



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

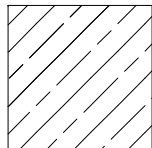
UNDERSIDE OF SOFFIT
FOR PORCHES AT
8' 6" A.F.F.

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

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

HANGER LEGEND:

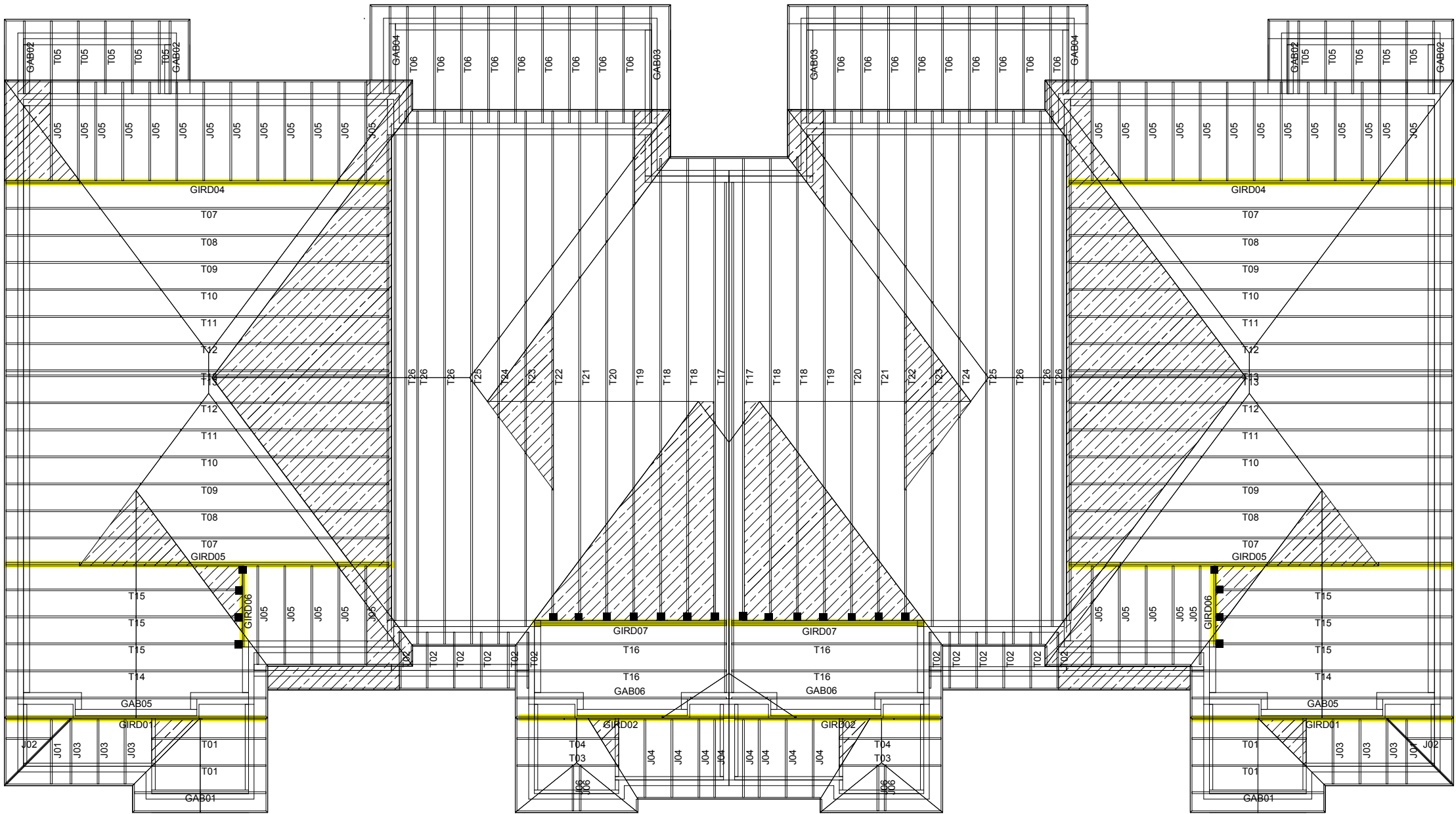
▼ LUS24 ■ LJS26DS
● HGUS26 × HGUS26-2



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'.



IVY-7E
EL 1
339-1

IVY-3
EL 1
339-2

IVY-3
EL 1
339-3

IVY-7E
EL 1
339-4

 **TOWN OF MILTON**
PLANNING AND DEVELOPMENT
BUILDING PERMIT: 17-5239
BUILDING: REVIEWED
SCOTT SHERRIFFS APR 24, 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

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TOWN OF MILTON
MAR 29, 2017
17-5239
BUILDING DIVISION

Model: **BLOCK 339**
Customer: **GREENPARK**
Project: **LECCO RIDGE**
Location: **MILTON**
Date: **3/14/2017** 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

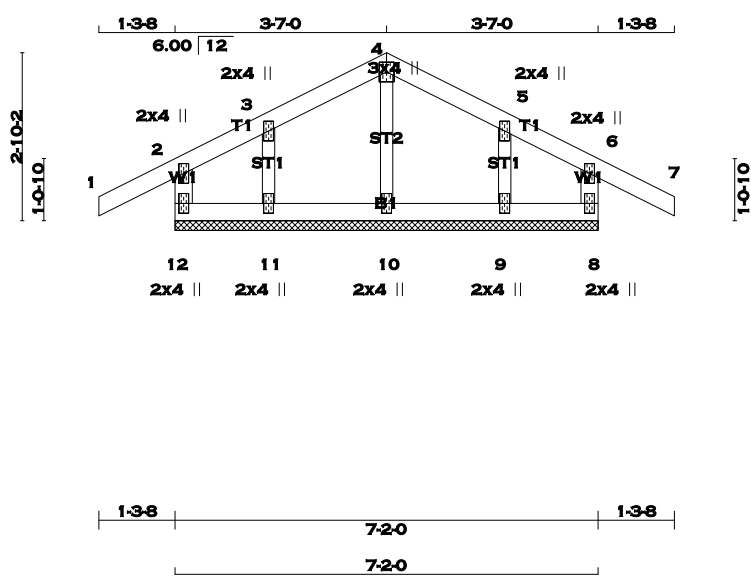
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01/29/2013

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SCALE = 1:39.0

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

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
12 - 2	2x4	DRY	No.2	SPF
1 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
12 - 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" OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMV+p	MT20	2.0	4.0	
3	TMW+w	MT20	2.0	4.0	
4	TTW+p	MT20	3.0	4.0	
5	TMW+w	MT20	2.0	4.0	
6	TMV+p	MT20	2.0	4.0	
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	
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									
MEMB. MAX. FACTORED FORCE (LBS)									
VERT. LOAD LC1 MAX. (PLF) CSI (LC)									
FROM TO UNBRAC LENGTH FR-TO									
12-2	-162 / 0	0.0	0.0	0.04 (1)	7.81	10-4	-212 / 0	0.04 (1)	
1-2	0 / 23	-77.3	-77.3	0.10 (1)	10.00	11-3	-114 / 0	0.02 (1)	
2-3	0 / 31	-77.3	-77.3	0.06 (1)	10.00	9-5	-114 / 0	0.02 (1)	
3-4	0 / 47	-77.3	-77.3	0.05 (1)	10.00				
4-5	0 / 47	-77.3	-77.3	0.05 (1)	10.00				
5-6	0 / 31	-77.3	-77.3	0.06 (1)	10.00				
6-7	0 / 23	-77.3	-77.3	0.10 (1)	10.00				
8-6	-162 / 0	0.0	0.0	0.04 (1)	7.81				
12-11	-34 / 0	-17.5	-17.5	0.01 (4)	6.25				
11-10	-39 / 0	-17.5	-17.5	0.01 (4)	6.25				
10-9	-39 / 0	-17.5	-17.5	0.01 (4)	6.25				
9-8	-34 / 0	-17.5	-17.5	0.01 (4)	6.25				

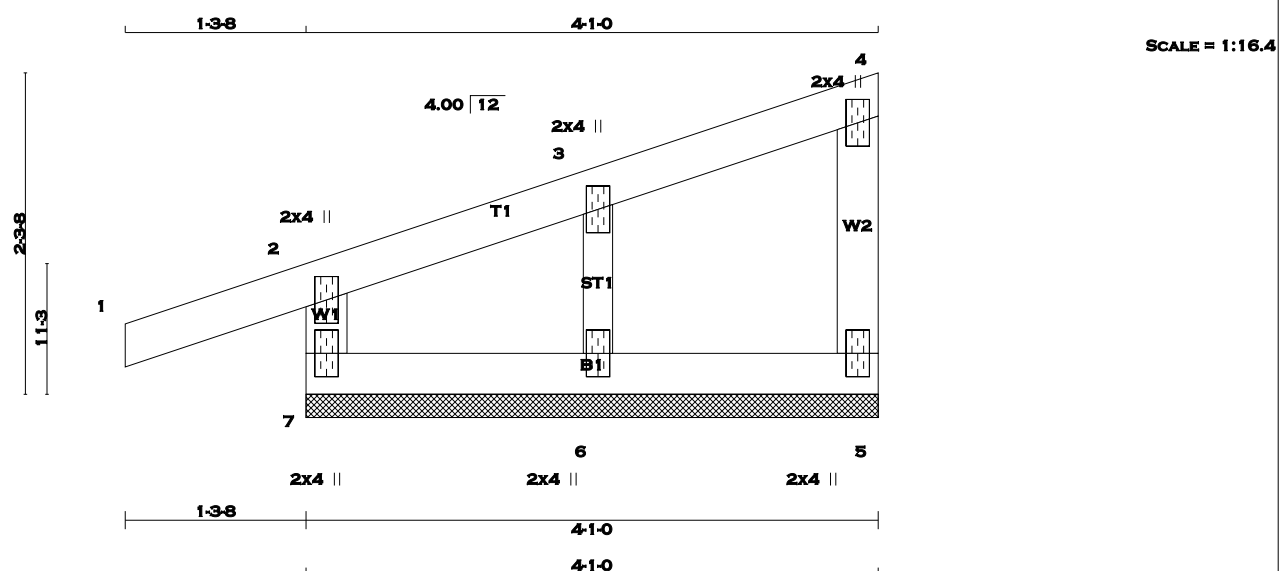
DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL =	23.3 PSF
DL =	3.0 PSF
BOT CH. LL =	0.0 PSF
DL =	7.0 PSF
TOTAL LOAD =	33.3 PSF
SPACING = 24.0 IN./C	
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010	
THIS DESIGN COMPLIES WITH:	
- PART 9 OF OBC 2012 , BCBC 2012 , 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 (9-10:4) , WB=0.04 (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= 0.13 (4) (INPUT = 0.90)	
JSI METAL= 0.08 (4) (INPUT = 1.00)	



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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 = 4 X 15 = 58 lb [M]

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

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

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

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

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

LOADING									
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				
7-2	-186 / 0	0.0	0.0	0.01 (1)	7.81	6-3	-164 / 0	0.02 (1)	
1-2	0 / 16	-77.3	-77.3	0.10 (1)	10.00				
2-3	-17 / 0	-77.3	-77.3	0.04 (1)	6.25				
3-4	-13 / 0	-77.3	-77.3	0.04 (1)	6.25				
5-4	-69 / 0	0.0	0.0	0.02 (1)	7.81				
7-6	0 / 16	-17.5	-17.5	0.02 (4)	10.00				
6-5	0 / 11	-17.5	-17.5	0.02 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF
DL = 3.0 PSF

BOT CH. LL = 0.0 PSF
DL = 7.0 PSF

TOTAL LOAD = 33.3 PSF

SPACING = 24.0 IN./C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

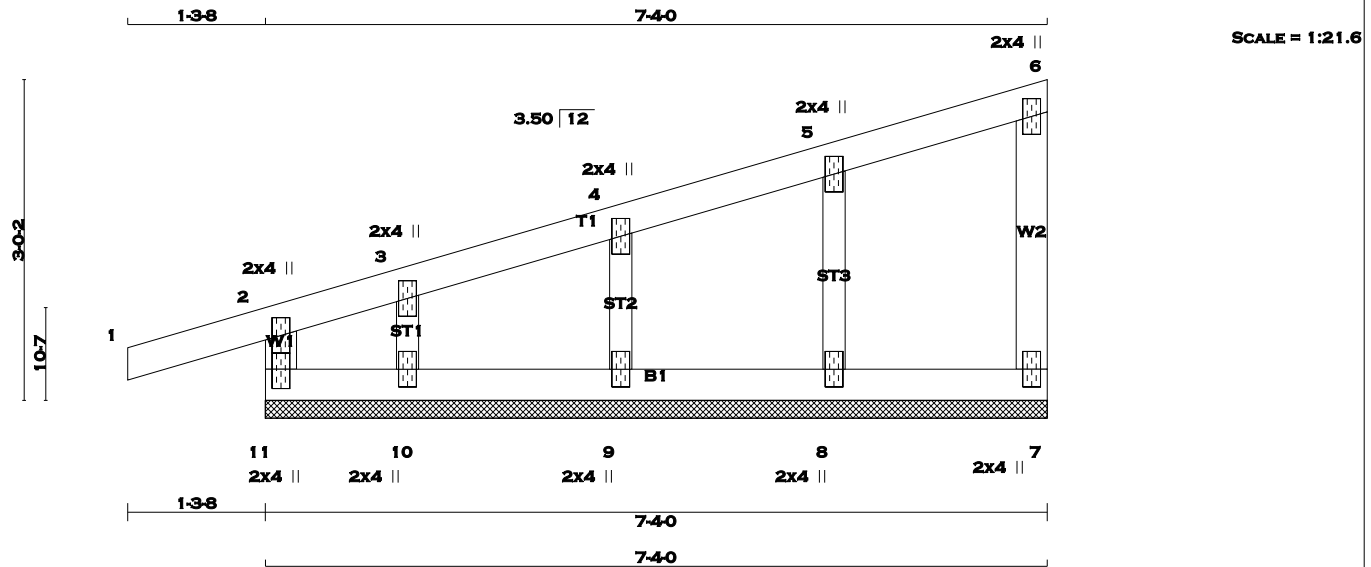
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 25 = 50 lb [M]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3, 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: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
11-2	-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 (4)	10.00			
9-8	0 / 8	-17.5	-17.5 0.02 (4)	10.00			
8-7	0 / 5	-17.5	-17.5 0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.0 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24.0 IN./C
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= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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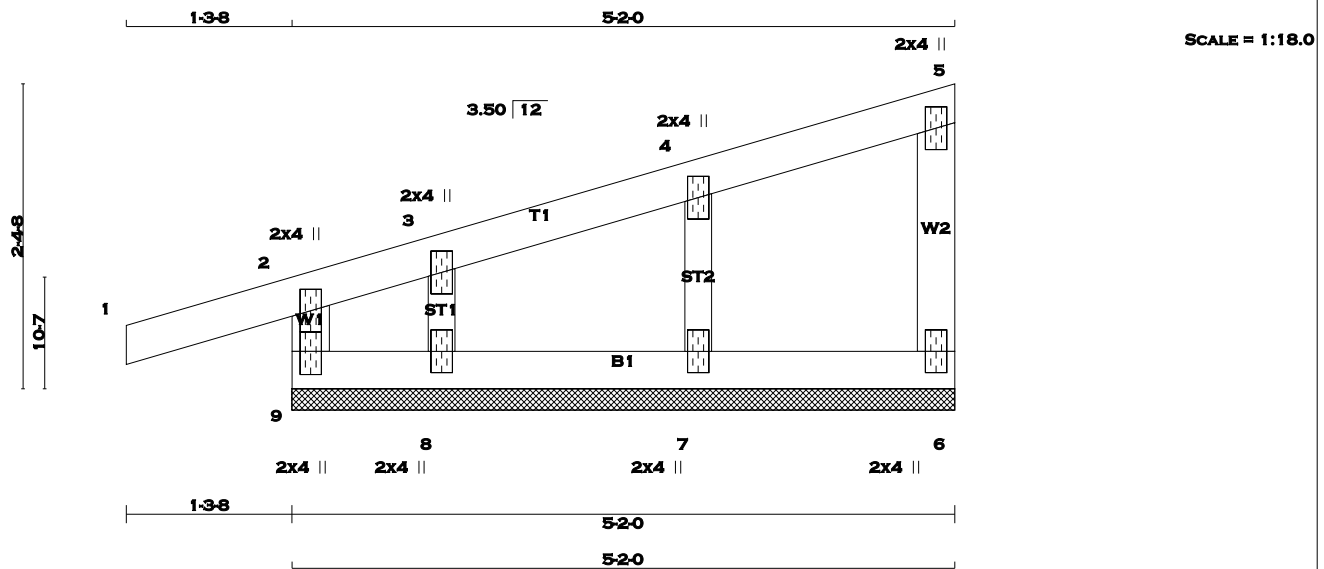
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ID:LbuJb4Vx7UM4_0JUbcP3HayDP1G-PGajO8uPS9r2MO6r0XILpdI9SwafZgPYJgjqnhzamSS



TOTAL WEIGHT = 2 X 18 = 35 lb [M]

<u>LUMBER</u>				
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	TMV+p	MT20	2.0	4.0		
3	TMW+w	MT20	2.0	4.0		
4	TMW+w	MT20	2.0	4.0		
5	TMV+p	MT20	2.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMV1+w	MT20	2.0	4.0		
8	BMV1+w	MT20	2.0	4.0		
9	BMV1+p	MT20	2.0	4.0	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: (4)

CHORDS				WEBS				
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			
9-2	-190 / 0	0.0	0.0	0.03 (1)	7.81	7- 4	-178 / 0	0.03 (1)
1-2	0 / 14	-77.3	-77.3	0.10 (1)	10.00	8- 3	-69 / 0	0.01 (1)
2-3	-26 / 0	-77.3	-77.3	0.07 (1)	6.25			
3-4	-8 / 0	-77.3	-77.3	0.05 (1)	10.00			
4-5	-9 / 0	-77.3	-77.3	0.05 (1)	10.00			
6-5	-66 / 0	0.0	0.0	0.01 (1)	7.81			
9-8	0 / 14	-17.5	-17.5	0.03 (1)	10.00			
8-7	0 / 11	-17.5	-17.5	0.02 (4)	10.00			
7-6	0 / 6	-17.5	-17.5	0.02 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

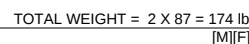
JSI GRIP= 0.10 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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GABLE STUDS SPACED AT 2'-0" OC.

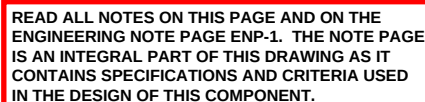
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

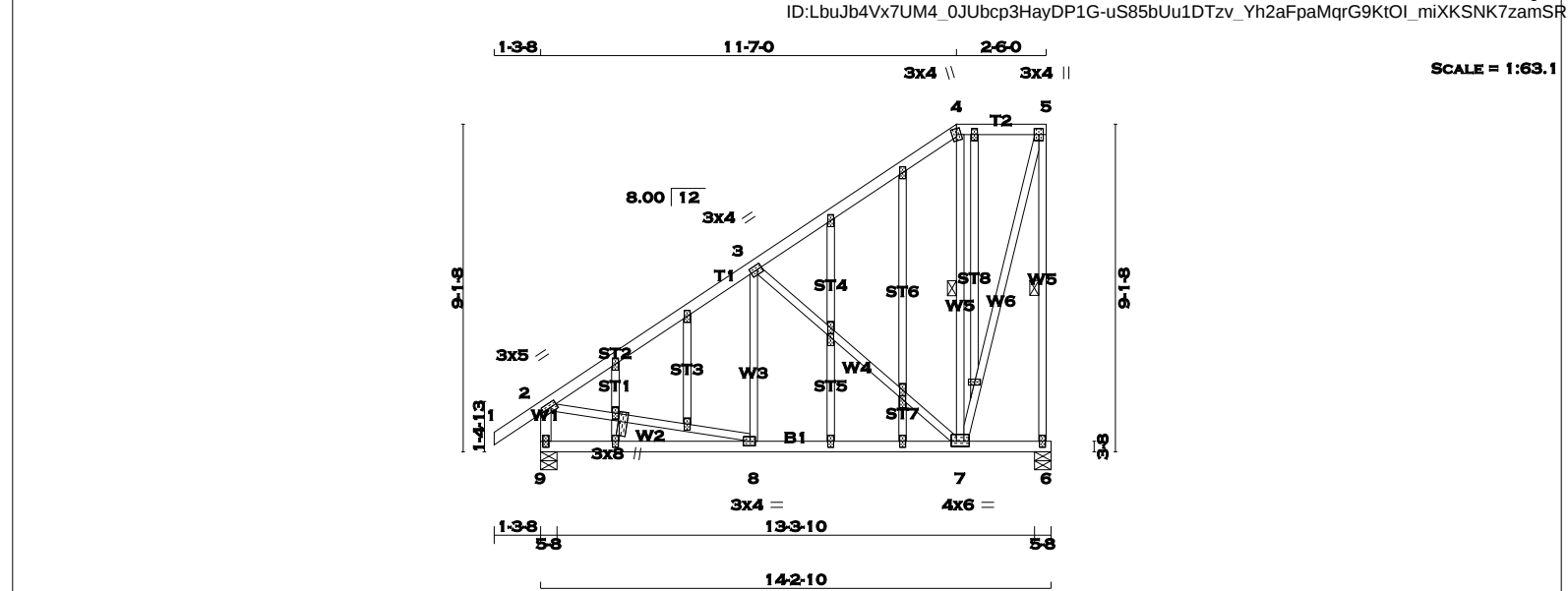
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

TOTAL LOAD CASES: (4)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	10-4	0 / 446	0.10 (1)	
2-3	0 / 21	-77.3	-77.3	0.21 (1)	10.00	10-5	-194 / 2	0.11 (1)	
3-4	-644 / 0	-77.3	-77.3	0.17 (1)	6.25	3-10	-194 / 2	0.11 (1)	
4-5	-644 / 0	-77.3	-77.3	0.17 (1)	6.25	11-3	-898 / 0	0.49 (1)	
5-6	0 / 21	-77.3	-77.3	0.21 (1)	10.00	5-8	-898 / 0	0.49 (1)	
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00				
11-2	-232 / 0	0.0	0.0	0.02 (1)	7.81				
8-6	-232 / 0	0.0	0.0	0.02 (1)	7.81				
11-10	0 / 660	-17.5	-17.5	0.39 (4)	10.00				
10-9	0 / 660	-17.5	-17.5	0.39 (4)	10.00				
9-8	0 / 660	-17.5	-17.5	0.39 (4)	10.00				

JSI GRIP= 0.88 (11) (INPUT = 0.90)
JSI METAL= 0.25 (3) (INPUT = 1.00)





TOTAL WEIGHT = 2 X 95 = 190 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 4	2x4	No.2			
4 - 5	2x4	No.2			
6 - 5	2x3	No.2			
9 - 2	2x4	No.2			
9 - 6	2x4	No.2			
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	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTW+m	MT20	3.0	4.0		
5	TMVW+p	MT20	3.0	4.0		
6	BMV1+p	MT20	2.0	4.0		
7	BMVWV-t	MT20	4.0	6.0	1.75	3.00
8	BMVW-t	MT20	3.0	4.0	1.50	1.75
9	BMV1+p	MT20	2.0	4.0		
10	NP-p	MT20	2.0	4.0	0.75	2.00
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22						
11	NP+w	MT20	2.0	4.0		
14	NP+w	MT20	2.0	4.0	1.25	1.00
17	NP+w	MT20	2.0	4.0	1.25	1.00
20	NP+t	MT20	3.0	8.0	3.25	0.25

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
6	668	0	668	0	0	5-8	5-8	5-8	5-8
9	774	0	774	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
6	469	328 / 0	0 / 0	0 / 0	0 / 0	141 / 0	0 / 0
9	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, 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.

