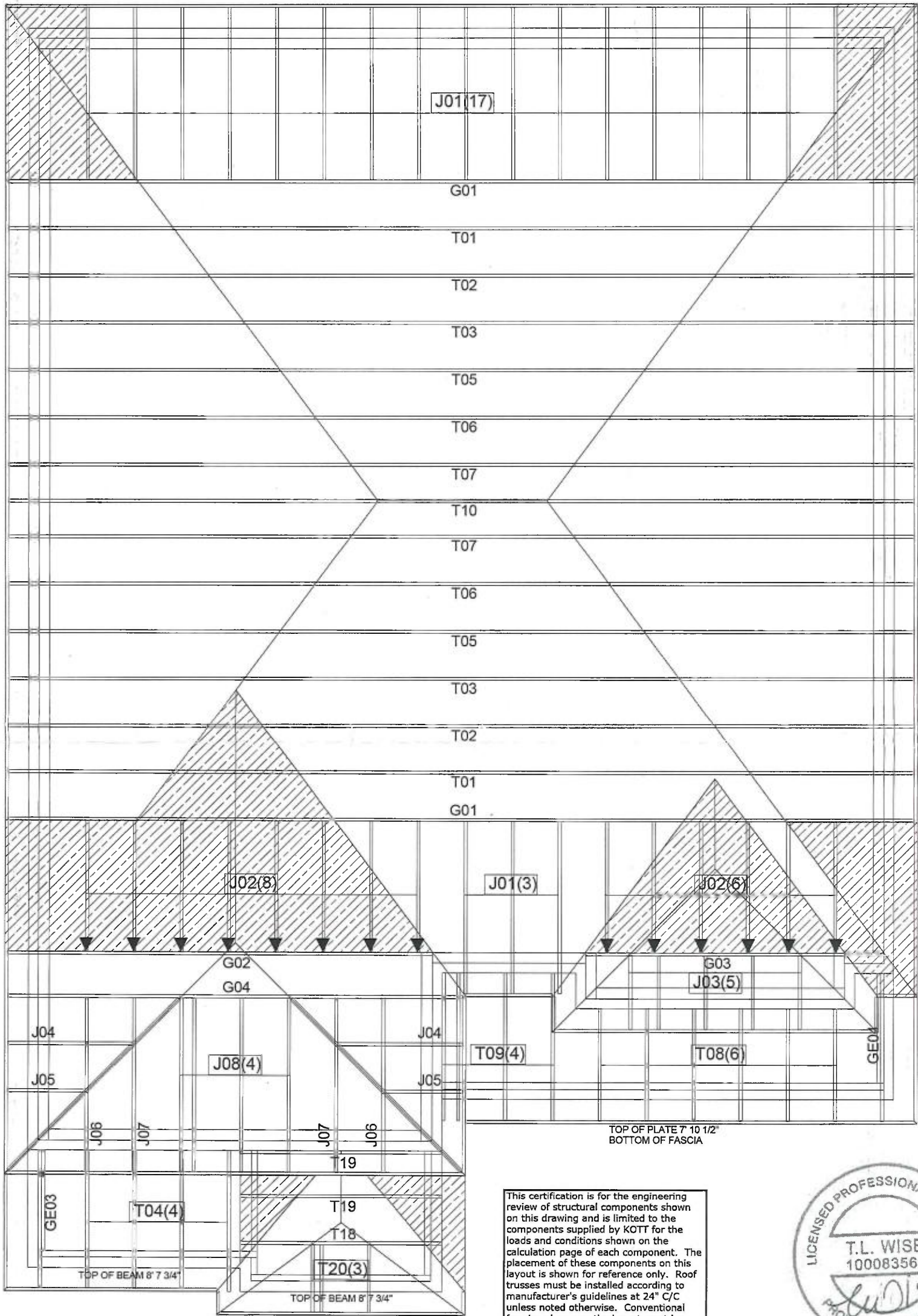


Roof Trusses 18-411395 000 00 HR



This certification is for the engineering review of structural components shown on this drawing and is limited to the components supplied by KOTT 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 bracing is to conform to BCSI guidelines.



August 16, 2018

CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
JAN 07 2019
BY MARY FREMETTE

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

18-411395-000-00RR

Lot 19

Architectural Drawing Info:
Date: JULY, 2018
Project number: 17-04-08
Model: SANDSTONE 1A



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
✕ 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, NBC 2010
THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCSC 2012, ABC 2014
- CSA 088-09
- TPIC 2011

Model: **SANDSTONE 1A EL 2**
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/28/2018 Drawn by: BB

Lot 19

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

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

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

SUPPORTS

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

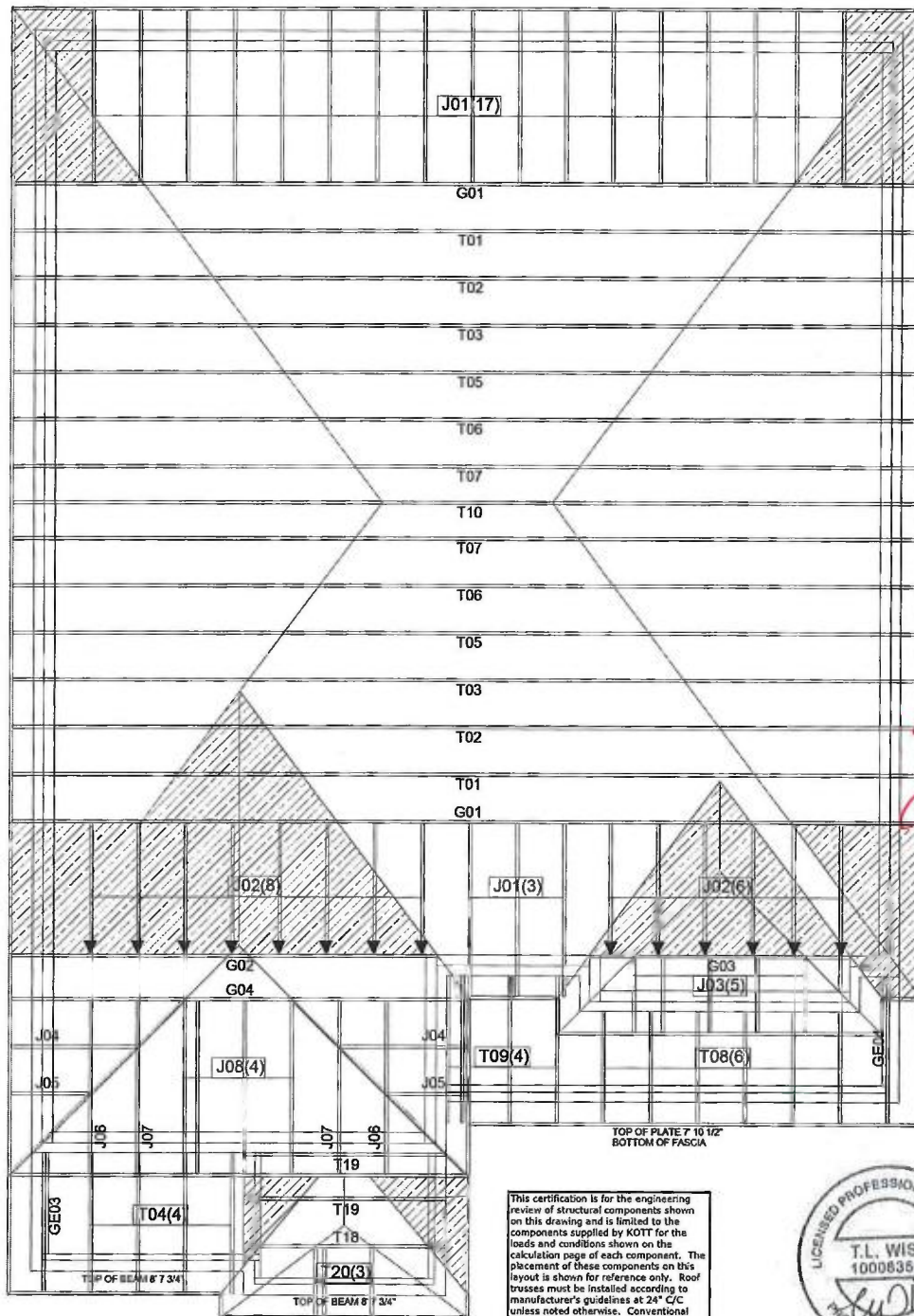
DIMENSIONS

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

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

01/29/2013



This certification is for the engineering review of structural components shown on this drawing and is limited to the components supplied by KOTT 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\"/>



August 16, 2018

Architectural Drawing Info:
Date: JULY, 2018
Project number: 17-04-06
Model: SANDSTONE 1A



CONVENTIONAL FRAMING BY OTHERS

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

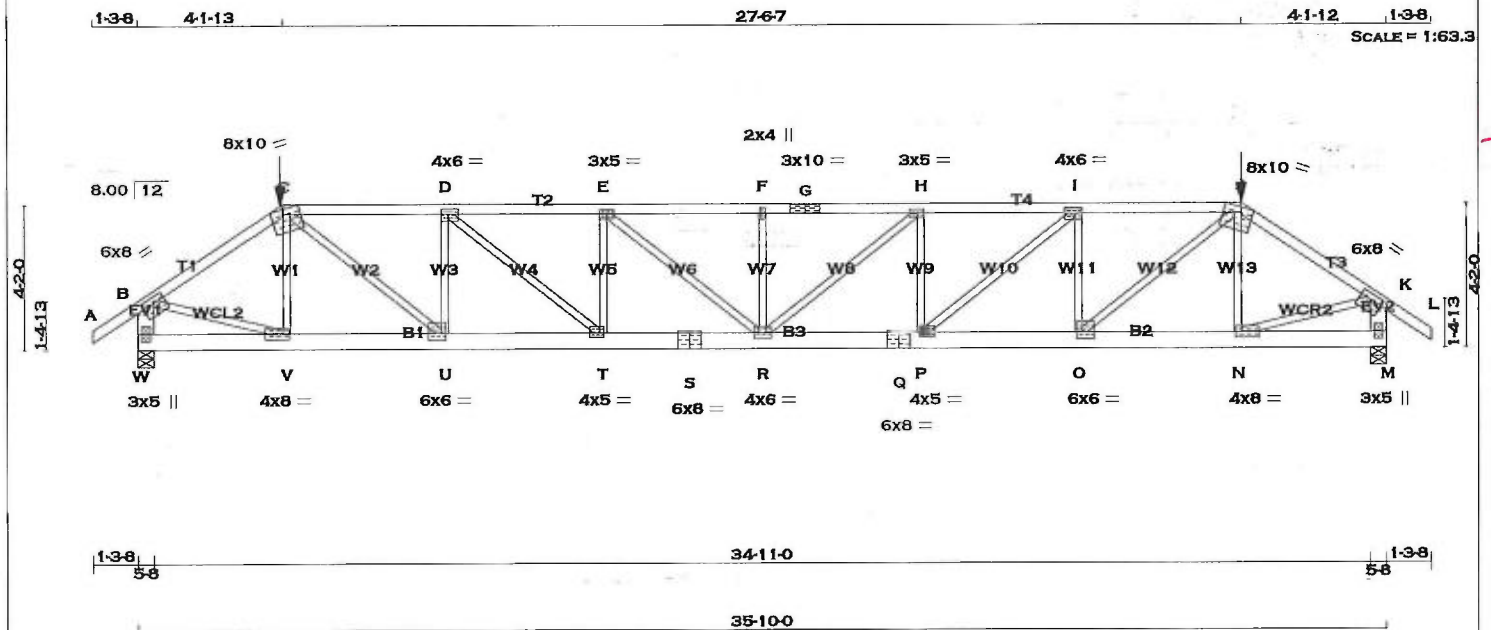
HANGER LEGEND:

- ▼ LUS24
- LJS26DS
- HGUS26
- ✕ HGUS26-2

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3 PSF
BOT CH. LL = 9 PSF
DL = 7 PSF
TOTAL LOAD = 33.3 PSF

