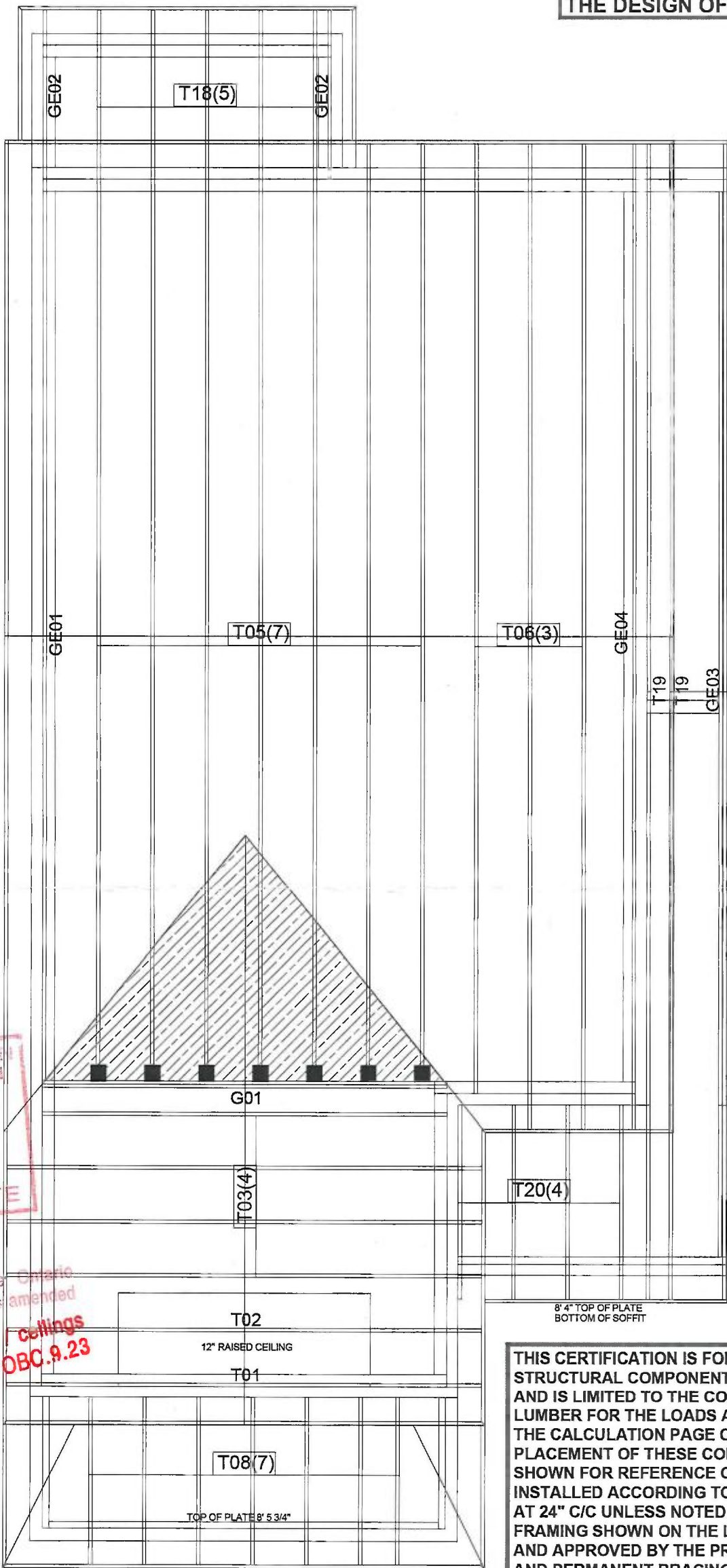


READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.



Roof Trusses 18-411410 000 00R



CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
JAN 05 2019
BY
MARY FRANETTE

All work shall conform to the Ontario
Building Code O. Reg. 332/12 as amended
For conventional framing roof / ceilings
framing shall conform to OBC.9.23

THIS CERTIFICATION IS FOR THE ENGINEERING REVIEW OF
STRUCTURAL COMPONENTS SHOWN ON THIS DRAWING
AND IS LIMITED TO THE COMPONENTS SUPPLIED BY KOTT
LUMBER FOR THE LOADS AND CONDITIONS SHOWN ON
THE CALCULATION PAGE OF EACH COMPONENT. THE
PLACEMENT OF THESE COMPONENTS ON THIS LAYOUT IS
SHOWN FOR REFERENCE ONLY. ROOF TRUSSES MUST BE
INSTALLED ACCORDING TO MANUFACTURER'S GUIDELINES
AT 24" C/C UNLESS NOTED OTHERWISE. CONVENTIONAL
FRAMING SHOWN ON THE LAYOUT MUST BE DESIGNED
AND APPROVED BY THE PROJECT ENGINEER. TEMPORARY
AND PERMANENT BRACINGS OF THE ROOF AND BUILDING
ARE THE RESPONSIBILITY OF THE PROJECT ENGINEER
AND TO CONFORM TO BCSI GUIDELINES.

Architectural Drawing Info:
Date: JULY 23, 2018
Project number: 18012
Model: HEMLOCK 3

18-411410-00-00R 37R



CONVENTIONAL
FRAMING BY OTHERS
ALL CONVENTIONAL FRAMING TO CONFORM WITH
PART 9 OF THE O.B.C.
ROOF RAFTERS THAT CROSS MEET OVER TRUSSES
TO BE 2x4 S.P.F. @ 24" O/C WITH A 2x4 VERTICAL
POST TO THE TRUSS UNDERNEATH EACH CROSS
POINT. VERTICAL POST LONGER THAN 6' TO HAVE
LATERAL BRACING SO THAT THE DISTANCE BETWEEN
END POINT AND BETWEEN ROWS OF BRACING
DOES NOT EXCEED 6'.
SIZE AND LOCATION OF CONVENTIONAL FRAMING
IS APPROXIMATE. ALL AREAS MAY NOT BE SHOWN.
REFER TO ARCHITECTURAL PLANS FOR DETAILS.

HANGER LEGEND:
▼ LUS24
■ LJS26DS
● HGUS26
X HGUS26-2

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3 PSF
BOT CH. LL = 0 PSF
DL = 7 PSF
TOTAL LOAD = 33.3 PSF
SPACING = 24" O/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

Model: HEMLOCK 3 EL 2
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/22/2018 Drawn by: BB

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

NE0818-099
GREENPARK-MINNISALE
HOMES-HEMLOCK 3 EL 2

Lot 37R

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

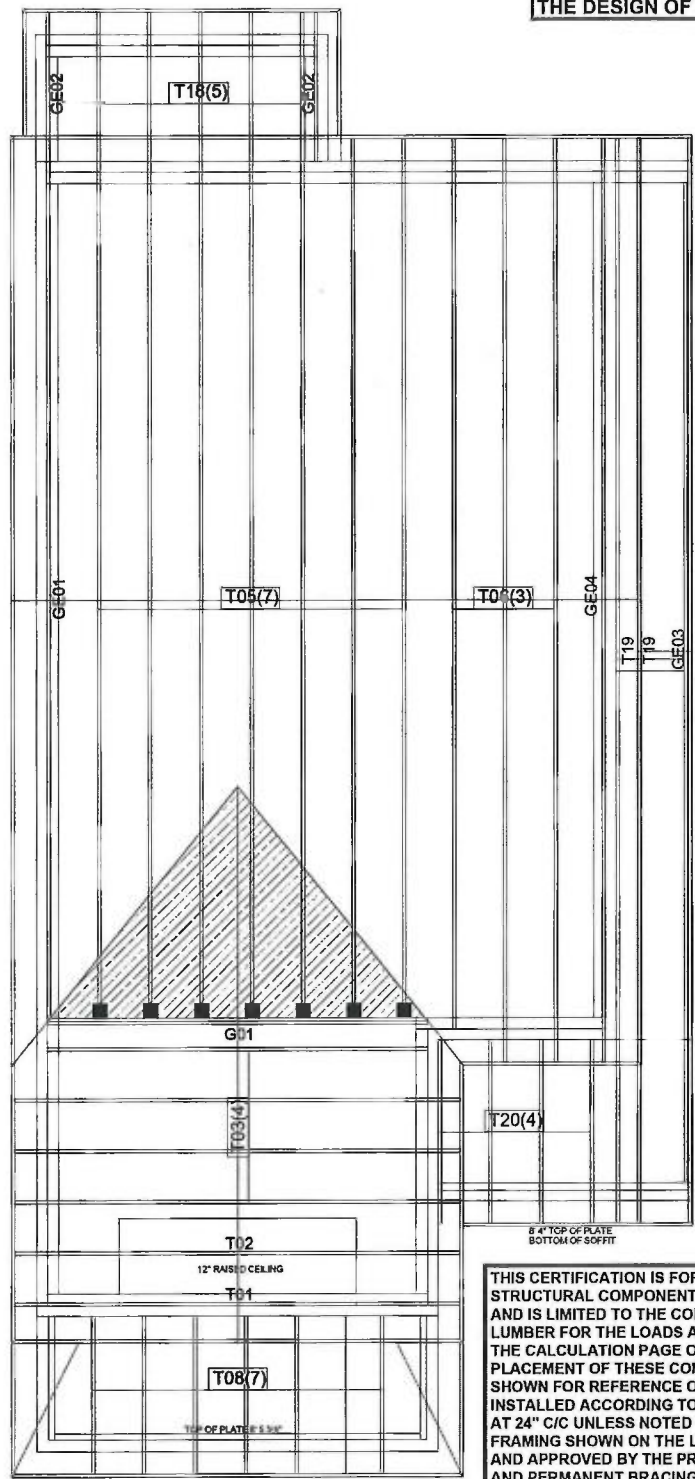
- The trusses are to be supported at the bearing points indicated and anchored to the supports where considered necessary by the designer of the overall structure
- Bearing sizes shown are the minimum required to prevent crushing of the truss members and do not necessarily take into account stability 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.

