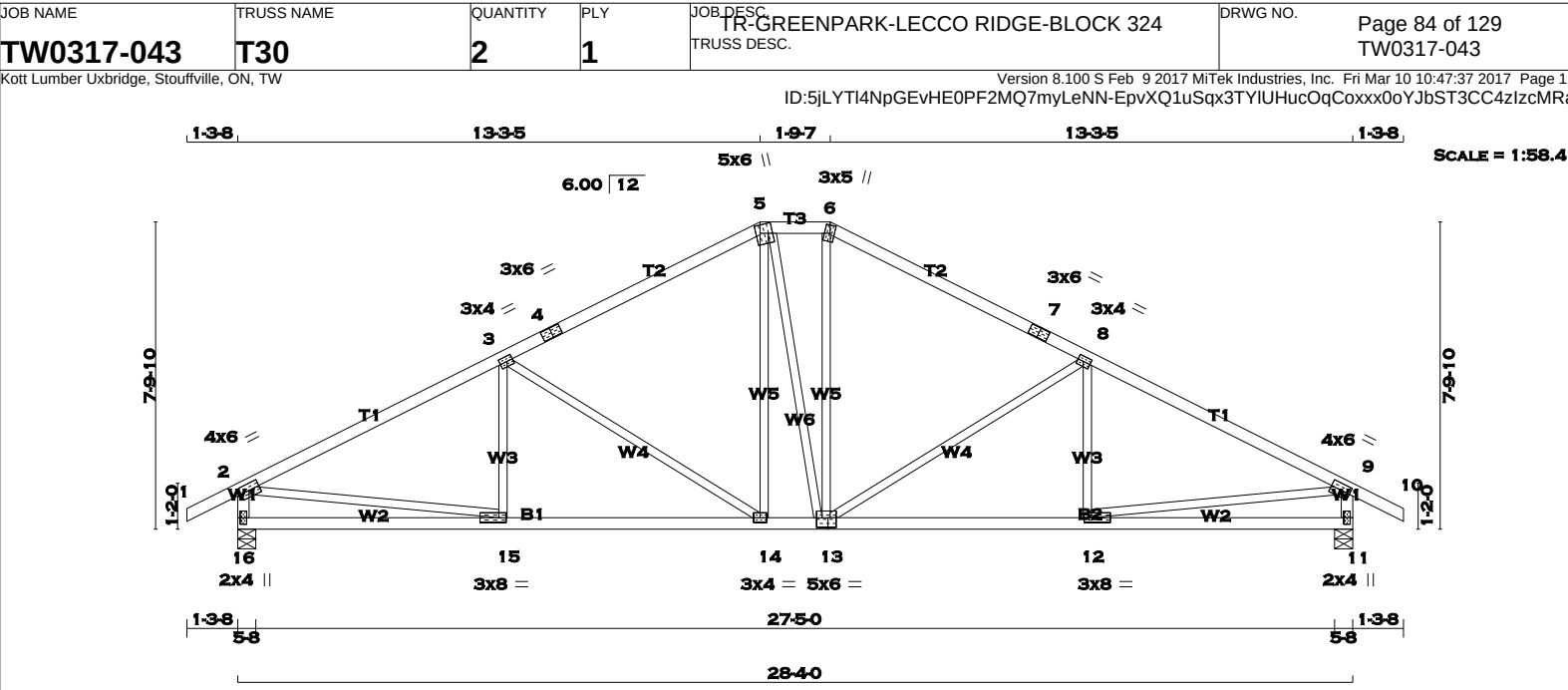
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TOWN OF MILTON

MAR 29, 2017

17-4954

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 - 6	2x4	DRY	No.2	SPF
6 - 7	2x4	DRY	No.2	SPF
7 - 10	2x4	DRY	No.2	SPF
16 - 2	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
16 - 13	2x4	DRY	No.2	SPF
13 - 11	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	2.00	2.75
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW+m	MT20	5.0	6.0	2.50	1.25
6	TTW+m	MT20	3.0	5.0	2.50	1.25
7	TS-t	MT20	3.0	6.0		
8	TMWW-t	MT20	3.0	4.0	1.50	1.75
9	TMVW-t	MT20	4.0	6.0	2.00	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMWW-t	MT20	3.0	8.0	1.50	2.25
13	BSWWW-t	MT20	5.0	6.0	3.00	2.50
14	BMWW-t	MT20	3.0	4.0		
15	BMWW-t	MT20	3.0	8.0	1.50	2.25
16	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
16	1449	0	1449	0
11	1449	0	1449	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. SNOW	MIN. LIVE	COMPONENT PERM. LIVE	RECTIONS WIND	DEAD	SOIL
16	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0
11	1014	723 / 0	0 / 0	0 / 0	0 / 0	291 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 4.29 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	15-3	-90 / 87	0.03 (3)
2-3	-1924 / 0	-77.3	-77.3 0.54 (1)	4.29	3-14	-572 / 0	0.73 (1)
3-4	-1441 / 0	-77.3	-77.3 0.48 (1)	4.87	14-5	0 / 364	0.08 (1)
4-5	-1441 / 0	-77.3	-77.3 0.48 (1)	4.87	5-13	0 / 10	0.00 (1)
5-6	-1271 / 0	-77.3	-77.3 0.05 (1)	5.68	13-6	0 / 375	0.08 (1)
6-7	-1443 / 0	-77.3	-77.3 0.48 (1)	4.87	13-8	-569 / 0	0.73 (1)
7-8	-1443 / 0	-77.3	-77.3 0.48 (1)	4.87	12-8	-93 / 86	0.03 (3)
8-9	-1924 / 0	-77.3	-77.3 0.54 (1)	4.29	2-15	0 / 1760	0.40 (1)
9-10	0 / 23	-77.3	-77.3 0.10 (1)	10.00	12-9	0 / 1759	0.40 (1)
16-2	-1400 / 0	0.0	0.0 0.14 (1)	6.88			
11-9	-1399 / 0	0.0	0.0 0.14 (1)	6.88			
16-15	0 / 0	-17.5	-17.5 0.19 (3)	10.00			
15-14	0 / 1746	-17.5	-17.5 0.37 (1)	10.00			
14-13	0 / 1268	-17.5	-17.5 0.27 (1)	10.00			
13-12	0 / 1745	-17.5	-17.5 0.37 (1)	10.00			
12-11	0 / 0	-17.5	-17.5 0.19 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.94")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.94")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.54 (2-3:1), BC=0.37 (14-15:1), WB=0.73 (3-14:1), SSI=0.22 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

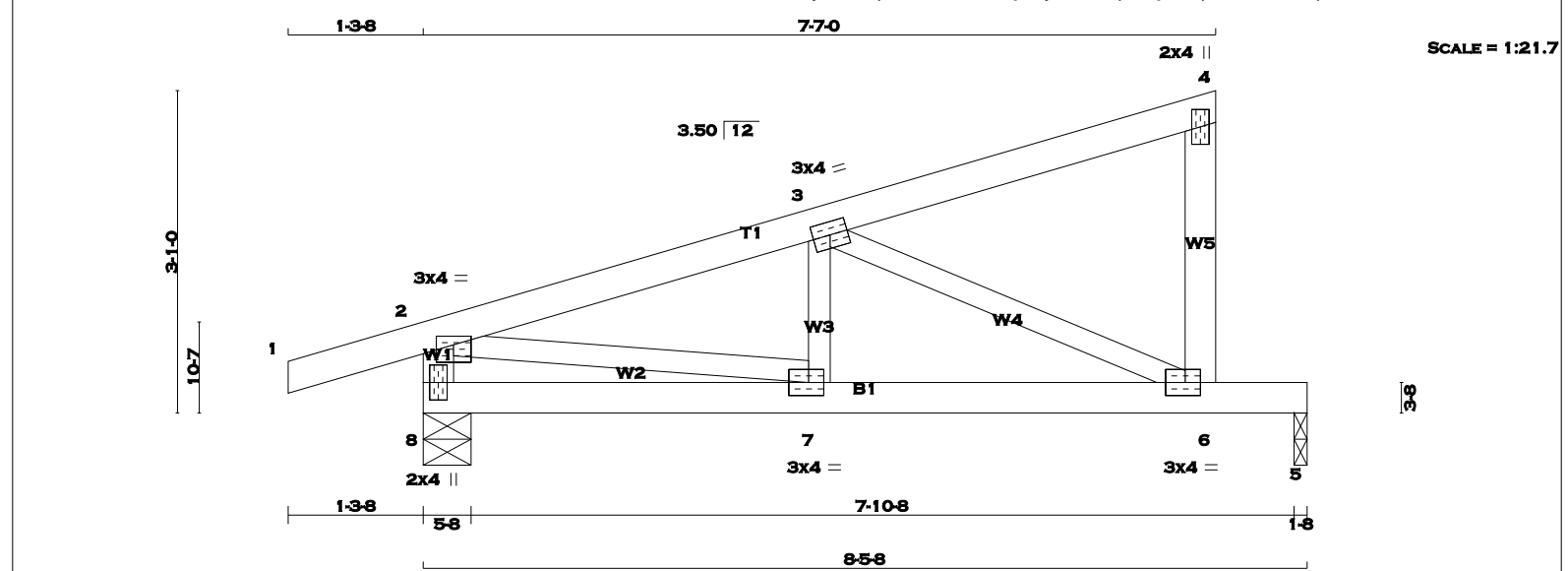
JSI GRIP= 0.89 (15) (INPUT = 0.90)
JSI METAL= 0.52 (2) (INPUT = 1.00)



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
17-4954
BUILDING DIVISION

BUILDING DIVISION



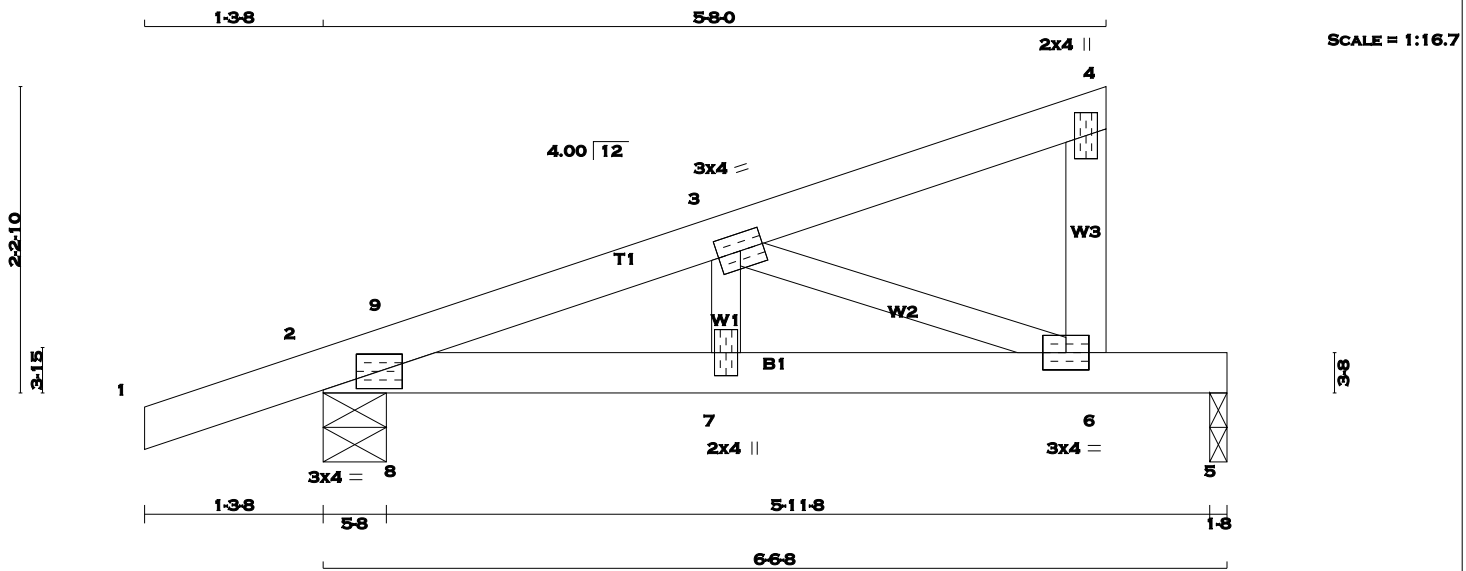
LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE		LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH.	LL =	23.3 PSF
1 - 4	2x4	DRY	No.2	SPF	GROSS REACTION	GROSS REACTION	BRG	BRG	BOT CH.	LL =	0.0 PSF
6 - 4	2x4	DRY	No.2	SPF	VERT	DOWN	HORZ	UPLIFT	DL =	7.0 PSF	
8 - 2	2x4	DRY	No.2	SPF	501	0	501	0	TOTAL LOAD =	33.3 PSF	
8 - 5	2x4	DRY	No.2	SPF	337	0	337	0			

ALL WEBS EXCEPT				UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
2x3 DRY				1ST LCASE				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
2x3 DRY				COMBINED				THIS DESIGN COMPLIES WITH:			
2x3 DRY				SNOW				- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014			
2x3 DRY				LIVE				- CSA 086-09			
2x3 DRY				PERM. LIVE				- TPIC 2011			
2x3 DRY				WIND				(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD			
2x3 DRY				DEAD				ALLOWABLE DEFL.(LL)= L/360 (0.28")			
2x3 DRY				SOIL				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")			
2x3 DRY				TOTAL LOAD CASES: (3)				ALLOWABLE DEFL.(TL)= L/360 (0.28")			
2x3 DRY				CHORDS				CALCULATED VERT. DEFL.(TL) = L/ 873 (0.12")			
2x3 DRY				MEMB.				CSI: TC=0.13 (2-3:1) , BC=0.49 (6-7:1) , WB=0.18 (3-6:1) , SSI=0.26 (5-6:1)			
2x3 DRY				MAX. FACTORED				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
2x3 DRY				FORCE (LBS)				COMP=1.10 SHEAR=1.10 TENS= 1.10			
2x3 DRY				VERT. LOAD LC1 MAX				COMPANION LIVE LOAD FACTOR = 0.50			
2x3 DRY				FROM TO				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
2x3 DRY				1-2				NAIL VALUES			
2x3 DRY				2-3				PLATE GRIP(DRY) SHEAR SECTION			
2x3 DRY				3-4				(PSI) (PLI) (PLI)			
2x3 DRY				6-4				MAX MIN MAX MIN MAX MIN			
2x3 DRY				8-2				MT20 618 354 1667 822 2284 1656			
2x3 DRY				8-7				PLATE PLACEMENT TOL. = 0.250 inches			
2x3 DRY				7-6				PLATE ROTATION TOL. = 5.0 Deg.			
2x3 DRY				6-5				JSI GRIP= 0.83 (7) (INPUT = 0.90)			
2x3 DRY								JSI METAL= 0.23 (7) (INPUT = 1.00)			

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 8, 5				ALLOWABLE DEFL.(LL)= L/360 (0.28")			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				BRACING				CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.				ALLOWABLE DEFL.(TL)= L/360 (0.28")			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.				CALCULATED VERT. DEFL.(TL) = L/ 873 (0.12")			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				CSI: TC=0.13 (2-3:1) , BC=0.49 (6-7:1) , WB=0.18 (3-6:1) , SSI=0.26 (5-6:1)			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				LOADING				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				TOTAL LOAD CASES: (3)				COMP=1.10 SHEAR=1.10 TENS= 1.10			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				CHORDS				COMPANION LIVE LOAD FACTOR = 0.50			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				MEMB.				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				MAX. FACTORED				NAIL VALUES			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				FORCE (LBS)				PLATE GRIP(DRY) SHEAR SECTION			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				VERT. LOAD LC1 MAX				(PSI) (PLI) (PLI)			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				FROM TO				MAX MIN MAX MIN MAX MIN			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				1-2				MT20 618 354 1667 822 2284 1656			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				2-3				PLATE PLACEMENT TOL. = 0.250 inches			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				3-4				PLATE ROTATION TOL. = 5.0 Deg.			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				6-4				JSI GRIP= 0.83 (7) (INPUT = 0.90)			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				8-2				JSI METAL= 0.23 (7) (INPUT = 1.00)			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				8-7							
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				7-6							
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				6-5							

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				CHORDS				WEBS			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				MEMB.				MEMB.			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				MAX. FACTORED				MAX. FACTORED			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				FORCE (LBS)				FORCE (LBS)			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				VERT. LOAD LC1 MAX				UNBRACED LENGTH			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				FROM TO				FR-TO			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				1-2				1-2			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				2-3				2-3			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				3-4				3-4			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				6-4				6-4			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				8-2				8-2			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				8-7				8-7			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				7-6				7-6			
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				6-5				6-5			

										NAIL VALUES									
										PLATE GRIP(DRY)		SHEAR		SECTION					
										(PSI)		(PLI)		(PLI)					
										MAX MIN		MAX MIN		MAX MIN					
MT20										618 354		1667 822		2284 1656					
										PLATE PLACEMENT TOL. = 0.250 inches									
										PLATE ROTATION TOL. = 5.0 Deg.									
										JSI GRIP= 0.83 (7) (INPUT = 0.90)									
										JSI METAL= 0.23 (7) (INPUT = 1.00)									



TOTAL WEIGHT = 6 X 20 = 122 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMB1-I	MT20	3.0	4.0	
3	TMVW-t	MT20	3.0	4.0	
4	TMV+p	MT20	2.0	4.0	
6	BMVW-t	MT20	3.0	4.0	
7	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		MAXIMUM FACTORED		INPUT		REQRD	
JT		GROSS	REACTION	GROSS	REACTION	BRG		BRG	
2		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		409	0	409	0	0	5-8	5-8	
5		247	0	247	0	0	1-8	1-8	

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

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS					WEBS				
		MAX. FACTORED	FACTORED					MAX. FACTORED	
MEMB.		FORCE	VERT.	LOAD	LC1	MAX.	MEMB.	FORCE	MAX
		(LBS)	(PLF)	CSI	(LC)	UNBRAC		(LBS)	CSI
FR-TO			FROM	TO	LENGTH	FR-TO			
1-2		0 / 15	-77.3	-77.3	0.10 (1)	10.00	7-3	0 / 176	0.04 (1)
2-9		-613 / 0	-77.3	-77.3	0.01 (1)	6.25	3-6	-610 / 0	0.11 (1)
9-3		-600 / 0	-77.3	-77.3	0.04 (1)	6.25	8-9	-72 / 1	0.00 (1)
3-4		-4 / 0	-77.3	-77.3	0.07 (1)	10.00			
6-4		-93 / 0	0.0	0.0	0.01 (1)	7.81			
2-8		0 / 573	-17.5	-17.5	0.14 (1)	10.00			
8-7		0 / 573	-17.5	-17.5	0.16 (1)	10.00			
7-6		0 / 573	-17.5	-17.5	0.38 (1)	10.00			
6-5		0 / 0	-17.5	-17.5	0.29 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (6) (INPUT = 0.90)
JSI METAL= 0.21 (6) (INPUT = 1.00)

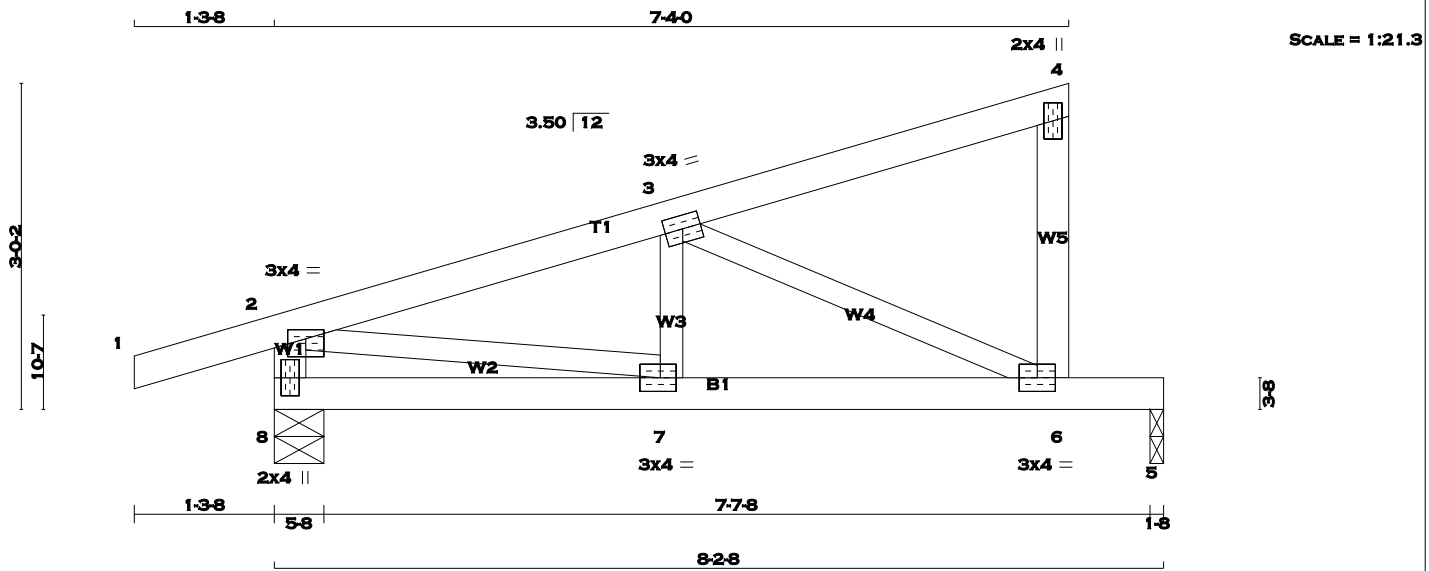


March 10, 2017



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

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



TOTAL WEIGHT = 20 X 30 = 591 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	3.0	4.0	1.00	2.00
3	TMVW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0		
7	BMVW-t	MT20	3.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
8		489	0	489	0	0	5-8	5-8	
5		325	0	325	0	0	1-8	1-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
8	341	251 / 0	0 / 0	0 / 0	0 / 0	0 / 0	90 / 0
5	230	153 / 0	0 / 0	0 / 0	0 / 0	0 / 0	77 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FACTORED MAX CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 14	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 94	0.03 (3)
2-3	-604 / 0	-77.3 -77.3	0.12 (1)	6.25	3-6	-644 / 0	0.17 (1)
3-4	-8 / 0	-77.3 -77.3	0.12 (1)	10.00	2-7	0 / 595	0.13 (1)
6-4	-112 / 0	0.0 0.0	0.02 (1)	7.81			
8-2	-478 / 0	0.0 0.0	0.05 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.11 (1)	10.00			
7-6	0 / 588	-17.5 -17.5	0.47 (1)	10.00			
6-5	0 / 0	-17.5 -17.5	0.38 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.27")
CALCULATED VERT. DEFL.(TL) = L/ 921 (0.11")

CSI: TC=0.12 (2-3:1) , BC=0.47 (6-7:1) , WB=0.17 (3-6:1) , SSI=0.25 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.22 (2) (INPUT = 1.00)

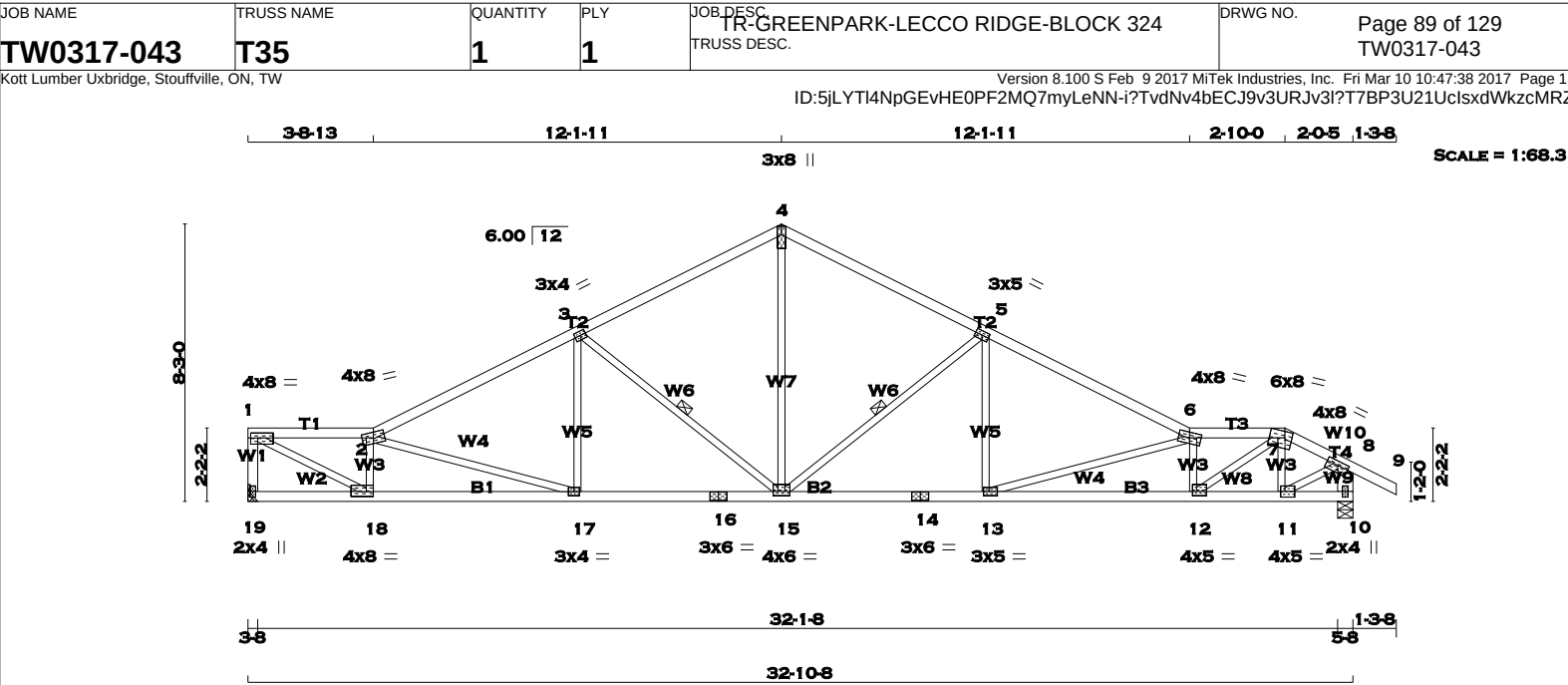


March 10, 2017



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

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER				N. L. G. A. RULES			
CHORDS		SIZE		LUMBER		DESCR.	
19 - 1	2x4	DRY	No.2	SPF			
1 - 2	2x4	DRY	No.2	SPF			
2 - 4	2x4	DRY	No.2	SPF			
4 - 6	2x4	DRY	No.2	SPF			
6 - 7	2x4	DRY	No.2	SPF			
7 - 9	2x4	DRY	No.2	SPF			
10 - 8	2x6	DRY	No.2	SPF			
19 - 16	2x4	DRY	No.2	SPF			
16 - 14	2x4	DRY	No.2	SPF			
14 - 10	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	8.0	1.75	2.50
2	TTWW-m	MT20	4.0	8.0		
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TTW+p	MT20	3.0	8.0	Edge	
5	TMWW-t	MT20	3.0	5.0		
6	TTWW-m	MT20	4.0	8.0		
7	TTWW-m	MT20	6.0	8.0	2.25	2.50
8	TMVW-t	MT20	4.0	8.0	1.50	4.00
10	BMV1+p	MT20	2.0	4.0		
11	BMWW-t	MT20	4.0	5.0	2.00	1.50
12	BMWW-t	MT20	4.0	5.0	1.50	1.50
13	BMWW-t	MT20	3.0	5.0	1.50	2.00
14	BS-t	MT20	3.0	6.0		
15	BMWWW-t	MT20	4.0	6.0	1.50	3.00
16	BS-t	MT20	3.0	6.0		
17	BMWW-t	MT20	3.0	4.0		
18	BMWW-t	MT20	4.0	8.0	1.75	2.50
19	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION		GROSS REACTION	
JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ	JT	VERT	JT	HORZ
19	1559	0		1559	0			1559	0	0									
10	1664	0		1664	0			1664	0	0		5-8		5-8					