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6, 4-7. 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: (4)			
C H O R D S		W E B S					
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	8-3	0 / 106	0.04 (4)
2-3	-609 / 0	-77.3 -77.3	0.35 (1)	6.25	3-7	-503 / 0	0.59 (1)
3-4	-216 / 0	-77.3 -77.3	0.34 (1)	6.25	7-4	-157 / 3	0.09 (1)
4-5	-151 / 0	-77.3 -77.3	0.06 (1)	6.25	7-5	0 / 579	0.13 (1)
6-5	-654 / 0	0.0 0.0	0.35 (1)	6.25	2-8	0 / 540	0.12 (1)
9-2	-733 / 0	0.0 0.0	0.08 (1)	7.81			
9-8	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
8-7	0 / 531	-17.5 -17.5	0.19 (4)	10.00			
7-6	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

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 (0.47")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.47")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.35 (5-6:1) , BC=0.19 (7-8:4) , WB=0.59 (3-7:1) , 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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

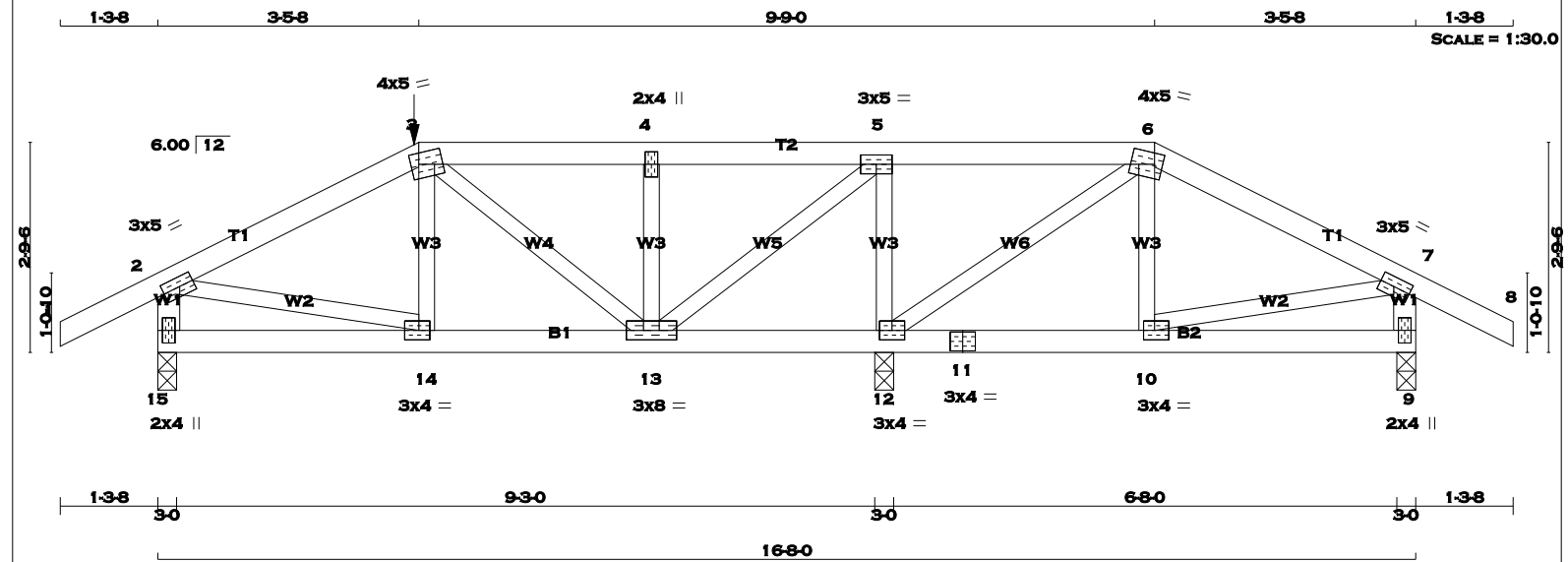
JSI GRIP= 0.86 (5) (INPUT = 0.90)
JSI METAL= 0.24 (2) (INPUT = 1.00)



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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	3.0	5.0	1.50 2.25
3	TTWW-m	MT20	4.0	5.0	1.75 1.25
4	TMW+w	MT20	2.0	4.0	
5	TMVW-t	MT20	3.0	5.0	
6	TTWW-m	MT20	4.0	5.0	1.75 1.25
7	TMVW-t	MT20	3.0	5.0	1.50 2.25
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	3.0	4.0	1.50 1.75
11	BS-t	MT20	3.0	4.0	
12	BMVW1-t	MT20	3.0	4.0	
13	BMVW1-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	

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) 87.3 lbs FACTORED DOWN AT 3-5-8 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	UPLIFT	IN-SX	IN-SX	
15	630	0	630	0	0	3-0	3-0	3-0	
12	1084	0	1084	0	0	3-0	3-0	3-0	
9	359	0	359	0	0	3-0	3-0	3-0	

UNFACTORED REACTIONS							
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS			
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
15	440	320 / 0	0 / 0	0 / 0	0 / 0	0 / 0	121 / 0
12	760	535 / 0	0 / 0	0 / 0	0 / 0	0 / 0	225 / 0
9	250	187 / 0	0 / 0	0 / 0	0 / 0	0 / 0	62 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 12, 9

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
		MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.		FORCE (LBS)	VERT. LOAD (LBS)	LC1 (PLF)	MAX. CSI (LC)	MEMB.		FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH		FR-TO		LENGTH	
1-2	0 / 23	-77.3	-77.3	0.11 (1)	10.00	14-3	-17 / 66	0.03 (4)	
2-3	-562 / 0	-77.3	-77.3	0.18 (1)	6.25	3-13	-132 / 0	0.04 (1)	
3-4	-398 / 0	-100.7	-100.7	0.13 (1)	6.25	13-4	-324 / 0	0.06 (1)	
4-5	-398 / 0	-100.7	-100.7	0.17 (1)	6.25	13-5	0 / 725	0.18 (1)	
5-6	0 / 166	-77.3	-77.3	0.20 (1)	10.00	12-5	-792 / 0	0.14 (1)	
6-7	-145 / 0	-77.3	-77.3	0.17 (1)	6.25	12-6	-360 / 0	0.11 (1)	
7-8	0 / 23	-77.3	-77.3	0.11 (1)	10.00	10-6	0 / 65	0.02 (4)	
15-2	-596 / 0	0.0	0.0	0.07 (1)	7.81	2-14	0 / 513	0.13 (1)	
9-7	-331 / 0	0.0	0.0	0.04 (1)	7.81	10-7	0 / 132	0.03 (1)	
15-14	0 / 0	-22.8	-22.8	0.07 (4)	10.00				
14-13	0 / 501	-22.8	-22.8	0.12 (1)	10.00				
13-12	-165 / 0	-22.8	-22.8	0.06 (4)	6.25				
12-11	0 / 131	-17.5	-17.5	0.08 (1)	10.00				
11-10	0 / 131	-17.5	-17.5	0.08 (1)	10.00				
10-9	0 / 0	-17.5	-17.5	0.05 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	3-5-8	-87	-87	---	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
SIDE SETBACK = 3-5-8
END SETBACK = 3-5-8
END WALL WIDTH = 3-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 9-6-0 OF SPAN MEASURED FROM THE LEFT.

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

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

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

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

CSI: TC=0.20 (5-6:1), BC=0.12 (13-14:1), WB=0.18 (5-13:1), SSI=0.16 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

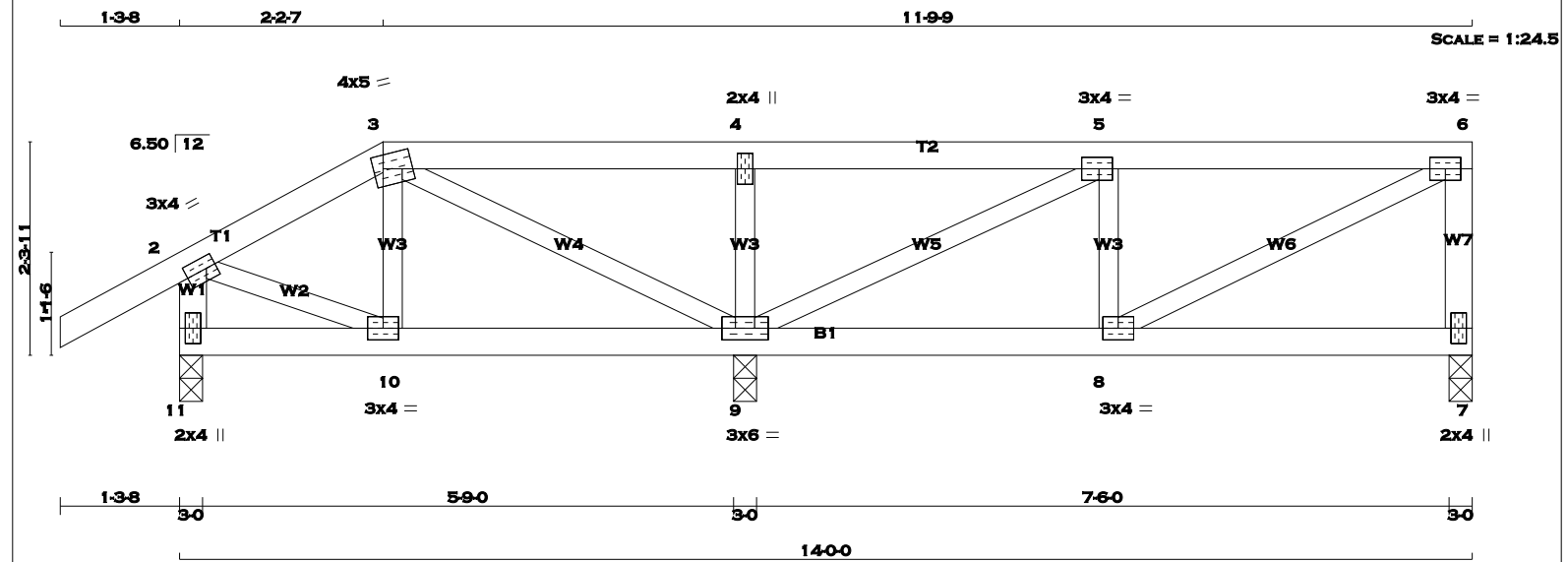
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (14) (INPUT = 0.90)
JSI METAL= 0.20 (2) (INPUT = 1.00)

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LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 6	2x4	DRY	No.2
7 - 6	2x4	DRY	No.2
11 - 2	2x4	DRY	No.2
11 - 7	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	3.0	4.0	1.50	1.25
3	TTWW-m	MT20	4.0	5.0	1.75	1.25
4	TMVW-w	MT20	2.0	4.0		
5	TMVW-t	MT20	3.0	4.0	1.50	1.75
6	TMVW-t	MT20	3.0	4.0		
7	BMV1+p	MT20	2.0	4.0		
8	BMVW-t	MT20	3.0	4.0		
9	BMVW1-t	MT20	3.0	6.0		
10	BMVW-t	MT20	3.0	4.0		
11	BMV1+p	MT20	2.0	4.0		

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



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
7		516	0	516	0	0	3-0	3-0	
11		314	0	314	0	0	3-0	3-0	
9		1015	0	1015	0	0	3-0	3-0	

UNFACTORED REACTIONS							
		1ST LCASE	MAX./MIN. COMPONENT REACTIONS				
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
7		363	252 / 0	0 / 0	0 / 0	0 / 0	110 / 0
11		219	164 / 0	0 / 0	0 / 0	0 / 0	54 / 0
9		712	501 / 0	0 / 0	0 / 0	0 / 0	211 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 11, 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)				
C H O R D S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH FR-TO
FR-2	0 / 25	-77.3	-77.3 0.11 (1)	10.00
2-3	-134 / 0	-77.3	-77.3 0.07 (1)	6.25
3-4	0 / 147	-77.3	-77.3 0.26 (1)	10.00
4-5	0 / 146	-120.0	-120.0 0.29 (1)	10.00
5-6	-540 / 0	-120.0	-120.0 0.27 (1)	6.25
7-6	-468 / 0	0.0	0.0 0.06 (1)	7.81
11-2	-295 / 0	0.0	0.0 0.03 (1)	7.81
11-10	0 / 0	-17.5	-17.5 0.03 (4)	10.00
10-9	0 / 117	-17.5	-17.5 0.10 (4)	10.00
9-8	0 / 540	-27.2	-27.2 0.17 (1)	10.00
8-7	0 / 0	-27.2	-27.2 0.10 (4)	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

GIRDER TYPE: CPrimeHip
LEFT SETBACK = 2-2-7
RIGHT SETBACK = 0-0
END SETBACK = 4-5-8
END WALL WIDTH = 3-0
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 7-9-0 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 (0.26")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.26")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.29 (4-5:1), BC=0.17 (8-9:1), WB=0.26 (5-9:1), 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 SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

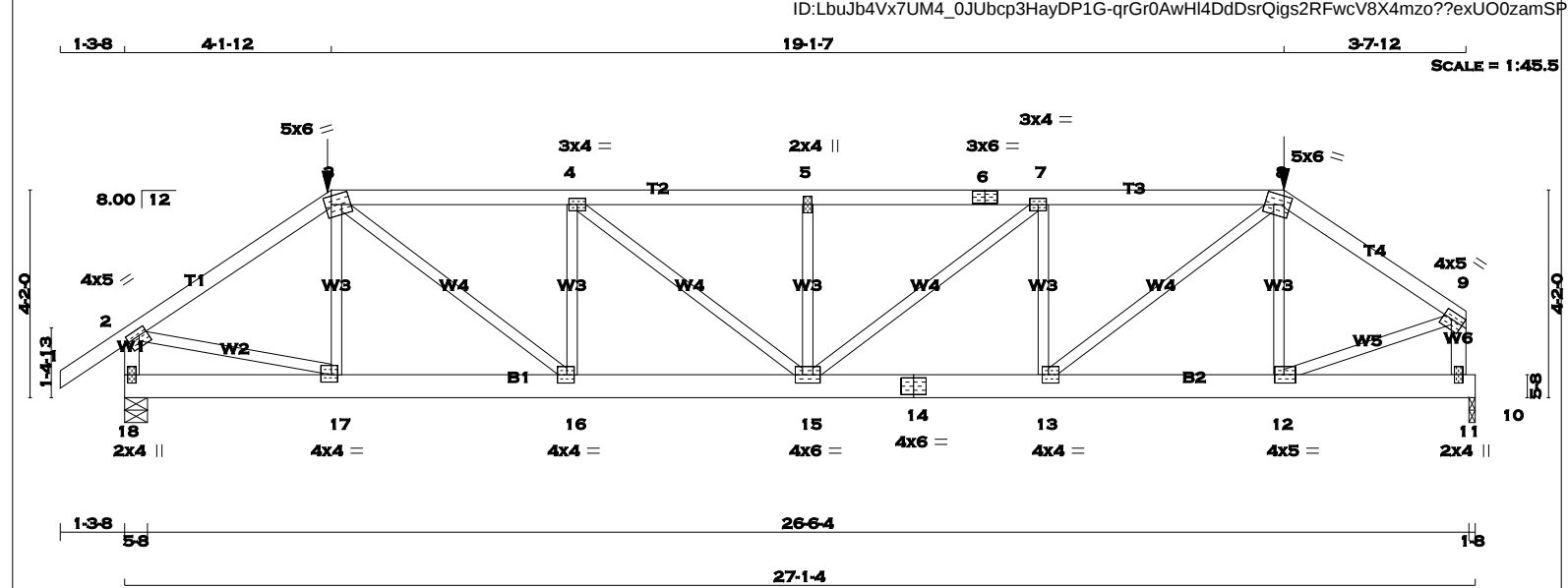
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.26 (5) (INPUT = 1.00)

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



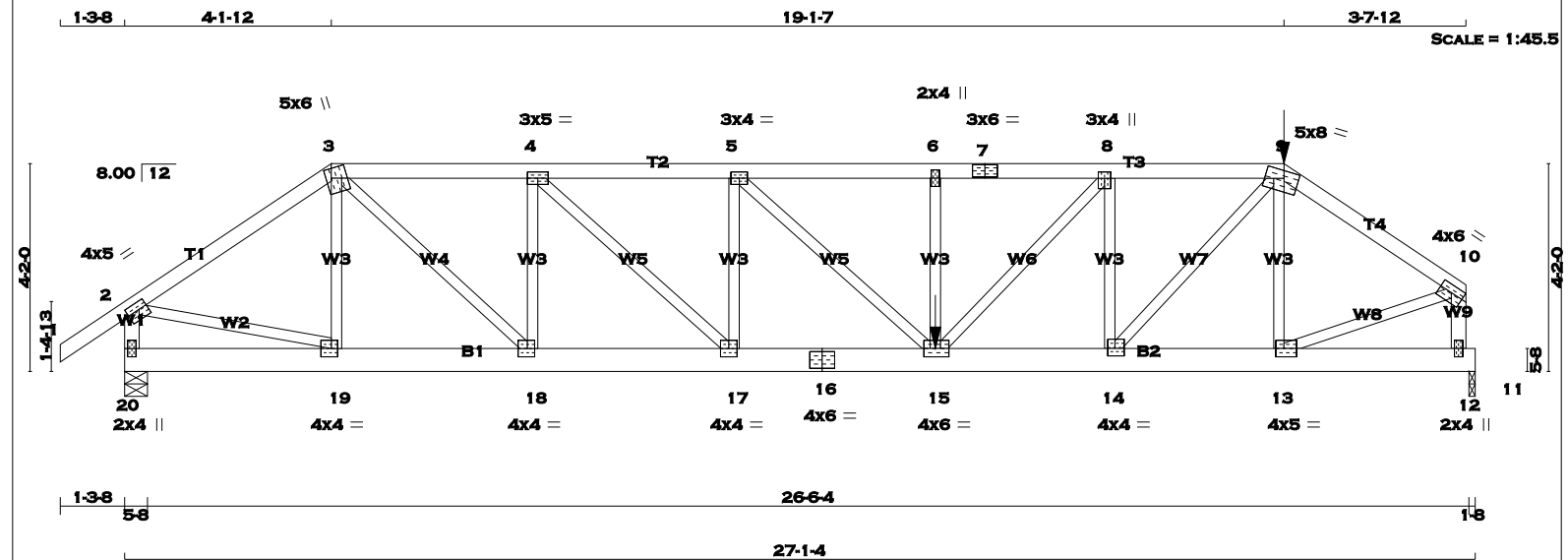


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. 1 - 3 2x4 DRY No.2 SPF 3 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 9 2x4 DRY No.2 SPF 18 - 2 2x4 DRY No.2 SPF 11 - 9 2x4 DRY No.2 SPF 18 - 14 2x6 DRY No.2 SPF 14 - 10 2x6 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER. DESIGN 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 1-3 1 12 SIDE(0.0) 3-6 1 12 SIDE(34.2) 6-8 1 12 SIDE(34.2) 8-9 1 12 SIDE(0.0) 18-2 1 12 TOP 11-9 1 12 TOP BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS 18-14 2 12 SIDE(8.7) 14-10 2 12 SIDE(8.7) WEBS : (0.122"x3") SPIRAL NAILS 2x3 1 6 NAILS TO BE DRIVEN FROM ONE SIDE ONLY. GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS. TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY. SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP. PLATES (table is in inches) JT TYPE PLATES W LEN Y X 2 TMVW-t MT20 4.0 5.0 1.50 2.00			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 18 2484 0 2484 0 0 5-8 5-8 10 2371 0 2371 0 0 1-8 1-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 18 1742 1226 / 0 0 / 0 0 / 0 516 / 0 0 / 0 10 1665 1158 / 0 0 / 0 0 / 0 507 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 18, 10 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.18 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 MAX. FACTORED MAX. FACTORED MEMB. FORCE VERT. LOAD LC1 MAX. MEMB. FORCE MAX. (LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC) FR-TO LENGTH FR-TO 1-2 0 / 29 -77.3 -77.3 0.06 (1) 10.00 17-3 -386 / 23 0.05 (1) 2-3 -2873 / 0 -77.3 -77.3 0.17 (1) 5.26 3-16 0 / 2094 0.26 (1) 3-4 -4026 / 0 -145.8 -145.8 0.35 (1) 4.39 16-4 -1140 / 0 0.15 (1) 4-5 -4471 / 0 -145.8 -145.8 0.36 (1) 4.18 4-15 0 / 571 0.07 (1) 5-6 -4471 / 0 -145.8 -145.8 0.36 (1) 4.18 15-5 -632 / 0 0.08 (1) 6-7 -4471 / 0 -145.8 -145.8 0.36 (1) 4.18 15-7 0 / 675 0.08 (1) 7-8 -3945 / 0 -145.8 -145.8 0.34 (1) 4.43 13-7 -1206 / 0 0.16 (1) 8-9 -2728 / 0 -77.3 -77.3 0.13 (1) 5.41 13-8 0 / 2148 0.27 (1) 18-2 -2426 / 0 0.0 0.0 0.14 (1) 7.23 12-8 -462 / 0 0.06 (1) 11-9 -2463 / 0 0.0 0.0 0.14 (1) 7.19 2-17 0 / 2451 0.30 (1) 12-9 0 / 2403 0.30 (1) 18-17 0 / 0 -33.0 -33.0 0.04 (4) 10.00 17-16 0 / 2376 -33.0 -33.0 0.18 (1) 10.00 16-15 0 / 4026 -33.0 -33.0 0.31 (1) 10.00 15-14 0 / 3945 -33.0 -33.0 0.31 (1) 10.00 14-13 0 / 3945 -33.0 -33.0 0.31 (1) 10.00 13-12 0 / 2253 -33.0 -33.0 0.20 (1) 10.00 12-11 0 / 0 -33.0 -33.0 0.16 (1) 10.00 11-10 0 / 0 -33.0 -33.0 0.16 (1) 10.00 FACTORED CONCENTRATED LOADS (LBS) JT LOC. LC1 MAX- MAX+ FACE DIR. TYPE 3 4-1-12 -241 -241 --- FRONT VERT TOTAL 8 23-3-4 -223 -223 --- 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 = <u>24.0</u> IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM GIRDER TYPE: CPrimeHip LEFT SETBACK = 4-1-12 RIGHT SETBACK = 3-10-1 END SETBACK = 6-0-0 END WALL WIDTH = 5-8 CORNER FRAMING TYPE: CONVENTIONAL END JACK TYPE: CONVENTIONAL APPLIED TO FRONT SIDE - ADDTL LOADS BASED ON 55 % OF GSL. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012 , BCBC 2012 , ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (0.90") CALCULATED VERT. DEFL.(LL) = L/999 (0.10") ALLOWABLE DEFL.(TL)= L/360 (0.90") CALCULATED VERT. DEFL.(TL) = L/999 (0.17") CSI: TC=0.36 (5-7:1) , BC=0.31 (15-16:1) , WB=0.30 (2-17:1) , SSI=0.79 (10-11:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS= 1.00 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (16) (INPUT = 0.90) JSI METAL= 0.45 (2) (INPUT = 1.00)		
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IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



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

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

ALL WEBS 2x3 DRY No.2 SPF

DRY: SEASONED LUMBER.

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

CHORDS #ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
1-3	12	TOP
3-7	12	SIDE(34.2)
7-9	12	SIDE(34.2)
9-10	12	SIDE(0.0)
20-2	12	TOP
12-10	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
20-16	12	TOP
16-11	12	SIDE(8.7)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00

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
20	2090	0	2090	0	5-8
11	2701	0	2701	0	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1464	1039 / 0	0 / 0	0 / 0	0 / 0	425 / 0	0 / 0
11	1897	1318 / 0	0 / 0	0 / 0	0 / 0	579 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.06 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.06 (1)	10-00	19-3	-373 / 0	0.05 (1)
2-3	-2385 / 0	-77.3 -77.3	0.16 (1)	5-66	3-18	0 / 2050	0.25 (1)
3-4	-3468 / 0	-77.3 -77.3	0.14 (1)	4-92	18-4	-1348 / 0	0.17 (1)
4-5	-4546 / 0	-77.3 -77.3	0.17 (1)	4-38	4-17	0 / 1478	0.18 (1)
5-6	-5179 / 0	-77.3 -77.3	0.17 (1)	4-15	17-5	-900 / 0	0.12 (1)
6-7	-5179 / 0	-145.8 -145.8	0.23 (1)	4-06	5-15	0 / 868	0.11 (1)
7-8	-5179 / 0	-145.8 -145.8	0.23 (1)	4-06	15-6	-382 / 0	0.05 (1)
8-9	-4192 / 0	-145.8 -145.8	0.20 (1)	4-48	15-8	0 / 1455	0.18 (1)
9-10	-3136 / 0	-77.3 -77.3	0.14 (1)	5-11	14-8	-1638 / 0	0.21 (1)
20-2	-2059 / 0	0.0 0.0	0.11 (1)	7-71	14-9	0 / 2360	0.29 (1)
12-10	-2811 / 0	0.0 0.0	0.16 (1)	6-84	13-9	-569 / 0	0.07 (1)
					2-19	0 / 2035	0.25 (1)
					13-10	0 / 2763	0.34 (1)
20-19	0 / 0	-17.5 -17.5	0.02 (4)	10-00			
19-18	0 / 1971	-17.5 -17.5	0.14 (1)	10-00			
18-17	0 / 3468	-17.5 -17.5	0.25 (1)	10-00			
17-16	0 / 4546	-17.5 -17.5	0.36 (1)	10-00			
16-15	0 / 4546	-17.5 -17.5	0.36 (1)	10-00			
15-14	0 / 4192	-33.0 -33.0	0.34 (1)	10-00			
14-13	0 / 2589	-33.0 -33.0	0.23 (1)	10-00			
13-12	0 / 0	-33.0 -33.0	0.19 (1)	10-00			
12-11	0 / 0	-33.0 -33.0	0.19 (1)	10-00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
9	23-3-4	-219	-219	---	FRONT	VERT	TOTAL
15	16-3-4	-1262	-1262	---	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

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

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

CSI: TC=0.23 (6-8:1), BC=0.36 (15-17:1), WB=0.34 (10-13:1), SSI=0.90 (11-12:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 0.500 degrees
KOTT

CONTINUED ON PAGE 2

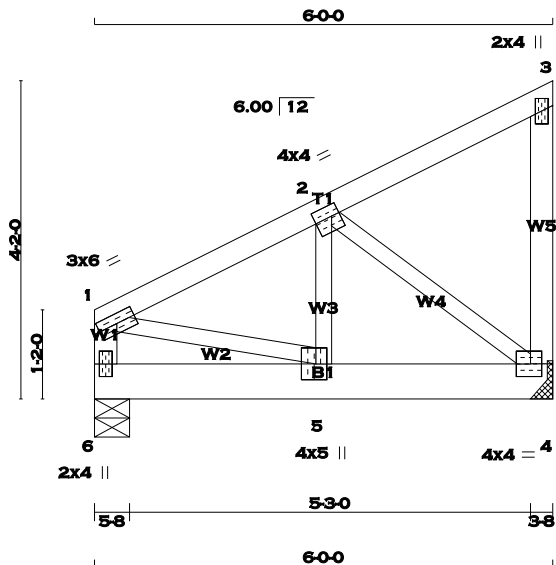


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TOTAL WEIGHT = 2 X 29 = 59 lb [M]

LUMBER					
N. L. G. A. RULES					
CHORDS	SIZE	LUMBER		DESCR.	
1 - 3	2x4	DRY	No.2	SPF	
4 - 3	2x4	DRY	No.2	SPF	
6 - 1	2x4	DRY	No.2	SPF	
6 - 4	2x6	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
DRY: SEASONED LUMBER.					