SPACING = 24\"/>

Model: SANDSTONE 1A EL 2
Customer: GREENPARK
Project: MINNISALE HOMES
Location: BRAMPTON
Date: 6/28/2018 Drawn by: BB



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - G	2x4	DRY	2100F 1.8E	SPF	
G - J	2x4	DRY	2100F 1.8E	SPF	
J - L	2x4	DRY	No.2	SPF	
W - B	2x6	DRY	No.2	SPF	
M - K	2x6	DRY	No.2	SPF	
W - S	2x6	DRY	2100F 1.8E	SPF	
S - Q	2x6	DRY	2100F 1.8E	SPF	
Q - M	2x6	DRY	2100F 1.8E	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	8.0	2.00	3.75
C	TTWW-m	MT20	8.0	10.0	Edge	4.00
D	TMWW-t	MT20	4.0	6.0	1.75	2.50
E	TMWW-t	MT20	3.0	5.0		
F	TMW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	10.0		
H	TMWW-t	MT20	3.0	5.0		
I	TMWW-t	MT20	4.0	6.0	1.75	2.50
J	TTWW-m	MT20	8.0	10.0	Edge	4.00
K	TMVW-t	MT20	6.0	8.0	2.00	3.75
M	BMV1+p	MT20	3.0	5.0		
N	BMWW-t	MT20	4.0	8.0	2.00	2.00
O	BMWW-t	MT20	6.0	6.0	2.50	1.75
P	BMWW-t	MT20	4.0	5.0	1.75	1.50
Q	BS-t	MT20	6.0	8.0		
R	BMWWW-t	MT20	4.0	6.0		
S	BS-t	MT20	6.0	8.0		
T	BMWW-t	MT20	4.0	5.0	1.75	1.50
U	BMWW-t	MT20	6.0	6.0	2.50	1.75
V	BMWW-t	MT20	4.0	8.0	2.00	2.00
W	BMV1+p	MT20	3.0	5.0		

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

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	IN-SX	IN-SX
W	3267	0	5-8	3-9
M	3267	0	5-8	3-9

UNFACTORED REACTIONS	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
W	2292	1611 / 0	0 / 0
M	2291	1611 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.77 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. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO	MAX. CSI (LC)
A-B	0 / 29	-77.4 -77.4 0.11 (1)	10.00	V-C	-582 / 0 0.15 (1)
B-C	-3917 / 0	-77.4 -77.4 0.56 (1)	3.08	C-U	0 / 3281 0.81 (1)
C-D	-5786 / 0	-145.9 -145.9 0.55 (1)	3.22	U-D	-1938 / 0 0.50 (1)
D-E	-7229 / 0	-145.9 -145.9 0.88 (1)	2.78	D-T	0 / 1877 0.46 (1)
E-F	-7703 / 0	-145.9 -145.9 0.63 (1)	2.77	T-E	-1036 / 0 0.27 (1)
F-G	-7703 / 0	-145.9 -145.9 0.63 (1)	2.77	E-R	0 / 617 0.15 (1)
G-H	-7703 / 0	-145.9 -145.9 0.63 (1)	2.77	R-F	-670 / 0 0.17 (1)
H-I	-7229 / 0	-145.9 -145.9 0.68 (1)	2.78	R-H	0 / 617 0.15 (1)
I-J	-5786 / 0	-145.9 -145.9 0.55 (1)	3.22	P-H	-1036 / 0 0.27 (1)
J-K	-3917 / 0	-77.4 -77.4 0.56 (1)	3.08	P-I	0 / 1877 0.46 (1)
K-L	0 / 29	-77.4 -77.4 0.11 (1)	10.00	O-I	-1938 / 0 0.50 (1)
W-B	-3210 / 0	0.0 0.0 0.23 (1)	5.86	O-J	0 / 3281 0.81 (1)
M-K	-3210 / 0	0.0 0.0 0.23 (1)	5.86	N-J	-582 / 0 0.15 (1)
				B-V	0 / 3342 0.83 (1)
				N-K	0 / 3342 0.83 (1)
W-V	0 / 0	-33.0 -33.0 0.04 (4)	10.00		
V-U	0 / 3238	-33.0 -33.0 0.21 (1)	10.00		
U-T	0 / 5787	-33.0 -33.0 0.36 (1)	10.00		
T-S	0 / 7229	-33.0 -33.0 0.45 (1)	10.00		
S-R	0 / 7229	-33.0 -33.0 0.45 (1)	10.00		
R-Q	0 / 7229	-33.0 -33.0 0.45 (1)	10.00		
Q-P	0 / 7229	-33.0 -33.0 0.45 (1)	10.00		
P-O	0 / 5786	-33.0 -33.0 0.36 (1)	10.00		
O-N	0 / 3237	-33.0 -33.0 0.21 (1)	10.00		
N-M	0 / 0	-33.0 -33.0 0.04 (4)	10.00		

FACTORED CONCENTRATED LOADS (LBS)	JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	4-1-13	-241	-241	--	--	FRONT	VERT	TOTAL
J	31-8-3	-241	-241	--	--	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
 LEFT SETBACK = 4-1-13
 RIGHT SETBACK = 4-1-12
 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 (1.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.41")
 ALLOWABLE DEFL.(TL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/597 (0.72")

CSI: TC=0.68/1.00 (D-E:1), BC=0.45/1.00 (R-T:1), WB=0.83/1.00 (B-V:1), SSI=0.35/1.00 (I-J:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
 JSI METAL= 0.99 (S) (INPUT = 1.00)



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC	DRWG NO.	Page 4 of 32
TW0818-107	G01	2	1	TR-GREENPARK-MINNISALE HOMES-SANDSTONE 1A EL 2		TW0818-107
				TRUSS DESC.		

Kott, Ottawa, Ontario, TW

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Thu Aug 16 15:42:57 2018 Page 2
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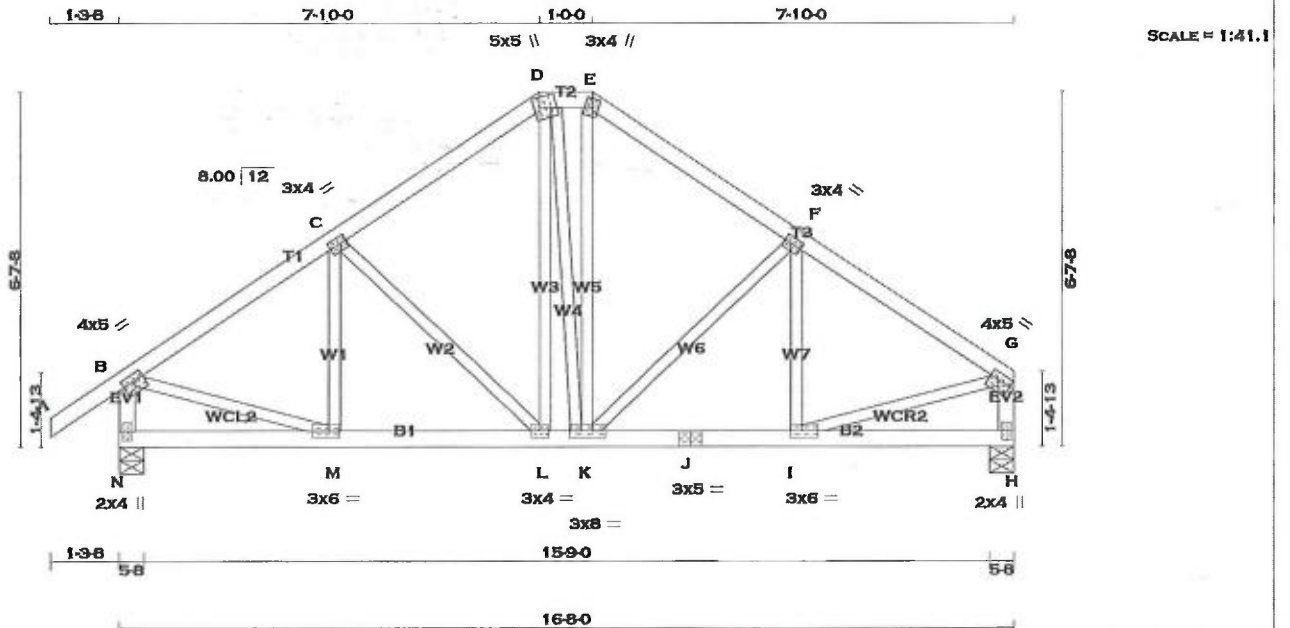
A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH
TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 240.5 lbs FACTORED DOWN AT
31-8-3, AND 240.8 lbs FACTORED DOWN AT
4-1-13 ON TOP CHORD. DESIGN FOR
UNSPECIFIED CONNECTION(S) IS DELEGATED
TO THE BUILDING DESIGNER.



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



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:	
A - D	2x4	DRY	No.2	SPF		GROSS REACTION	GROSS REACTION	BRG	BRG	TOP CH. LL = 23.3 PSF	
D - E	2x4	DRY	No.2	SPF		VERT	DOWN	UPLIFT	IN-SX	DL = 3.0 PSF	
E - G	2x4	DRY	No.2	SPF		N	1597 0	0	5-8	BOT CH. LL = 0.0 PSF	
N - B	2x4	DRY	No.2	SPF		H	1490 0	0	5-8	DL = 7.0 PSF	
H - G	2x4	DRY	No.2	SPF					2-9	TOTAL LOAD = 33.3 PSF	
N - J	2x4	DRY	No.2	SPF							
J - H	2x4	DRY	No.2	SPF							

ALL WEBS EXCEPT				UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
ALL WEBS	2x3	DRY	No.2	SPF		1ST LCASE	MAX/MIN. COMPONENT REACTIONS			LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM	
EXCEPT						JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
						N	1118	796 / 0	0 / 0	0 / 0	322 / 0
						H	1046	732 / 0	0 / 0	0 / 0	314 / 0

DRY: SEASONED LUMBER.

PLATES (table is in inches)						BRACING					
JT	TYPE	PLATES	W	LEN	Y	X	TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.03 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)
B	TMVW-t	MT20	4.0	5.0	1.50	2.00					
C	TMVW-t	MT20	3.0	4.0	1.50	1.50					
D	TTWW+m	MT20	5.0	5.0	2.25	1.25					
E	TTWW+m	MT20	3.0	4.0	2.00	1.25					
F	TMVW-t	MT20	3.0	4.0	1.50	1.50					
G	TMVW-t	MT20	4.0	5.0	1.50	2.00					
H	BMV1+p	MT20	2.0	4.0							
I	BMVW-t	MT20	3.0	6.0	1.50	2.50					
J	BS-t	MT20	3.0	5.0							
K	BMVW-t	MT20	3.0	8.0							
L	BMVW-t	MT20	3.0	4.0							
M	BMVW-t	MT20	3.0	6.0	1.50	2.25					
N	BMV1+p	MT20	2.0	4.0							

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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			
A-B	0 / 29	-77.4 -77.4 0.11 (1)	10.00	M-C	0 / 123	0.04 (4)	
B-C	-1529 / 0	-77.4 -77.4 0.25 (1)	5.03	C-L	-424 / 0	0.21 (1)	
C-D	-1201 / 0	-77.4 -77.4 0.23 (1)	5.54	L-D	0 / 447	0.11 (1)	
D-E	-998 / 0	-77.4 -77.4 0.03 (1)	6.21	D-K	0 / 60	0.01 (1)	
E-F	-1210 / 0	-77.4 -77.4 0.23 (1)	5.52	K-E	0 / 512	0.13 (1)	
F-G	-1526 / 0	-77.4 -77.4 0.25 (1)	5.04	K-F	-409 / 0	0.21 (1)	
N-B	-1433 / 0	0.0 0.0 0.16 (1)	6.78	I-F	0 / 107	0.04 (4)	
H-G	-1324 / 0	0.0 0.0 0.15 (1)	7.00	B-M	0 / 1333	0.33 (1)	
				I-G	0 / 1330	0.33 (1)	
N-M	0 / 0	-101.5 -101.5 0.25 (1)	10.00				
M-L	0 / 1288	-101.5 -101.5 0.47 (1)	10.00				
L-K	0 / 989	-101.5 -101.5 0.34 (1)	10.00				
K-J	0 / 1284	-101.5 -101.5 0.46 (1)	10.00				
J-I	0 / 1284	-101.5 -101.5 0.46 (1)	10.00				
I-H	0 / 0	-101.5 -101.5 0.23 (1)	10.00				