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	1094	765 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
10	1165	829 / 0	0 / 0	0 / 0	0 / 0	337 / 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 = 3.70 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-15. DBS = 16-0-0. CBF = 84 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15. DBS = 14-0-0. CBF = 88 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.		MAX. FACTORED		MEMB.		MAX. FACTORED	
		FORCE (LBS)				FORCE (LBS)	
		VERT. LOAD (PLF)				VERT. LOAD (PLF)	
		FROM TO				FROM TO	
		CSI (LC)				CSI (LC)	
FR-TO				FR-TO			
19-1	-1524 / 0	0.0	0.0 0.17 (1)	6.66	1-18	0 / 3002	0.68 (1)
1-2	-2664 / 0	-77.3	-77.3 0.22 (1)	4.08	18-2	-1317 / 0	0.20 (1)
2-3	-2509 / 0	-77.3	-77.3 0.49 (1)	3.91	2-17	-491 / 0	0.37 (1)
3-4	-1834 / 0	-77.3	-77.3 0.43 (1)	4.52	17-3	0 / 265	0.06 (3)
4-5	-1834 / 0	-77.3	-77.3 0.43 (1)	4.51	3-15	-835 / 0	0.34 (1)
5-6	-2657 / 0	-77.3	-77.3 0.51 (1)	3.80	15-4	0 / 1261	0.28 (1)
6-7	-3354 / 0	-77.3	-77.3 0.20 (1)	3.70	15-5	-1006 / 0	0.41 (1)
7-8	-1815 / 0	-77.3	-77.3 0.07 (1)	4.93	13-5	0 / 438	0.10 (1)
8-9	0 / 23	-77.3	-77.3 0.10 (1)	10.00	13-6	-1066 / 0	0.81 (1)
10-8	-1654 / 0	0.0	0.0 0.11 (1)	7.67	12-6	-1172 / 0	0.18 (1)
					12-7	0 / 2143	0.48 (1)
					11-7	-586 / 0	0.09 (1)
					11-8	0 / 1748	0.39 (1)
19-18	0 / 0	-17.5	-17.5 0.07 (3)	10.00			
18-17	0 / 2737	-17.5	-17.5 0.53 (1)	10.00			
17-16	0 / 2268	-17.5	-17.5 0.44 (1)	10.00			
16-15	0 / 2268	-17.5	-17.5 0.44 (1)	10.00			
15-14	0 / 2401	-17.5	-17.5 0.47 (1)	10.00			
14-13	0 / 2401	-17.5	-17.5 0.47 (1)	10.00			
13-12	0 / 3418	-17.5	-17.5 0.65 (1)	10.00			
12-11	0 / 1588	-17.5	-17.5 0.30 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.02 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

LOADING IN ALL FLAT SECTIONS 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 (1.10")
CALCULATED VERT. DEFL.(LL)= L/999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL)= L/999 (0.34")

CSI: TC=0.51 (5-6:1), BC=0.65 (12-13:1), WB=0.81 (6-13:1), SSI=0.20 (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= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.62 (14) (INPUT = 1.00)



March 10, 2017



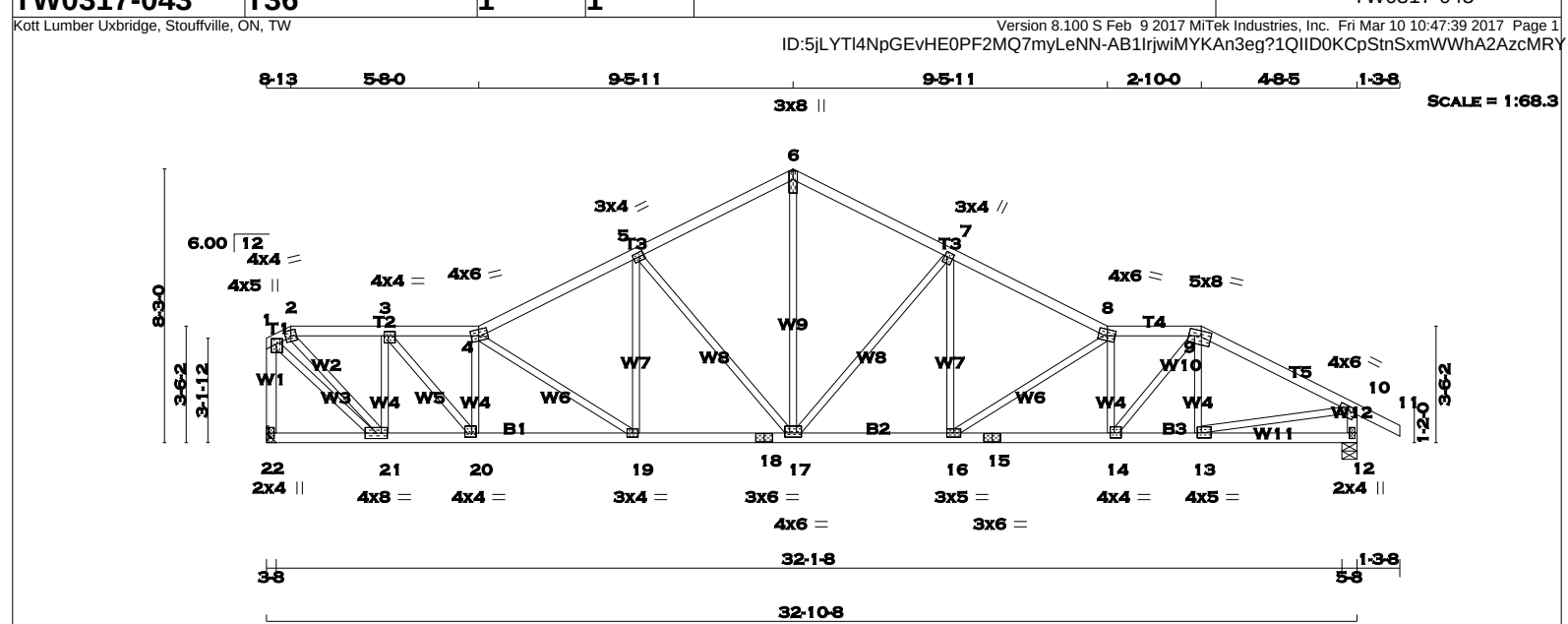
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

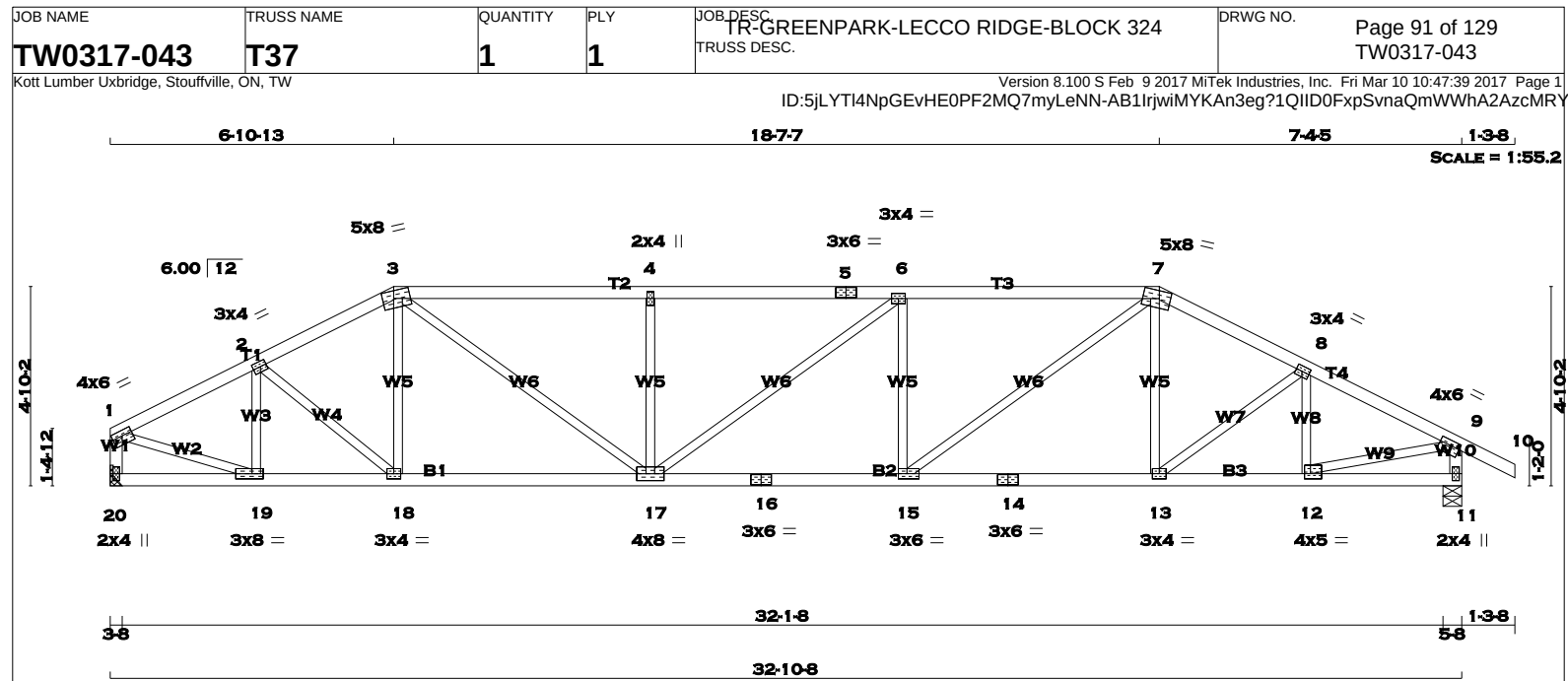
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MAR 29, 2017

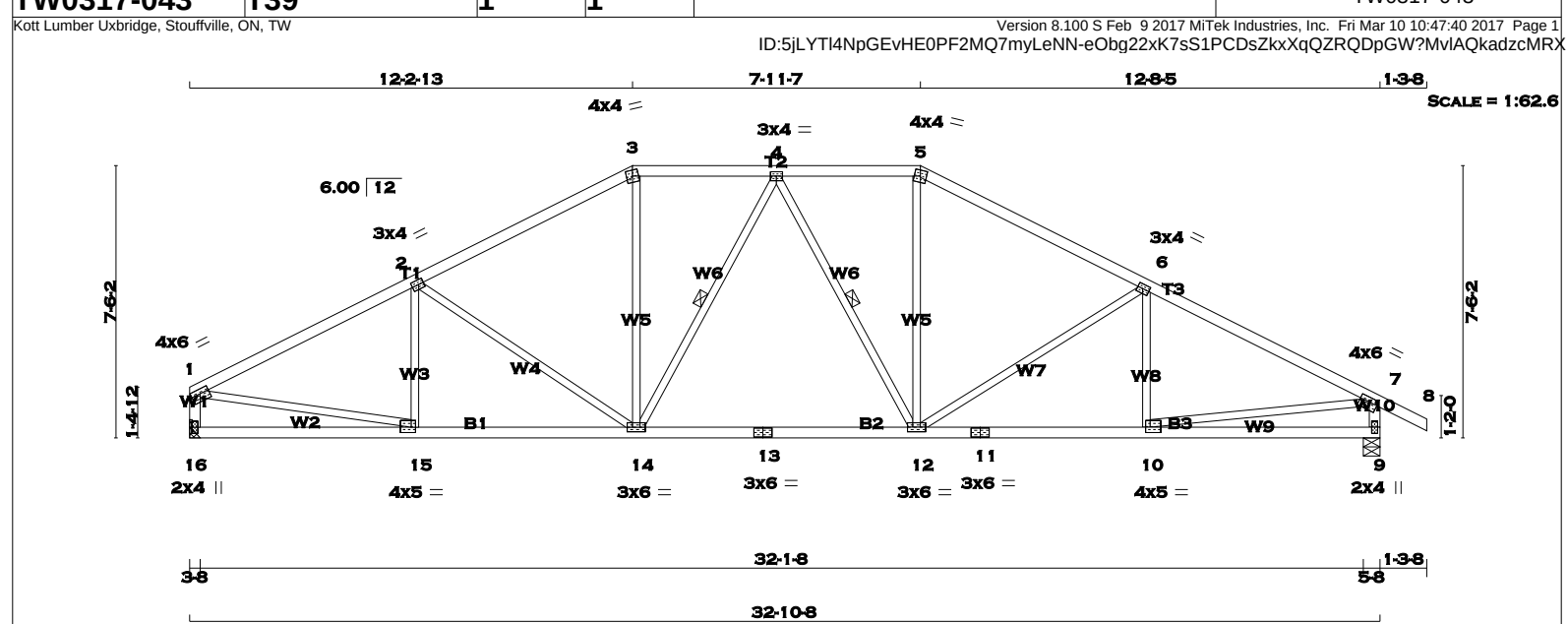
17-4954

BUILDING DIVISION





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. SPF					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA	
1 - 3 2x4 DRY No.2 SPF					BEARINGS										SPECIFIED LOADS:	
3 - 5 2x4 DRY No.2 SPF					FACTORED MAXIMUM FACTORED INPUT REQRD										TOP CH. LL = 23.3 PSF	
5 - 7 2x4 DRY No.2 SPF					GROSS REACTION GROSS REACTION BRG BRG										DL = 3.0 PSF	
7 - 10 2x4 DRY No.2 SPF					JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 0.0 PSF	
20 - 1 2x4 DRY No.2 SPF					20 1559 0 1559 0 0 HANGER BY OTHERS										DL = 7.0 PSF	
11 - 9 2x4 DRY No.2 SPF					11 1664 0 1664 0 0 5-8 5-8										TOTAL LOAD = 33.3 PSF	
20 - 16 2x4 DRY No.2 SPF																
16 - 14 2x4 DRY No.2 SPF																
14 - 11 2x4 DRY No.2 SPF																
ALL WEBS 2x3 DRY No.2 SPF																
EXCEPT																
DRY: SEASONED LUMBER.																
PLATES (table is in inches)																
JT	TYPE	PLATES	W	LEN	Y	X										
1	TMVW-t	MT20	4.0	6.0	1.50	3.00										
2	TMWW-t	MT20	3.0	4.0	1.50	1.75										
3	TTWW-m	MT20	5.0	8.0	2.25	3.25										
4	TMW+w	MT20	2.0	4.0												
5	TS-t	MT20	3.0	6.0												
6	TMWW-t	MT20	3.0	4.0												
7	TTWW-m	MT20	5.0	8.0	2.25	3.25										
8	TMWW-t	MT20	3.0	4.0	1.50	1.75										
9	TMVW-t	MT20	4.0	6.0	1.50	3.00										
11	BMV1+p	MT20	2.0	4.0												
12	BMWW-t	MT20	4.0	5.0	1.50	1.75										
13	BMWW-t	MT20	3.0	4.0												
14	BS-t	MT20	3.0	6.0												
15	BMWW-t	MT20	3.0	6.0	1.50	2.50										
16	BS-t	MT20	3.0	6.0												
17	BMWW-t	MT20	4.0	8.0												
18	BMWW-t	MT20	3.0	4.0												
19	BMWW-t	MT20	3.0	8.0	1.50	3.25										
20	BMV1+p	MT20	2.0	4.0												
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.																
																
March 10, 2017																
																
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.																
RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION																
LOADING																
TOTAL LOAD CASES: (3)																
CHORDS																
MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD LC1 MAX (PLF) CSI (LC) MAX. UNBRAC LENGTH FR-TO																
FR-TO																
1-2 -1951 / 0 -77.3 -77.3 0.18 (1) 4.67 19-2 -493 / 0 0.09 (1)																
2-3 -2118 / 0 -77.3 -77.3 0.18 (1) 4.51 2-18 0 / 164 0.04 (1)																
3-4 -2771 / 0 -77.3 -77.3 0.63 (1) 3.62 18-3 -5 / 63 0.02 (3)																
4-5 -2771 / 0 -77.3 -77.3 0.62 (1) 3.61 3-17 0 / 1101 0.25 (1)																
5-6 -2771 / 0 -77.3 -77.3 0.62 (1) 3.61 17-4 -519 / 0 0.18 (1)																
6-7 -2801 / 0 -77.3 -77.3 0.64 (1) 3.59 17-6 -38 / 0 0.04 (1)																
7-8 -2216 / 0 -77.3 -77.3 0.21 (1) 4.40 15-6 -498 / 0 0.17 (1)																
8-9 -2149 / 0 -77.3 -77.3 0.21 (1) 4.46 15-7 0 / 1028 0.23 (1)																
9-10 0 / 23 -77.3 -77.3 0.10 (1) 10.00 13-7 0 / 88 0.03 (3)																
20-1 -1526 / 0 0.0 0.0 0.16 (1) 6.65 13-8 0 / 44 0.01 (1)																
11-9 -1629 / 0 0.0 0.0 0.16 (1) 6.48 12-8 -390 / 0 0.07 (1)																
1-19 0 / 1835 0.41 (1)																
12-9 0 / 1982 0.45 (1)																
20-19 0 / 0 -17.5 -17.5 0.05 (3) 10.00 12-9 0 / 1982 0.45 (1)																
19-18 0 / 1755 -17.5 -17.5 0.34 (1) 10.00																
18-17 0 / 1881 -17.5 -17.5 0.36 (1) 10.00																
17-16 0 / 2801 -17.5 -17.5 0.51 (1) 10.00																
16-15 0 / 2801 -17.5 -17.5 0.51 (1) 10.00																
15-14 0 / 1970 -17.5 -17.5 0.38 (1) 10.00																
14-13 0 / 1970 -17.5 -17.5 0.38 (1) 10.00																
13-12 0 / 1933 -17.5 -17.5 0.37 (1) 10.00																
12-11 0 / 0 -17.5 -17.5 0.06 (3) 10.00																
WEBS																
MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED CSI (LC)																
19-2 -493 / 0 0.09 (1)																
2-18 0 / 164 0.04 (1)																
18-3 -5 / 63 0.02 (3)																
3-17 0 / 1101 0.25 (1)																
17-4 -519 / 0 0.18 (1)																
17-6 -38 / 0 0.04 (1)																
15-6 -498 / 0 0.17 (1)																
15-7 0 / 1028 0.23 (1)																
13-7 0 / 88 0.03 (3)																
13-8 0 / 44 0.01 (1)																
12-8 -390 / 0 0.07 (1)																
1-19 0 / 1835 0.41 (1)																
12-9 0 / 1982 0.45 (1)																
ALLOWABLE DEFL.(LL)= L/360 (1.10")																
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.16")																
ALLOWABLE DEFL.(TL)= L/360 (1.10")																
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.30")																
CSI: TC=0.64 (6-7:1) , BC=0.51 (15-17:1) , WB=0.45 (9-12:1) , SSI=0.22 (6-7:1)																
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10																
COMP=1.10 SHEAR=1.10 TENS= 1.10																
COMPANION LIVE LOAD FACTOR = 0.50																
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .																
NAIL VALUES																
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)																
MAX MIN MAX MIN MAX MIN																
MT20 618 354 1667 822 2284 1656																
PLATE PLACEMENT TOL. = 0.250 inches																
PLATE ROTATION TOL. = 5.0 Deg.																
JSI GRIP= 0.89 (9) (INPUT = 0.90)																
JSI METAL= 0.78 (16) (INPUT = 1.00)																



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 - 8

2x4

DRY

No.2

SPF

16 - 1

2x4

DRY

No.2

SPF

9 - 7

2x4

DRY

No.2

SPF

16 - 13

2x4

DRY

No.2

SPF

13 - 11

2x4

DRY

No.2

SPF

11 - 9

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.50	3.00
2	TMVW-t	MT20	3.0	4.0	1.50	1.75
3	TTW-m	MT20	4.0	4.0		
4	TMVW-t	MT20	3.0	4.0		
5	TTW-m	MT20	4.0	4.0		
6	TMVW-t	MT20	3.0	4.0	1.50	1.75
7	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	4.0	5.0	1.75	1.50
11	BS-t	MT20	3.0	6.0		
12	BMVW-t	MT20	3.0	6.0		
13	BS-t	MT20	3.0	6.0		
14	BMVW-t	MT20	3.0	6.0		
15	BMVW-t	MT20	4.0	5.0	1.75	1.50
16	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
16	1559	0	1559	0
9	1664	0	1664	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS	
	COMBINED	SNOW	LIVE	PERM.LIVE
16	1094	765 / 0	0 / 0	0 / 0
9	1165	829 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.02 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-14, 4-12. DBS = 20-0-0 . CBF = 29 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
1- 2	-2173 / 0	-77.3 -77.3	0.47 (1)	4.17	15- 2	-233 / 28	0.07 (1)
2- 3	-1890 / 0	-77.3 -77.3	0.43 (1)	4.46	2-14	-362 / 0	0.39 (1)
3- 4	-1674 / 0	-77.3 -77.3	0.18 (1)	4.97	14- 3	0 / 537	0.12 (1)
4- 5	-1698 / 0	-77.3 -77.3	0.18 (1)	4.95	14- 4	-234 / 0	0.11 (1)
5- 6	-1917 / 0	-77.3 -77.3	0.47 (1)	4.38	4-12	-184 / 0	0.08 (1)
6- 7	-2302 / 0	-77.3 -77.3	0.52 (1)	4.02	12- 5	0 / 542	0.12 (1)
7- 8	0 / 23	-77.3 -77.3	0.10 (1)	10.00	12- 6	-465 / 0	0.53 (1)
16- 1	-1512 / 0	0.0 0.0	0.16 (1)	6.68	10- 6	-162 / 53	0.05 (1)
9- 7	-1615 / 0	0.0 0.0	0.16 (1)	6.51	1-15	0 / 1995	0.45 (1)
					10- 7	0 / 2100	0.47 (1)
16-15	0 / 0	-17.5 -17.5	0.14 (3)	10.00			
15-14	0 / 1965	-17.5 -17.5	0.42 (1)	10.00			
14-13	0 / 1785	-17.5 -17.5	0.39 (1)	10.00			
13-12	0 / 1785	-17.5 -17.5	0.39 (1)	10.00			
12-11	0 / 2082	-17.5 -17.5	0.44 (1)	10.00			
11-10	0 / 2082	-17.5 -17.5	0.44 (1)	10.00			
10- 9	0 / 0	-17.5 -17.5	0.15 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.10")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.11")

ALLOWABLE DEFL.(TL)= L/360 (1.10")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.52 (6-7:1) , BC=0.44 (10-12:1) , WB=0.53 (6-12:1) , SSI=0.21 (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) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX	MIN	MAX
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (15) (INPUT = 0.90)

JSI METAL= 0.62 (10) (INPUT = 1.00)

LICENSED PROFESSIONAL ENGINEER

T.L. WISE

100083566

PROVINCE OF ONTARIO

March 10, 2017

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

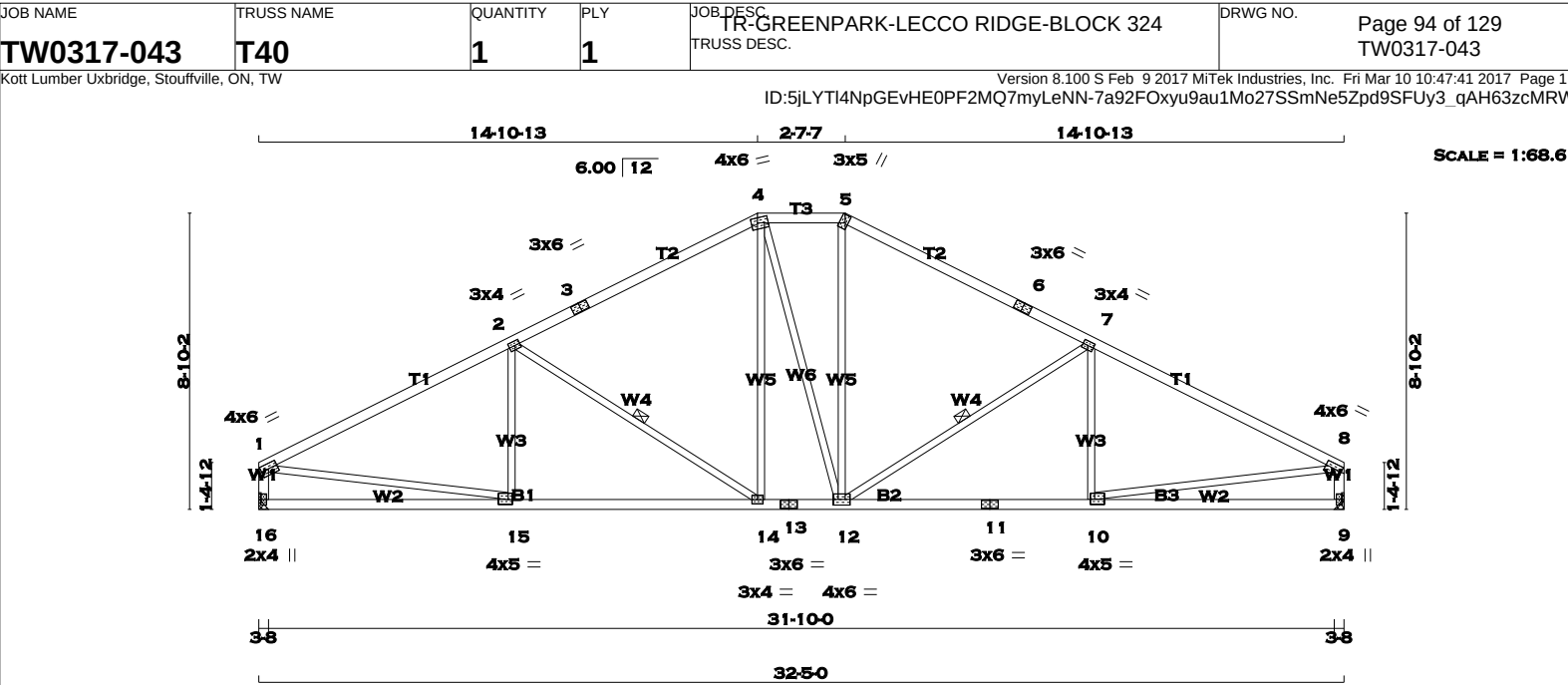
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TOWN OF MILTON

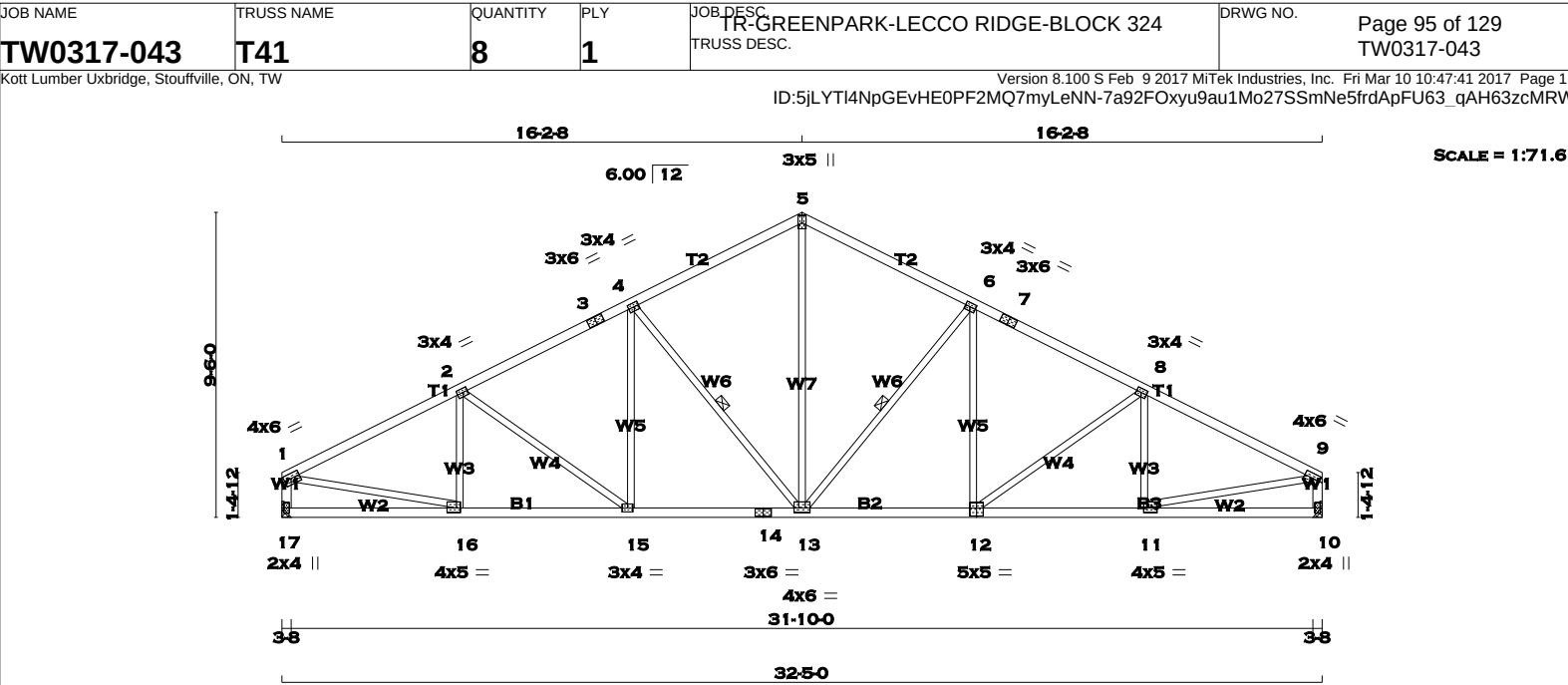
MAR 29, 2017

17-4954

BUILDING DIVISION



LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 3 2x4 DRY No.2 3 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 6 2x4 DRY No.2 6 - 8 2x4 DRY No.2 16 - 1 2x4 DRY No.2 9 - 8 2x4 DRY No.2 16 - 13 2x4 DRY No.2 13 - 11 2x4 DRY No.2 11 - 9 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.				DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF			
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 1 TMVW-t MT20 4.0 6.0 1.75 2.75 2 TMWW-t MT20 3.0 4.0 1.50 1.75 3 TS-t MT20 3.0 6.0 4 TTWW-m MT20 4.0 6.0 1.75 2.25 5 TTW+h MT20 3.0 5.0 2.75 1.00 6 TS-t MT20 3.0 6.0 7 TMWW-t MT20 3.0 4.0 1.50 1.75 8 TMVW-t MT20 4.0 6.0 1.75 2.75 9 BMV1+p MT20 2.0 4.0 10 BMWW-t MT20 4.0 5.0 1.75 1.50 11 BS-t MT20 3.0 6.0 12 BMWWW-t MT20 4.0 6.0 13 BS-t MT20 3.0 6.0 14 BMWW-t MT20 3.0 4.0 15 BMWW-t MT20 4.0 5.0 1.75 1.50 16 BMV1+p MT20 2.0 4.0 A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.				DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF SPF			
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 (1.08") CALCULATED VERT. DEFL.(LL) = L/999 (0.11") ALLOWABLE DEFL.(TL)= L/360 (1.08") CALCULATED VERT. DEFL.(TL) = L/999 (0.22") CSI: TC=0.74 (1-2:1), BC=0.44 (14-15:1), WB=0.44 (1-15:1), SSI=0.25 (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 (5) (INPUT = 0.90) JSI METAL= 0.59 (15) (INPUT = 1.00)				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 (1.08") CALCULATED VERT. DEFL.(LL) = L/999 (0.11") ALLOWABLE DEFL.(TL)= L/360 (1.08") CALCULATED VERT. DEFL.(TL) = L/999 (0.22") CSI: TC=0.74 (1-2:1), BC=0.44 (14-15:1), WB=0.44 (1-15:1), SSI=0.25 (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 (5) (INPUT = 0.90) JSI METAL= 0.59 (15) (INPUT = 1.00)			
RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION				RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION			