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

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

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

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	
FR-TO		FROM TO		FR-TO			
1-2	-1076 / 0	-77.3 -77.3	0.11 (1)	5-93	0 / 946	0.23 (1)	
2-3	-10 / 0	-77.3 -77.3	0.10 (1)	10.00	2-4 -1218 / 0	0.30 (1)	
4-3	-95 / 0	0.0 0.0	0.02 (1)	7.81	1-5 0 / 1002	0.25 (1)	
6-1	-830 / 0	0.0 0.0	0.09 (1)	7.81			
6-5	0 / 0	-343.5 -343.5	0.20 (1)	10.00			
5-4	0 / 971	-343.5 -343.5	0.33 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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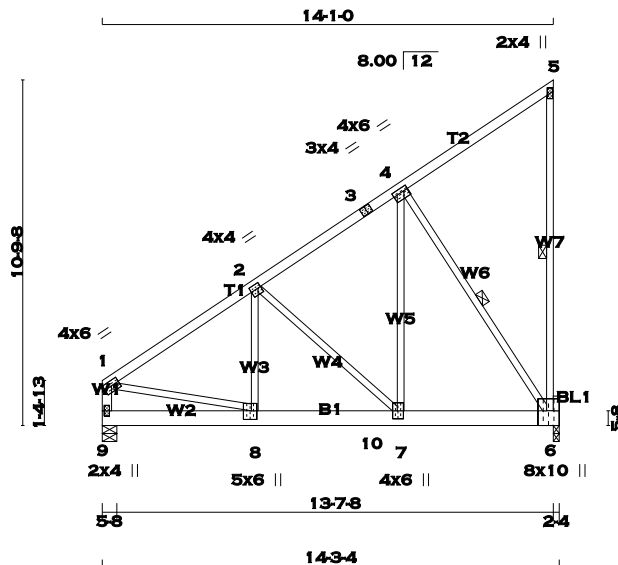
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



KOTT , Stouffville, ON, CGC

Version 8.100 S Feb 9 2017 MiTek Industries, Inc. Wed Mar 15 07:49:58 2017 Page 1

ID:LbuJb4Vx7UM4_0JUbcP3HayDP1G-mDObRsyXHiTKS9?pp5uWWg?_CxDKekKHSyQbTuzamSN



SCALE = 1:71.9

TOTAL WEIGHT = 6 X 78 = 469 lb [M]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 3	2x4	DRY	No.2	SPF
3 - 5	2x4	DRY	No.2	SPF
6 - 5	2x3	DRY	No.2	SPF
9 - 1	2x4	DRY	No.2	SPF
9 - 6	2x6	DRY	2100F 1.8E	SPF
BEARING BLOCKS				
BL1	2x6	DRY	No.2	SPF
ALL WEBS				
EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
DESIGN CONSISTS OF 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	
9-1	1	12	TOP	
5-6	1	12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS				
9-6	2	5	SIDE(536.2)	
WEBS : (0.122"x3") SPIRAL NAILS				
2x3	1	6		
STAGGER NAILS BY HALF THE SURFACE SPACING IN ADJACENT PLIES.				
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.				
SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.				
PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
1	TMVW-t	MT20	4.0	6.0 1.75 Edge
2	TMVW-t	MT20	4.0	4.0 1.75 1.00
3	TS-t	MT20	3.0	4.0
4	TMVW-t	MT20	4.0	6.0 1.50 1.50
5	TMV+p	MT20	2.0	4.0
6	BMVWK1+p	MT20	8.0	10.0 Edge 3.25

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	
6		5912	0	5912	0	0	2-4	2-4	
9		6185	0	6185	0	0	5-8	5-8	
UNFACTORED REACTIONS									
		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
6		4149	2903 / 0	0 / 0	0 / 0	0 / 0	1246 / 0	0 / 0	
9		4341	3037 / 0	0 / 0	0 / 0	0 / 0	1304 / 0	0 / 0	
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 6, 9									
BEARING SIZE FACTOR = 1.08 AT JNT(S) 6 (BASED ON SUPPORT DEPTH = 1-8)									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.68 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-6. DBS = 20-0-0 . CBF = 18 LBS.									
1 - 2x4 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-6. DBS = 4-0-0 . CBF = 129 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: (4)									
		CHORDS			WEBS				
		MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED			
		MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX (LC)
		FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO		
1-2		-5985 / 0	-77.3	-77.3	0.16 (1)	4.68	8-2	0 / 3106	0.23 (1)
2-3		-3353 / 0	-77.3	-77.3	0.11 (1)	5.89	2-7	-2970 / 0	0.65 (1)
3-4		-3353 / 0	-77.3	-77.3	0.11 (1)	5.89	7-4	0 / 5783	0.43 (1)
4-5		-19 / 0	-77.3	-77.3	0.08 (1)	6.25	4-6	-5159 / 0	0.85 (1)
6-5		-148 / 0	0.0	0.0	0.04 (1)	6.25	1-8	0 / 5097	0.38 (1)
9-1		-4535 / 0	0.0	0.0	0.15 (1)	6.68			
9-8		0 / 0	-821.7	-821.7	0.20 (1)	10.00			
8-10		0 / 4989	-821.7	-821.7	0.26 (1)	10.00			
10-7		0 / 4989	-738.7	-738.7	0.26 (1)	10.00			
7-6		0 / 2799	-738.7	-738.7	0.21 (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 = 8-2-8
START SPAN CARRIED = 36-4-8
END DISTANCE = 8-2-8
END SPAN CARRIED = 36-4-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

GIRDER TYPE: CStdGirder
START DISTANCE = 8-2-8
START SPAN CARRIED = 32-10-8
END DISTANCE = 14-3-4
END SPAN CARRIED = 32-10-8
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, NBC 2010

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.47")
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=0.16 (1-2:1) , BC=0.26 (7-8:1) , WB=0.85 (4-6:1) , SSI=0.46 (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= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.51 (1) (INPUT = 1.00)

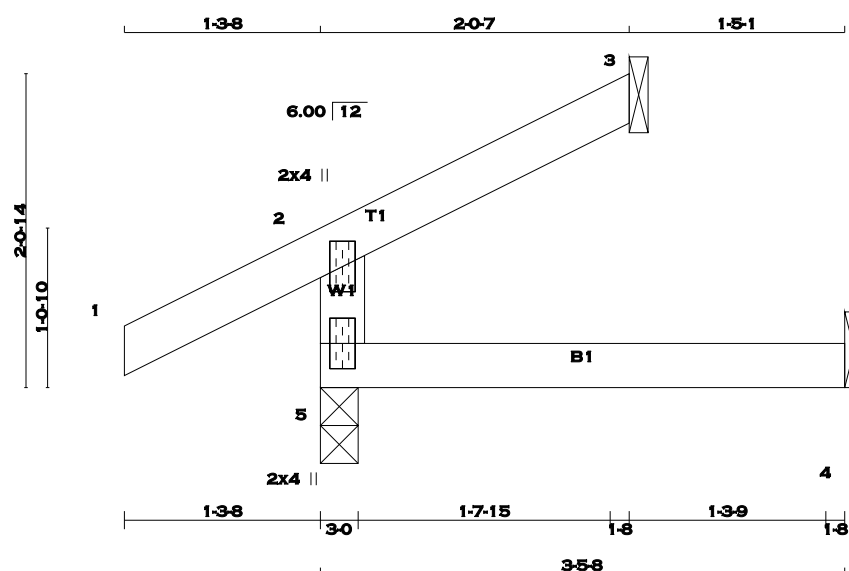


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SCALE = 1:15.2

TOTAL WEIGHT = 2 X 9 = 18 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	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		
5	238	0	238	0	3-0	3-0
3	59	0	59	0	1-8	1-8
4	26	0	29	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	166	122 / 0	0 / 0	0 / 0	0 / 0	44 / 0	0 / 0
3	40	36 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
4	21	0 / 0	0 / 0	0 / 0	0 / 0	21 / 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: (5)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM	TO		FR-TO				
5-2	-203 / 0	0.0	0.0	0.04 (4)	7.81				
1-2	0 / 23	-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	0.04 (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=0.10 (1-2:1), BC=0.04 (4-5:4), WB=0.00 (n/a:0), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

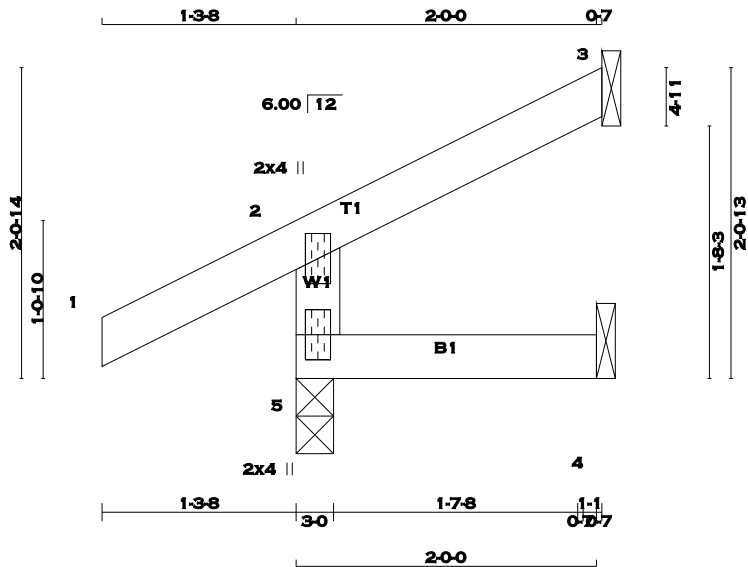
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 7 = 15 lb [M]

LUMBER				DESCR.	SPF
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	3-0	3-0	
3		59	0	59	0	0	1-8	1-8	
4		15	0	17	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
5	154	122 / 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	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

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: (5)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
5-2	-203 / 0	0.0	0.0 0.01 (4)	7.81			
1-2	0 / 23	-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 (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=0.10 (1-2:1) , BC=0.02 (4-5:4) , WB=0.00 (n/a:0) , SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

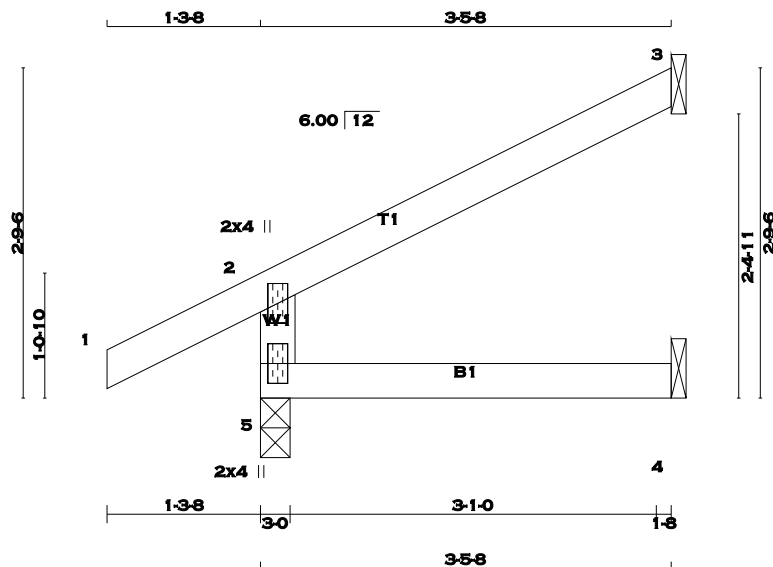
JSI GRIP= 0.12 (2) (INPUT = 0.90)
JSI METAL= 0.05 (2) (INPUT = 1.00)



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SCALE = 1:19.4

TOTAL WEIGHT = 6 X 11 = 65 lb [M]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
5	307	0	307	0	0	3-0	3-0
3	100	0	100	0	0	1-8	1-8
4	26	0	29	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	213	164 / 0	0 / 0	0 / 0	0 / 0	49 / 0	0 / 0
3	68	60 / 0	0 / 0	0 / 0	0 / 0	8 / 0	0 / 0
4	21	0 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
5- 2	-272 / 0	0.0	0.0 0.04 (4)	7.81			
1- 2	0 / 23	-77.3	-77.3 0.10 (1)	10.00			
2- 3	-15 / 0	-77.3	-77.3 0.16 (1)	6.25			
5- 4	0 / 0	-17.5	-17.5 0.04 (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=0.16 (2-3:1), BC=0.04 (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= 0.16 (2) (INPUT = 0.90)
JSI METAL= 0.06 (2) (INPUT = 1.00)



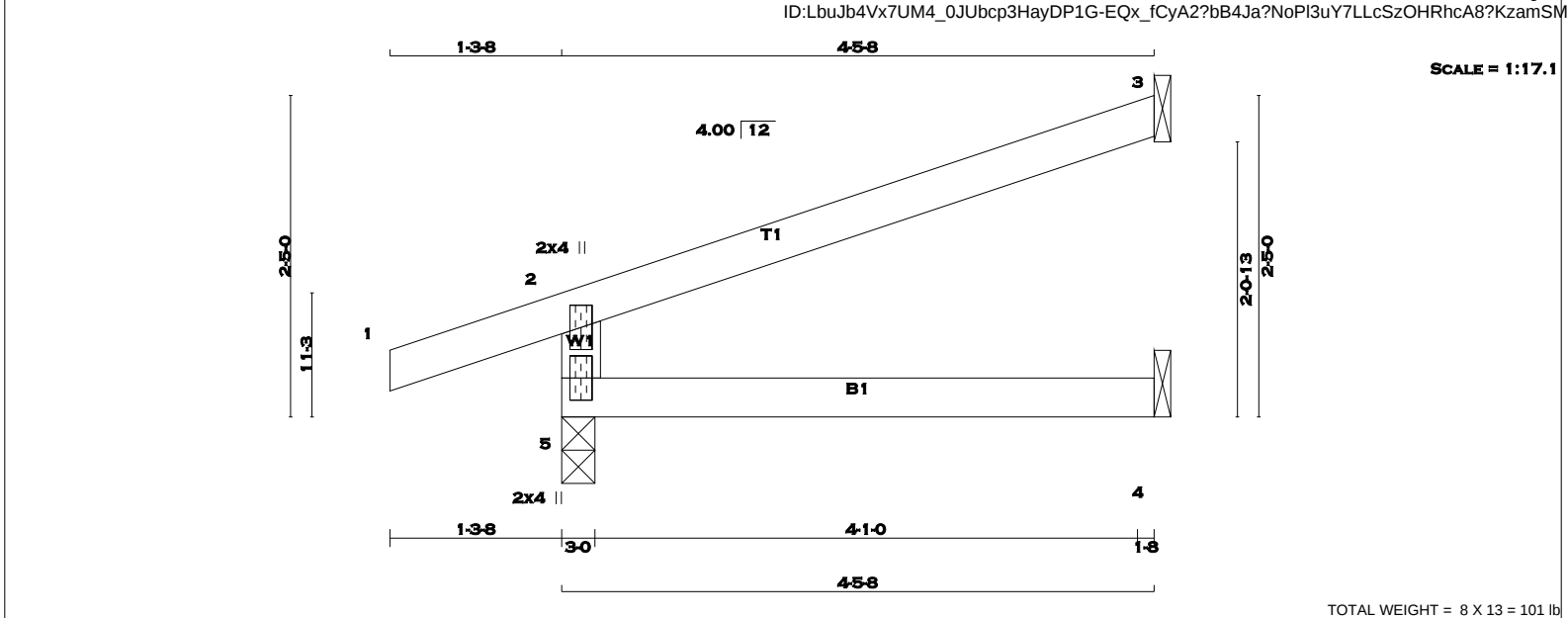
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LUMBER

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

DRY: SEASONED LUMBER.

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	365	0	365	0	3-0	3-0
3	129	0	129	0	1-8	1-8
4	32	0	36	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	253	192 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
3	88	78 / 0	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0
4	26	0 / 0	0 / 0	0 / 0	0 / 0	26 / 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		MAX. UNBRAC	MEMB.	WEBS	
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX. (LC)			MAX. FACTORED	FORCE (LBS)
FR-TO			FROM	TO		FR-TO		
5-2	-319 / 0		0.0	0.0	0.07 (4)	7.81		
1-2	0 / 16		-77.3	-77.3	0.10 (1)	10.00		
2-3	-14 / 0		-77.3	-77.3	0.26 (1)	6.25		
5-4	0 / 0		-17.5	-17.5	0.07 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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=0.26 (2-3:1) , BC=0.07 (4-5:4) , WB=0.00 (n/a:0) , 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
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

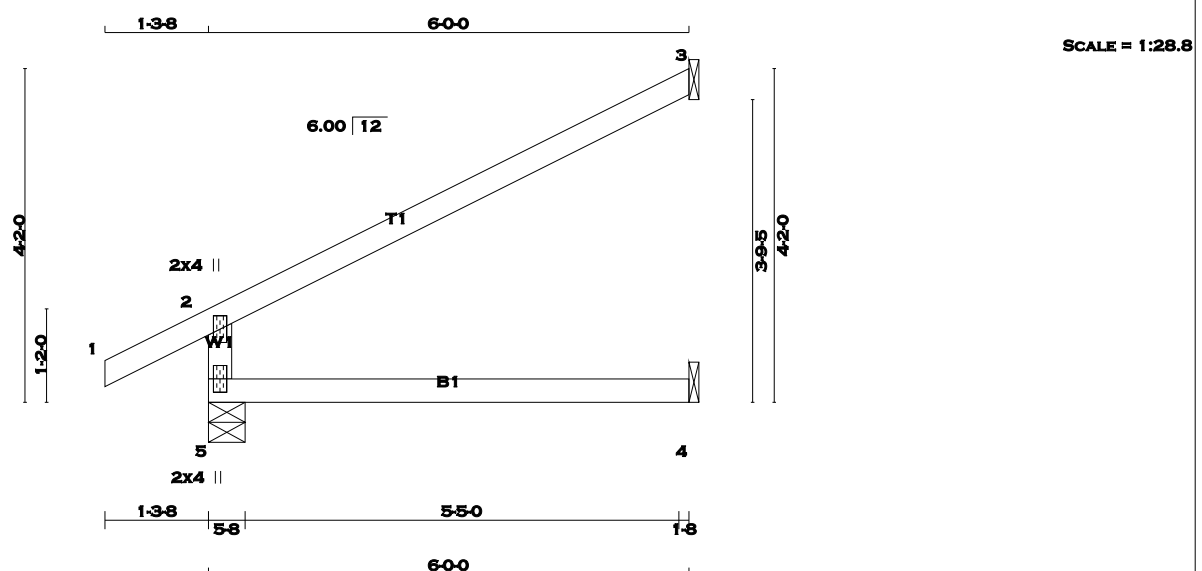
JSI GRIP= 0.17 (2) (INPUT = 0.90)
JSI METAL= 0.06 (5) (INPUT = 1.00)

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TOTAL WEIGHT = 36 X 17 = 615 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	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		
5	457	0	457	0	5-8	5-8
3	174	0	174	0	1-8	1-8
4	43	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	318	238 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

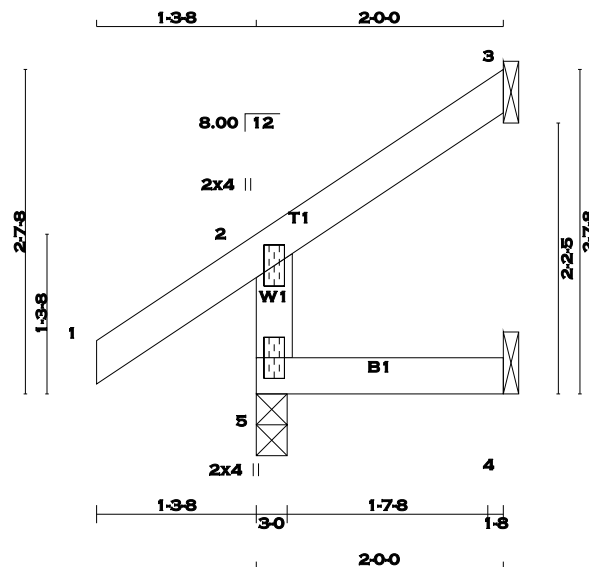


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SCALE = 1:18.6

TOTAL WEIGHT = 4 X 8 = 32 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	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	222	0	222	0	0	3-0
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	153	122 / 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	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)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC	WEBS		MAX. UNBRAC
	MAX. FACTORED	FORCE (LBS)	VERT. LOAD (PLF)	LC1		MAX. FACTORED	FORCE (LBS)	
FR-TO								
5-2	-202 / 0		0.0	0.0	0.01 (4)	7.81		
1-2	0 / 29		-77.3	-77.3	0.10 (1)	10.00		
2-3	-10 / 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=0.10 (1-2:1), BC=0.02 (4-5:4), WB=0.00 (n/a:0), SSI=0.07 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

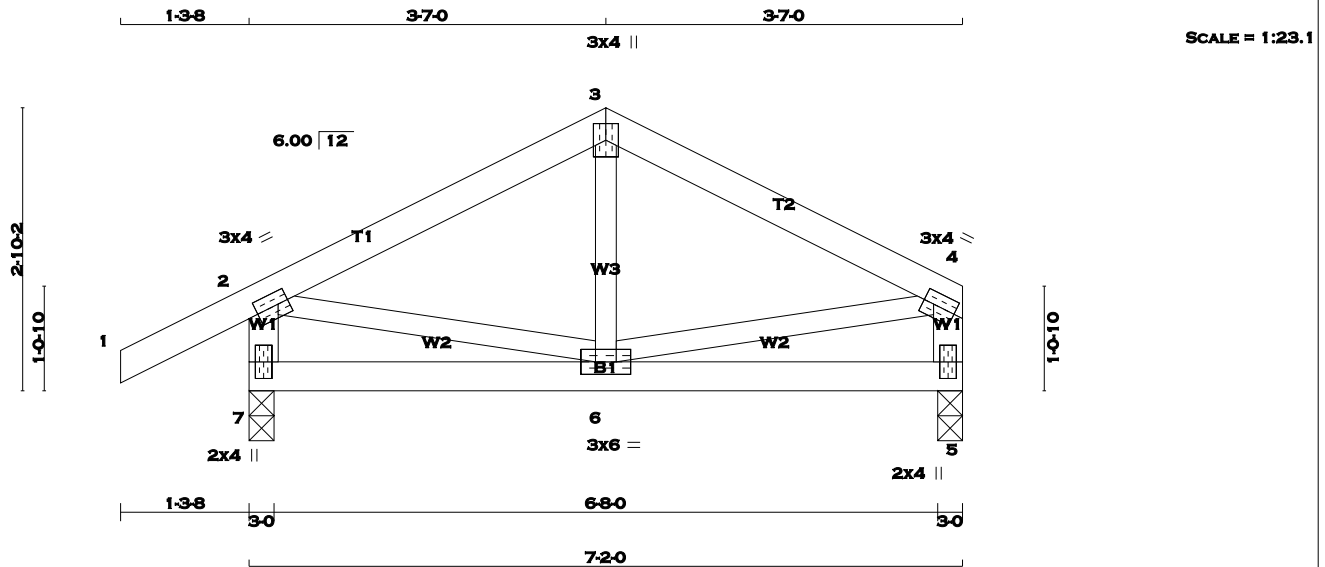


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TOTAL WEIGHT = 4 X 28 = 111 lb
[M][F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
7	445	0	445	0	0	3-0	3-0	3-0	3-0
5	340	0	340	0	0	3-0	3-0	3-0	3-0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
7	310	230 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
5	239	167 / 0	0 / 0	0 / 0	0 / 0	72 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 7, 5

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS		WEBS		CHORDS		WEBS	
MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	6-3	-28 / 52	0.02 (4)
2-3	-278 / 0	-77.3 -77.3	0.13 (1)	6.25	2-6	0 / 254	0.06 (1)
3-4	-278 / 0	-77.3 -77.3	0.13 (1)	6.25	6-4	0 / 254	0.06 (1)
7-2	-420 / 0	0.0 0.0	0.04 (1)	7.81			
5-4	-315 / 0	0.0 0.0	0.03 (1)	7.81			
7-6	0 / 0	-17.5 -17.5	0.06 (4)	10.00			
6-5	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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.01")

CSI: TC=0.13 (2-3:1) , BC=0.06 (6-7:4) , WB=0.06 (2-6:1) , SSI=0.10 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

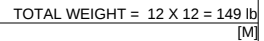
JSI GRIP= 0.62 (2) (INPUT = 0.90)
JSI METAL= 0.15 (4) (INPUT = 1.00)



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DRY: SEASONED LUMBER.

