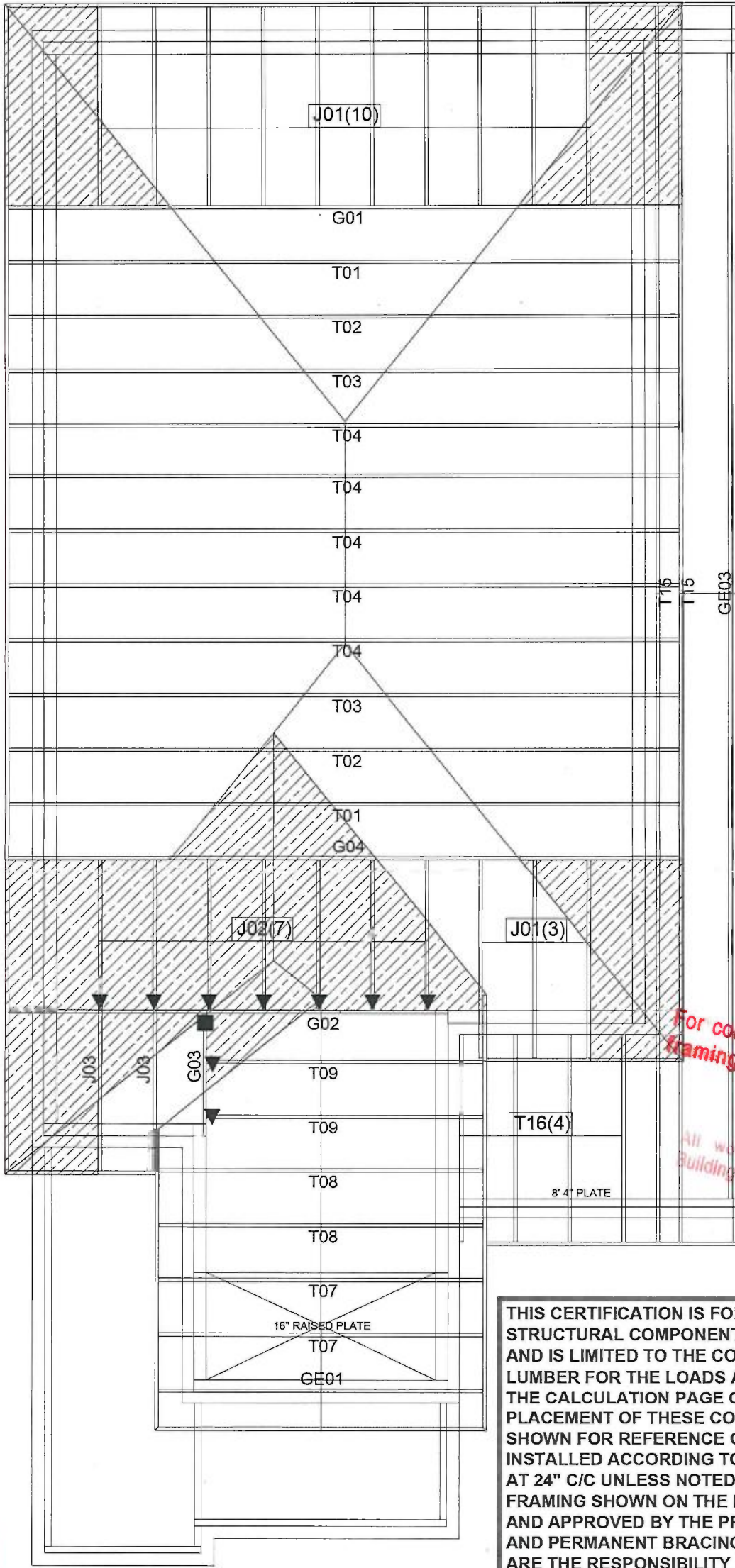


READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.



LICENSED PROFESSIONAL ENGINEER
N.A. EL-MASRI
Aug 16, 2018
NE0818-101

Roof Trusses 18-411409-000-00

For conventional framing roof / ceilings
framing shall conform to OBC.9.23

All work shall conform to the Ontario
Building Code O. Reg. 332/12 as amended

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.

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

Architectural Drawing Info:
Date: JULY 23, 2018
Project number: 18012
Model: HEMLOCK 4

18-411409-000-00 AL.

LOT 36L



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 4 EL 2**
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/20/2018 Drawn by: BB

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

NE0818-101
GREENPARK-MINNISALE
HOMES-HEMLOCK 4 EL 2

Lot 364

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")**

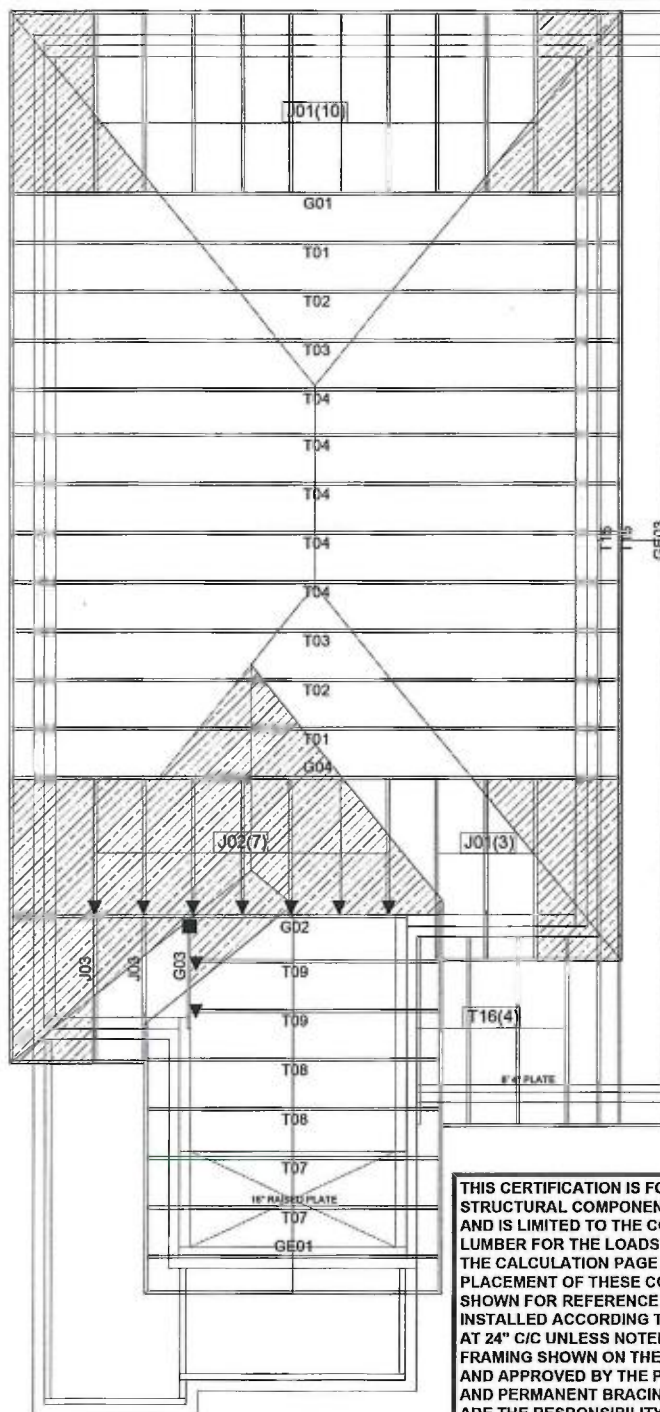
SUPPORTS

- 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.



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 4



CONVENTIONAL FRAMING BY OTHERS

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.C.B.C. ROOF PARTS THAT CROSS OVER TRUSSES TO BE 24\"/>

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

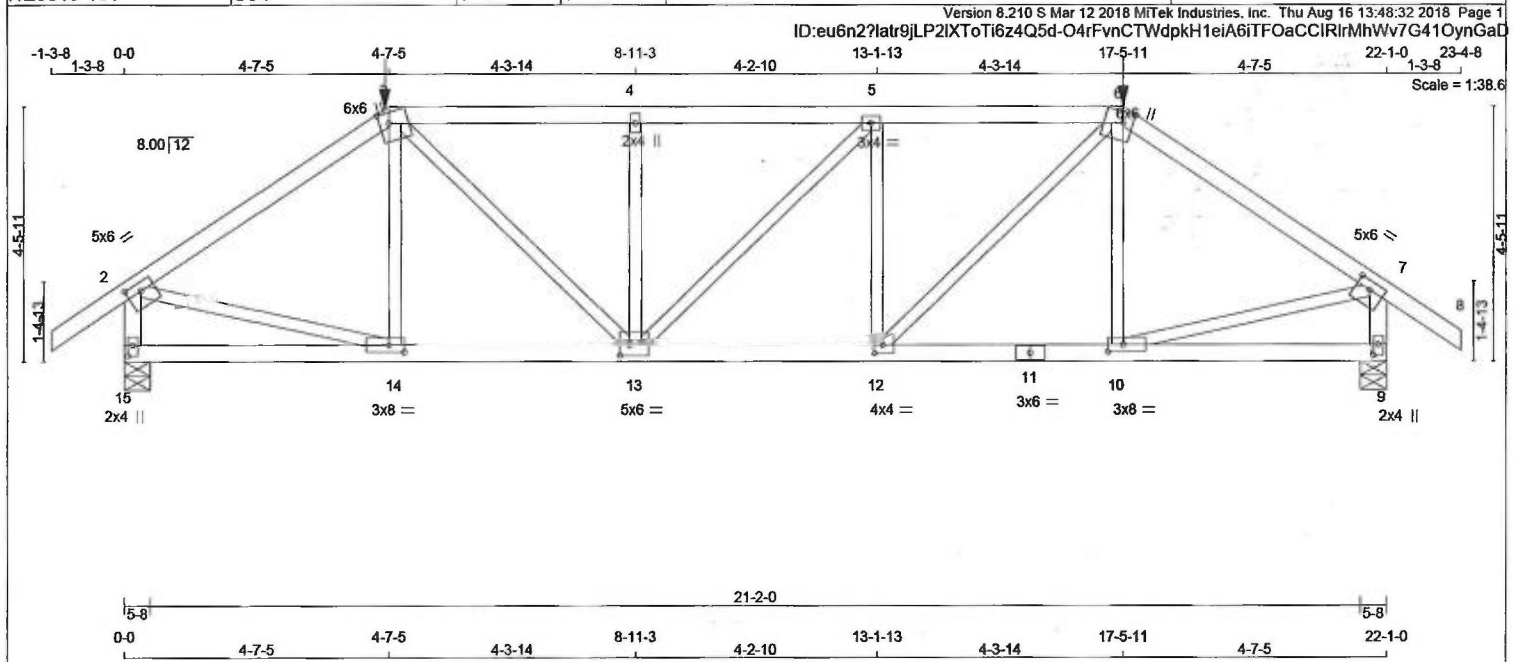
HANGER LEGEND:

- ▼ LUS24
- LUS26DS
- HGUS26
- ✕ HGUS26-2

DESIGN CRITERIA
ENFORCED LOADS
TOP CH. LL = 23 PSF
TOP CH. SL = 3 PSF
TOP CH. WL = 8 PSF
TOTAL LOAD = 34 PSF
BRACING = 34\"/>

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2018
THIS DESIGN COMPLIES WITH
PART 9 OF NBC 2018, NBC 2012, NBC 2014
- CSA 606.08
- TPC 2011