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

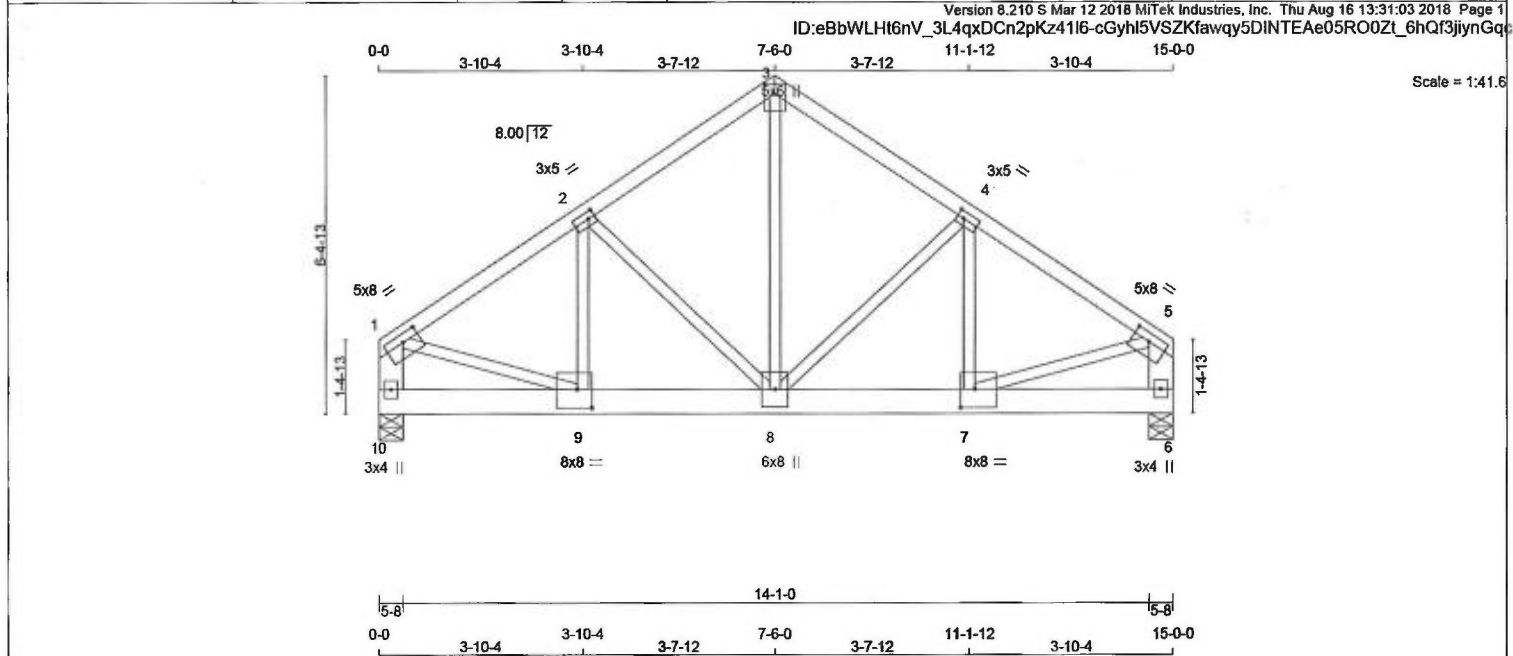

 LICENSED PROFESSIONAL ENGINEER
 N.A. EL-MASRI
 License No. NE0818-099
 Aug 16, 2018



THIS CERTIFICATION IS FOR THE ENGINEERING REVIEW OF
STRUCTURAL COMPONENTS SHOWN ON THIS DRAWING
AND IS LIMITED TO THE COMPONENTS SUPPLIED BY KOTT
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THE CALCULATION PAGE OF EACH COMPONENT. THE
PLACEMENT OF THESE COMPONENTS ON THIS LAYOUT MUST BE
SHOWN FOR REFERENCE ONLY. ROOF TRUSSES MUST BE
INSTALLED ACCORDING TO MANUFACTURER'S GUIDELINES
AT 24" C/C UNLESS NOTED OTHERWISE. CONVENTIONAL
FRAMING SHOWN ON THE LAYOUT MUST BE DESIGNED
AND APPROVED BY THE PROJECT ENGINEER. TEMPORARY
AND PERMANENT BRACINGS OF THE ROOF AND BUILDING
ARE THE RESPONSIBILITY OF THE PROJECT ENGINEER
AND TO CONFORM TO BCSI GUIDELINES.

Architectural Drawing Info:
 Date: JULY 23, 2018
 Project number: 10012
 Model: HEMLOCK 3

	CONVENTIONAL FRAMING BY OTHERS ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 8 OF THE CBC. ROOF PARTS THAT CROSS MEET OVER TRUSSES TO BE 2x4 S.P.F. @ 24"OC WITH A 2x4 VERTICAL POST TO THE TRUSS UNDERNEATH EACH CROSS POINT. VERTICAL POST LONGER THAN 8' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINT AND BETWEEN ROWS OF BRACING DOES NOT EXCEED 8'. SIZE AND LOCATION OF CONVENTIONAL FRAMING IS APPROPRIATE. ALL AREAS MAY NOT BE SHOWN. REFER TO ARCHITECTURAL PLANS FOR DETAILS.	HANGER LEGEND: ▼ LUS24 ■ LJS26DS ■ HGUS26 ⊗ HGUS26-2	DESIGN CRITERIA: SPECIFIED LOADS: TOP CH. LL = 23.3 PSF RL = 3 PSF BOT CH. LL = 9 PSF RL = 7 PSF TOTAL LOAD = 33.3 PSF SPACING = 24" O.C. THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 8, NBC 2010 THIS DESIGN COMPLIES WITH: - PART 8 OF CBC 2012, BCRC 2012, ABC 2014 - CSA 086-09 - TFC 2011	Model: HEMLOCK 3 EL 2 Customer: GREENPARK Project: MINNISALE HOMES Location: BRAMPTON Date: 6/22/2018 Drawn by: BB
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LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
10 - 1	2x6	DRY	No.2
6 - 5	2x6	DRY	No.2
10 - 6	2x6	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			

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
3-5	12	TOP
10-1	12	TOP
6-5	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
10-6	6	SIDE (366.6)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

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

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
1	TMVW-t	MT20	5.0	8.0	1.75 3.75
2	TMVW-t	MT20	3.0	5.0	1.50 1.50
3	TTW+p	MT20	5.0	6.0	2.25 2.50

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	IN-SX	BRG
10	6210	0	6210	0	0	0	5-8	5-8	5-8
6	6210	0	6210	0	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
10	4359	3049 / 0	0 / 0	0 / 0	0 / 0	1309 / 0	0 / 0
6	4359	3049 / 0	0 / 0	0 / 0	0 / 0	1309 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 6

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	-6271 / 0	-77.4 -77.4	0.26 (1)	3-7	0 / 5093	0.63 (1)	
2-3	-4828 / 0	-77.4 -77.4	0.17 (1)	8-4	-1696 / 0	0.37 (1)	
3-4	-4828 / 0	-77.4 -77.4	0.17 (1)	4-2	0 / 1678	0.21 (1)	
4-5	-6271 / 0	-77.4 -77.4	0.26 (1)	7-4	-1696 / 0	0.37 (1)	
10-1	-4969 / 0	0.0 0.0	0.18 (1)	2-8	0 / 1678	0.21 (1)	
6-5	-4969 / 0	0.0 0.0	0.18 (1)	9-2	0 / 5395	0.67 (1)	
				1-9	0 / 5395	0.67 (1)	
10-9	0 / 0	-750.7 -750.7	0.38 (1)	7-5	0 / 5395	0.67 (1)	
9-8	0 / 5224	-750.7 -750.7	0.63 (1)				
8-7	0 / 5224	-750.7 -750.7	0.63 (1)				
7-6	0 / 0	-750.7 -750.7	0.38 (1)				

DESIGN CRITERIA

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

SPACING = **24.0 IN. C/C**

GIRDER TYPE: CStd Girder
START DISTANCE = 0-0
START SPAN CARRIED = 33-4-8
END DISTANCE = 15-0-0
END SPAN CARRIED = 33-4-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55% OF GSI.

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.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.50")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.50")
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")

CSI: TC=0.26/1.00 (1-2:1), BC=0.63/1.00 (8-9:1), WB=0.67/1.00 (1-9:1), SSI=0.55/1.00 (9-10:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

CONTINUED ON PAGE 2



Aug 16, 2018

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

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
4	TMWW-l	MT20	3.0	5.0	1.50	1.50
5	TMVW-t	MT20	5.0	8.0	1.75	3.75
6	BMV1+p	MT20	3.0	4.0		
7	BMWW-l	MT20	8.0	8.0	4.25	3.25
8	BMWWW+t	MT20	6.0	8.0		
9	BMWW-l	MT20	8.0	8.0	4.25	3.25
10	BMV1+p	MT20	3.0	4.0		

JSI GRIP= 0.89 (4) (INPUT = 0.90)
 JSI METAL= 0.60 (5) (INPUT = 1.00)

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





PLATES (table is in inches) <table><tr><th>JT</th><th>TYPE</th><th>PLATES</th><th>W</th><th>LEN</th><th>Y</th><th>X</th></tr><tr><td>2</td><td>TMV+p</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr><tr><td>3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>TMW+w</td><td>MT20</td><td>2.0</td><td>4.0</td><td></td><td></td></tr></table>							JT	TYPE	PLATES	W	LEN	Y	X	2	TMV+p	MT20	2.0	4.0			3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21							3	TMW+w	MT20	2.0	4.0			DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). 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							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						
JT	TYPE	PLATES	W	LEN	Y	X																																										
2	TMV+p	MT20	2.0	4.0																																												
3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21																																																
3	TMW+w	MT20	2.0	4.0																																												