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

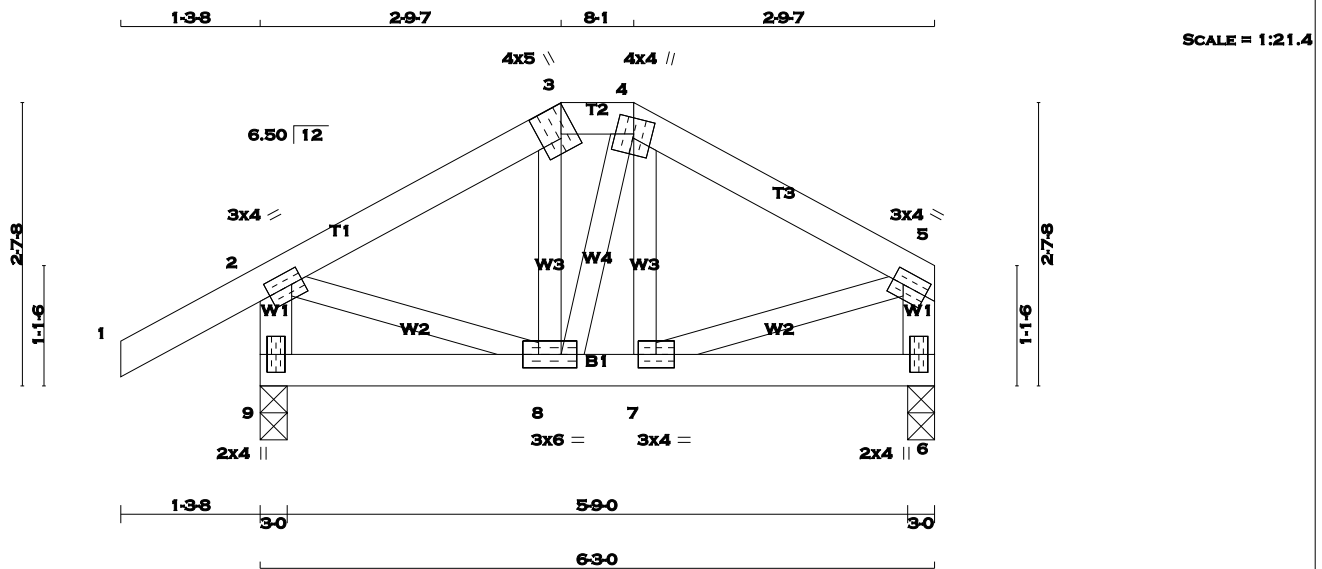
JSI GRIP= 0.60 (2) (INPUT = 0.90)
JSI METAL= 0.04 (2) (INPUT = 1.00)



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





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
2	TMVW-t	MT20	3.0	4.0	1.50 1.25
3	TTW+h	MT20	4.0	5.0	3.00 1.50
4	TTWW+m	MT20	4.0	4.0	1.75 2.00
5	TMVW-t	MT20	3.0	4.0	1.50 1.25
6	BMV1+p	MT20	2.0	4.0	
7	BMWW-t	MT20	3.0	4.0	
8	BMWW-t	MT20	3.0	6.0	
9	BMV1+p	MT20	2.0	4.0	

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
9	402	0	402	0	0
6	296	0	296	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN. SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
9	COMBINED	209 / 0	0 / 0	0 / 0	0 / 0	71 / 0	0 / 0
6	COMBINED	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: (4)			
CHORDS		MEMB.		WEBS		MEMB.	
FR-TO	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	FR-TO	MAX. FACTORED FORCE (LBS)	MAX (LC)
1-2	0 / 25	-77.3	-77.3 0.10 (1)	10.00	8-3	-26 / 20	0.01 (4)
2-3	-225 / 0	-77.3	-77.3 0.08 (1)	6.25	8-4	-2 / 1	0.00 (4)
3-4	-199 / 0	-77.3	-77.3 0.00 (1)	6.25	7-4	-24 / 19	0.01 (4)
4-5	-226 / 0	-77.3	-77.3 0.08 (1)	6.25	2-8	0 / 207	0.05 (1)
9-2	-380 / 0	0.0	0.0 0.04 (1)	7.81	7-5	0 / 207	0.05 (1)
6-5	-275 / 0	0.0	0.0 0.03 (1)	7.81			
9-8	0 / 0	-17.5	-17.5 0.03 (4)	10.00			
8-7	0 / 200	-17.5	-17.5 0.04 (1)	10.00			
7-6	0 / 0	-17.5	-17.5 0.03 (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 (0.21")
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 (5-7:1), SSI=0.07 (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= 0.52 (5) (INPUT = 0.90)
JSI METAL= 0.12 (2) (INPUT = 1.00)



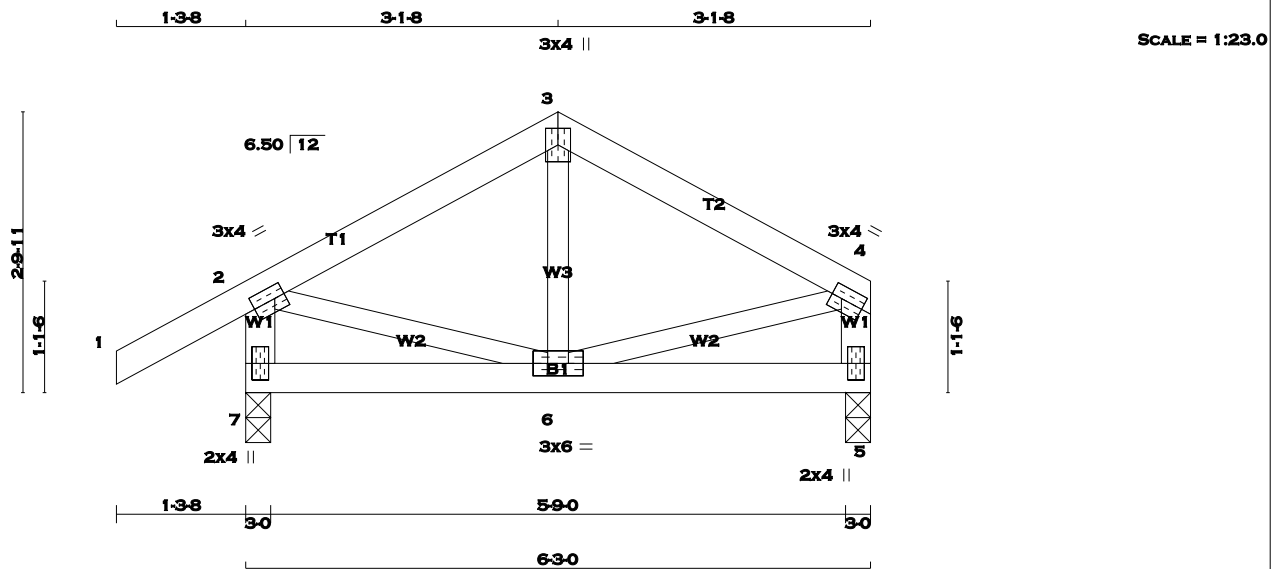
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BUILDING DIVISION

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 = 2 X 25 = 50 lb

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TTW+p	MT20	3.0	4.0		
4	TMVW-t	MT20	3.0	4.0	1.50	1.25
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
7	402	0	0	402	0	0	3-0	3-0	
5	296	0	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: (4)

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		
1-2	0 / 25	-77.3 -77.3	0.10 (1)	10.00	6-3	-34 / 43	0.01 (4)
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 (4)	10.00			
6-5	0 / 0	-17.5 -17.5	0.05 (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 (0.21")
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 (5-6:4) , 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.

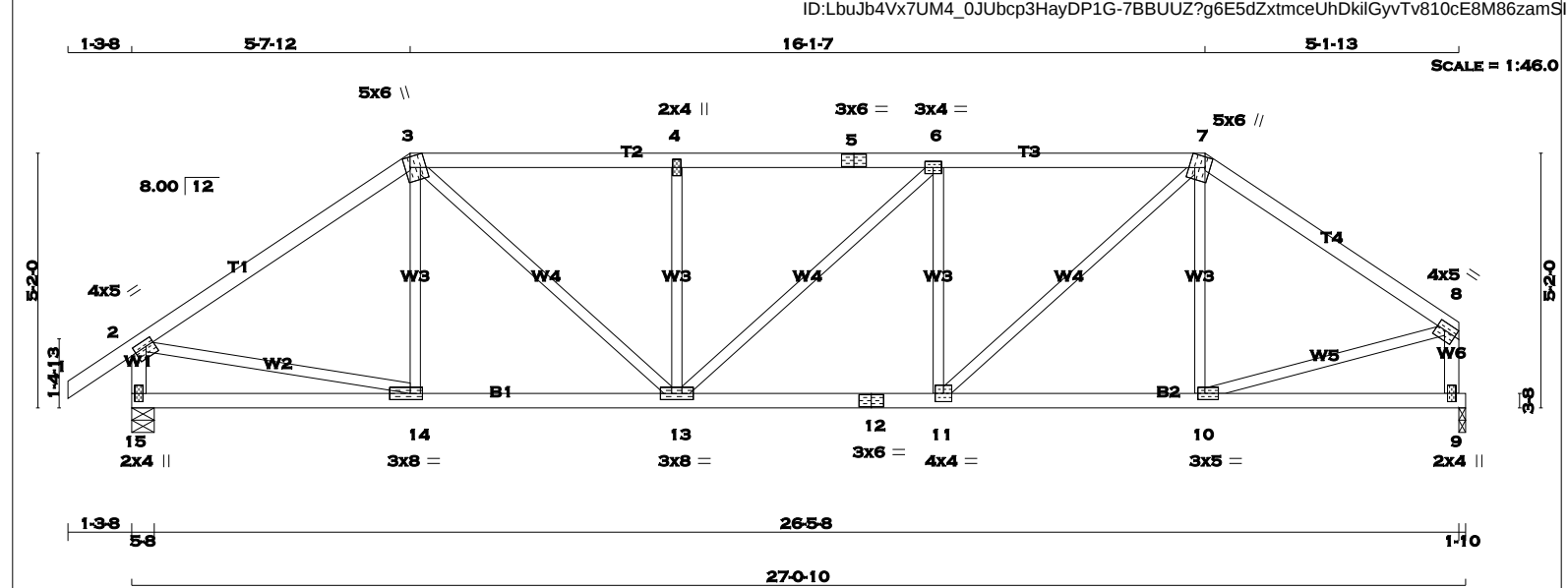
JSI GRIP= 0.49 (2) (INPUT = 0.90)
JSI METAL= 0.12 (4) (INPUT = 1.00)



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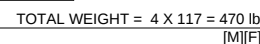
TOTAL WEIGHT = 4 X 109 = 436 LB										[M]																																																																																																																																																																																												
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.																																																																																																																																																																																																						
1 - 3	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
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5 - 7	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
7 - 8	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
15 - 2	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
9 - 8	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
15 - 12	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
12 - 9	2x4	DRY	No.2	SPF																																																																																																																																																																																																		
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2	TMVW-t	MT20	4.0	5.0	1.50	2.00																																																																																																																																																																																																
3	TTWW+m	MT20	5.0	6.0	Edge	3.75																																																																																																																																																																																																
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	6.0	Edge	3.75																																																																																																																																																																																																
8	TMVW-t	MT20	4.0	5.0	1.75	Edge																																																																																																																																																																																																
9	BMV1+p	MT20	2.0	4.0																																																																																																																																																																																																		
10	BMWW-t	MT20	3.0	5.0	1.50	1.75																																																																																																																																																																																																
11	BMWW-t	MT20	4.0	4.0																																																																																																																																																																																																		
12	BS-t	MT20	3.0	6.0																																																																																																																																																																																																		
13	BMWW-t	MT20	3.0	8.0																																																																																																																																																																																																		
14	BMWW-t	MT20	3.0	8.0	1.50	3.00																																																																																																																																																																																																
15	BMV1+p	MT20	2.0	4.0																																																																																																																																																																																																		
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																																																																																																																																																																																																						
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JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX																																																																																																																																																																																															
15	1383	0	1383	0	0	5-8	5-8																																																																																																																																																																																															
9	1276	0	1276	0	0	1-10	1-10																																																																																																																																																																																															
UNFACTORED REACTIONS																																																																																																																																																																																																						
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JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL																																																																																																																																																																																															
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0																																																																																																																																																																																															
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0																																																																																																																																																																																															
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9																																																																																																																																																																																																						
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TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.64 FT.																																																																																																																																																																																																						
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.																																																																																																																																																																																																						
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TOTAL LOAD CASES: (4)																																																																																																																																																																																																						
<table><tr><th colspan="5">CHORDS</th><th colspan="5">WEBS</th></tr><tr><th colspan="2">MAX. FACTORED</th><th colspan="2">FACTORED</th><th rowspan="2">MAX. LC1</th><th rowspan="2">MAX.</th><th colspan="2">MAX. FACTORED</th><th colspan="2"></th></tr><tr><th>MEMB.</th><th>FORCE (LBS)</th><th>VERT. LOAD (LBS)</th><th>(PLF)</th><th>UNBRACED LENGTH</th><th>MEMB.</th><th>FORCE (LBS)</th><th>MAX. CSI (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM</td><td>TO</td><td></td><td></td><td>FR-TO</td><td></td><td></td><td></td></tr><tr><td>1-2</td><td>0 / 29</td><td>-77.3</td><td>-77.3</td><td>0.10 (1)</td><td>10.00</td><td>14-3</td><td>-111 / 57</td><td>0.04 (1)</td><td></td></tr><tr><td>2-3</td><td>-1428 / 0</td><td>-77.3</td><td>-77.3</td><td>0.52 (1)</td><td>4.83</td><td>3-13</td><td>0 / 766</td><td>0.17 (1)</td><td></td></tr><tr><td>3-4</td><td>-1754 / 0</td><td>-77.3</td><td>-77.3</td><td>0.36 (1)</td><td>4.65</td><td>13-4</td><td>-448 / 0</td><td>0.18 (1)</td><td></td></tr><tr><td>4-5</td><td>-1754 / 0</td><td>-77.3</td><td>-77.3</td><td>0.37 (1)</td><td>4.64</td><td>13-6</td><td>0 / 33</td><td>0.01 (1)</td><td></td></tr><tr><td>5-6</td><td>-1754 / 0</td><td>-77.3</td><td>-77.3</td><td>0.37 (1)</td><td>4.64</td><td>11-6</td><td>-472 / 0</td><td>0.19 (1)</td><td></td></tr><tr><td>6-7</td><td>-1730 / 0</td><td>-77.3</td><td>-77.3</td><td>0.37 (1)</td><td>4.68</td><td>11-7</td><td>0 / 841</td><td>0.19 (1)</td><td></td></tr><tr><td>7-8</td><td>-1334 / 0</td><td>-77.3</td><td>-77.3</td><td>0.42 (1)</td><td>5.10</td><td>10-7</td><td>-194 / 27</td><td>0.08 (1)</td><td></td></tr><tr><td>15-2</td><td>-1342 / 0</td><td>0.0</td><td>0.0</td><td>0.14 (1)</td><td>7.00</td><td>2-14</td><td>0 / 1208</td><td>0.27 (1)</td><td></td></tr><tr><td>9-8</td><td>-1240 / 0</td><td>0.0</td><td>0.0</td><td>0.13 (1)</td><td>7.21</td><td>10-8</td><td>0 / 1148</td><td>0.26 (1)</td><td></td></tr><tr><td>15-14</td><td>0 / 0</td><td>-17.5</td><td>-17.5</td><td>0.13 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>14-13</td><td>0 / 1184</td><td>-17.5</td><td>-17.5</td><td>0.26 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>13-12</td><td>0 / 1730</td><td>-17.5</td><td>-17.5</td><td>0.32 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>12-11</td><td>0 / 1730</td><td>-17.5</td><td>-17.5</td><td>0.32 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>11-10</td><td>0 / 1104</td><td>-17.5</td><td>-17.5</td><td>0.24 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr><tr><td>10-9</td><td>0 / 0</td><td>-17.5</td><td>-17.5</td><td>0.12 (4)</td><td>10.00</td><td></td><td></td><td></td><td></td></tr></table>											CHORDS					WEBS					MAX. FACTORED		FACTORED		MAX. LC1	MAX.	MAX. FACTORED				MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	(PLF)	UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)	FR-TO		FROM	TO			FR-TO				1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	14-3	-111 / 57	0.04 (1)		2-3	-1428 / 0	-77.3	-77.3	0.52 (1)	4.83	3-13	0 / 766	0.17 (1)		3-4	-1754 / 0	-77.3	-77.3	0.36 (1)	4.65	13-4	-448 / 0	0.18 (1)		4-5	-1754 / 0	-77.3	-77.3	0.37 (1)	4.64	13-6	0 / 33	0.01 (1)		5-6	-1754 / 0	-77.3	-77.3	0.37 (1)	4.64	11-6	-472 / 0	0.19 (1)		6-7	-1730 / 0	-77.3	-77.3	0.37 (1)	4.68	11-7	0 / 841	0.19 (1)		7-8	-1334 / 0	-77.3	-77.3	0.42 (1)	5.10	10-7	-194 / 27	0.08 (1)		15-2	-1342 / 0	0.0	0.0	0.14 (1)	7.00	2-14	0 / 1208	0.27 (1)		9-8	-1240 / 0	0.0	0.0	0.13 (1)	7.21	10-8	0 / 1148	0.26 (1)		15-14	0 / 0	-17.5	-17.5	0.13 (4)	10.00					14-13	0 / 1184	-17.5	-17.5	0.26 (1)	10.00					13-12	0 / 1730	-17.5	-17.5	0.32 (1)	10.00					12-11	0 / 1730	-17.5	-17.5	0.32 (1)	10.00					11-10	0 / 1104	-17.5	-17.5	0.24 (1)	10.00					10-9	0 / 0	-17.5	-17.5	0.12 (4)	10.00				
CHORDS					WEBS																																																																																																																																																																																																	
MAX. FACTORED		FACTORED		MAX. LC1	MAX.	MAX. FACTORED																																																																																																																																																																																																
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	(PLF)			UNBRACED LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)																																																																																																																																																																																													
FR-TO		FROM	TO			FR-TO																																																																																																																																																																																																
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	14-3	-111 / 57	0.04 (1)																																																																																																																																																																																														
2-3	-1428 / 0	-77.3	-77.3	0.52 (1)	4.83	3-13	0 / 766	0.17 (1)																																																																																																																																																																																														
3-4	-1754 / 0	-77.3	-77.3	0.36 (1)	4.65	13-4	-448 / 0	0.18 (1)																																																																																																																																																																																														
4-5	-1754 / 0	-77.3	-77.3	0.37 (1)	4.64	13-6	0 / 33	0.01 (1)																																																																																																																																																																																														
5-6	-1754 / 0	-77.3	-77.3	0.37 (1)	4.64	11-6	-472 / 0	0.19 (1)																																																																																																																																																																																														
6-7	-1730 / 0	-77.3	-77.3	0.37 (1)	4.68	11-7	0 / 841	0.19 (1)																																																																																																																																																																																														
7-8	-1334 / 0	-77.3	-77.3	0.42 (1)	5.10	10-7	-194 / 27	0.08 (1)																																																																																																																																																																																														
15-2	-1342 / 0	0.0	0.0	0.14 (1)	7.00	2-14	0 / 1208	0.27 (1)																																																																																																																																																																																														
9-8	-1240 / 0	0.0	0.0	0.13 (1)	7.21	10-8	0 / 1148	0.26 (1)																																																																																																																																																																																														
15-14	0 / 0	-17.5	-17.5	0.13 (4)	10.00																																																																																																																																																																																																	
14-13	0 / 1184	-17.5	-17.5	0.26 (1)	10.00																																																																																																																																																																																																	
13-12	0 / 1730	-17.5	-17.5	0.32 (1)	10.00																																																																																																																																																																																																	
12-11	0 / 1730	-17.5	-17.5	0.32 (1)	10.00																																																																																																																																																																																																	
11-10	0 / 1104	-17.5	-17.5	0.24 (1)	10.00																																																																																																																																																																																																	
10-9	0 / 0	-17.5	-17.5	0.12 (4)	10.00																																																																																																																																																																																																	
DESIGN CRITERIA																																																																																																																																																																																																						
SPECIFIED LOADS:																																																																																																																																																																																																						
TOP	CH.	LL	=	23.3	PSF																																																																																																																																																																																																	
		DL	=	3.0	PSF																																																																																																																																																																																																	
BOT	CH.	LL	=	0.0	PSF																																																																																																																																																																																																	
		DL	=	7.0	PSF																																																																																																																																																																																																	
TOTAL	LOAD	=	33.3	PSF																																																																																																																																																																																																		
SPACING = 24.0 IN. C/C																																																																																																																																																																																																						
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM																																																																																																																																																																																																						
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010																																																																																																																																																																																																						
THIS DESIGN COMPLIES WITH:																																																																																																																																																																																																						
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014																																																																																																																																																																																																						
- CSA 086-09																																																																																																																																																																																																						
- TPIC 2011																																																																																																																																																																																																						
(55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD																																																																																																																																																																																																						
ALLOWABLE DEFL.(LL)= L/360 (0.90")																																																																																																																																																																																																						
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")																																																																																																																																																																																																						
ALLOWABLE DEFL.(TL)= L/360 (0.90")																																																																																																																																																																																																						
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")																																																																																																																																																																																																						
CSI: TC=0.52 (2-3:1), BC=0.32 (11-13:1), WB=0.27 (2-14:1), SSI=0.19 (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 (10) (INPUT = 0.90)																																																																																																																																																																																																						
JSI METAL= 0.48 (2) (INPUT = 1.00)																																																																																																																																																																																																						
RECEIVED TOWN OF MILTON MAR 29, 2017 17-5239 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. 																																																																																																																																																																																																						



RECEIVED
TOWN OF MILTON
MAR 29, 2017
17-5239
BUILDING DIVISION

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





DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
<u>BEARINGS</u>							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
14	1383	0	1383	0	0	5-8	5-8
9	1276	0	1276	0	0	1-10	1-10

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

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 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.18")

CSI: TC=0.27 (4-5:1) , BC=0.38 (12-13:4) ,
WB=0.92 (3-14:1) , 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

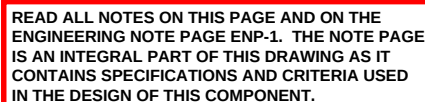
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

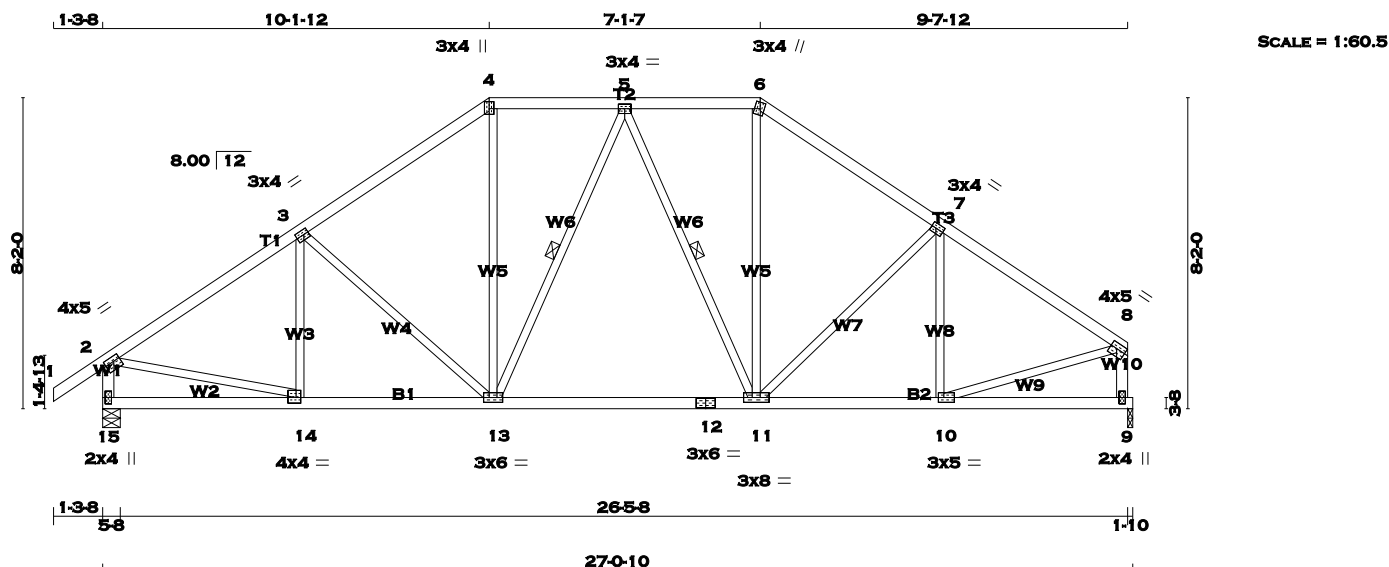
NAIL VALUES						
PLATE	GRIP(DRY)		SHEAR		SECTION	
	(PSI)		(PLI)		(PLI)	
	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (3) (INPUT = 0.90)
JSI METAL= 0.56 (7) (INPUT = 1.00)





TOTAL WEIGHT = $4 \times 122 = 489$ 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
15 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
15 - 12	2x4	DRY	No.2	SPF
12 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMWV-t	MT20	4.0	5.0	1.50	2.00
3	TMWV-t	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWV-t	MT20	3.0	4.0		
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMWV-t	MT20	3.0	4.0	1.50	1.50
8	TMWV-t	MT20	4.0	5.0	1.75	Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMWV-t	MT20	3.0	5.0	1.50	1.75
11	BMWVW-t	MT20	3.0	8.0		
12	BS-t	MT20	3.0	6.0		
13	BMWVW-t	MT20	3.0	6.0		
14	BMWV-t	MT20	4.0	4.0	1.75	1.50
15	BMV1+o	MT20	2.0	4.0		

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

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

BEARINGS			MAXIMUM FACTORED			INPUT	REQRD
GROSS REACTION			GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
15	1383	0	1383	0	0	5-8	5-8
9	1276	0	1276	0	0	1-10	1-10

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY
APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 5-13, 5-11. DBS = 20-0-0 . CBF = 26 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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S					W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			FR-TO				
1-2	0 / 29	-77.3	-77.3 0.10 (1)	10.00	14-3	-168 / 29	0.06 (1)		
2-3	-1461 / 0	-77.3	-77.3 0.29 (1)	5.12	3-13	-276 / 0	0.24 (1)		
3-4	-1267 / 0	-77.3	-77.3 0.27 (1)	5.42	13-4	0 / 434	0.10 (1)		
4-5	-1037 / 0	-77.3	-77.3 0.12 (1)	6.04	13-5	-153 / 0	0.08 (1)		
5-6	-1016 / 0	-77.3	-77.3 0.12 (1)	6.08	5-11	-205 / 0	0.10 (1)		
6-7	-1241 / 0	-77.3	-77.3 0.25 (1)	5.50	11-6	0 / 427	0.10 (1)		
7-8	-1352 / 0	-77.3	-77.3 0.25 (1)	5.32	11-7	-188 / 0	0.16 (1)		
15-2	-1343 / 0	0.0	0.0 0.14 (1)	6.99	10-7	-244 / 2	0.09 (1)		
9-8	-1239 / 0	0.0	0.0 0.13 (1)	7.22	2-14	0 / 1263	0.28 (1)		
					10-8	0 / 1191	0.27 (1)		
15-14	0 / 0	-17.5	-17.5 0.10 (4)	10.00					
14-13	0 / 1237	-17.5	-17.5 0.28 (1)	10.00					
13-12	0 / 1098	-17.5	-17.5 0.25 (1)	10.00					
12-11	0 / 1098	-17.5	-17.5 0.25 (1)	10.00					
11-10	0 / 1145	-17.5	-17.5 0.26 (1)	10.00					
10-9	0 / 0	-17.5	-17.5 0.09 (4)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.29 (2-3:1) , BC=0.28 (13-14:1) ,
WB=0.28 (2-14:1) . SSI=0.16 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE	GRIP(DRY) (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= 0.90 (4) (INPUT = 0.90)
JSI METAL= 0.49 (2) (INPUT = 1.00)