Model: HEMLOCK 4 EL 2
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/20/2018 Drawn by: BB



TOTAL WEIGHT = 92 lb

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
15 - 2	2x4	DRY	No.2 SPF
9 - 7	2x4	DRY	No.2 SPF
15 - 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-I	MT20	5.0	6.0	1.75	3.00
3	TTWW+m	MT20	6.0	6.0	2.25	2.00
4	TMW+w	MT20	2.0	4.0		
5	TMWW-I	MT20	3.0	4.0		
6	TTWW+m	MT20	6.0	6.0	2.25	2.00
7	TMVW-I	MT20	5.0	6.0	1.75	3.00
9	BMV1+p	MT20	2.0	4.0	2.25	1.00
10	BMWW-I	MT20	3.0	8.0	1.50	3.25
11	BS-I	MT20	3.0	6.0		
12	BMWW-I	MT20	4.0	4.0	1.75	1.75
13	BMWW-I	MT20	5.0	6.0	2.25	2.00
14	BMWW-I	MT20	3.0	8.0	1.50	3.25
15	BMV1+p	MT20	2.0	4.0	2.25	1.00

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 267.4 lbs FACTORED DOWN AT 17-5-11, AND 267.4 lbs FACTORED DOWN AT 4-7-5 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

JT	VERT	HORZ	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
15	2033	0	2033	0	5-8	5-8
9	2033	0	2033	0	5-8	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
15	1425	1004 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0
9	1425	1004 / 0	0 / 0	0 / 0	0 / 0	421 / 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 = 3.61 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	-77.4 -77.4	0.11 (1)	10-0	14-3	-259 / 65	0.08 (1)
2-3	-2255 / 0	-77.4 -77.4	0.45 (1)	4-08	3-13	0 / 1152	0.29 (1)
3-4	-2697 / 0	-145.9 -145.9	0.51 (1)	3-83	13-4	-669 / 0	0.21 (1)
4-5	-2697 / 0	-145.9 -145.9	0.52 (1)	3-82	13-5	-4 / 0	0.00 (1)
5-6	-2700 / 0	-145.9 -145.9	0.52 (1)	3-81	12-5	-670 / 0	0.21 (1)
6-7	-2255 / 0	-77.4 -77.4	0.45 (1)	4-08	12-6	0 / 1157	0.29 (1)
7-8	0 / 29	-77.4 -77.4	0.11 (1)	10-0	10-6	-261 / 65	0.08 (1)
15-2	-1969 / 0	0.0 0.0	0.22 (1)	5-95	2-14	0 / 1922	0.48 (1)
9-7	-1968 / 0	0.0 0.0	0.22 (1)	5-96	10-7	0 / 1922	0.48 (1)
15-14	0 / 0	-33.0 -33.0	0.18 (4)	10-00			
14-13	0 / 1867	-33.0 -33.0	0.43 (1)	10-00			
13-12	0 / 2700	-33.0 -33.0	0.55 (1)	10-00			
12-11	0 / 1867	-33.0 -33.0	0.43 (1)	10-00			
11-10	0 / 1867	-33.0 -33.0	0.43 (1)	10-00			
10-9	0 / 0	-33.0 -33.0	0.18 (4)	10-00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
3	4-7-5	-267	-267	-	FRONT	VERT	TOTAL
6	17-5-11	-267	-267	-	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 = 4-7-5

END SETBACK = 6-0-0

END WALL WIDTH = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADD'L 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 (0.74")

CALCULATED VERT. DEFL.(LL) = L/999 (0.09")

ALLOWABLE DEFL.(TL) = L/360 (0.74")

CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.52/1.00 (5-6:1), BC=0.55/1.00 (12-13:1), WB=0.48/1.00 (2-14:1), SSI=0.32/1.00 (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)	(PLI)	
MAX	MIN	MAX	MIN	
MT20	618	354	1667	822
			2284	1656

CONTINUED ON PAGE 2



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.

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
NE0818-101	G01	1	1	GREENPARK-MINNISALE HOMES-HEMLOCK 4 EL 2	PAGE 4 OF 27
TRUSS DESC.					

Version 8.210 S Mar 12 2018 MITek Industries, Inc. Thu Aug 16 13:48:32 2018 Page 2
ID:eu6n2?latr9jLP2IXToTi6z4Q5d-O4rFvnCTWdpkH1eiA6ITFoacCIRlrMhWv7G41OynGaD

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (14) (INPUT = 0.90)
JSI METAL= 0.60 (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.





JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREENPARK-MINNISALE HOMES-HEMLOCK 4 EL 2	DRWG NO. PAGE 6 OF 27
NE0818-101	G02	1	1	TRUSS DESC.		

Version 8.210 S Mar 12 2018 MITek Industries, Inc. Thu Aug 16 13:48:33 2018 Page 2
ID:eu6n2?latr9jLP2IXToTi6z4Q5d-sGPd77D5HxxbuBDvvpDinb7QBipAanDf8n?darynGaC

CSI: TC=0.38/1.00 (4-5:1) , BC=0.34/1.00 (8-9:1) ,
WB=0.52/1.00 (4-8:1) , SSI=0.18/1.00 (8-9:1)

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

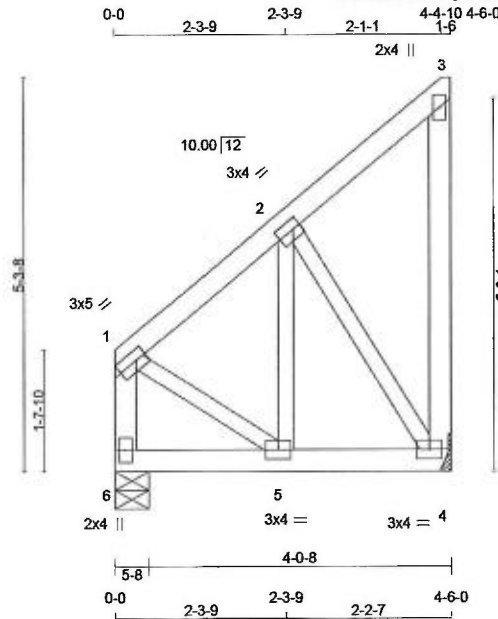
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (2) (INPUT = 0.90)
JSI METAL= 0.48 (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 = 26 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	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMVW-t	MT20	3.0	5.0	1.50	1.75
2	TMVW-t	MT20	3.0	4.0	1.50	1.25
3	TMV+p	MT20	2.0	4.0		
4	BMVW1-t	MT20	3.0	4.0		
5	BMVW1-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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG MECHANICAL	REQD BRG
	VERT	HORZ	DOWN	HORZ UPLIFT		
4	556	0	556	0	5-8	5-8
6	556	0	556	0	5-8	5-8

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 4 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
4	390	273 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0
6	390	273 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)
FR-TO		FROM	TO	FR-TO					
1-2	-296 / 0	-77.4	-77.4	0.07 (1)	6.25	5-2	0 / 329	0.08 (1)	
2-3	-13 / 0	-77.4	-77.4	0.07 (1)	6.25	2-4	-418 / 0	0.11 (1)	
4-3	-65 / 0	0.0	0.0	0.03 (1)	7.81	1-5	0 / 272	0.07 (1)	
6-1	-401 / 0	0.0	0.0	0.05 (1)	7.81				
6-5	0 / 0	-169.7	-169.7	0.14 (1)	10.00				
5-4	0 / 236	-169.7	-169.7	0.18 (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: CStd Girder
START DISTANCE = 0-0
START SPAN CARRIED = 8-10-8
END DISTANCE = 4-6-0
END SPAN CARRIED = 8-10-8
END WALL WIDTH = 5-8
APPLIED TO FRONT SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55% OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.19")
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=0.07/1.00 (1-2:1), BC=0.18/1.00 (4-5:1), WB=0.11/1.00 (2-4:1), SSI=0.20/1.00 (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.

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

CONTINUED ON PAGE 2



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.



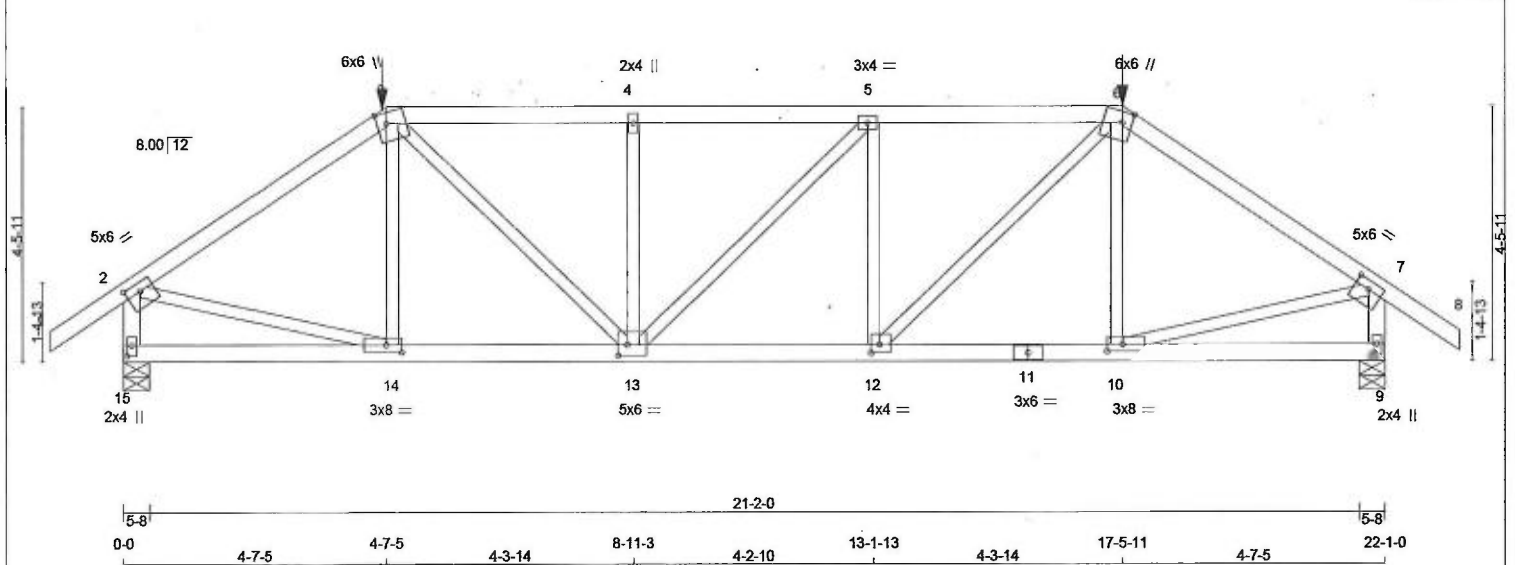
JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREENPARK-MINNISALE HOMES-HEMLOCK 4 EL 2	DRWG NO. PAGE 8 OF 27
NE0818-101	G03	1	1	TRUSS DESC.		

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Thu Aug 16 13:48:33 2018 Page 2
ID:eu6n27latr9jLP2IXToTi6z4Q5d-sGPd77D5HxxbuBDvkdinb7U3iskaucf8n?darynGaC

JSI GRIP= 0.66 (5) (INPUT = 0.90)
JSI METAL= 0.12 (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.