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 (0.56")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.56")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.25/1.00 (B-C:1), BC=0.47/1.00 (L-M:1)
WB=0.33/1.00 (B-M:1), SSI=0.21/1.00 (M-N: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				SECTION			
PLATE	GRIP(DRY)	SHEAR	(PSI)	PLI	PLI	PLI	PLI
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
MT20	618	354	1667	822	2284	1656	

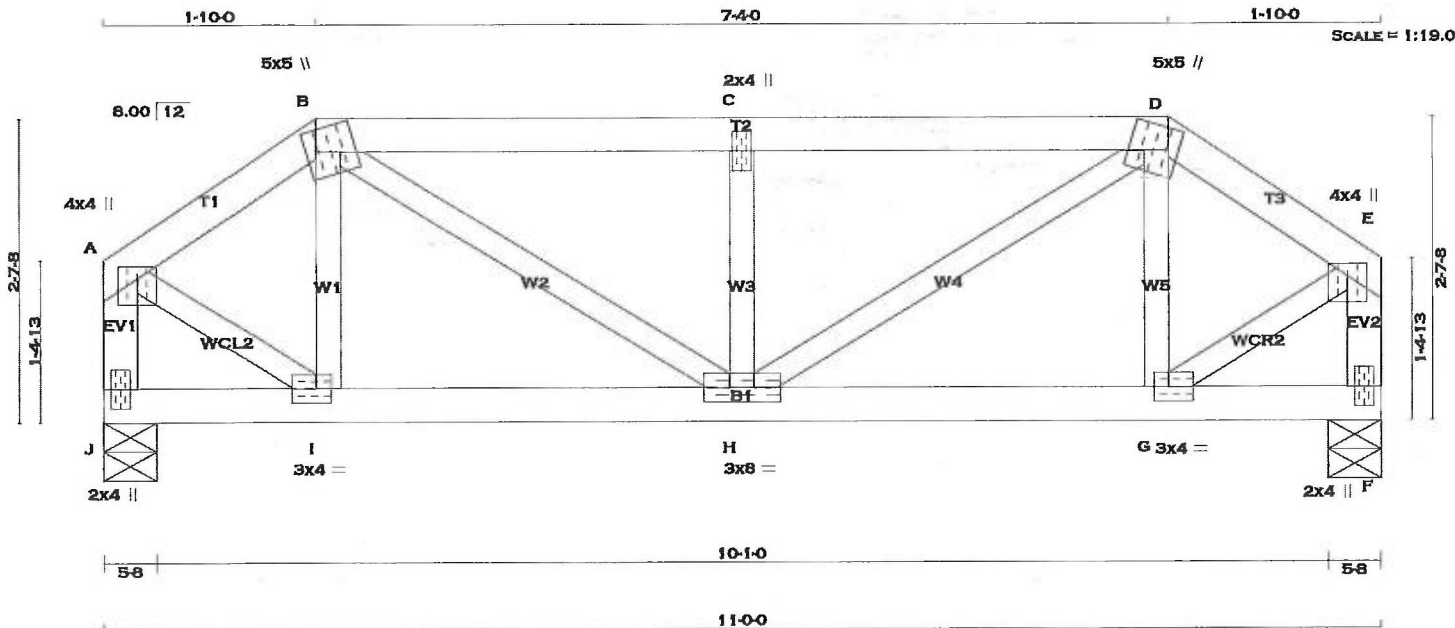
PLATE PLACEMENT TOL. = 0.250 inches

PLATE TOLERANCE TOL. = 5.0 Deg.

JSI GRIP= 0.90 (E) (INPUT = 0.90)
JSI METAL= 0.50 (B) (INPUT = 1.00)



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



LUMBER

N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - B	2x4	DRY	No.2
B - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
J - A	2x4	DRY	No.2
F - E	2x4	DRY	No.2
J - F	2x4	DRY	No.2

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A - B	MT20	4.0	4.0	1.25	2.00
B - D	MT20	5.0	5.0	2.25	1.00
C	MT20	2.0	4.0		
D - E	MT20	5.0	5.0	2.25	1.00
E	MT20	4.0	4.0	1.25	2.00
F	BMV1+p	2.0	4.0		
G	BMWW-t	3.0	4.0	1.50	1.50
H	BMWW-t	3.0	8.0		
I	BMWW-t	3.0	4.0	1.50	1.50
J	BMV1+p	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
J	984	0	984	0	0	5-8	1-11		
F	984	0	984	0	0	5-8	1-11		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS						
J	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
F	690	483 / 0	0 / 0	0 / 0	0 / 0	207 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.52 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. CSJ (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSJ (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-840 / 0	-77.4 -77.4	0.06 (1)	I-B	-68 / 21	0.01 (1)	
B-C	-1246 / 0	-77.4 -77.4	0.18 (1)	B-H	0 / 654	0.16 (1)	
C-D	-1246 / 0	-77.4 -77.4	0.18 (1)	H-C	-331 / 0	0.06 (1)	
D-E	-840 / 0	-77.4 -77.4	0.06 (1)	H-D	0 / 654	0.16 (1)	
J-A	-929 / 0	0.0 0.0	0.10 (1)	G-D	-68 / 21	0.01 (1)	
F-E	-929 / 0	0.0 0.0	0.10 (1)	A-I	0 / 797	0.20 (1)	
				G-E	0 / 797	0.20 (1)	
J-I	0 / 0	-101.5 -101.5	0.13 (1)				
I-H	0 / 693	-101.5 -101.5	0.26 (1)				
H-G	0 / 693	-101.5 -101.5	0.26 (1)				
G-F	0 / 0	-101.5 -101.5	0.13 (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

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

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 5-6-8
END DISTANCE = 11-0-0
END SPAN CARRIED = 5-6-8
END WALL WIDTH = 0-0
APPLIED TO BACK SIDE OF BOTTOM CHORD.
- ADDTL LOADS BASED ON 55 % OF GSL.

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.37")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.37")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.18/1.00 (B-C:1), BC=0.26/1.00 (H-I:1), WB=0.20/1.00 (A-I:1), SSI=0.16/1.00 (H-I: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 622	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (I) (INPUT = 0.90)
JSI METAL= 0.26 (I) (INPUT = 1.00)



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

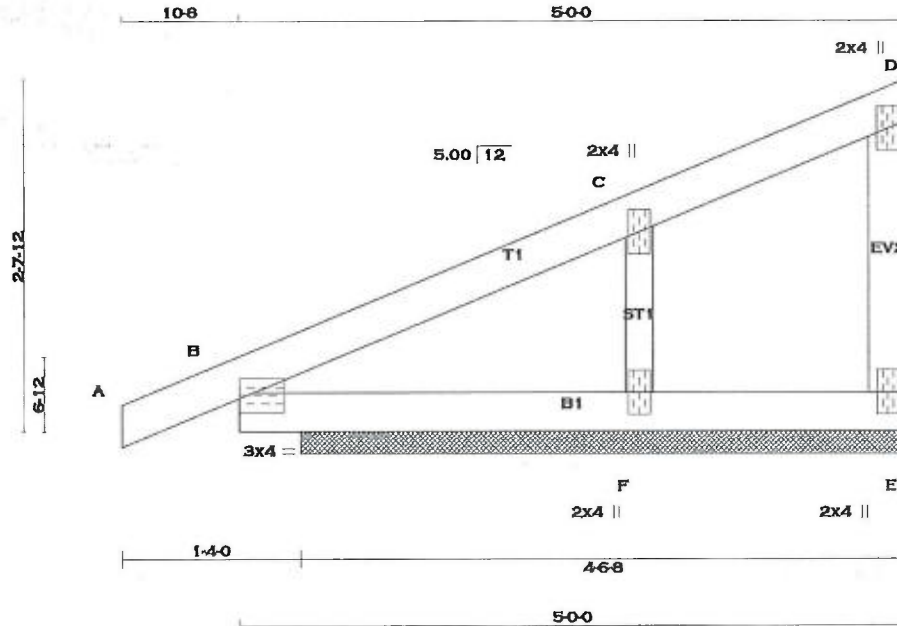


1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 10-8-0, AND 348.1 lbs FACTORED DOWN AT 6-0-0 ON TOP CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER

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		FR-TO		FR-TO				
A-B	0 / 29	-77.4	-77.4	0.11 (1)	10.00	M-C	-345 / 0	0.08 (1)
B-C	-1507 / 0	-77.4	-77.4	0.14 (1)	5.19	L-D	-13 / 50	0.01 (1)
C-D	-1578 / 0	-77.4	-77.4	0.14 (1)	5.09	C-L	0 / 154	0.06 (4)
D-E	-1301 / 0	-145.9	-145.9	0.65 (1)	4.57	D-K	0 / 0	0.00 (1)
E-F	-1579 / 0	-77.4	-77.4	0.14 (1)	5.09	K-E	0 / 155	0.06 (4)
F-G	-1507 / 0	-77.4	-77.4	0.14 (1)	5.19	K-F	-12 / 51	0.01 (1)
G-H	0 / 29	-77.4	-77.4	0.11 (1)	10.00	J-F	-346 / 0	0.09 (1)
N-B	-1486 / 0	0.0	0.0	0.17 (1)	6.68	B-M	0 / 1339	0.33 (1)
I-G	-1486 / 0	0.0	0.0	0.17 (1)	6.68	J-G	0 / 1338	0.33 (1)
N-M	0 / 0	-33.0	-33.0	0.08 (4)	10.00			
M-L	0 / 1264	-33.0	-33.0	0.28 (1)	10.00			
L-K	0 / 1301	-33.0	-33.0	0.29 (1)	10.00			
K-J	0 / 1264	-33.0	-33.0	0.29 (1)	10.00			
J-I	0 / 0	-33.0	-33.0	0.08 (4)	10.00			

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IN THE DESIGN OF THIS COMPONENT.**

JSI GRIP= 0.89 (F) (INPUT = 0.90)
JSI METAL= 0.49 (B) (INPUT = 1.00)



SCALE = 1:16.5

TOTAL WEIGHT = 16 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB-I	MT20	3.0	4.0		Edge
C	TMW+w	MT20	2.0	4.0		
D	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		
F	BMW1+w	MT20	2.0	4.0		

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

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

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 5	-77.4	-77.4 0.05 (1)	10.00	F-C	-394 / 0	0.06 (1)
B-C	0 / 105	-77.4	-77.4 0.23 (1)	10.00			
C-D	0 / 36	-77.4	-77.4 0.22 (1)	10.00			
E-D	0 / 9	0.0	0.0 0.13 (1)	10.00			
B-F	-60 / 0	-17.5	-17.5 0.21 (1)	6.25			
F-E	-75 / 0	-17.5	-17.5 0.19 (1)	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=0.23/1.00 (B-C:1) , BC=0.21/1.00 (B-F:1) , WB=0.06/1.00 (C-F:1) , SSI=0.14/1.00 (C-D: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.