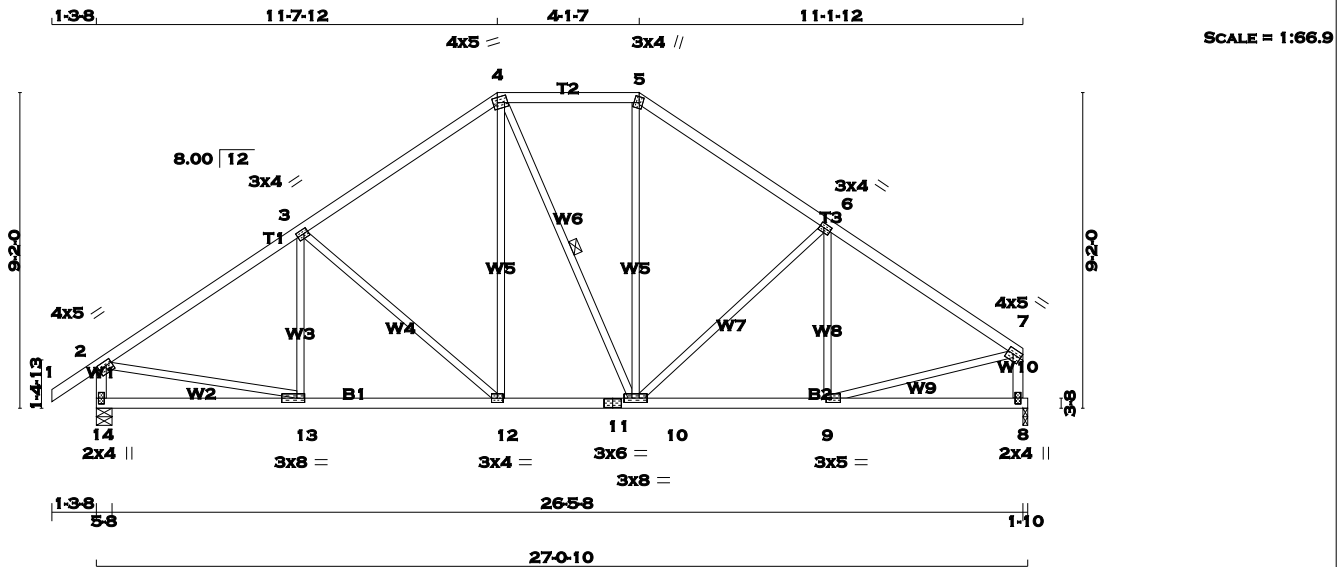
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MAR 29, 2017
17-5239

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 = 4 X 122 = 488 lb
[M][F]

LUMBER				DESCR.	
N. L. G. A. RULES		LUMBER	SIZE	DRY	SPF
CHORDS	SIZE				
1 - 4	2x4	No.2			
4 - 5	2x4	No.2			
5 - 7	2x4	No.2			
14 - 2	2x4	No.2			
8 - 7	2x4	No.2			
14 - 11	2x4	No.2			
11 - 8	2x4	No.2			
ALL WEBS EXCEPT		2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TTWW-m	MT20	3.0	4.0	2.00	1.25
6	TMVW-t	MT20	3.0	4.0	1.50	1.50
7	TMVW-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	1.75
10	BMVW-t	MT20	3.0	8.0		
11	BS-t	MT20	3.0	6.0		
12	BMVW-t	MT20	3.0	4.0		
13	BMVW-t	MT20	3.0	8.0	1.50	2.75
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		MAXIMUM FACTORED		INPUT		REQRD	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
14		1383	0	1383	0	0	5-8	5-8	
8		1276	0	1276	0	0	1-10	1-10	

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
8	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

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

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 4-10. 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: (4)			
CHORDS		FACTORED		W E B S		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-110 / 67	0.05 (1)
2-3	-1468 / 0	-77.3 -77.3	0.39 (1)	4.99	3-12	-390 / 0	0.47 (1)
3-4	-1176 / 0	-77.3 -77.3	0.36 (1)	5.45	12-4	0 / 335	0.08 (1)
4-5	-945 / 0	-77.3 -77.3	0.18 (1)	6.17	4-10	-25 / 0	0.02 (1)
5-6	-1163 / 0	-77.3 -77.3	0.33 (1)	5.52	10-5	0 / 312	0.07 (1)
6-7	-1372 / 0	-77.3 -77.3	0.35 (1)	5.17	10-6	-306 / 0	0.36 (1)
14-2	-1340 / 0	0.0 0.0	0.14 (1)	7.00	9-6	-180 / 42	0.08 (1)
8-7	-1236 / 0	0.0 0.0	0.13 (1)	7.22	2-13	0 / 1267	0.29 (1)
					9-7	0 / 1201	0.27 (1)
14-13	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
13-12	0 / 1246	-17.5 -17.5	0.28 (1)	10.00			
12-11	0 / 956	-17.5 -17.5	0.20 (1)	10.00			
11-10	0 / 956	-17.5 -17.5	0.20 (1)	10.00			
10-9	0 / 1165	-17.5 -17.5	0.25 (1)	10.00			
9-8	0 / 0	-17.5 -17.5	0.14 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.09")

CSI: TC=0.39 (2-3:1), BC=0.28 (12-13:1), WB=0.47 (3-12:1), 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= 0.50 (2) (INPUT = 1.00)



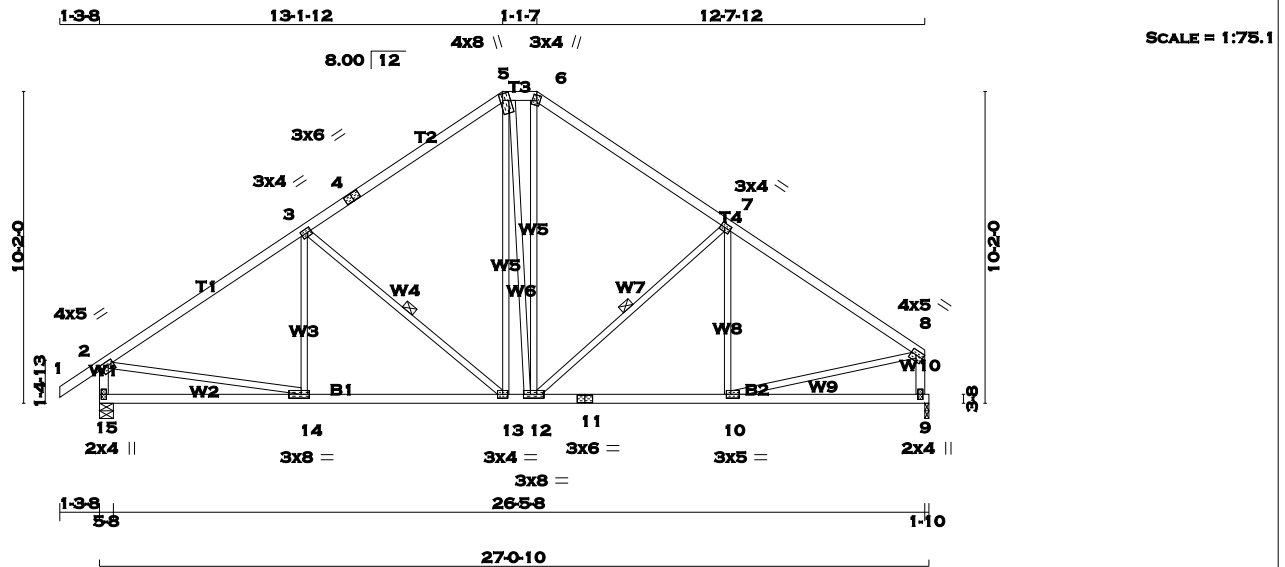
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TOTAL WEIGHT = 4 X 128 = 512 lb
[M][F]

LUMBER				
N. L. G. A. RULES				
CHORDS		SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
15 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
15 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.50	2.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.50
4	TS-t	MT20	3.0	6.0		
5	TTWV+m	MT20	4.0	8.0	2.50	1.00
6	TTW+m	MT20	3.0	4.0	2.00	1.25
7	TMVW-t	MT20	3.0	4.0	1.50	1.50
8	TMVW-t	MT20	4.0	5.0	1.75	Edge
9	BMV1+p	MT20	2.0	4.0		
10	BMVW-t	MT20	3.0	5.0	1.50	1.75
11	BS-t	MT20	3.0	6.0		
12	BMVWV-t	MT20	3.0	8.0		
13	BMVW-t	MT20	3.0	4.0		
14	BMVW-t	MT20	3.0	8.0	1.50	3.25
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	
		GROSS REACTION		GROSS REACTION		BRG		BRG	
JT		VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
15		1383	0	1383	0	0	5-8	5-8	
9		1276	0	1276	0	0	1-10	1-10	

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
15	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 15, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.82 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 3-13, 7-12. DBS = 20-0-0 . CBF = 62 LBS.

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

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

C H O R D S				W E B S			
MEMB.		MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.		MAX. FACTORED FORCE (LBS)
FR-TO			FROM TO		FR-TO		
1-2		0 / 29	-77.3	-77.3 0.10 (1)	10-00 14-3		-67 / 92
2-3		-1464 / 0	-77.3	-77.3 0.51 (1)	4.82 3-13		-492 / 0
3-4		-1081 / 0	-77.3	-77.3 0.47 (1)	5.46 13-5		0 / 343
4-5		-1081 / 0	-77.3	-77.3 0.47 (1)	5.46 5-12		0 / 9
5-6		-874 / 0	-77.3	-77.3 0.02 (1)	6.25 12-6		0 / 359
6-7		-1081 / 0	-77.3	-77.3 0.43 (1)	5.52 12-7		-407 / 0
7-8		-1378 / 0	-77.3	-77.3 0.46 (1)	5.00 10-7		-136 / 67
15-2		-1336 / 0	0.0	0.0 0.14 (1)	7.00 2-14		0 / 1262
9-8		-1230 / 0	0.0	0.0 0.13 (1)	7.23 10-8		0 / 1201
15-14		0 / 0	-17.5	-17.5 0.19 (4)	10.00		
14-13		0 / 1246	-17.5	-17.5 0.30 (1)	10.00		
13-12		0 / 873	-17.5	-17.5 0.22 (1)	10.00		
12-11		0 / 1173	-17.5	-17.5 0.27 (1)	10.00		
11-10		0 / 1173	-17.5	-17.5 0.27 (1)	10.00		
10-9		0 / 0	-17.5	-17.5 0.17 (4)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.51 (2-3:1) , BC=0.30 (13-14:1) , WB=0.28 (2-14:1) , SSI=0.21 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES					
PLATE GRIP(DRY)		SHEAR (PSI)		SECTION (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 (10) (INPUT = 0.90)
JSI METAL= 0.50 (2) (INPUT = 1.00)

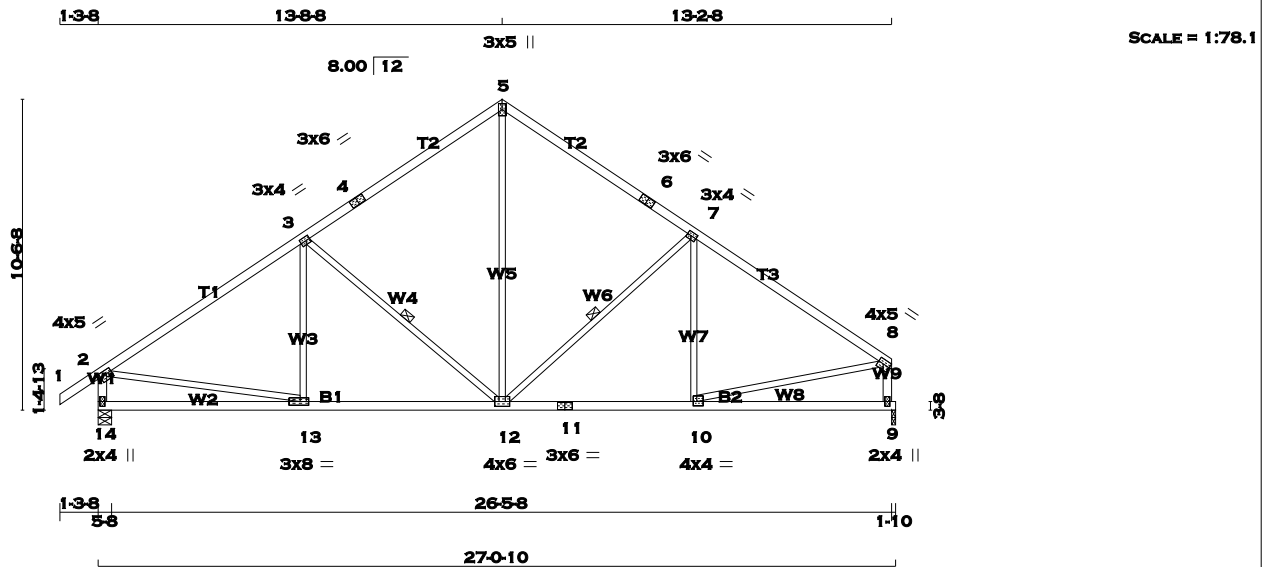


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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
1 - 4	2x4	DRY	No.2	SPF
4 - 5	2x4	DRY	No.2	SPF
5 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
14 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	5.0	1.50 2.00
3	TMVW-t	MT20	3.0	4.0	1.50 1.50
4	TS-t	MT20	3.0	6.0	
5	TTW+p	MT20	3.0	5.0	
6	TS-t	MT20	3.0	6.0	
7	TMVW-t	MT20	3.0	4.0	1.50 1.50
8	TMVW-t	MT20	4.0	5.0	1.75 Edge
9	BMV1+p	MT20	2.0	4.0	
10	BMVW-t	MT20	4.0	4.0	1.75 1.50
11	BS-t	MT20	3.0	6.0	
12	BMVW-t	MT20	4.0	6.0	
13	BMVW-t	MT20	3.0	8.0	1.50 3.50
14	BMV1+p	MT20	2.0	4.0	
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
14	1383	0	1383	0	0	5-8	5-8
9	1276	0	1276	0	0	1-10	1-10
UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	968	691 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0
9	896	627 / 0	0 / 0	0 / 0	0 / 0	269 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 14, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.75 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 3-12, 7-12. 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: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	13-3	-59 / 97	0.03 (1)
2-3	-1458 / 0	-77.3 -77.3	0.56 (1)	4.75	3-12	-520 / 0	0.28 (1)
3-4	-1053 / 0	-77.3 -77.3	0.51 (1)	5.44	12-5	0 / 744	0.17 (1)
4-5	-1053 / 0	-77.3 -77.3	0.51 (1)	5.44	12-7	-443 / 0	0.23 (1)
5-6	-1052 / 0	-77.3 -77.3	0.47 (1)	5.52	10-7	-119 / 74	0.07 (1)
6-7	-1052 / 0	-77.3 -77.3	0.47 (1)	5.52	2-13	0 / 1257	0.28 (1)
7-8	-1377 / 0	-77.3 -77.3	0.51 (1)	4.94	10-8	0 / 1200	0.27 (1)
14-2	-1333 / 0	0.0	0.0 0.14 (1)	7.02			
9-8	-1228 / 0	0.0	0.0 0.13 (1)	7.23			
14-13	0 / 0	-17.5 -17.5	0.20 (4)	10.00			
13-12	0 / 1243	-17.5 -17.5	0.30 (1)	10.00			
12-11	0 / 1174	-17.5 -17.5	0.29 (1)	10.00			
11-10	0 / 1174	-17.5 -17.5	0.29 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.19 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.56 (2-3:1) , BC=0.30 (12-13:1) , WB=0.28 (2-13:1) , 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 POSITIONING TOL. = 5.0 Deg.

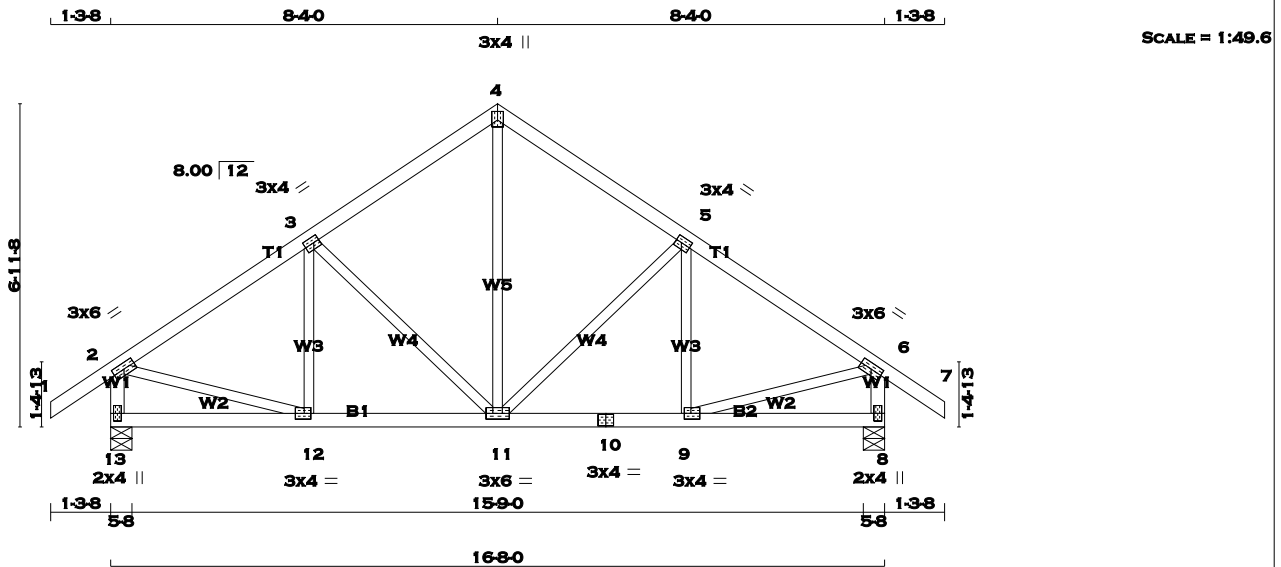
JSI GRIP= 0.90 (8) (INPUT = 0.90)
JSI METAL= 0.50 (2) (INPUT = 1.00)



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

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

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		
13	897	0	897	0	0	5-8	5-8		
8	897	0	897	0	0	5-8	5-8		

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

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

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

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

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO		FROM	TO		FR-TO		FROM	TO	
1-2	0 / 29	-77.3	-77.3	0.10 (1)	10.00	11-4	0 / 430	0.10 (1)	10.00
2-3	-803 / 0	-77.3	-77.3	0.17 (1)	6.25	11-5	-259 / 0	0.14 (1)	10.00
3-4	-622 / 0	-77.3	-77.3	0.17 (1)	6.25	9-5	-95 / 41	0.03 (1)	10.00
4-5	-622 / 0	-77.3	-77.3	0.17 (1)	6.25	3-11	-259 / 0	0.14 (1)	10.00
5-6	-803 / 0	-77.3	-77.3	0.17 (1)	6.25	12-3	-95 / 41	0.03 (1)	10.00
6-7	0 / 29	-77.3	-77.3	0.10 (1)	10.00	2-12	0 / 707	0.16 (1)	10.00
13-2	-865 / 0	0.0	0.0	0.09 (1)	7.81	9-6	0 / 707	0.16 (1)	10.00
8-6	-865 / 0	0.0	0.0	0.09 (1)	7.81				
13-12	0 / 0	-17.5	-17.5	0.07 (4)	10.00				
12-11	0 / 685	-17.5	-17.5	0.14 (1)	10.00				
11-10	0 / 685	-17.5	-17.5	0.14 (1)	10.00				
10-9	0 / 685	-17.5	-17.5	0.14 (1)	10.00				
9-8	0 / 0	-17.5	-17.5	0.07 (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
- TPC 2011

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

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

CSI: TC=0.17 (5-6:1) , BC=0.14 (9-11:1) , WB=0.16 (2-12:1) , SSI=0.13 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (9) (INPUT = 0.90)
JSI METAL= 0.26 (12) (INPUT = 1.00)



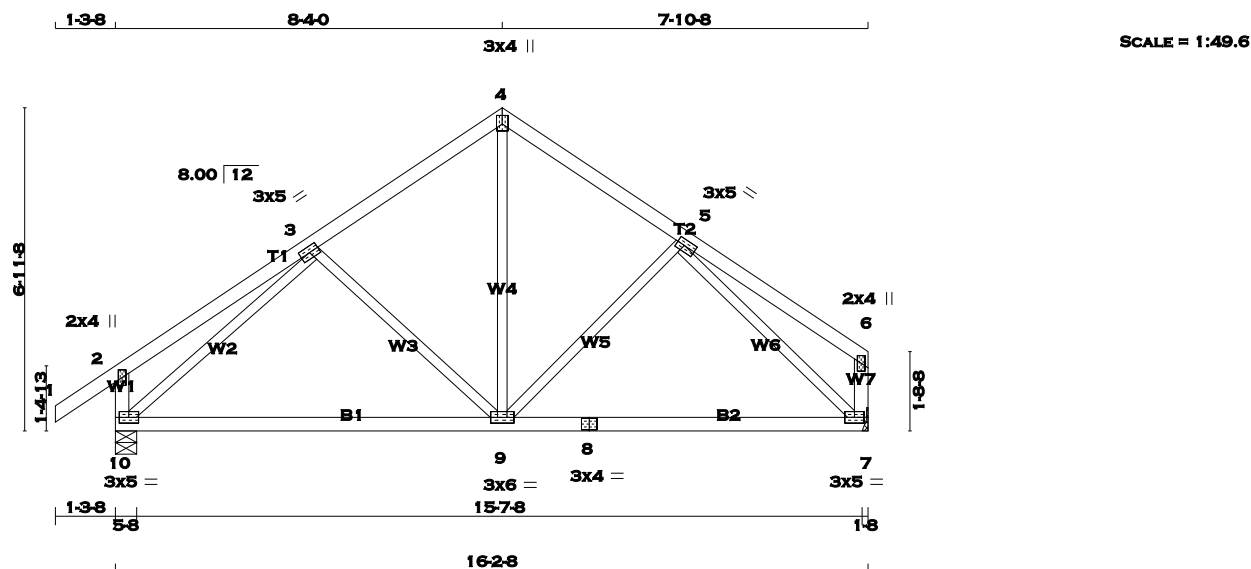
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TOTAL WEIGHT = 6 X 68 = 407 lb
[M][F]

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

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	BRG	BRG
10	875	0	875	0	0	5-8	5-8		
7	769	0	769	0	0	HANGER BY OTHERS MIN. SEAT SIZE: 1-8			

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	612	441 / 0	0 / 0	0 / 0	0 / 0	0 / 0	170 / 0	0 / 0
7	539	377 / 0	0 / 0	0 / 0	0 / 0	0 / 0	162 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	FR-TO
1-2	0 / 29	-77.3	-77.3 0.10 (1)	3-9	-199 / 0	10.00	0.11 (1)
2-3	0 / 21	-77.3	-77.3 0.22 (1)	9-4	0 / 411	10.00	0.09 (1)
3-4	-609 / 0	-77.3	-77.3 0.17 (1)	6-25	-141 / 12	6.25	0.08 (1)
4-5	-608 / 0	-77.3	-77.3 0.15 (1)	6-25	-867 / 0	10-3	0.46 (1)
5-6	0 / 20	-77.3	-77.3 0.19 (1)	10-0	-841 / 0	10.00	0.43 (1)
10-2	-229 / 0	0.0	0.0 0.02 (1)	7-81			
7-6	-117 / 0	0.0	0.0 0.01 (1)	7-81			
10-9	0 / 636	-17.5	-17.5 0.37 (4)	10-00			
9-8	0 / 589	-17.5	-17.5 0.37 (4)	10-00			
8-7	0 / 589	-17.5	-17.5 0.37 (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 (0.54")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.54")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.11")

CSI: TC=0.22 (2-3:1), BC=0.37 (9-10:4), WB=0.46 (3-10:1), SSI=0.13 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.24 (3) (INPUT = 1.00)



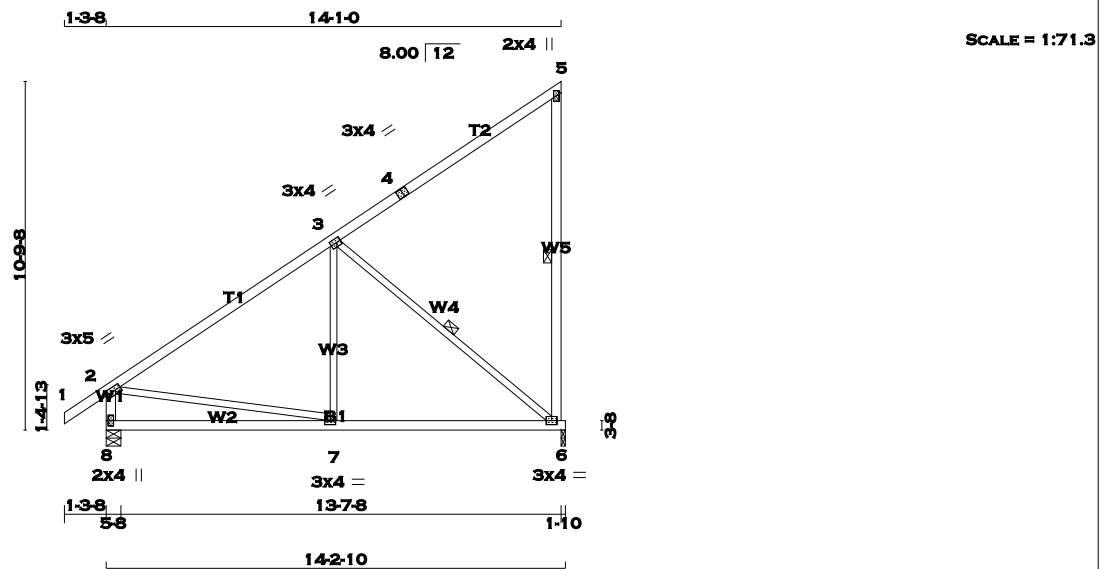
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TOTAL WEIGHT = 4 X 67 = 269 lb
[M][F]

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
1 - 4	2x4	DRY	No.2		SPF
4 - 5	2x4	DRY	No.2		SPF
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 EXCEPT					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	TMVW-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	BMVW-t	MT20	3.0	4.0		
8	BMV1+p	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT		GROSS	REACTION	GROSS	REACTION	BRG		BRG	
6	668	0	668	0	0	1-10		1-10	
8	774	0	774	0	0	5-8		5-8	