LUMBER N. L. C. A. RULES CHORDS SIZE LUMBER DESCR. ALL WEBS EXCEPT DRY: SEASONED LUMBER. TOTAL WEIGHT = 92 lb

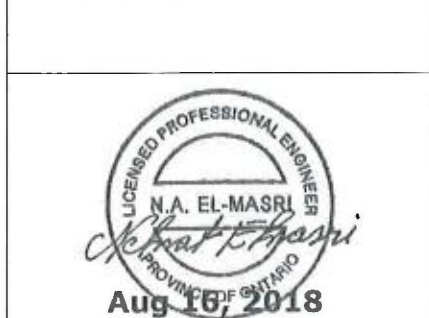
N. L. C. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
1 - 3	2x4	DRY	No.2	SPF
3 - 6	2x4	DRY	No.2	SPF
6 - 8	2x4	DRY	No.2	SPF
15 - 2	2x4	DRY	No.2	SPF
9 - 7	2x4	DRY	No.2	SPF
15 - 11	2x4	DRY	No.2	SPF
11 - 9	2x4	DRY	No.2	SPF

ALL WEBS EXCEPT DRY: SEASONED LUMBER.

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	5.0	6.0	1.75	3.00
3	TTWW+m	MT20	6.0	6.0	2.25	2.00
4	TMW+w	MT20	2.0	4.0		
5	TMWW-t	MT20	3.0	4.0		
6	TTWW+m	MT20	6.0	6.0	2.25	2.00
7	TMVW-t	MT20	5.0	6.0	1.75	3.00
9	BMV1+p	MT20	2.0	4.0	2.25	1.00
10	BMWW-t	MT20	3.0	8.0	1.50	3.25
11	BS-t	MT20	3.0	6.0		
12	BMWW-t	MT20	4.0	4.0	1.75	1.75
13	BMWWW-t	MT20	5.0	6.0	2.25	2.00
14	BMWW-t	MT20	3.0	8.0	1.50	3.25
15	BMV1+p	MT20	2.0	4.0	2.25	1.00

HANGERS NOTES
1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 267.4 lbs FACTORED DOWN AT 17-5-11, AND 267.4 lbs FACTORED DOWN AT 4-7-5 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.



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.

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

BEARINGS								
	FACTORED		MAXIMUM FACTORED		INPUT	REQ'D		
JT	GROSS REACTION		GROSS REACTION		BRG	BRG		
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
15	2033	0	2033	0	0	5-8	5-8	
9	2033	0	2033	0	0	5-8	5-8	

UNFACTORED REACTIONS		1ST CASE		MAX/MIN COMPONENT REACTIONS		WIND		DEAD		SOIL	
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	JT	COMBINED	SNOW	LIVE
15	1425	1004 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0	15	1425	1004 / 0	0 / 0
9	1425	1004 / 0	0 / 0	0 / 0	0 / 0	421 / 0	0 / 0	9	1425	1004 / 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 = 3.61 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS		FACTORED		W E B S		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 29	-77.4	-77.4 0.11 (1)	10.00	14-3	-259 / 65	0.08 (1)
2-3	-2255 / 0	-77.4	-77.4 0.45 (1)	4.08	3-13	0 / 1152	0.29 (1)
3-4	-2697 / 0	-145.9	-145.9 0.51 (1)	3.63	13-4	-669 / 0	0.21 (1)
4-5	-2697 / 0	-145.9	-145.9 0.52 (1)	3.62	13-5	-4 / 0	0.00 (1)
5-6	-2700 / 0	-145.9	-145.9 0.52 (1)	3.61	12-5	-670 / 0	0.21 (1)
6-7	-2255 / 0	-77.4	-77.4 0.45 (1)	4.08	12-6	0 / 1157	0.29 (1)
7-8	0 / 29	-77.4	-77.4 0.11 (1)	10.00	10-6	-261 / 65	0.08 (1)
15-2	-1969 / 0	0.0	0.0 0.22 (1)	5.95	2-14	0 / 1922	0.48 (1)
9-7	-1968 / 0	0.0	0.0 0.22 (1)	5.96	10-7	0 / 1922	0.48 (1)
15-14	0 / 0	-33.0	-33.0 0.18 (4)	10.00			
14-13	0 / 1867	-33.0	-33.0 0.43 (1)	10.00			
13-12	0 / 2700	-33.0	-33.0 0.55 (1)	10.00			
12-11	0 / 1867	-33.0	-33.0 0.43 (1)	10.00			
11-10	0 / 1867	-33.0	-33.0 0.43 (1)	10.00			
10-9	0 / 0	-33.0	-33.0 0.18 (4)	10.00			

FACTORED CONCENTRATED LOADS (LBS)		LOC.		MAX-		MAX+		FACE		DIR.		TYPE	
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	JT	LOC.	LC1	MAX-	MAX+	TYPE
3	4-7-5	-267	-267	--	FRONT	VERT	TOTAL	6	17-5-11	-267	-267	--	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 = 4-7-5
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 (0.74")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.17")

CSI: TC=0.52/1.00 (5-6:1), BC=0.55/1.00 (12-13:1), WB=0.48/1.00 (2-14:1), SSI=0.32/1.00 (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

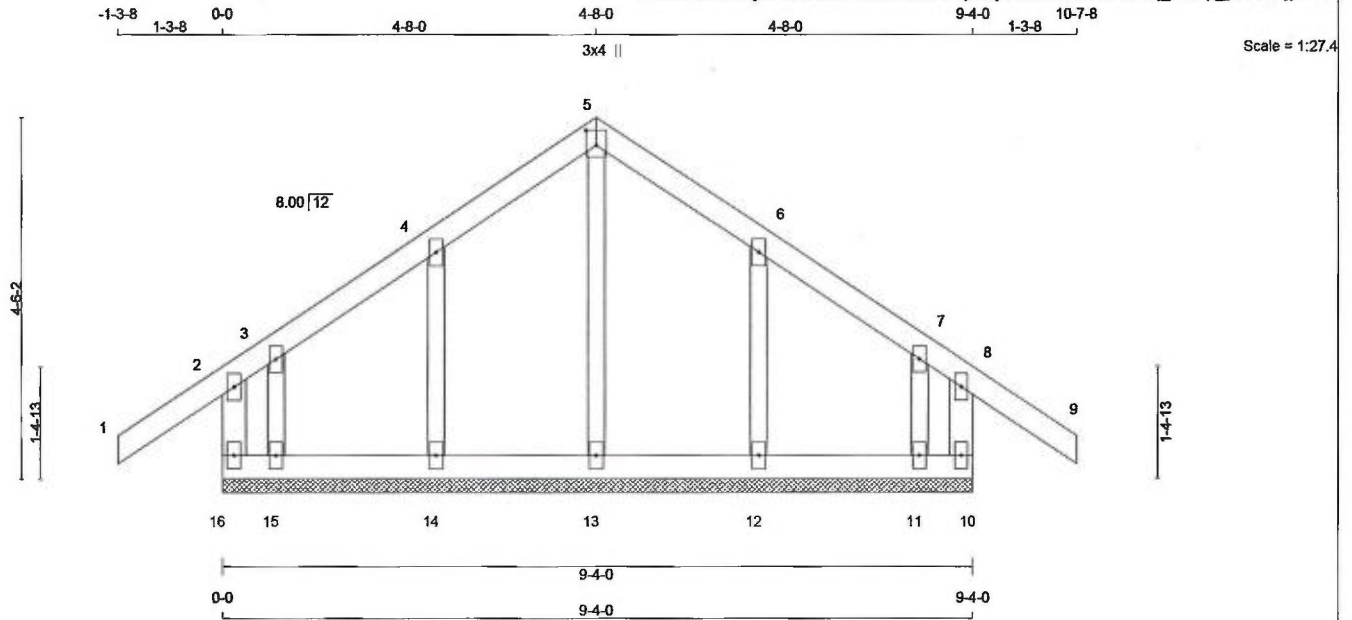
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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

CONTINUED ON PAGE 2



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG N
NE0818-101	G04	1	1	GREENPARK-MINNISALE HOMES-HEMLOCK 4 EL 2	PAGE 10 OF 27
				TRUSS DESC.	
Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Thu Aug 16 13:48:34 2018 Page 2 ID:eu6n27latr9jLP2IXToTj6z4Q5d-KTy0KTDj2F3SWLo5IXkxKpgYI56DJFAoNRIB6HynGaa					
PLATE PLACEMENT TOL. = 0.250 inches PLATE ROTATION TOL. = 5.0 Deg. JSI GRIP= 0.89 (14) (INPUT = 0.90) JSI METAL= 0.60 (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 = 39 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
16 - 2	2x4	DRY	No.2	SPF
1 - 5	2x4	DRY	No.2	SPF
5 - 9	2x4	DRY	No.2	SPF
10 - 8	2x4	DRY	No.2	SPF
16 - 10	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2'-0" O.C.

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.

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	MAX. FACTORED (LC)
FR-TO				FR-TO			
16-2	-176 / 0	0.0	0.03 (1)	7.81	13-5	-189 / 0	0.06 (1)
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	14-4	-164 / 0	0.03 (1)
2-3	-11 / 0	-77.4	-77.4 0.07 (1)	6.25	15-3	-33 / 0	0.00 (1)
3-4	0 / 27	-77.4	-77.4 0.04 (1)	10.00	12-6	-164 / 0	0.03 (1)
4-5	0 / 28	-77.4	-77.4 0.04 (1)	10.00	11-7	-33 / 0	0.00 (1)
5-6	0 / 28	-77.4	-77.4 0.04 (1)	10.00			
6-7	0 / 27	-77.4	-77.4 0.04 (1)	10.00			
7-8	-11 / 0	-77.4	-77.4 0.10 (1)	6.25			
8-9	0 / 29	-77.4	-77.4 0.10 (1)	10.00			
10-8	-176 / 0	0.0	0.03 (1)	7.81			
16-15	-18 / 0	-17.5	-17.5 0.01 (4)	6.25			
15-14	-20 / 0	-17.5	-17.5 0.01 (4)	6.25			
14-13	-24 / 0	-17.5	-17.5 0.01 (4)	6.25			
13-12	-24 / 0	-17.5	-17.5 0.01 (4)	6.25			
12-11	-20 / 0	-17.5	-17.5 0.01 (4)	6.25			
11-10	-18 / 0	-17.5	-17.5 0.01 (4)	6.25			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.10/1.00 (8-9:1), BC=0.01/1.00 (13-14:4), WB=0.06/1.00 (5-13:1), SSI=0.07/1.00 (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= 0.13 (5) (INPUT = 0.90)
JSI METAL= 0.06 (5) (INPUT = 1.00)

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
2 TMV+p	MT20	2.0	4.0		
3, 4, 6, 7					
3 TMW+w	MT20	2.0	4.0		
5 TTW+p	MT20	3.0	4.0	2.25	1.50
8 TMV+p	MT20	2.0	4.0		
10 BMV1+p	MT20	2.0	4.0		
11, 12, 13, 14, 15					
11 BMW1+w	MT20	2.0	4.0		
16 BMV1+p	MT20	2.0	4.0		



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.



