

RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 9
BUILDING DIVISION



TOWN OF MILTON
PLANNING AND DEVELOPMENT
JUNIPER 9 MODEL

BUILDING: REVIEWED

SCOTT SHERRIFFS

MAR 30, 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



CONVENTIONAL
FRAMING BY OTHERS

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'.

HANGER LEGEND:

▼ LUS24

● (2)H2.5A

■ LJS26DS

✕ THGQ3

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

Model: JUNIPER 9 EL 2

Customer: GREENPARK

Project: LECCO RIDGE

Location: MILTON

Date: 3/23/2017 Drawn by: BB

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION

RESPONSIBILITIES

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

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

SUPPORTS

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

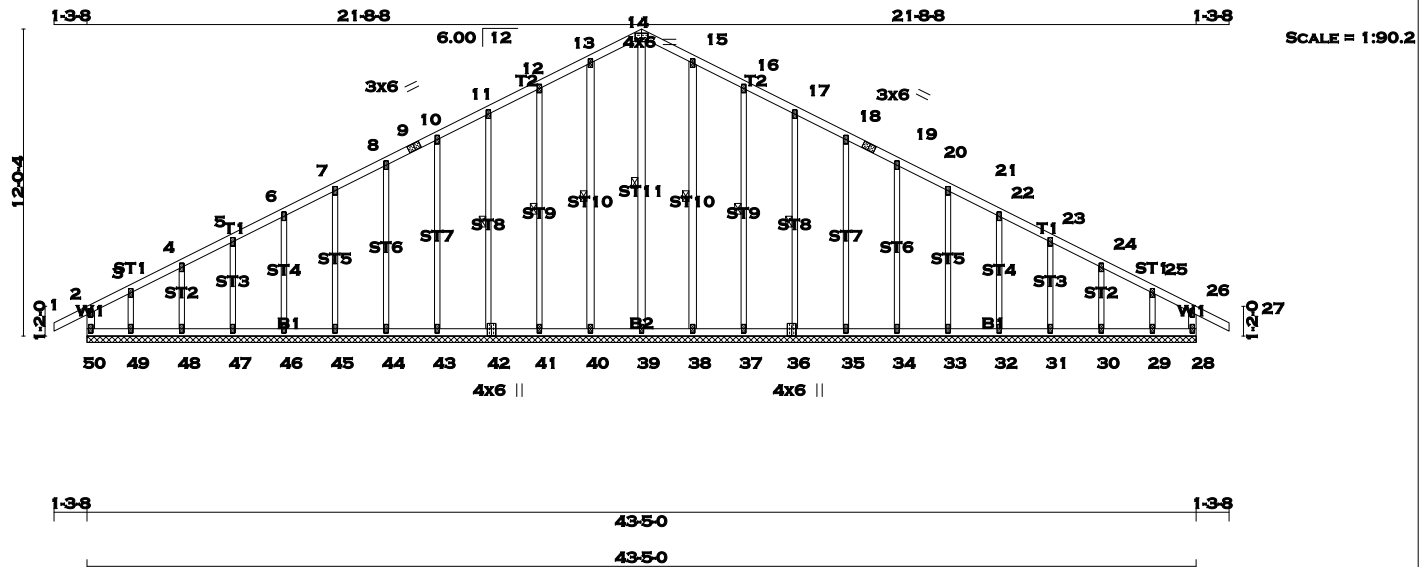
DIMENSIONS

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

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

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01/29/2013

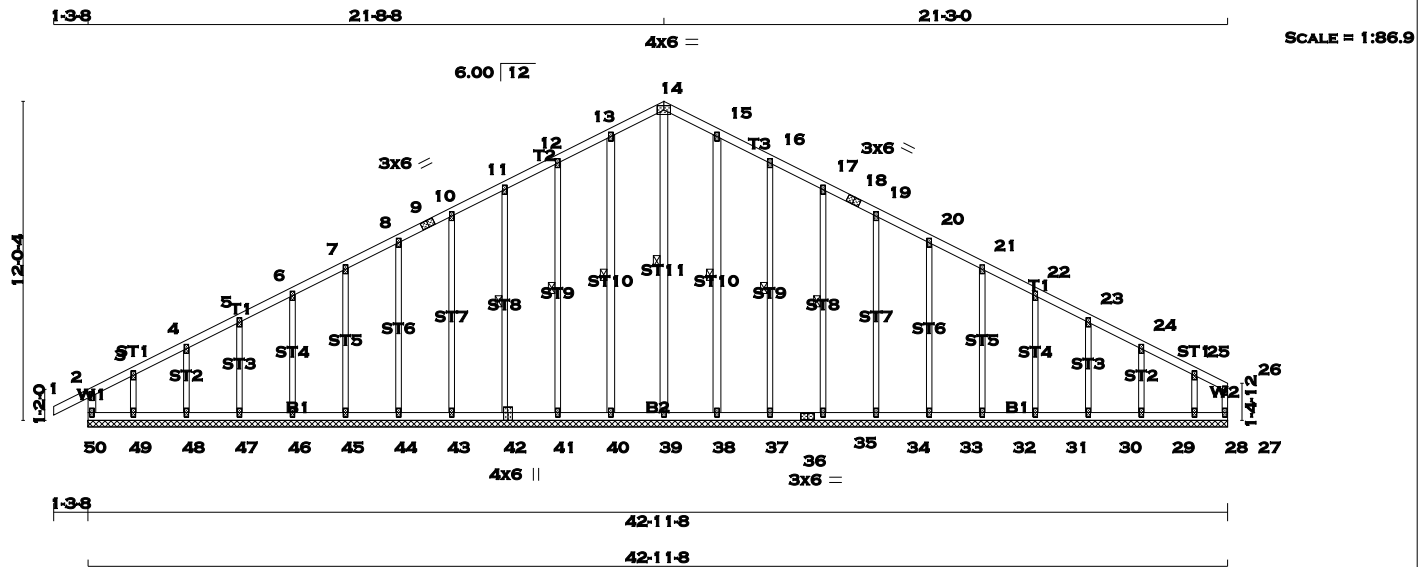


TOTAL WEIGHT = 227 lb
[M]

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
50 - 2	2x4	DRY	No.2	SPF						DL	=	3.0	PSF	
1 - 9	2x4	DRY	No.2	SPF	THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.					BOT CH. <th>LL</th> <th>=</th> <th>0.0</th> <th>PSF</th>	LL	=	0.0	PSF
9 - 14	2x4	DRY	No.2	SPF						DL <th>=</th> <th>7.0</th> <th>PSF</th>	=	7.0	PSF	
14 - 19	2x4	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)					TOTAL LOAD = 33.3 PSF				
19 - 27	2x4	DRY	No.2	SPF										
28 - 26	2x4	DRY	No.2	SPF										
50 - 42	2x4	DRY	No.2	SPF										
42 - 36	2x4	DRY	No.2	SPF										
36 - 28	2x4	DRY	No.2	SPF										
ALL WEBS 2x3 DRY No.2 SPF														
EXCEPT														
39 - 14	2x4	DRY	No.2	SPF	ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
40 - 13	2x4	DRY	No.2	SPF										
38 - 15	2x4	DRY	No.2	SPF										
ALL GABLE WEBS 2x3 DRY No.2 SPF														
EXCEPT														
ST1	2x4	DRY	No.2	SPF	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.									
ST2	2x4	DRY	No.2	SPF										
ST12	2x4	DRY	No.2	SPF	END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW									
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, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25														
3 TMW+w	MT20	2.0	4.0											
9 TS-t	MT20	3.0	6.0											
14 TTW-p	MT20	4.0	6.0											
19 TS-t	MT20	3.0	6.0											
26 TMV+p	MT20	2.0	4.0											
28 BMV1+p	MT20	2.0	4.0											
29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49														
29 BMV1+w	MT20	2.0	4.0											
36 BSW1+l	MT20	4.0	6.0											
42 BSW1+l	MT20	4.0	6.0											
50 BMV1+p	MT20	2.0	4.0											
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.														

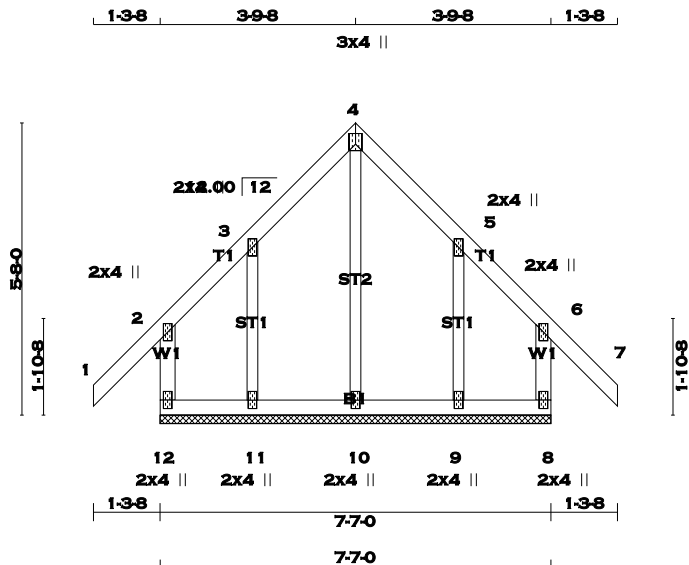


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



TOTAL WEIGHT = 224 lb
[M]

LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS					DESIGN CRITERIA				
50 - 2 2x4 DRY No.2 SPF					THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.					SPECIFIED LOADS:				
1 - 9 2x4 DRY No.2 SPF										TOP CH. LL = 23.3 PSF				
9 - 14 2x4 DRY No.2 SPF										DL = 3.0 PSF				
14 - 18 2x4 DRY No.2 SPF					THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.					BOT CH. LL = 0.0 PSF				
18 - 26 2x4 DRY No.2 SPF										DL = 7.0 PSF				
27 - 26 2x3 DRY No.2 SPF					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)					TOTAL LOAD = 33.3 PSF				
50 - 42 2x4 DRY No.2 SPF														
42 - 36 2x4 DRY No.2 SPF														
36 - 27 2x4 DRY No.2 SPF														
ALL WEBS EXCEPT 2x3 DRY No.2 SPF					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.					THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC2010				
39 - 14 2x4 DRY No.2 SPF										THIS DESIGN COMPLIES WITH:				
40 - 13 2x4 DRY No.2 SPF										- PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014				
38 - 15 2x4 DRY No.2 SPF										- CSA 086-09				
										- TPIC 2011				
ALL GABLE WEBS 2x3 DRY No.2 SPF					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.					DESIGN ASSUMPTIONS				
EXCEPT										-OVERHANG NOT TO BE ALTERED OR CUT OFF.				
ST1 2x4 DRY No.2 SPF					END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW					(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD				
ST2 2x4 DRY No.2 SPF														
ST12 2x4 DRY No.2 SPF														
DRY: SEASONED LUMBER.														
GABLE STUDS SPACED AT 2-0-0 OC.														



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	Edge
3	TMW+w	MT20	2.0	4.0	
4	TTW+p	MT20	3.0	4.0	
5	TMW+w	MT20	2.0	4.0	
6	TMV+p	MT20	2.0	4.0	Edge
8	BMV1+p	MT20	2.0	4.0	
9, 10, 11					
9	BMW1+w	MT20	2.0	4.0	
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

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 = 10.00 FT.