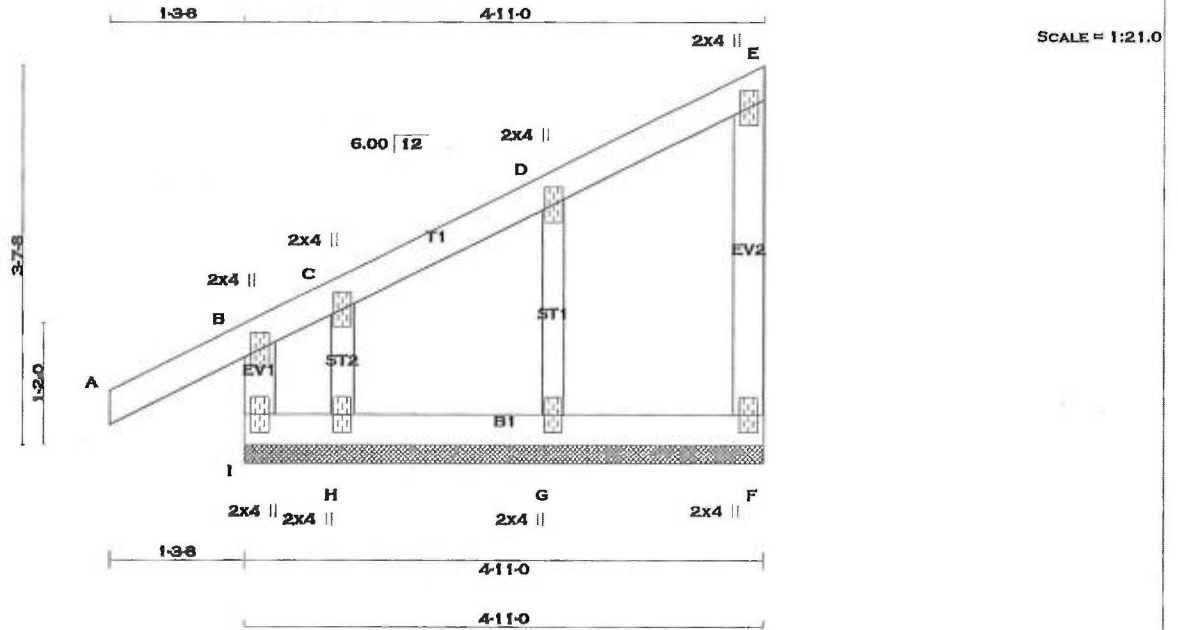
JSI GRIP= 0.22 (C) (INPUT = 0.90)
JSI METAL= 0.08 (C) (INPUT = 1.00)



August 16, 2018



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TOTAL WEIGHT = 20 lb [M]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
I - B	2x4	DRY	No.2	SPF
A - E	2x4	DRY	No.2	SPF
F - E	2x4	DRY	No.2	SPF
I - F	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT 2-0-0 OC.				

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMV+p	MT20	2.0	4.0	
C	TMW+w	MT20	2.0	4.0	
D	TMW+w	MT20	2.0	4.0	
E	TMV+p	MT20	2.0	4.0	
F	BMV1+p	MT20	2.0	4.0	
G	BMW1+w	MT20	2.0	4.0	
H	BMW1+w	MT20	2.0	4.0	
I	BMV1+p	MT20	2.0	4.0	

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

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

CHORDS						WEBS					
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	LC1
FR-TO		FROM TO			FR-TO				FR-TO		
I-B	-202 / 0	0.0	0.0	0.03 (1)	7.81	G-D	-177 / 0	0.03 (1)			
A-B	0 / 23	-77.4	-77.4	0.10 (1)	10.00	H-C	-39 / 0	0.01 (1)			
B-C	-38 / 0	-77.4	-77.4	0.08 (1)	6.25						
C-D	-5 / 0	-77.4	-77.4	0.04 (1)	10.00						
D-E	-9 / 0	-77.4	-77.4	0.04 (1)	10.00						
F-E	-67 / 0	0.0	0.0	0.01 (1)	7.81						
I-H	0 / 11	-17.5	-17.5	0.03 (1)	10.00						
H-G	0 / 9	-17.5	-17.5	0.02 (4)	10.00						
G-F	0 / 4	-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, NBC 2010

THIS DESIGN COMPLIES WITH:
- PART 9 OF OBC 2012, BCBC 2012, ABC 2014
- CSA D86-09
- 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 (A-B:1), BC=0.03/1.00 (H-I:1), WB=0.03/1.00 (D-G:1), SSI=0.07/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

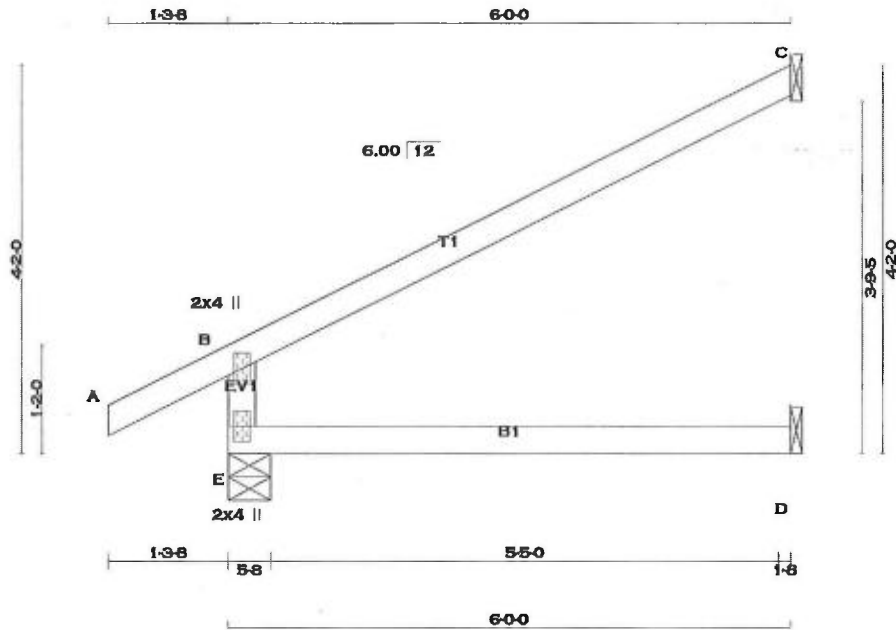
JSI GRIP= 0.12 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



August 16, 2018



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SCALE = 1:23.6

TOTAL WEIGHT = 20 X 17 = 342 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N.L.G.A. RULES				
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	457	0	457	0	0	5-8	1-8
C	174	0	174	0	0	1-8	1-8
D	43	0	49	0	0	1-8	1-8

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
E-B	-395 / 0	0.0	0.0	0.13 (4)	7.81		
A-B	0 / 23	-77.4	-77.4	0.10 (1)	10.00		
B-C	-26 / 0	-77.4	-77.4	0.47 (1)	6.25		
E-D	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 (B-C:1), BC=0.13/1.00 (D-E:4)
 , WB=0.00/1.00 (n/a:0), SSI=0.20/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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.

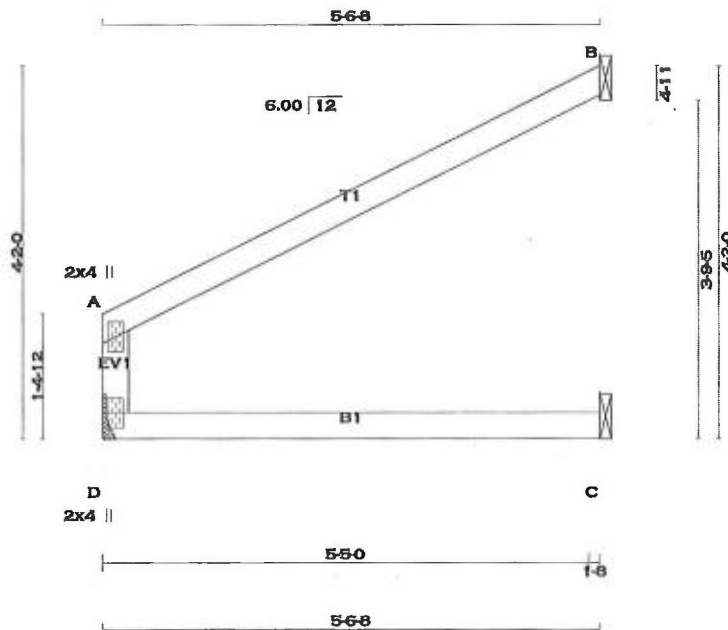
JSI GRIP= 0.23 (B) (INPUT = 0.90)
 JSI METAL= 0.09 (B) (INPUT = 1.00)



August 16, 2018



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SCALE = 1:24.6

TOTAL WEIGHT = 14 X 15 = 204 lb [M/F]

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
D - A	2x4	DRY	No.2	SPF
A - B	2x4	DRY	No.2	SPF
D - C	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
D	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS							
JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
D	263	0	263	0	0	MECHANICAL	
B	197	0	197	0	0	1-8	1-8
C	66	0	66	0	0	1-8	1-8

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

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

UNFACTORED REACTIONS

JT	COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
D	184	129 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0
B	134	116 / 0	0 / 0	0 / 0	0 / 0	18 / 0	0 / 0
C	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)

FR-TO	CHORDS		WEBS	
	MAX. FACTORED MEMB. FORCE (LBS)	FACTORED VERT. LOAD LC1 MAX (PLF)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED MEMB. FORCE (LBS)
D-A	-232 / 0	0.0 0.0 0.12 (1)	7.81	
A-B	-8 / 1	-77.4 -77.4 0.34 (1)	10.00	
D-C	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 D86-09
 - 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/829 (0.08")

CSI: TC=0.34/1.00 (A-B:1), BC=0.17/1.00 (C-D:1)
 , WB=0.00/1.00 (n/a:0), SSI=0.16/1.00 (A-B: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.

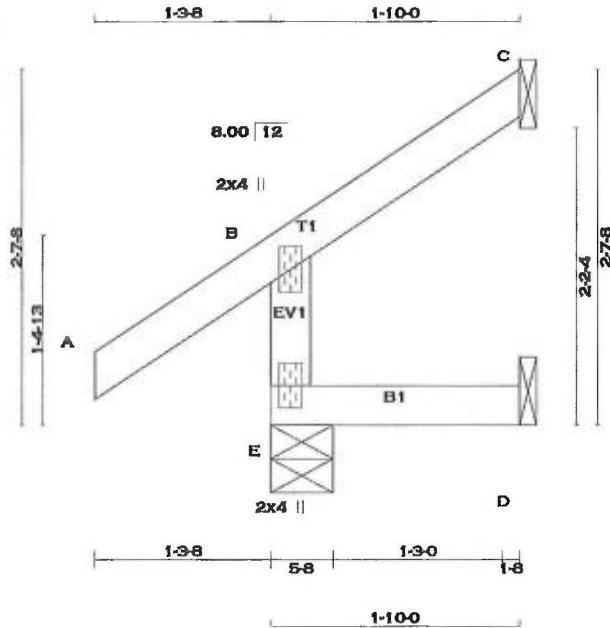
JSI GRIP= 0.13 (A) (INPUT = 0.90)
 JSI METAL= 0.05 (A) (INPUT = 1.00)



August 16, 2018



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SCALE = 1:16.2

TOTAL WEIGHT = 5 X 8 = 38 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0	
E	BMV1+p	MT20	2.0	4.0	

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

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

	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
E	233	0	233	0	0	5-8
C	39	0	39	0	-22	1-8
D	8	0	16	0	0	1-8

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

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST CASE	MAX/MIN COMPONENT REACTIONS		PERM.LIVE	WIND	DEAD	SOIL
		SNOW	LIVE				
E	160	131/0	0/0	0/0	0/0	30/0	0/0
C	27	23/-17	0/0	0/0	0/0	4/0	0/0
D	7	0/-7	0/0	0/0	0/0	11/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	
FR-TO		FROM	TO		FR-TO				
E-B	-209 / 0	0.0	0.0	0.03 (5)	7.81				
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00				
B-C	-18 / 0	-77.4	-77.4	0.08 (1)	6.25				
E-D	0 / 0	-17.5	-17.5	0.03 (5)	10.00				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CSI: TC=0.10/1.00 (A-B:1) , BC=0.03/1.00 (D-E:5) , VWB=0.00/1.00 (n/a:0) , SSI=0.07/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