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.	52-51	0 / 4	-17.5	-17.5	0.01 (4)	10.00
	51-50	0 / 1	-17.5	-17.5	0.01 (4)	10.00
	50-49	0 / 1	-17.5	-17.5	0.01 (4)	10.00
	49-48	-2 / 1	-17.5	-17.5	0.01 (4)	10.00
	48-47	-3 / 0	-17.5	-17.5	0.01 (4)	10.00
	47-46	-3 / 0	-17.5	-17.5	0.01 (4)	10.00
	46-45	-4 / 0	-17.5	-17.5	0.01 (4)	10.00
	45-44	-5 / 0	-17.5	-17.5	0.01 (4)	10.00
	44-43	-5 / 0	-17.5	-17.5	0.01 (4)	10.00
	43-42	-5 / 0	-17.5	-17.5	0.01 (4)	10.00

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREENPARK-MINNISALE HOMES-HEMLOCK 4 EL 2	DRWG N	PAGE 13 OF 27
NE0818-101	GE03	1	1	TRUSS DESC.		Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Thu Aug 16 13:48:36 2018 Page 2 ID:eu6n2?latr9jLP2IXToTi6z4Q5d-Gr4mi9FzasJAleyUPymPPEI_rvwmnEN5qlEHB9ynGa9	

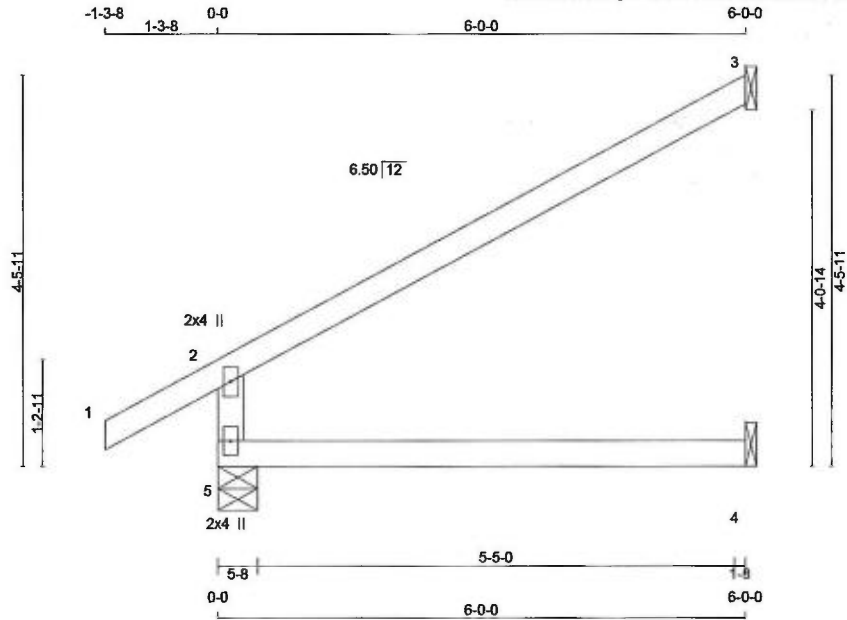
LOADING

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				
42-41	-4 / 0	-17.5	-17.5	0.01 (4)	10.00				
41-40	-3 / 0	-17.5	-17.5	0.01 (4)	10.00				
40-39	-2 / 1	-17.5	-17.5	0.01 (4)	10.00				
39-38	0 / 1	-17.5	-17.5	0.01 (4)	10.00				
38-37	0 / 1	-17.5	-17.5	0.01 (4)	10.00				
37-36	0 / 4	-17.5	-17.5	0.01 (4)	10.00				
36-35	0 / 6	-17.5	-17.5	0.01 (4)	10.00				
35-34	0 / 8	-17.5	-17.5	0.01 (4)	10.00				
33-34	-40 / 7	0.0	0.0	0.01 (1)	7.81				
34-23	-65 / 0	0.0	0.0	0.01 (1)	7.81				
33-32	0 / 8	-17.5	-17.5	0.01 (4)	10.00				
32-31	0 / 11	-17.5	-17.5	0.02 (4)	10.00				
31-30	0 / 16	-17.5	-17.5	0.02 (4)	10.00				
30-29	0 / 16	-17.5	-17.5	0.03 (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 = 13 X 17 = 225 lb [M]

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

DRY: SEASONED LUMBER.

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

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	457	0	457	0	0	5-8	5-8	
3	174	0	174	0	0	1-8	1-8	
4	43	0	49	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		PERM. LIVE	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE					
5	318	238 / 0	0 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
3	118	105 / 0	0 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
4	35	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC (LC)	MEMB. FORCE (LBS)	MAX. UNBRAC (LC)	MAX. FORCE (LBS)	MAX. UNBRAC (LC)
FR-TO		FROM	TO	LENGTH	FR-TO	LENGTH		
5-2	-395 / 0	0.0	0.0	0.13 (4)	7.81			
1-2	0 / 25	-77.4	-77.4	0.10 (1)	10.00			
2-3	-28 / 0	-77.4	-77.4	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=0.47/1.00 (2-3:1), BC=0.13/1.00 (4-5:4), WB=0.00/1.00 (n/a:0), SSI=0.20/1.00 (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 (PSI)	SECTION (PLI)
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

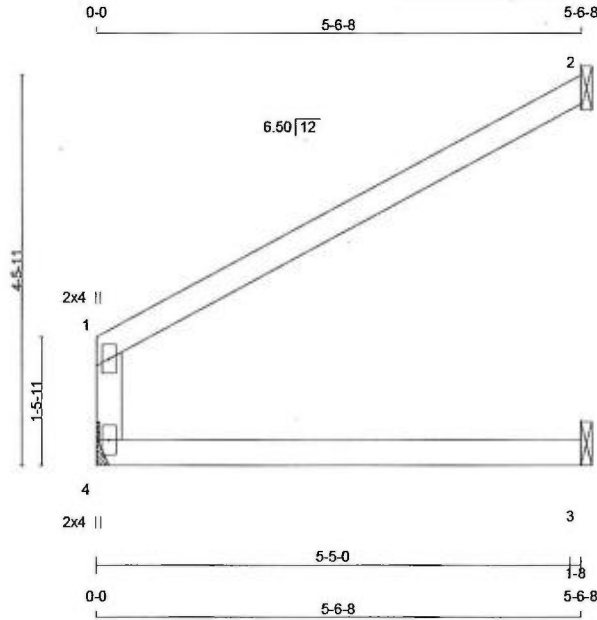
PLATE ROTATION TOL. = 5.0 Deg.

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





Scale = 1:25.2

TOTAL WEIGHT = 7 X 15 = 104 lb [M/F]

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMV+p	MT20	2.0	4.0		
4	BMV1+p	MT20	2.0	4.0		

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		
4	263	0	263	0	0	0
2	197	0	197	0	1-8	1-8
3	66	0	66	0	1-8	1-8

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 4 TO RESIST THE MAX FACTORED REACTIONS.

SEE MITEK STANDARD DETAIL B37579H FOR CONNECTION TO JOINT(S) 2, 3

UNFACTORED REACTIONS

JT	1ST LCASE	MAX / MIN. COMPONENT REACTIONS					SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	
4	184	129 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
2	134	116 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
3	50	13 / 0	0 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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		WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX	MAX. MEMB. FORCE (LBS)	MAX. FORCE (LBS)	MAX	CS1 (LC)
FR-TO								
4-1	-232 / 0	0.0	0.0	0.12 (1)	7.61			
1-2	-8 / 1	-77.4	-77.4	0.34 (1)	10.00			
4-3	0 / 0	-17.5	-17.5	0.17 (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.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (LL) = $L/999$ (0.03")
ALLOWABLE DEFL. (TL) = $L/360$ (0.19")
CALCULATED VERT. DEFL. (TL) = $L/829$ (0.08")

CSI: TC=0.34/1.00 (1-2:1), BC=0.17/1.00 (3-4:1), WB=0.00/1.00 (n/a:0), SSI=0.16/1.00 (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
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

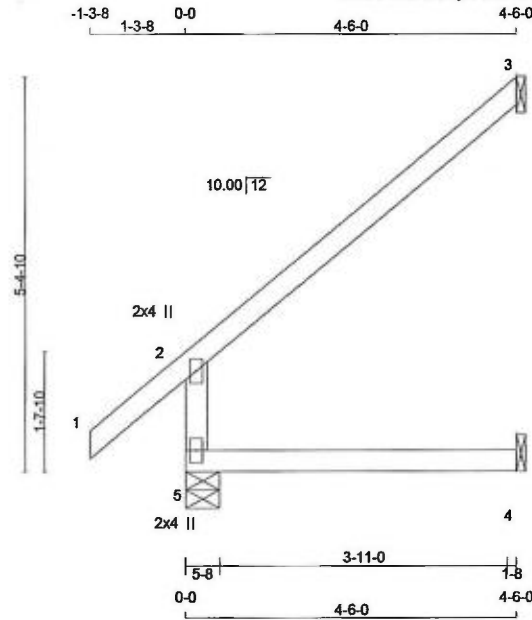
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.14 (1) (INPUT = 0.90)
JSI METAL= 0.05 (1) (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 = 1:30.0

TOTAL WEIGHT = 2 X 15 = 31 lb

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX	
5	369	0	369	0	0	5-8	5-8
3	131	0	131	0	0	1-8	1-8
4	34	0	38	0	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
5	256	195 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
3	89	79 / 0	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0
4	27	0 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH FR-TO		MAX. FACTORED FORCE (LBS)	MAX. (LC)
FR-TO							
5-2	-325 / 0	0.0	0.0	0.06 (4)	7.81		
1-2	0 / 34	-77.4	-77.4	0.11 (1)	10.00		
2-3	-28 / 0	-77.4	-77.4	0.27 (1)	6.25		
5-4	0 / 0	-17.5	-17.5	0.08 (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=0.27/1.00 (2-3:1), BC=0.08/1.00 (4-5:4), WB=0.00/1.00 (n/a:0), SSI=0.13/1.00 (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

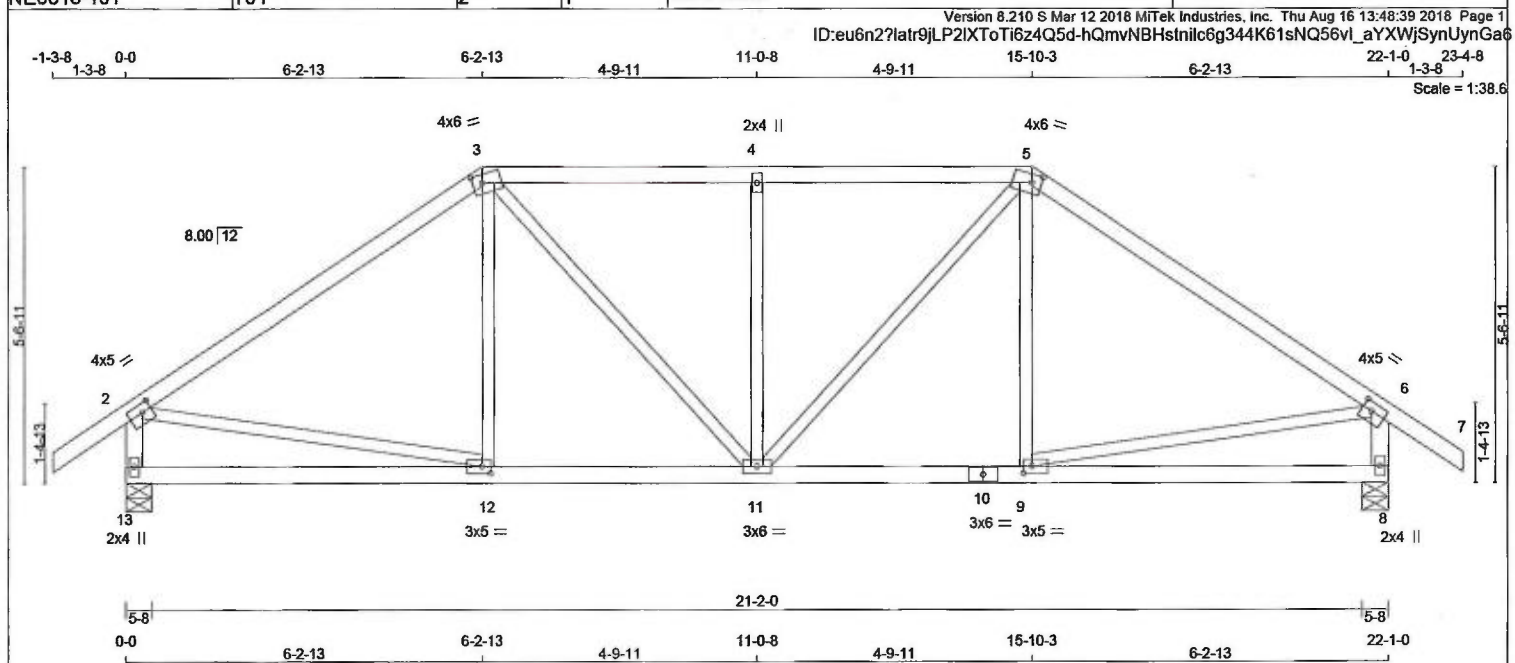
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (2) (INPUT = 0.90)
JSI METAL= 0.09 (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 = 2 X 92 = 185 lb [M][F]