[illegible]

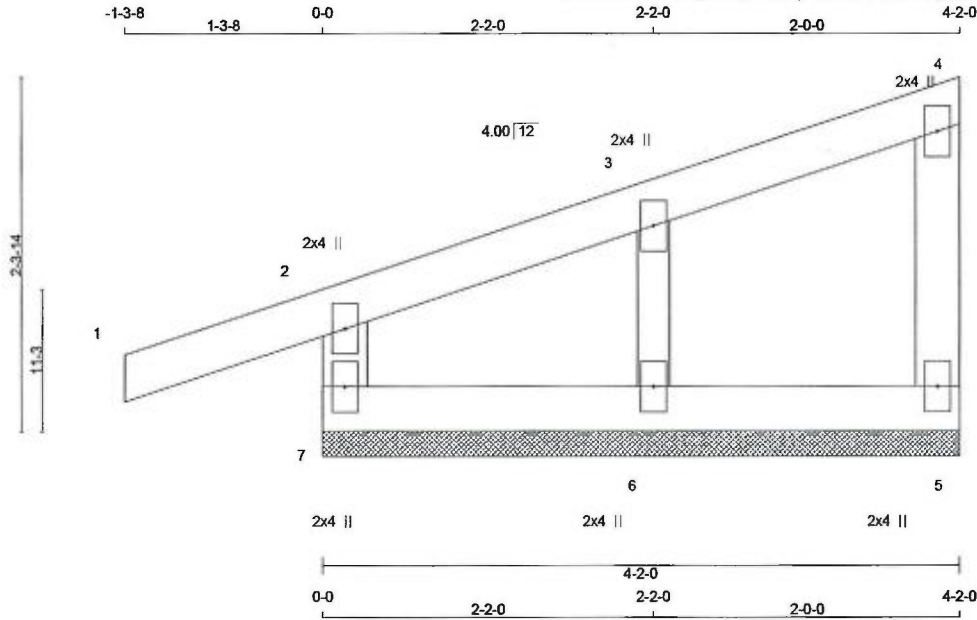
LOADING

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	MAX. MEMB. FORCE (LBS)	FACTORED UNBRAC	MAX	MEMB. FORCE (LBS)	FACTORED MAX CSI (LC)
FR-TO		FROM TO			FR-TO	LENGTH			
30-29	-2 / 0	-17.5	-17.5	0.01 (4)	10.00				
29-28	0 / 0	-17.5	-17.5	0.01 (4)	10.00				
28-27	0 / 2	-17.5	-17.5	0.01 (4)	10.00				
27-26	0 / 4	-17.5	-17.5	0.01 (4)	10.00				
26-25	0 / 7	-17.5	-17.5	0.01 (4)	10.00				
25-24	0 / 12	-17.5	-17.5	0.01 (4)	10.00				
24-23	0 / 17	-17.5	-17.5	0.01 (1)	10.00				

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS 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 15 = 30 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
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" 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 TMV+p	MT20	2.0	4.0		
5 BMV1+p	MT20	2.0	4.0		
6 BMW1+w	MT20	2.0	4.0		
7 BMV1+p	MT20	2.0	4.0		

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)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	LC1 MAX (LC)
FR-TO		FROM TO		FR-TO			
7-2	-190 / 0	0.0	0.0 0.01 (4)	7.81	6-3	-167 / 0	0.02 (1)
1-2	0 / 16	-77.4	-77.4 0.10 (1)	10.00			
2-3	-17 / 0	-77.4	-77.4 0.04 (1)	6.25			
3-4	-13 / 0	-77.4	-77.4 0.04 (1)	6.25			
5-4	-68 / 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 / 10	-17.5	-17.5 0.02 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.10/1.00 (1-2:1), BC=0.02/1.00 (6-7:4), WB=0.02/1.00 (3-6:1), SSI=0.08/1.00 (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)



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





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

GABLE STUDS SPACED AT 2-0-0 OC.

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

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS
CHORD AT JT(S): 53, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 41, 39, 38, 37, 36, 35, 34
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

DESIGN CRITERIA

SPECIFIED LOADS:

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
- TPIQ 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=0.10/1.00 (26-27:1), BC=0.03/1.00 (28-29:1), WB=0.16/1.00 (13-42:1), SSI=0.08/1.00 (26-27:1)

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= 0.82 (13) (INPUT = 0.90)
JSI METAL= 0.07 (13) (INPUT = 1.00)



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

CONTINUED ON PAGE 2



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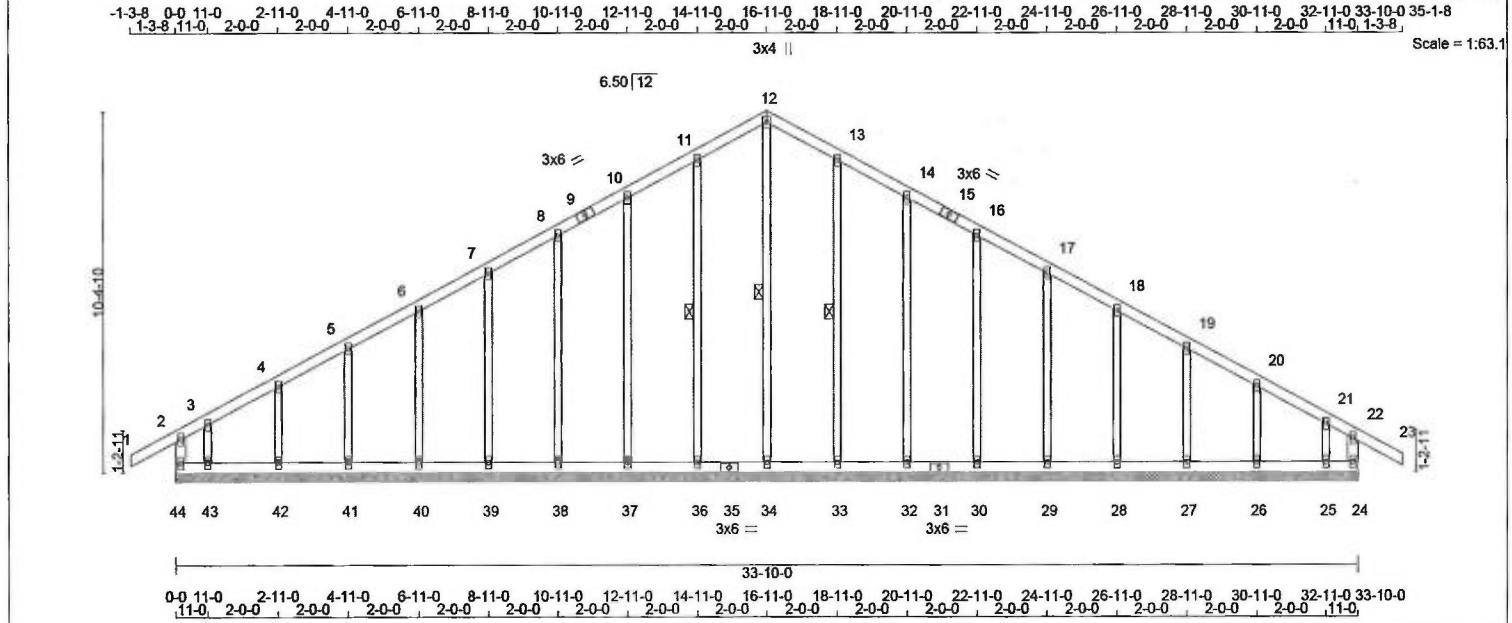
LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
36-35	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			
35-34	-8 / 0	-17.5	-17.5 0.01 (4)	10.00			
34-33	-5 / 0	-17.5	-17.5 0.01 (4)	10.00			
33-33	-67 / 0	0.0	0.0 0.01 (1)	7.81			
33-22	-54 / 0	0.0	0.0 0.01 (1)	7.81			
32-31	-7 / 0	-17.5	-17.5 0.01 (4)	10.00			
31-30	-5 / 0	-17.5	-17.5 0.02 (4)	10.00			
30-29	0 / 0	-17.5	-17.5 0.02 (4)	10.00			
29-28	0 / 3	-17.5	-17.5 0.03 (1)	10.00			

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ID: eBbWLHt6nV_3L4qxDCn2pKz4116-U1CCbTZzcZ90PRFIS8SPO00jV2vRVofhc2dHsTynGqY



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

44 - 2	2x4	DRY	No.2	SPF
1 - 9	2x4	DRY	No.2	SPF
9 - 12	2x4	DRY	No.2	SPF
12 - 15	2x4	DRY	No.2	SPF
15 - 23	2x4	DRY	No.2	SPF
24 - 22	2x4	DRY	No.2	SPF
44 - 35	2x4	DRY	No.2	SPF
35 - 31	2x4	DRY	No.2	SPF
31 - 24	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, 4, 5, 6, 7, 8, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21	3	TMW+w	MT20	2.0	4.0	
9	TS-t	MT20	3.0	6.0		
12	TTW+p	MT20	3.0	4.0		
15	TS-t	MT20	3.0	6.0		
22	TMV+p	MT20	2.0	4.0		
24	BMV1+p	MT20	2.0	4.0		
25, 26, 27, 28, 29, 30, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43	25	BMV1+w	MT20	2.0	4.0	
31	BS-t	MT20	3.0	6.0		
35	BS-t	MT20	3.0	6.0		
44	BMV1+p	MT20	2.0	4.0		