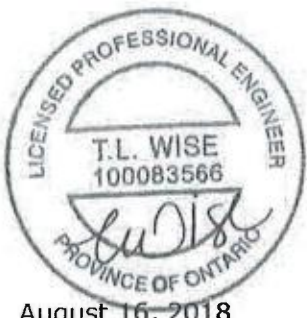
NAIL VALUES

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

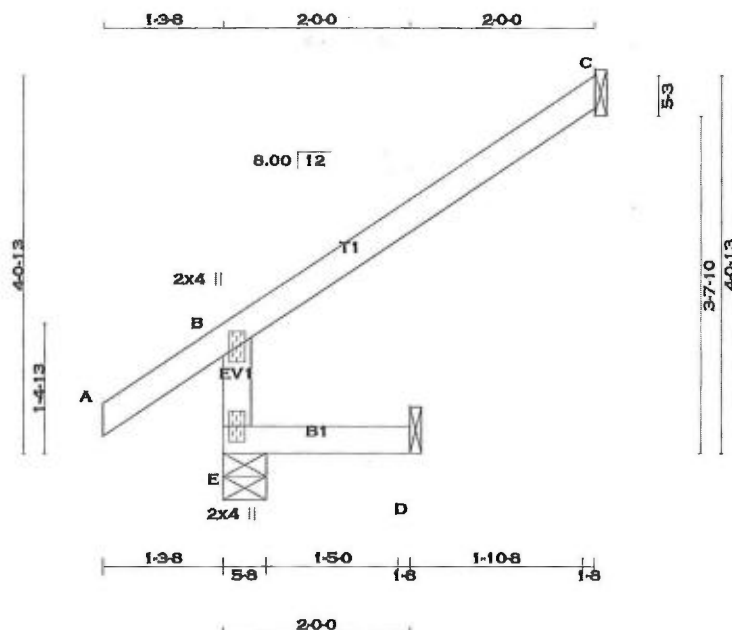
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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SCALE = 1:23.7

TOTAL WEIGHT = 2 X 11 = 22 lb
(M)**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4 DRY	No.2	SPF
A - C	2x4 DRY	No.2	SPF
E - D	2x4 DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0	
E	BMV1+p	MT20	2.0	4.0	

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
E	319	0	319	0	5-8	1-8
C	116	0	116	0	1-8	1-8
D	16	0	18	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX./MIN. COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	219	180/0	0/0	0/0	0/0	39/0	0/0
C	79	70/0	0/0	0/0	0/0	9/0	0/0
D	13	0/0	0/0	0/0	0/0	13/0	0/0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
E-B	-299 / 0	0.0	0.0	0.01 (4)	7.81		
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00		
B-C	-21 / 0	-77.4	-77.4	0.21 (1)	6.25		
E-D	0 / 0	-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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")CSI: TC=0.21/1.00 (B-C:1), BC=0.02/1.00 (D-E:4)
WB=0.00/1.00 (n/a:0), SSI=0.13/1.00 (B-C: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

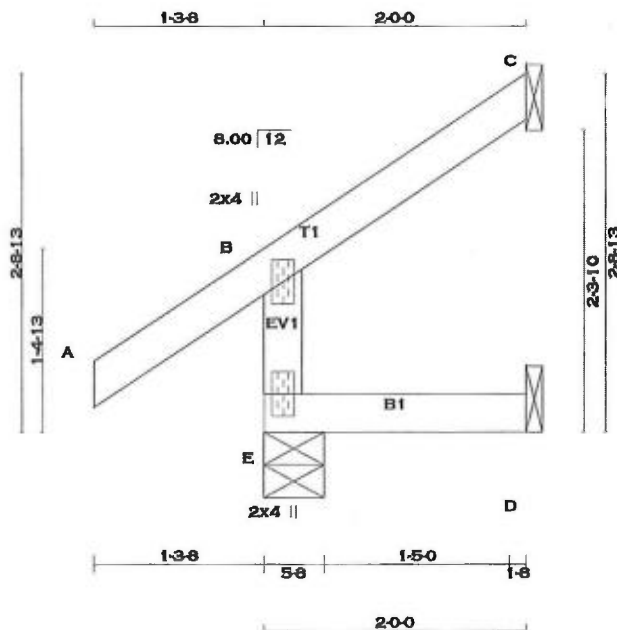
PLATE ROTATION TOL. = 5.0 Deg.

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

August 16, 2018



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SCALE = 1:16.8

TOTAL WEIGHT = 2 X 8 = 16 lb [M]

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

E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
E	222	0	222	0	5-8	1-8
C	59	0	59	0	1-8	1-8
D	16	0	16	0	1-8	1-8

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	153	122 / 0	0 / 0	0 / 0	0 / 0	31 / 0	0 / 0
C	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
D	13	0 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)
FR-TO		FROM TO			FR-TO		
E-B	-202 / 0	0.0	0.0	0.01 (4)	7.81		
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00		
B-C	-10 / 0	-77.4	-77.4	0.05 (1)	6.25		
E-D	0 / 0	-17.5	-17.5	0.02 (4)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.10/1.00 (A-B:1), BC=0.02/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.07/1.00 (A-B: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
	622	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

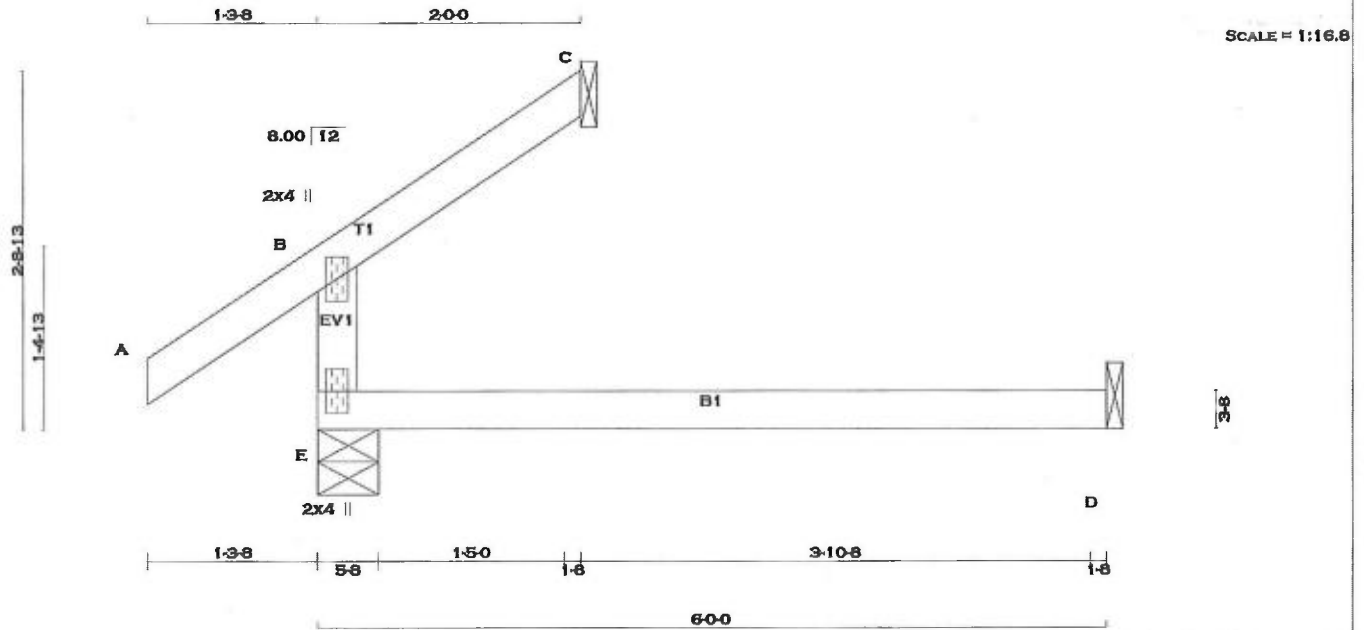
JSI GRIP= 0.13 (B) (INPUT = 0.90)
 JSI METAL= 0.05 (B) (INPUT = 1.00)



August 16, 2018



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TOTAL WEIGHT = 2 X 13 = 25 lb [M]

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
E	263	0	263	0	5-8	1-8
C	59	0	59	0	1-8	1-8
D	44	0	49	0	1-8	1-8

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

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	186	122 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0
C	40	35 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
D	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	CHORDS		WEBS	
			MAX. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO		
E-B	-202 / 0	0.0	0.0	0.12 (4)	7.81	
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00	
B-C	-10 / 0	-77.4	-77.4	0.05 (1)	6.25	
E-D	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=0.12/1.00 (B-E:4), BC=0.13/1.00 (D-E:4), WB=0.00/1.00 (n/a:0), SSI=0.08/1.00 (D-E:4)

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.

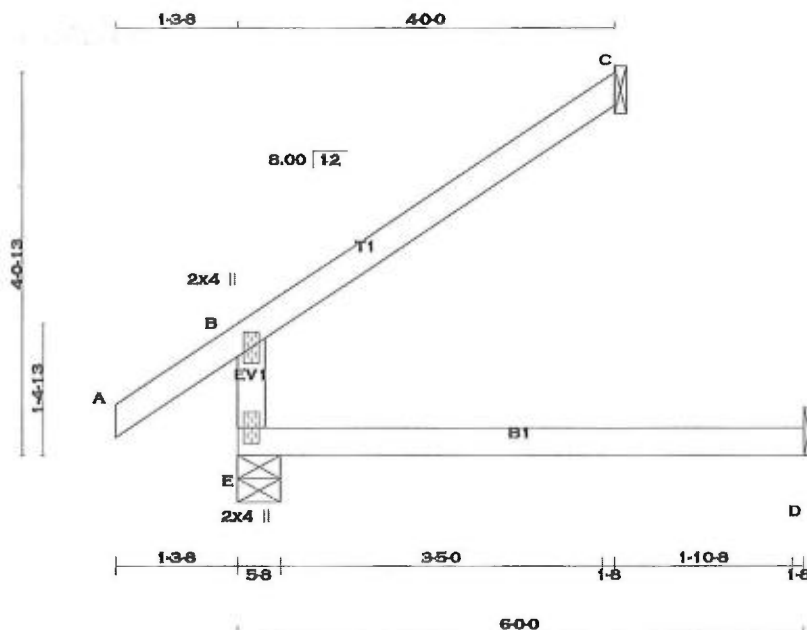
JSI GRIP= 0.13 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



August 16, 2018



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SCALE = 1:23.4

TOTAL WEIGHT = 2 X 15 = 31 lb

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF	
A - C	2x4	DRY	No.2	SPF	
E - D	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
E	BMV1+p	MT20	2.0	4.0		

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	361	0	361	0	5-8	1-8
C	116	0	116	0	1-8	1-8
D	44	0	49	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
E	252	180/0	0/0	0/0 0/0 72/0 0/0
C	79	70/0	0/0	0/0 0/0 9/0 0/0
D	35	0/0	0/0	0/0 0/0 35/0 0/0

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

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. UNBRAC	MEMB. MAX. FACTORED FORCE (LBS)	FACTORED MAX. CSI (LC)			
FR-TO		FROM TO	CSI (LC)	LENGTH	FR-TO			
E-B	-299 / 0	0.0	0.0	0.12 (4)	7.81			
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00			
B-C	-21 / 0	-77.4	-77.4	0.21 (1)	6.25			
E-D	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=0.21/1.00 (B-C:1), BC=0.13/1.00 (D-E:4)
WB=0.00/1.00 (n/a:0), SSI=0.13/1.00 (B-C: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.