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX (LC)		
FR-TO		FROM TO			FR-TO				
12-2	-174 / 0	0.0	0.0	0.04 (1)	7.81	10-4	-214 / 0	0.10 (1)	
1-2	0 / 38	-77.3	-77.3	0.11 (1)	10.00	11-3	-120 / 0	0.03 (1)	
2-3	-1 / 11	-77.3	-77.3	0.07 (1)	10.00	9-5	-120 / 0	0.03 (1)	
3-4	0 / 33	-77.3	-77.3	0.05 (1)	10.00				
4-5	0 / 33	-77.3	-77.3	0.05 (1)	10.00				
5-6	-1 / 11	-77.3	-77.3	0.07 (1)	10.00				
6-7	0 / 38	-77.3	-77.3	0.11 (1)	10.00				
8-6	-174 / 0	0.0	0.0	0.04 (1)	7.81				
12-11	-16 / 0	-17.5	-17.5	0.01 (4)	6.25				
11-10	-20 / 0	-17.5	-17.5	0.01 (4)	6.25				
10-9	-20 / 0	-17.5	-17.5	0.01 (4)	6.25				
9-8	-16 / 0	-17.5	-17.5	0.01 (4)	6.25				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

CSI: TC=0.11 (1-2:1), BC=0.01 (10-11:4), WB=0.10 (4-10:1), SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

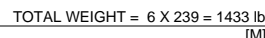
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.34 (4) (INPUT = 0.90)

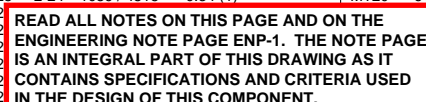
JSI METAL= 0.07 (4) (INPUT = 1.00)

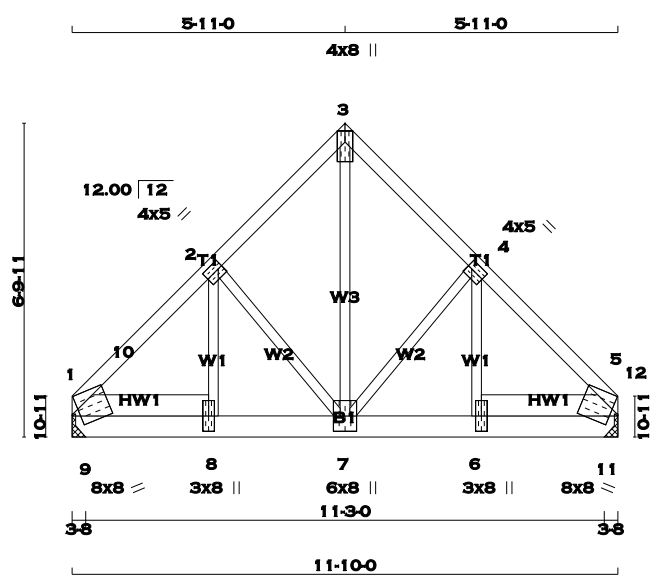
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NOTE PAGE
G AS IT
RIA USED





SCALE = 1:50.0

TOTAL WEIGHT = 3 X 68 = 205 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
1 - 5	2x6	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
HW2	2x6	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

DESIGN CONSISTS OF 3 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-5	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
1-5	4	SIDE(956.3)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	
2x6	2	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	TMBMW1-m	MT20	8.0	8.0	3.50	2.00
2	TMWV-t	MT20	4.0	5.0	2.00	1.25
3	TTW+p	MT20	4.0	8.0	Edge	
4	TMWV-t	MT20	4.0	5.0	2.00	1.25
5	TMBMW1-m	MT20	8.0	8.0	3.50	2.00
6	BMWV-t	MT20	3.0	8.0		
7	BMWVW-t	MT20	6.0	8.0		
8	BMWV-t	MT20	3.0	8.0		

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
1	9258	0	9258	-229	-1706	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8
5	9258	0	9258	0	-1706	HANGER BY OTHERS	MIN. SEAT SIZE: 3-8

PROVIDE ANCHORAGE AT BEARING JOINT 1 FOR 1706 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 5 FOR 1706 LBS. FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES.
SHALL BE PROVIDED BY BUILDG. DESIGNER

PROVIDE FOR 229 LBS. FACTORED HORIZONTAL REACTION AT JOINT 1

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
1	7279	4469 / 0	1277 / 0	0 / 0	1463 / -2204	1532 / 0	0 / 0
5	7279	4469 / 0	1277 / 0	0 / 0	1463 / -2204	1532 / 0	0 / 0

HORIZONTAL REACTIONS						
1	---	0 / 0	0 / 0	164 / -164	0 / 0	0 / 0

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 3.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (18)

C H O R D S				W E B S			
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRAC	MEMB.	MAX. FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
1-10	-9748 / 1797	-102.7 -102.7	0.13 (2)	3.81	7-3	-1724 / 8570	0.64 (1)
10-2	-8705 / 1655	-102.7 -102.7	0.15 (3)	4.00	7-4	-2730 / 695	0.30 (3)
2-3	-6279 / 1309	-102.7 -102.7	0.12 (2)	4.61	6-4	-623 / 3553	0.27 (2)
3-4	-6279 / 1309	-102.7 -102.7	0.12 (3)	4.61	2-7	-2730 / 695	0.30 (2)
4-12	-8705 / 1654	-102.7 -102.7	0.15 (2)	4.00	8-2	-621 / 3553	0.27 (3)
12-5	-9748 / 1782	-102.7 -102.7	0.13 (3)	3.81	9-10	-362 / 2018	0.00 (1)
					10-8	-412 / 2416	0.10 (1)
1-9	-848 / 3855	-1462.0 -1462.0	0.16 (1)	6.25	11-12	-342 / 2018	0.00 (1)
9-8	-848 / 3855	-1462.0 -1462.0	0.39 (1)	6.25	12-6	-423 / 2416	0.10 (1)
8-7	-1168 / 6144	-1462.0 -1462.0	0.46 (1)	6.25			
7-6	-1087 / 6137	-1462.0 -1462.0	0.46 (1)	6.25			
6-11	-704 / 3815	-1462.0 -1462.0	0.39 (1)	6.25			
11-5	-704 / 3815	-1462.0 -1462.0	0.16 (1)	6.25			

TRUSS HAS BEEN CHECKED FOR UNBALANCED LOADING
AS PER NBCC 4.1.6.2.(8)

WIND LOAD APPLIED IS DERIVED FROM REFERENCE VELOCITY PRESSURE OF { 9.0 } PSF AT (26-0-0) FT-IN-SX REFERENCE HEIGHT ABOVE GRADE AND USING EXTERNAL PEAK COEFFICIENTS, CpCg, BASED ON THE (MAIN WIND FORCE RESISTING SYSTEM).INTERNAL WIND PRESSURE IS BASED ON DESIGN (CATEGORY 2). BUILDING MAY BE LOCATED ON (OPEN TERRAIN), AND TRUSS IS DESIGNED TO BE LOCATED AT LEAST (0-0) FT-IN-SX AWAY FROM EAVE.

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 30.1 PSF
DL = 5.0 PSF
BOT CH. LL = 10.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.1 PSF

SPACING = 24.0 IN./C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 41-7-8
END DISTANCE = 11-10-0
END SPAN CARRIED = 41-7-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 100 % OF GSL.

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/180 (0.79")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.15 (4-12-2), BC=0.46 (6-7-1), WB=0.64 (3-7-1), SSI=0.45 (8-9-2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT
PLATE ROTATION
JSI GRIP= 0.83 (1)
JSI METAL= 0.45



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.



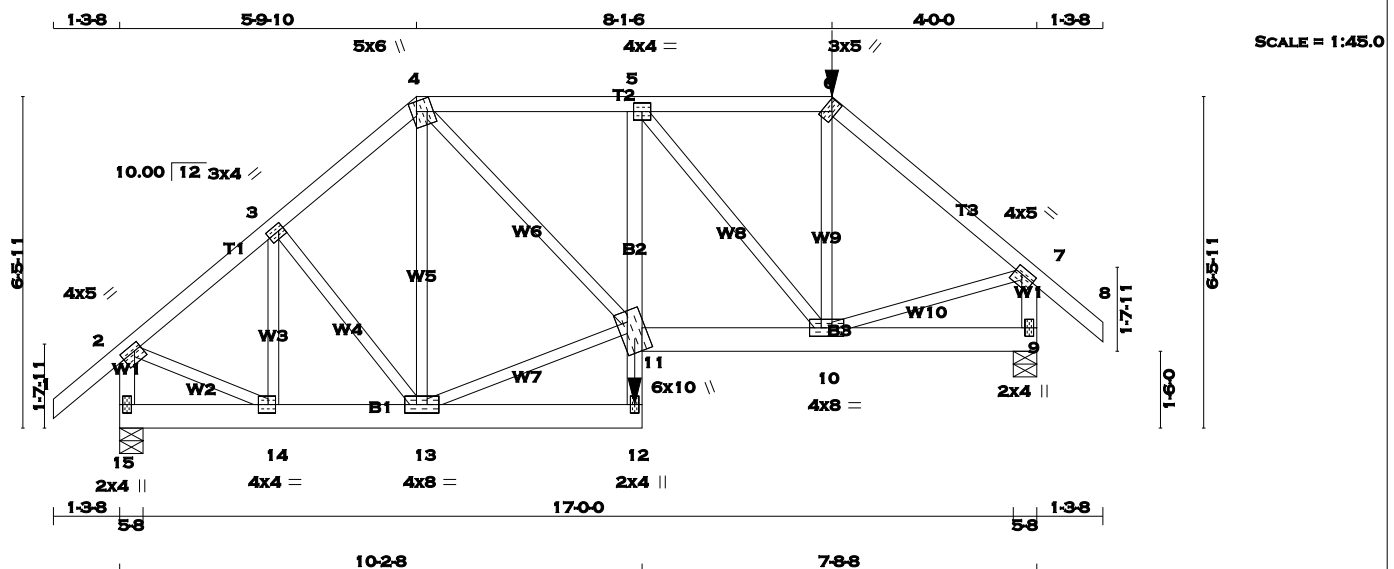


IM



KOTT





TOTAL WEIGHT = 102 lb
[M]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
15 - 2	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
15 - 12	2x6	DRY	No.2
12 - 5	2x4	DRY	No.2
11 - 9	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	5.0	1.50 1.75
3	TMVWV-t	MT20	3.0	4.0	1.50 1.25
4	TTWW+m	MT20	5.0	6.0	2.25 1.25
5	TMVW-t	MT20	4.0	4.0	
6	TTW+h	MT20	3.0	5.0	2.50 1.00
7	TMVW-t	MT20	4.0	5.0	1.50 1.75
9	BMV1+p	MT20	2.0	4.0	
10	BMVWW-t	MT20	4.0	8.0	
11	BVMWW-w	MT20	6.0	10.0	3.50 7.50
12	BMV+p	MT20	2.0	4.0	
13	BMVWW-t	MT20	4.0	8.0	
14	BMVW-t	MT20	4.0	4.0	2.00 1.75
15	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) 128.9 lbs FACTORED DOWN AT 13-11-0 ON TOP CHORD, AND 557.1 lbs FACTORED DOWN AT 10-0-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	DOWN	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
15	1279	0	0	1279	0	5-8	5-8	5-8	5-8
9	1488	0	0	1488	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND
15	895	642 / 0	0 / 0	0 / 0	253 / 0
9	1042	742 / 0	0 / 0	0 / 0	300 / 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 = 4.80 FT.
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)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO	FROM	TO	FR-TO
1-2	0 / 34	-77.3 -77.3	10.00 14-3
2-3	-1082 / 0	-77.3 -77.3	5.90 3-13
3-4	-1145 / 0	-77.3 -77.3	5.77 13-4
4-5	-1652 / 0	-77.3 -77.3	4.80 13-11
5-6	-1050 / 0	-107.2 -107.2	5.76 4-11
6-7	-1358 / 0	-77.3 -77.3	5.22 5-10
7-8	0 / 34	-77.3 -77.3	10.00 10-6
15-2	-1244 / 0	0.0 0.0	7.17 2-14
9-7	-1445 / 0	0.0 0.0	6.76 10-7
15-14	0 / 0	-17.5 -17.5	10.00
14-13	0 / 843	-17.5 -17.5	10.00
13-12	0 / 17	-17.5 -17.5	10.00
12-11	0 / 583	0.0 0.0	10.00
11-5	0 / 309	0.0 0.0	10.00
11-10	0 / 1664	-24.2 -24.2	10.00
10-9	0 / 0	-24.2 -24.2	10.00

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
6	13-11-0	-129	-129	---	FRONT	VERT	TOTAL
12	10-0-12	-557	-557	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***

GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.