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.	BEARINGS				SPECIFIED LOADS:			
1 - 3	2x4	DRY	No.2	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	TOP CH. LL =	23.3	PSF	
3 - 5	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	DL =	3.0	PSF	
5 - 7	2x4	DRY	No.2	JT VERT	HORZ	DOWN	UPLIFT	BOT CH. LL =	0.0	PSF	
13 - 2	2x4	DRY	No.2	13	1154	0	1154	DL =	7.0	PSF	
8 - 6	2x4	DRY	No.2	8	1154	0	1154	TOTAL LOAD =	33.3	PSF	
13 - 10	2x4	DRY	No.2								
10 - 8	2x4	DRY	No.2								
ALL WEBS EXCEPT	2x3	DRY	No.2	UNFACTORED REACTIONS				SPACING =			
				1ST LCASE	MAX/MIN	COMPONENT REACTIONS		LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
				JT COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
				13	807	578 / 0	0 / 0	0 / 0	229 / 0	0 / 0	
				8	807	578 / 0	0 / 0	0 / 0	229 / 0	0 / 0	

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	MEMB. MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	12-3	-36 / 85	0.03 (4)
2-3	-1090 / 0	-77.4	-77.4 0.42 (1)	5.53	3-11	0 / 347	0.08 (1)
3-4	-1140 / 0	-77.4	-77.4 0.24 (1)	5.88	11-4	-453 / 0	0.21 (1)
4-5	-1140 / 0	-77.4	-77.4 0.24 (1)	5.88	11-5	0 / 347	0.08 (1)
5-6	-1090 / 0	-77.4	-77.4 0.42 (1)	5.53	9-5	-36 / 85	0.03 (4)
6-7	0 / 29	-77.4	-77.4 0.10 (1)	10.00	2-12	0 / 919	0.21 (1)
13-2	-1108 / 0	0.0	0.0 0.11 (1)	7.52	9-6	0 / 919	0.21 (1)
8-6	-1108 / 0	0.0	0.0 0.11 (1)	7.52			
13-12	0 / 0	-17.5	-17.5 0.15 (4)	10.00			
12-11	0 / 906	-17.5	-17.5 0.23 (1)	10.00			
11-10	0 / 906	-17.5	-17.5 0.23 (1)	10.00			
10-9	0 / 906	-17.5	-17.5 0.23 (1)	10.00			
9-8	0 / 0	-17.5	-17.5 0.15 (4)	10.00			

ALLOWABLE DEFL. (LL) = L/360 (0.74")
CALCULATED VERT. DEFL. (LL) = L/999 (0.04")
ALLOWABLE DEFL. (TL) = L/360 (0.74")
CALCULATED VERT. DEFL. (TL) = L/999 (0.07")

CSI: TC=0.42/1.00 (2-3:1), BC=0.23/1.00 (11-12:1), WB=0.21/1.00 (4-11:1), SSI=0.18/1.00 (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

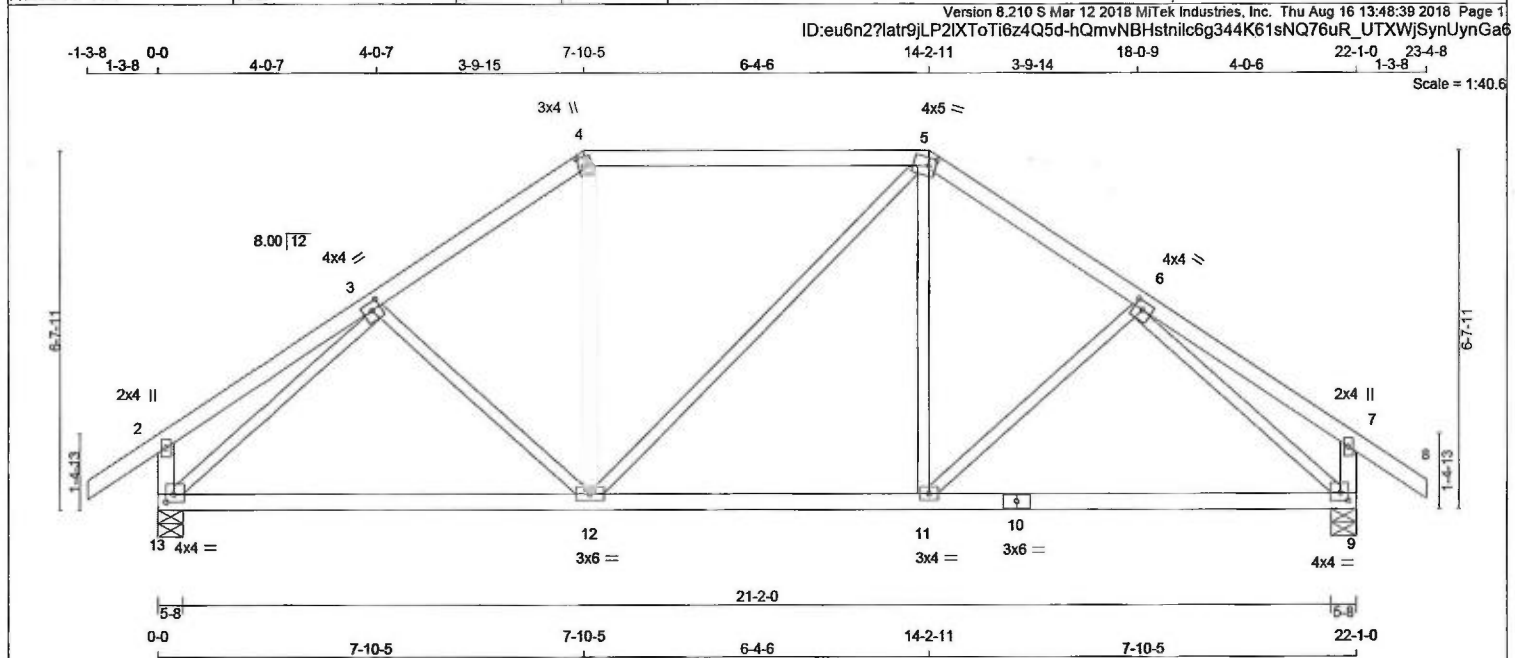
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

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= 0.90 (12) (INPUT = 0.90)
JSI METAL= 0.38 (2) (INPUT = 1.00)



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2
5 - 8	2x4	DRY	No.2
13 - 2	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
13 - 10	2x4	DRY	No.2
10 - 9	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	TMV+p	MT20	2.0	4.0		
3	TMWW-I	MT20	4.0	4.0	1.75	2.00
4	TTW+m	MT20	3.0	4.0	2.00	1.25
5	TTWW-m	MT20	4.0	5.0	1.75	1.50
6	TMWW-I	MT20	4.0	4.0	1.75	2.00
7	TMV+p	MT20	2.0	4.0		
9	BMVW1-I	MT20	4.0	4.0	1.75	1.75
10	BS-I	MT20	3.0	6.0		
11	BMWW-I	MT20	3.0	4.0		
12	BMWWW-I	MT20	3.0	6.0		
13	BMVW1-I	MT20	4.0	4.0	1.75	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	UPLIFT		
13	1154	0	1154	0	5-8	5-8
9	1154	0	1154	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
13	807	578 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0
9	807	578 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 13, 9

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 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.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)
FR-TO		FROM	TO		FR-TO		
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	3-12	-103 / 23	0.05 (1)
2-3	0 / 19	-77.4	-77.4 0.19 (1)	10.00	12-4	0 / 204	0.05 (4)
3-4	-1041 / 0	-77.4	-77.4 0.15 (1)	5.99	12-5	0 / 0	0.00 (1)
4-5	-852 / 0	-77.4	-77.4 0.41 (1)	6.04	11-5	0 / 204	0.05 (4)
5-6	-1040 / 0	-77.4	-77.4 0.15 (1)	5.99	11-6	-103 / 23	0.05 (1)
6-7	0 / 19	-77.4	-77.4 0.19 (1)	10.00	13-3	-1271 / 0	0.60 (1)
7-8	0 / 29	-77.4	-77.4 0.10 (1)	10.00	6-9	-1270 / 0	0.60 (1)
13-2	-224 / 0	0.0	0.0 0.02 (1)	7.81			
9-7	-224 / 0	0.0	0.0 0.02 (1)	7.81			
13-12	0 / 925	-17.5	-17.5 0.29 (4)	10.00			
12-11	0 / 852	-17.5	-17.5 0.28 (4)	10.00			
11-10	0 / 925	-17.5	-17.5 0.29 (4)	10.00			
10-9	0 / 925	-17.5	-17.5 0.29 (4)	10.00			

TOTAL WEIGHT = 2 X 94 = 187 lb

(M/F)

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 (0.74")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.74")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.13")

CSI: TC=0.41/1.00 (4-5:1), BC=0.29/1.00 (9-11:4), WB=0.60/1.00 (3-13:1), SSI=0.19/1.00 (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.