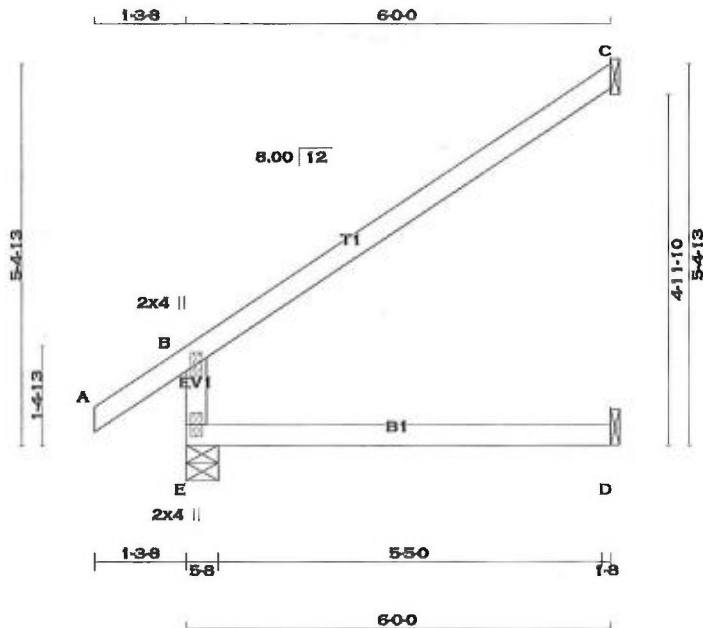
JSI GRIP= 0.19 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)



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SCALE = 1:31.2

TOTAL WEIGHT = 4 X 18 = 73 lb

LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
E - B	2x4	DRY	No.2	SPF
A - C	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMV+p	MT20	2.0	4.0		
E BMV1+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
E	457	0	457	0
C	174	0	174	0
D	44	0	49	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS				
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	318	239 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
C	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
D	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	CS1 (LC)	MAX. UNBRACED LENGTH FR-TO	MEMB.	WEBS	MAX. FACTORED FORCE (LBS)	MAX CS1 (LC)
E-B	FR-TO	-396 / 0	0.0	0.0	0.12 (4)	7.81				
A-B		0 / 29	-77.4	-77.4	0.10 (1)	10.00				
B-C		-32 / 0	-77.4	-77.4	0.47 (1)	6.25				
E-D		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 (B-C:1), BC=0.13/1.00 (D-E:4)
, WB=0.00/1.00 (n/a:0), SSI=0.19/1.00 (B-C: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.

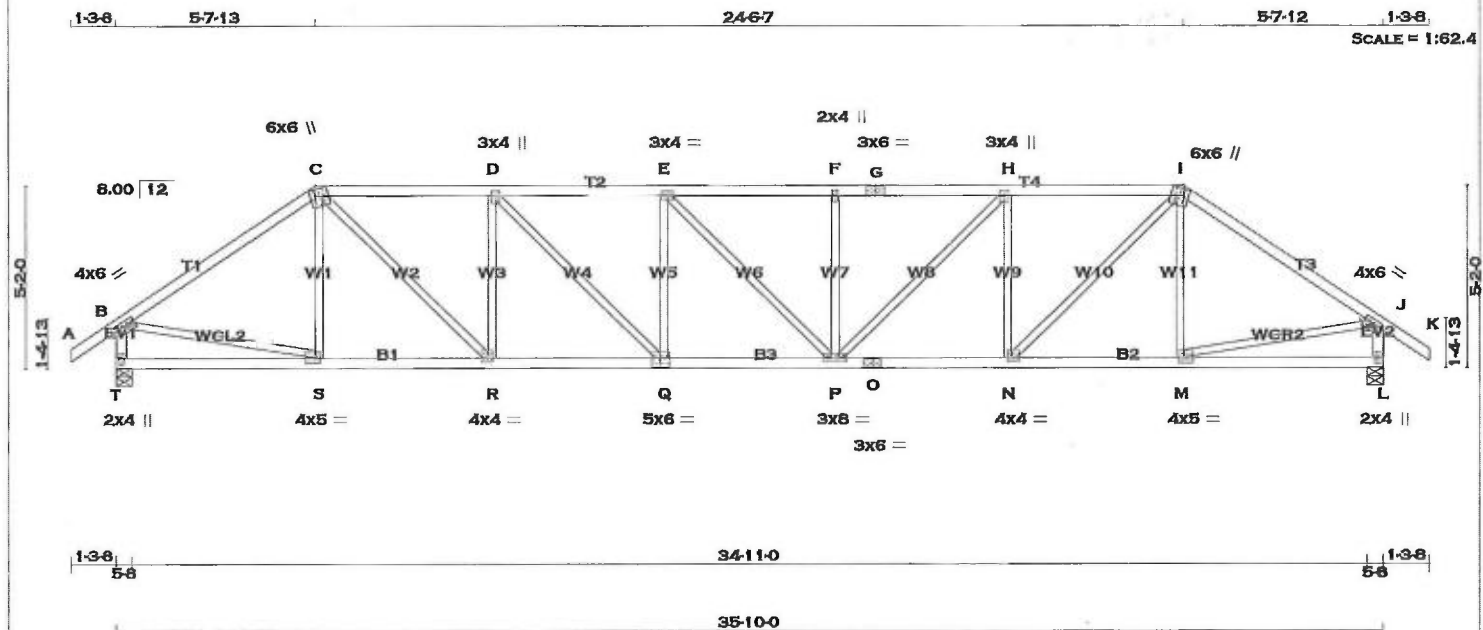
JSI GRIP= 0.25 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)



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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - I	2x4	DRY	No.2	SPF	
I - K	2x4	DRY	No.2	SPF	
T - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
T - Q	2x4	DRY	No.2	SPF	
Q - O	2x4	DRY	No.2	SPF	
O - L	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
B	TMVW-t	MT20	4.0	6.0	1.50	3.00	
C	TTWW+m	MT20	6.0	6.0	2.25	1.75	
D	TMVW+t	MT20	3.0	4.0	1.75	1.50	
E	TMVW-t	MT20	3.0	4.0			
F	TMVW+w	MT20	2.0	4.0			
G	TS-t	MT20	3.0	6.0			
H	TMVW+t	MT20	3.0	4.0	1.75	1.50	
I	TTWW+m	MT20	6.0	6.0	2.25	1.75	
J	TMVW-t	MT20	4.0	6.0	1.50	3.00	
L	BMV1+p	MT20	2.0	4.0	2.25	1.00	
M	BMVW-t	MT20	4.0	5.0	1.75	1.75	
N	BMVW-t	MT20	4.0	4.0	1.50	1.50	
O	BS-t	MT20	3.0	6.0			
P	BMVWVW-t	MT20	3.0	8.0			
Q	BSVW-t	MT20	5.0	6.0	3.25	2.75	
R	BMVW-t	MT20	4.0	4.0	1.50	1.50	
S	BMVW-t	MT20	4.0	5.0	1.75	1.75	
T	BMV1+p	MT20	2.0	4.0	2.25	1.00	

A SIZE FOR SIZE SUBSTITUTION OF MITK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD
GROSS REACTION				
JT VERT	1806	0	0	5-8
T VERT	1806	0	0	5-8
L VERT	1806	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
T	1265	898 / 0	0 / 0	0 / 0	367 / 0	0 / 0	
L	1265	898 / 0	0 / 0	0 / 0	367 / 0	0 / 0	

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

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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FR-TO			FR-TO		
A-B	0 / 29	-77.4	-77.4 0.10 (1)	10.00	S-C	-207 / 26	0.08 (1)
B-C	-2021 / 0	-77.4	-77.4 0.60 (1)	4.15	C-R	0 / 1358	0.31 (1)
C-D	-2646 / 0	-77.4	-77.4 0.40 (1)	3.91	R-D	-872 / 0	0.34 (1)
D-E	-3098 / 0	-77.4	-77.4 0.44 (1)	3.62	D-Q	0 / 639	0.14 (1)
E-F	-3096 / 0	-77.4	-77.4 0.36 (1)	3.71	Q-E	-365 / 0	0.14 (1)
F-G	-3096 / 0	-77.4	-77.4 0.44 (1)	3.61	E-P	-2 / 0	0.00 (1)
G-H	-3096 / 0	-77.4	-77.4 0.44 (1)	3.61	P-F	-365 / 0	0.14 (1)
H-I	-2647 / 0	-77.4	-77.4 0.40 (1)	3.91	P-H	0 / 636	0.14 (1)
I-J	-2021 / 0	-77.4	-77.4 0.60 (1)	4.15	N-H	-871 / 0	0.34 (1)
J-K	0 / 29	-77.4	-77.4 0.10 (1)	10.00	N-I	0 / 1359	0.31 (1)
T-B	-1764 / 0	0.0	0.0 0.18 (1)	6.28	M-I	-207 / 26	0.08 (1)
L-J	-1764 / 0	0.0	0.0 0.18 (1)	6.28	B-S	0 / 1709	0.38 (1)
					M-J	0 / 1709	0.38 (1)
T-S	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
S-R	0 / 1675	-17.5	-17.5 0.34 (1)	10.00			
R-Q	0 / 2647	-17.5	-17.5 0.47 (1)	10.00			
Q-P	0 / 3098	-17.5	-17.5 0.54 (1)	10.00			
P-O	0 / 2647	-17.5	-17.5 0.47 (1)	10.00			
O-N	0 / 2647	-17.5	-17.5 0.47 (1)	10.00			
N-M	0 / 1675	-17.5	-17.5 0.34 (1)	10.00			
M-L	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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.35")

CSI: TC=0.60/1.00 (B-C:1), BC=0.54/1.00 (P-Q:1)
WB=0.38/1.00 (B-S:1), SSI=0.18/1.00 (H-I: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.

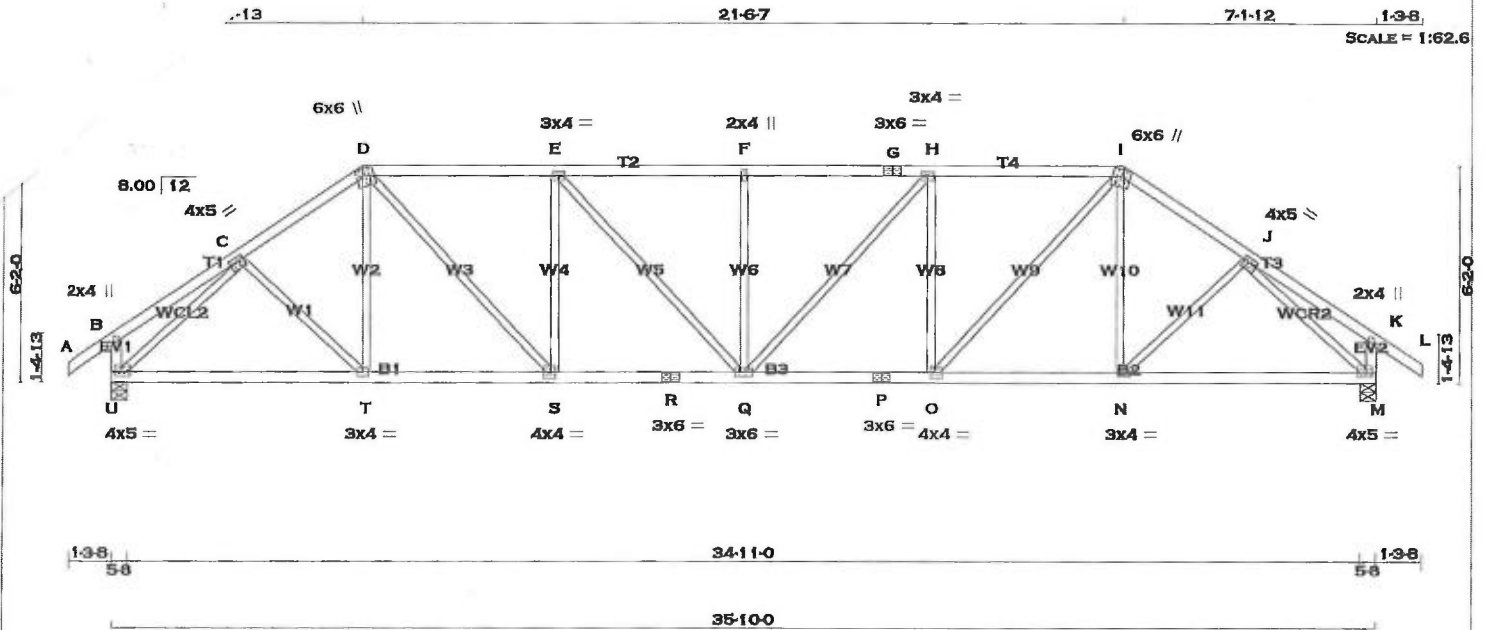
JSI GRIP= 0.88 (B) (INPUT = 0.90)
JSI METAL= 0.69 (O) (INPUT = 1.00)