LOADS WERE DERIVED FROM USER INPUT NO FURTHER MODIFICATIONS WERE MADE

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip

LEFT SETBACK = 5-9-10

RIGHT SETBACK = 4-0-0

END SETBACK = 4-0-0

END WALL WIDTH = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL LOADS BASED ON 55 % OF GSL.

LOADS APPLIED TO FIRST 7-7-12 OF SPAN MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.60")

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

ALLOWABLE DEFL.(TL)= L/360 (0.60")

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

CSI: TC=0.30 (4-5:1) , BC=0.24 (10-11:1) , WB=0.57 (5-10:1) , SSI=0.21 (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

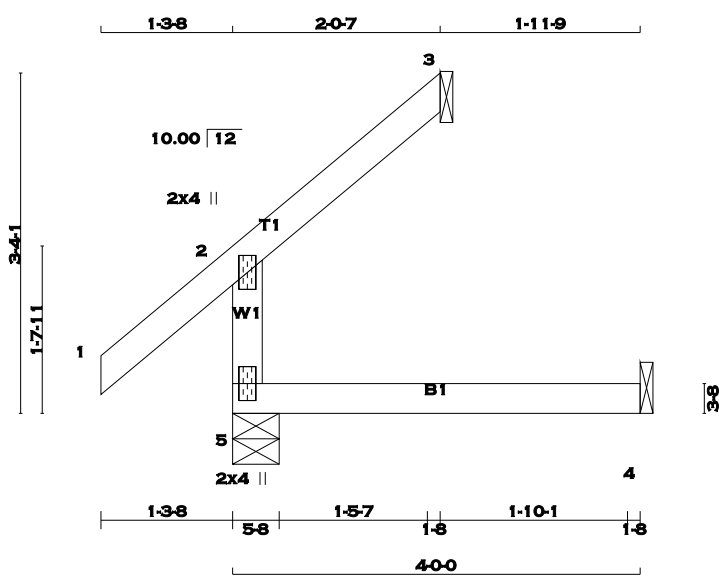
TRUSS PLATE M RESPONSIBLE F TRUSS MANUFA

NAIL VALUES PLATE GRIP(DR (PSI)

MAX MIL 618 35

RECEIVED TOWN OF MILTON MAR 29, 2017 JUNIPER 9 BUILDING DIVISION





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

DRY

No.2

LUMBER

DESCR.

SPF

SPF

5 - 2

2x4

DRY

No.2

1 - 3

2x4

DRY

No.2

5 - 4

2x4

DRY

No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT

TYPE

PLATES

W

LEN

Y

X

2

TMV+p

MT20

2.0

4.0

5

BMV1+p

MT20

2.0

4.0

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5	244	0	244	0	0	5-8	5-8	
3	60	0	60	0	0	1-8	1-8	
4	31	0	34	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM.LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
5	171	123 / 0	0 / 0	0 / 0	0 / 0	47 / 0	0 / 0	
3	41	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0	
4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 (LC)	MAX. UNBRACED LENGTH	MEMB. FORCE (LBS)	MAX. CSI (LC)	MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO								
5-2	-205 / 0	0.0	0.0 0.04 (4)	7.81				
1-2	0 / 34	-77.3	-77.3 0.11 (1)	10.00				
2-3	-12 / 0	-77.3	-77.3 0.05 (1)	6.25				
5-4	0 / 0	-17.5	-17.5 0.06 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.11 (1-2:1) , BC=0.06 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE GRIP(DRY)

SHEAR

SECTION

(PSI)

(PLI)

(PLI)

MAX MIN

MAX MIN

MAX MIN

MT20

618

354

1667

822

2284

1656

PLATE PLACEMENT TOL. = 0.250 inches

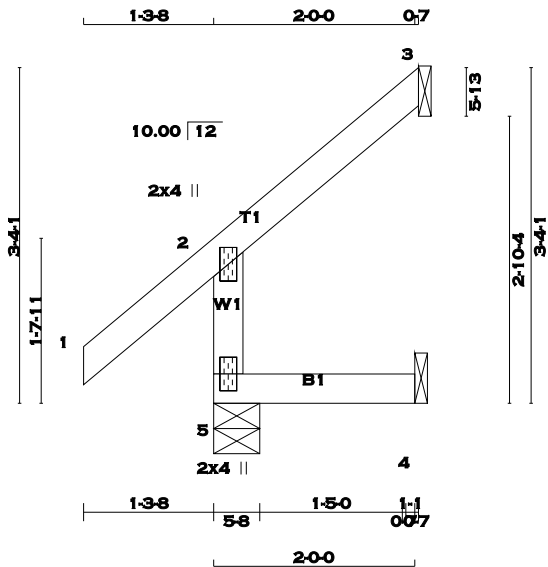
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.06 (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.





SCALE = 1:22.9

TOTAL WEIGHT = 9 lb [M]

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

DRY: SEASONED LUMBER.

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

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5		224	0	224	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	155	123 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
3	41	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: (5)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	
FR-TO		FROM	TO	FR-TO		LENGTH	
5-2	-205 / 0	0.0	0.0 0.01 (4)	7.81			
1-2	0 / 34	-77.3	-77.3 0.11 (1)	10.00			
2-3	-12 / 0	-77.3	-77.3 0.05 (1)	6.25			
5-4	0 / 0	-17.5	-17.5 0.02 (4)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.11 (1-2:1) , BC=0.02 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.06 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (2) (INPUT = 0.90)
JSI METAL= 0.06 (2) (INPUT = 1.00)



RECEIVED
TOWN OF MILTON
MAR 29, 2017
JUNIPER 9
BUILDING DIVISION

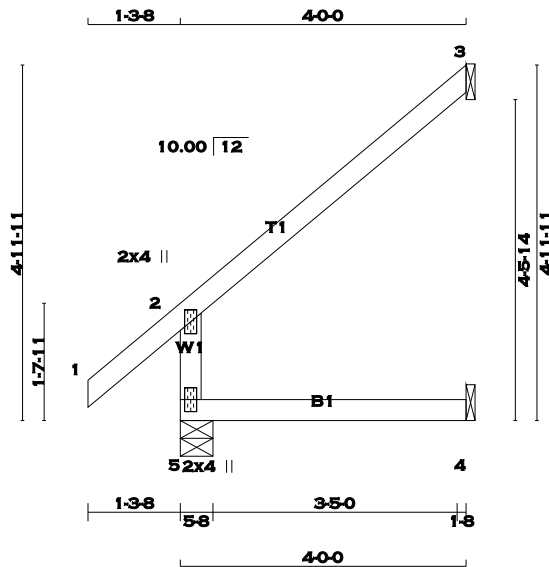
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KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Thu Mar 23 11:07:38 2017 Page 1

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SCALE: 3/8"=1'

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

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

DRY: SEASONED LUMBER.

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
5	340	0	340	0	0	5-8	5-8	
3	116	0	116	0	0	1-8	1-8	
4	31	0	34	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
5	236	181 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
3	79	70 / 0	0 / 0	0 / 0	0 / 0	9 / 0	0 / 0
4	24	0 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 (PLF)	MAX. CSI (LC)	MEMB. FORCE (LBS)	MAX. CSI (LC)	MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO								
5-2	-300 / 0	0.0	0.0	0.04 (4)	7.81			
1-2	0 / 34	-77.3	-77.3	0.11 (1)	10.00			
2-3	-25 / 0	-77.3	-77.3	0.21 (1)	6.25			
5-4	0 / 0	-17.5	-17.5	0.06 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.21 (2-3:1) , BC=0.06 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.12 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

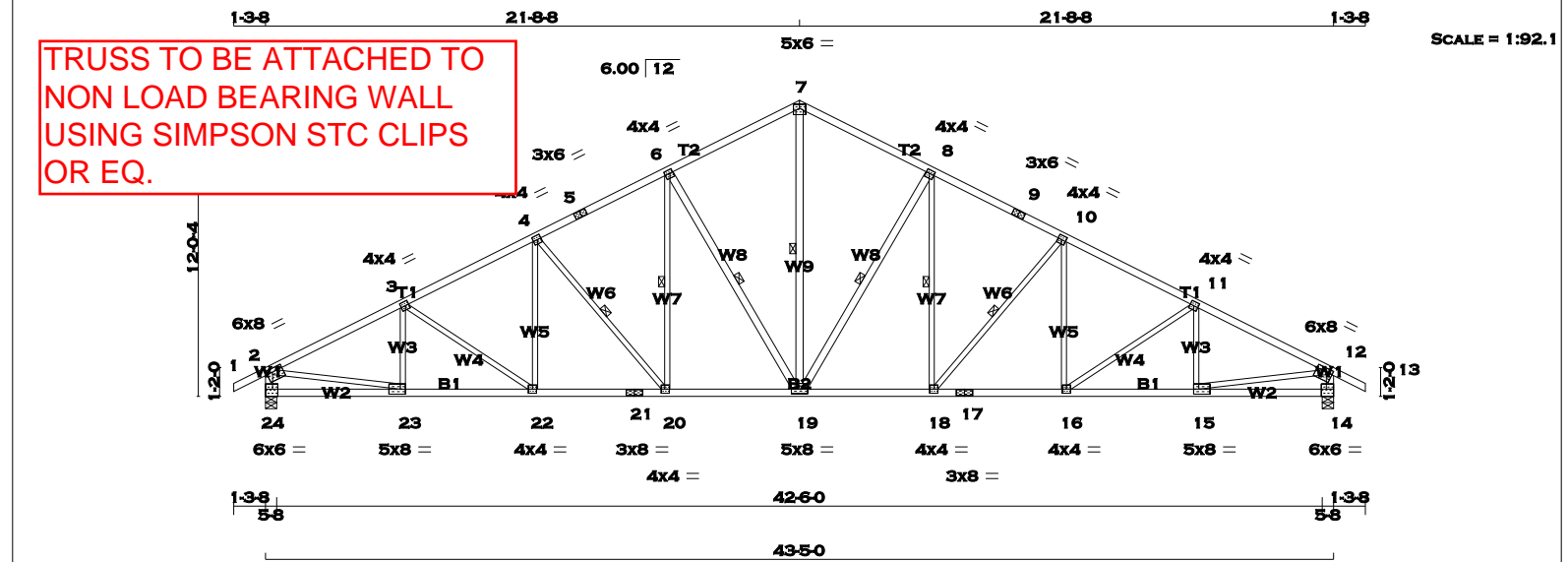
JSI GRIP= 0.22 (2) (INPUT = 0.90)
JSI METAL= 0.08 (2) (INPUT = 1.00)



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TOWN OF MILTON
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JUNIPER 9
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 = 3 X 208 = 623 lb [M]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 5	2x4	DRY	No.2	SPF	SPF
5 - 7	2x4	DRY	No.2		
7 - 9	2x4	DRY	No.2		
9 - 13	2x4	DRY	No.2		
24 - 2	2x4	DRY	No.2		
14 - 12	2x4	DRY	No.2		
24 - 21	2x4	DRY	No.2		
21 - 17	2x4	DRY	No.2		
17 - 14	2x4	DRY	No.2		
ALL WEBS EXCEPT	2x3	DRY	No.2		
19 - 7	2x4	DRY	No.2	SPF	SPF
19 - 8	2x4	DRY	No.2		
6 - 19	2x4	DRY	No.2		

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	6.0	8.0	1.75 3.00
3, 4, 10, 11					
3	TMWW-t	MT20	4.0	4.0	2.00 1.75
5	TS-t	MT20	3.0	6.0	
6	TMWW-t	MT20	4.0	4.0	1.75 1.50
7	TTW-p	MT20	5.0	6.0	2.00 3.00
8	TMWW-t	MT20	4.0	4.0	1.75 1.50
9	TS-t	MT20	3.0	6.0	
12	TMVW-t	MT20	6.0	8.0	1.75 3.00
14	BMV1-t	MT20	6.0	6.0	Edge 2.50
15	BMWW-t	MT20	5.0	8.0	2.50 2.50
16	BMWW-t	MT20	4.0	4.0	
17	BS-t	MT20	3.0	8.0	
18	BMWW-t	MT20	4.0	4.0	2.00 1.75
19	BMWW-t	MT20	5.0	8.0	2.25 4.00
20	BMWW-t	MT20	4.0	4.0	2.00 1.75
21	BS-t	MT20	3.0	8.0	
22	BMWW-t	MT20	4.0	4.0	
23	BMWW-t	MT20	5.0	8.0	2.50 2.50
24	BMV1-t	MT20	6.0	6.0	3.50

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.