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

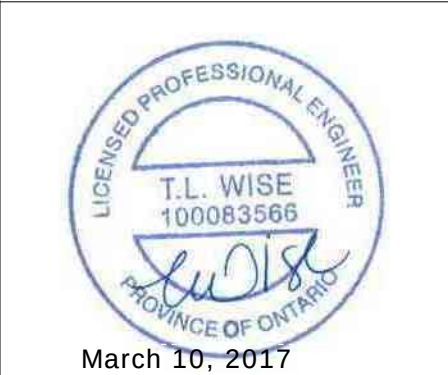
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
5 - 7	2x4	DRY	No.2	SPF
7 - 9	2x4	DRY	No.2	SPF
17 - 1	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
17 - 14	2x4	DRY	No.2	SPF
14 - 12	2x4	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.75	2.75
2, 4, 6, 8						
2	TMVW-t	MT20	3.0	4.0	1.50	1.75
3	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	5.0	2.75	1.50
7	TS-t	MT20	3.0	6.0		
9	TMVW-t	MT20	4.0	6.0	1.75	2.75
10	BMV1+p	MT20	2.0	4.0		
11	BMVW-t	MT20	4.0	5.0	1.75	1.50
12	BSWW-t	MT20	5.0	5.0	3.00	2.50
13	BMVW-t	MT20	4.0	6.0	1.75	3.00
14	BS-t	MT20	3.0	6.0		
15	BMVW-t	MT20	3.0	4.0		
16	BMVW-t	MT20	4.0	5.0	1.75	1.50
17	BMV1+p	MT20	2.0	4.0		

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



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

BEARINGS

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
17	1537	0	1537	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8	
10	1537	0	1537	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. PERM.LIVE	WIND	DEAD	SOIL
17	1079	755 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0
10	1079	755 / 0	0 / 0	0 / 0	0 / 0	324 / 0	0 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.37 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-13, 4-13. DBS = 20-0-0. CBF = 75 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-2102 / 0	-77.3 -77.3	0.35 (1)	4.37 13-5	0 / 1026	0.23 (1)	
2-3	-1945 / 0	-77.3 -77.3	0.29 (1)	4.58 13-6	-599 / 0	0.29 (1)	
3-4	-1945 / 0	-77.3 -77.3	0.29 (1)	4.58 12-6	0 / 203	0.05 (3)	
4-5	-1539 / 0	-77.3 -77.3	0.29 (1)	5.02 12-8	-193 / 0	0.15 (1)	
5-6	-1539 / 0	-77.3 -77.3	0.29 (1)	5.02 11-8	-269 / 10	0.07 (1)	
6-7	-1945 / 0	-77.3 -77.3	0.29 (1)	4.58 4-13	-599 / 0	0.29 (1)	
7-8	-1945 / 0	-77.3 -77.3	0.29 (1)	4.58 15-4	0 / 203	0.05 (3)	
8-9	-2102 / 0	-77.3 -77.3	0.35 (1)	4.37 2-15	-193 / 0	0.15 (1)	
17-1	-1495 / 0	0.0 0.0	0.15 (1)	6.71 16-2	-269 / 10	0.07 (1)	
10-9	-1495 / 0	0.0 0.0	0.15 (1)	6.71 1-16	0 / 1932	0.43 (1)	
				11-9	0 / 1932	0.43 (1)	
17-16	0 / 0	-17.5 -17.5	0.12 (3)	10.00			
16-15	0 / 1896	-17.5 -17.5	0.35 (1)	10.00			
15-14	0 / 1740	-17.5 -17.5	0.34 (1)	10.00			
14-13	0 / 1740	-17.5 -17.5	0.34 (1)	10.00			
13-12	0 / 1740	-17.5 -17.5	0.34 (1)	10.00			
12-11	0 / 1896	-17.5 -17.5	0.35 (1)	10.00			
11-10	0 / 0	-17.5 -17.5	0.12 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.08")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.08")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.35 (1-2:1), BC=0.35 (15-16:1), WB=0.43 (9-11:1), SSI=0.18 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

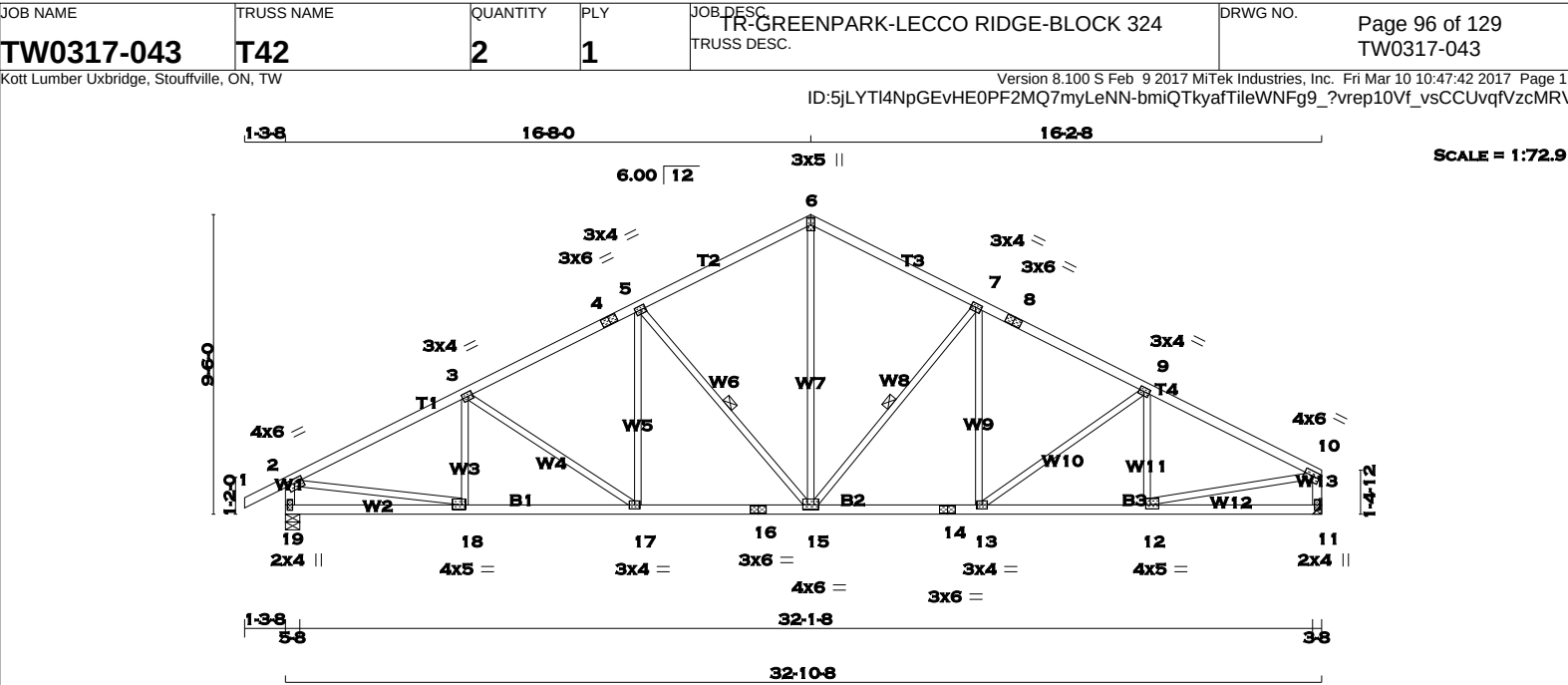
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (11) (INPUT = 0.90)
JSI METAL= 0.57 (11) (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
17-4954
BUILDING DIVISION



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

1 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
8 - 10	2x4	DRY	No.2	SPF
19 - 2	2x4	DRY	No.2	SPF
11 - 10	2x4	DRY	No.2	SPF
19 - 16	2x4	DRY	No.2	SPF
16 - 14	2x4	DRY	No.2	SPF
14 - 11	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	2.75
3, 5, 7, 9						
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
6	TTW+p	MT20	3.0	5.0	2.75	1.50
8	TS-t	MT20	3.0	6.0		
10	TMVW-t	MT20	4.0	6.0	1.75	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMVW-t	MT20	4.0	5.0	1.50	1.75
13	BMVW-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMVWV-t	MT20	4.0	6.0	1.75	3.00
16	BS-t	MT20	3.0	6.0		
17	BMVW-t	MT20	3.0	4.0		
18	BMVW-t	MT20	4.0	5.0	1.75	1.50
19	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
19	1664	0	1664	0
11	1559	0	1559	0

MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. LIVE	PERM. LIVE	WIND	DEAD	SOIL
19	1165	829 / 0	0 / 0	0 / 0	337 / 0	0 / 0
11	1094	765 / 0	0 / 0	0 / 0	329 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15, 7-15. DBS = 20-0-0. CBF = 82 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	18-3	-205 / 31	0.05 (1)
2-3	-2276 / 0	-77.3 -77.3	0.39 (1)	4.20	3-17	-275 / 0	0.22 (1)
3-4	-2039 / 0	-77.3 -77.3	0.32 (1)	4.47	17-5	0 / 247	0.06 (1)
4-5	-2039 / 0	-77.3 -77.3	0.32 (1)	4.47	5-15	-655 / 0	0.32 (1)
5-6	-1582 / 0	-77.3 -77.3	0.31 (1)	4.94	15-6	0 / 1060	0.24 (1)
6-7	-1582 / 0	-77.3 -77.3	0.29 (1)	4.96	15-7	-595 / 0	0.29 (1)
7-8	-1986 / 0	-77.3 -77.3	0.30 (1)	4.54	13-7	0 / 199	0.05 (3)
8-9	-1986 / 0	-77.3 -77.3	0.30 (1)	4.54	13-9	-187 / 0	0.15 (1)
9-10	-2137 / 0	-77.3 -77.3	0.36 (1)	4.34	12-9	-275 / 8	0.07 (1)
19-2	-1620 / 0	0.0	0.0	16.1 (4)	6-50	0 / 2075	0.47 (1)
11-10	-1517 / 0	0.0	0.0	16.1 (4)	6-67	0 / 1964	0.44 (1)
19-18	0 / 0	-17.5 -17.5	0.12 (3)	10.00			
18-17	0 / 2052	-17.5 -17.5	0.38 (1)	10.00			
17-16	0 / 1824	-17.5 -17.5	0.36 (1)	10.00			
16-15	0 / 1824	-17.5 -17.5	0.36 (1)	10.00			
15-14	0 / 1776	-17.5 -17.5	0.35 (1)	10.00			
14-13	0 / 1776	-17.5 -17.5	0.35 (1)	10.00			
13-12	0 / 1927	-17.5 -17.5	0.36 (1)	10.00			
12-11	0 / 0	-17.5 -17.5	0.12 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.39 (2-3:1), BC=0.38 (17-18:1), WB=0.47 (2-18:1), SSI=0.18 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.62 (18) (INPUT = 1.00)



March 10, 2017



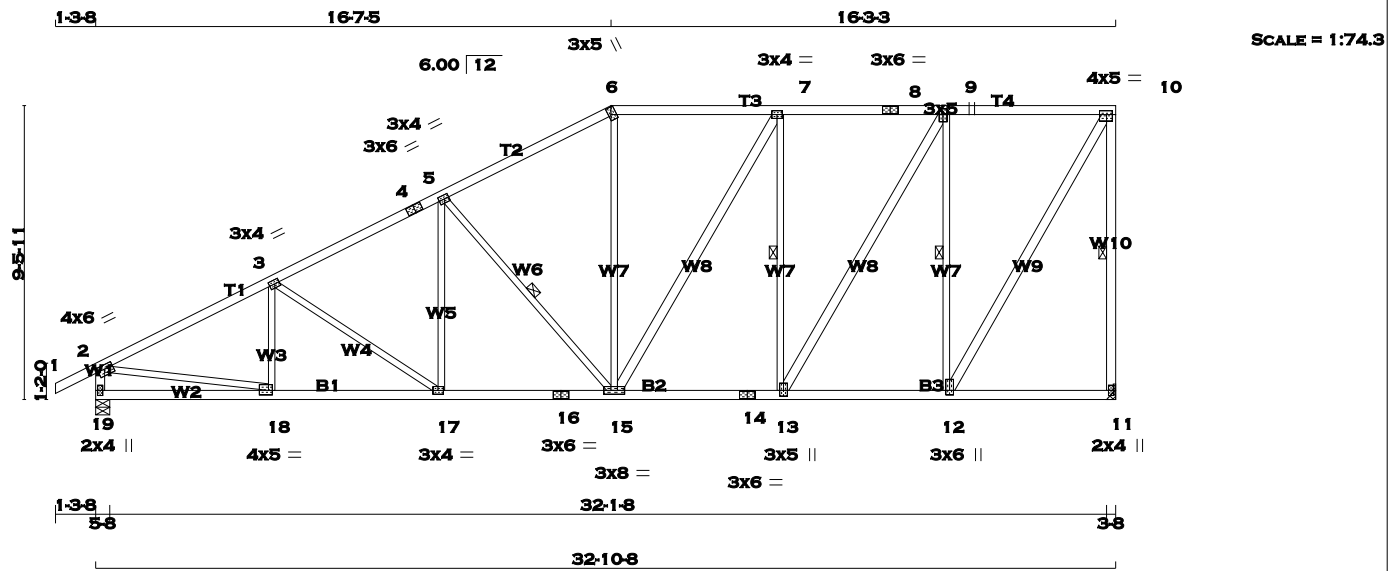
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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MAR 29, 2017

17-4954

BUILDING DIVISION



TOTAL WEIGHT = 2 X 171 = 341 lb
[M][F]

LUMBER				N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.	CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF			
4 - 6	2x4	DRY	No.2	SPF			
6 - 8	2x4	DRY	No.2	SPF			
8 - 10	2x4	DRY	No.2	SPF			
11 - 10	2x4	DRY	No.2	SPF			
19 - 2	2x4	DRY	No.2	SPF			
19 - 16	2x4	DRY	No.2	SPF			
16 - 14	2x4	DRY	No.2	SPF			
14 - 11	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			
15 - 7	2x4	DRY	No.2	SPF			
13 - 9	2x4	DRY	No.2	SPF			
12 - 10	2x4	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	2.75
3	TMWW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TMWW-t	MT20	3.0	4.0	1.50	1.75
6	TTW+h	MT20	3.0	5.0	2.75	1.00
7	TMWW-t	MT20	3.0	4.0		
8	TS-t	MT20	3.0	6.0		
9	TMWW+t	MT20	3.0	5.0	2.25	1.50
10	TMVW-t	MT20	4.0	5.0	1.50	2.25
11	BMV1+p	MT20	2.0	4.0		
12	BMWW+t	MT20	3.0	6.0	1.75	1.50
13	BMWW+t	MT20	3.0	5.0	2.25	1.50
14	BS-t	MT20	3.0	6.0		
15	BMWWWW-t	MT20	3.0	8.0		
16	BS-t	MT20	3.0	6.0		
17	BMWW-t	MT20	3.0	4.0		
18	BMWW-t	MT20	4.0	5.0	1.75	1.50
19	BMV1+p	MT20	2.0	4.0		

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

March 10, 2017

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
11		1559	0	1559	0	0	HANGER BY OTHERS		
19		1664	0	1664	0	0	MIN. SEAT SIZE: 3-8	5-8	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
11		1094	765 / 0	0 / 0	0 / 0	0 / 0	329 / 0
19		1165	829 / 0	0 / 0	0 / 0	0 / 0	337 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-11. DBS = 8-0-0 . CBF = 76 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15, 7-13. DBS = 20-0-0 . CBF = 87 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-12. DBS = 12-0-0 . CBF = 93 LBS.

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

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

LOADING				TOTAL LOAD CASES: (3)			
		CHORDS				WEBS	
		MAX. FACTORED	FACTORED			MAX. FACTORED	FACTORED
MEMB.		FORCE (LBS)	VERT. LOAD (PLF)	CS1 (LC)	UNBRAC	FORCE (LBS)	MAX CS1 (LC)
FR-TO			FROM TO		LENGTH	FR-TO	
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	18-3	-206 / 30
2-3	-2275 / 0	-77.3	-77.3	0.39 (1)	4.20	3-17	-271 / 0
3-4	-2042 / 0	-77.3	-77.3	0.31 (1)	4.47	17-5	0 / 247
4-5	-2042 / 0	-77.3	-77.3	0.31 (1)	4.47	5-15	-658 / 0
5-6	-1579 / 0	-77.3	-77.3	0.31 (1)	4.95	15-6	0 / 356
6-7	-1399 / 0	-77.3	-77.3	0.28 (1)	5.21	15-7	0 / 279
7-8	-1259 / 0	-77.3	-77.3	0.26 (1)	5.46	13-7	-696 / 0
8-9	-1259 / 0	-77.3	-77.3	0.26 (1)	5.46	13-9	0 / 906
9-10	-803 / 0	-77.3	-77.3	0.26 (1)	6.25	12-9	-1242 / 0
11-10	-1521 / 0	0.0	0.0	0.65 (1)	5.33	12-10	0 / 1571
19-2	-1621 / 0	0.0	0.0	0.16 (1)	6.50	2-18	0 / 2074
19-18	0 / 0	-17.5	-17.5	0.12 (3)	10.00		
18-17	0 / 2051	-17.5	-17.5	0.38 (1)	10.00		
17-16	0 / 1827	-17.5	-17.5	0.35 (1)	10.00		
16-15	0 / 1827	-17.5	-17.5	0.35 (1)	10.00		
15-14	0 / 1259	-17.5	-17.5	0.26 (1)	10.00		
14-13	0 / 1259	-17.5	-17.5	0.26 (1)	10.00		
13-12	0 / 803	-17.5	-17.5	0.20 (1)	10.00		
12-11	0 / 0	-17.5	-17.5	0.13 (3)	10.00		

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.65 (10-11:1), BC=0.38 (17-18:1), WB=0.74 (9-12:1), SSI=0.20 (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)		
MT20	618	354	1667	822	2284 1656

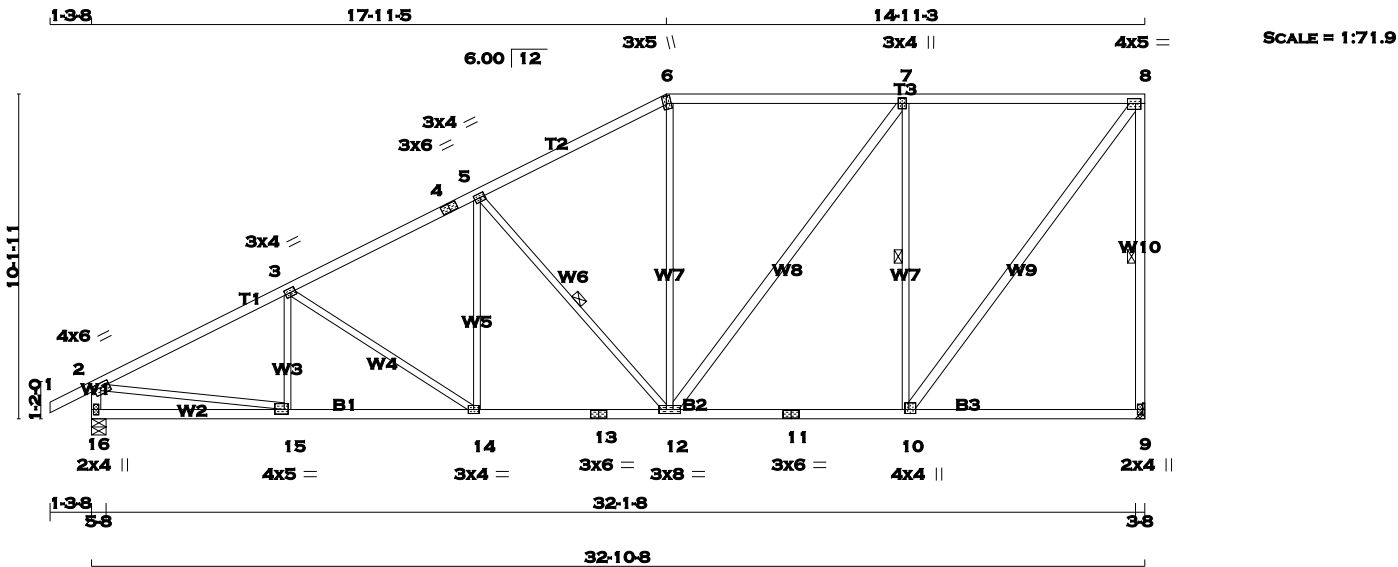
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (18) (INPUT = 0.90)
JSI METAL= 0.61 (18) (INPUT = 1.00)

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

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MAR 29, 2017
17-4954
BUILDING DIVISION



TOTAL WEIGHT = 2 X 159 = 319 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
16 - 2	2x4	DRY	No.2	SPF	
16 - 13	2x4	DRY	No.2	SPF	
13 - 11	2x4	DRY	No.2	SPF	
11 - 9	2x4	DRY	No.2	SPF	
ALL WEBS				SPF	
EXCEPT					
12 - 7	2x4	DRY	No.2	SPF	
10 - 8	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	6.0	1.50 2.75
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TMWW-t	MT20	3.0	4.0	1.50 1.75
6	TTW+m	MT20	3.0	5.0	2.75 1.25
7	TMWW-t	MT20	3.0	4.0	
8	TMVW-t	MT20	4.0	5.0	1.75 2.00
9	BMV1+p	MT20	2.0	4.0	
10	BMWW-t	MT20	4.0	4.0	1.50 1.50
11	BS-t	MT20	3.0	6.0	
12	BMWWW-t	MT20	3.0	8.0	
13	BS-t	MT20	3.0	6.0	
14	BMWW-t	MT20	3.0	4.0	
15	BMWW-t	MT20	4.0	5.0	1.75 1.50
16	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX		
9	1559	0		1559	0	0		HANGER BY OTHERS	
MIN. SEAT SIZE: 3-8									
16	1664	0		1664	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
9	1094	765 / 0	0 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0	
16	1165	829 / 0	0 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.13 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-9. DBS = 8-0-0 . CBF = 75 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-12. DBS = 20-0-0 . CBF = 92 LBS.
- 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-10. DBS = 12-0-0 . CBF = 86 LBS.