August 16, 2018



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LUMBER	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
I - L	2x4	DRY	No.2	SPF
U - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
U - R	2x4	DRY	No.2	SPF
R - P	2x4	DRY	No.2	SPF
P - M	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF

PLATES (table is in inches)	W	LEN	Y	X
JT TMV+p	MT20	2.0	4.0	
C TMWW-l	MT20	4.0	5.0	1.50 2.00
D TTWW+m	MT20	6.0	6.0	2.25 2.25
E TMWW-l	MT20	3.0	4.0	
F TMWW+y	MT20	2.0	4.0	
G TS-l	MT20	3.0	6.0	
H TMWW-l	MT20	3.0	4.0	
I TTWW+m	MT20	6.0	6.0	2.25 2.25
J TMWW-l	MT20	4.0	5.0	1.50 2.00
K TMV+p	MT20	2.0	4.0	
M BMWW-l	MT20	4.0	5.0	1.50 2.00
N BMWW-l	MT20	3.0	4.0	
O BMWW-l	MT20	4.0	4.0	2.00 1.50
P BS-l	MT20	3.0	6.0	
Q BMWW-l	MT20	3.0	6.0	
R BS-l	MT20	3.0	6.0	
S BMWW-l	MT20	4.0	4.0	2.00 1.50
T BMWW-l	MT20	3.0	4.0	
U BMWW-l	MT20	4.0	5.0	1.50 2.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	1806	1806	0	5-8
U VERT	1806	1806	0	5-8
M VERT	1806	1806	0	5-8

UNFACTORED REACTIONS	1ST LCASE	MAX / MIN. COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT COMBINED	1265	898 / 0	0 / 0	0 / 0	367 / 0	0 / 0
U COMBINED	1265	898 / 0	0 / 0	0 / 0	367 / 0	0 / 0
M COMBINED	1265	898 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

CHORDS	MEMB.	MAX. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO	A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00	C-T	0 / 121	0.03 (4)
	B-C	0 / 15	-77.4	-77.4	0.14 (1)	10.00	T-D	0 / 90	0.03 (4)
	C-D	-2030 / 0	-77.4	-77.4	0.19 (1)	4.58	D-S	0 / 1075	0.24 (1)
	D-E	-2405 / 0	-77.4	-77.4	0.46 (1)	4.00	S-E	-707 / 0	0.42 (1)
	E-F	-2622 / 0	-77.4	-77.4	0.48 (1)	3.83	E-Q	0 / 322	0.07 (1)
	F-G	-2622 / 0	-77.4	-77.4	0.48 (1)	4.00	Q-F	-380 / 0	0.23 (1)
	G-H	-2622 / 0	-77.4	-77.4	0.48 (1)	3.83	Q-H	0 / 322	0.07 (1)
	H-I	-2405 / 0	-77.4	-77.4	0.46 (1)	4.00	O-H	-707 / 0	0.42 (1)
	I-J	-2030 / 0	-77.4	-77.4	0.19 (1)	4.58	O-I	0 / 1075	0.24 (1)
	J-K	0 / 15	-77.4	-77.4	0.14 (1)	10.00	N-I	0 / 90	0.03 (4)
	K-L	0 / 29	-77.4	-77.4	0.10 (1)	10.00	N-J	0 / 121	0.03 (4)
	U-B	-217 / 0	0.0	0.0	0.02 (1)	7.81	U-C	-2207 / 0	0.87 (1)
	M-K	-217 / 0	0.0	0.0	0.02 (1)	7.81	J-M	-2207 / 0	0.87 (1)
	U-T	0 / 1585	-17.5	-17.5	0.36 (1)	10.00			
	T-S	0 / 1674	-17.5	-17.5	0.38 (1)	10.00			
	S-R	0 / 2405	-17.5	-17.5	0.43 (1)	10.00			
	R-Q	0 / 2405	-17.5	-17.5	0.43 (1)	10.00			
	Q-P	0 / 2405	-17.5	-17.5	0.43 (1)	10.00			
	P-O	0 / 2405	-17.5	-17.5	0.43 (1)	10.00			
	O-N	0 / 1674	-17.5	-17.5	0.38 (1)	10.00			
	N-M	0 / 1585	-17.5	-17.5	0.36 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.15")
ALLOWABLE DEFL.(TL) = L/360 (1.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.27")

CSI: TC=0.48/1.00 (E-F:1), BC=0.43/1.00 (Q-S:1), WB=0.87/1.00 (C-U:1), SSI=0.20/1.00 (D-E: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.

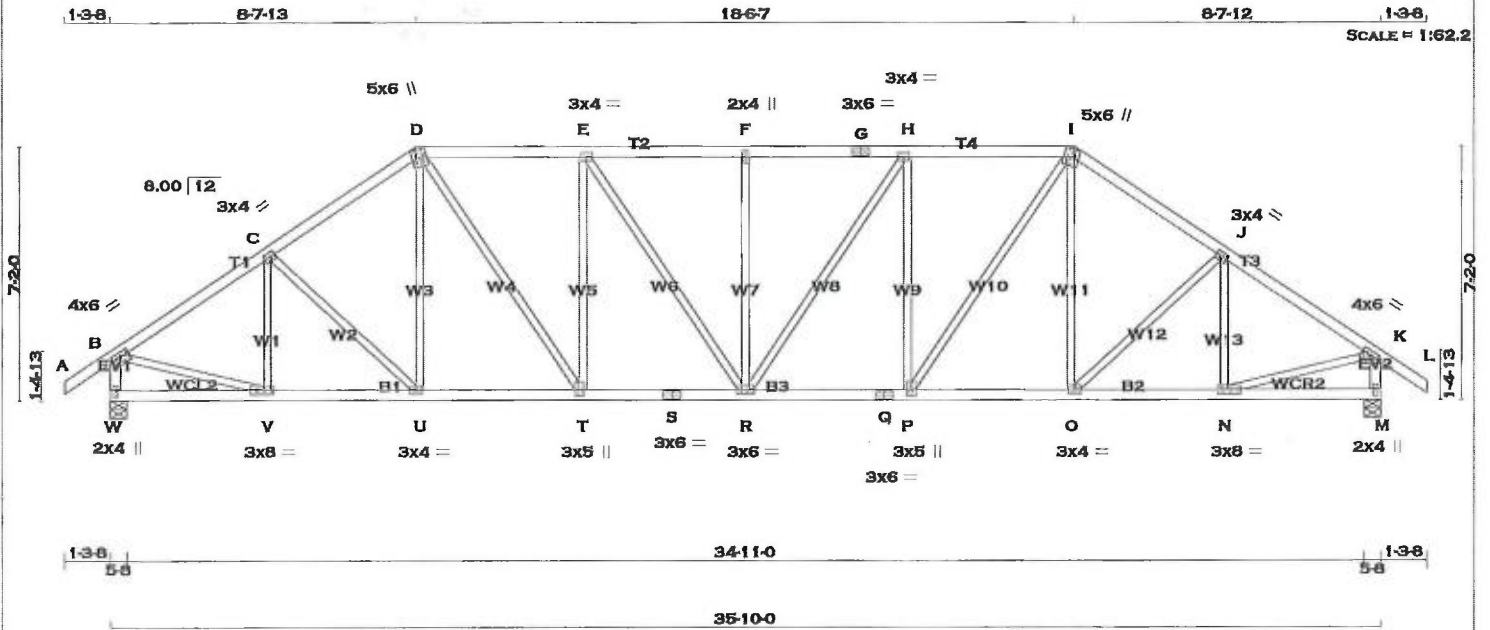
JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.66 (R) (INPUT = 1.00)



August 16, 2018



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



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

A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
I - L	2x4	DRY	No.2	SPF
L - M	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
K - S	2x4	DRY	No.2	SPF
S - Q	2x4	DRY	No.2	SPF
Q - M	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
B	TMVW-t	MT20	4.0	6.0	1.50	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TMVW+m	MT20	5.0	6.0	2.50	1.50
E	TMVW-t	MT20	3.0	4.0		
F	TMVW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMVW-t	MT20	3.0	4.0		
I	TMVW+m	MT20	5.0	6.0	2.50	1.50
J	TMVW-t	MT20	3.0	4.0	1.50	1.50
K	TMVW-t	MT20	4.0	6.0	1.50	3.00
M	BMV1+p	MT20	2.0	4.0	2.25	1.00
N	BMVW-t	MT20	3.0	8.0	1.50	3.50
O	BMVW-t	MT20	3.0	4.0		
P	BMVW-t	MT20	3.0	5.0	2.25	1.50
Q	BS-t	MT20	3.0	6.0		
R	BMVWV-t	MT20	3.0	6.0		
S	BS-t	MT20	3.0	6.0		
T	BMVW-t	MT20	3.0	5.0	2.25	1.50
U	BMVW-t	MT20	3.0	4.0		
V	BMVW-t	MT20	3.0	8.0	1.50	3.50
W	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
W	1806 0	1806 0	5-8	3-1
M	1806 0	1806 0	5-8	3-1

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0
M	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

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.

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			
A-B	0 / 29	-77.4 -77.4	0.10 (1)	10.00	V-C	-333 / 0	0.09 (1)
B-C	-1999 / 0	-77.4 -77.4	0.31 (1)	4.49	C-U	-71 / 0	0.04 (1)
C-D	-1982 / 0	-77.4 -77.4	0.30 (1)	4.50	U-D	0 / 130	0.03 (4)
D-E	-2098 / 0	-77.4 -77.4	0.32 (1)	4.38	D-T	0 / 830	0.19 (1)
E-F	-2232 / 0	-77.4 -77.4	0.32 (1)	4.27	T-E	-603 / 0	0.54 (1)
F-G	-2232 / 0	-77.4 -77.4	0.32 (1)	4.27	E-R	0 / 241	0.05 (1)
G-H	-2232 / 0	-77.4 -77.4	0.32 (1)	4.27	R-F	-326 / 0	0.29 (1)
H-I	-2098 / 0	-77.4 -77.4	0.32 (1)	4.38	F-R	0 / 241	0.05 (1)
I-J	-1982 / 0	-77.4 -77.4	0.30 (1)	4.50	P-H	-603 / 0	0.54 (1)
J-K	-1999 / 0	-77.4 -77.4	0.31 (1)	4.49	P-I	0 / 830	0.19 (1)
K-L	0 / 29	-77.4 -77.4	0.10 (1)	10.00	O-I	0 / 130	0.03 (4)
W-B	-1771 / 0	0.0 0.0	0.18 (1)	6.27	O-J	-71 / 0	0.04 (1)
M-K	-1771 / 0	0.0 0.0	0.18 (1)	6.27	N-J	-333 / 0	0.09 (1)
					B-V	0 / 1730	0.39 (1)
					N-K	0 / 1730	0.39 (1)
W-V	0 / 0	-17.5 -17.5	0.07 (4)	10.00			
V-U	0 / 1681	-17.5 -17.5	0.31 (1)	10.00			
U-T	0 / 1631	-17.5 -17.5	0.30 (1)	10.00			
T-S	0 / 2098	-17.5 -17.5	0.37 (1)	10.00			
S-R	0 / 2098	-17.5 -17.5	0.37 (1)	10.00			
R-Q	0 / 2098	-17.5 -17.5	0.37 (1)	10.00			
Q-P	0 / 2098	-17.5 -17.5	0.37 (1)	10.00			
P-O	0 / 1631	-17.5 -17.5	0.30 (1)	10.00			
O-N	0 / 1681	-17.5 -17.5	0.31 (1)	10.00			
N-M	0 / 0	-17.5 -17.5	0.07 (4)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
 ALLOWABLE DEFL.(TL)= L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.32/1.00 (E-F:1), BC=0.37/1.00 (R-T:1), WB=0.54/1.00 (H-P:1), SS=0.17/1.00 (H-I: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