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
24	2966	0	2966	277	-771	5-8	5-8
14	2966	0	2966	0	-771	5-8	5-8

PROVIDE ANCHORAGE AT BEARING JOINT 24 FOR 771 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 14 FOR 771 LBS. FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES.
SHALL BE PROVIDED BY BUILDG. DESIGNER

PROVIDE FOR 277 LBS. FACTORED HORIZONTAL REACTION AT JOINT 24

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
24	2356	1387 / 0	434 / 0	0 / 0	103 / -894	535 / 0	0 / 0
14	2356	1387 / 0	434 / 0	0 / 0	103 / -894	535 / 0	0 / 0

HORIZONTAL REACTIONS

24	---	0 / 0	0 / 0	0 / 0	198 / -198	0 / 0	0 / 0
----	-----	-------	-------	-------	------------	-------	-------

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

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 2.73 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.94 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 7-19. DBS = 12-0-0. CBF = 82 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-19, 6-19. DBS = 10-0-0. CBF = 86 LBS.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-18, 6-20. DBS = 20-0-0. CBF = 51 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 10-18, 4-20. DBS = 16-0-0. 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: (18)

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)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM	TO	FR-TO			
1-2	0 / 36	-102.7	-102.7 0.15 (2)	10.00	19-7	-644 / 2187	0.50 (14)
2-3	-4294 / 1101	-102.7	-102.7 0.97 (2)	2.73	19-8	-1383 / 572	0.81 (3)
3-4	-4139 / 1111	-102.7	-102.7 0.89 (1)	2.81	18-8	-214 / 813	0.18 (3)
4-5	-3604 / 1017	-102.7	-102.7 0.80 (1)	3.06	18-10	-878 / 373	0.41 (3)
5-6	-3604 / 1017	-102.7	-102.7 0.80 (1)	3.06	16-10	-62 / 359	0.08 (6)
6-7	-2961 / 929	-102.7	-102.7 0.69 (1)	3.44	16-11	-372 / 221	0.28 (3)
7-8	-2961 / 929	-102.7	-102.7 0.69 (1)	3.44	15-11	-460 / 215	0.11 (1)
8-9	-3604 / 1017	-102.7	-102.7 0.80 (1)	3.06	6-19	-1383 / 572	0.81 (2)
9-10	-3604 / 1017	-102.7	-102.7 0.80 (1)	3.06	20-6	-214 / 813	0.18 (2)
10-11	-4139 / 1111	-102.7	-102.7 0.89 (1)	2.81	4-20	-878 / 373	0.41 (2)
11-12	-4294 / 1101	-102.7	-102.7 0.97 (3)	2.73	22-4	-62 / 359	0.08 (5)
12-13	0 / 36	-102.7	-102.7 0.15 (3)	10.00	3-22	-372 / 221	0.28 (2)
24-2	-2897 / 796	0.0	0.0 0.29 (1)	5.07	23-3	-460 / 215	0.11 (1)
14-12	-2897 / 797	0.0	0.0 0.29 (1)	5.07	2-23	-875 / 3907	0.88 (1)
					15-12	-875 / 3907	0.88 (1)
24-23	-261 / 292	-27.5	-27.5 0.19 (17)	6.25			
23-22	-1126 / 3862	-27.5	-27.5 0.70 (1)	5.9			
22-21	-943 / 3695	-27.5	-27.5 0.67 (1)	6.2			
21-20	-943 / 3695	-27.5	-27.5 0.67 (1)	6.2			
20-19	-702 / 3231	-27.5	-27.5 0.62 (1)	6.2			
19-18	-540 / 3231	-27.5	-27.5 0.62 (1)	6.2			
18-17	-667 / 3695	-27.5	-27.5 0.67 (1)	6.2			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	30.1	PSF
	DL	=	5.0	PSF
BOT CH.	LL	=	10.0	PSF
	DL	=	7.0	PSF
TOTAL LOAD		=	52.1	PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:

- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS

- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.45")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.29")
ALLOWABLE DEFL.(TL)= L/180 (2.89")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.40")

CSI: TC=0.97 (11-12:3), BC=0.70 (22-23:1), WB=0.88 (2-23:1), SSI=0.28 (2-3:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

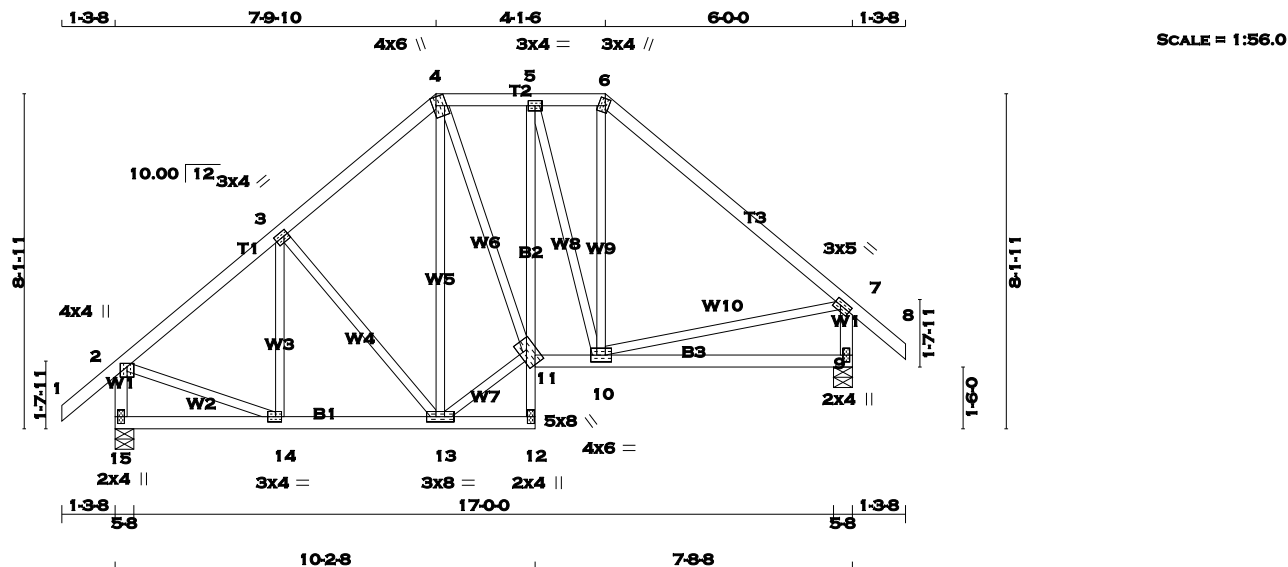
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (15) (INPUT = 0.90)
JSI METAL= 0.96 (17) (INPUT = 1.00)

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TOTAL WEIGHT = 98 lb
[M][F]

LUMBER				DESCR.	
CHORDS	SIZE	LUMBER			
1 - 4	2x4	DRY	No.2	SPF	
4 - 6	2x4	DRY	No.2	SPF	
6 - 8	2x4	DRY	No.2	SPF	
15 - 2	2x4	DRY	No.2	SPF	
9 - 7	2x4	DRY	No.2	SPF	
15 - 12	2x4	DRY	No.2	SPF	
12 - 5	2x3	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	TMVW+p	MT20	4.0	4.0	1.00 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.25
4	TTWW+m	MT20	4.0	6.0	Edge 1.00
5	TMVW-t	MT20	3.0	4.0	
6	TTWW+m	MT20	3.0	4.0	2.00 1.00
7	TMVW-t	MT20	3.0	5.0	1.50 1.75
9	BMV1+p	MT20	2.0	4.0	
10	BMVWW-t	MT20	4.0	6.0	
11	BVMWW-w	MT20	5.0	8.0	2.50 5.00
12	BMV+p	MT20	2.0	4.0	
13	BMVWW-t	MT20	3.0	8.0	
14	BMVW-t	MT20	3.0	4.0	1.50 1.75
15	BMV1+p	MT20	2.0	4.0	

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
15	957	0	957	0	0	5-8	5-8	5-8	5-8
9	957	0	957	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	669	482 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0
9	669	482 / 0	0 / 0	0 / 0	0 / 0	187 / 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 = 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)	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 / 34	-77.3	-77.3 0.11 (1)	10-00	14-3	-123 / 30	0.04 (1)
2-3	-764 / 0	-77.3	-77.3 0.16 (1)	6.25	3-13	-195 / 0	0.12 (1)
3-4	-649 / 0	-77.3	-77.3 0.15 (1)	6.25	13-4	-158 / 0	0.20 (1)
4-5	-614 / 0	-77.3	-77.3 0.05 (1)	6.25	13-11	0 / 602	0.14 (1)
5-6	-551 / 0	-77.3	-77.3 0.03 (1)	6.25	4-11	0 / 390	0.09 (1)
6-7	-714 / 0	-77.3	-77.3 0.37 (1)	6.25	5-10	-251 / 0	0.20 (1)
7-8	0 / 34	-77.3	-77.3 0.11 (1)	10.00	10-6	0 / 162	0.04 (4)
15-2	-927 / 0	0.0	0.0 0.10 (1)	7.81	2-14	0 / 635	0.14 (1)
9-7	-913 / 0	0.0	0.0 0.10 (1)	7.81	10-7	0 / 560	0.13 (1)
15-14	0 / 0	-17.5	-17.5 0.06 (4)	10.00			
14-13	0 / 604	-17.5	-17.5 0.13 (1)	10.00			
13-12	0 / 3	-17.5	-17.5 0.04 (4)	10.00			
12-11	0 / 13	0.0	0.0 0.01 (1)	10.00			
11-5	0 / 74	0.0	0.0 0.03 (1)	10.00			
11-10	0 / 615	-17.5	-17.5 0.20 (4)	10.00			
10-9	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (0.60")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.60")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.05")

CSI: TC=0.37 (6-7:1), BC=0.20 (10-11:4) , WB=0.20 (4-13:1) , SSI=0.14 (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 (14) (INPUT = 0.90)
JSI METAL= 0.28 (7) (INPUT = 1.00)



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

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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
13	957	0	957	0	0	5-8	5-8
8	957	0	957	0	0	5-8	5-8

<u>UNFACTORED REACTIONS</u>							
JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
13	669	482 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0
8	669	482 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.60")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.60")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.25 (2-3:1) , BC=0.13 (9-10:1) , WB=0.14 (6-9:1) , SSI=0.14 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