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX/MIN.	COMPONENT	REACTIONS			
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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.3 -77.3	0.10 (1)	10.00	7-3	0 / 149	0.05 (4)
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	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 (4)	10.00			
7-6	0 / 507	-17.5 -17.5	0.29 (4)	10.00			

LOADING
TOTAL LOAD CASES: (4)

DESIGN CRITERIA

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

SPACING = 24.0 IN./C

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 (6-7:4), WB=0.37 (3-6:1), 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
MT20	618	354	1667	822	2284

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)

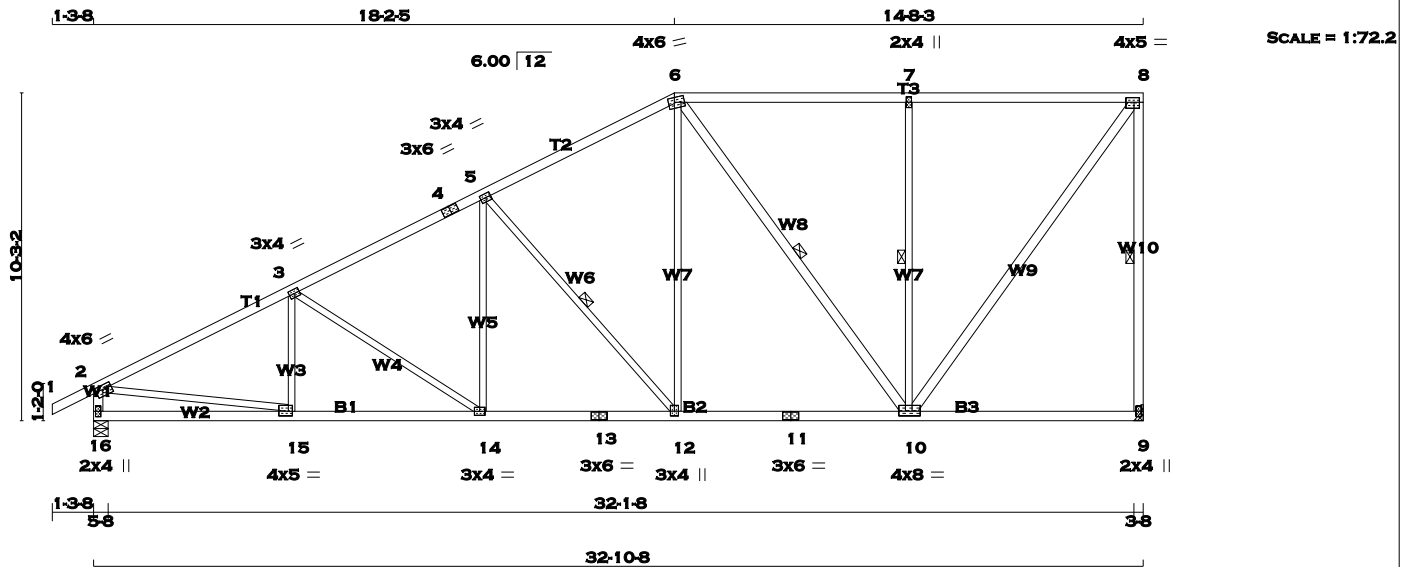


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LUMBER				N. L. G. A. RULES			
CHORDS		SIZE	LUMBER	DESCR.			
1 - 4	2x4	DRY	No.2	SPF			
4 - 6	2x4	DRY	No.2	SPF			
6 - 8	2x4	DRY	No.2	SPF			
9 - 8	2x4	DRY	No.2	SPF			
16 - 2	2x4	DRY	No.2	SPF			
16 - 13	2x4	DRY	No.2	SPF			
13 - 11	2x4	DRY	No.2	SPF			
11 - 9	2x4	DRY	No.2	SPF			
ALL WEBS EXCEPT				SPF			
6 - 10	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	TTWW-m	MT20	4.0	6.0	1.75	2.25
7	TMW-w	MT20	2.0	4.0		
8	TMW-t	MT20	4.0	5.0	1.75	2.00
9	BMV1-p	MT20	2.0	4.0		
10	BMVWW-t	MT20	4.0	8.0	1.75	2.50
11	BS-t	MT20	3.0	6.0		
12	BMVWW-t	MT20	3.0	4.0	1.75	1.50
13	BS-t	MT20	3.0	6.0		
14	BMW-w	MT20	3.0	4.0		
15	BMWV-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	UPLIFT	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		PERM.LIVE		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	DOWN	HORZ	UP	DOWN	UP	DOWN	UP	DOWN
9	1094	765 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	329 / 0	0 / 0	0 / 0
16	1165	829 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	337 / 0	0 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 16

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.11 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, 6-10, 7-10. DBS = 20-0-0. CBF = 94 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	15-3	-170 / 50	0.05 (1)
2-3	-2286 / 0	-77.3 -77.3	0.47 (1)	4.11	3-14	-357 / 0	0.36 (1)
3-4	-1973 / 0	-77.3 -77.3	0.37 (1)	4.47	14-5	0 / 299	0.07 (1)
4-5	-1973 / 0	-77.3 -77.3	0.37 (1)	4.47	5-12	-748 / 0	0.45 (1)
5-6	-1442 / 0	-77.3 -77.3	0.36 (1)	5.05	12-6	0 / 677	0.15 (1)
6-7	-952 / 0	-77.3 -77.3	0.56 (1)	5.51	6-10	-549 / 0	0.49 (1)
7-8	-953 / 0	-77.3 -77.3	0.56 (1)	5.51	10-7	-706 / 0	0.51 (1)
9-8	-1508 / 0	0.0 0.0	0.78 (1)	5.35	10-8	0 / 1606	0.26 (1)
16-2	-1617 / 0	0.0 0.0	0.16 (1)	6.50	2-15	0 / 2082	0.47 (1)
16-15	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
15-14	0 / 2063	-17.5 -17.5	0.40 (1)	10.00			
14-13	0 / 1764	-17.5 -17.5	0.36 (1)	10.00			
13-12	0 / 1764	-17.5 -17.5	0.36 (1)	10.00			
12-11	0 / 1278	-17.5 -17.5	0.34 (1)	10.00			
11-10	0 / 1278	-17.5 -17.5	0.34 (1)	10.00			
10-9	0 / 0	-17.5 -17.5	0.23 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.10")
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=0.78 (8-9:1), BC=0.40 (14-15:1), WB=0.51 (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)
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 (15) (INPUT = 1.00)



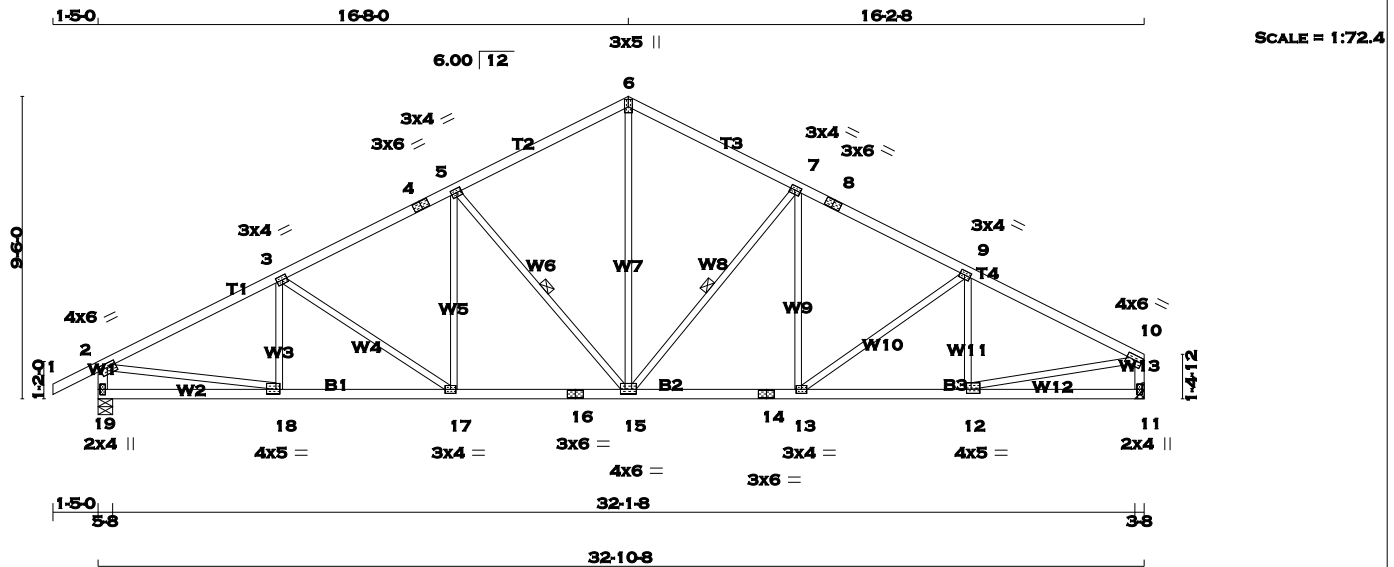
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TOTAL WEIGHT = 4 X 139 = 554 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 10	2x4	DRY	No.2
19 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
19 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 11	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	6.0	1.50	2.75
3, 5, 7, 9						
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
6	TTW+p	MT20	3.0	5.0	2.75	1.50
8	TS-t	MT20	3.0	6.0		
10	TMVW-t	MT20	4.0	6.0	1.75	2.75
11	BMV1+p	MT20	2.0	4.0		
12	BMVW-t	MT20	4.0	5.0	1.50	1.75
13	BMVW-t	MT20	3.0	4.0		
14	BS-t	MT20	3.0	6.0		
15	BMVWVW-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	
JT	VERT	DOWN	HORZ
19	1674	0	1674
11	1559	0	1559

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX./MIN.	LIVE	PERM.	WIND	DEAD	SOIL
19	1172	834 / 0	0 / 0	0 / 0	0 / 0	338 / 0	0 / 0
11	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) 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: (4)			

C H O R D S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO			
1-2	0 / 26	-77.3	-77.3
2-3	-2276 / 0	-77.3	-77.3
3-4	-2039 / 0	-77.3	-77.3
4-5	-2039 / 0	-77.3	-77.3
5-6	-1582 / 0	-77.3	-77.3
6-7	-1582 / 0	-77.3	-77.3
7-8	-1986 / 0	-77.3	-77.3
8-9	-1986 / 0	-77.3	-77.3
9-10	-2137 / 0	-77.3	-77.3
19-2	-1630 / 0	0.0	0.0
11-10	-1517 / 0	0.0	0.0

W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1)
FR-TO			
18-3	-205 / 31	0.05	0.05
3-17	-275 / 0	0.22	0.22
17-5	0 / 247	0.06	0.06
5-15	-655 / 0	0.32	0.32
15-6	0 / 1060	0.24	0.24
15-7	-595 / 0	0.29	0.29
13-7	0 / 199	0.05	0.05
13-9	-187 / 0	0.15	0.15
12-9	-275 / 8	0.07	0.07
2-18	0 / 2075	0.47	0.47
12-10	0 / 1964	0.44	0.44

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
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

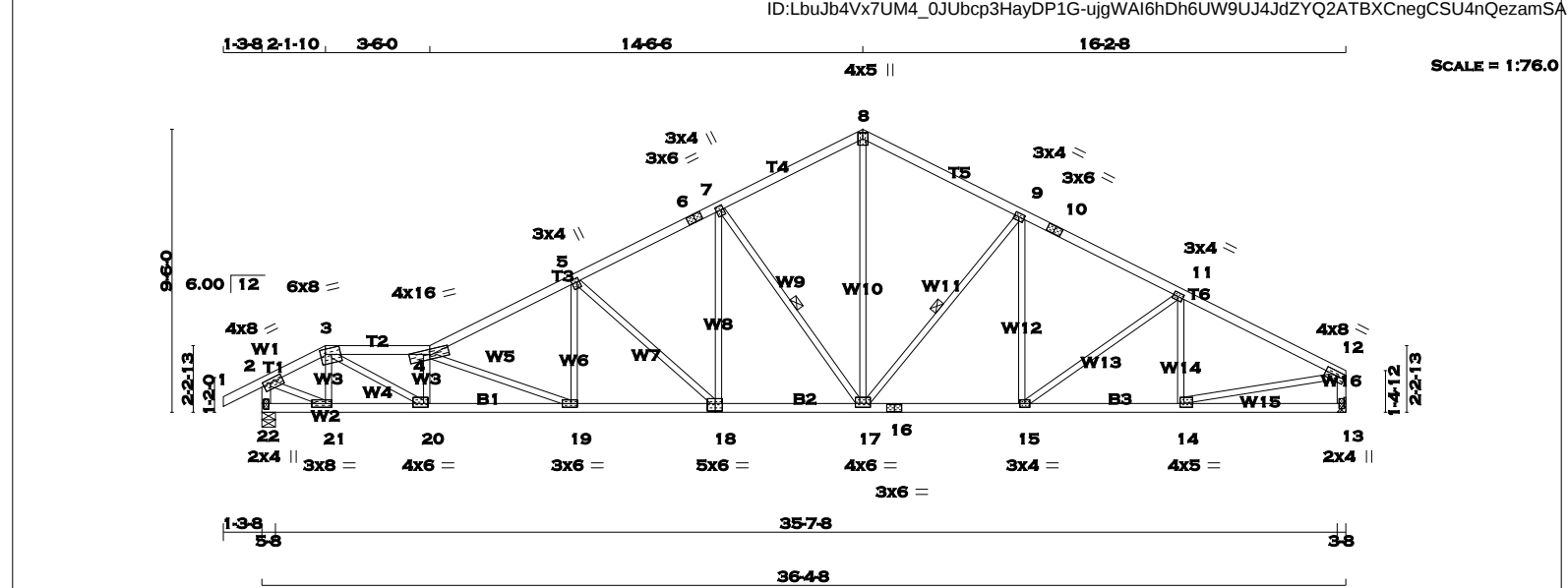
JSI GRIP= 0.90 (10) (INPUT = 0.90)
JSI METAL= 0.62 (18) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 154 = 308 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
8 - 10	2x4	DRY	No.2	SPF
10 - 12	2x4	DRY	No.2	SPF
22 - 2	2x4	DRY	No.2	SPF
13 - 12	2x4	DRY	No.2	SPF
22 - 18	2x4	DRY	No.2	SPF
18 - 16	2x4	DRY	No.2	SPF
16 - 13	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	8.0	1.50 3.00
3	TTWW-m	MT20	6.0	8.0	2.00 2.00
4	TTWW-m	MT20	4.0	16.0	2.00 7.75
5	TMWW-t	MT20	3.0	4.0	1.50 0.75
6	TS-t	MT20	3.0	6.0	
7	TMWW-t	MT20	3.0	4.0	1.75 0.75
8	TTW+p	MT20	4.0	5.0	
9	TMWW-t	MT20	3.0	4.0	1.50 1.75
10	TS-t	MT20	3.0	6.0	
11	TMWW-t	MT20	3.0	4.0	1.50 1.75
12	TMVW-t	MT20	4.0	8.0	1.75 Edge
13	BMV1+p	MT20	2.0	4.0	
14	BMWW-t	MT20	4.0	5.0	1.50 1.50
15	BMWW-t	MT20	3.0	4.0	
16	BS-t	MT20	3.0	6.0	
17	BMWWW-t	MT20	4.0	6.0	1.50 3.00
18	BSWW-l	MT20	5.0	6.0	3.00 2.75
19	BMWW-t	MT20	3.0	6.0	1.50 2.50
20	BMWW-t	MT20	4.0	6.0	1.50 1.75
21	BMWW-t	MT20	3.0	8.0	1.50 2.50
22	BMV1+p	MT20	2.0	4.0	2.25 1.00
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.					
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.					



DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER							
BEARINGS							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
22	1830	0	1830	0	0	5-8	5-8
13	1725	0	1725	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
22	1282	910 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
13	1211	847 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 22

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.25 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 7-17. DBS = 14-0-0. CBF = 90 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 9-17. DBS = 20-0-0. CBF = 71 LBS.

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

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

LOADING			
TOTAL LOAD CASES: (4)			
CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO	FROM TO	FR-TO	FROM TO
1-2	0 / 23	21-3	-615 / 0
2-3	-2069 / 0	4-6	3-20 / 0
3-4	-4145 / 0	20-4	-1307 / 0
4-5	-3345 / 0	4-19	-1300 / 0
5-6	-2557 / 0	19-5	0 / 593
6-7	-2557 / 0	4-11	-968 / 0
7-8	-1907 / 0	18-7	0 / 720
8-9	-1909 / 0	7-17	-1024 / 0
9-10	-2295 / 0	17-8	0 / 1372
10-11	-2295 / 0	17-9	-569 / 0
11-12	-2403 / 0	15-9	0 / 171
22-2	-1826 / 0	15-11	-139 / 0
13-12	-1683 / 0	14-11	-323 / 0
		2-21	0 / 1978
		14-12	0 / 2206
22-21	0 / 0		
21-20	0 / 1814		
20-19	0 / 4215		
19-18	0 / 3008		
18-17	0 / 2287		
17-16	0 / 2052		
16-15	0 / 2052		
15-14	0 / 2165		
14-13	0 / 0		

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

SPACING = 24.0 IN./C

LOADING IN 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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.41")

CSI: TC=0.38 (11-12:1), BC=0.78 (19-20:1), WB=0.74 (5-18:1), SSI=0.18 (11-12:1)

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

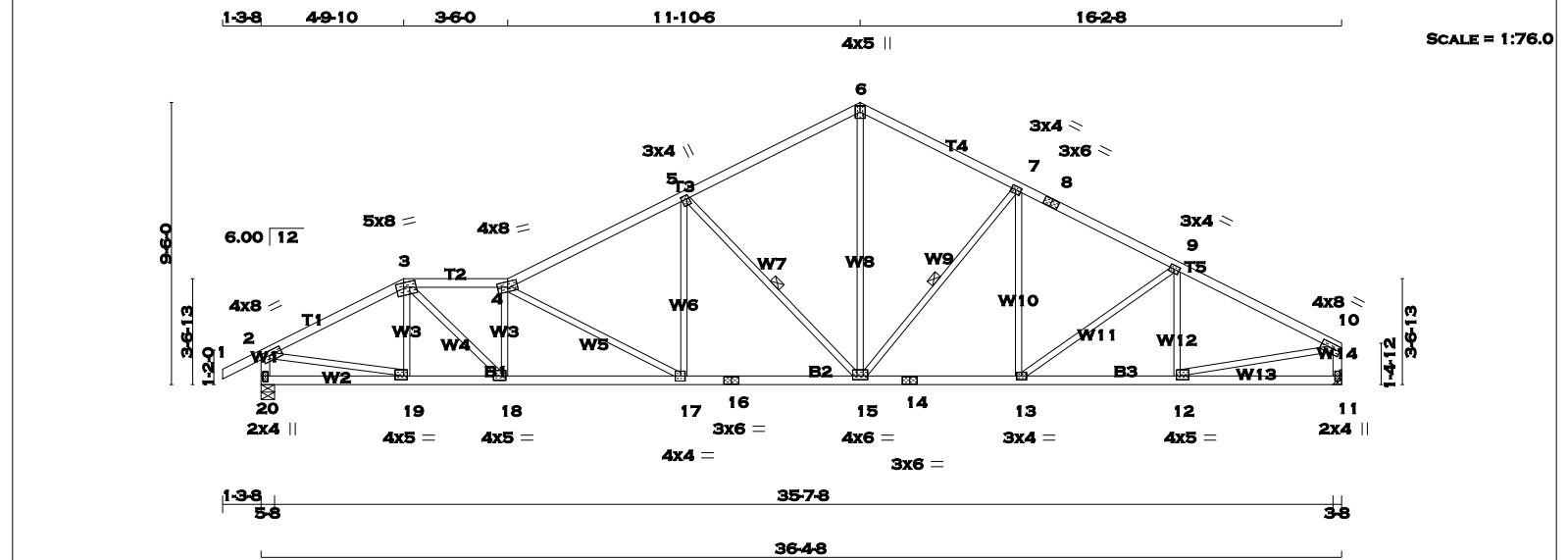
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (3) (INPUT = 0.90)
JSI METAL= 0.65 (14) (INPUT = 1.00)

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TOTAL WEIGHT = 2 X 152 = 303 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2
3 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 10	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
11 - 10	2x4	DRY	No.2
20 - 16	2x4	DRY	No.2
16 - 14	2x4	DRY	No.2
14 - 11	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
2	TMVW-t	MT20	4.0	8.0 1.75 3.00
3	TTWW-m	MT20	5.0	8.0 1.75 3.00
4	TTWW-m	MT20	4.0	8.0 2.25 4.00
5	TMWW+t	MT20	3.0	4.0 1.50 0.75
6	TTW+p	MT20	4.0	5.0
7	TMWW-t	MT20	3.0	4.0 1.50 1.75
8	TS-t	MT20	3.0	6.0
9	TMWW-t	MT20	3.0	4.0 1.50 1.75
10	TMVW-t	MT20	4.0	8.0 1.75 Edge
11	BMV1+p	MT20	2.0	4.0
12	BMWW-t	MT20	4.0	5.0 1.50 1.50
13	BMWW-t	MT20	3.0	4.0
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	BMWWW-t	MT20	4.0	4.0 2.00 1.75
18	BMWWW-t	MT20	4.0	5.0 1.75 1.75
19	BMWWW-t	MT20	4.0	5.0 1.50 1.50
20	BMV1+p	MT20	2.0	4.0 2.25 1.00

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

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

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

BEARINGS			
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION	
JT	VERT	DOWN	UPLIFT
20	1830	0	0
11	1725	0	0

UNFACTORED REACTIONS							
JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1282	910 / 0	0 / 0	0 / 0	0 / 0	372 / 0	0 / 0
11	1211	847 / 0	0 / 0	0 / 0	0 / 0	364 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.66 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-15. DBS = 12-0-0. CBF = 84 LBS.
1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-15. DBS = 20-0-0. CBF = 71 LBS.

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

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

LOADING			
TOTAL LOAD CASES: (4)			
C H O R D S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	W E B S MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH FR-TO
1-2	0 / 23	-77.3 -77.3	10.00
2-3	-2482 / 0	-77.3 -77.3	4.11
3-4	-3349 / 0	-77.3 -77.3	3.66
4-5	-2726 / 0	-77.3 -77.3	3.78
5-6	-1916 / 0	-77.3 -77.3	4.45
6-7	-1909 / 0	-77.3 -77.3	4.59
7-8	-2295 / 0	-77.3 -77.3	4.26
8-9	-2295 / 0	-77.3 -77.3	4.26
9-10	-2403 / 0	-77.3 -77.3	4.11
20-2	-1792 / 0	0.0 0.0	6.24
11-10	-1683 / 0	0.0 0.0	6.40
20-19	0 / 0	-17.5 -17.5	10.00
19-18	0 / 2209	-17.5 -17.5	10.00
18-17	0 / 3381	-17.5 -17.5	10.00
17-16	0 / 2461	-17.5 -17.5	10.00
16-15	0 / 2461	-17.5 -17.5	10.00
15-14	0 / 2052	-17.5 -17.5	10.00
14-13	0 / 2052	-17.5 -17.5	10.00
13-12	0 / 2165	-17.5 -17.5	10.00
12-11	0 / 0	-17.5 -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

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
- 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 (1.21")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.21")
CALCULATED VERT. DEFL.(TL) = L/999 (0.36")

CSI: TC=0.49 (4-5:1), BC=0.62 (17-18:1), WB=0.92 (4-17:1), SSI=0.20 (4-5:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

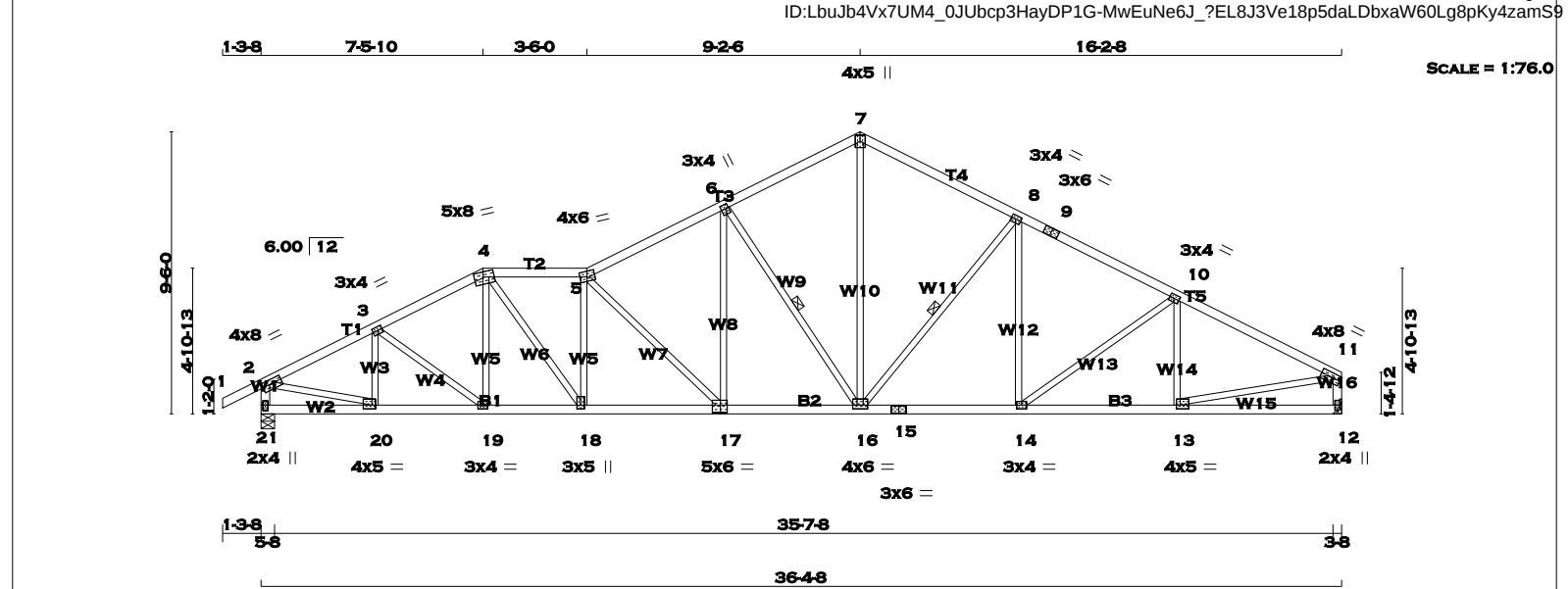
JSI GRIP= 0.90 (3) (INPUT = 0.90)
JSI METAL= 0.66 (19) (INPUT = 1.00)