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

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

LOADING		TOTAL LOAD CASES: (3)		C H O R D S		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC1)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-3	-175 / 47	0.05 (1)
2-3	-2285 / 0	-77.3 -77.3	0.45 (1)	4.13	3-14	-344 / 0	0.33 (1)
3-4	-1984 / 0	-77.3 -77.3	0.36 (1)	4.47	14-5	0 / 291	0.07 (1)
4-5	-1984 / 0	-77.3 -77.3	0.36 (1)	4.47	5-12	-734 / 0	0.43 (1)
5-6	-1464 / 0	-77.3 -77.3	0.35 (1)	5.04	12-6	0 / 244	0.05 (1)
6-7	-1293 / 0	-77.3 -77.3	0.60 (1)	4.83	12-7	0 / 528	0.08 (1)
7-8	-978 / 0	-77.3 -77.3	0.58 (1)	5.41	10-7	-1141 / 0	0.80 (1)
9-8	-1507 / 0	0.0 0.0	0.76 (1)	5.35	10-8	0 / 1618	0.26 (1)
16-2	-1618 / 0	0.0 0.0	0.16 (1)	6.50	2-15	0 / 2081	0.47 (1)

16-15	0 / 0	-17.5 -17.5	0.15 (3)	10.00
15-14	0 / 2061	-17.5 -17.5	0.39 (1)	10.00
14-13	0 / 1775	-17.5 -17.5	0.36 (1)	10.00
13-12	0 / 1775	-17.5 -17.5	0.36 (1)	10.00
12-11	0 / 978	-17.5 -17.5	0.31 (3)	10.00
11-10	0 / 978	-17.5 -17.5	0.31 (3)	10.00
10-9	0 / 0	-17.5 -17.5	0.24 (3)	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.10")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.19")

CSI: TC=0.76 (8-9:1) , BC=0.39 (14-15:1) , WB=0.80 (7-10:1) , SSI=0.28 (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)		
MT20	618	354	1667	822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

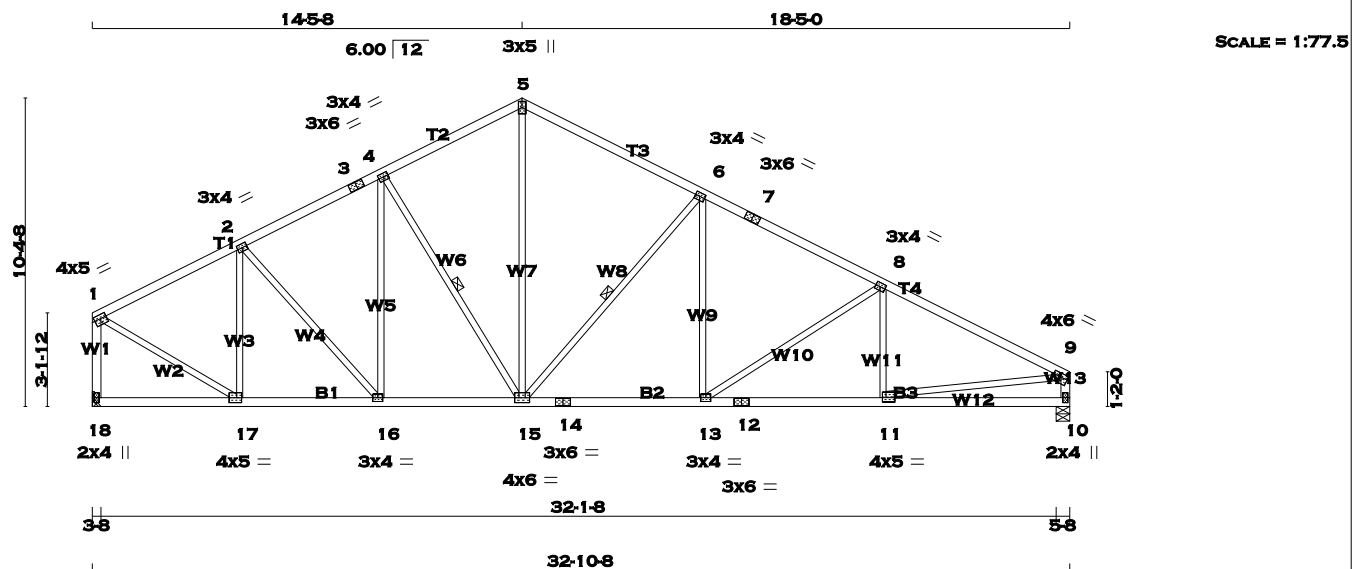
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (6) (INPUT = 0.90)
JSI METAL= 0.62 (15) (INPUT = 1.00)



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

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MAR 29, 2017
17-4954
BUILDING DIVISION



TOTAL WEIGHT = 3 X 145 = 435 lb

<u>LUMBER</u>			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	No.2	SPF
3 - 5	2x4	No.2	SPF
5 - 7	2x4	No.2	SPF
7 - 9	2x4	No.2	SPF
18 - 1	2x4	No.2	SPF
10 - 9	2x4	No.2	SPF
18 - 14	2x4	No.2	SPF
14 - 12	2x4	No.2	SPF
12 - 10	2x4	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES		(table is in inches)				
JT	TYPE	PLATES	W	LEN	Y	X
1	TMWw-t	MT20	4.0	5.0	1.50	2.25
2, 4, 6, 8						
2	TMWw-t	MT20	3.0	4.0	1.50	1.75
3	TS-t	MT20	3.0	6.0		
5	TTW+p	MT20	3.0	5.0		
7	TS-t	MT20	3.0	6.0		
9	TMWw-t	MT20	4.0	6.0	1.50	2.75
10	BMV1+p	MT20	2.0	4.0		
11	BMWw-t	MT20	4.0	5.0	1.75	1.50
12	BS-t	MT20	3.0	6.0		
13	BMWw-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMWwWw-t	MT20	4.0	6.0		
16	BMWw-t	MT20	3.0	4.0		
17	BMWw-t	MT20	4.0	5.0	2.00	2.00
18	BMV1+p	MT20	2.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
18	1559	0	1559	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 3-8	
10	1559	0	1559	0	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
18	1094	765 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0
10	1094	765 / 0	0 / 0	0 / 0	0 / 0	329 / 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 = 4.10 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 4-15. DBS = 20-0-0 . CBF = 36 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 6-15. DBS = 18-0-0 . CBF = 85 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX FACTORED CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
1- 2	-1410 / 0	-77.3	-77.3 0.24 (1)	5.24	17- 2	-633 / 0	0.31 (1)
2- 3	-1578 / 0	-77.3	-77.3 0.23 (1)	5.04	2-16	0 / 205	0.02 (1)
3- 4	-1578 / 0	-77.3	-77.3 0.23 (1)	5.04	16- 4	-78 / 41	0.10 (1)
4- 5	-1423 / 0	-77.3	-77.3 0.22 (1)	5.25	4-15	-287 / 0	0.16 (1)
5- 6	-1428 / 0	-77.3	-77.3 0.37 (1)	5.06	15- 5	0 / 920	0.21 (1)
6- 7	-1963 / 0	-77.3	-77.3 0.38 (1)	4.47	15- 6	-759 / 0	0.46 (1)
7- 8	-1963 / 0	-77.3	-77.3 0.38 (1)	4.47	13- 6	0 / 308	0.07 (1)
8- 9	-2287 / 0	-77.3	-77.3 0.48 (1)	4.10	13- 8	-369 / 0	0.38 (1)
18- 1	-1523 / 0	0.0	0.0 0.26 (1)	6.66	11- 8	-165 / 52	0.05 (1)
10- 9	-1512 / 0	0.0	0.0 0.15 (1)	6.68	1-17	0 / 1470	0.33 (1)
					11- 9	0 / 2083	0.47 (1)
18-17	0 / 0	-17.5	-17.5 0.10 (3)	10.00			
17-16	0 / 1276	-17.5	-17.5 0.26 (1)	10.00			
16-15	0 / 1410	-17.5	-17.5 0.29 (1)	10.00			
15-14	0 / 1755	-17.5	-17.5 0.35 (1)	10.00			
14-13	0 / 1755	-17.5	-17.5 0.35 (1)	10.00			
13-12	0 / 2064	-17.5	-17.5 0.40 (1)	10.00			
12-11	0 / 2064	-17.5	-17.5 0.40 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.15 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL
OR 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19")

CSI: TC=0.48 (8-9:1) , BC=0.40 (11-13:1) ,
WB=0.47 (9-11:1) , SSI=0.20 (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) (PSI)		SHEAR (PLI)		SECTION (PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (1) (INPUT = 0.90)
JSI METAL= 0.62 (11) (INPUT = 1.00)



March 10, 2017



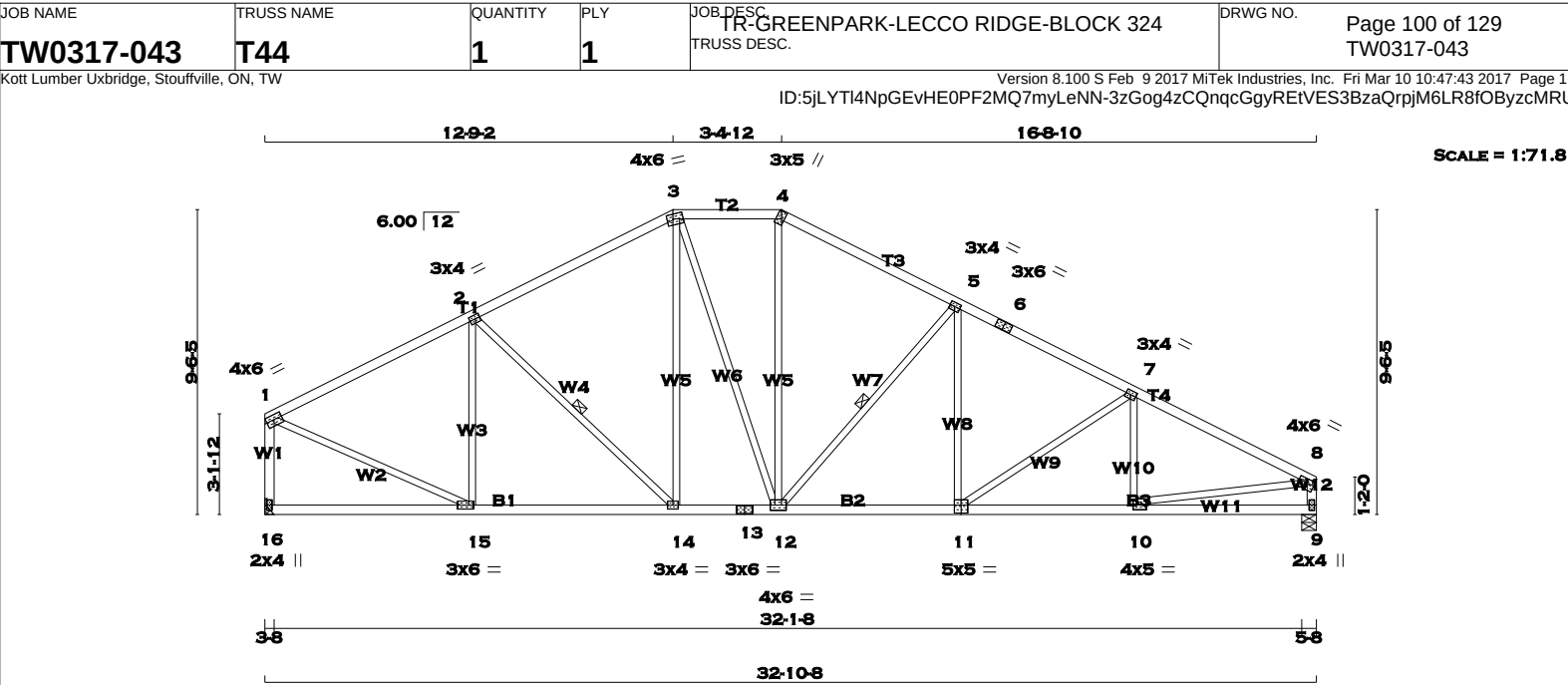
**READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.**

RECEIVED
TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION



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

1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
16 - 1	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
16 - 13	2x4	DRY	No.2	SPF
13 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

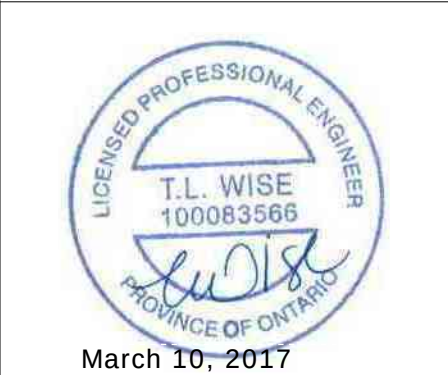
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.75	Edge
2, 5, 7						
2	TMVW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW-m	MT20	4.0	6.0	1.75	2.25
4	TTWW-h	MT20	3.0	5.0	2.75	1.00
6	TS-t	MT20	3.0	6.0		
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	4.0	5.0	1.75	1.50
11	BSWW-l	MT20	5.0	5.0	3.00	2.50
12	BMVW-t	MT20	4.0	6.0		
13	BS-t	MT20	3.0	6.0		
14	BMVW-t	MT20	3.0	4.0		
15	BMVW-t	MT20	3.0	6.0	1.50	1.75
16	BMV1+p	MT20	2.0	4.0		

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	INPUT DOWN	REQRD BRG IN-SX
16	1559	0	1559	0
9	1559	0	1559	0

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
16	1094	765 / 0	0 / 0	0 / 0	329 / 0	0 / 0
9	1094	765 / 0	0 / 0	0 / 0	329 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-14, 5-12. DBS = 20-0-0 . CBF = 83 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-1550 / 0	-77.3 -77.3	0.47 (1)	4.77 15-2	-487 / 0	0.32 (1)	
2-3	-1506 / 0	-77.3 -77.3	0.45 (1)	4.83 2-14	-122 / 0	0.07 (1)	
3-4	-1390 / 0	-77.3 -77.3	0.14 (1)	5.40 14-3	0 / 162	0.04 (3)	
4-5	-1569 / 0	-77.3 -77.3	0.31 (1)	4.96 3-12	0 / 199	0.04 (1)	
5-6	-2038 / 0	-77.3 -77.3	0.32 (1)	4.47 12-4	0 / 392	0.09 (1)	
6-7	-2038 / 0	-77.3 -77.3	0.32 (1)	4.47 12-5	-667 / 0	0.33 (1)	
7-8	-2276 / 0	-77.3 -77.3	0.39 (1)	4.19 11-5	0 / 254	0.06 (1)	
16-1	-1513 / 0	0.0 0.0	0.26 (1)	6.68 11-7	-276 / 0	0.22 (1)	
9-8	-1515 / 0	0.0 0.0	0.15 (1)	6.67 10-7	-205 / 31	0.05 (1)	
16-15	0 / 0	-17.5 -17.5	0.19 (3)	10.00 10-8	0 / 1539	0.35 (1)	
15-14	0 / 1410	-17.5 -17.5	0.32 (1)	10.00 10-8	0 / 2075	0.47 (1)	
14-13	0 / 1323	-17.5 -17.5	0.26 (1)	10.00 13-12			
13-12	0 / 1323	-17.5 -17.5	0.26 (1)	10.00 12-11			
12-11	0 / 1823	-17.5 -17.5	0.35 (1)	10.00 11-10			
11-10	0 / 2052	-17.5 -17.5	0.38 (1)	10.00 10-9			
10-9	0 / 0	-17.5 -17.5	0.12 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (1.10")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL)= L/360 (1.10")
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.47 (1-2:1), BC=0.38 (10-11:1), WB=0.47 (8-10:1), SSI=0.22 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

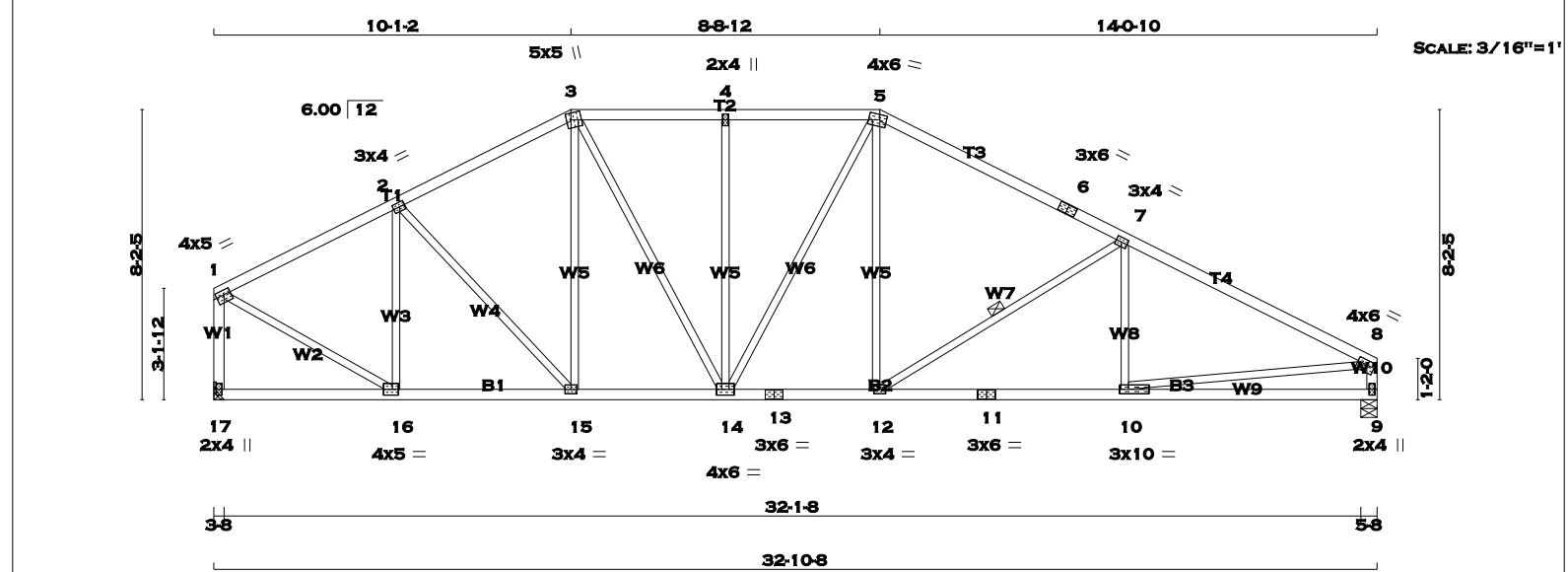
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (15) (INPUT = 0.90)
JSI METAL= 0.62 (10) (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
17-4954
BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 5

2x4

DRY

No.2

SPF

5 - 6

2x4

DRY

No.2

SPF

6 - 8

2x4

DRY

No.2

SPF

17 - 1

2x4

DRY

No.2

SPF

9 - 8

2x4

DRY

No.2

SPF

17 - 13

2x4

DRY

No.2

SPF

13 - 11

2x4

DRY

No.2

SPF

11 - 9

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

17

1559

0

1559

0

0

HANGER BY OTHERS

MIN. SEAT SIZE: 3-8

5-8

5-8

9

1559

0

1559

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

17

1094

765 / 0

0 / 0

0 / 0

0 / 0

329 / 0

0 / 0

9

1094

765 / 0

0 / 0

0 / 0

0 / 0

329 / 0

0 / 0

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING

=

24.0

IN./C

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 (1.10")

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

ALLOWABLE DEFL.(TL)= L/360 (1.10")

CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.66 (7-8:1), BC=0.44 (10-12:1), WB=0.53 (4-14:1), SSI=0.24 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (10) (INPUT = 0.90)

JSI METAL= 0.62 (11) (INPUT = 1.00)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

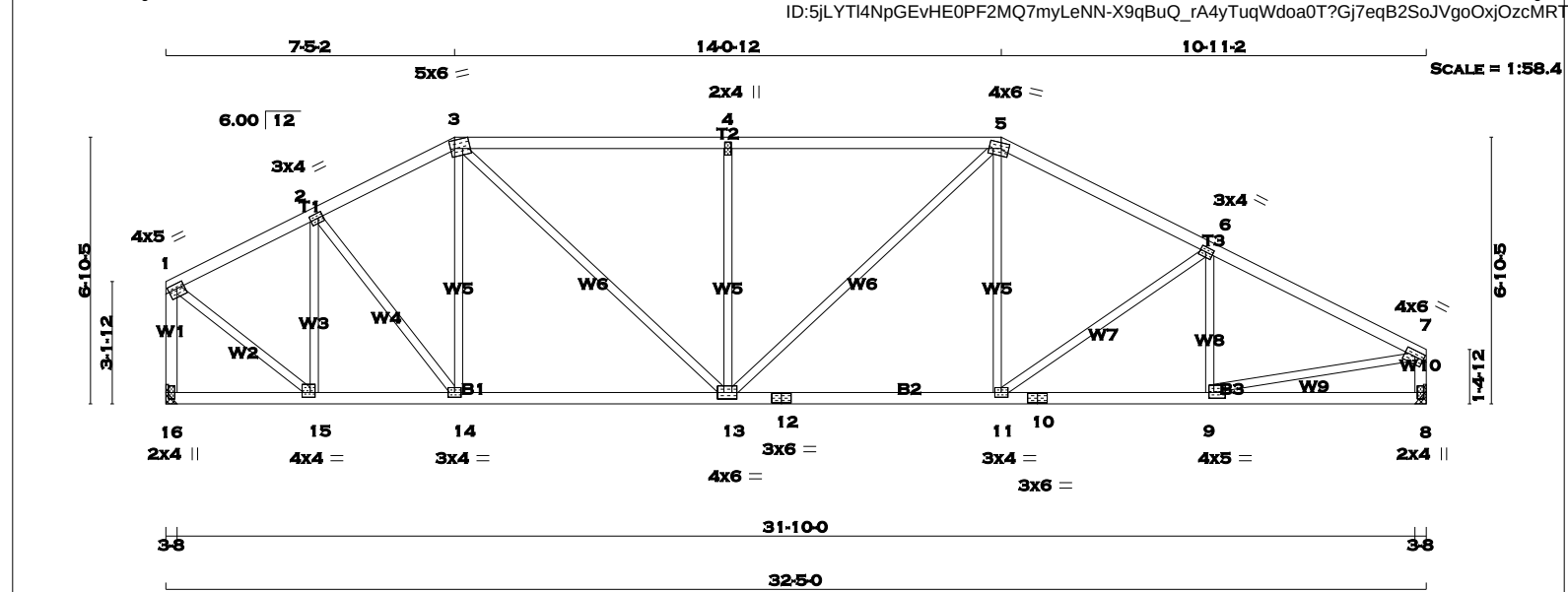
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

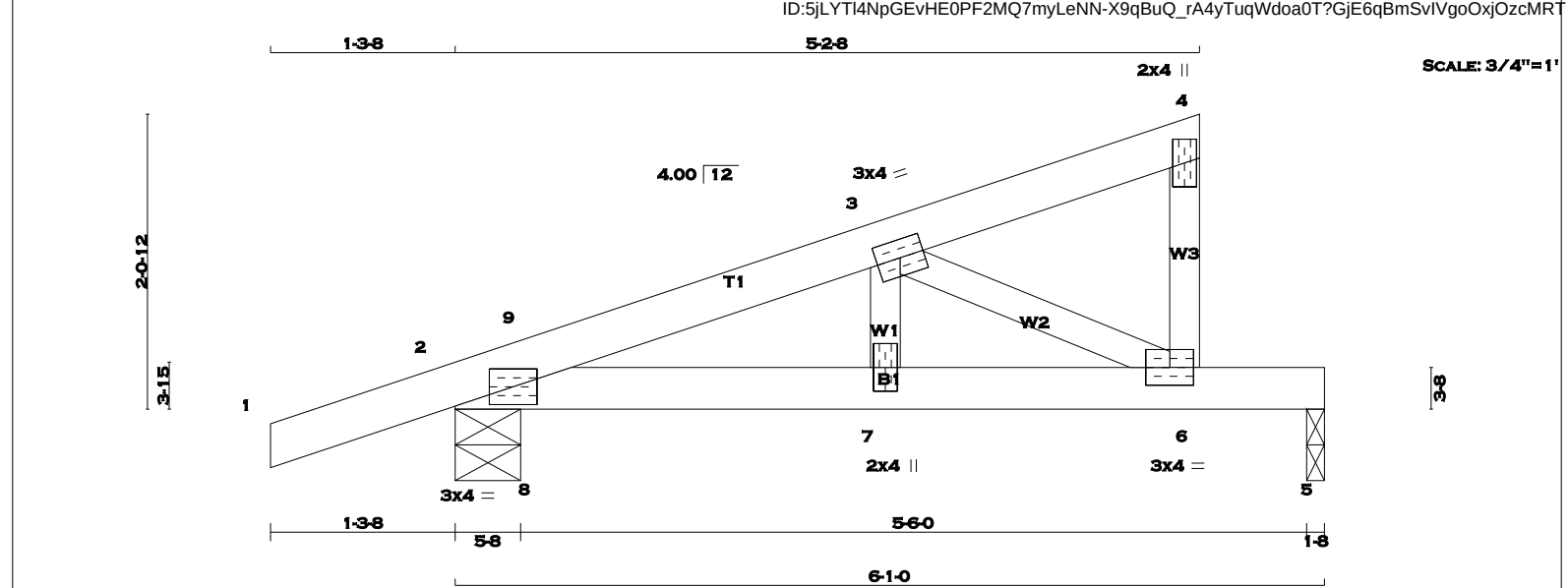
JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	5.0	1.50	2.25
2	TMWW-t	MT20	3.0	4.0	1.50	1.75
3	TTWW+m	MT20	5.0	5.0	2.25	1.50
4	TMW+w	MT20	2.0	4.0		
5	TTWW-m	MT20	4.0	6.0	1.75	2.25
6	TS-t	MT20	3.0	6.0		
7	TMWW-t	MT20	3.0	4.0	1.50	1.75
8	TMVW-t	MT20	4.0	6.0	1.50	2.75
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	10.0	1.50	3.00
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMWWW-t	MT20	4.0	6.0		
15	BMWW-t	MT20	3.0	4.0		
16	BMWW-t	MT20	4.0	5.0	2.00	2.00
17	BMV1+p	MT20	2.0	4.0		

15	BMWW-t	MT20	3.0	4.0	2.00	2.00	CHORDS	WEBS	DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10	
16	BMWW-t	MT20	4.0	5.0						
17	BMV1+p	MT20	2.0	4.0						
						MAX. FACTORED		MAX. FACTORED		
						MEMB. FORCE		MEMB. FORCE		COMPANION LIVE LOAD FACTOR = 0.50



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 16 - 1 2x4 DRY No.2 SPF 8 - 7 2x4 DRY No.2 SPF 16 - 12 2x4 DRY No.2 SPF 12 - 10 2x4 DRY No.2 SPF 10 - 8 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQD GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 16 1537 0 1537 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 8 1537 0 1537 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 16 1079 755 / 0 0 / 0 0 / 0 0 / 0 324 / 0 0 / 0 8 1079 755 / 0 0 / 0 0 / 0 0 / 0 324 / 0 0 / 0 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.17 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (3) CHORDS WEBS MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 -1237 / 0 -77.3 -77.3 0.15 (1) 5.62 15-2 -774 / 0 0.29 (1) 2-3 -1530 / 0 -77.3 -77.3 0.16 (1) 5.18 2-14 0 / 380 0.09 (1) 3-4 -1956 / 0 -77.3 -77.3 0.57 (1) 4.17 14-3 -198 / 11 0.16 (1) 4-5 -1956 / 0 -77.3 -77.3 0.57 (1) 4.17 3-13 0 / 827 0.19 (1) 5-6 -1928 / 0 -77.3 -77.3 0.35 (1) 4.52 13-4 -671 / 0 0.53 (1) 6-7 -2113 / 0 -77.3 -77.3 0.37 (1) 4.34 13-5 0 / 340 0.08 (1) 16-1 -1507 / 0 0.0 0.0 0.26 (1) 6.68 11-5 0 / 257 0.06 (1) 8-7 -1494 / 0 0.0 0.0 0.15 (1) 6.71 11-6 -252 / 0 0.21 (1) 9-6 -275 / 7 0.07 (1) 16-15 0 / 0 -17.5 -17.5 0.06 (3) 10.00 1-15 0 / 1395 0.31 (1) 15-14 0 / 1119 -17.5 -17.5 0.25 (1) 10.00 9-7 0 / 1945 0.44 (1) 14-13 0 / 1351 -17.5 -17.5 0.31 (1) 10.00 13-12 0 / 1707 -17.5 -17.5 0.37 (1) 10.00 12-11 0 / 1707 -17.5 -17.5 0.37 (1) 10.00 11-10 0 / 1909 -17.5 -17.5 0.38 (1) 10.00 10-9 0 / 1909 -17.5 -17.5 0.38 (1) 10.00 9-8 0 / 0 -17.5 -17.5 0.11 (3) 10.00							DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN./C 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 (1.08") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (1.08") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.19") CSI: TC=0.57 (3-4:1), BC=0.38 (9-11:1), WB=0.53 (4-13:1), SSI=0.26 (3-4:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (2) (INPUT = 0.90) JSI METAL= 0.57 (9) (INPUT = 1.00)						
LICENSED PROFESSIONAL ENGINEER T.L. WISE 100083566 PROVINCE OF ONTARIO March 10, 2017							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 17-4954 BUILDING DIVISION													



TOTAL WEIGHT = 6 X 18 = 110 lb

[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-I	MT20	3.0	4.0		
3	TMVW-t	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-t	MT20	3.0	4.0		
7	BMV+w	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		DOWN		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
2	387	0	387	0	0	5-8	5-8	5-8	5-8
5	226	0	226	0	0	1-8	1-8	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	DEAD	SOIL
2	269	201 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0	68 / 0	0 / 0
5	160	104 / 0	0 / 0	0 / 0	0 / 0	56 / 0	0 / 0	56 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS		MAX. FACTORED		FACTORED		MEMB.		WEBS		MAX. FACTORED	
MEMB.		FORCE		VERT. LOAD LC1		MAX.		MEMB.		FORCE	
		(LBS)		(PLF)		CSI (LC)				(LBS)	
FR-TO				FROM TO		UNBRAC		FR-TO			
1-2		0 / 15		-77.3 -77.3		0.10 (1)		7-3		0 / 183	
2-9		-518 / 0		-77.3 -77.3		0.01 (3)		3-6		-535 / 0	
9-3		-506 / 0		-77.3 -77.3		0.05 (1)		8-9		-79 / 5	
3-4		-4 / 0		-77.3 -77.3		0.04 (1)					
6-4		-71 / 0		0.0 0.0		0.01 (1)					
2-8		0 / 484		-17.5 -17.5		0.14 (1)					
8-7		0 / 484		-17.5 -17.5		0.14 (1)					
7-6		0 / 484		-17.5 -17.5		0.34 (1)					
6-5		0 / 0		-17.5 -17.5		0.26 (1)					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.10 (1-2:1), BC=0.34 (6-7:1), WB=0.09 (3-6:1), SSI=0.18 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (6) (INPUT = 0.90)
JSI METAL= 0.18 (2) (INPUT = 1.00)