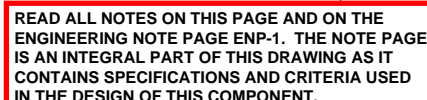
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

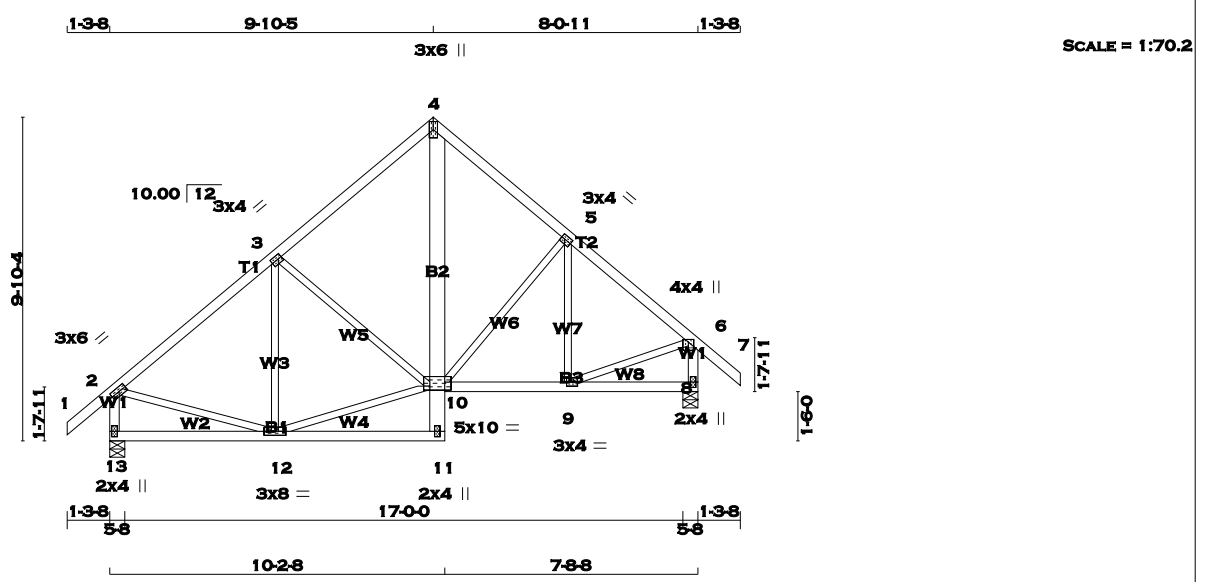
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.25 (6) (INPUT = 1.00)



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JUNIPER 9
BUILDING DIVISION



TOTAL WEIGHT = 99 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 7	2x4	DRY	No.2
13 - 2	2x4	DRY	No.2
8 - 6	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2
11 - 4	2x6	DRY	No.2
10 - 8	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	3.0	6.0	1.50 2.75
3	TMVW-t	MT20	3.0	4.0	1.50 1.25
4	TTV+p	MT20	3.0	6.0	
5	TMVW-t	MT20	3.0	4.0	1.50 1.25
6	TMVW+p	MT20	4.0	4.0	1.00 2.00
8	BMV1+p	MT20	2.0	4.0	
9	BMVW-t	MT20	3.0	4.0	1.50 1.75
10	BVMW-t	MT20	5.0	10.0	3.00 2.25
11	BMV+p	MT20	2.0	4.0	
12	BMVW-t	MT20	3.0	8.0	
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	
JT	VERT	DOWN	HORZ
13	957	0	957
8	957	0	957

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS	INPUT BRG	REQRD BRG	
13	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	669	482 / 0	0 / 0	0 / 0	0 / 0	187 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH
FR-TO		FROM TO	
1-2	0 / 34	-77.3 -77.3	0.11 (1)
2-3	-764 / 0	-77.3 -77.3	0.25 (1)
3-4	-630 / 0	-77.3 -77.3	0.25 (1)
4-5	-638 / 0	-77.3 -77.3	0.16 (1)
5-6	-766 / 0	-77.3 -77.3	0.17 (1)
6-7	0 / 34	-77.3 -77.3	0.11 (1)
13-2	-922 / 0	0.0 0.0	0.10 (1)
8-6	-929 / 0	0.0 0.0	0.10 (1)
13-12	0 / 0	-17.5 -17.5	0.12 (4)
12-11	0 / 23	-17.5 -17.5	0.12 (4)
11-10	0 / 37	0.0 0.0	0.03 (1)
10-4	0 / 516	0.0 0.0	0.08 (1)
10-9	0 / 607	-17.5 -17.5	0.13 (1)
9-8	0 / 0	-17.5 -17.5	0.07 (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

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.60")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.60")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.25 (2-3:1), BC=0.13 (9-10:1), WB=0.14 (6-9:1), SSI=0.14 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

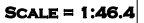
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.25 (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.





TOTAL WEIGHT = 52 lb

DESCR
SPF
SPF
SPF
SPF
SPF

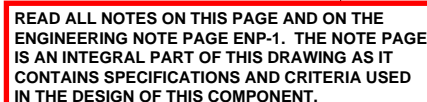
SPF

SPF

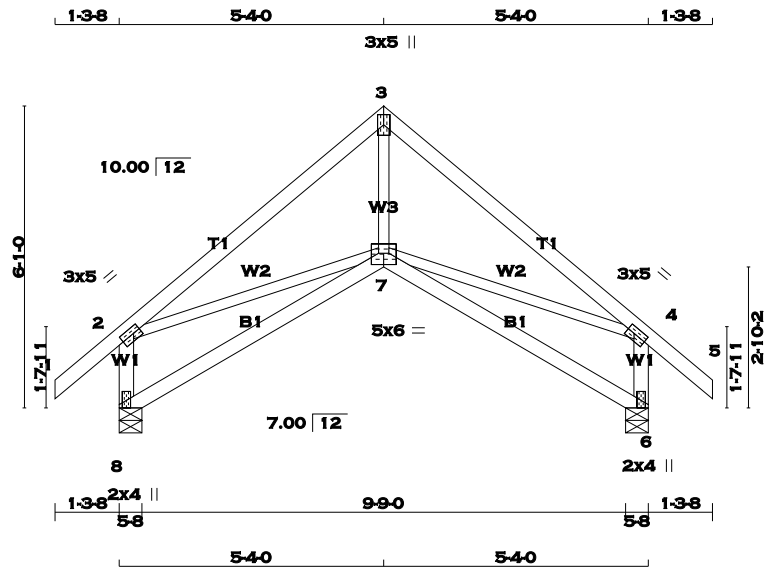
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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 / 34	-77.3	-77.3 0.11 (1)	10.00	7-3	0 / 367	0.08 (1)
2-3	-609 / 0	-77.3	-77.3 0.29 (1)	6.25	2-7	0 / 488	0.11 (1)
3-4	-609 / 0	-77.3	-77.3 0.29 (1)	6.25	7-4	0 / 488	0.11 (1)
4-5	0 / 34	-77.3	-77.3 0.11 (1)	10.00			
8-2	-566 / 0	0.0	0.0 0.06 (1)	7.81			
6-4	-566 / 0	0.0	0.0 0.06 (1)	7.81			
8-7	0 / 0	-17.5	-17.5 0.15 (4)	10.00			
7-6	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

JSI GRIP= 0.88 (7) (INPUT = 0.90)
JSI METAL= 0.24 (4) (INPUT = 1.00)



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TOTAL WEIGHT = 48 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	1.75
3	TTW+p	MT20	3.0	5.0		
4	TMVW-t	MT20	3.0	5.0	1.50	1.75
6	BMV1+p	MT20	2.0	4.0	Edge	
7	BBWWW-p	MT20	5.0	6.0	2.75	3.00
8	BMV1+p	MT20	2.0	4.0	Edge	

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
8	613	0	613	0	0	5-8	5-8	5-8	5-8
6	613	0	613	0	0	5-8	5-8	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
8	428	313 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0		
6	428	313 / 0	0 / 0	0 / 0	0 / 0	115 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		MAX. FACTORED		FACTORED		WEBS		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	CS1 (LC)	UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM	TO			FR-TO			
1-2	0 / 34	-77.3	-77.3	0.11 (1)	10.00	7-3	0 / 367	0.08 (1)	
2-3	-609 / 0	-77.3	-77.3	0.29 (1)	6.25	2-7	0 / 488	0.11 (1)	
3-4	-609 / 0	-77.3	-77.3	0.29 (1)	6.25	7-4	0 / 488	0.11 (1)	
4-5	0 / 34	-77.3	-77.3	0.11 (1)	10.00				
8-2	-566 / 0	0.0	0.0	0.06 (1)	7.81				
6-4	-566 / 0	0.0	0.0	0.06 (1)	7.81				
8-7	0 / 0	-17.5	-17.5	0.15 (4)	10.00				
7-6	0 / 0	-17.5	-17.5	0.15 (4)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.06")

CSI: TC=0.29 (3-4:1), BC=0.15 (7-8:4), WB=0.11 (4-7:1), SSI=0.12 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

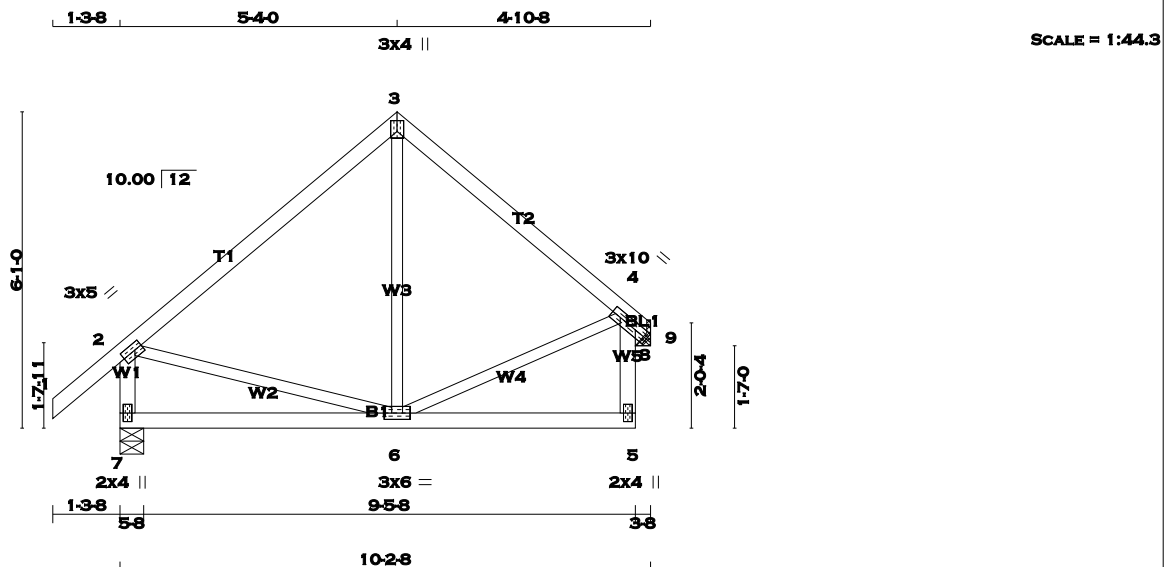
JSI GRIP= 0.88 (7) (INPUT = 0.90)
JSI METAL= 0.24 (4) (INPUT = 1.00)



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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
7 - 2	2x4	DRY	No.2
5 - 4	2x4	DRY	No.2
7 - 5	2x4	DRY	No.2

BEARING BLOCKS			
BL1	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

BEARING NOTE: GAP BETWEEN INSIDE OF TOP CHORD BEARING AND FIRST DIAGONAL OR VERTICAL WEB SHALL NOT EXCEED 0.5 INCHES.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	5.0	1.50	1.75
3	TTW+p	MT20	3.0	4.0	2.50	1.50
4	TMVWK1-t	MT20	3.0	10.0	1.50	3.25
5	BMV+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			
JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT REQRD BRG
9(4)	463	463	0
7	584	584	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD
9(4)	325	228 / 0	0 / 0	0 / 0	0 / 0	0 / 0	98 / 0
7	408	299 / 0	0 / 0	0 / 0	0 / 0	0 / 0	109 / 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

CHORDS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)
1-2	0 / 34	-77.3	10.00
2-3	-282 / 0	-77.3	6.25
3-4	-282 / 0	-77.3	6.25
7-2	-547 / 0	0.0	7.81
5-8	0 / 32	0.0	10.00
8-4	0 / 32	0.0	10.00
7-6	0 / 0	-17.5	10.00
6-5	0 / 35	-17.5	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.33")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.33")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.28 (2-3:1), BC=0.13 (5-6:4), WB=0.05 (2-6:1), 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

AUTOSOLVE LEFT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

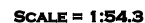
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.48 (2) (INPUT = 0.90)
JSI METAL= 0.14 (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.