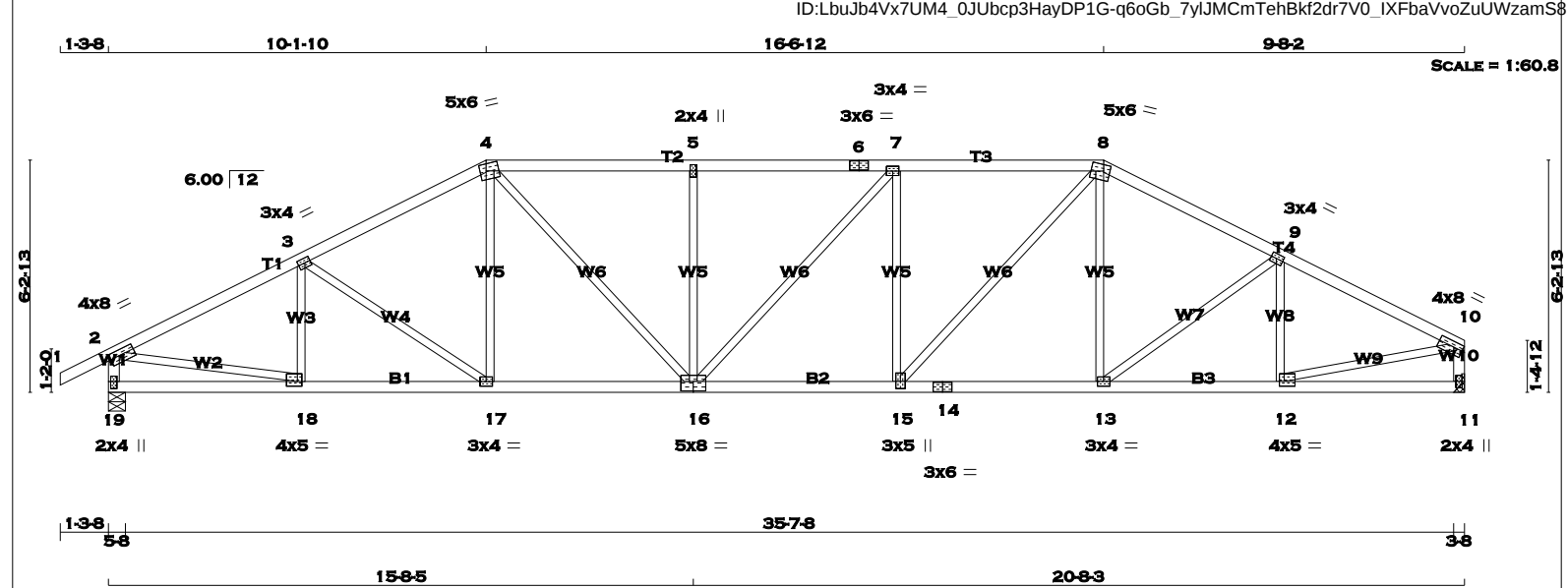
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BUILDING DIVISION

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





LUMBER N. L. G. A. RULES CHORDS SIZE 1 - 4 2x4 DRY No.2 4 - 5 2x4 DRY No.2 5 - 7 2x4 DRY No.2 7 - 9 2x4 DRY No.2 9 - 11 2x4 DRY No.2 21 - 2 2x4 DRY No.2 12 - 11 2x4 DRY No.2 21 - 17 2x4 DRY No.2 17 - 15 2x4 DRY No.2 15 - 12 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 21 1830 0 12 1725 0 MAXIMUM FACTORED GROSS REACTION DOWN HORZ 1830 0 1725 0 INPUT BRG 5-8 5-8 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 21 1282 910 / 0 0 / 0 0 / 0 372 / 0 0 / 0 12 1211 847 / 0 0 / 0 0 / 0 364 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 21 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.96 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 6-16. DBS = 14-0-0. CBF = 89 LBS. 1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 8-16. DBS = 20-0-0. CBF = 71 LBS. DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE. FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4) C H O R D S MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) MAX. LC1 (LC) UNBRAC LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 20-3 -427 / 0 0.08 (1) 2-3 -2413 / 0 -77.3 -77.3 0.19 (1) 4.28 3-19 0 / 77 0.02 (1) 3-4 -2509 / 0 -77.3 -77.3 0.19 (1) 4.22 19-4 0 / 51 0.02 (4) 4-5 -2855 / 0 -77.3 -77.3 0.21 (1) 3.96 4-18 0 / 1050 0.24 (1) 5-6 -2505 / 0 -77.3 -77.3 0.29 (1) 4.13 18-5 -784 / 0 0.28 (1) 6-7 -1909 / 0 -77.3 -77.3 0.25 (1) 4.65 5-17 -868 / 0 0.67 (1) 7-8 -1908 / 0 -77.3 -77.3 0.31 (1) 4.59 17-6 0 / 692 0.16 (1) 8-9 -2295 / 0 -77.3 -77.3 0.32 (1) 4.26 6-16 -1022 / 0 0.48 (1) 9-10 -2295 / 0 -77.3 -77.3 0.32 (1) 4.26 16-7 0 / 1387 0.31 (1) 10-11 -2403 / 0 -77.3 -77.3 0.38 (1) 4.11 16-8 -570 / 0 0.28 (1) 21-2 -1795 / 0 0.0 0.0 0.18 (1) 6.24 14-8 0 / 172 0.04 (4) 12-11 -1683 / 0 0.0 0.0 0.17 (1) 6.40 14-10 -139 / 0 0.11 (1) 13-10 -323 / 0 0.0 0.0 0.17 (1) 6.40 13-10 -323 / 0 0.09 (1) 21-20 0 / 0 -17.5 -17.5 0.05 (4) 10.00 2-20 0 / 2222 0.50 (1) 20-19 0 / 2169 -17.5 -17.5 0.38 (1) 10.00 13-11 0 / 2206 0.50 (1) 19-18 0 / 2231 -17.5 -17.5 0.39 (1) 10.00 18-17 0 / 2872 -17.5 -17.5 0.51 (1) 10.00 17-16 0 / 2259 -17.5 -17.5 0.42 (1) 10.00 16-15 0 / 2052 -17.5 -17.5 0.39 (1) 10.00 15-14 0 / 2052 -17.5 -17.5 0.39 (1) 10.00 14-13 0 / 2164 -17.5 -17.5 0.39 (1) 10.00 13-12 0 / 0 -17.5 -17.5 0.12 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN 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 (1.21") CALCULATED VERT. DEFL.(LL)= L/999 (0.17") ALLOWABLE DEFL.(TL)= L/360 (1.21") CALCULATED VERT. DEFL.(TL)= L/999 (0.31") CSI: TC=0.38 (10-11:1), BC=0.51 (17-18:1), WB=0.67 (5-17:1), SSI=0.18 (10-11:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 0.50 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 618 354 1667 822 2284 1656 PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (18) (INPUT = 0.90) JSI METAL= 0.65 (20) (INPUT = 1.00)			
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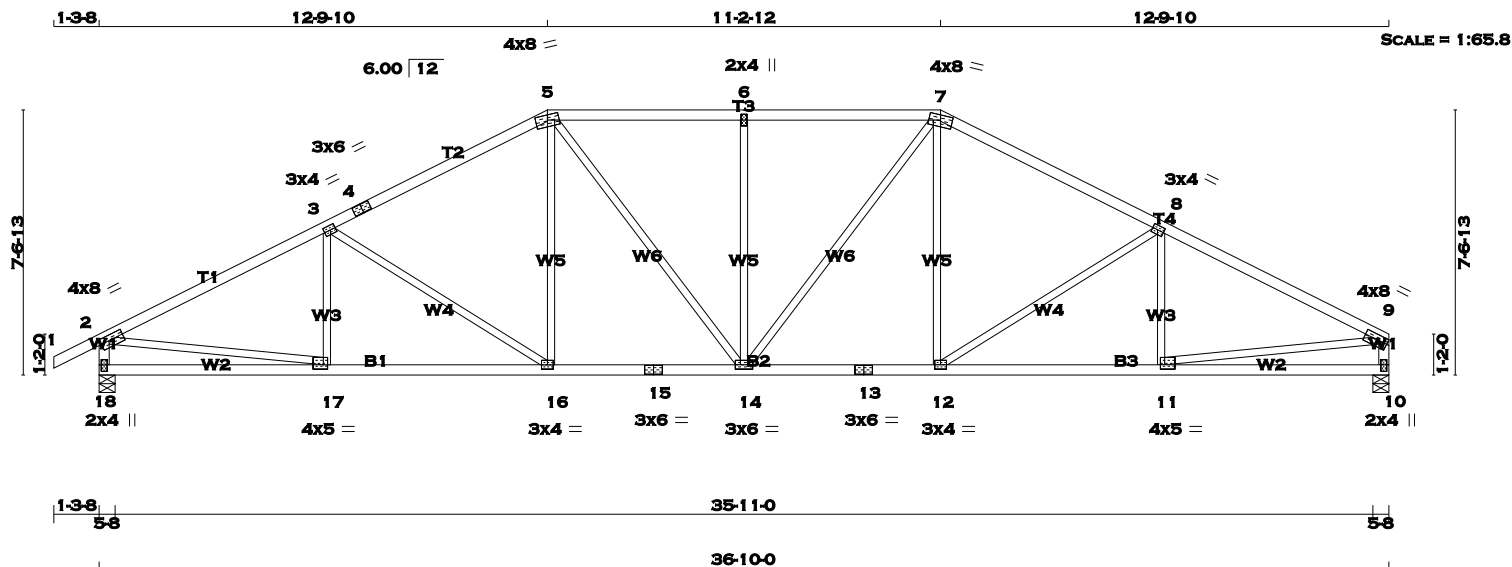
LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. LUMBER DESCR. 1 - 4 2x4 DRY No.2 SPF 4 - 6 2x4 DRY No.2 SPF 6 - 8 2x4 DRY No.2 SPF 8 - 10 2x4 DRY No.2 SPF 19 - 2 2x4 DRY No.2 SPF 11 - 10 2x4 DRY No.2 SPF 19 - 16 2x4 DRY No.2 SPF 16 - 14 2x4 DRY No.2 SPF 14 - 11 2x4 DRY No.2 SPF ALL WEBS 2x3 DRY No.2 SPF EXCEPT DRY: SEASONED LUMBER.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS FACTORED MAXIMUM FACTORED INPUT REQ'D GROSS REACTION GROSS REACTION BRG BRG JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX 19 1830 0 1830 0 0 5-8 5-8 11 1725 0 1725 0 0 HANGER BY OTHERS MIN. SEAT SIZE: 3-8 UNFACTORED REACTIONS 1ST LCASE MAX./MIN. COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL 19 1282 910 / 0 0 / 0 0 / 0 0 / 0 372 / 0 0 / 0 11 1211 847 / 0 0 / 0 0 / 0 0 / 0 364 / 0 0 / 0 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19 BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.95 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (4) CHORDS WEBS MEMB. MAX. FACTORED FORCE (LBS) VERT. LOAD (PLF) LC1 MAX. MAX. UNBRAC. MEMB. MAX. FACTORED FORCE (LBS) MAX. CSI (LC) FR-TO FROM TO LENGTH FR-TO 1-2 0 / 23 -77.3 -77.3 0.10 (1) 10.00 18-3 -292 / 0 0.07 (1) 2-3 -2544 / 0 -77.3 -77.3 0.34 (1) 4.05 3-17 -196 / 0 0.13 (1) 3-4 -2403 / 0 -77.3 -77.3 0.32 (1) 4.16 17-4 0 / 209 0.05 (1) 4-5 -2632 / 0 -77.3 -77.3 0.38 (1) 3.95 4-16 0 / 730 0.16 (1) 5-6 -2632 / 0 -77.3 -77.3 0.35 (1) 3.99 16-5 -461 / 0 0.28 (1) 6-7 -2632 / 0 -77.3 -77.3 0.35 (1) 3.99 16-7 0 / 27 0.01 (1) 7-8 -2614 / 0 -77.3 -77.3 0.37 (1) 3.96 15-7 -483 / 0 0.30 (1) 8-9 -2335 / 0 -77.3 -77.3 0.29 (1) 4.24 15-8 0 / 792 0.18 (1) 9-10 -2366 / 0 -77.3 -77.3 0.30 (1) 4.21 13-8 0 / 142 0.04 (4) 19-2 -1788 / 0 0.0 0.0 0.18 (1) 6.25 13-9 -78 / 0 0.05 (1) 11-10 -1685 / 0 0.0 0.0 0.17 (1) 6.39 12-9 -384 / 0 0.09 (1) 2-18 0 / 2324 0.52 (1) 19-18 0 / 0 -17.5 -17.5 0.09 (4) 10.00 12-10 0 / 2184 0.49 (1) 18-17 0 / 2292 -17.5 -17.5 0.43 (1) 10.00 17-16 0 / 2133 -17.5 -17.5 0.40 (1) 10.00 16-15 0 / 2614 -17.5 -17.5 0.47 (1) 10.00 15-14 0 / 2072 -17.5 -17.5 0.39 (1) 10.00 14-13 0 / 2072 -17.5 -17.5 0.39 (1) 10.00 13-12 0 / 2133 -17.5 -17.5 0.40 (1) 10.00 12-11 0 / 0 -17.5 -17.5 0.09 (4) 10.00				DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 23.3 PSF DL = 3.0 PSF BOT CH. LL = 0.0 PSF DL = 7.0 PSF TOTAL LOAD = 33.3 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010 THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011 (55 % OF 27.2 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.21") CALCULATED VERT. DEFL.(LL) = L/999 (0.16") ALLOWABLE DEFL.(TL)= L/360 (1.21") CALCULATED VERT. DEFL.(TL) = L/999 (0.29") CSI: TC=0.38 (4-5:1), BC=0.47 (15-16:1), WB=0.52 (2-18:1), 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= 0.88 (11) (INPUT = 0.90) JSI METAL= 0.69 (18) (INPUT = 1.00)			
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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 = 2 X 151 = 301 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2
5 - 7	2x4	DRY	No.2
7 - 9	2x4	DRY	No.2
18 - 2	2x4	DRY	No.2
10 - 9	2x4	DRY	No.2
18 - 15	2x4	DRY	No.2
15 - 13	2x4	DRY	No.2
13 - 10	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	4.0	8.0	1.75	3.00
3	TMVW-t	MT20	3.0	4.0	1.50	1.75
4	TS-t	MT20	3.0	6.0		
5	TTWW-m	MT20	4.0	8.0	1.75	4.00
6	TMW-w	MT20	2.0	4.0		
7	TTWW-m	MT20	4.0	8.0	1.75	4.00
8	TMVW-t	MT20	3.0	4.0	1.50	1.75
9	TMVW-t	MT20	4.0	8.0	1.75	Edge
10	BMV1+p	MT20	2.0	4.0	2.25	1.00
11	BMVW-t	MT20	4.0	5.0	1.50	1.50
12	BMVW-t	MT20	3.0	4.0		
13	BS-t	MT20	3.0	6.0		
14	BMVW-t	MT20	3.0	6.0		
15	BS-t	MT20	3.0	6.0		
16	BMVW-t	MT20	3.0	4.0		
17	BMVW-t	MT20	4.0	5.0	1.50	1.50
18	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
18	1852	0	1852	0	0	5-8	5-8	
10	1747	0	1747	0	0	5-8	5-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX/MIN. SNOW		LIVE		PERM. LIVE		WIND		DEAD		SOIL	
	18	10	1297	921 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	376 / 0	368 / 0	0 / 0	0 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. VERT. LOAD LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	17-3	-193 / 51	0.06 (1)
2-3	-2635 / 0	-77.3	-77.3 0.58 (1)	3.75	3-16	-439 / 0	0.51 (1)
3-4	-2275 / 0	-77.3	-77.3 0.51 (1)	4.05	16-5	0 / 345	0.08 (1)
4-5	-2275 / 0	-77.3	-77.3 0.51 (1)	4.05	5-14	0 / 392	0.09 (1)
5-6	-2255 / 0	-77.3	-77.3 0.38 (1)	4.19	14-6	-531 / 0	0.55 (1)
6-7	-2255 / 0	-77.3	-77.3 0.38 (1)	4.19	14-7	0 / 392	0.09 (1)
7-8	-2276 / 0	-77.3	-77.3 0.51 (1)	4.05	12-7	0 / 345	0.08 (1)
8-9	-2635 / 0	-77.3	-77.3 0.57 (1)	3.75	12-8	-439 / 0	0.51 (1)
18-2	-1803 / 0	0.0	0.0 0.18 (1)	6.23	11-8	-193 / 51	0.06 (1)
10-9	-1698 / 0	0.0	0.0 0.17 (1)	6.38	2-17	0 / 2401	0.54 (1)
					11-9	0 / 2400	0.54 (1)
18-17	0 / 0	-17.5	-17.5 0.17 (4)	10.00			
17-16	0 / 2380	-17.5	-17.5 0.45 (1)	10.00			
16-15	0 / 2015	-17.5	-17.5 0.39 (1)	10.00			
15-14	0 / 2015	-17.5	-17.5 0.39 (1)	10.00			
14-13	0 / 2015	-17.5	-17.5 0.39 (1)	10.00			
13-12	0 / 2015	-17.5	-17.5 0.39 (1)	10.00			
12-11	0 / 2380	-17.5	-17.5 0.45 (1)	10.00			
11-10	0 / 0	-17.5	-17.5 0.17 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.58 (2-3:1), BC=0.45 (16-17:1), WB=0.55 (6-14:1), 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.

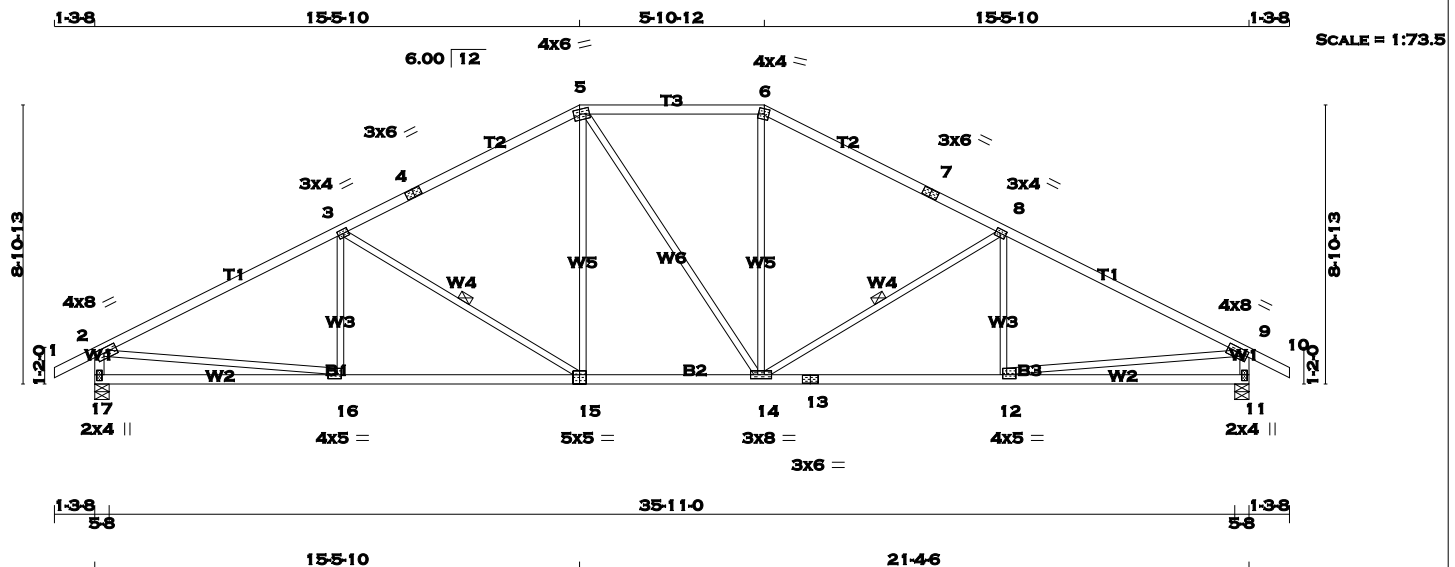
JSI GRIP= 0.87 (11) (INPUT = 0.90)
JSI METAL= 0.71 (17) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 149 = 298 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2
5 - 6	2x4	DRY	No.2
6 - 7	2x4	DRY	No.2
7 - 10	2x4	DRY	No.2
17 - 2	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 13	2x4	DRY	No.2
13 - 11	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			SPF
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-t	MT20	4.0	8.0	1.75 3.00
3	TMWW-t	MT20	3.0	4.0	1.50 1.75
4	TS-t	MT20	3.0	6.0	
5	TTWW-m	MT20	4.0	6.0	1.75 2.25
6	TTW-m	MT20	4.0	4.0	2.00 1.75
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	8.0	1.75 3.00
11	BMV1+p	MT20	2.0	4.0	2.25 1.00
12	BMWW-t	MT20	4.0	5.0	1.50 1.50
13	BS-t	MT20	3.0	6.0	
14	BMWWW-t	MT20	3.0	8.0	
15	BSWW-l	MT20	5.0	5.0	Edge 2.50
16	BMWW-t	MT20	4.0	5.0	1.50 1.50
17	BMV1+p	MT20	2.0	4.0	2.25 1.00

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

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

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	UP
17		1852	0	0	5-8
11		1852	0	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
JT		COMBINED	SNOW	LIVE
17		1297	921 / 0	0 / 0
11		1297	921 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 17, 11

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 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 3-15, 8-14. DBS = 20-0-0. CBF = 84 LBS.

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

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	16-3	-109 / 99	0.04 (1)
2-3	-2644 / 0	-77.3 -77.3	0.90 (1)	3.33	3-15	-669 / 0	0.39 (1)
3-4	-2073 / 0	-77.3 -77.3	0.77 (1)	3.83	15-5	0 / 464	0.10 (1)
4-5	-2073 / 0	-77.3 -77.3	0.77 (1)	3.83	5-14	0 / 0	0.00 (1)
5-6	-1830 / 0	-77.3 -77.3	0.40 (1)	4.54	14-6	0 / 465	0.10 (1)
6-7	-2074 / 0	-77.3 -77.3	0.77 (1)	3.82	14-8	-668 / 0	0.39 (1)
7-8	-2074 / 0	-77.3 -77.3	0.77 (1)	3.82	12-8	-110 / 99	0.04 (1)
8-9	-2644 / 0	-77.3 -77.3	0.90 (1)	3.33	2-16	0 / 2407	0.54 (1)
9-10	0 / 23	-77.3 -77.3	0.10 (1)	10.00	12-9	0 / 2407	0.54 (1)
17-2	-1795 / 0	0.0	0.0	0.18 (1)			
11-9	-1795 / 0	0.0	0.0	0.18 (1)			
17-16	0 / 0	-17.5 -17.5	0.26 (4)	10.00			
16-15	0 / 2393	-17.5 -17.5	0.51 (1)	10.00			
15-14	0 / 1830	-17.5 -17.5	0.38 (1)	10.00			
14-13	0 / 2393	-17.5 -17.5	0.51 (1)	10.00			
13-12	0 / 2393	-17.5 -17.5	0.51 (1)	10.00			
12-11	0 / 0	-17.5 -17.5	0.26 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.23")
CALCULATED VERT. DEFL.(LL)= L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL)= L/999 (0.29")

CSI: TC=0.90 (2-3:1), BC=0.51 (15-16:1), WB=0.54 (2-16:1), SSI=0.26 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

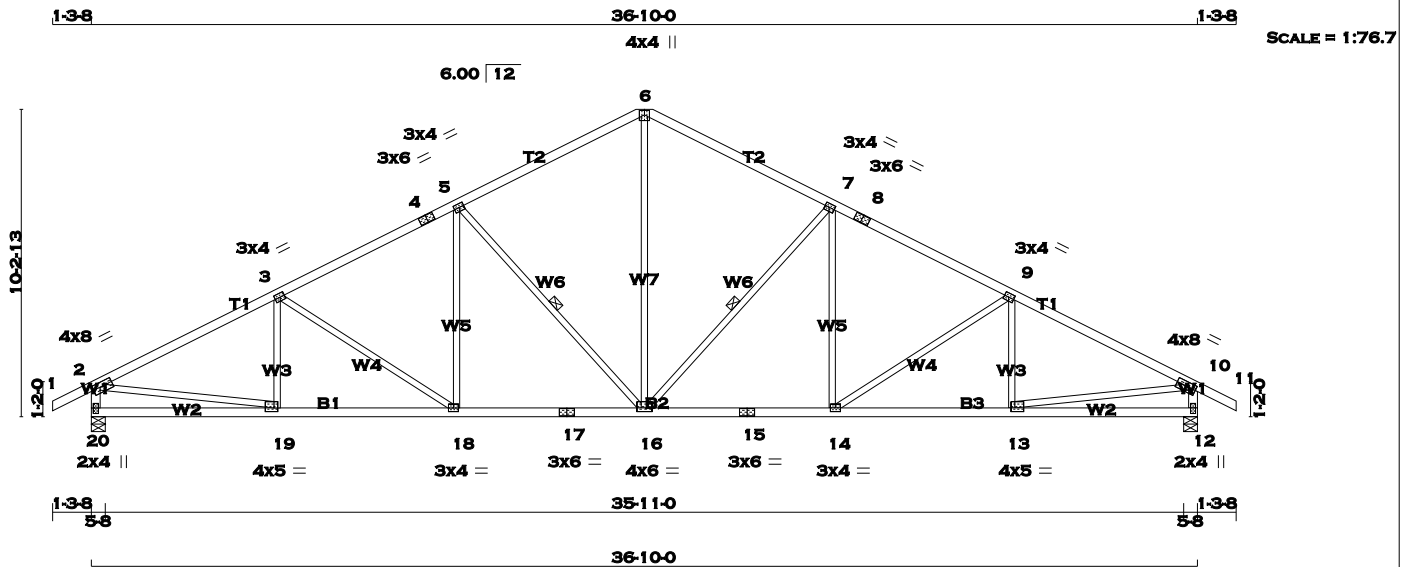
JSI GRIP= 0.87 (16) (INPUT = 0.90)
JSI METAL= 0.72 (16) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 154 = 308 lb
[M][F]