March 10, 2017



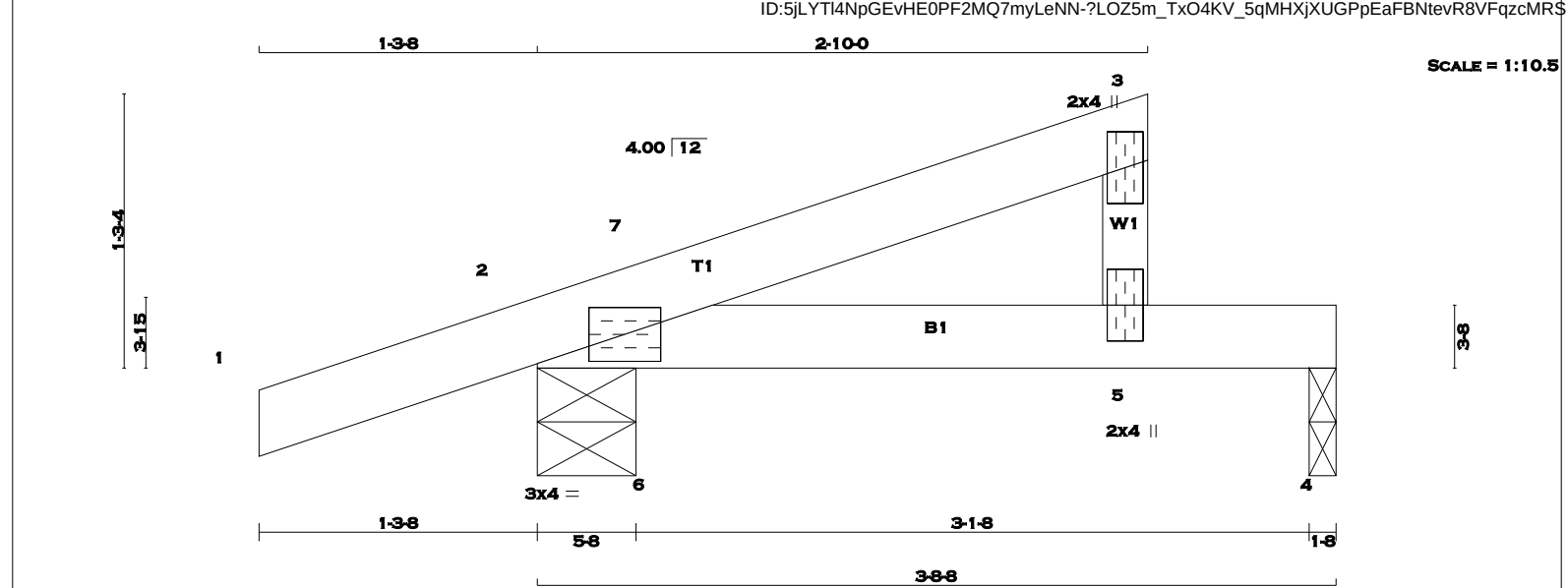
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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TOWN OF MILTON

MAR 29, 2017

17-4954

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
2 - 4	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMB1-I	MT20	3.0	4.0		
3	TMV+p	MT20	2.0	4.0		
5	BMV+p	MT20	2.0	4.0		

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
2	271	0	271	0	5-8	5-8
4	116	0	116	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS				WIND	DEAD	SOIL
	SNOW	LIVE	PERM.	LIVE	WIND	DEAD			
2	188	144 / 0	0 / 0	0 / 0	0 / 0	44 / 0	0 / 0	0 / 0	
4	83	50 / 0	0 / 0	0 / 0	0 / 0	32 / 0	0 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX (LC)		
FR-TO					FR-TO				
1-2	0 / 15	-77.3	-77.3	0.10 (1)	10.00	6-7	-18 / 32	0.00 (1)	
2-7	-25 / 0	-77.3	-77.3	0.06 (1)	6.25				
7-3	0 / 6	-77.3	-77.3	0.10 (1)	10.00				
5-3	-106 / 0	0.0	0.0	0.01 (1)	7.81				
2-6	0 / 0	-17.5	-17.5	0.06 (1)	10.00				
6-5	0 / 0	-17.5	-17.5	0.13 (1)	10.00				
5-4	0 / 0	-17.5	-17.5	0.13 (1)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	PSF
DL	23.3	PSF
DL	3.0	PSF

BOT CH.	LL	PSF
DL	0.0	PSF
DL	7.0	PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.10 (3-7:1) , BC=0.13 (4-5:1) , WB=0.00 (6-7:1) , SSI=0.09 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

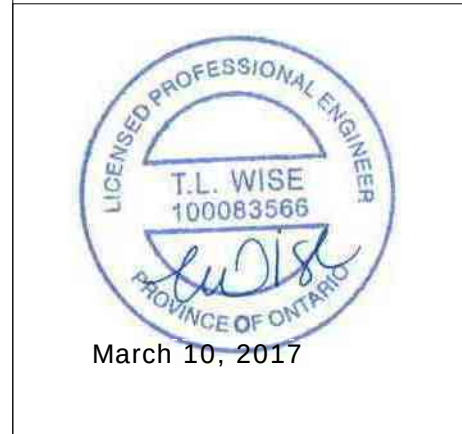
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

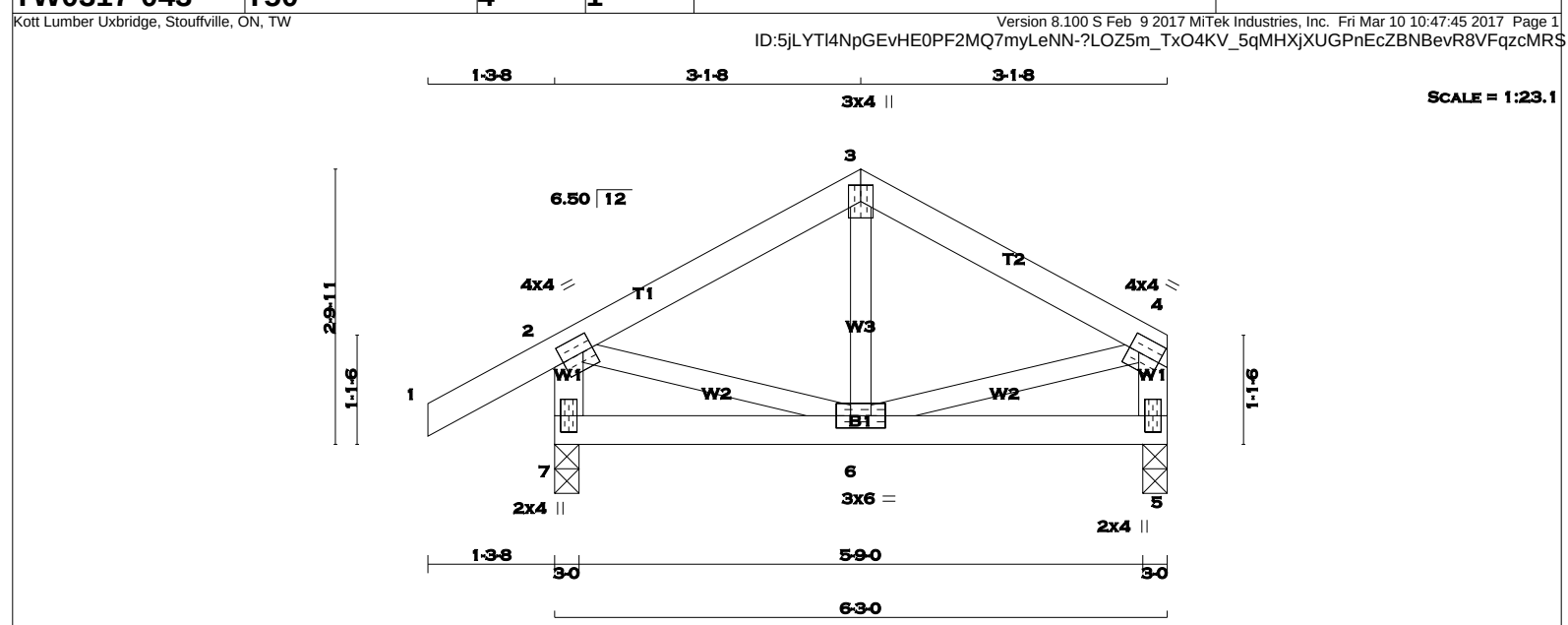


March 10, 2017



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MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

7 - 2

2x4

DRY

No.2

SPF

5 - 4

2x4

DRY

No.2

SPF

7 - 5

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

7

402

0

402

0

0

3-0

3-0

5

296

0

296

0

0

3-0

3-0

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

7

280

209 / 0

0 / 0

0 / 0

0 / 0

71 / 0

0 / 0

5

208

146 / 0

0 / 0

0 / 0

0 / 0

63 / 0

0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS

MAX. FACTORED

FACTORED

VERT. LOAD

LC1

MAX

MAX.

MEMB.

MAX.

MEMB.

MAX.

FACTORED

FORCE

FORCE

PLF

CSI (LC)

UNBRAC

LENGTH

FR-TO

FR-TO

FORCE

MAX

(LBS)

(PLF)

(LC)

(LC)

FR-TO

(LBS)

CSI (LC)

1-2

0 / 25

-77.3

-77.3

0.10 (1)

10.00

6-3

-34 / 43

0.01 (3)

2-3

-218 / 0

-77.3

-77.3

0.10 (1)

6.25

2-6

0 / 198

0.04 (1)

3-4

-218 / 0

-77.3

-77.3

0.10 (1)

6.25

6-4

0 / 198

0.04 (1)

7-2

-379 / 0

0.0

0.0

0.04 (1)

7.81

5-4

-274 / 0

0.0

0.0

0.03 (1)

7.81

7-6

0 / 0

-17.5

-17.5

0.05 (3)

10.00

6-5

0 / 0

-17.5

-17.5

0.05 (3)

10.00

WEBS

MAX. FACTORED

FORCE

MAX

CSI (LC)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.21")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.21")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (1-2:1) , BC=0.05 (6-7:3) , WB=0.04 (2-6:1) , SSI=0.08 (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= 0.36 (6) (INPUT = 0.90)

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

LICENSED PROFESSIONAL ENGINEER

T.L. WISE

100083566

PROVINCE OF ONTARIO

March 10, 2017

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

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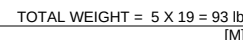
TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION

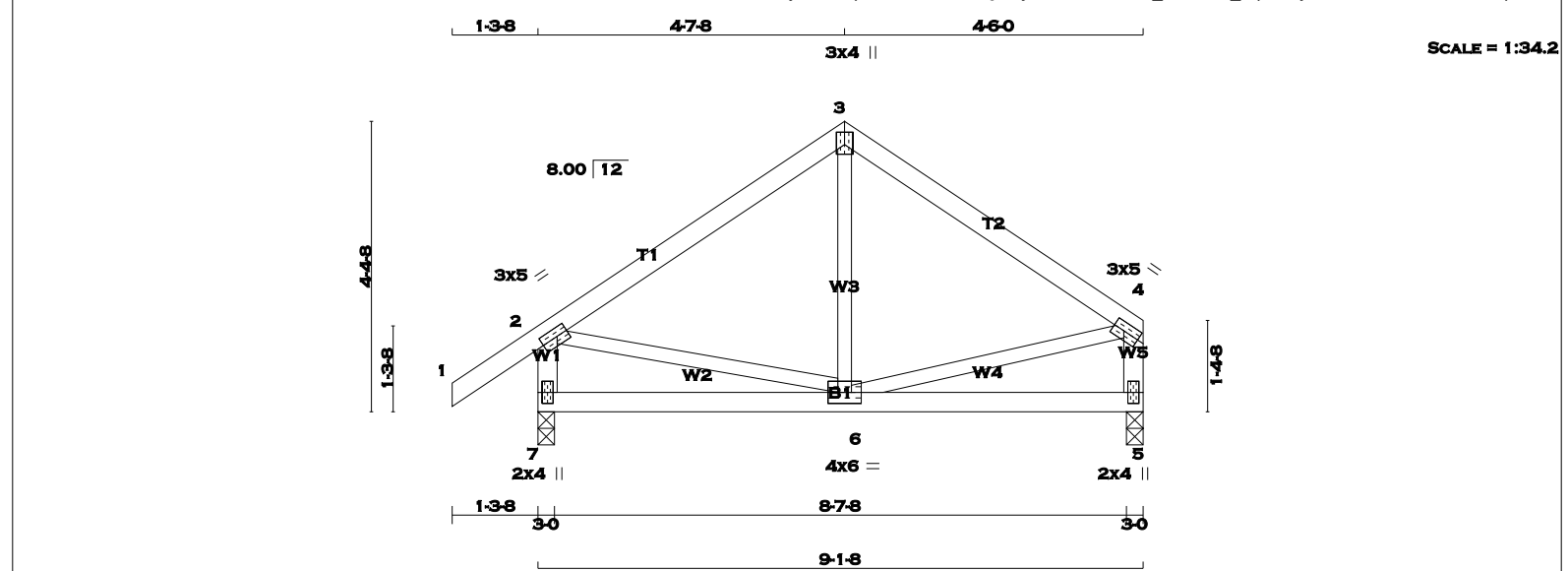
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A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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)	FACTORED MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0/16	-77.3	-77.3	0.10 (1)	10.00		
2-3	0/0	-77.3	-77.3	0.28 (1)	10.00		
5-3	-177/0	0.0	0.0	0.03 (1)	7.81	2-5	0/0
6-2	-281/0	0.0	0.0	0.03 (1)	7.81		0.00 (1)
6-5	0/0	-17.5	-17.5	0.23 (1)	10.00		
5-4	0/0	-17.5	-17.5	0.22 (1)	10.00		

BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

1 - 3

2x4

DRY

No.2

SPF

3 - 4

2x4

DRY

No.2

SPF

7 - 2

2x4

DRY

No.2

SPF

5 - 4

2x4

DRY

No.2

SPF

7 - 5

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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		
7	539	0	539	0	0	3-0	3-0		
5	433	0	433	0	0	3-0	3-0		

UNFACTORED REACTIONS									
JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM.LIVE		SOIL
7	376	276 / 0	0 / 0	0 / 0	0 / 0	0 / 0	99 / 0	0 / 0	
5	304	212 / 0	0 / 0	0 / 0	0 / 0	0 / 0	91 / 0	0 / 0	

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

BRACING

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

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

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

LOADING									
TOTAL LOAD CASES: (3)									
FR-TO	CHORDS		MEMB.		WEBS		MEMB.		
	MAX. FACTORED	FACTORED	FORCE	VERT. LOAD	MAX. FACTORED	FORCE	MAX. FACTORED	FORCE	MAX. FACTORED
	(LBS)	(PLF)	(LBS)	LC1 (LC)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	6-3	-15 / 74	0.03 (3)	
2-3	-305 / 0	-77.3	-77.3	0.21 (1)	6.25	2-6	0 / 259	0.06 (1)	
3-4	-304 / 0	-77.3	-77.3	0.20 (1)	6.25	6-4	0 / 261	0.06 (1)	
7-2	-505 / 0	0.0	0.0	0.05 (1)	7.81				
5-4	-405 / 0	0.0	0.0	0.04 (1)	7.81				
7-6	0 / 0	-17.5	-17.5	0.10 (3)	10.00				
6-5	0 / 0	-17.5	-17.5	0.10 (3)	10.00				

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

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.30")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")

ALLOWABLE DEFL.(TL)= L/360 (0.30")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.21 (2-3:1), BC=0.10 (6-7:3), WB=0.06 (4-6:1), SSI=0.12 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

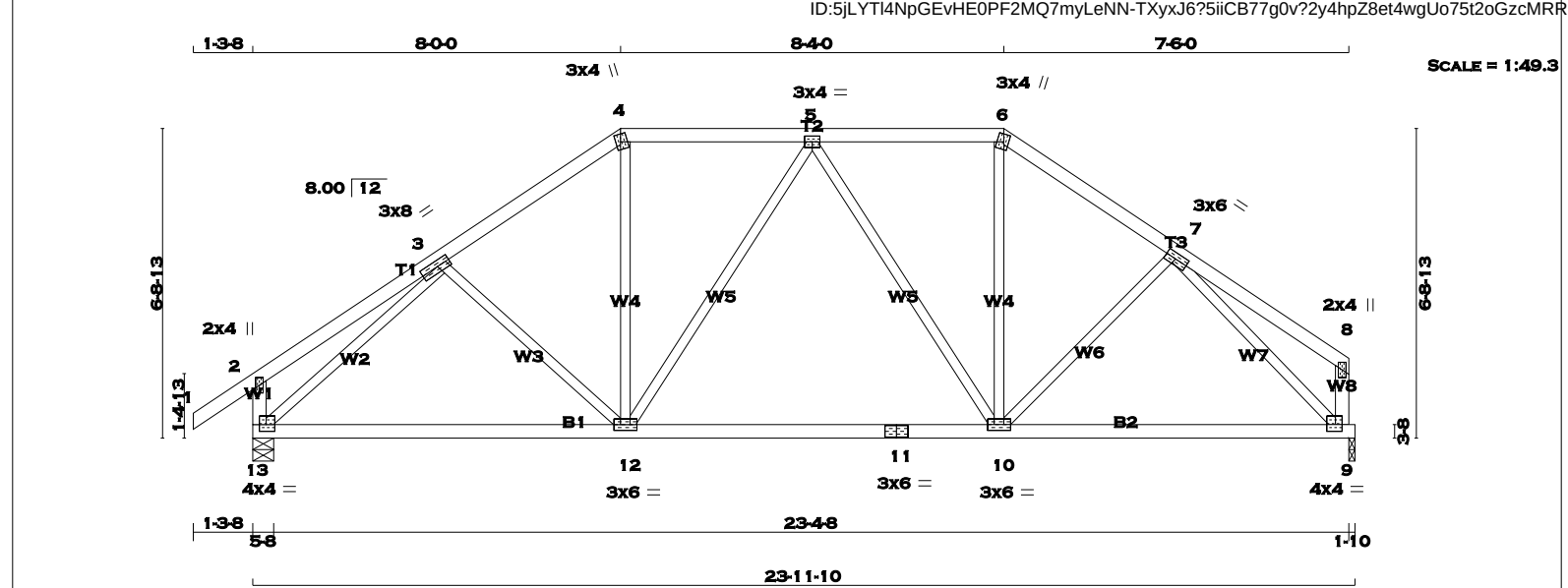
JSI GRIP= 0.48 (6) (INPUT = 0.90)

JSI METAL= 0.14 (2) (INPUT = 1.00)

TOTAL LOAD CASES: (3)									
FR-TO	CHORDS		MEMB.		WEBS		MEMB.		
	MAX. FACTORED	FACTORED	FORCE	VERT. LOAD	MAX. FACTORED	FORCE	MAX. FACTORED	FORCE	MAX. FACTORED
	(LBS)	(PLF)	(LBS)	LC1 (LC)	(LBS)	(LBS)	(LBS)	(LBS)	(LBS)
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	6-3	-15 / 74	0.03 (3)	
2-3	-305 / 0	-77.3	-77.3	0.21 (1)	6.25	2-6	0 / 259	0.06 (1)	
3-4	-304 / 0	-77.3	-77.3	0.20 (1)	6.25	6-4	0 / 261	0.06 (1)	
7-2	-505 / 0	0.0	0.0	0.05 (1)	7.81				
5-4	-405 / 0	0.0	0.0	0.04 (1)	7.81				
7-6	0 / 0	-17.5	-17.5	0.10 (3)	10.00				
6-5	0 / 0	-17.5	-17.5	0.10 (3)	10.00				

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

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TOTAL WEIGHT = 2 X 102 = 203 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
13 - 2	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
13 - 11	2x4	DRY	No.2	SPF	
11 - 9	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMVW-t	MT20	3.0	8.0	1.50 3.50
4	TTW+m	MT20	3.0	4.0	2.00 1.25
5	TMVW-t	MT20	3.0	4.0	
6	TTW+m	MT20	3.0	4.0	2.00 1.25
7	TMVW-t	MT20	3.0	6.0	1.50 2.75
8	TMV+p	MT20	2.0	4.0	
9	BMVW1-t	MT20	4.0	4.0	1.75 1.75
10	BMVW-t	MT20	3.0	6.0	
11	BS-t	MT20	3.0	6.0	
12	BMVW-t	MT20	3.0	6.0	
13	BMVW1-t	MT20	4.0	4.0	1.75 1.75
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

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

BEARINGS				FACTORED				MAXIMUM FACTORED				INPUT				REQRD			
		GROSS REACTION		GROSS REACTION		DOWN		GROSS REACTION		DOWN		UP		BRG		BRG		IN-SX	
JT	VERT	HORZ		JT	VERT	HORZ		JT	VERT	HORZ		JT	VERT	HORZ		JT	VERT	HORZ	
13	1236	0		1236	0	0		5-8	5-8			5-8	5-8						
9	1130	0		1130	0	0		1-10	1-10			1-10	1-10						

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
13	865	619 / 0	0 / 0	0 / 0	0 / 0	0 / 0	247 / 0
9	793	555 / 0	0 / 0	0 / 0	0 / 0	0 / 0	238 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (3)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	3-12	-91 / 29	0.05 (1)
2-3	0 / 19	-77.3	-77.3 0.19 (1)	10.00	12-4	0 / 389	0.09 (1)
3-4	-1162 / 0	-77.3	-77.3 0.16 (1)	5.74	12-5	-201 / 0	0.24 (1)
4-5	-956 / 0	-77.3	-77.3 0.18 (1)	6.15	5-10	-261 / 0	0.31 (1)
5-6	-924 / 0	-77.3	-77.3 0.17 (1)	6.23	10-6	0 / 375	0.08 (1)
6-7	-1123 / 0	-77.3	-77.3 0.14 (1)	5.84	10-7	-8 / 48	0.02 (3)
7-8	0 / 18	-77.3	-77.3 0.16 (1)	10.00	13-3	-1394 / 0	0.68 (1)
13-2	-226 / 0	0.0	0.0 0.02 (1)	7.81	7-9	-1335 / 0	0.63 (1)
9-8	-113 / 0	0.0	0.0 0.01 (1)	7.81			
13-12	0 / 1017	-17.5	-17.5 0.34 (3)	10.00			
12-11	0 / 1063	-17.5	-17.5 0.35 (3)	10.00			
11-10	0 / 1063	-17.5	-17.5 0.35 (3)	10.00			
10-9	0 / 923	-17.5	-17.5 0.31 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.19 (2-3:1), BC=0.35 (10-12:3), WB=0.68 (3-13:1), SSI=0.16 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (7) (INPUT = 0.90)
JSI METAL= 0.38 (13) (INPUT = 1.00)

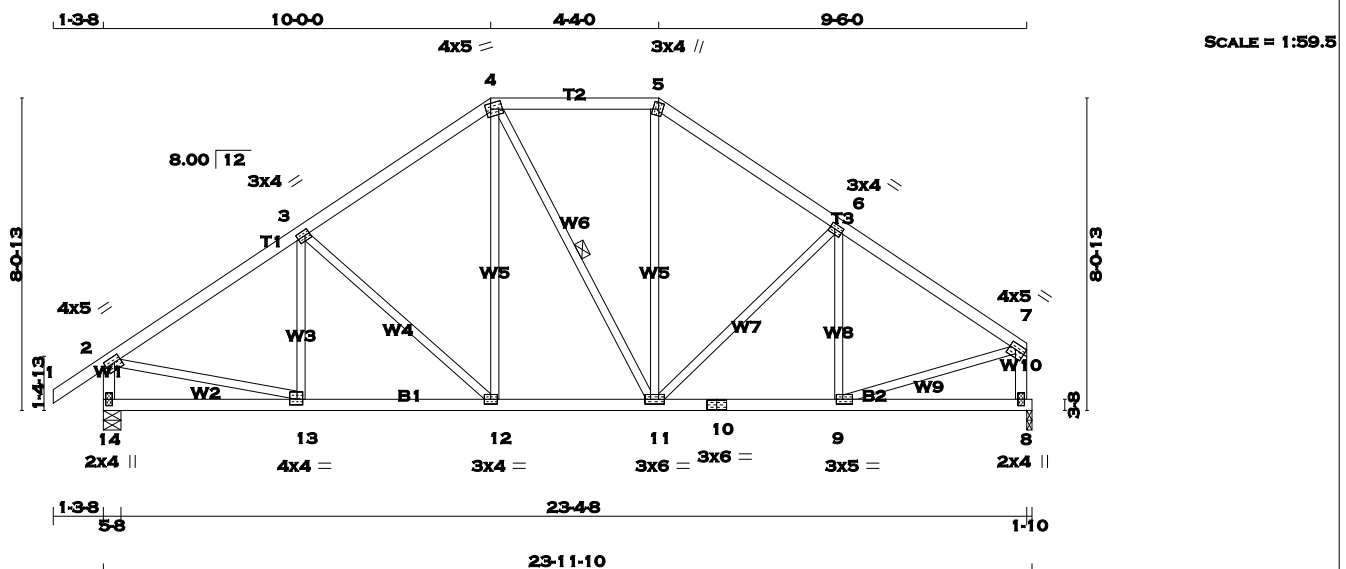


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TOTAL WEIGHT = 2 X 108 = 216 lb
[M][F]

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

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
14	1236	0	1236	0	5-8
8	1130	0	1130	0	1-10

UNFACTORED REACTIONS							
JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	MAX/MIN. WIND	MAX/MIN. DEAD	MAX/MIN. SOIL
14	865	619 / 0	0 / 0	0 / 0	0 / 0	247 / 0	0 / 0
8	793	555 / 0	0 / 0	0 / 0	0 / 0	238 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.44 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

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

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

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-129 / 47	0.04 (1)
2-3	-1262 / 0	-77.3 -77.3	0.27 (1)	5.44	3-12	-303 / 0	0.25 (1)
3-4	-1044 / 0	-77.3 -77.3	0.26 (1)	5.85	12-4	0 / 279	0.06 (1)
4-5	-836 / 0	-77.3 -77.3	0.19 (1)	6.25	4-11	-26 / 0	0.01 (1)
5-6	-1027 / 0	-77.3 -77.3	0.23 (1)	5.91	11-5	0 / 255	0.06 (1)
6-7	-1168 / 0	-77.3 -77.3	0.24 (1)	5.63	11-6	-222 / 0	0.18 (1)
14-2	-1199 / 0	0.0 0.0	0.12 (1)	7.30	9-6	-197 / 22	0.07 (1)
8-7	-1095 / 0	0.0 0.0	0.12 (1)	7.55	2-13	0 / 1095	0.25 (1)
					9-7	0 / 1033	0.23 (1)
14-13	0 / 0	-17.5 -17.5	0.11 (3)	10.00			
13-12	0 / 1071	-17.5 -17.5	0.22 (1)	10.00			
12-11	0 / 849	-17.5 -17.5	0.17 (1)	10.00			
11-10	0 / 992	-17.5 -17.5	0.20 (1)	10.00			
10-9	0 / 992	-17.5 -17.5	0.20 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.10 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.79")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.27 (2-3:1), BC=0.22 (12-13:1), WB=0.25 (3-12:1), SSI=0.16 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

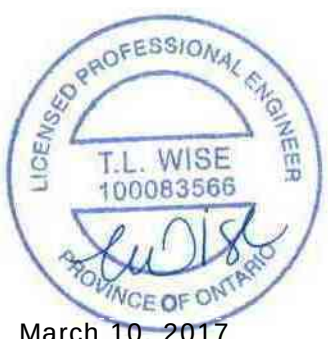
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

PLATE PLACEMENT TOL. = 0.250 inches

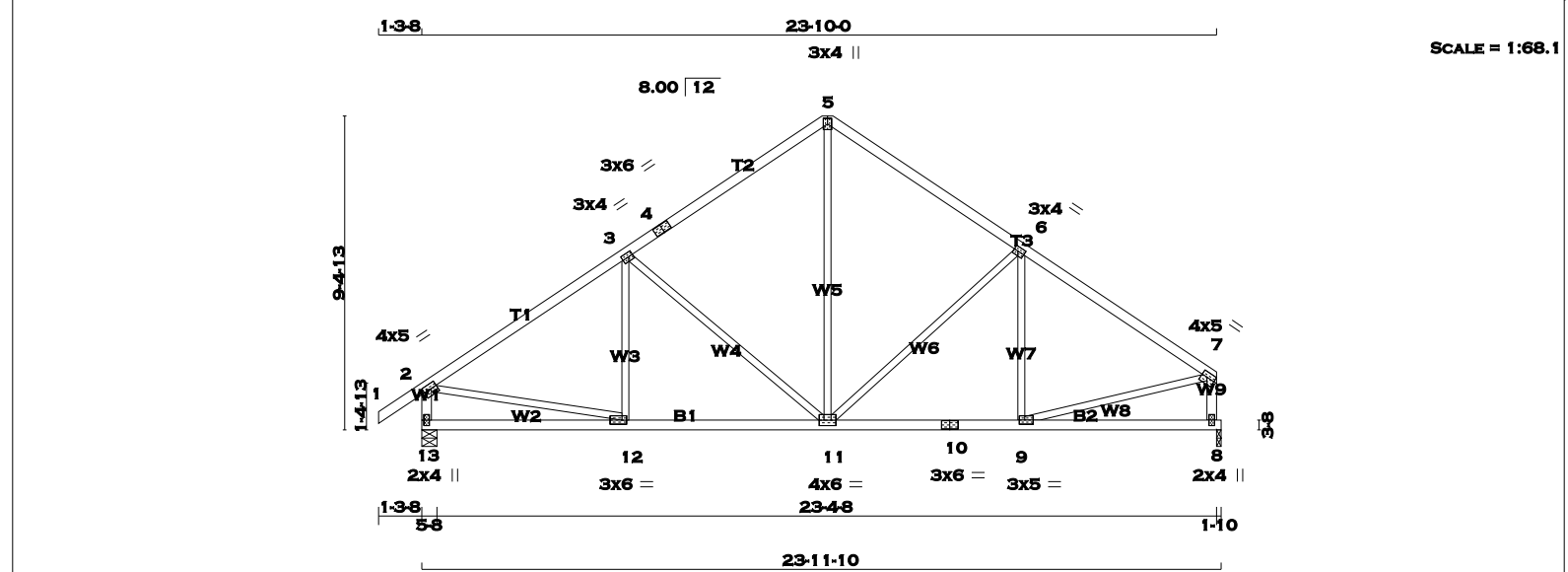
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.43 (2) (INPUT = 1.00)