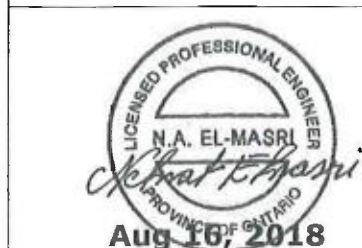
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

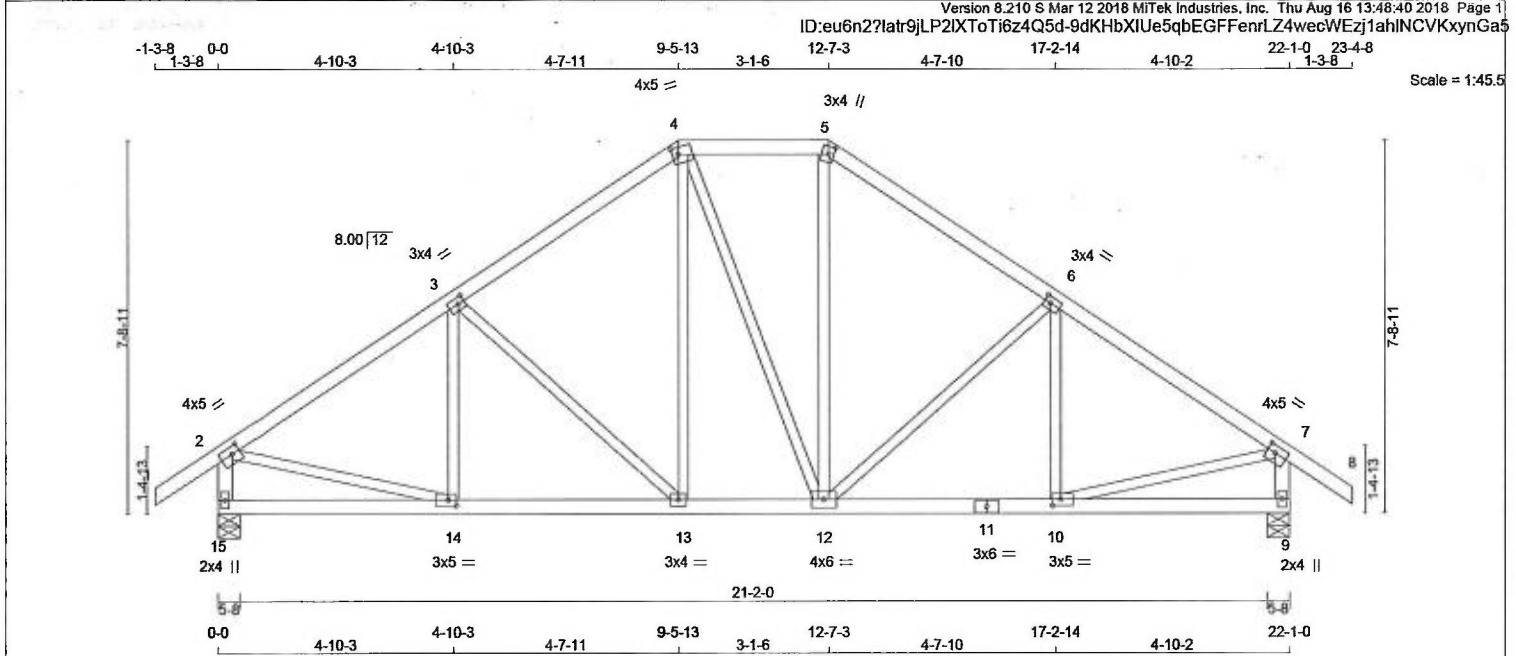
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (3) (INPUT = 0.90)
JSI METAL= 0.46 (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.





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
1 - 4	2x4	DRY	No.2
4 - 5	2x4	DRY	No.2
5 - 8	2x4	DRY	No.2
15 - 2	2x4	DRY	No.2
9 - 7	2x4	DRY	No.2
15 - 11	2x4	DRY	No.2
11 - 9	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	4.0	5.0	1.75	2.00
3	TMWW-t	MT20	3.0	4.0	1.50	1.50
4	TTWW-m	MT20	4.0	5.0	1.75	1.50
5	TTW+m	MT20	3.0	4.0	2.00	1.25
6	TMWW-t	MT20	3.0	4.0	1.50	1.50
7	TMVW-t	MT20	4.0	5.0	1.75	2.00
9	BMV1+p	MT20	2.0	4.0		
10	BMWW-t	MT20	3.0	5.0	1.50	2.00
11	BS-t	MT20	3.0	6.0		
12	BMWWW-t	MT20	4.0	6.0		
13	BMWW-t	MT20	3.0	4.0		
14	BMWW-t	MT20	3.0	5.0	1.50	2.00
15	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	REQD BRG
15	1154	0	1154	0
9	1154	0	1154	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
15	COMBINED	578 / 0	0 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0
9	COMBINED	578 / 0	0 / 0	0 / 0	0 / 0	0 / 0	229 / 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 = 5.67 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. FACTORED VERT. LOAD (LC1)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)
FR-TO		FROM	TO	LENGTH	FR-TO		
1-2	0 / 29	-77.4	-77.4	0.10 (1)	10.00	14-3	-123 / 45
2-3	-1148 / 0	-77.4	-77.4	0.24 (1)	5.67	3-13	-286 / 0
3-4	-943 / 0	-77.4	-77.4	0.23 (1)	6.11	13-4	0 / 254
4-5	-768 / 0	-77.4	-77.4	0.10 (1)	6.25	4-12	0 / 3
5-6	-944 / 0	-77.4	-77.4	0.23 (1)	6.11	12-5	0 / 257
6-7	-1148 / 0	-77.4	-77.4	0.24 (1)	5.68	12-6	-285 / 0
7-8	0 / 29	-77.4	-77.4	0.10 (1)	10.00	10-6	-125 / 44
15-2	-1118 / 0	0.0	0.0	0.12 (1)	7.49	2-14	0 / 999
9-7	-1118 / 0	0.0	0.0	0.12 (1)	7.50	10-7	0 / 999
15-14	0 / 0	-17.5	-17.5	0.10 (4)	10.00		
14-13	0 / 975	-17.5	-17.5	0.20 (1)	10.00		
13-12	0 / 767	-17.5	-17.5	0.16 (1)	10.00		
12-11	0 / 975	-17.5	-17.5	0.20 (1)	10.00		
11-10	0 / 975	-17.5	-17.5	0.20 (1)	10.00		
10-9	0 / 0	-17.5	-17.5	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

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 (0.74")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/999 (0.06")

CSI: TC=0.24/1.00 (2-3:1), BC=0.20/1.00 (13-14:1), WB=0.22/1.00 (2-14:1), SS=0.15/1.00 (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 (PSI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1656

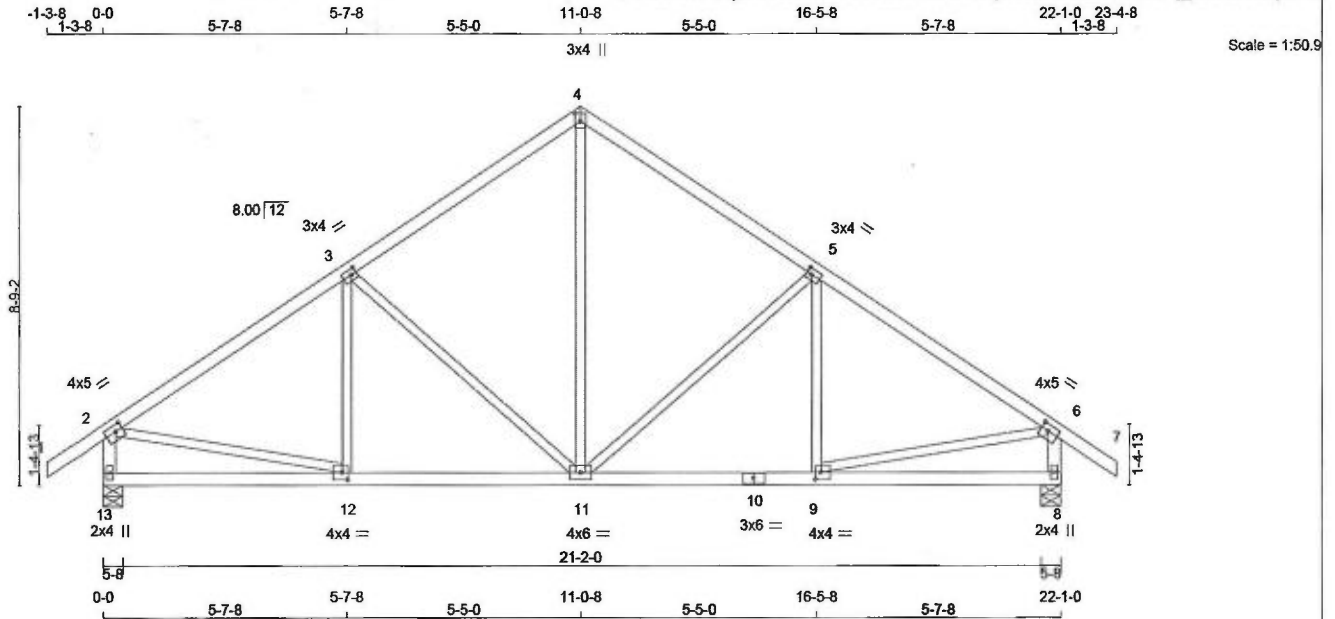
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (5) (INPUT = 0.90)
JSI METAL= 0.39 (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 = 5 X 96 = 478 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	
13 - 2	2x4	DRY	No.2	SPF	
8 - 6	2x4	DRY	No.2	SPF	
13 - 10	2x4	DRY	No.2	SPF	
10 - 8	2x4	DRY	No.2	SPF	

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-1	MT20	4.0	5.0	1.75	2.00
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	4.0	5.0	1.75	2.00
8	BMV1+p	MT20	2.0	4.0		
9	BMVW-1	MT20	4.0	4.0	2.00	1.50
10	BS-1	MT20	3.0	6.0		
11	BMVW-1	MT20	4.0	4.0	6.0	
12	BMVW-1	MT20	4.0	4.0	2.00	1.50
13	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
13	1154	0	1154	0	0	5-8	5-8
8	1154	0	1154	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
13	807	578 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0
8	807	578 / 0	0 / 0	0 / 0	0 / 0	229 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS			WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	11-4	0 / 605	0.14 (1)
2-3	-1147 / 0	-77.4	-77.4 0.33 (1)	5.55	11-5	-386 / 0	0.39 (1)
3-4	-858 / 0	-77.4	-77.4 0.31 (1)	6.20	9-5	-81 / 68	0.03 (1)
4-5	-858 / 0	-77.4	-77.4 0.31 (1)	6.20	3-11	-386 / 0	0.39 (1)
5-6	-1147 / 0	-77.4	-77.4 0.33 (1)	5.55	12-3	-81 / 68	0.03 (1)
6-7	0 / 29	-77.4	-77.4 0.10 (1)	10.00	2-12	0 / 995	0.22 (1)
13-2	-1113 / 0	0.0	0.0 0.11 (1)	7.51	9-6	0 / 995	0.22 (1)
8-6	-1113 / 0	0.0	0.0 0.11 (1)	7.51			
13-12	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
12-11	0 / 977	-17.5	-17.5 0.22 (1)	10.00			
11-10	0 / 977	-17.5	-17.5 0.22 (1)	10.00			
10-9	0 / 977	-17.5	-17.5 0.22 (1)	10.00			
9-8	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 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 (0.74")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL) = L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.33/1.00 (2-3:1), BC=0.22/1.00 (11-12:1), WB=0.39/1.00 (3-11:1), SSI=0.17/1.00 (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 (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