LUMBER		N. L. G. A. RULES		LUMBER	DESCR.
CHORDS	SIZE				
1 - 4	2x4	DRY	No.2	SPF	SPF
4 - 6	2x4	DRY	No.2		
6 - 8	2x4	DRY	No.2		
8 - 11	2x4	DRY	No.2		
20 - 2	2x4	DRY	No.2		
12 - 10	2x4	DRY	No.2		
20 - 17	2x4	DRY	No.2		
17 - 15	2x4	DRY	No.2		
15 - 12	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	4.0	8.0	1.75 3.00
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	4.0	4.0	1.75 2.00
8	TS-t	MT20	3.0	6.0	
10	TMVW-t	MT20	4.0	8.0	1.75 3.00
12	BMV1+p	MT20	2.0	4.0	2.25 1.00
13	BMVW-t	MT20	4.0	5.0	1.50 1.50
14	BMVW-t	MT20	3.0	4.0	
15	BS-t	MT20	3.0	6.0	
16	BMVW-t	MT20	4.0	6.0	1.50 3.00
17	BS-t	MT20	3.0	6.0	
18	BMVW-t	MT20	3.0	4.0	
19	BMVW-t	MT20	4.0	5.0	1.50 1.50
20	BMV1+p	MT20	2.0	4.0	2.25 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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
20	1852	0	1852	0	0	5-8	5-8
12	1852	0	1852	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0
12	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 12

BRACING

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

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

1 - 2x3 SPF No.2 LATERAL BRACE(S) AT 1/2 LENGTH OF 5-16, 7-16. DBS = 20-0-0. CBF = 92 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 23	-77.3 -77.3	0.10 (1)	10.00	19-3	-213 / 37	0.06 (1)
2-3	-2612 / 0	-77.3 -77.3	0.50 (1)	3.86	3-18	-306 / 0	0.30 (1)
3-4	-2344 / 0	-77.3 -77.3	0.42 (1)	4.13	18-5	0 / 273	0.06 (1)
4-5	-2344 / 0	-77.3 -77.3	0.42 (1)	4.13	5-16	-738 / 0	0.45 (1)
5-6	-1814 / 0	-77.3 -77.3	0.43 (1)	4.55	16-7	-738 / 0	0.45 (1)
6-7	-1814 / 0	-77.3 -77.3	0.43 (1)	4.55	14-7	0 / 273	0.06 (1)
7-8	-2344 / 0	-77.3 -77.3	0.42 (1)	4.13	14-9	-306 / 0	0.30 (1)
8-9	-2344 / 0	-77.3 -77.3	0.42 (1)	4.13	13-9	-213 / 37	0.06 (1)
9-10	-2612 / 0	-77.3 -77.3	0.50 (1)	3.86	2-19	0 / 2376	0.53 (1)
10-11	0 / 23	-77.3 -77.3	0.10 (1)	10.00	13-10	0 / 2376	0.53 (1)
20-2	-1805 / 0	0.0 0.0	0.18 (1)	6.23	16-6	0 / 1211	0.27 (1)
12-10	-1805 / 0	0.0 0.0	0.18 (1)	6.23			
20-19	0 / 0	-17.5 -17.5	0.15 (4)	10.00			
19-18	0 / 2354	-17.5 -17.5	0.44 (1)	10.00			
18-17	0 / 2098	-17.5 -17.5	0.42 (1)	10.00			
17-16	0 / 2098	-17.5 -17.5	0.42 (1)	10.00			
16-15	0 / 2098	-17.5 -17.5	0.42 (1)	10.00			
15-14	0 / 2098	-17.5 -17.5	0.42 (1)	10.00			
14-13	0 / 2354	-17.5 -17.5	0.44 (1)	10.00			
13-12	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
- 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 (1.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.28")

CSI: TC=0.50 (2-3:1), BC=0.44 (13-14:1), WB=0.53 (10-13:1), 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= 0.90 (6) (INPUT = 0.90)
JSI METAL= 0.71 (13) (INPUT = 1.00)



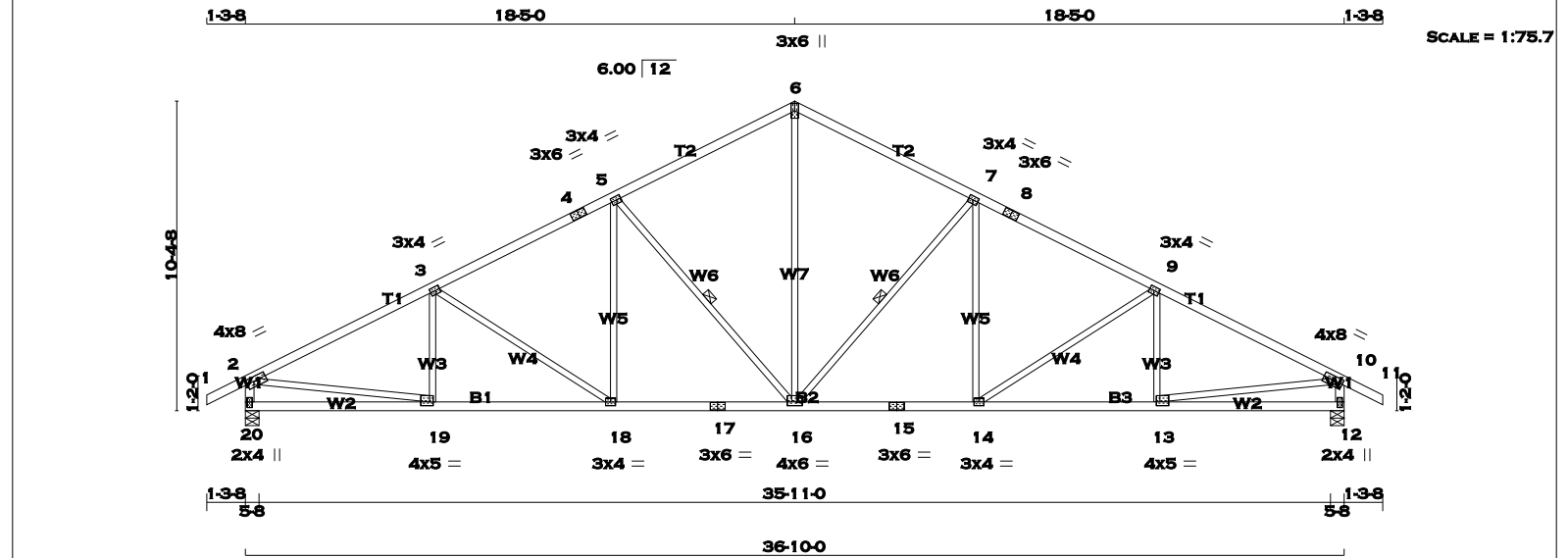
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TOTAL WEIGHT = 6 X 155 = 929 lb
[M][F]

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 6	2x4	DRY	No.2
6 - 8	2x4	DRY	No.2
8 - 11	2x4	DRY	No.2
20 - 2	2x4	DRY	No.2
12 - 10	2x4	DRY	No.2
20 - 17	2x4	DRY	No.2
17 - 15	2x4	DRY	No.2
15 - 12	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	4.0	8.0	1.75 3.00
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	6.0	
8	TS-t	MT20	3.0	6.0	
10	TMVW-t	MT20	4.0	8.0	1.75 3.00
12	BMV1+p	MT20	2.0	4.0	2.25 1.00
13	BMWW-t	MT20	4.0	5.0	1.50 1.50
14	BMWW-t	MT20	3.0	4.0	
15	BS-t	MT20	3.0	6.0	
16	BMWWW-t	MT20	4.0	6.0	1.50 3.00
17	BS-t	MT20	3.0	6.0	
18	BMWW-t	MT20	3.0	4.0	
19	BMWW-t	MT20	4.0	5.0	1.50 1.50
20	BMV1+p	MT20	2.0	4.0	2.25 1.00

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	
JT	VERT	DOWN	HORZ
20	1852	0	1852
12	1852	0	1852

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
20	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0
12	1297	921 / 0	0 / 0	0 / 0	0 / 0	376 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 20, 12

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 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 7-16, 5-16. DBS = 20-0-0 . CBF = 92 LBS.

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

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

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		
1-2	0 / 23	-77.3	-77.3 0.10 (1)	10.00	16-6	0 / 1225	0.28 (1)
2-3	-2616 / 0	-77.3	-77.3 0.52 (1)	3.85	16-7	-735 / 0	0.44 (1)
3-4	-2330 / 0	-77.3	-77.3 0.42 (1)	4.14	14-7	0 / 283	0.06 (1)
4-5	-2330 / 0	-77.3	-77.3 0.42 (1)	4.14	14-9	-327 / 0	0.34 (1)
5-6	-1813 / 0	-77.3	-77.3 0.40 (1)	4.58	13-9	-206 / 41	0.06 (1)
6-7	-1813 / 0	-77.3	-77.3 0.40 (1)	4.58	5-16	-735 / 0	0.44 (1)
7-8	-2330 / 0	-77.3	-77.3 0.42 (1)	4.14	18-5	0 / 283	0.06 (1)
8-9	-2330 / 0	-77.3	-77.3 0.42 (1)	4.14	3-18	-327 / 0	0.34 (1)
9-10	-2616 / 0	-77.3	-77.3 0.52 (1)	3.85	19-3	-206 / 41	0.06 (1)
10-11	0 / 23	-77.3	-77.3 0.10 (1)	10.00	2-19	0 / 2379	0.54 (1)
20-2	-1804 / 0	0.0	0.0 0.18 (1)	6.23	13-10	0 / 2379	0.54 (1)
12-10	-1804 / 0	0.0	0.0 0.18 (1)	6.23			

20-19	0 / 0	-17.5	-17.5 0.15 (4)	10.00
19-18	0 / 2357	-17.5	-17.5 0.44 (1)	10.00
18-17	0 / 2084	-17.5	-17.5 0.41 (1)	10.00
17-16	0 / 2084	-17.5	-17.5 0.41 (1)	10.00
16-15	0 / 2084	-17.5	-17.5 0.41 (1)	10.00
15-14	0 / 2084	-17.5	-17.5 0.41 (1)	10.00
14-13	0 / 2357	-17.5	-17.5 0.44 (1)	10.00
13-12	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 (1.23")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.23")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.27")

CSI: TC=0.52 (2-3:1) , BC=0.44 (13-14:1) , WB=0.54 (10-13:1) , 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)
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 (6) (INPUT = 0.90)
JSI METAL= 0.71 (13) (INPUT = 1.00)



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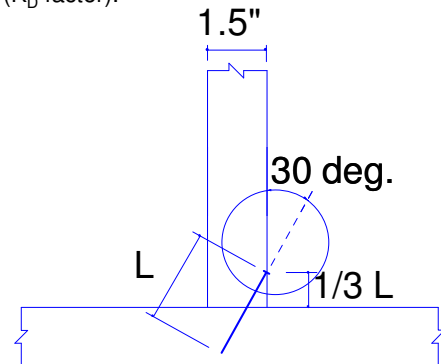
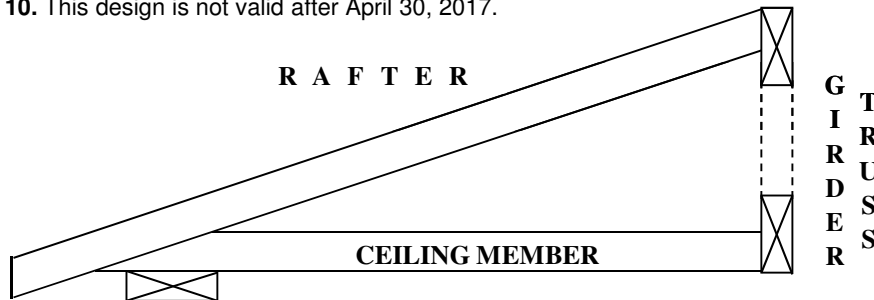
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

NOTES:

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



TOE-NAIL INSTALLATION

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



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100 Industrial Rd.
Bradford, Ontario L3Z 3G7

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April 24, 2015

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

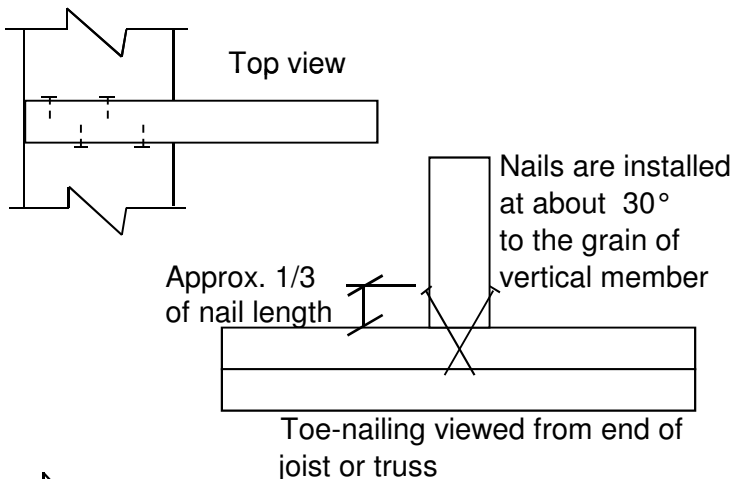
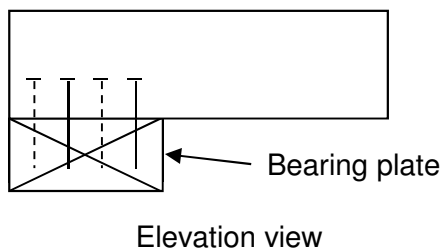
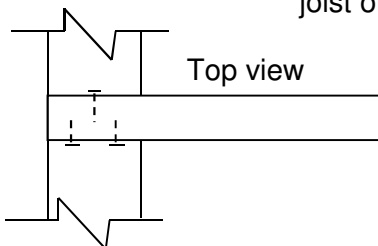
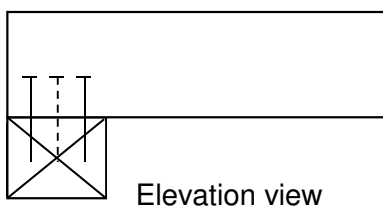
B37579H2

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

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

NOTES:

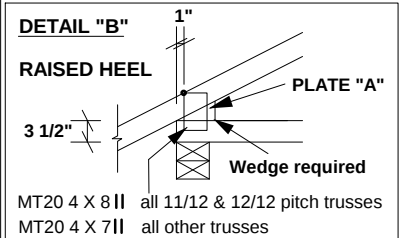
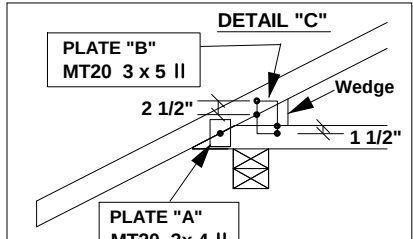
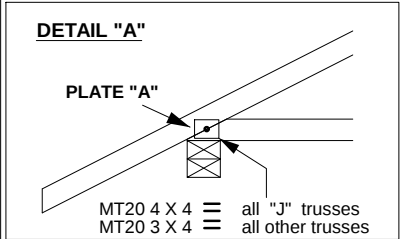
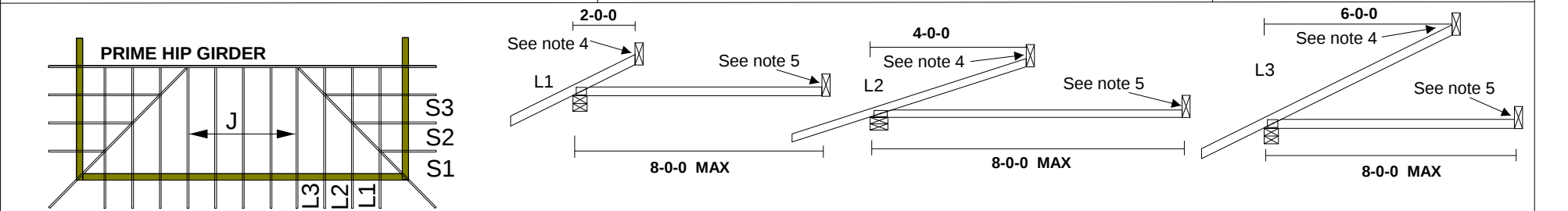
1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are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

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

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100 Industrial Rd.
Bradford, Ontario L3Z 3G7



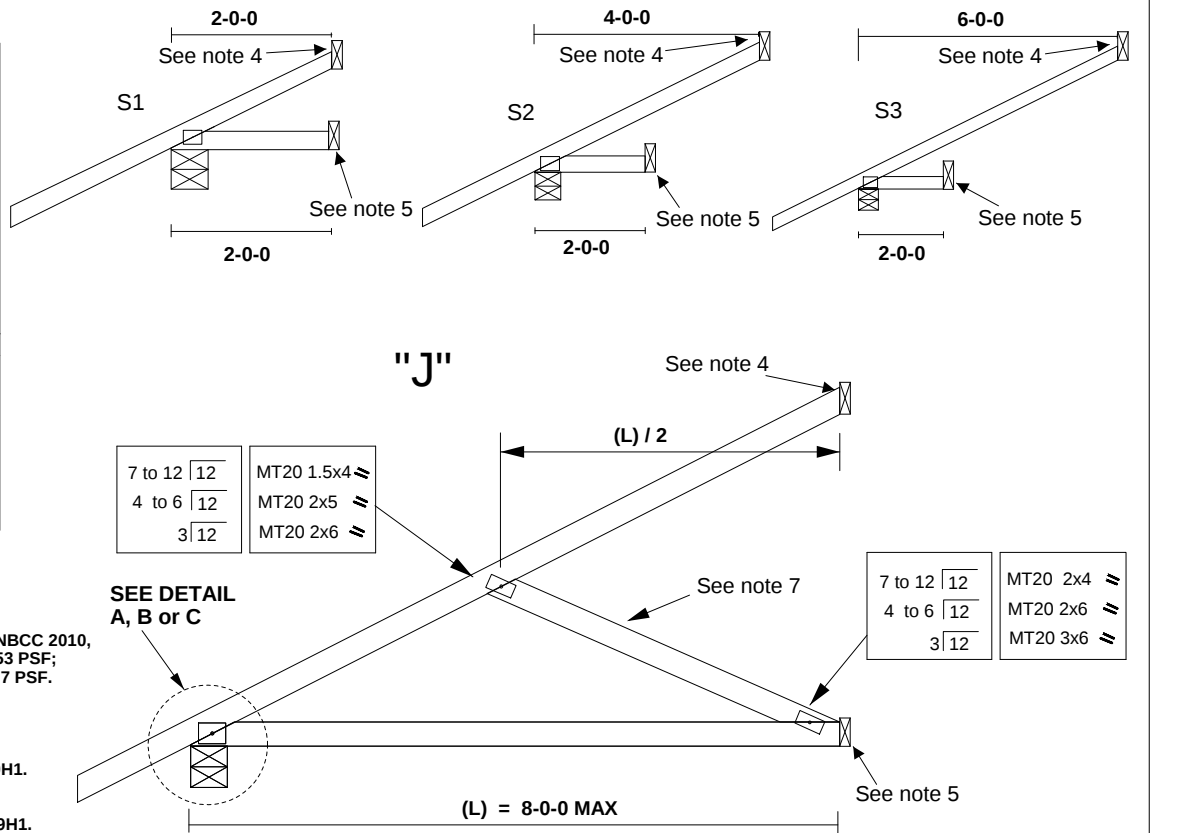
April 24, 2015



CANTILEVER DETAIL "C"

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

- 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



MiTek Canada, Inc.

100 Industrial Rd.
Bradford, Ontario, L3Z 3G7

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STANDARD GABLE END DETAIL

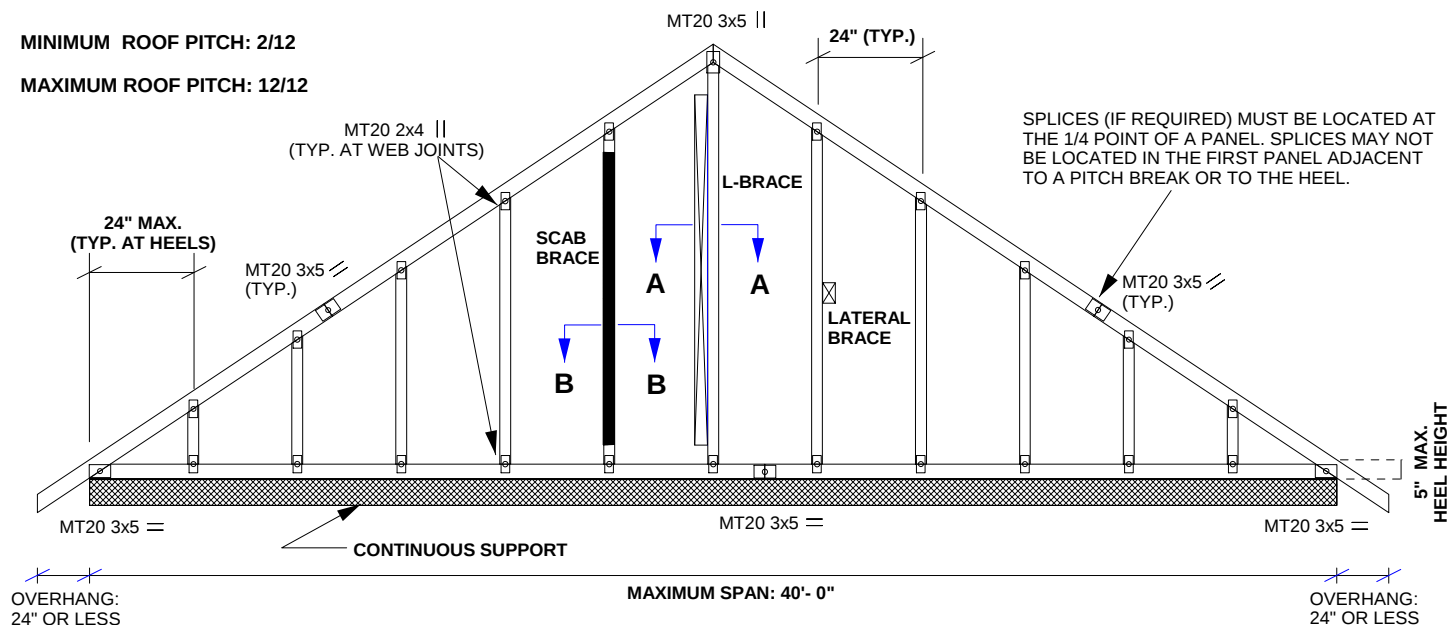
LECCO RIDGE-BLOCK 339

DRAWING NO.: B37579K

ENR 108 PTO 017-082

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

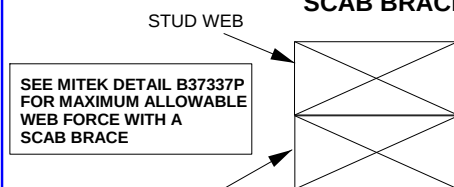
TOTAL LOAD = 73.0 PSF OR LESS

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:

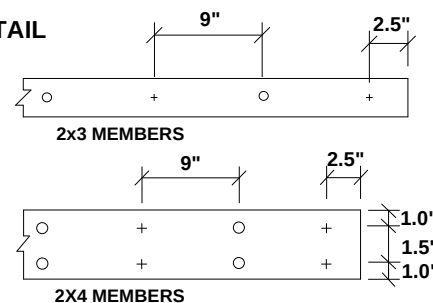
WEB LENGTH (L)	SCAB BRACE	L-BRACE	LATERAL BRACE
L < 6 FT.	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED
6 FT. < L < 12 FT.	REQUIRED	2x4 L-BRACE	1 LATERAL AT 1/2 LENGTH OF WEB

SCAB BRACE DETAIL



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

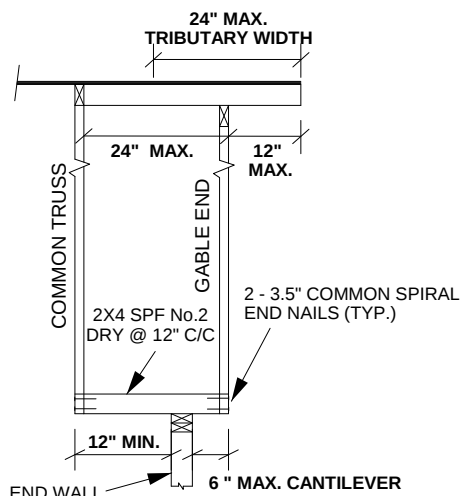
SECTION B-B



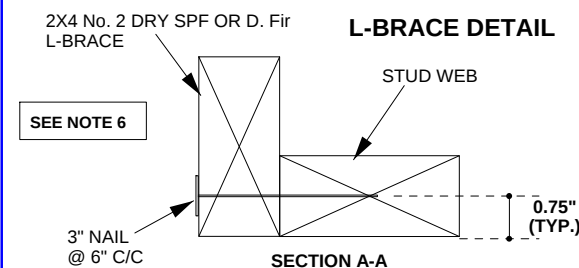
FASTEN SCAB BRACE TO ONE FACE OF WEB WITH 9-3/4 GAUGE 0.122" X 3" COMMON SPIRAL NAILS SPACED @ 9" C/C (MAX) WITH 2.5" MINIMUM END DISTANCE. SCAB BRACE MUST COVER 90% OF WEB LENGTH. DRIVE NAILS ALTERNATELY FROM FRONT AND BACK FACES.

CANTILEVER DETAIL

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



L-BRACE DETAIL



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

NOTES:

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

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