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TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 13 - 2 2x4 DRY No.2 8 - 7 2x4 DRY No.2 13 - 10 2x4 DRY No.2 10 - 8 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.		DESCR. SPF SPF SPF SPF SPF SPF SPF SPF SPF	
PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 4.0 5.0 1.75 2.00 3 TMVW-t MT20 3.0 4.0 1.50 1.50 4 TS-t MT20 3.0 6.0 5 TTW+p MT20 3.0 4.0 6 TMVW-t MT20 3.0 4.0 1.50 1.50 7 TMVW-t MT20 4.0 5.0 1.75 Edge 8 BMV1+p MT20 2.0 4.0 9 BMVW-t MT20 3.0 5.0 1.50 2.00 10 BS-t MT20 3.0 6.0 11 BMVW-t MT20 4.0 6.0 12 BMVW-t MT20 3.0 6.0 1.50 1.75 13 BMV1+p MT20 2.0 4.0 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD. A SIZE FOR SIZE SUBSTITUTION OF MITEK 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 THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.79") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04") ALLOWABLE DEFL.(TL)= L/360 (0.79") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08") CSI: TC=0.41 (2-3:1) , BC=0.25 (11-12:1) , WB=0.58 (3-11:1) , SSI=0.19 (2-3:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.90 (12) (INPUT = 0.90) JSI METAL= 0.43 (2) (INPUT = 1.00)	

BEARINGS FACTORED GROSS REACTION JT VERT HORZ 13 1236 0 8 1130 0		MAXIMUM FACTORED GROSS REACTION DOWN HORZ 1236 0 1130 0		INPUT BRG UPLIFT IN-SX 5-8 5-8 1-10 1-10	
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UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 13 865 619 / 0 0 / 0 0 / 0 247 / 0 0 / 0 8 793 555 / 0 0 / 0 0 / 0 0 / 0 238 / 0 0 / 0		BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 8	
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BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 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.	
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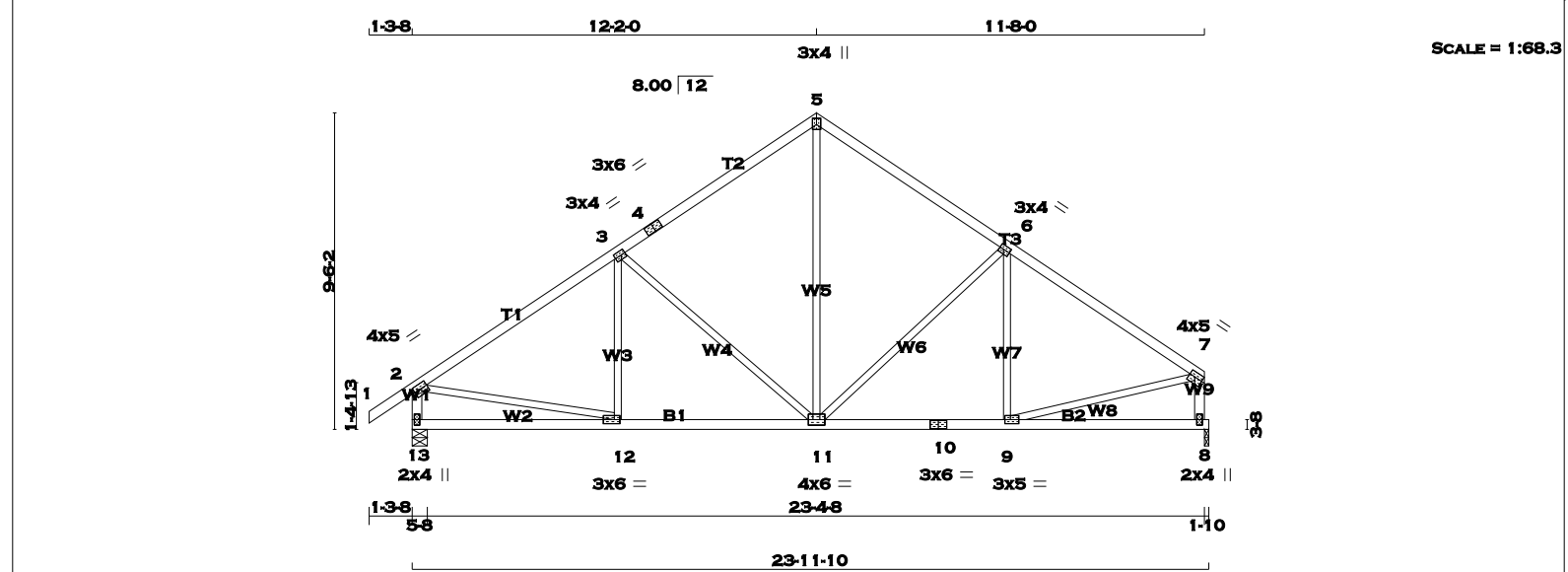
LOADING TOTAL LOAD CASES: (3)		CHORDS MAX. FACTORED FORCE VERT. LOAD LC1 MAX (LBS) (PLF) CSI (LC)		WEBS MAX. FACTORED FORCE MAX (LBS) CSI (LC)	
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FR-TO		FROM TO		LENGTH FR-TO	
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	12-3 -72 / 80 0.03 (1)
2-3	-1261 / 0	-77.3	-77.3 0.41 (1)	5.25	3-11 -443 / 0 0.58 (1)
3-4	-918 / 0	-77.3	-77.3 0.39 (1)	5.94	11-6 -368 / 0 0.47 (1)
4-5	-918 / 0	-77.3	-77.3 0.39 (1)	5.94	9-6 -131 / 57 0.06 (1)
5-6	-917 / 0	-77.3	-77.3 0.35 (1)	5.99	2-12 0 / 1092 0.25 (1)
6-7	-1182 / 0	-77.3	-77.3 0.37 (1)	5.44	9-7 0 / 1038 0.23 (1)
13-2	-1192 / 0	0.0	0.0 0.12 (1)	7.32	11-5 0 / 636 0.14 (1)
8-7	-1088 / 0	0.0	0.0 0.12 (1)	7.58	
13-12	0 / 0	-17.5	-17.5 0.16 (3)	10.00	
12-11	0 / 1075	-17.5	-17.5 0.25 (1)	10.00	
11-10	0 / 1009	-17.5	-17.5 0.23 (1)	10.00	
10-9	0 / 1009	-17.5	-17.5 0.23 (1)	10.00	
9-8	0 / 0	-17.5	-17.5 0.14 (3)	10.00	

March 10, 2017		READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.		RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION	
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March 10, 2017

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

SPF

1 - 4

2x4

DRY

No.2

SPF

4 - 5

2x4

DRY

No.2

SPF

5 - 7

2x4

DRY

No.2

SPF

13 - 2

2x4

DRY

No.2

SPF

8 - 7

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

13

1236

0

1236

0

0

5-8

5-8

8

1130

0

1130

0

0

1-10

1-10

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

13

865

619 / 0

0 / 0

0 / 0

0 / 0

247 / 0

0 / 0

8

793

555 / 0

0 / 0

0 / 0

0 / 0

238 / 0

0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.25 FT.

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

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

LOADING

TOTAL LOAD CASES: (3)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING =

24.0

IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

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

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

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

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.41 (2-3:1) , BC=0.25 (11-12:1) , WB=0.58 (3-11:1) , SSI=0.19 (2-3:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20

618

354

1667

822

2284

1656

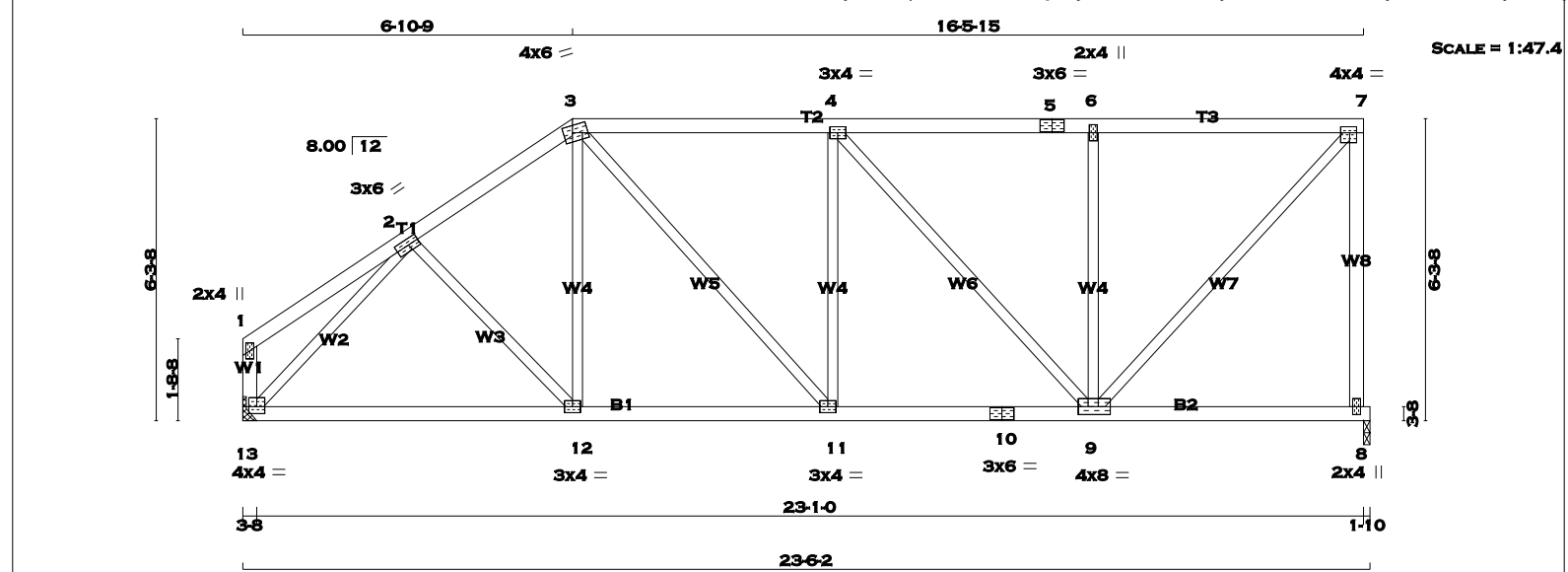
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (12) (INPUT = 0.90)

JSI METAL= 0.43 (2) (INPUT = 1.00)

N. L. G. A. RULES				LUMBER				BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS				SIZE				DESCR.				BEARINGS			
1 - 4				2x4	DRY	No.2	SPF	FACTORED				MAXIMUM FACTORED			
4 - 5				2x4	DRY	No.2	SPF	GROSS REACTION				GROSS REACTION			
5 - 7				2x4	DRY	No.2	SPF	JT VERT				DOWN			
13 - 2				2x4	DRY	No.2	SPF	13 1236 0				1236 0 0			
8 - 7				2x4	DRY	No.2	SPF	8 1130 0				1130 0 0			
13 - 10				2x4	DRY	No.2	SPF					5-8 5-8			
10 - 8				2x4	DRY	No.2	SPF					1-10 1-10			
ALL WEBS				2x3	DRY	No.2	SPF								
EXCEPT															
DRY: SEASONED LUMBER.															



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

8 - 7

2x4

DRY

No.2

SPF

13 - 1

2x4

DRY

No.2

SPF

13 - 10

2x4

DRY

No.2

SPF

10 - 8

2x4

DRY

No.2

SPF

ALL WEBS

2x3

DRY

No.2

SPF

EXCEPT

DRY: SEASONED LUMBER.

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

BEARINGS

FACTORED

MAXIMUM FACTORED

INPUT

REQRD

GROSS REACTION

GROSS REACTION

BRG

BRG

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

8

1109

0

1109

0

0

1-10

1-10

13

1109

0

1109

0

0

HANGER BY OTHERS

MIN. SEAT SIZE: 3-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

8

778

544 / 0

0 / 0

0 / 0

0 / 0

234 / 0

0 / 0

13

778

544 / 0

0 / 0

0 / 0

0 / 0

234 / 0

0 / 0

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.0

PSF

TOTAL LOAD

=

33.3

PSF

SPACING =

24.0

IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.78")

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

ALLOWABLE DEFL.(TL)= L/360 (0.78")

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

CSI: TC=0.84 (7-8:1) , BC=0.26 (11-12:3) , WB=0.57 (4-9:1) , SSI=0.20 (6-7:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.33 (13) (INPUT = 1.00)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
2	TMWW-t	MT20	3.0	6.0	1.50	2.75
3	TTWW-m	MT20	4.0	6.0	1.75	2.25
4	TMWW-t	MT20	3.0	4.0		
5	TS-t	MT20	3.0	6.0		
6	TMW+w	MT20	2.0	4.0		
7	TMW-t	MT20	4.0	4.0	1.50	1.75
8	BMV1+p	MT20	2.0	4.0		
9	BMWW-t	MT20	4.0	8.0	2.00	2.50
10	BS-t	MT20	3.0	6.0		
11	BMWW-t	MT20	3.0	4.0		
12	BMWW-t	MT20	3.0	4.0		
13	BMVW1-t	MT20	4.0	4.0	1.75	2.00

MEMB.	CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.	MEMB.	CHORDS	MAX. FACTORED	FACTORED	VERT. LOAD	LC1	MAX	MAX.
FR-TO								FR-TO							
1-2		0 / 16	-77.3	-77.3	0.14 (1)	10.00	2-12	0 / 53		0.02 (3)					
2-3		-1113 / 0	-77.3	-77.3	0.15 (1)	5.83	12-3	0 / 109		0.04 (3)					
3-4		-1117 / 0	-77.3	-77.3	0.34 (1)	5.56	3-11	0 / 305		0.07 (1)					
4-5		-838 / 0	-77.3	-77.3	0.34 (1)	6.17	11-4	-146 / 38		0.09 (1)					
5-6		-838 / 0	-77.3	-77.3	0.34 (1)	6.17	4-9	-417 / 0		0.57 (1)					
6-7		-838 / 0	-77.3	-77.3	0.34 (1)	6.17	9-6	-472 / 0		0.30 (1)					
8-7		-1068 / 0	0.0	0.0	0.84 (1)	7.63	9-7	0 / 1223		0.28 (1)					
13-1		-104 / 0	0.0	0.0	0.01 (1)	7.81	13-2	-1306 / 0		0.52 (1)					
13-12		0 / 892	-17.5	-17.5	0.25 (3)	10.00									
12-11		0 / 913	-17.5	-17.5	0.26 (3)	10.00									
11-10		0 / 1117	-17.5	-17.5	0.25 (1)	10.00									
10-9		0 / 1117	-17.5	-17.5	0.25 (1)	10.00									
9-8		0 / 0	-17.5	-17.5	0.14 (3)	10.00									

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

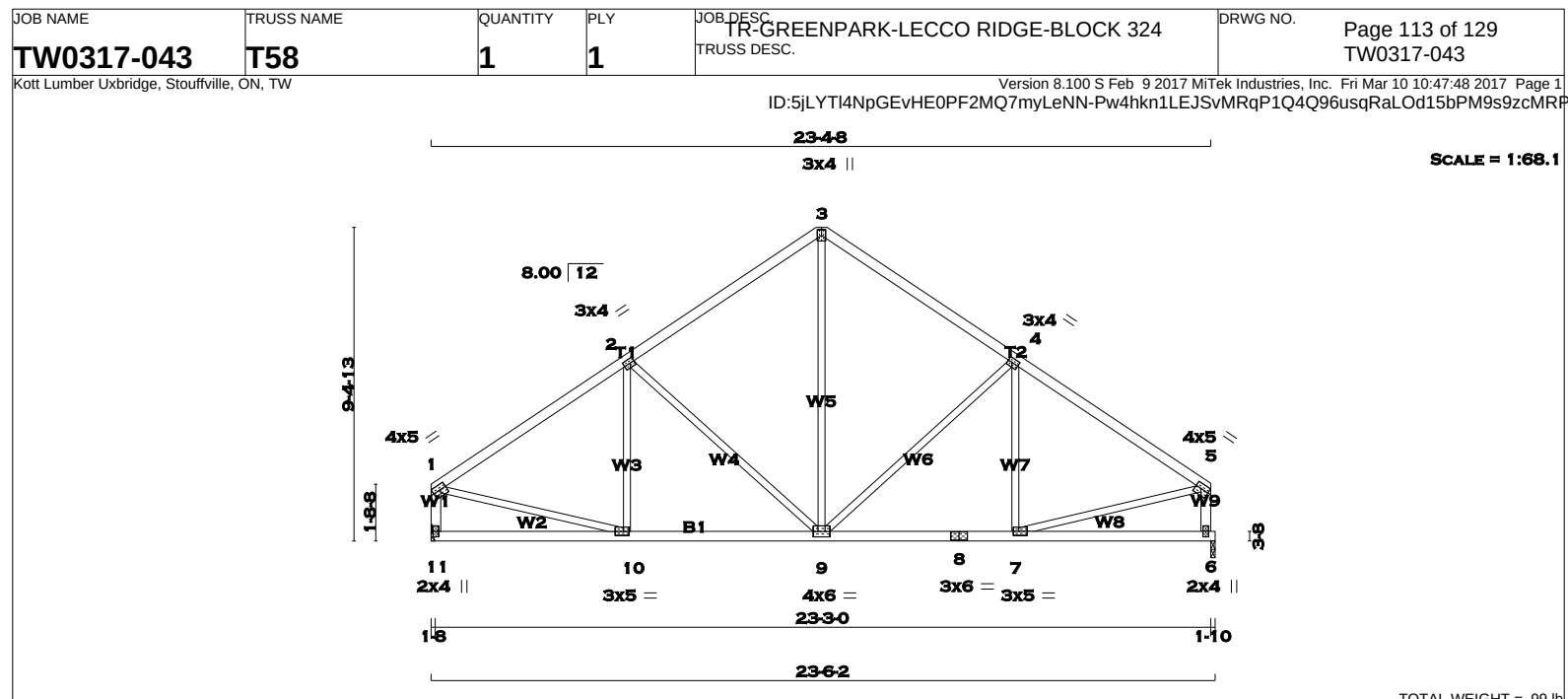
RECEIVED

TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
11 - 1	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
11 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

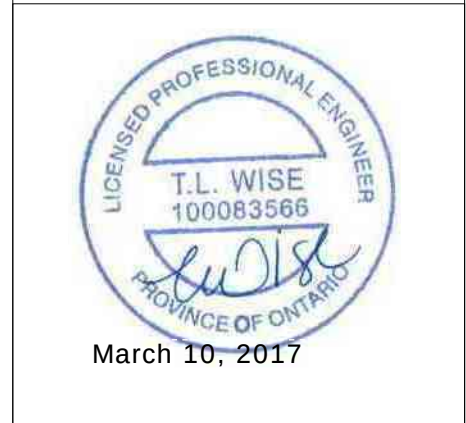
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UP	IN-SX
11	1109	0	0	HANGER BY OTHERS
6	1109	0	0	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
11	778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0	0 / 0
6	778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.47 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-1160 / 0	-77.3 -77.3	0.37 (1)	5.47	10-2	-120 / 61	0.06 (1)
2-3	-883 / 0	-77.3 -77.3	0.35 (1)	6.07	2-9	-379 / 0	0.49 (1)
3-4	-883 / 0	-77.3 -77.3	0.35 (1)	6.08	9-4	-373 / 0	0.48 (1)
4-5	-1154 / 0	-77.3 -77.3	0.37 (1)	5.49	7-4	-125 / 60	0.06 (1)
11-1	-1066 / 0	0.0 0.0	0.11 (1)	7.63	1-10	0 / 1017	0.23 (1)
6-5	-1066 / 0	0.0 0.0	0.11 (1)	7.63	7-5	0 / 1013	0.23 (1)
					9-3	0 / 606	0.14 (1)
11-10	0 / 0	-17.5 -17.5	0.14 (3)	10.00			
10-9	0 / 990	-17.5 -17.5	0.23 (1)	10.00			
9-8	0 / 985	-17.5 -17.5	0.23 (1)	10.00			
8-7	0 / 985	-17.5 -17.5	0.23 (1)	10.00			
7-6	0 / 0	-17.5 -17.5	0.14 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
	DL	=	3.0 <th>PSF</th>	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	7.0 <th>PSF</th>	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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.37 (1-2:1), BC=0.23 (9-10:1), WB=0.49 (2-9:1), SSI=0.18 (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
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

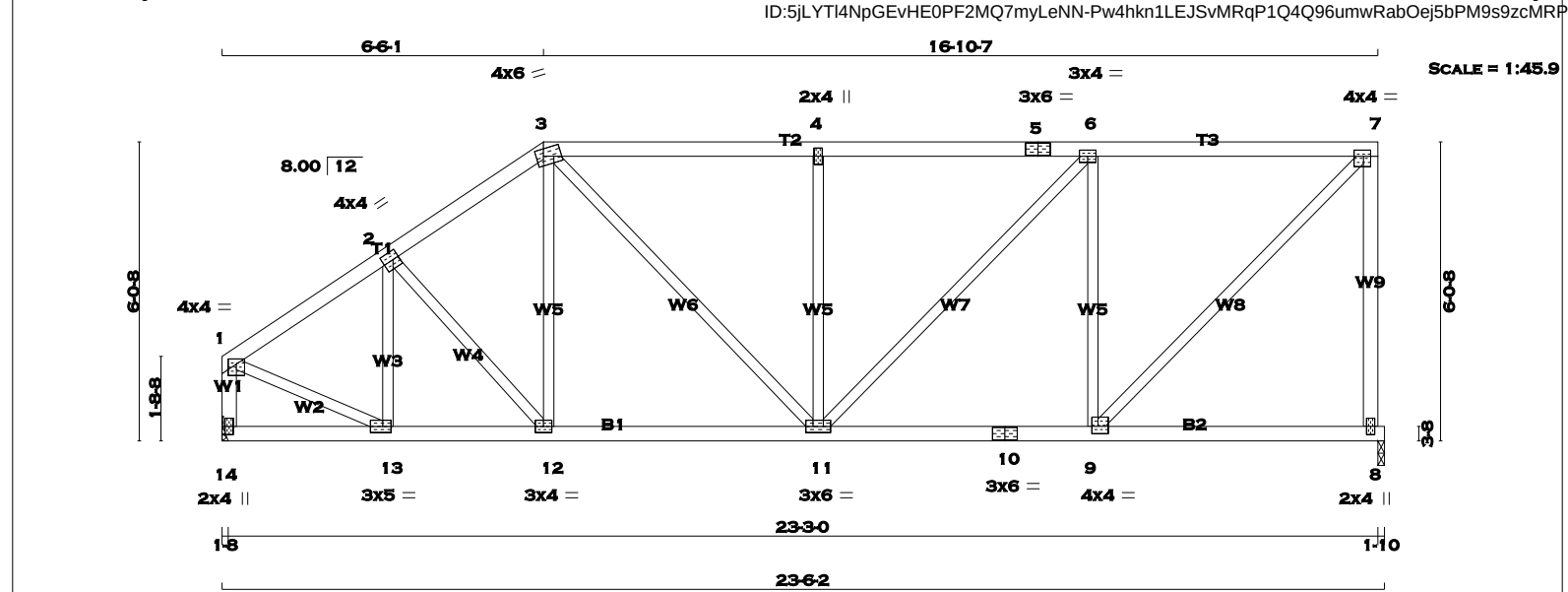
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (10) (INPUT = 0.90)
JSI METAL= 0.39 (1) (INPUT = 1.00)



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

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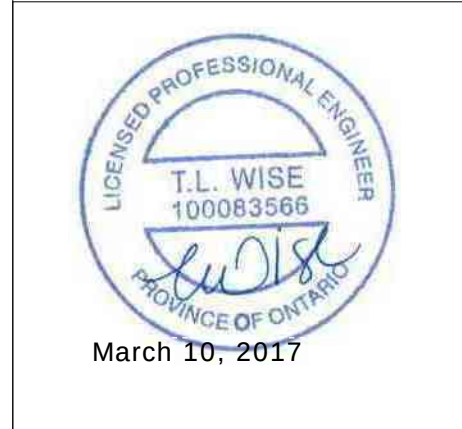


TOTAL WEIGHT = 104 lb [M]

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
8 - 7	2x4	DRY	No.2	SPF
14 - 1	2x4	DRY	No.2	SPF
14 - 10	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

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

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
<u>BEARINGS</u>							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
8	1109	0	1109	0	0	1-10	1-10
14	1109	0	1109	0	0	HANGER BY OTHERS	
MIN. SEAT SIZE: 1-8							

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS				
8	778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0
14	778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 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 = 5.40 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING			
TOTAL LOAD CASES: (3)			
CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC1)
FR-TO	FROM	TO	LENGTH
1-2	-1074 / 0	-77.3	-77.3 0.14 (1)
2-3	-1115 / 0	-77.3	-77.3 0.14 (1)
3-4	-1170 / 0	-77.3	-77.3 0.35 (1)
4-5	-1171 / 0	-77.3	-77.3 0.38 (1)
5-6	-1171 / 0	-77.3	-77.3 0.38 (1)
6-7	-889 / 0	-77.3	-77.3 0.37 (1)
7-8	-1068 / 0	0.0	0.0 0.75 (1)
14-1	-1081 / 0	0.0	0.0 0.12 (1)
14-13	0 / 0	-17.5	-17.5 0.04 (3)
13-12	0 / 906	-17.5	-17.5 0.19 (1)
12-11	0 / 914	-17.5	-17.5 0.19 (1)
11-10	0 / 889	-17.5	-17.5 0.22 (1)
10-9	0 / 889	-17.5	-17.5 0.22 (1)
9-8	0 / 0	-17.5	-17.5 0.14 (3)

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

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.75 (7-8:1), BC=0.22 (9-11:1), WB=0.44 (6-9:1), SSI=0.21 (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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

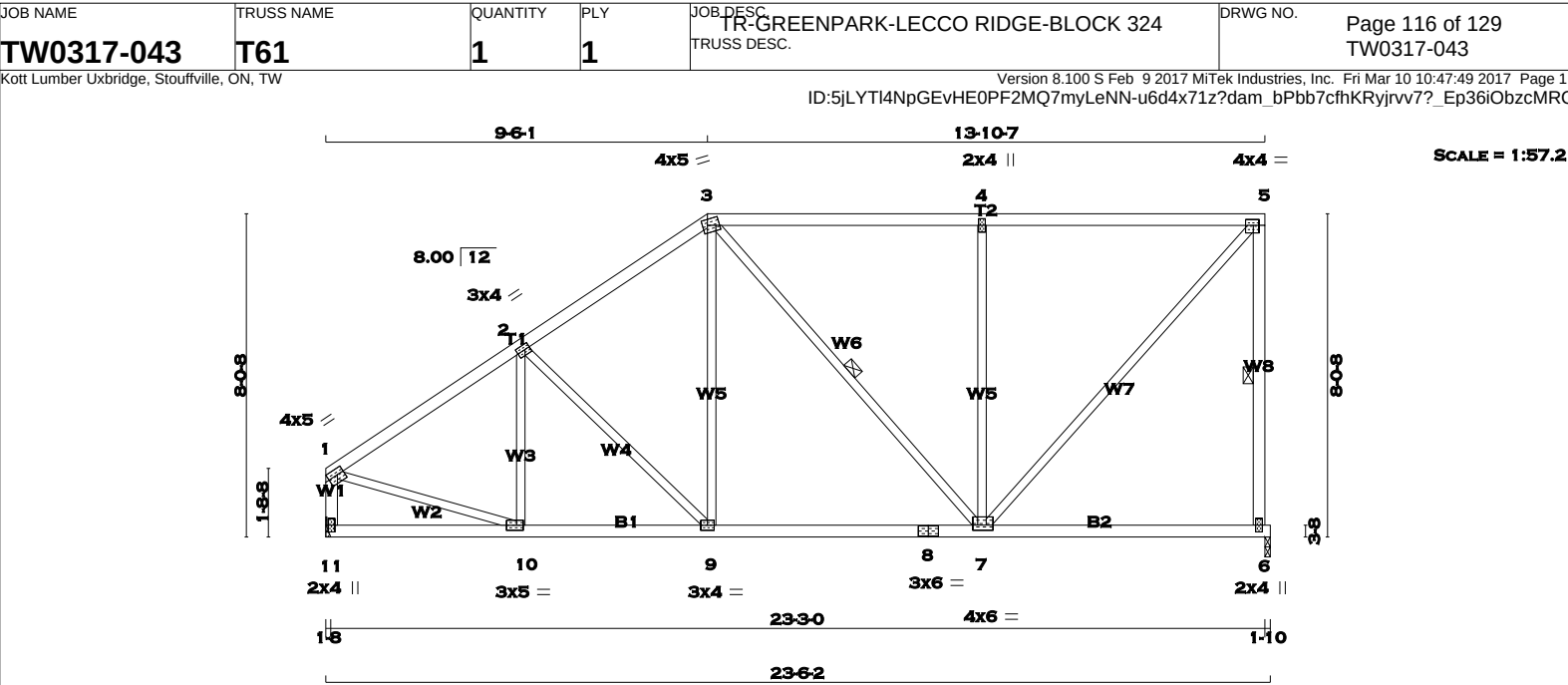
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.33 (9) (INPUT = 1.00)



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

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LUMBER

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

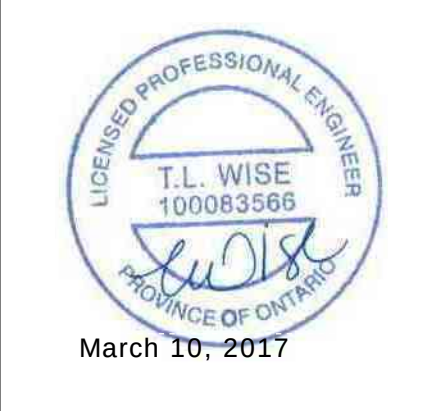
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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



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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
6	1109 0	1109 0	1-10	1-10
11	1109 0	1109 0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
6	778	544 / 0	0 / 0
11	778	544 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.53 FT.