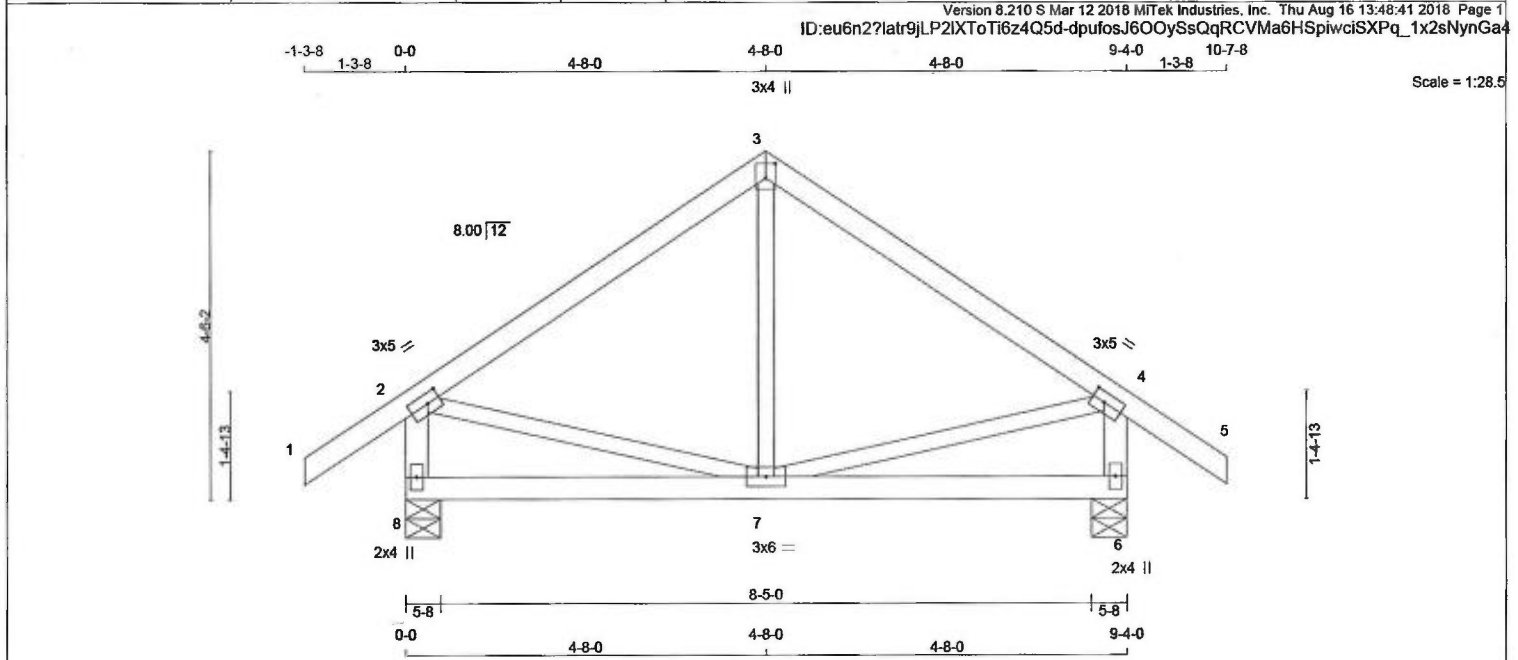
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.82 (9) (INPUT = 0.90)
JSI METAL= 0.40 (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.





TOTAL WEIGHT = 2 X 40 = 80 lb [M][F]

LUMBER			
N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
1 - 3	2x4	DRY	No.2
3 - 5	2x4	DRY	No.2
8 - 2	2x4	DRY	No.2
6 - 4	2x4	DRY	No.2
8 - 6	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	TMVW-t	MT20	3.0	5.0	1.50 2.00
3	TTW+p	MT20	3.0	4.0	2.25 1.50
4	TMVW-t	MT20	3.0	5.0	1.50 2.00
6	BMV1+p	MT20	2.0	4.0	
7	BMVWW-t	MT20	3.0	6.0	
8	BMV1+p	MT20	2.0	4.0	

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
8	549	0	549	0	0	0	5-8	5-8	5-8
6	549	0	549	0	0	0	5-8	5-8	5-8

UNFACTORED REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
8	383	281 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
6	383	281 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0

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

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

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	7-3	-19 / 74	0.03 (4)
2-3	-309 / 0	-77.4 -77.4	0.22 (1)	6.25	2-7	0 / 263	0.06 (1)
3-4	-309 / 0	-77.4 -77.4	0.22 (1)	6.25	7-4	0 / 263	0.06 (1)
4-5	0 / 29	-77.4 -77.4	0.10 (1)	10.00			
8-2	-517 / 0	0.0 0.0	0.05 (1)	7.81			
6-4	-517 / 0	0.0 0.0	0.05 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.11 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.11 (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) = $L/360$ (0.31")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.31")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.01")

CSI: TC=0.22/1.00 (3-4:1), BC=0.11/1.00 (7-8:4), WB=0.06/1.00 (2-7:1), SSI=0.12/1.00 (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)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

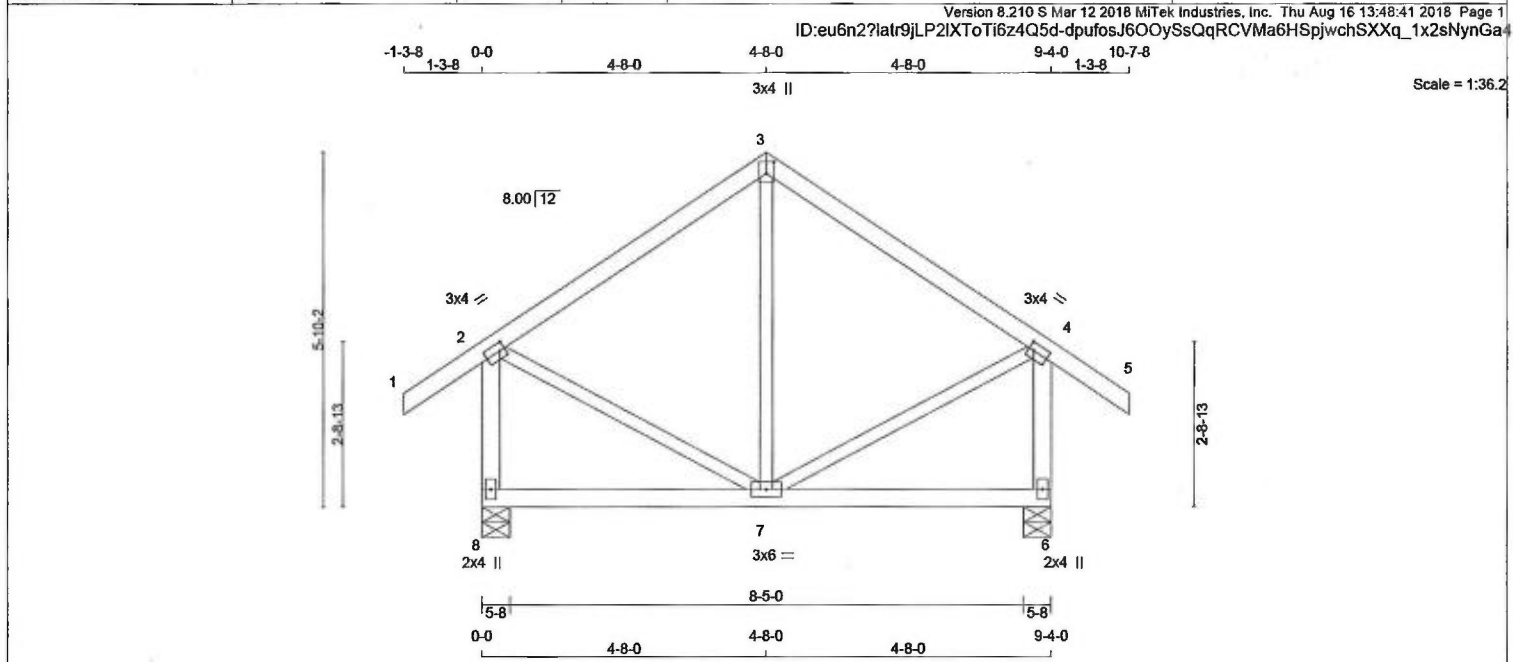
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.48 (7) (INPUT = 0.90)
JSI METAL= 0.14 (4) (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.





LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
6	BMV1+p	MT20	2.0	4.0		
7	BMVWW-t	MT20	3.0	6.0		
8	BMV1+p	MT20	2.0	4.0		

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
8	549 0	549 0	5-8	5-8
6	549 0	549 0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
8	383	281 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0
6	383	281 / 0	0 / 0	0 / 0	0 / 0	102 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1) (LC)	MAX. FACTORED VERT. LOAD (LC1) (LC)
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4 -77.4	0.10 (1)	10.00	7-3	-101 / 47	0.05 (1)
2-3	-234 / 0	-77.4 -77.4	0.22 (1)	6.25	2-7	0 / 219	0.05 (1)
3-4	-234 / 0	-77.4 -77.4	0.22 (1)	6.25	7-4	0 / 219	0.05 (1)
4-5	0 / 29	-77.4 -77.4	0.10 (1)	10.00			
8-2	-517 / 0	0.0 0.0	0.07 (1)	7.81			
6-4	-517 / 0	0.0 0.0	0.07 (1)	7.81			
8-7	0 / 0	-17.5 -17.5	0.11 (4)	10.00			
7-6	0 / 0	-17.5 -17.5	0.11 (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.I. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 23.3 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.31")
CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.31")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

CSI: TC=0.22/1.00 (3-4:1), BC=0.11/1.00 (7-8:4), WB=0.05/1.00 (3-7:1), 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 (PSI)	SECTION (PLI)
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

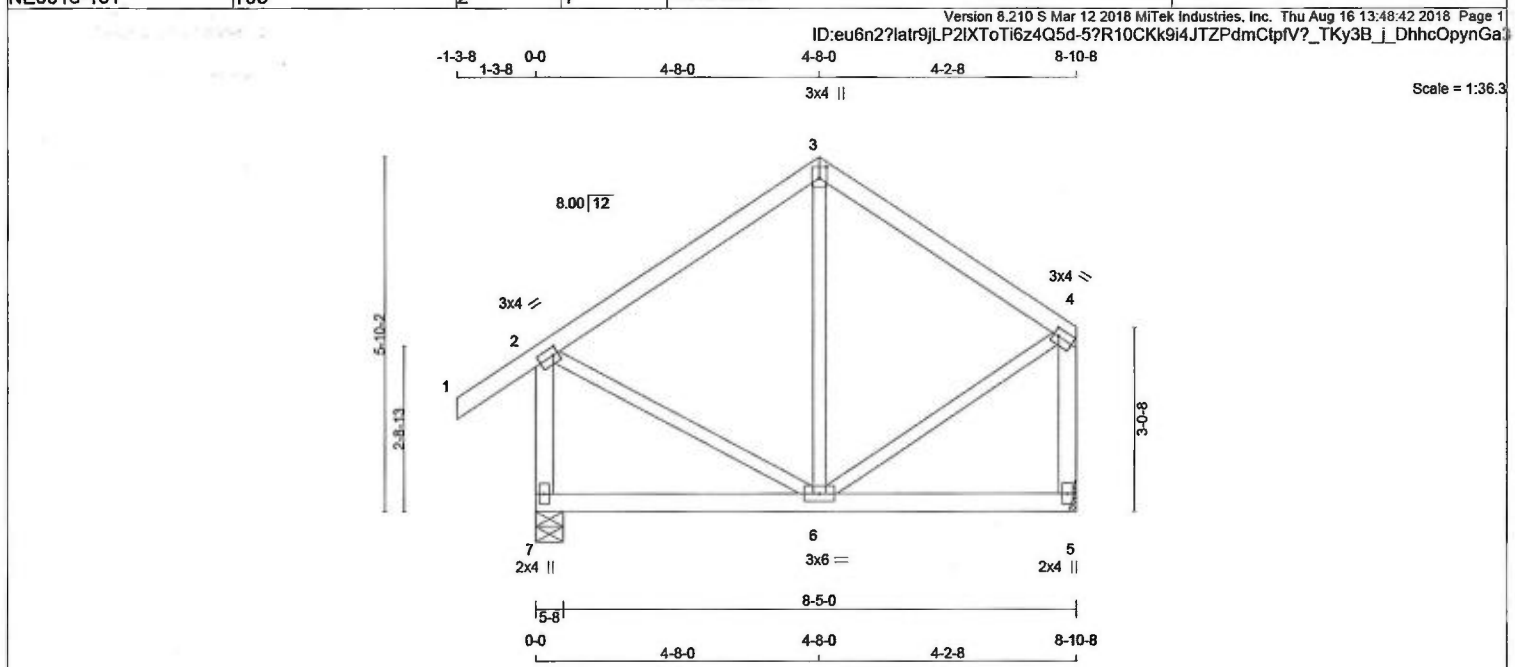
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (4) (INPUT = 0.90)
JSI METAL= 0.15 (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.





LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR. DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER **DESIGN CRITERIA**

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-t	MT20	3.0	4.0	1.50	1.00
3	TTW+p	MT20	3.0	4.0	2.25	1.50
4	TMVW-t	MT20	3.0	4.0	1.50	1.00
5	BMV1+p	MT20	2.0	4.0		
6	BMVWW-t	MT20	3.0	6.0		
7	BMV1+p	MT20	2.0	4.0		

BUILDING DESIGNER							
BEARINGS							
	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
7	527	0	527	0	0	5-8	5-8
5	421	0	421	0	0	MECHANICAL	

A SUITABLE MECHANICAL CONNECTION IS REQUIRED AT JOINT 5 TO RESIST THE MAX FACTORED REACTIONS.

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
7	368	271 / 0	0 / 0	0 / 0	0 / 0	97 / 0	0 / 0
5	295	207 / 0	0 / 0	0 / 0	0 / 0	89 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED	FACTORED		MEMB.	MAX. FACTORED	FACTORED	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)		FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO		FR-TO			
1-2	0 / 29	-77.4	-77.4 0.10 (1)	10.00	6-3	-109 / 41	0.06 (1)
2-3	-211 / 0	-77.4	-77.4 0.22 (1)	6.25	2-6	0 / 198	0.04 (1)
3-4	-211 / 0	-77.4	-77.4 0.18 (1)	6.25	6-4	0 / 209	0.05 (1)
7-2	-495 / 0	0.0	0.0 0.07 (1)	7.81			
5-4	-394 / 0	0.0	0.0 0.06 (1)	7.81			
7-6	0 / 0	-17.5	-17.5 0.10 (4)	10.00			
6-5	0 / 0	-17.5	-17.5 0.10 (4)	10.00			

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 (0.30")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.30")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.22/1.00 (2-3:1), BC=0.10/1.00 (5-6:4), WB=0.06/1.00 (3-6:1), SSI=0.12/1.00 (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= 0.68 (4) (INPUT = 0.90)
JSI METAL= 0.14 (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 EXCEPT	2x3	DRY	No.2	SPF
--------------------	-----	-----	------	-----

PLATES (table is in inches)

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

UNFACTORED REACTIONS

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 25, 14, 17

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 4.78 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 5-21. DBS = 20-0-0 . CBF = 130 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)

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 (1.22")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.22")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.41")

CSI: TC=0.75/1.00 (2-3:1) , BC=0.61/1.00 (23-24:1)
 , WB=0.74/1.00 (2-24:1) , SSI=0.23/1.00 (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 .

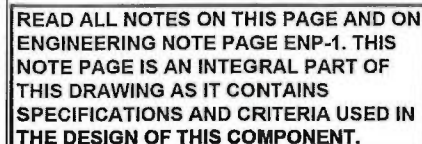
NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

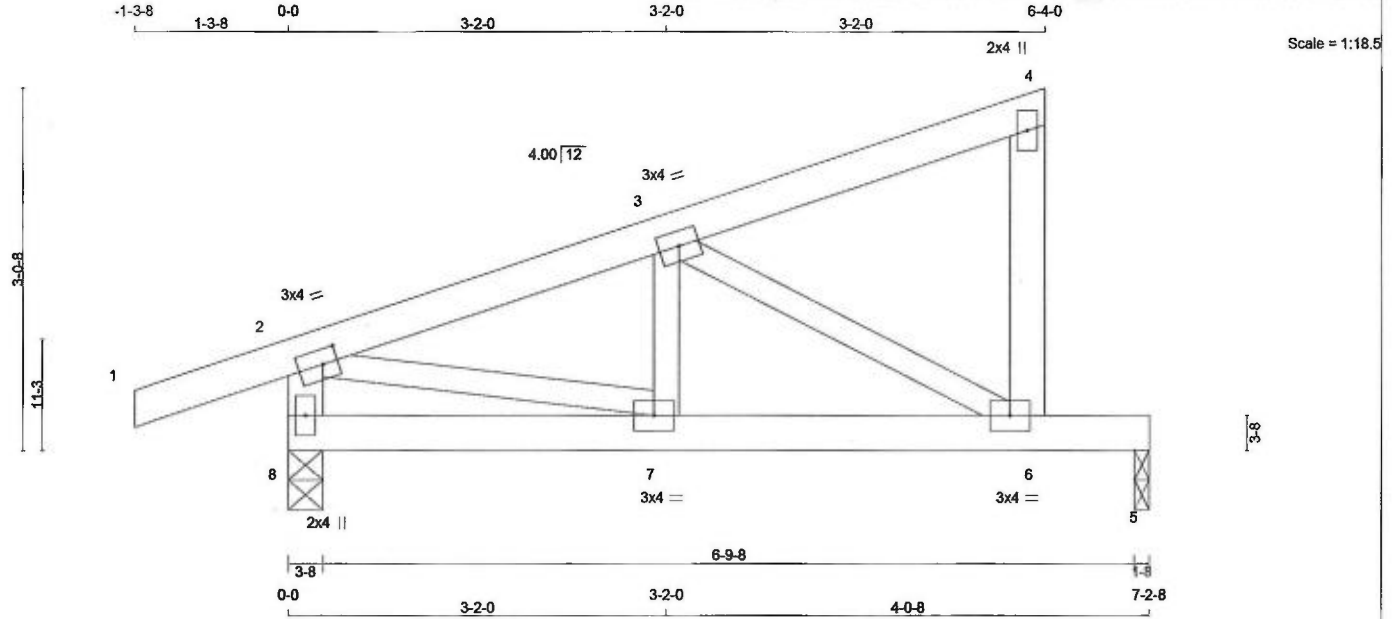
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (18) (INPUT = 0.90)
JSI METAL= 0.82 (24) (INPUT = 1.00)



CONTINUED ON PAGE 2





TOTAL WEIGHT = 4 X 27 = 107 lb
(M/F)

LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
2	TMVW-1	MT20	3.0	4.0	1.50	1.50
3	TMVW-1	MT20	3.0	4.0		
4	TMV+p	MT20	2.0	4.0		
6	BMVW-1	MT20	3.0	4.0		
7	BMVW-1	MT20	3.0	4.0		
8	BMV1+p	MT20	2.0	4.0		

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	IN-SX	IN-SX	IN-SX	IN-SX
8	441	0	441	0	3-8	3-8	3-8	3-8
5	278	0	278	0	1-8	1-8	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
8	307	228 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
5	197	130 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	MEMB.	WEBS		FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	LC2 MAX (LC)			MAX. FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LBS)
FR-TO						FR-TO				
1-2	0 / 16	-77.4	-77.4	0.10 (1)	10.00	7-3	0 / 83	0.03 (4)		
2-3	-455 / 0	-77.4	-77.4	0.09 (1)	6.25	3-6	-498 / 0	0.11 (1)		
3-4	-8 / 0	-77.4	-77.4	0.09 (1)	10.00	2-7	0 / 448	0.10 (1)		
6-4	-96 / 0	0.0	0.0	0.01 (1)	7.81					
8-2	-434 / 0	0.0	0.0	0.04 (1)	7.81					
8-7	0 / 0	-17.5	-17.5	0.09 (1)	10.00					
7-6	0 / 439	-17.5	-17.5	0.39 (1)	10.00					
6-5	0 / 0	-17.5	-17.5	0.32 (1)	10.00					

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.24")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.04")
ALLOWABLE DEFL.(TL) = $L/360$ (0.24")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.07")

CSI: TC=0.10/1.00 (1-2:1), BC=0.39/1.00 (6-7:1), WB=0.11/1.00 (3-6:1), SSI=0.22/1.00 (5-6:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	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 (2) (INPUT = 0.90)
JSI METAL= 0.20 (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.



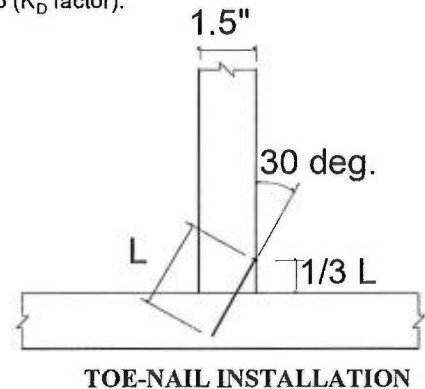
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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

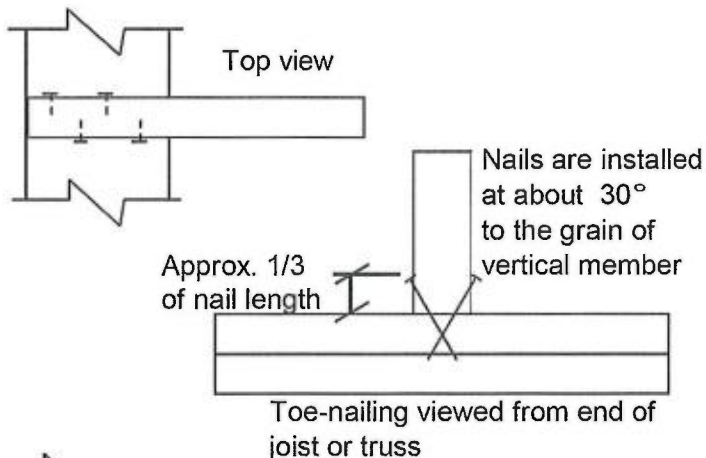
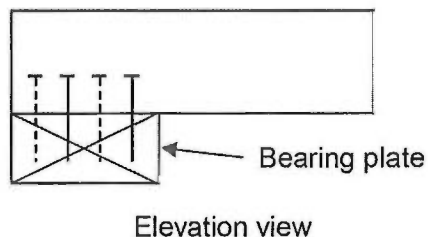
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

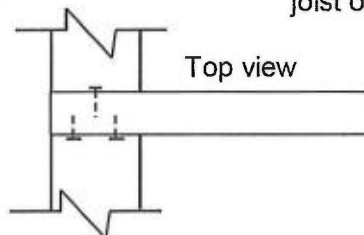
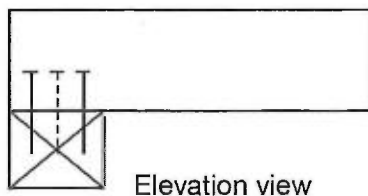
NOTES:

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



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

PEO
Certificate No. 10889485



April 26, 2017