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 12-34, 11-36, 13-33. DBS = 20'-0", CBF = 22 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
44-2	-195 / 0	0.0	0.0 0.02 (1)	7.81	34-12	-174 / 0	0.13 (1)
1-2	0 / 25	-77.4	-77.4 0.10 (1)	10.00	36-11	-159 / 0	0.09 (1)
2-3	-30 / 0	-77.4	-77.4 0.08 (1)	6.25	37-10	-153 / 0	0.20 (1)
3-4	0 / 2	-77.4	-77.4 0.04 (1)	10.00	38-8	-154 / 0	0.14 (1)
4-5	0 / 3	-77.4	-77.4 0.04 (1)	10.00	39-7	-154 / 0	0.09 (1)
5-6	0 / 7	-77.4	-77.4 0.04 (1)	10.00	40-6	-154 / 0	0.06 (1)
6-7	0 / 10	-77.4	-77.4 0.04 (1)	10.00	41-5	-151 / 0	0.04 (1)
7-8	0 / 12	-77.4	-77.4 0.04 (1)	10.00	42-4	-162 / 0	0.03 (1)
8-9	0 / 14	-77.4	-77.4 0.04 (1)	6.25	43-3	-46 / 0	0.01 (1)
9-10	0 / 14	-77.4	-77.4 0.04 (1)	6.25	33-13	-159 / 0	0.09 (1)
10-11	0 / 16	-77.4	-77.4 0.04 (1)	10.00	32-14	-153 / 0	0.20 (1)
11-12	0 / 16	-77.4	-77.4 0.04 (1)	10.00	30-16	-154 / 0	0.14 (1)
12-13	0 / 16	-77.4	-77.4 0.04 (1)	10.00	29-17	-154 / 0	0.09 (1)
13-14	0 / 16	-77.4	-77.4 0.04 (1)	10.00	28-18	-154 / 0	0.06 (1)
14-15	0 / 14	-77.4	-77.4 0.04 (1)	6.25	27-19	-151 / 0	0.04 (1)
15-16	0 / 14	-77.4	-77.4 0.04 (1)	6.25	26-20	-162 / 0	0.03 (1)
16-17	0 / 12	-77.4	-77.4 0.04 (1)	10.00	25-21	-46 / 0	0.01 (1)
17-18	0 / 10	-77.4	-77.4 0.04 (1)	10.00			
18-19	0 / 7	-77.4	-77.4 0.04 (1)	10.00			
19-20	0 / 3	-77.4	-77.4 0.04 (1)	10.00			
20-21	0 / 2	-77.4	-77.4 0.04 (1)	10.00			
21-22	-30 / 0	-77.4	-77.4 0.08 (1)	6.25			
22-23	0 / 25	-77.4	-77.4 0.10 (1)	10.00			
24-22	-195 / 0	0.0	0.0 0.02 (1)	7.81			
44-43	0 / 4	-17.5	-17.5 0.02 (1)	10.00			
43-42	0 / 1	-17.5	-17.5 0.01 (4)	10.00			
42-41	-3 / 0	-17.5	-17.5 0.01 (4)	10.00			
41-40	-6 / 0	-17.5	-17.5 0.01 (4)	10.00			
40-39	-9 / 0	-17.5	-17.5 0.01 (4)	10.00			
39-38	-10 / 0	-17.5	-17.5 0.01 (4)	6.25			
38-37	-12 / 0	-17.5	-17.5 0.01 (4)	6.25			
37-36	-13 / 0	-17.5	-17.5 0.01 (4)	6.25			
36-35	-15 / 0	-17.5	-17.5 0.01 (4)	6.25			
35-34	-15 / 0	-17.5	-17.5 0.01 (4)	6.25			
34-33	-15 / 0	-17.5	-17.5 0.01 (4)	6.25			
33-32	-13 / 0	-17.5	-17.5 0.01 (4)	6.25			
32-31	-12 / 0	-17.5	-17.5 0.01 (4)	6.25			
31-30	-12 / 0	-17.5	-17.5 0.01 (4)	6.25			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 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=0.10/1.00 (22-23:1), BC=0.02/1.00 (24-25:1), WB=0.20/1.00 (10-37:1), SSI=0.07/1.00 (1-2:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (12) (INPUT = 0.90)
JSI METAL= 0.06 (12) (INPUT = 1.00)



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

CONTINUED ON PAGE 2



LOADING

TOTAL LOAD CASES: (4)

CHORDS

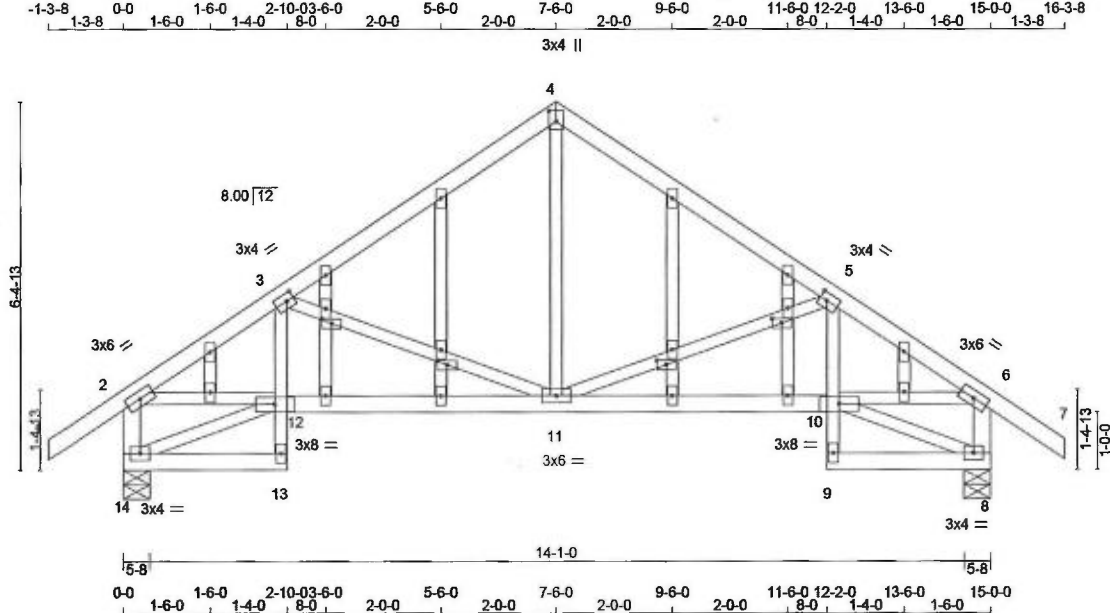
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. CSI (LC)	UNBRAC	MEMB. FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			LENGTH FR-TO		
30-29	-10 / 0	-17.5	-17.5	0.01 (4)	6.25		
29-28	-9 / 0	-17.5	-17.5	0.01 (4)	10.00		
28-27	-6 / 0	-17.5	-17.5	0.01 (4)	10.00		
27-26	-3 / 0	-17.5	-17.5	0.01 (4)	10.00		
26-25	0 / 1	-17.5	-17.5	0.01 (4)	10.00		
25-24	0 / 4	-17.5	-17.5	0.02 (1)	10.00		

WEBS

MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
-------	---------------------------	------------------------

READ ALL NOTES ON THIS PAGE AND ON
 ENGINEERING NOTE PAGE ENP-1. THIS
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 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 - 4	2x4	DRY	No.2	SPF
4 - 7	2x4	DRY	No.2	SPF
14 - 2	2x4	DRY	No.2	SPF
8 - 6	2x4	DRY	No.2	SPF
14 - 13	2x4	DRY	No.2	SPF
13 - 3	2x3	DRY	No.2	SPF
12 - 10	2x4	DRY	No.2	SPF
9 - 5	2x3	DRY	No.2	SPF
9 - 8	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-I	MT20	3.0	6.0		
3	TMVW-I	MT20	3.0	4.0	1.50	1.50
4	TTW+P	MT20	3.0	4.0	2.25	1.50
5	TMVW-I	MT20	3.0	4.0	1.50	1.50
6	BMVW-I	MT20	3.0	6.0		
8	BMV+P	MT20	3.0	4.0		
9	BMVW-I	MT20	3.0	8.0		
11	BMVW-I	MT20	3.0	6.0		
12	BMVW-I	MT20	3.0	8.0		
13	BMV+P	MT20	2.0	4.0		
14	BMVW-I	MT20	3.0	4.0		
15, 18, 25, 28						
15	NP-P	MT20	2.0	4.0	1.00	2.00
15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30						
15	NP+W	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
14	818	0	818	0	5-8	5-8
8	818	0	818	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
14	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0
8	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	11-4	0 / 404	0.09 (1)
2-3	-1122 / 0	-77.4	-77.4 0.16 (1)	5.81	11-5	-464 / 0	0.20 (1)
3-4	-659 / 0	-77.4	-77.4 0.21 (1)	6.25	3-11	-464 / 0	0.20 (1)
4-5	-659 / 0	-77.4	-77.4 0.21 (1)	6.25	2-12	0 / 958	0.22 (1)
5-6	-1122 / 0	-77.4	-77.4 0.16 (1)	5.81	10-6	0 / 958	0.22 (1)
6-7	0 / 29	-77.4	-77.4 0.10 (1)	10.00	14-12	-13 / 0	0.00 (1)
14-2	-789 / 0	0.0	0.0 0.08 (1)	7.81	10-8	-13 / 0	0.00 (1)
8-6	-789 / 0	0.0	0.0 0.08 (1)	7.81			
14-13	0 / 12	-17.5	-17.5 0.04 (4)	10.00			
13-12	0 / 27	0.0	0.0 0.04 (1)	10.00			
12-3	0 / 81	0.0	0.0 0.05 (1)	10.00			
12-11	0 / 965	-17.5	-17.5 0.22 (1)	10.00			
11-10	0 / 965	-17.5	-17.5 0.22 (1)	10.00			
9-10	0 / 27	0.0	0.0 0.04 (1)	10.00			
10-5	0 / 81	0.0	0.0 0.05 (1)	10.00			
9-8	0 / 12	-17.5	-17.5 0.04 (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 (0.50")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.50")
CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.21/1.00 (3-4:1), BC=0.22/1.00 (10-11:1), WB=0.22/1.00 (6-10:1), SSI=0.14/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