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 93 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7. DBS = 20-0-0 . CBF = 8 LBS.

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

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

LOADING

TOTAL LOAD CASES: (3)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	LC2 MAX	UNBRACED LENGTH	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX
FR-TO		FROM TO				FR-TO		
1-2	-1147 / 0	-77.3 -77.3	0.33 (1)	5.53	10-2	-191 / 20	0.07 (1)	
2-3	-1001 / 0	-77.3 -77.3	0.32 (1)	5.83	2-9	-227 / 0	0.18 (1)	
3-4	-773 / 0	-77.3 -77.3	0.68 (1)	5.62	9-3	0 / 256	0.06 (1)	
4-5	-773 / 0	-77.3 -77.3	0.68 (1)	5.62	3-7	-62 / 0	0.05 (1)	
6-5	-1059 / 0	0.0 0.0	0.31 (1)	6.12	7-4	-666 / 0	0.83 (1)	
11-1	-1072 / 0	0.0 0.0	0.11 (1)	7.61	7-5	0 / 1150	0.26 (1)	
					1-10	0 / 1013	0.23 (1)	
11-10	0 / 0	-17.5 -17.5	0.09 (3)	10.00				
10-9	0 / 974	-17.5 -17.5	0.22 (1)	10.00				
9-8	0 / 814	-17.5 -17.5	0.28 (3)	10.00				
8-7	0 / 814	-17.5 -17.5	0.28 (3)	10.00				
7-6	0 / 0	-17.5 -17.5	0.21 (3)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

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 (0.78")

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

ALLOWABLE DEFL.(TL)= L/360 (0.78")

CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.68 (4-5:1), BC=0.28 (7-9:3), WB=0.83 (4-7:1), SSI=0.26 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

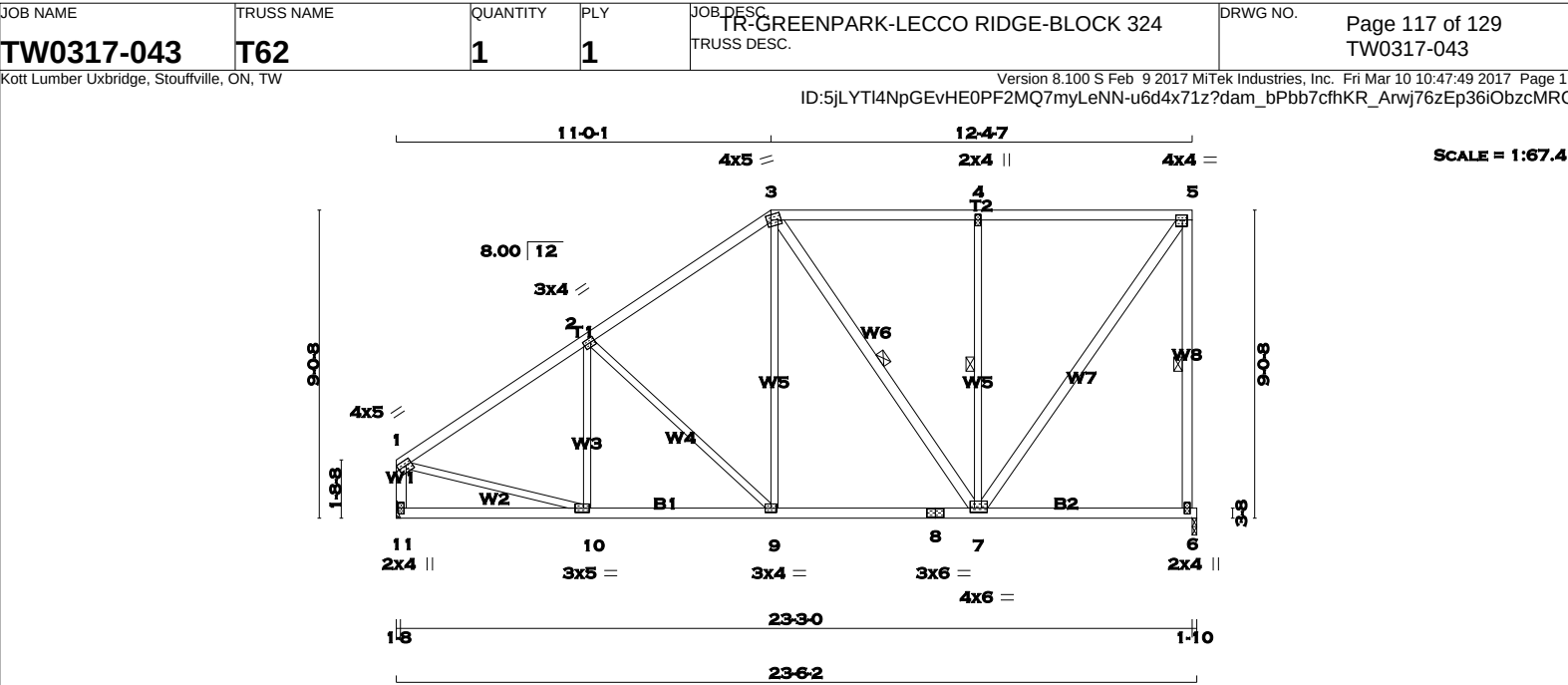
JSI GRIP= 0.89 (7) (INPUT = 0.90)

JSI METAL= 0.37 (1) (INPUT = 1.00)



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





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4 DRY	No.2	SPF
3 - 5	2x4 DRY	No.2	SPF
6 - 5	2x4 DRY	No.2	SPF
11 - 1	2x4 DRY	No.2	SPF
11 - 8	2x4 DRY	No.2	SPF
8 - 6	2x4 DRY	No.2	SPF
ALL WEBS EXCEPT	2x3 DRY	No.2	SPF
3 - 7	2x4 DRY	No.2	SPF
7 - 5	2x4 DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	UPLIFT
JT				
6	1109	0	1109	0
11	1109	0	1109	0

MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	778	544 / 0	0 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0
11	778	544 / 0	0 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 93 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 74 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM	TO	LENGTH	FR-TO				
1-2	-1158 / 0	-77.3	-77.3 0.45 (1)	5.33	10-2	-137 / 51	0.06 (1)		
2-3	-920 / 0	-77.3	-77.3 0.43 (1)	5.82	2-9	-337 / 0	0.38 (1)		
3-4	-631 / 0	-77.3	-77.3 0.52 (1)	6.25	9-3	0 / 324	0.07 (1)		
4-5	-631 / 0	-77.3	-77.3 0.52 (1)	6.25	3-7	-197 / 0	0.12 (1)		
6-5	-1064 / 0	0.0	0.0 0.40 (1)	6.11	7-4	-594 / 0	0.32 (1)		
11-1	-1068 / 0	0.0	0.0 0.11 (1)	7.63	7-5	0 / 1082	0.17 (1)		
					1-10	0 / 1016	0.23 (1)		
11-10	0 / 0	-17.5	-17.5 0.13 (3)	10.00					
10-9	0 / 987	-17.5	-17.5 0.22 (1)	10.00					
9-8	0 / 744	-17.5	-17.5 0.22 (3)	10.00					
8-7	0 / 744	-17.5	-17.5 0.22 (3)	10.00					
7-6	0 / 0	-17.5	-17.5 0.17 (3)	10.00					

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.52 (4-5:1) , BC=0.22 (7-9:3) , WB=0.38 (2-9:1) , SSI=0.23 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.84 (10) (INPUT = 0.90)
JSI METAL= 0.38 (1) (INPUT = 1.00)



March 10, 2017



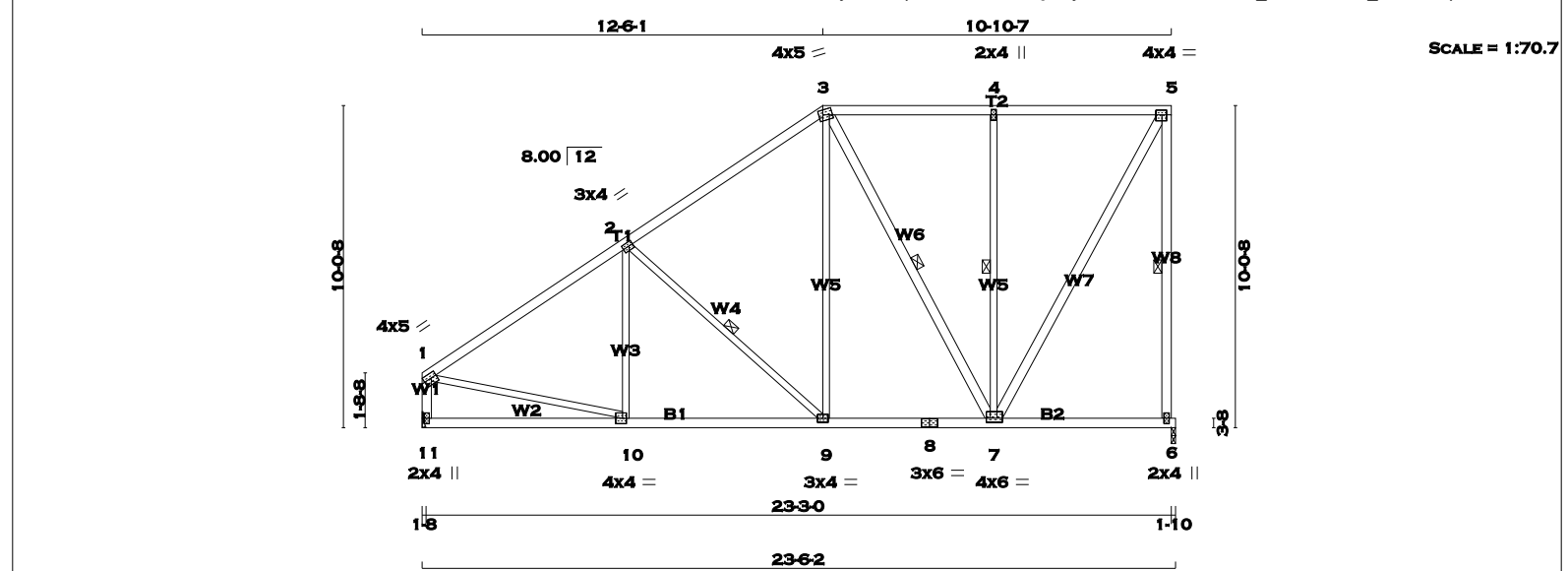
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RECEIVED
TOWN OF MILTON

MAR 29, 2017

17-4954

BUILDING DIVISION



TOTAL WEIGHT = 125 lb
[M][F]

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

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
6		1109	0	1109	0	0	1-10	1-10	
11		1109	0	1109	0	0	HANGER BY OTHERS		
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
6		778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 0
11		778	544 / 0	0 / 0	0 / 0	0 / 0	234 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 94 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 65 LBS.

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

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

LOADING
TOTAL LOAD CASES: (3)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
1-2	-1158 / 0	-77.3	-77.3 0.43 (1)	5.38	10-2	-91 / 79	0.05 (1)
2-3	-831 / 0	-77.3	-77.3 0.40 (1)	6.13	2-9	-440 / 0	0.21 (1)
3-4	-514 / 0	-77.3	-77.3 0.29 (1)	6.25	9-3	0 / 389	0.09 (1)
4-5	-514 / 0	-77.3	-77.3 0.29 (1)	6.25	3-7	-318 / 0	0.21 (1)
6-5	-1069 / 0	0.0	0.0 0.52 (1)	6.10	7-4	-521 / 0	0.36 (1)
11-1	-1063 / 0	0.0	0.0 0.11 (1)	7.64	7-5	0 / 1040	0.17 (1)
					1-10	0 / 1013	0.23 (1)
11-10	0 / 0	-17.5	-17.5 0.17 (3)	10.00			
10-9	0 / 990	-17.5	-17.5 0.25 (1)	10.00			
9-8	0 / 667	-17.5	-17.5 0.17 (3)	10.00			
8-7	0 / 667	-17.5	-17.5 0.17 (3)	10.00			
7-6	0 / 0	-17.5	-17.5 0.12 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.52 (5-6:1) , BC=0.25 (9-10:1) , WB=0.36 (4-7:1) , 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

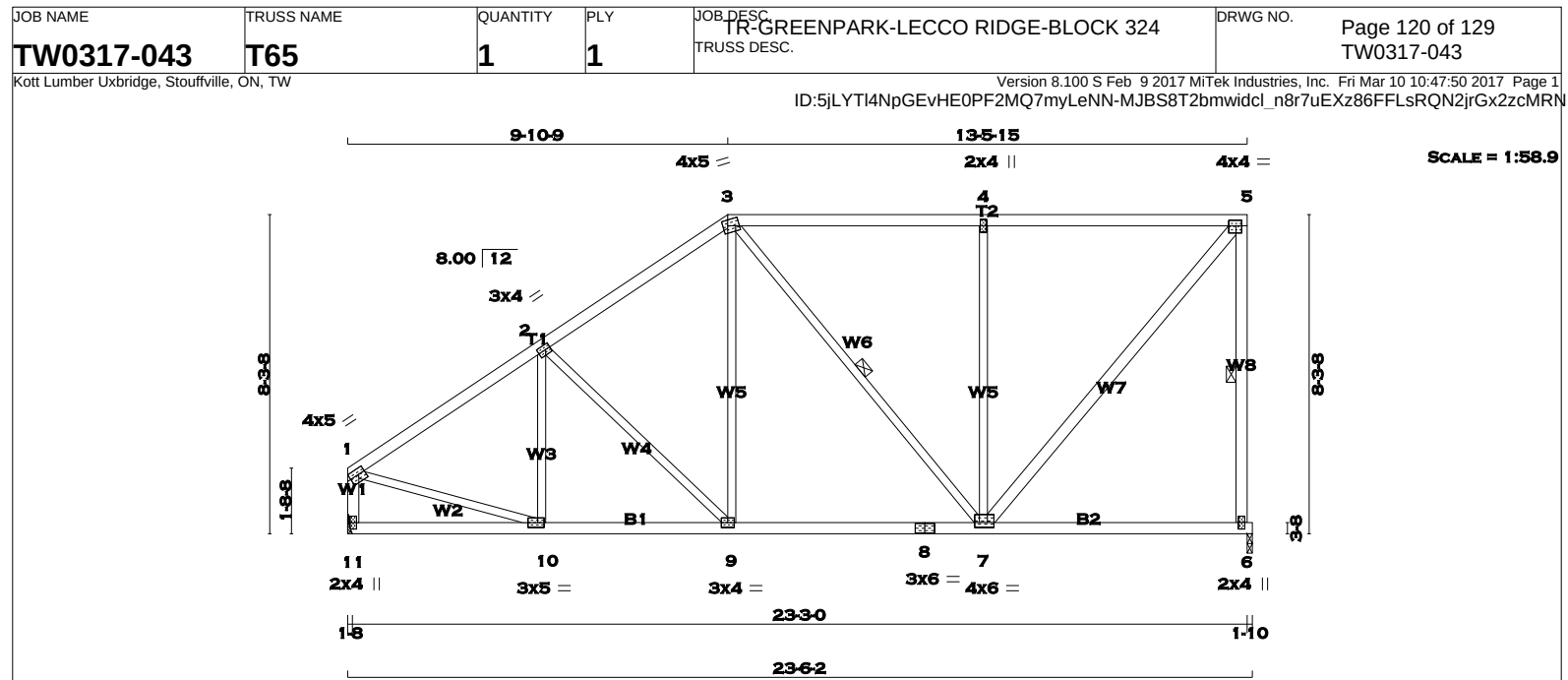
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (10) (INPUT = 0.90)
JSI METAL= 0.39 (1) (INPUT = 1.00)

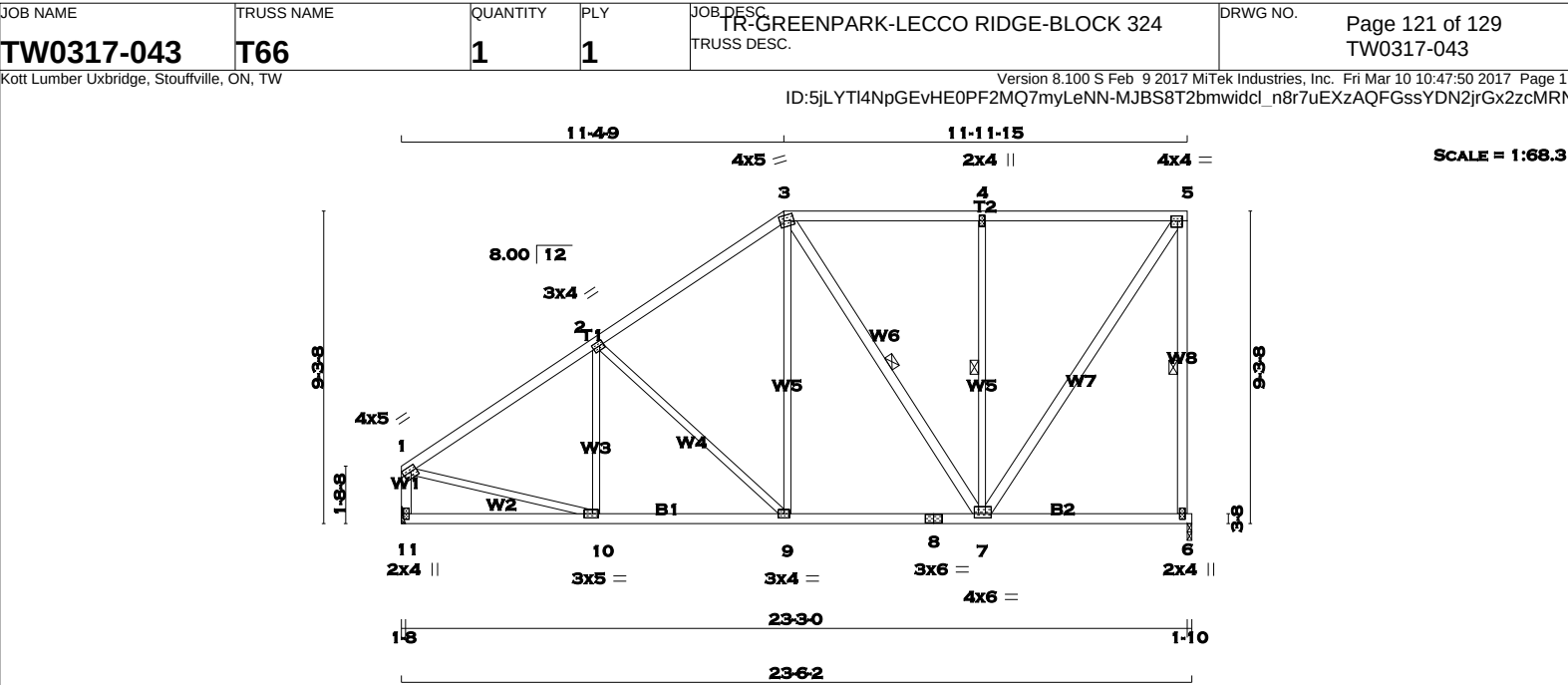


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-4954
BUILDING DIVISION



LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 5 2x4 DRY No.2 SPF 6 - 5 2x4 DRY No.2 SPF 11- 1 2x4 DRY No.2 SPF 11- 8 2x4 DRY No.2 SPF 8 - 6 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT 7 - 5 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 REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 6 1109 0 1109 0 0 1-10 1-10 11 1109 0 1109 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 6 778 544 / 0 0 / 0 0 / 0 0 / 0 234 / 0 0 / 0 11 778 544 / 0 0 / 0 0 / 0 0 / 0 234 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.48 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. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 93 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7. DBS = 20-0-0 . CBF = 12 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) C H O R D S W E B S MAX. FACTORED MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC LENGTH FR-TO (LBS) CSI (LC) FR-TO FROM TO 1- 2 -1151 / 0 -77.3 -77.3 0.36 (1) 5.48 10- 2 -176 / 28 0.07 (1) 2- 3 -982 / 0 -77.3 -77.3 0.34 (1) 5.83 2- 9 -255 / 0 0.22 (1) 3- 4 -735 / 0 -77.3 -77.3 0.64 (1) 5.82 9- 3 0 / 273 0.06 (1) 4- 5 -735 / 0 -77.3 -77.3 0.64 (1) 5.82 3- 7 -97 / 0 0.08 (1) 6- 5 -1061 / 0 0.0 0.0 0.33 (1) 6.12 7- 4 -648 / 0 0.88 (1) 11- 1 -1071 / 0 0.0 0.0 0.11 (1) 7.61 7- 5 0 / 1130 0.18 (1) 11-10 0 / 0 -17.5 -17.5 0.10 (3) 10.00 1-10 0 / 1014 0.23 (1) 10- 9 0 / 978 -17.5 -17.5 0.21 (1) 10.00 9- 8 0 / 798 -17.5 -17.5 0.26 (3) 10.00 8- 7 0 / 798 -17.5 -17.5 0.26 (3) 10.00 7- 6 0 / 0 -17.5 -17.5 0.20 (3) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN 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 (0.78") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.78") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07") CSI: TC=0.64 (4-5:1) , BC=0.26 (7-9:3) , WB=0.88 (4-7:1) , SSI=0.26 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.86 (7) (INPUT = 0.90) JSI METAL= 0.38 (1) (INPUT = 1.00)			
 March 10, 2017											
 March 10, 2017				RECEIVED TOWN OF MILTON MAR 29, 2017 17-4954 BUILDING DIVISION							
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.											



TOTAL WEIGHT = 120 lb																																																																																																																																																																																																																					
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SEAT SIZE: 1-8</td></tr></table> UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX./MIN.</th><th>SNOW</th><th>LIVE</th><th>PERM.LIVE</th><th>WIND</th><th>DEAD</th><th>SOIL</th></tr><tr><td>6</td><td>778</td><td>544 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>234 / 0</td><td>0 / 0</td></tr><tr><td>11</td><td>778</td><td>544 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>234 / 0</td><td>0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.27 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 14-0-0 . CBF = 93 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-7, 4-7. DBS = 20-0-0 . CBF = 72 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (3) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED VERT. LOAD (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED VERT. LOAD (LC)</th><th></th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td>UNBRAC LENGTH</td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>-1159 / 0</td><td>-77.3 -77.3</td><td>0.49 (1)</td><td>5.27</td><td>10-2</td><td>-125 / 59</td><td>0.06 (1)</td></tr><tr><td>2-3</td><td>-898 / 0</td><td>-77.3 -77.3</td><td>0.46 (1)</td><td>5.82</td><td>2-9</td><td>-363 / 0</td><td>0.44 (1)</td></tr><tr><td>3-4</td><td>-600 / 0</td><td>-77.3 -77.3</td><td>0.49 (1)</td><td>6.25</td><td>9-3</td><td>0 / 340</td><td>0.08 (1)</td></tr><tr><td>4-5</td><td>-600 / 0</td><td>-77.3 -77.3</td><td>0.49 (1)</td><td>6.25</td><td>3-7</td><td>-228 / 0</td><td>0.14 (1)</td></tr><tr><td>6-5</td><td>-1065 / 0</td><td>0.0 0.0</td><td>0.43 (1)</td><td>6.10</td><td>7-4</td><td>-576 / 0</td><td>0.33 (1)</td></tr><tr><td>11-1</td><td>-1067 / 0</td><td>0.0 0.0</td><td>0.11 (1)</td><td>7.63</td><td>7-5</td><td>0 / 1069</td><td>0.17 (1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>1-10</td><td>0 / 1016</td><td>0.23 (1)</td></tr><tr><td>11-10</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.14 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 988</td><td>-17.5 -17.5</td><td>0.23 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>9-8</td><td>0 / 725</td><td>-17.5 -17.5</td><td>0.21 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>8-7</td><td>0 / 725</td><td>-17.5 -17.5</td><td>0.21 (3)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>7-6</td><td>0 / 0</td><td>-17.5 -17.5</td><td>0.16 (3)</td><td>10.00</td><td></td><td></td><td></td></tr></table>											FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT	REQRD	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	6	1109	0	1109	0	0	1-10	1-10	11	1109	0	1109	0	0	HANGER BY OTHERS									MIN. SEAT SIZE: 1-8	JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	6	778	544 / 0	0 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0	11	778	544 / 0	0 / 0	0 / 0	0 / 0	0 / 0	234 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)		FR-TO		FROM TO	UNBRAC LENGTH	FR-TO				1-2	-1159 / 0	-77.3 -77.3	0.49 (1)	5.27	10-2	-125 / 59	0.06 (1)	2-3	-898 / 0	-77.3 -77.3	0.46 (1)	5.82	2-9	-363 / 0	0.44 (1)	3-4	-600 / 0	-77.3 -77.3	0.49 (1)	6.25	9-3	0 / 340	0.08 (1)	4-5	-600 / 0	-77.3 -77.3	0.49 (1)	6.25	3-7	-228 / 0	0.14 (1)	6-5	-1065 / 0	0.0 0.0	0.43 (1)	6.10	7-4	-576 / 0	0.33 (1)	11-1	-1067 / 0	0.0 0.0	0.11 (1)	7.63	7-5	0 / 1069	0.17 (1)						1-10	0 / 1016	0.23 (1)	11-10	0 / 0	-17.5 -17.5	0.14 (3)	10.00				10-9	0 / 988	-17.5 -17.5	0.23 (1)	10.00				9-8	0 / 725	-17.5 -17.5	0.21 (3)	10.00				8-7	0 / 725	-17.5 -17.5	0.21 (3)	10.00				7-6	0 / 0	-17.5 -17.5	0.16 (3)	10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 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 (0.78") CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03") ALLOWABLE DEFL.(TL)= L/360 (0.78") CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07") CSI: TC=0.49 (1-2:1) , BC=0.23 (9-10:1) , WB=0.44 (2-9:1) , SSI=0.23 (4-5:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.84 (10) (INPUT = 0.90) JSI METAL= 0.38 (1) (INPUT = 1.00)									
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3-4	-600 / 0	-77.3 -77.3	0.49 (1)	6.25	9-3	0 / 340	0.08 (1)																																																																																																																																																																																																														
4-5	-600 / 0	-77.3 -77.3	0.49 (1)	6.25	3-7	-228 / 0	0.14 (1)																																																																																																																																																																																																														
6-5	-1065 / 0	0.0 0.0	0.43 (1)	6.10	7-4	-576 / 0	0.33 (1)																																																																																																																																																																																																														
11-1	-1067 / 0	0.0 0.0	0.11 (1)	7.63	7-5	0 / 1069	0.17 (1)																																																																																																																																																																																																														
					1-10	0 / 1016	0.23 (1)																																																																																																																																																																																																														
11-10	0 / 0	-17.5 -17.5	0.14 (3)	10.00																																																																																																																																																																																																																	
10-9	0 / 988	-17.5 -17.5	0.23 (1)	10.00																																																																																																																																																																																																																	
9-8	0 / 725	-17.5 -17.5	0.21 (3)	10.00																																																																																																																																																																																																																	
8-7	0 / 725	-17.5 -17.5	0.21 (3)	10.00																																																																																																																																																																																																																	
7-6	0 / 0	-17.5 -17.5	0.16 (3)	10.00																																																																																																																																																																																																																	