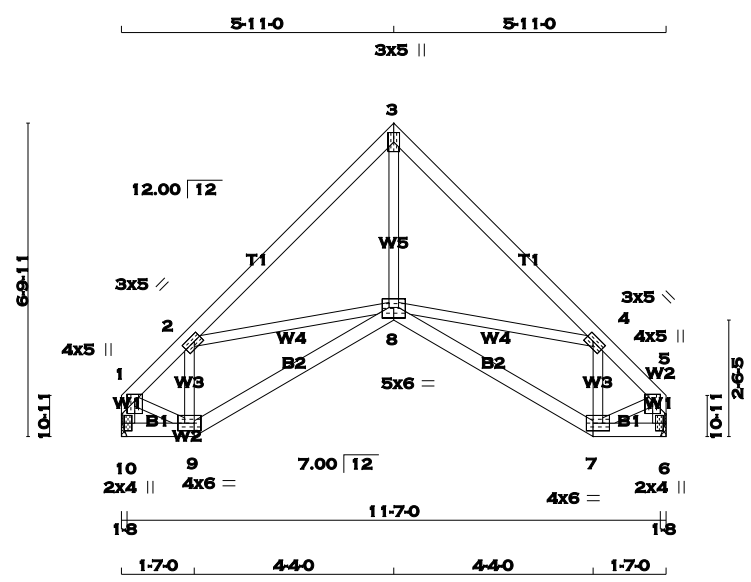




[M][F]

JSI GRIP= 0.67 (6) (INPUT = 0.90)
JSI METAL= 0.22 (2) (INPUT = 1.00)





TOTAL WEIGHT = 51 lb [M][F]

<u>LUMBER</u>				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
10 - 1	2x4	DRY	No.2	SPF
6 - 5	2x4	DRY	No.2	SPF
10 - 9	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
8 - 7	2x4	DRY	No.2	SPF
7 - 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	5.0	1.75	2.00
2	TMVW-t	MT20	3.0	5.0	1.50	2.00
3	TTW+p	MT20	3.0	5.0		
4	TMVW-t	MT20	3.0	5.0	1.50	2.00
5	TMVW+p	MT20	4.0	5.0	1.75	2.00
6	BMV1+p	MT20	2.0	4.0		
7	BBWW-p	MT20	4.0	6.0	2.00	4.25
8	BBWW-p	MT20	5.0	6.0	2.75	3.00
9	BBWW-p	MT20	4.0	6.0	2.00	4.25
10	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	
10	561	0		561	0	0		HANGER BY OTHERS	
6	561	0		561	0	0		HANGER BY OTHERS	
MIN. SEAT SIZE: 1-8									

UNFACTORED REACTIONS							
JT	1ST LCASE	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
10	394	276	0	0/0	0/0	0/0	118/0
6	394	276	0	0/0	0/0	0/0	118/0

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)		
FR-TO		FROM TO			FR-TO				
1-2	-553 / 0	-77.3 -77.3	0.15 (1)	6.25	8-3	0 / 569	0.13 (1)		
2-3	-623 / 0	-77.3 -77.3	0.18 (1)	6.25	8-4	0 / 13	0.00 (4)		
3-4	-623 / 0	-77.3 -77.3	0.18 (1)	6.25	7-4	-341 / 0	0.05 (1)		
4-5	-553 / 0	-77.3 -77.3	0.15 (1)	6.25	2-8	0 / 13	0.00 (4)		
10-1	-547 / 0	0.0 0.0	0.05 (1)	7.81	9-2	-341 / 0	0.05 (1)		
6-5	-547 / 0	0.0 0.0	0.05 (1)	7.81	1-9	0 / 461	0.10 (1)		
					7-5	0 / 461	0.10 (1)		
10-9	0 / 0	-17.5 -17.5	0.01 (4)	10.00					
9-8	0 / 487	-17.5 -17.5	0.13 (1)	10.00					
8-7	0 / 487	-17.5 -17.5	0.13 (1)	10.00					
7-6	0 / 0	-17.5 -17.5	0.01 (4)	10.00					

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

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR 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 (0.39")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.18 (2-3:1), BC=0.13 (8-9:1), WB=0.13 (3-8:1), 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

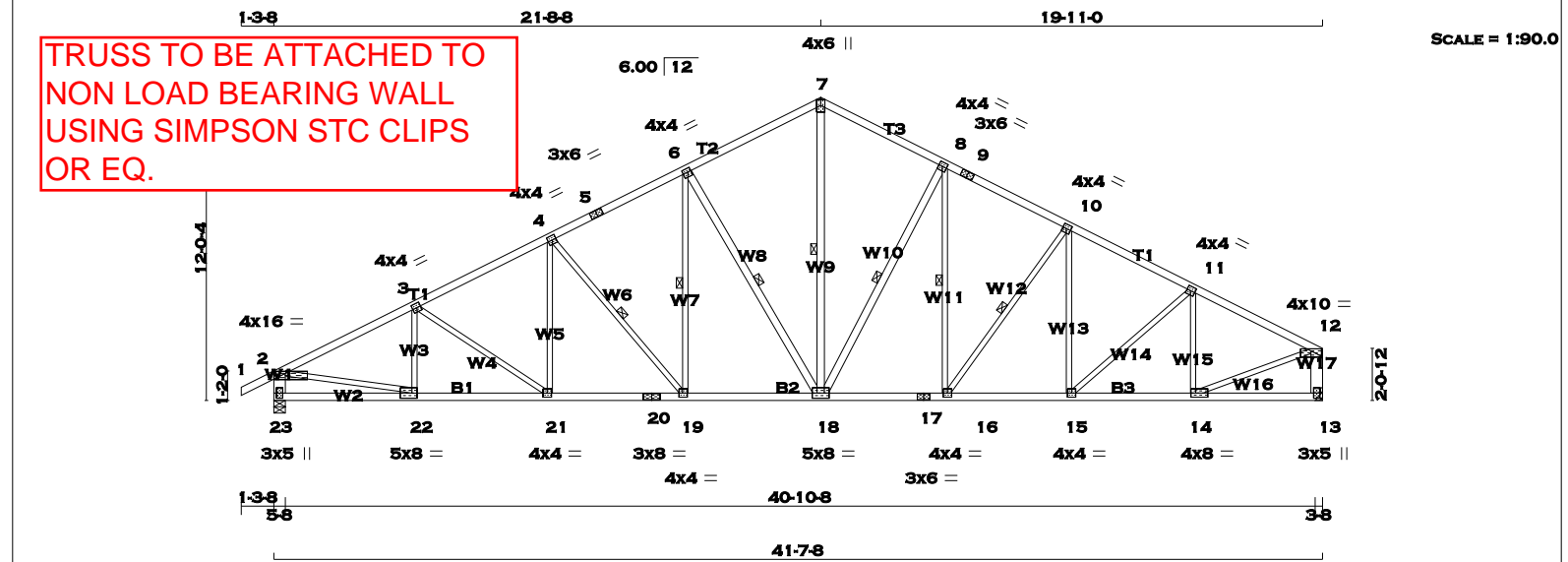
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (7) (INPUT = 0.90)
JSI METAL= 0.13 (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.





TOTAL WEIGHT = 5 X 205 = 1026 [M]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 5	2x4	DRY	No.2		SPF
5 - 7	2x4	DRY	No.2		SPF
7 - 9	2x4	DRY	No.2		SPF
9 - 12	2x4	DRY	No.2		SPF
23 - 2	2x6	DRY	No.2		SPF
13 - 12	2x6	DRY	No.2		SPF
23 - 20	2x4	DRY	No.2		SPF
20 - 17	2x4	DRY	No.2		SPF
17 - 13	2x4	DRY	No.2		SPF
ALL WEBS		2x3	DRY	No.2	SPF
EXCEPT					
6 - 18	2x4	DRY	No.2		SPF
18 - 7	2x4	DRY	No.2		SPF
18 - 8	2x4	DRY	No.2		SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-p	MT20	4.0	16.0	1.00	5.50
3, 4, 8, 10, 11						
3	TMWW-t	MT20	4.0	4.0	2.00	1.75
5	TS-t	MT20	3.0	6.0		
6	TMWW-t	MT20	4.0	4.0	1.75	1.50
7	TTW+p	MT20	4.0	6.0	Edge	
9	TS-t	MT20	3.0	6.0		
12	TMVW-p	MT20	4.0	10.0	1.00	5.00
13	BMV1+p	MT20	3.0	5.0		
14	BMWW-t	MT20	4.0	8.0	2.00	2.25
15, 16, 21						
15	BMWW-t	MT20	4.0	4.0		
17	BS-t	MT20	3.0	6.0		
18	BMWW-t	MT20	5.0	8.0		
19	BMWW-t	MT20	4.0	4.0	2.00	1.75
20	BS-t	MT20	3.0	8.0		
22	BMWW-t	MT20	5.0	8.0	2.50	2.50
23	BMV1+p	MT20	3.0	5.0		

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

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
23	2849	0	2849	298	-748	5-8	5-8		
13	2710	0	2710	0	-675	HANGER BY OTHERS MIN. SEAT SIZE: 3-8			

PROVIDE ANCHORAGE AT BEARING JOINT 23 FOR 748 LBS. FACTORED UPLIFT
PROVIDE ANCHORAGE AT BEARING JOINT 13 FOR 675 LBS. FACTORED UPLIFT

NOTE: ANCHORAGE REQUIRED FOR LARGE UPLIFT FORCES. SHALL BE PROVIDED BY BUILDG. DESIGNER

PROVIDE FOR 298 LBS. FACTORED HORIZONTAL REACTION AT JOINT 23

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
23	2263	1333 / 0	416 / 0	0 / 0	102 / -864	513 / 0	0 / 0
13	2167	1252 / 0	416 / 0	0 / 0	98 / -803	500 / 0	0 / 0