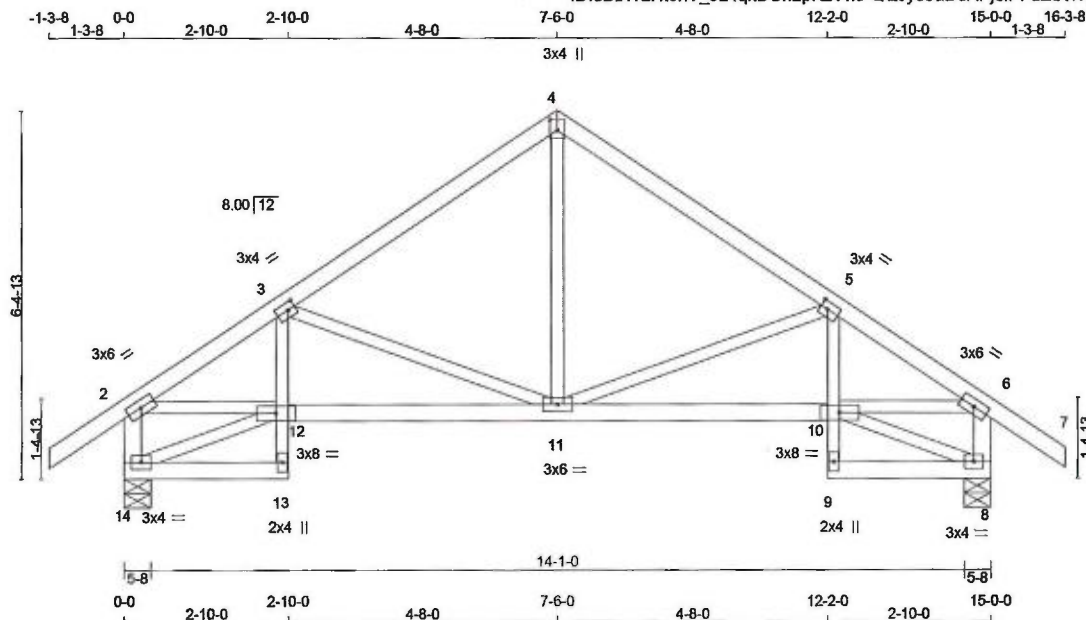
JSI GRIP= 0.85 (10) (INPUT = 0.90)

JSI METAL= 0.31 (2) (INPUT = 1.00)



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





TOTAL WEIGHT = 68 lb [M]F

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-1	MT20	3.0	6.0		
3	TMVW-1	MT20	3.0	4.0	1.50	1.50
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMVW-1	MT20	3.0	4.0	1.50	1.50
6	TMVW-1	MT20	3.0	6.0		
8	BMVW1-t	MT20	3.0	4.0		
9	BMV+p	MT20	2.0	4.0		
10	BMVWW-1	MT20	3.0	8.0		
11	BMVWW-1	MT20	3.0	6.0		
12	BMVWW-1	MT20	3.0	8.0		
13	BMV+p	MT20	2.0	4.0		
14	BMVW1-t	MT20	3.0	4.0		

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

BEARINGS								
JT	FACTORED		MAXIMUM FACTORED			INPUT	REQRD	
	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	BRG	
14	818	0	818	0	0	5-8	5-8	
8	818	0	818	0	0	5-8	5-8	

UNFACTORED REACTIONS

UNFACTORED REACTIONS							
1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
14	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0
8	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH
FR-TO					FR-TO		
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	11-4	0 / 404	0.09 (1)
2-3	-1122 / 0	-77.4	-77.4 0.16 (1)	5.81	11-5	-464 / 0	0.20 (1)
3-4	-659 / 0	-77.4	-77.4 0.21 (1)	6.25	3-11	-464 / 0	0.20 (1)
4-5	-659 / 0	-77.4	-77.4 0.21 (1)	6.25	2-12	0 / 958	0.22 (1)
5-6	-1122 / 0	-77.4	-77.4 0.16 (1)	5.81	10-6	0 / 958	0.22 (1)
6-7	0 / 29	-77.4	-77.4 0.10 (1)	10.00	14-12	-13 / 0	0.00 (1)
14-2	-789 / 0	0.0	0.0 0.08 (1)	7.81	10-8	-13 / 0	0.00 (1)
8-6	-789 / 0	0.0	0.0 0.08 (1)	7.81			
14-13	0 / 12	-17.5	-17.5 0.04 (4)	10.00			
13-12	0 / 27	0.0	0.0 0.04 (1)	10.00			
12-3	0 / 81	0.0	0.0 0.05 (1)	10.00			
12-11	0 / 965	-17.5	-17.5 0.22 (1)	10.00			
11-10	0 / 965	-17.5	-17.5 0.22 (1)	10.00			
9-10	0 / 27	0.0	0.0 0.04 (1)	10.00			
10-5	0 / 81	0.0	0.0 0.05 (1)	10.00			
9-8	0 / 12	-17.5	-17.5 0.04 (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, 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 (0.50")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.50")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.21/1.00 (3-4:1), BC=0.22/1.00 (10-11:1)
WB=0.22/1.00 (6-10:1), SSI=0.14/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

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

PLATE PLACEMENT TOL. = 0.250 inches

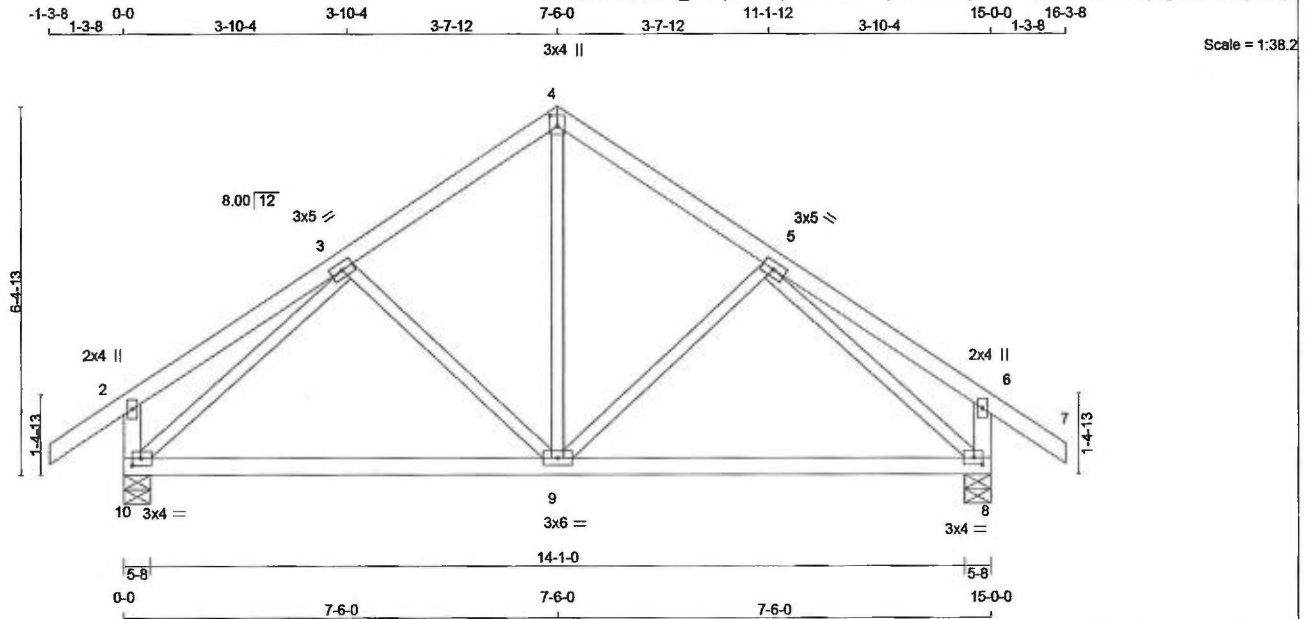
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (10) (INPUT = 0.90)
JSI METAL= 0.31 (2) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS 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 64 = 257 lb
[M]F

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMV+p	MT20	2.0	4.0		
3	TMWW-t	MT20	3.0	5.0		
4	TTW+p	MT20	3.0	4.0	2.25	1.50
5	TMWW-t	MT20	3.0	5.0		
6	TMV+p	MT20	2.0	4.0		
8	BMVW1-t	MT20	3.0	4.0	1.50	1.75
9	BMVWW-t	MT20	3.0	6.0		
10	BMVW1-t	MT20	3.0	4.0	1.50	1.75

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		IN-SX	IN-SX
10	818	0	818	0	5-8	5-8	
8	818	0	818	0	5-8	5-8	

UNFACTORED REACTIONS

JT	MAX/MIN COMPONENT REACTIONS						
	1ST LCASE COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
10	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0
8	571	413 / 0	0 / 0	0 / 0	0 / 0	158 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 10, 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 (PLF)	LC1 MAX	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)		
FR-TO		FROM	TO		FR-TO				
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00	9-4	0 / 386	0.09 (1)	
2-3	0 / 18	-77.4	-77.4	0.17 (1)	10.00	9-5	-162 / 4	0.07 (1)	
3-4	-569 / 0	-77.4	-77.4	0.13 (1)	6.25	3-9	-162 / 4	0.07 (1)	
4-5	-569 / 0	-77.4	-77.4	0.13 (1)	6.25	10-3	-796 / 0	0.34 (1)	
5-6	0 / 18	-77.4	-77.4	0.17 (1)	10.00	5-8	-796 / 0	0.34 (1)	
6-7	0 / 29	-77.4	-77.4	0.10 (1)	10.00				
10-2	-218 / 0	0.0	0.0	0.02 (1)	7.81				
8-6	-218 / 0	0.0	0.0	0.02 (1)	7.81				
10-9	0 / 575	-17.5	-17.5	0.32 (4)	10.00				
9-8	0 / 575	-17.5	-17.5	0.32 (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, 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 (0.50")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.50")
CALCULATED VERT. DEFL.(TL)= L/999 (0.07")