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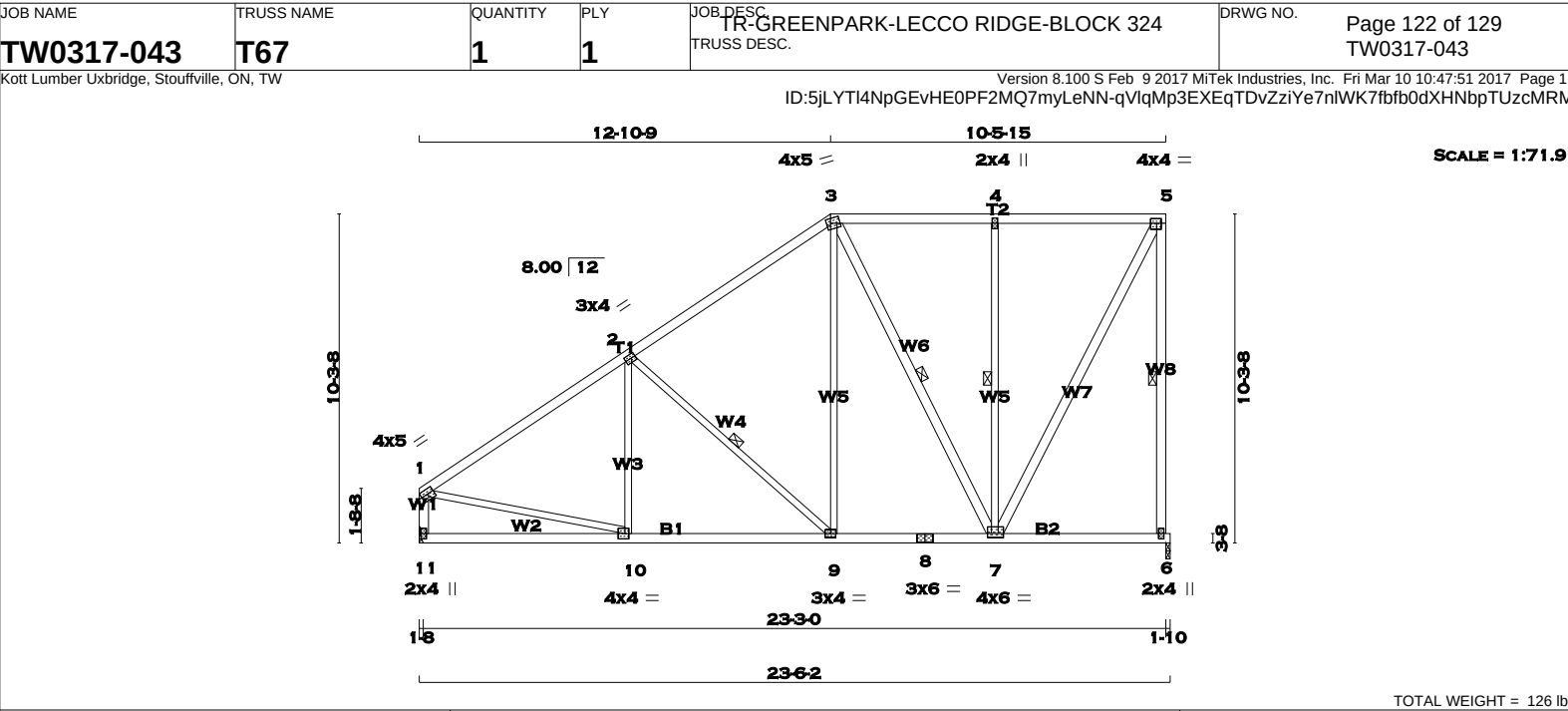


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LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.

1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
11 - 1	2x4	DRY	No.2	SPF
11 - 8	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

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

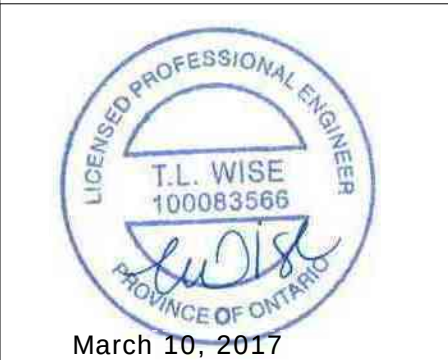
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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



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
6	1109 0	1109 0	1-10	1-10
11	1109 0	1109 0	HANGER BY OTHERS	MIN. SEAT SIZE: 1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. SNOW	MAX./MIN. LIVE	MAX./MIN. WIND	MAX./MIN. DEAD	MAX./MIN. SOIL
6	778	544 / 0	0 / 0	0 / 0	234 / 0	0 / 0
11	778	544 / 0	0 / 0	0 / 0	234 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 12-0-0 . CBF = 80 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 2-9, 3-7, 4-7. DBS = 20-0-0 . CBF = 63 LBS.

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

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (3)

MEMB.	CHORDS MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (CSI (LC))	MAX. UNBRACED LENGTH (FT)	MEMB.	WEBS MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)
FR-TO					FR-TO		
1-2	-1156 / 0	-77.3	-77.3 0.46 (1)	5.33	10-2	-80 / 86	0.05 (1)
2-3	-807 / 0	-77.3	-77.3 0.43 (1)	6.14	2-9	-465 / 0	0.24 (1)
3-4	-487 / 0	-77.3	-77.3 0.27 (1)	6.25	9-3	0 / 405	0.09 (1)
4-5	-488 / 0	-77.3	-77.3 0.27 (1)	6.25	3-7	-347 / 0	0.24 (1)
6-5	-1070 / 0	0.0	0.0 0.56 (1)	6.10	7-4	-503 / 0	0.37 (1)
11-1	-1062 / 0	0.0	0.0 0.11 (1)	7.64	7-5	0 / 1033	0.17 (1)
					1-10	0 / 1011	0.23 (1)
11-10	0 / 0	-17.5	-17.5 0.19 (3)	10.00			
10-9	0 / 989	-17.5	-17.5 0.26 (3)	10.00			
9-8	0 / 647	-17.5	-17.5 0.16 (1)	10.00			
8-7	0 / 647	-17.5	-17.5 0.16 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.11 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3 PSF
	DL = 3.0 PSF
BOT CH.	LL = 0.0 PSF
	DL = 7.0 PSF
TOTAL LOAD	= 33.3 PSF

SPACING = 24.0 IN./C

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 (0.78")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.78")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.56 (5-6:1) , BC=0.26 (9-10:3) , WB=0.37 (4-7:1) , SSI=0.20 (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) (PSI)	SHEAR (PLI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

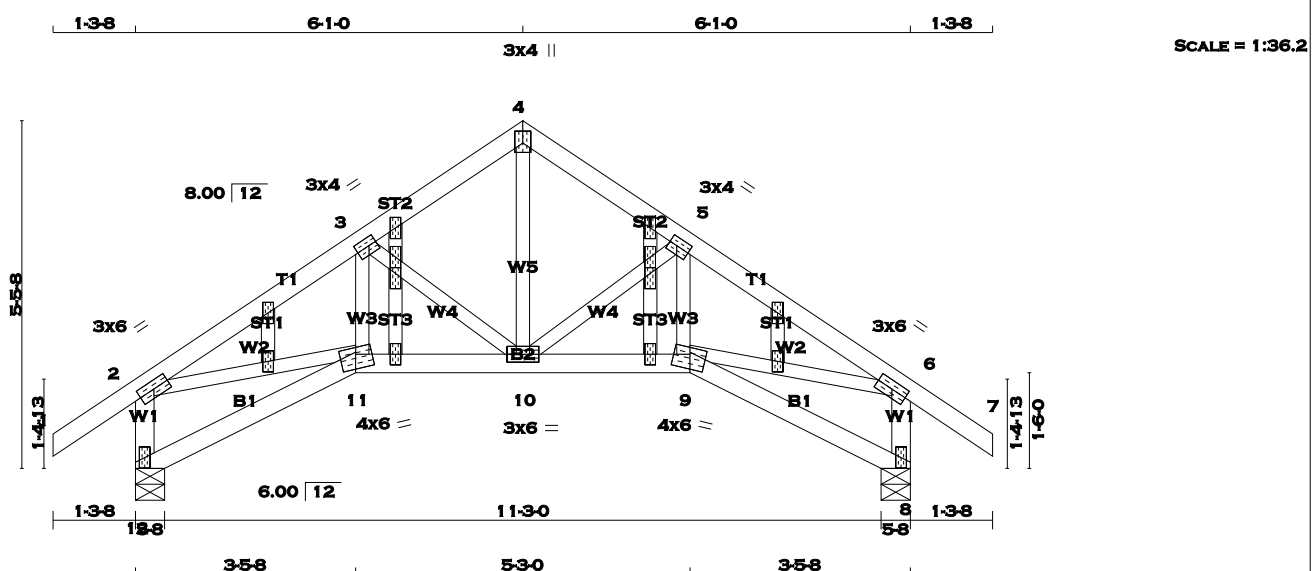
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (10) (INPUT = 0.90)
JSI METAL= 0.39 (1) (INPUT = 1.00)



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TOTAL WEIGHT = 58 lb

LUMBER				DESCR.	
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER			
1 - 4	2x4	DRY	No.2	SPF	
4 - 7	2x4	DRY	No.2	SPF	
12 - 2	2x4	DRY	No.2	SPF	
8 - 6	2x4	DRY	No.2	SPF	
12 - 11	2x4	DRY	No.2	SPF	
11 - 9	2x4	DRY	No.2	SPF	
9 - 8	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	
ALL GABLE WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					
GABLE STUDS SPACED AT 2-0-0 OC.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	
3	TMWW-t	MT20	3.0	4.0	1.50 1.50
4	TTW+p	MT20	3.0	4.0	2.25 1.50
5	TMWW-t	MT20	3.0	4.0	1.50 1.50
6	TMVW-t	MT20	3.0	6.0	
8	BMV1+p	MT20	2.0	4.0	
9	BBWW-m	MT20	4.0	6.0	2.75 3.00
10	BMWWW-t	MT20	3.0	6.0	
11	BBWW-m	MT20	4.0	6.0	2.75 3.00
12	BMV1+p	MT20	2.0	4.0	
13	NP+w	MT20	2.0	4.0	1.00 1.00
13, 14, 15, 16, 17, 18, 19, 20, 21, 22					
13	NP+w	MT20	2.0	4.0	
20	NP+w	MT20	2.0	4.0	1.00 1.00
A SIZE FOR SIZE SUBSTITUTION OF MITTEK 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	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
12	683	0	683	0	0	5-8	5-8	5-8	
8	683	0	683	0	0	5-8	5-8	5-8	

UNFACTORED REACTIONS							
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
12	477	347 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0
8	477	347 / 0	0 / 0	0 / 0	0 / 0	130 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 12, 8

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING		TOTAL LOAD CASES: (3)	
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORZ. LOAD (LBS)
FR-TO		FROM	TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)
2-3	-941 / 0	-77.3	-77.3 0.12 (1)
3-4	-601 / 0	-77.3	-77.3 0.08 (1)
4-5	-601 / 0	-77.3	-77.3 0.08 (1)
5-6	-941 / 0	-77.3	-77.3 0.12 (1)
6-7	0 / 29	-77.3	-77.3 0.10 (1)
12-2	-653 / 0	0.0	0.0 0.07 (1)
8-6	-653 / 0	0.0	0.0 0.07 (1)
12-11	0 / 0	-17.5	-17.5 0.06 (3)
11-10	0 / 785	-17.5	-17.5 0.14 (1)
10-9	0 / 785	-17.5	-17.5 0.14 (1)
9-8	0 / 0	-17.5	-17.5 0.06 (3)

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

(55 % OF 27.2 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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.12 (5-6:1), BC=0.14 (9-10:1), WB=0.18 (6-9:1), SSI=0.10 (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

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= 0.82 (9) (INPUT = 0.90)
JSI METAL= 0.27 (2) (INPUT = 1.00)

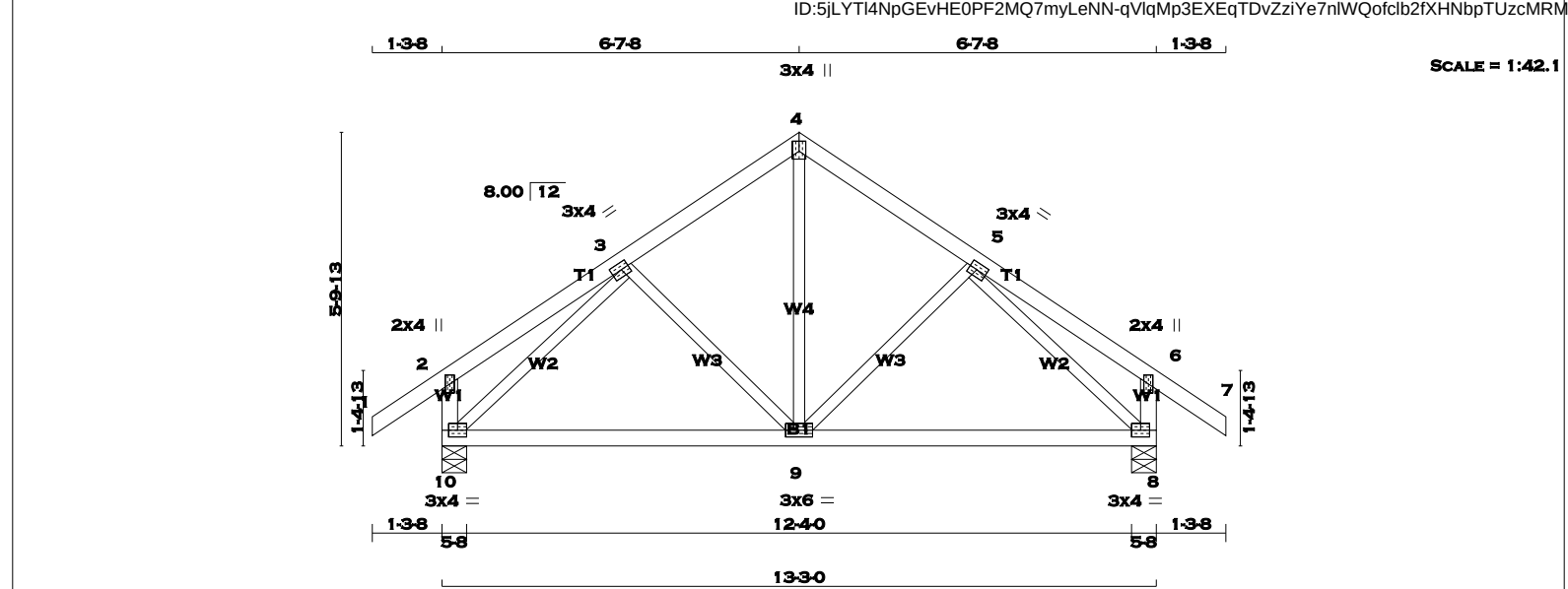


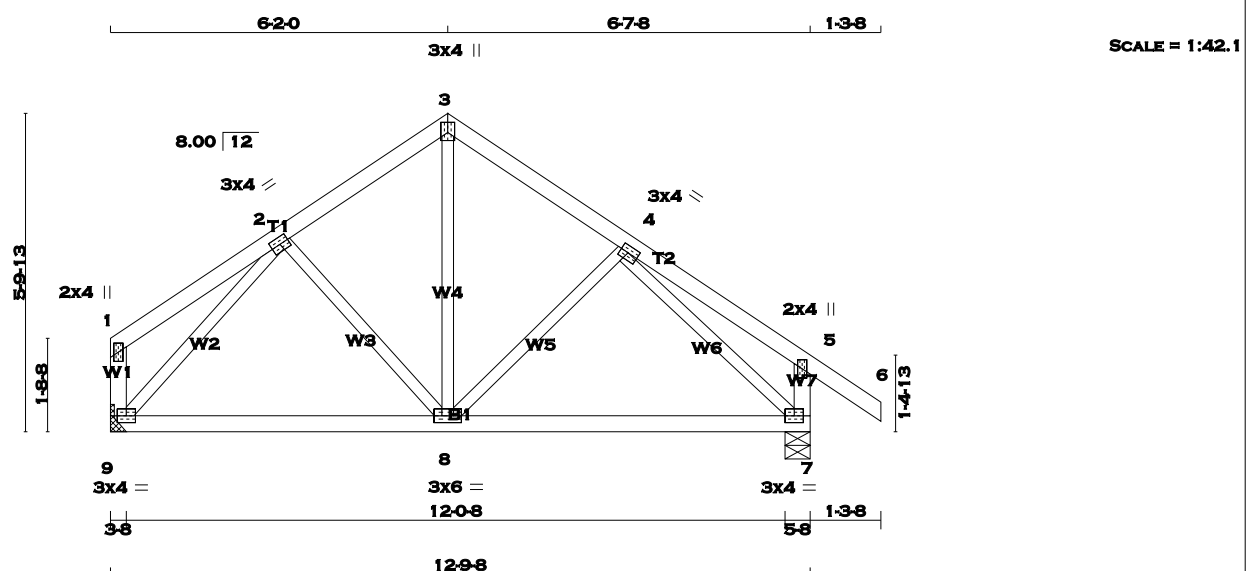
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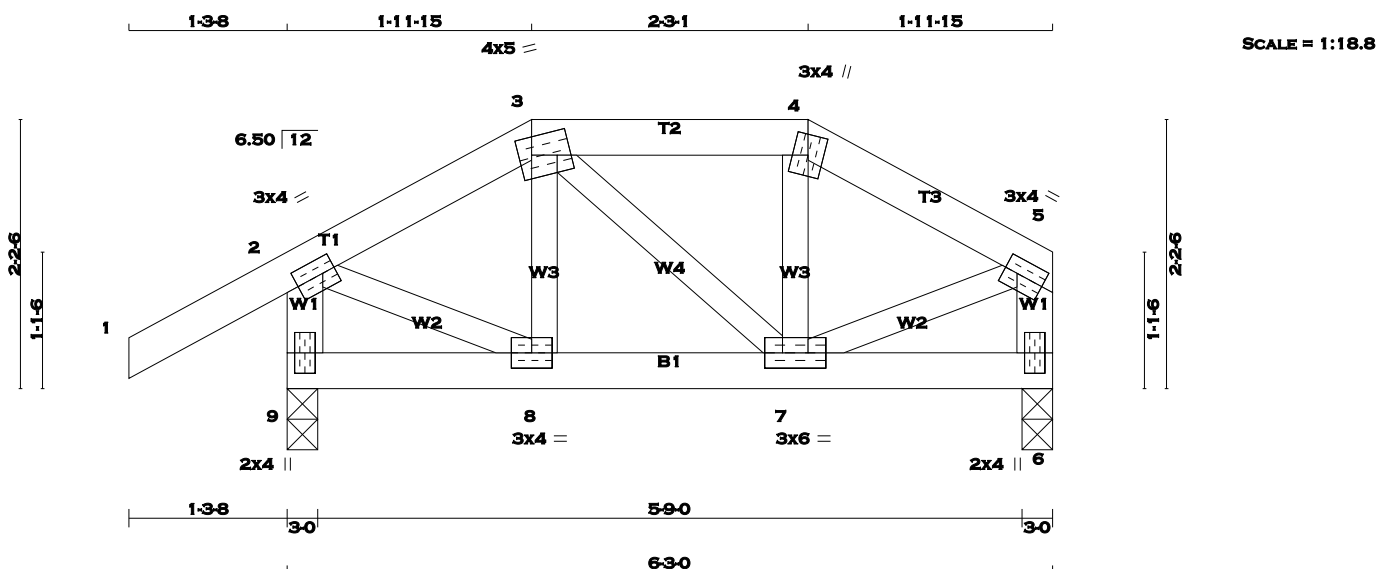


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TOTAL WEIGHT = $2 \times 26 = 52 \text{ lb}$

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
9 - 2	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
9 - 6	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TTW+m	MT20	3.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.25
6	BMV1+p	MT20	2.0	4.0		
7	BMWWWW-t	MT20	3.0	6.0		
8	BMWW-t	MT20	3.0	4.0		
9	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TFF-LOK TI 20 PLATES IS ALLOWED

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQ'D BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
9	402	0	402	0	0	3-0
6	296	0	296	0	0	3-0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
9	280	209 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0
6	208	146 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 9, 6

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (3)

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 / 25	-77.3	-77.3 0.10 (1)	10.00	8-3	-45 / 18	0.01 (1)		
2-3	-248 / 0	-77.3	-77.3 0.04 (1)	6.25	3-7	0 / 0	0.00 (1)		
3-4	-215 / 0	-77.3	-77.3 0.05 (1)	6.25	7-8	-46 / 19	0.01 (1)		
4-5	-248 / 0	-77.3	-77.3 0.04 (1)	6.25	2-4	0 / 233	0.05 (1)		
9-2	-385 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 233	0.05 (1)		
6-5	-279 / 0	0.0	0.0 0.03 (1)	7.81					
9-8	0 / 0	-17.5	-17.5 0.02 (3)	10.00					
8-7	0 / 215	-17.5	-17.5 0.04 (1)	10.00					
7-6	0 / 0	-17.5	-17.5 0.02 (3)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

TOP	CH.	LL =	23.3	PSF
		DL =	3.0	PSF
BOT	CH.	LL =	0.0	PSF
		DL =	7.0	PSF
TOTAL LOAD		=	33.3	PSF

SPACING = 24.0 IN. C/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 (0.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.21")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.10 (1-2:1) , BC=0.04 (7-8:1) , WB=0.05 (2-8:1) , 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= 0.59 (2) (INPUT = 0.90)
JSI METAL= 0.13 (2) (INPUT = 1.00)



March 10, 2017



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CS Beam 4.11.26.1
kmBeamEngine 4.11.26.1
Materials Database 1516

Member Data B1**Description:****Standard Load:**

Snow Load: 30 PLF

Dead Load: 15 PLF

Member Type: Beam

Top Lateral Bracing: Continuous

Bottom Lateral Bracing: Continuous

Moisture Condition: Dry

Deflection Criteria: L/360 live, L/240 total

Deck Connection: Nailed

Filename: Beam1

Application: Roof

Slope: 0.00 / 12

Building Code: OBC-2012

0.720" max. LL

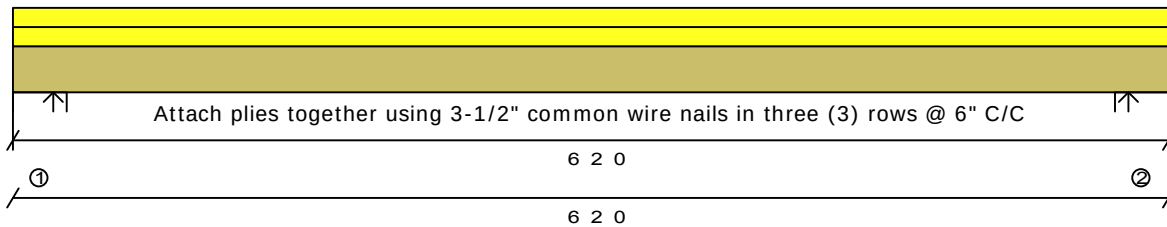
Member Weight: 3.9 PLF

Building Type: Residential

Importance Category: Normal (Part 9)

Other Loads

Type (Description)	Side	Begin	End	Trib. Width	Other Start	End	Dead Start	End	Category
Additional Uniform (PLF)	Top	0' 0.00"	6' 2.00"		0		35		Live
Additional Uniform (PLF)	Top	0' 0.00"	6' 2.00"		132		0		Snow

**Bearings and Factored Reactions**

	Location	Type	Material	Input Length	Min Required	Gravity Reaction	Gravity Uplift
1	0' 0.000"	Wall	Steel	3.500"	1.500"	889#	--
2	6' 2.000"	Wall	Steel	3.500"	1.500"	889#	--

Maximum Unfactored Load Case Reactions

Used for applying point loads (or line loads) to carrying members

	Snow	Dead
1	464#	154#
2	464#	154#

Design spans
5' 8.750"

Product: S-P-F No1/No2 2x8 2 ply**PASSES DESIGN CHECKS**

Design assumes continuous lateral bracing along the top chord.
Design assumes continuous lateral bracing along the bottom chord.

Limit States Design

	Actual	Limit	Capacity	Location	Loading
Positive Moment	1273.#	4049.#	31%	3.08'	Total Load 1.25D+1.00*1.5S
Shear	702.#	2271.#	30%	5.37'	Total Load 1.25D+1.00*1.5S
Max. Reaction	889.#	6457.#	13%	0'	Total Load 1.25D+1.00*1.5S
TL Deflection	0.0392"	0.2865"	L/999+	3.08'	Total Load D+S
LL Deflection	0.0294"	0.1910"	L/999+	3.08'	Total Load S

(Actual is factored load effects, Limit is design resistance)

Bearing length from point load of top loads beams assumed to be 3.50"

Control: Positive Moment

Manufacturer's installation guide MUST be consulted for multi-ply connection details and alternatives

READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



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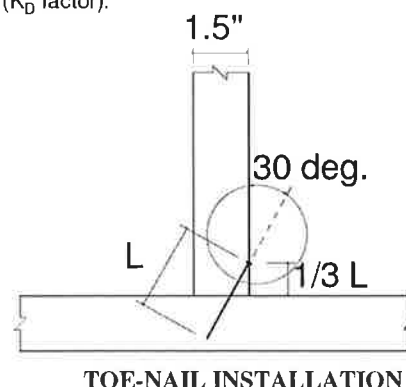
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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.



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



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BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

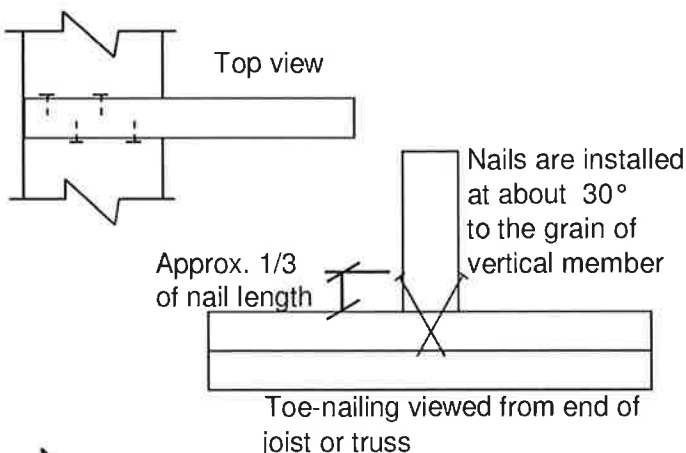
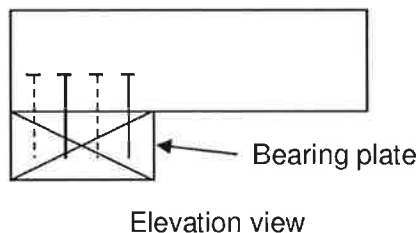
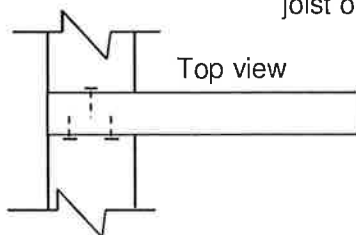
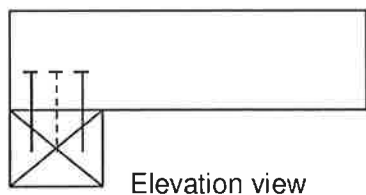
B37579H2

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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