HORIZONTAL REACTIONS							
23	---	0 / 0	0 / 0	0 / 0	213 / -167	0 / 0	0 / 0

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

BRACING
MAX. UNBRACED TOP CHORD LENGTH = 2.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 5.97 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 4-19. DBS = 16-0-0 . CBF = 88 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1 / 2 LENGTH OF 6-19, 8-16, 10-16. DBS = 20-0-0 . CBF = 74 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1 / 2 LENGTH OF 6-18. DBS = 10-0-0 . CBF = 87 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1 / 2 LENGTH OF 7-18. DBS = 14-0-0 . CBF = 87 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1 / 2 LENGTH OF 8-18. 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: (18)				
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO		FROM	TO	LENGTH	FR-TO		FROM	TO	LENGTH
1-2	0 / 36	-102.7	-102.7	0.15 (2)	10.00	22-3	-434	210	0.10 (1)
2-3	-4095 / 1062	-102.7	-102.7	0.95 (2)	2.82	3-21	-387	226	0.30 (2)
3-4	-3913 / 1067	-102.7	-102.7	0.85 (2)	2.91	21-4	-65	367	0.08 (5)
4-5	-3368 / 971	-102.7	-102.7	0.76 (1)	3.19	4-19	-885	376	0.41 (2)
5-6	-3368 / 971	-102.7	-102.7	0.76 (1)	3.19	19-6	-215	820	0.18 (2)
6-7	-2719 / 865	-102.7	-102.7	0.65 (1)	3.59	6-18	-1390	573	0.81 (2)
7-8	-2717 / 866	-102.7	-102.7	0.53 (1)	3.72	18-7	-609	1989	0.47 (13)
8-9	-3170 / 913	-102.7	-102.7	0.59 (1)	3.43	18-8	-1143	501	0.66 (3)
9-10	-3170 / 913	-102.7	-102.7	0.59 (1)	3.43	16-8	-171	609	0.14 (3)
10-11	-3450 / 944	-102.7	-102.7	0.64 (1)	3.25	16-10	-592	291	0.28 (3)
11-12	-3214 / 830	-102.7	-102.7	0.65 (3)	3.39	15-10	-99	162	0.09 (9)
23-2	-2781 / 774	0.0	0.0	0.18 (1)	6.27	15-11	-33	315	0.07 (2)
13-12	-2649 / 700	0.0	0.0	0.20 (1)	6.39	14-11	-839	294	0.27 (1)
						2-22	-840	3728	0.84 (1)
23-22	-281 / 236	-27.5	-27.5	0.19 (17)	6.25	14-12	-681	3059	0.69 (1)
22-21	-1110 / 3684	-27.5	-27.5	0.67 (1)	5.97				
21-20	-923 / 3493	-27.5	-27.5	0.64 (1)	6.2				
20-19	-923 / 3493	-27.5	-27.5	0.64 (1)	6.2				
19-18	-680 / 3020	-27.5	-27.5	0.58 (1)	6.2				
18-17	-482 / 2842	-27.5	-27.5	0.55 (1)	6.2				
17-16	-482 / 2842	-27.5	-27.5	0.55 (1)	6.2				
16-15	-539 / 3079	-27.5	-27.5	0.55 (1)	6.2				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 30.1 PSF
DL = 5.0 PSF
BOT CH. LL = 10.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 52.1 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR COMMERCIAL OR INDUSTRIAL BUILDING REQUIREMENTS OF PART 4, NBCC 2010

THIS DESIGN COMPLIES WITH:
- PART 4 OF OBC 2012, BCBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

DESIGN ASSUMPTIONS
- SLOPE REDUCTION FACTOR NOT USED

(80 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) TIMES IMPORTANCE FACTOR EQUALS 30.1 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (1.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL)= L/180 (2.78")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

CSI: TC=0.95 (2-3:2), BC=0.67 (21-22:1), WB=0.84 (2-22:1), SSI=0.28 (2-3:2)

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

SNOW LOAD IMPORTANCE FACTOR = 1.00
WIND LOAD IMPORTANCE FACTOR = 1.00
LIVE LOAD IMPORTANCE FACTOR = 1.00
COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (22) (INPUT = 0.90)
JSI METAL= 0.91 (20) (INPUT = 1.00)

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



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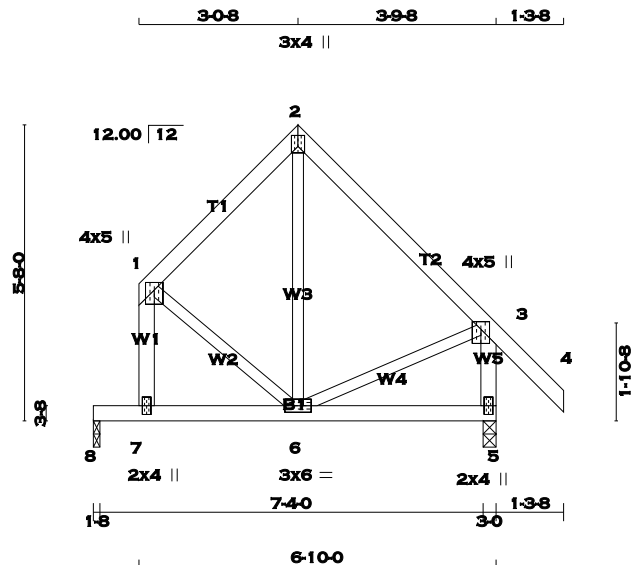


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KOTT





TOTAL WEIGHT = 2 X 37 = 73 lb

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
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
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
1	TMVW+p	MT20	4.0	5.0	1.75 2.00
2	TTW+p	MT20	3.0	4.0	Edge
3	TMVW+p	MT20	4.0	5.0	1.75 2.00
5	BMV1+p	MT20	2.0	4.0	
6	BMVWW-t	MT20	3.0	6.0	
7	BMV+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	UPLIFT	IN-SX
8		366	0	366	0
5		473	0	473	0

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8		257	179 / 0	0 / 0	0 / 0	0 / 0	77 / 0	0 / 0
5		330	244 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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

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

LOADING		TOTAL LOAD CASES: (4)							
		CHORDS		WEBS					
		MAX. FACTORED	FACTORED	MAX. FACTORED	FACTORED				
		MEMB. FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB. FORCE (LBS)				
FR-TO			FROM TO						
1-2		-210 / 0	-77.3	-77.3 0.12 (1)	6.25	6-2	0 / 67	0.02 (4)	
2-3		-210 / 0	-77.3	-77.3 0.19 (1)	6.25	1-6	0 / 185	0.04 (1)	
3-4		0 / 38	-77.3	-77.3 0.11 (1)	10.00	6-3	0 / 160	0.04 (1)	
7-1		-377 / 0	0.0	0.0 0.05 (1)	7.81				
5-3		-463 / 0	0.0	0.0 0.05 (1)	7.81				
8-7		0 / 0	-94.8	-94.8 0.39 (1)	10.00				
7-6		0 / 0	-17.5	-17.5 0.39 (1)	10.00				
6-5		0 / 0	-17.5	-17.5 0.12 (1)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.26")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.19 (2-3:1), BC=0.39 (7-8:1), WB=0.04 (1-6:1), SSI=0.29 (7-8:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.35 (6) (INPUT = 0.90)
JSI METAL= 0.09 (5) (INPUT = 1.00)



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



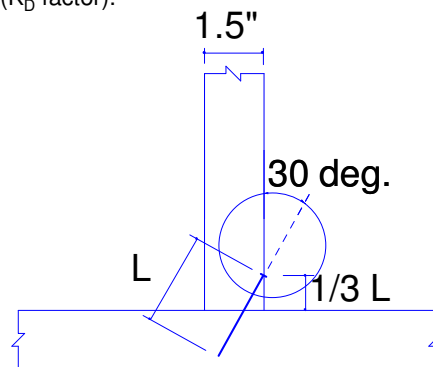
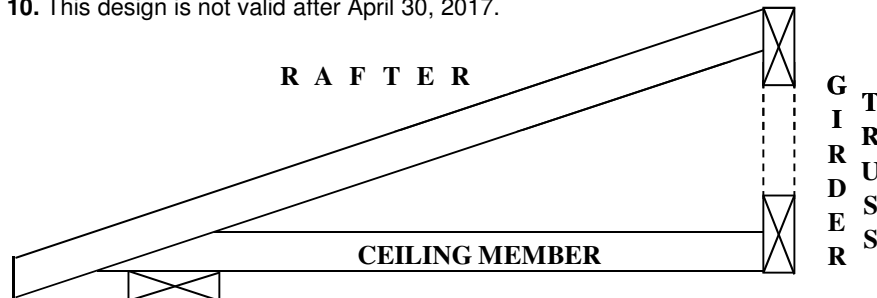
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2017.



TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	(3.5" nail)		(3" and 3.25" nail)	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4



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BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

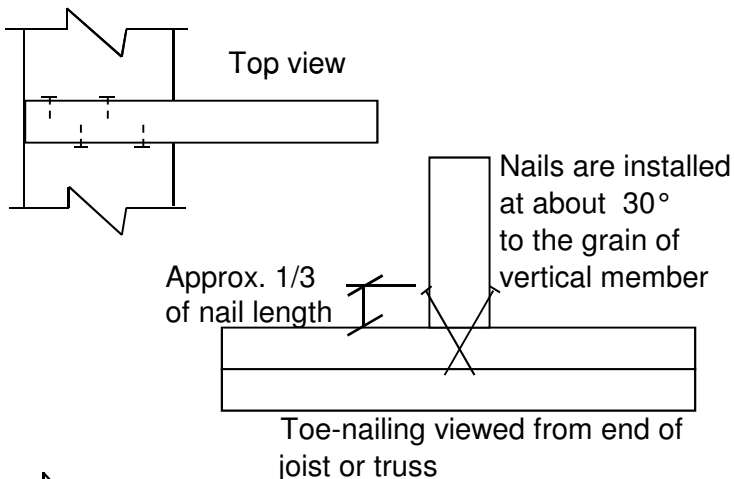
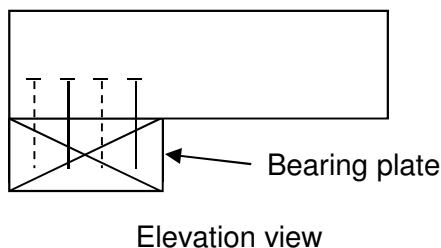
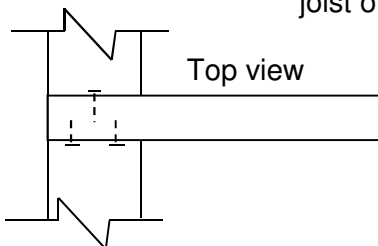
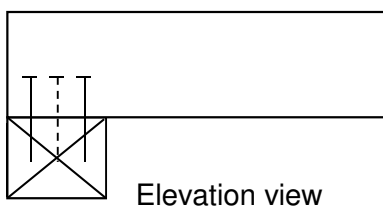
B37579H2