CSI: TC=0.17/1.00 (2-3:1), BC=0.32/1.00 (9-10:4),
WB=0.34/1.00 (3-10:1), SSI=0.12/1.00 (3-4:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

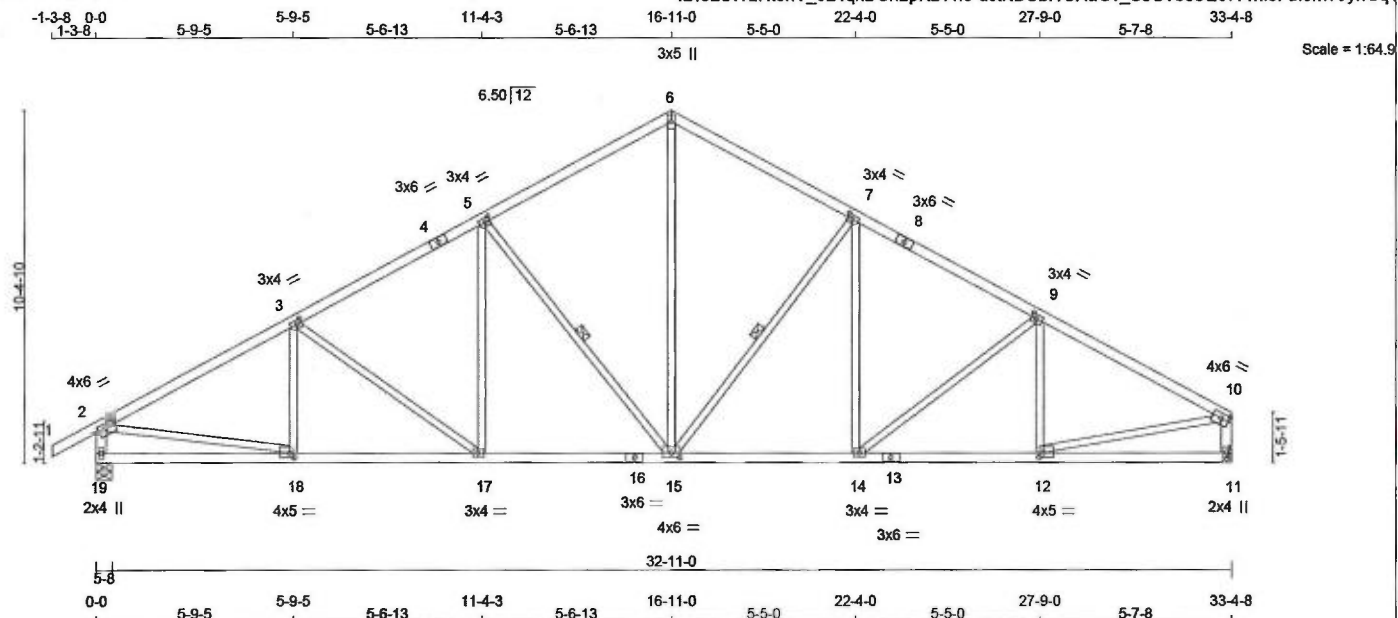
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (10) (INPUT = 0.90)
JSI METAL= 0.22 (3) (INPUT = 1.00)



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





TOTAL WEIGHT = 7 X 144 = 1010 lb

LUMBER		LUMBER		DESCR	
N. L. G. A. RULES					
CHORDS	SIZE				
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 - 13	2x4	DRY	No.2		SPF
13 - 11	2x4	DRY	No.2		SPF

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
3	TMVW-t	MT20	4.0	6.0	1.50 3.00
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	
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	1.75 1.50
13	BS-t	MT20	3.0	6.0	
14	BMVW-t	MT20	3.0	4.0	
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	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT	REQRD
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	BRG
19	1688	0	1688	0	0	5-8	5-8
11	1583	0	1583	0	0	MECHANICAL	

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 11 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
19	1183	841 / 0	0 / 0	0 / 0	0 / 0	342 / 0	0 / 0
11	1111	777 / 0	0 / 0	0 / 0	0 / 0	334 / 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 = 4.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

1- 1x4 LATERAL BRACE(S) AT 1/ 2 LENGTH OF 5-15, 7-15. DBS = 20-0-0 , CBF = 81 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). 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				
MAX. FACTORED		FACTORED		MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX.	
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
1-2	0 / 25	-77.4	-77.4	0.10 (1)	10.00	18-3	-199 / 34	0.06 (1)
2-3	-2186 / 0	-77.4	-77.4	0.40 (1)	4.27	3-17	-275 / 0	0.24 (1)
3-4	-1953 / 0	-77.4	-77.4	0.32 (1)	4.54	17-5	0 / 255	0.06 (1)
4-5	-1953 / 0	-77.4	-77.4	0.32 (1)	4.54	5-15	-648 / 0	0.36 (1)
5-6	-1516 / 0	-77.4	-77.4	0.32 (1)	5.02	15-6	0 / 1081	0.24 (1)
6-7	-1515 / 0	-77.4	-77.4	0.30 (1)	5.04	15-7	-591 / 0	0.33 (1)
7-8	-1903 / 0	-77.4	-77.4	0.30 (1)	4.61	14-7	0 / 207	0.05 (4)
8-9	-1903 / 0	-77.4	-77.4	0.30 (1)	4.61	14-9	-190 / 0	0.17 (1)
9-10	-2054 / 0	-77.4	-77.4	0.36 (1)	4.41	12-9	-271 / 11	0.08 (1)
19-2	-1645 / 0	0.0	0.0	0.17 (1)	6.46	2-18	0 / 1963	0.44 (1)
11-10	-1541 / 0	0.0	0.0	0.16 (1)	6.63	12-10	0 / 1861	0.42 (1)
19-18	0 / 0	-17.5	-17.5	0.13 (4)	10.00			
16-17	0 / 1939	-17.5	-17.5	0.37 (1)	10.00			
17-16	0 / 1717	-17.5	-17.5	0.34 (1)	10.00			
16-15	0 / 1717	-17.5	-17.5	0.34 (1)	10.00			
15-14	0 / 1672	-17.5	-17.5	0.33 (1)	10.00			
14-13	0 / 1823	-17.5	-17.5	0.35 (1)	10.00			
13-12	0 / 1823	-17.5	-17.5	0.35 (1)	10.00			
12-11	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

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 (1.11")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.11")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.40/1.00 (2-3:1), BC=0.37/1.00 (17-18:1)
WB=0.44/1.00 (2-18:1), SSI=0.18/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (6) (INPUT = 0.90)
JSI METAL= 0.59 (2) (INPUT = 1.00)



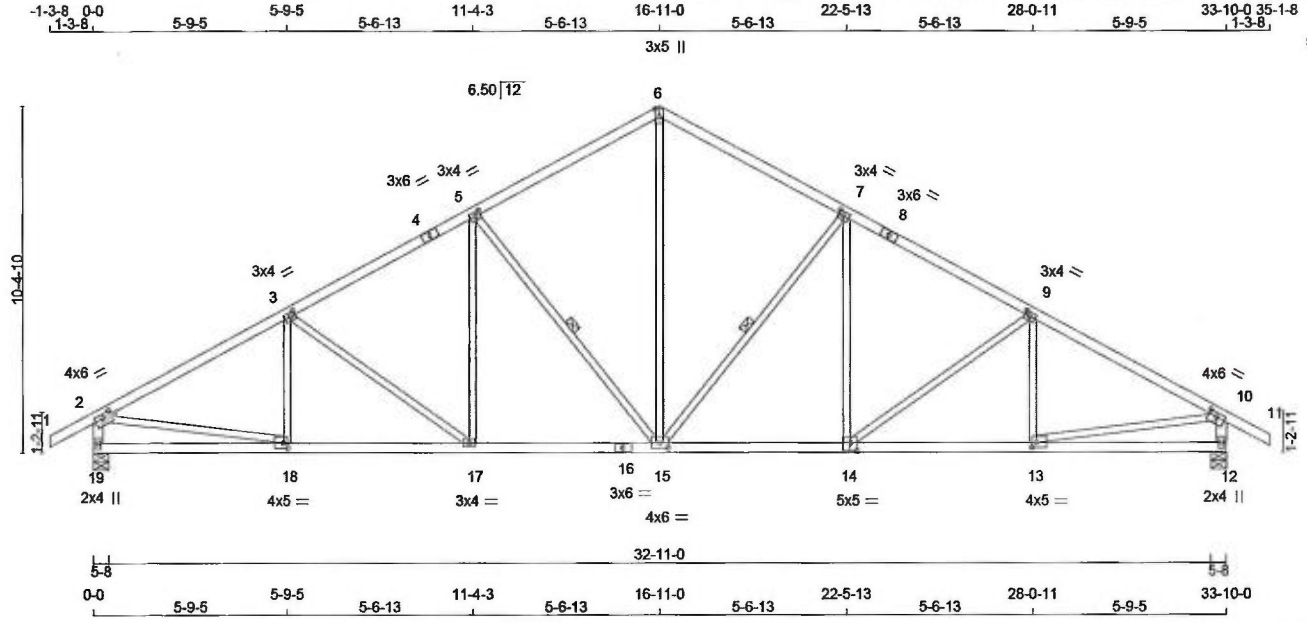
**READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.**



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ID: eBbWHLt6nV_3L4qxDCn2pKz41l6-NpRjQgcUgnfRu2Zeh_XLZszKqfBxRYOHXgbU?EynGqU

Scale = 1:65.9



TOTAL WEIGHT = 3 X 147 = 440 lb
(M) [F]

LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE	DRY	No.2	SPF	No.2	SPF	No.2
1 - 4	2x4	DRY	No.2	SPF	No.2	SPF	No.2
4 - 6	2x4	DRY	No.2	SPF	No.2	SPF	No.2
6 - 8	2x4	DRY	No.2	SPF	No.2	SPF	No.2
8 - 11	2x4	DRY	No.2	SPF	No.2	SPF	No.2
19 - 2	2x4	DRY	No.2	SPF	No.2	SPF	No.2
12 - 10	2x4	DRY	No.2	SPF	No.2	SPF	No.2
19 - 16	2x4	DRY	No.2	SPF	No.2	SPF	No.2
16 - 14	2x4	DRY	No.2	SPF	No.2	SPF	No.2
14 - 12	2x4	DRY	No.2	SPF	No.2	SPF	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	No.2	SPF	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	4.0	6.0	1.50	3.00
3, 5, 7, 9	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	1.50	3.00
12	BMV1+p	MT20	2.0	4.0		
13	BMWW-t	MT20	4.0	5.0	1.75	1.50
14	BSWW-t	MT20	5.0	5.0	3.00	2.50
15	BMWW-t	MT20	4.0	6.0	1.75	3.00
16	BS-t	MT20	3.0	6.0		
17	BMWW-t	MT20	3.0	4.0		
18	BMWW-t	MT20	4.0	5.0	1.75	1.50
19	BMV1+p	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG	IN-SX
19	1710	0	1710	0	0	5-8	5-8	5-8	5-8
12	1710	0	1710	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
19	1198	851 / 0	0 / 0	0 / 0	0 / 0	347 / 0	0 / 0
12	1198	851 / 0	0 / 0	0 / 0	0 / 0	347 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 19, 12

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.24 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 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF 7-15, 5-15. DBS = 20-0-0. CBF = 81 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). 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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MEMB.
FR-TO				FR-TO			
1-2	0 / 25	-77.4	-77.4 0.10 (1)	10.00	15-6	0 / 1116	0.25 (1)
2-3	-2221 / 0	-77.4	-77.4 0.40 (1)	4.24	15-7	-645 / 0	0.36 (1)
3-4	-1993 / 0	-77.4	-77.4 0.33 (1)	4.50	14-7	0 / 252	0.06 (1)
4-5	-1993 / 0	-77.4	-77.4 0.33 (1)	4.50	14-9	-270 / 0	0.24 (1)
5-6	-1557 / 0	-77.4	-77.4 0.32 (1)	4.96	13-9	-204 / 33	0.06 (1)
6-7	-1557 / 0	-77.4	-77.4 0.32 (1)	4.96	5-15	-645 / 0	0.36 (1)
7-8	-1993 / 0	-77.4	-77.4 0.33 (1)	4.50	17-5	0 / 252	0.06 (1)
8-9	-1993 / 0	-77.4	-77.4 0.33 (1)	4.50	3-17	-270 / 0	0.24 (1)
9-10	-2221 / 0	-77.4	-77.4 0.40 (1)	4.24	18-3	-204 / 33	0.06 (1)
10-11	0 / 25	-77.4	-77.4 0.10 (1)	10.00	2-18	0 / 1995	0.45 (1)
19-2	-1666 / 0	0.0	0.0 0.17 (1)	6.42	13-10	0 / 1995	0.45 (1)
12-10	-1666 / 0	0.0	0.0 0.17 (1)	6.42			
19-18	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
18-17	0 / 1970	-17.5	-17.5 0.37 (1)	10.00			
17-16	0 / 1752	-17.5	-17.5 0.35 (1)	10.00			
16-15	0 / 1752	-17.5	-17.5 0.35 (1)	10.00			
15-14	0 / 1752	-17.5	-17.5 0.35 (1)	10.00			
14-13	0 / 1970	-17.5	-17.5 0.37 (1)	10.00			
13-12	0 / 0	-17.5	-17.5 0.13 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 088-09
- 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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.40/1.00 (2-3:1), BC=0.37/1.00 (17-18:1), WB=0.45/1.00 (2-18:1), SSI=0.18/1.00 (2-3:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

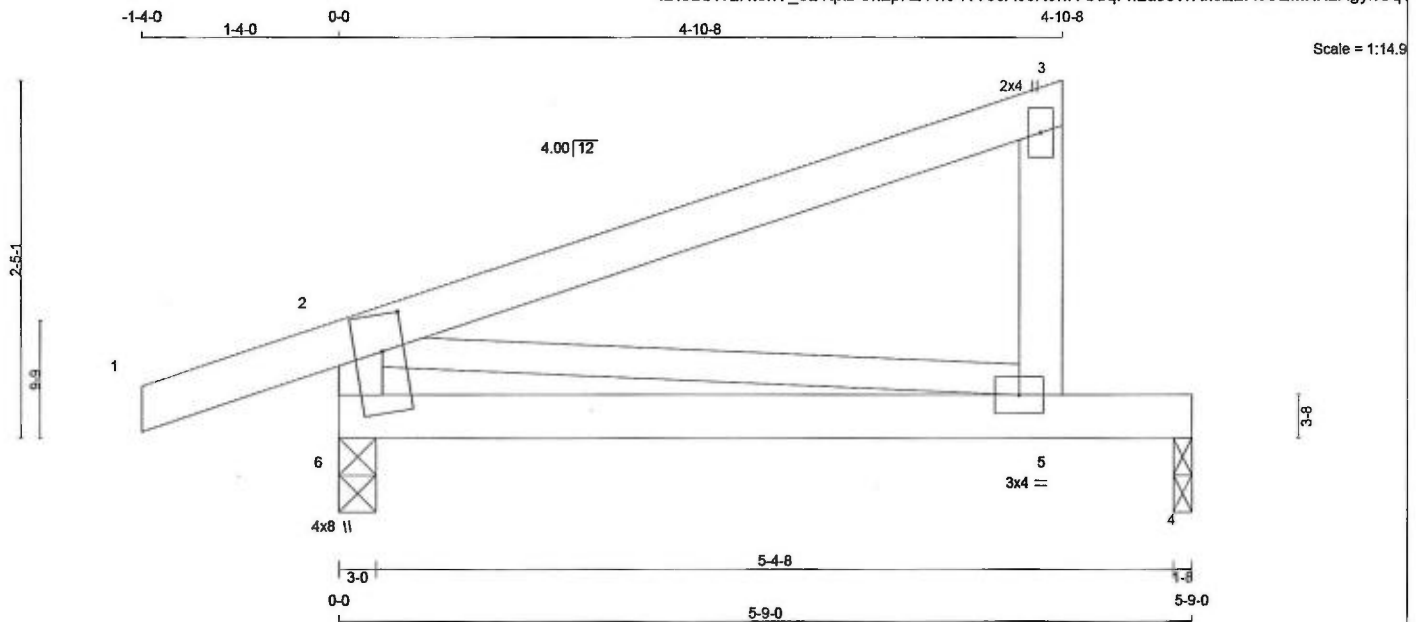
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.89 (2) (INPUT = 0.90)
JSI METAL = 0.59 (10) (INPUT = 1.00)



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





TOTAL WEIGHT = 7 X 20 = 140 lb

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
2						
3	TMV+p	MT20	2.0	4.0		
5	BMVW-t	MT20	3.0	4.0		
6						
6	TMBMVW1*+n	MT20	4.0	8.0	3.00	1.75

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

BEARINGS							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	374	0	374	0	0	3-0	3-0
4	210	0	210	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	260	195 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
4	149	96 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC. LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 17	-77.4	-77.4 0.10 (1)	10.00	2-5	0 / 0	0.00 (1)
2-3	0 / 0	-77.4	-77.4 0.31 (1)	10.00			
5-3	-189 / 0	0.0	0.0 0.02 (1)	7.81			
6-2	-295 / 0	0.0	0.0 0.03 (1)	7.81			
6-5	0 / 0	-17.5	-17.5 0.24 (1)	10.00			
5-4	0 / 0	-17.5	-17.5 0.24 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= $L/360$ (0.19")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.05")
ALLOWABLE DEFL.(TL)= $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/597$ (0.12")

CSI: TC=0.31/1.00 (2-3:1), BC=0.24/1.00 (5-6:1),
WB=0.00/1.00 (2-5:1), SSI=0.16/1.00 (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

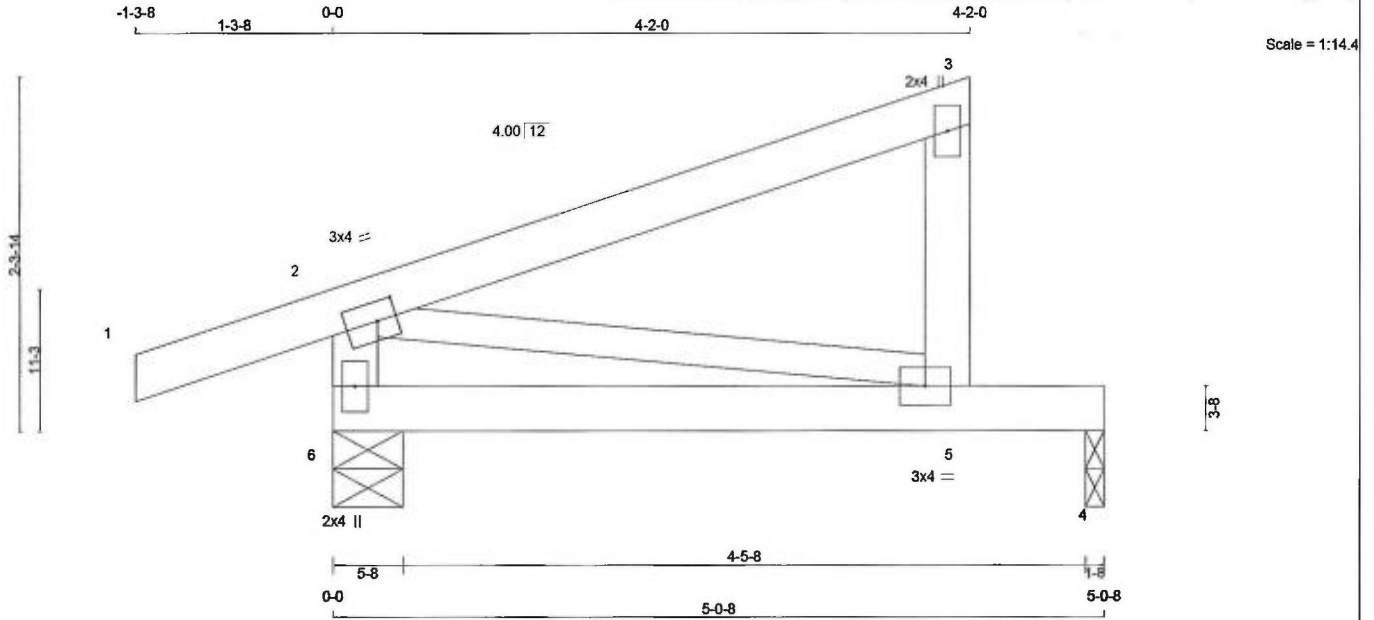
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.19 (5) (INPUT = 0.90)
JSI METAL= 0.03 (3) (INPUT = 1.00)



**READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
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THE DESIGN OF THIS COMPONENT.**





TOTAL WEIGHT = 5 X 18 = 89 lb [M]

LUMBER

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

PLATES (table is in inches)

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

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

BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
6	337	0	337	0	0	5-8	5-8
4	177	0	177	0	0	1-8	1-8

UNFACTORED REACTIONS

JT	COMBINED	1ST LCASE MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
6	234	176 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0
4	126	80 / 0	0 / 0	0 / 0	0 / 0	46 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MEMB.	WEBS	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	MAX. UNBRACED LENGTH		MAX. FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 16	-77.4	-77.4	0.10 (1)	10.00	2-5	0 / 0
2-3	0 / 0	-77.4	-77.4	0.23 (1)	10.00		
5-3	-161 / 0	0.0	0.0	0.02 (1)	7.81		
6-2	-265 / 0	0.0	0.0	0.03 (1)	7.81		
6-5	0 / 0	-17.5	-17.5	0.20 (1)	10.00		
5-4	0 / 0	-17.5	-17.5	0.20 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL)= L/835 (0.07")

CSI: TC=0.23/1.00 (2-3:1), BC=0.20/1.00 (5-6:1), WB=0.00/1.00 (2-5:1), SSI=0.14/1.00 (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
(FSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

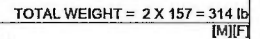
JSI GRIP= 0.24 (2) (INPUT = 0.90)
JSI METAL= 0.05 (6) (INPUT = 1.00)



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



Scale = 1:66.9

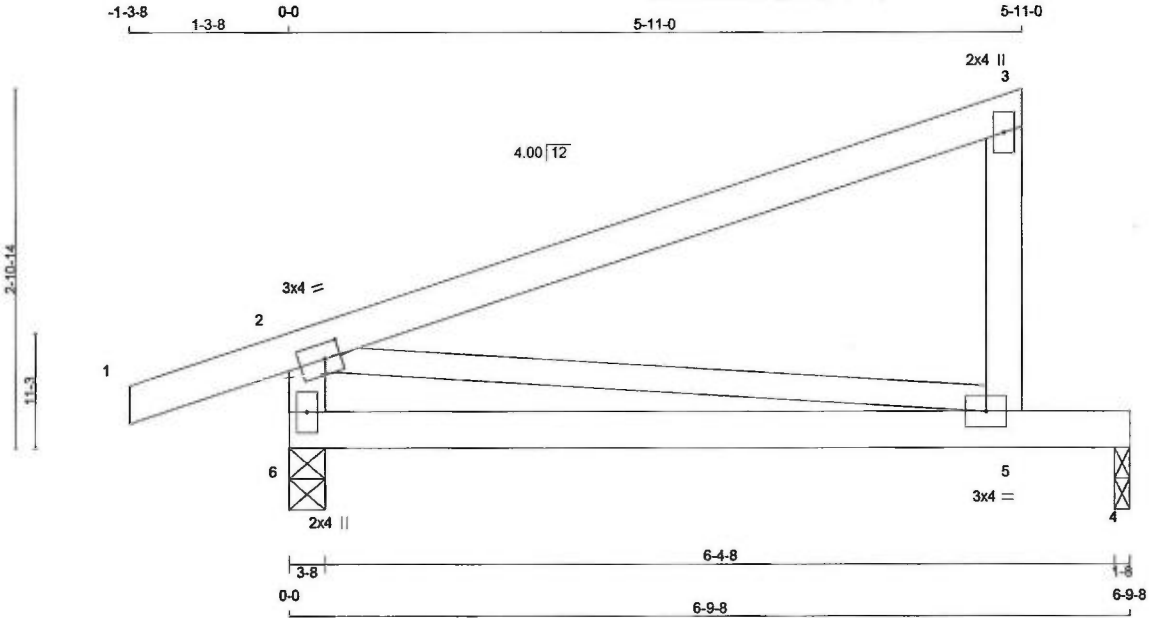

KOTT

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0818-099	T19	2	1	GREENPARK-MINNISALE HOMES-HEMLOCK 3 EL 2	PAGE 20 OF 23
				TRUSS DESC.	

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Thu Aug 16 13:31:13 2018 Page 2
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READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
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 24 = 96 lb [M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
2	TMVW-1	MT20	3.0	4.0	1.50 1.50
3	TMV+p	MT20	2.0	4.0	
5	BMVW-1	MT20	3.0	4.0	
6	BMV1+p	MT20	2.0	4.0	

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQD
JT	GROSS REACTION	GROSS REACTION	DOWN	UP	BRG
6	421	0	421	0	3-8
4	259	0	259	0	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	PERM.LIVE	WIND	DEAD	SOIL
6	293	218 / 0	0 / 0	0 / 0	0 / 0	76 / 0	0 / 0
4	183	120 / 0	0 / 0	0 / 0	0 / 0	63 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD	MEMB.	MAX. FACTORED	FACTORED	VERT. LOAD
FR-TO	(LBS)	(PLF)	LC1 MAX	FR-TO	(LBS)	(PLF)	LC1 MAX
1-2	0 / 16	-77.4	-77.4 0.10 (1)	2-5	0 / 0	0.00 (1)	10.00
2-3	0 / 0	-77.4	-77.4 0.46 (1)				
5-3	-229 / 0	0.0	0.0 0.03 (1)				
6-2	-332 / 0	0.0	0.0 0.03 (1)				
6-5	0 / 0	-17.5	-17.5 0.31 (1)				
5-4	0 / 0	-17.5	-17.5 0.30 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.23")
CALCULATED VERT. DEFL.(LL)= L/999 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.23")
CALCULATED VERT. DEFL.(TL)= L/391 (0.21")

CSI: TC=0.46/1.00 (2-3:1), BC=0.31/1.00 (5-6:1), WB=0.00/1.00 (2-5:1), SSI=0.20/1.00 (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 (PSI)	SECTION (PLI)
MT20	618	354	1667 822 2284 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (2) (INPUT = 0.90)
JSI METAL= 0.06 (6) (INPUT = 1.00)



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



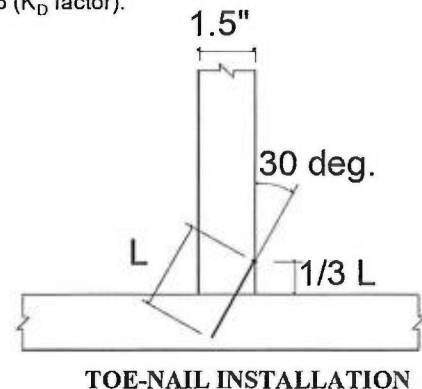
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

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, 2019.



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



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

PEO
Certificate No. 10889485



April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

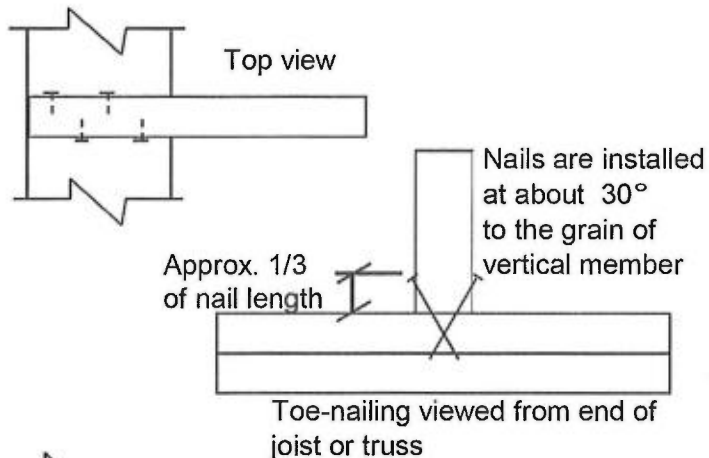
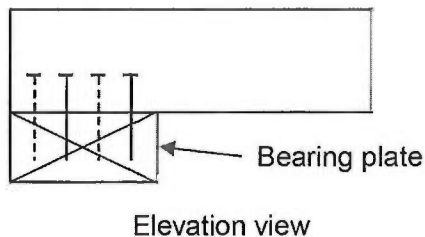
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

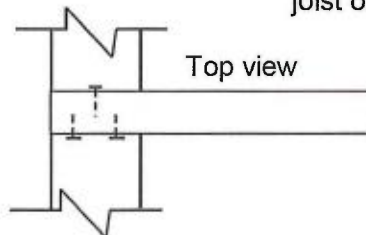
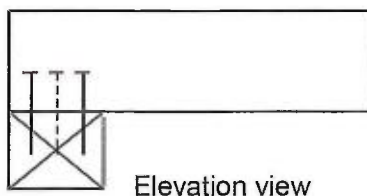
NOTES:

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, 2019

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



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