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**

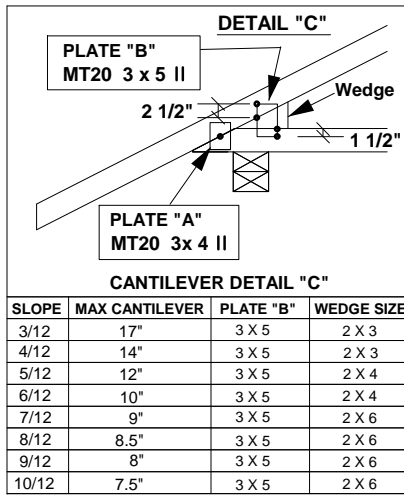
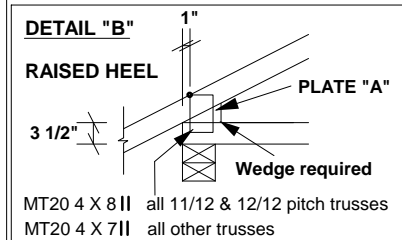
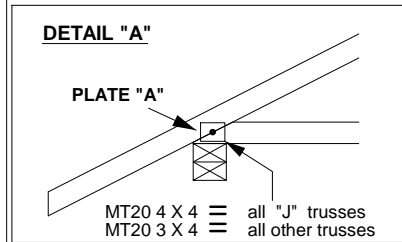
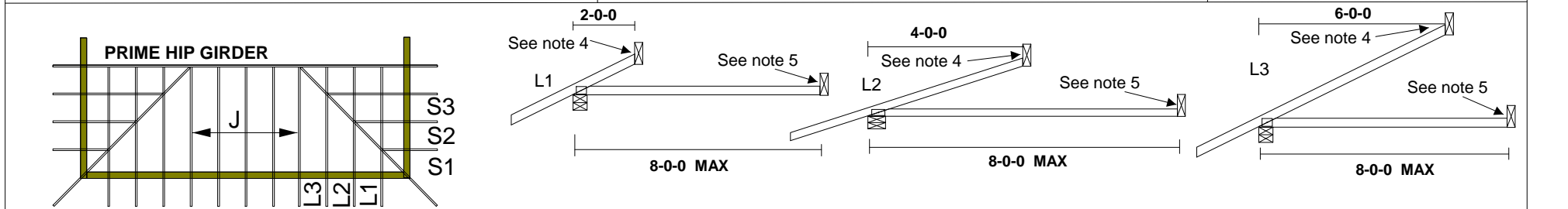
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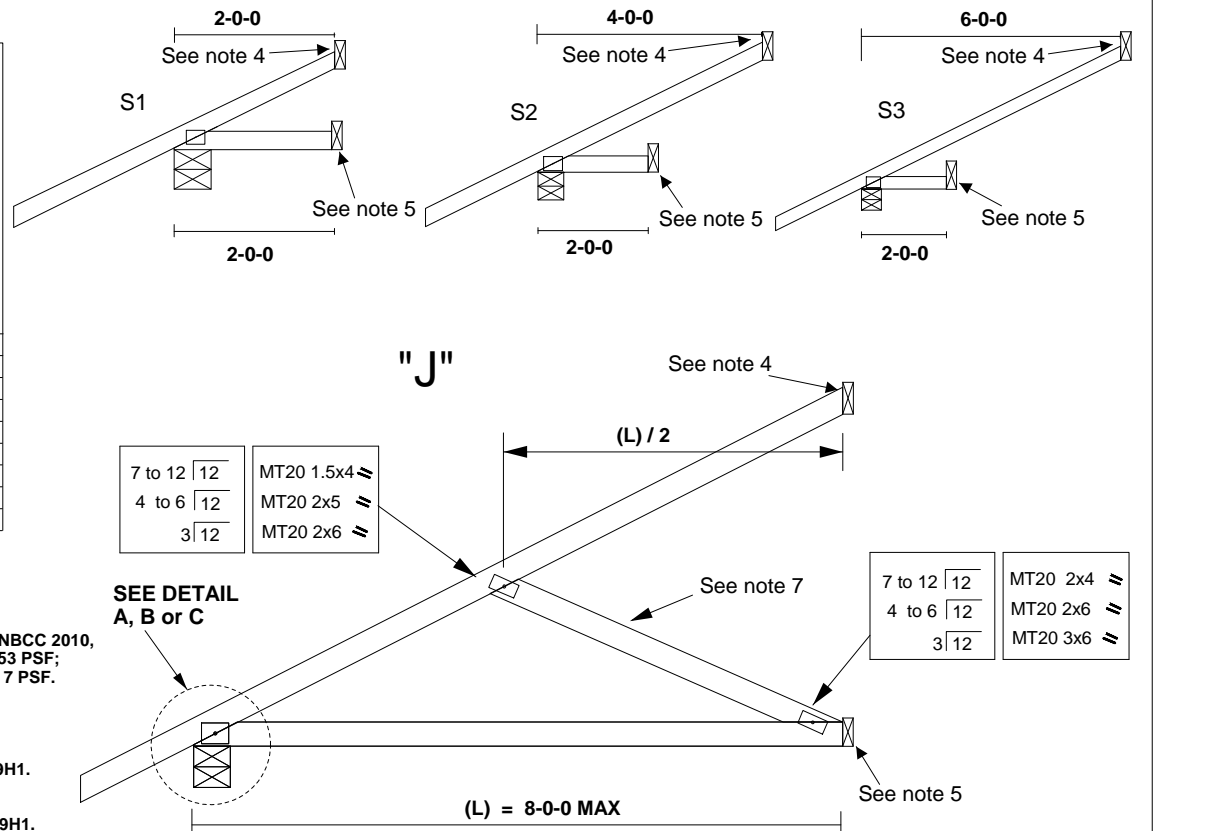


April 24, 2015



NOTES:

- ALL LUMBER SHALL BE 2x4 SPF OR D. Fir No. 2 DRY OR BETTER.
- THIS TRUSS IS DESIGNED FOR HOUSING AND SMALL BUILDING REQUIREMENTS OF PART 9 NBC 2010, WHERE GROUND SNOW LOAD IS 60.0 PSF OR LESS AND RAIN LOAD DOES NOT EXCEED 12.53 PSF; TOP CHORD DEAD LOAD IS 6 PSF OR LESS; BC LIVE LOAD IS 0 PSF AND BC DEAD LOAD IS 7 PSF.
- HIP RAFTER DESIGN SHALL CONFORM TO SECTION 9.23.14.6 OF NBC 2010.
- FASTEN HIGH END OF RAFTERS USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- FASTEN RIGHT END OF CEILING USING MITEK CANADA INC. "BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY" STANDARD DETAIL B37579H1.
- OVERHANG LENGTH SHALL NOT EXCEED 2 FT.
- WHEN SETBACK IS 6 FT OR LESS, DIAGONAL WEB MAY BE OMITTED AND HIGH END OF TOP CHORD SHALL BE CONNECTED AS PER NOTE 4.
- ALL PLATES SPECIFIED ARE PRESSED INTO BOTH FACES OF THE TRUSS.
- MITEK REFERENCE PAGE MII-7473C FORMS AN INTEGRAL PART OF THIS DETAIL.
- THIS DETAIL IS NOT VALID AFTER APRIL 30, 2017



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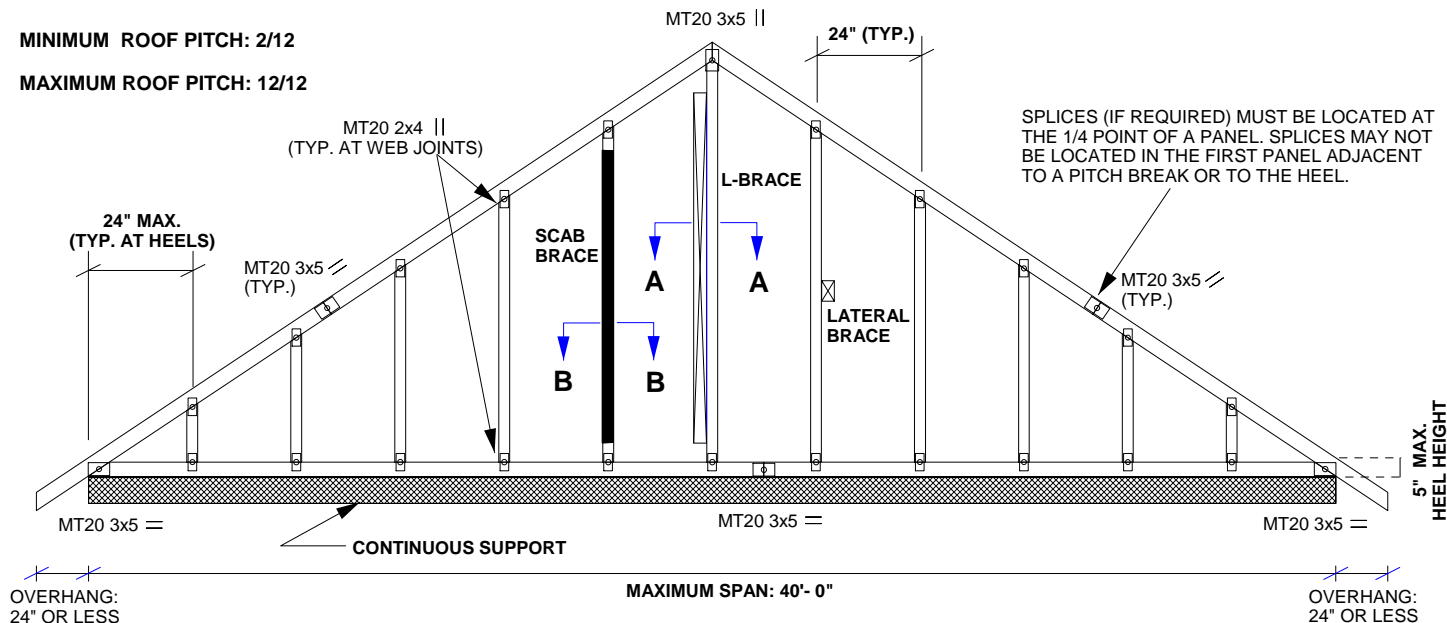
STANDARD GABLE END DETAIL

LECCO RIDGE-JUNIPER 9 EL 2

DRAWING NO.: **B37579K**

MINIMUM ROOF PITCH: 2/12

MAXIMUM ROOF PITCH: 12/12



LUMBER

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

PLATES

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

DESIGN CRITERIA

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

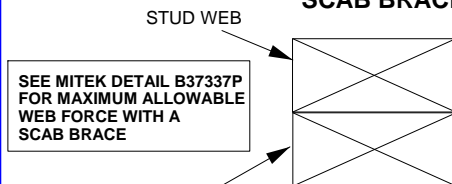
TOTAL LOAD = 73.0 PSF OR LESS

BRACING

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

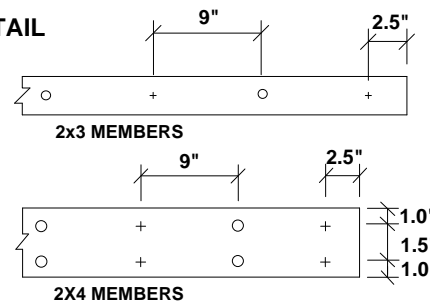
WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

SCAB BRACE DETAIL



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

SECTION B-B

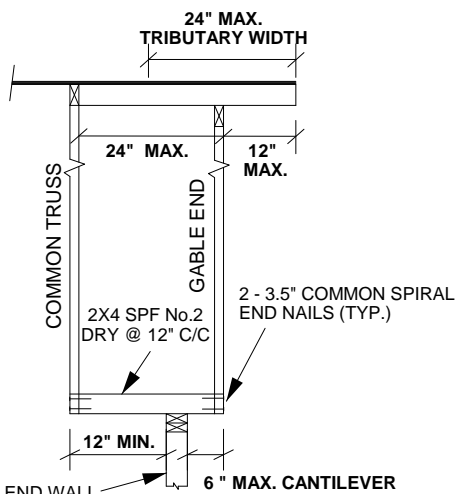


FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

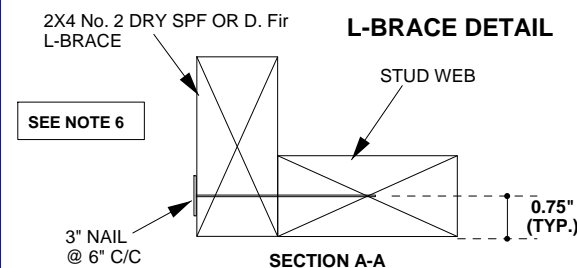
+ NAIL FROM FRONT FACE
 o NAIL FROM BACK FACE

CANTILEVER DETAIL

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



L-BRACE DETAIL



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

NOTES:

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

PEO
 Certificate No. 10889485



RECEIVED
 TOWN OF MILTON
 MAR 29, 2017
 JUNIPER 9
 BUILDING DIVISION

April 24, 2015



MiTek Canada, Inc.
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