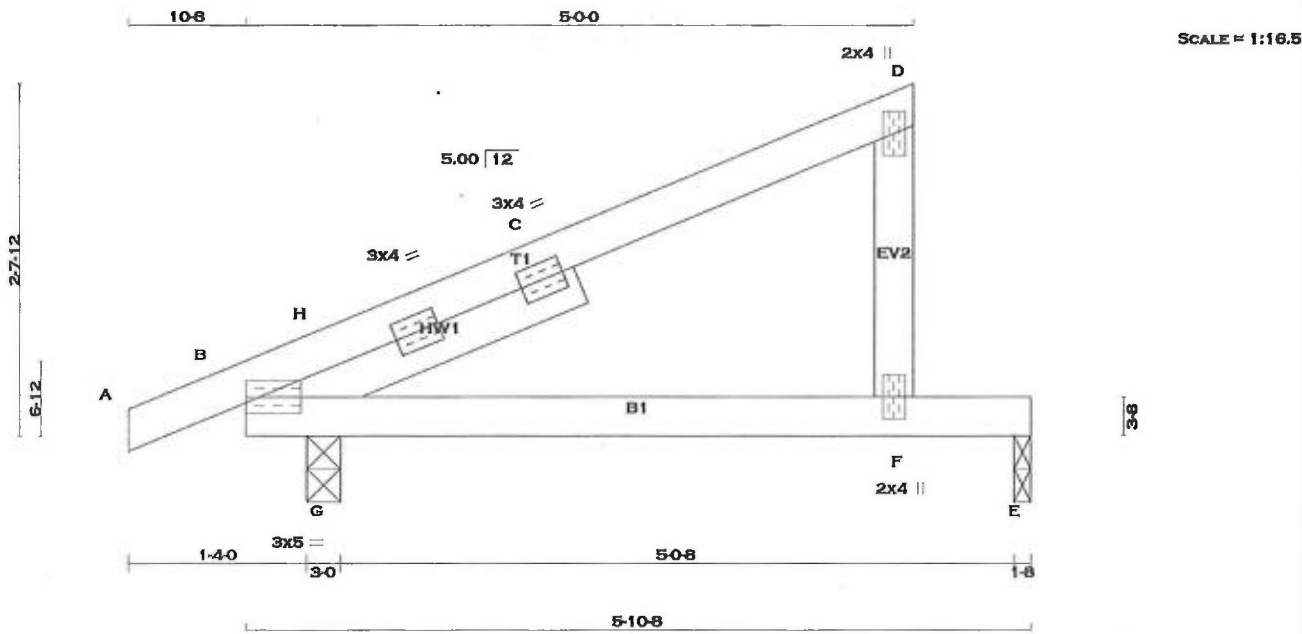
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
 JSI METAL= 0.57 (S) (INPUT = 1.00)



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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - D	2x4	DRY	No.2
F - D	2x4	DRY	No.2
B - E	2x4	DRY	No.2
REINFORCING MEMBERS			
HW1	2x4	DRY	No.2
SPF			
DRY: SEASONED LUMBER.			

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y
B	TMBR1-I	MT20	3.0	5.0	Edge
B	RT-1	MT20	3.0	4.0	
B	RT-1	MT20	3.0	4.0	
D	TMV+p	MT20	2.0	4.0	
F	BMV+p	MT20	2.0	4.0	

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
B	346	0	346	0	3-0	1-8	
E	216	0	216	0	1-8	1-8	

UNFACTORED REACTIONS							
1ST LCASE	MAX/MIN	COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	241	177 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
E	153	99 / 0	0 / 0	0 / 0	0 / 0	54 / 0	0 / 0

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

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

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

LOADING							
TOTAL LOAD CASES: (4)							
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 5	-77.4	-77.4 0.05 (1)	10.00	G-H	-246 / 0	0.00 (1)
B-H	-317 / 0	-77.4	-77.4 0.07 (1)	6.25	G-C	0 / 364	0.06 (1)
H-C	-168 / 0	-77.4	-77.4 0.34 (1)	6.25			
C-D	-168 / 0	-77.4	-77.4 0.34 (1)	6.25			
F-D	-190 / 0	0.0	0.0 0.02 (1)	7.81			
B-G	0 / 292	-17.5	-17.5 0.13 (1)	10.00			
G-F	0 / 0	-17.5	-17.5 0.25 (1)	10.00			
F-E	0 / 0	-17.5	-17.5 0.25 (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 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/529 (0.13")

CSI: TC=0.34/1.00 (D-H:1), BC=0.25/1.00 (F-G:1)
WB=0.06/1.00 (C-G:1), SSI=0.17/1.00 (D-H: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

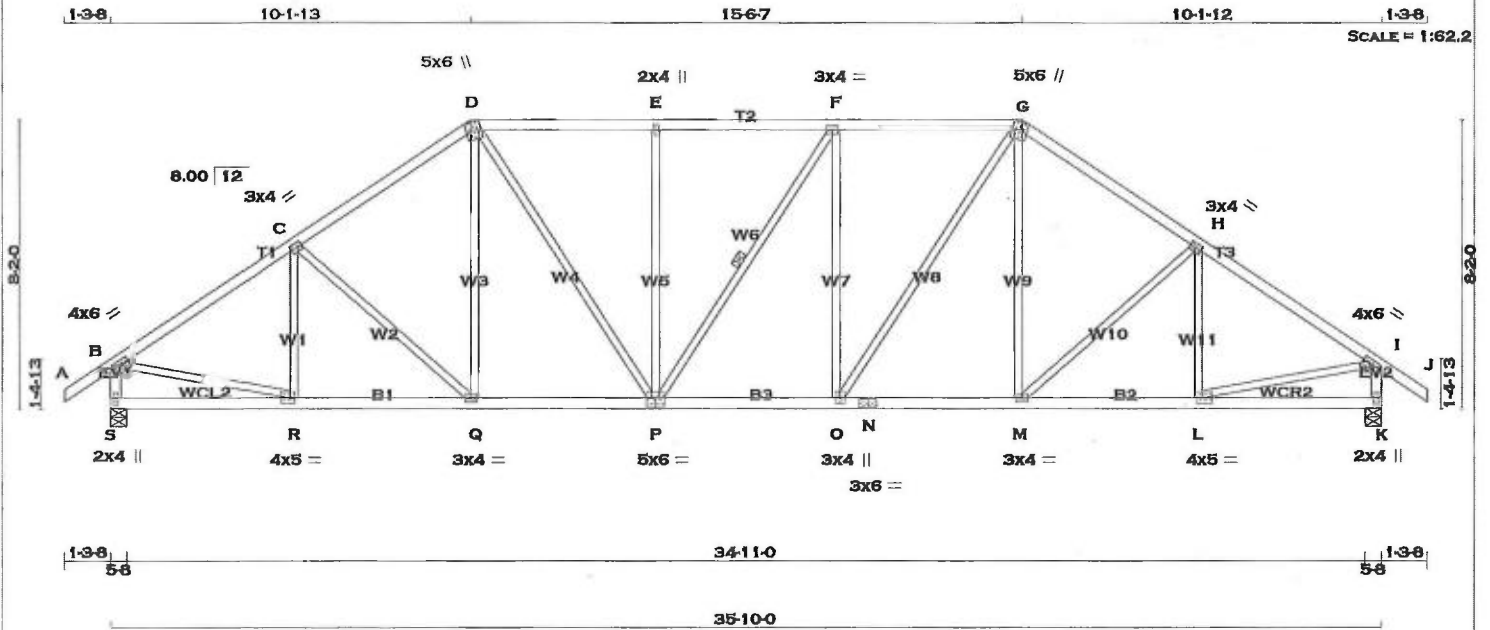
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.45 (B) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)



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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
G - J	2x4	DRY	No.2	SPF	
S - B	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
S - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - K	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
B	TMVW-t	MT20	4.0	6.0	1.50	3.00	
C	TMVW-t	MT20	3.0	4.0	1.50	1.50	
D	TTVW+m	MT20	5.0	6.0	Edge	1.75	
E	TMVW-w	MT20	2.0	4.0			
F	TMVW-t	MT20	3.0	4.0			
G	TTVW+m	MT20	5.0	6.0	Edge	1.75	
H	TMVW-t	MT20	3.0	4.0	1.50	1.50	
I	TMVW-t	MT20	4.0	6.0	1.50	3.00	
K	BMV1+p	MT20	2.0	4.0	2.25	1.00	
L	BMVW-t	MT20	4.0	5.0	1.75	1.75	
M	BMVW-t	MT20	3.0	4.0			
N	BS-t	MT20	3.0	6.0			
O	BMVW-t	MT20	3.0	4.0	1.75	1.50	
P	BSVW-t	MT20	5.0	6.0	3.00	3.00	
Q	BMVW-t	MT20	3.0	4.0			
R	BMVW-t	MT20	4.0	5.0	1.75	1.75	
S	BMV1+p	MT20	2.0	4.0	2.25	1.00	

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	DOWN	UP	IN-SX
S	1806	0	1806	0
K	1806	0	1806	0

UNFACTORED REACTIONS

1ST CASE	MAX/MIN	COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
S	1265	898/0	0/0	0/0	0/0	0/0
K	1265	898/0	0/0	0/0	0/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.46 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P. DBS = 20-0-0. CBF = 0 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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (L)
FR-TO					FR-TO		
A-B	0/29	-77.4	-77.4	0.10 (1)	10.00	R-C	-265/6
B-C	-2041/0	-77.4	-77.4	0.32 (1)	4.46	C-Q	-193/0
C-D	-1922/0	-77.4	-77.4	0.31 (1)	4.58	Q-D	0/221
D-E	-1922/0	-77.4	-77.4	0.28 (1)	4.60	D-P	0/623
E-F	-1923/0	-77.4	-77.4	0.26 (1)	4.62	P-E	-430/0
F-G	-1924/0	-77.4	-77.4	0.28 (1)	4.60	P-F	-2/0
G-H	-1922/0	-77.4	-77.4	0.31 (1)	4.58	O-F	-431/0
H-I	-2042/0	-77.4	-77.4	0.32 (1)	4.46	O-G	0/625
I-J	0/29	-77.4	-77.4	0.10 (1)	10.00	M-G	0/220
S-B	-1766/0	0.0	0.0	0.18 (1)	6.28	M-H	-193/0
K-I	-1766/0	0.0	0.0	0.18 (1)	6.28	L-H	-264/6
S-R	0/0	-17.5	-17.5	0.10 (4)	10.00	B-R	0/1756
R-Q	0/1719	-17.5	-17.5	0.33 (1)	10.00	L-I	0/1756
Q-P	0/1578	-17.5	-17.5	0.31 (1)	10.00		
P-O	0/1924	-17.5	-17.5	0.36 (1)	10.00		
O-N	0/1578	-17.5	-17.5	0.30 (1)	10.00		
N-M	0/1578	-17.5	-17.5	0.30 (1)	10.00		
M-L	0/1719	-17.5	-17.5	0.33 (1)	10.00		
L-K	0/0	-17.5	-17.5	0.10 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.19")
 CALCULATED DEFL.(LL) = L/999 (0.10")
 ALLOWABLE DEFL.(TL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.32/1.00 (H-1), BC=0.36/1.00 (O-P-1), WB=0.56/1.00 (F-O-1), SSI=0.19/1.00 (F-G-1)

DOL LUMBER=1.00 NAIL=1.00 LBS 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.

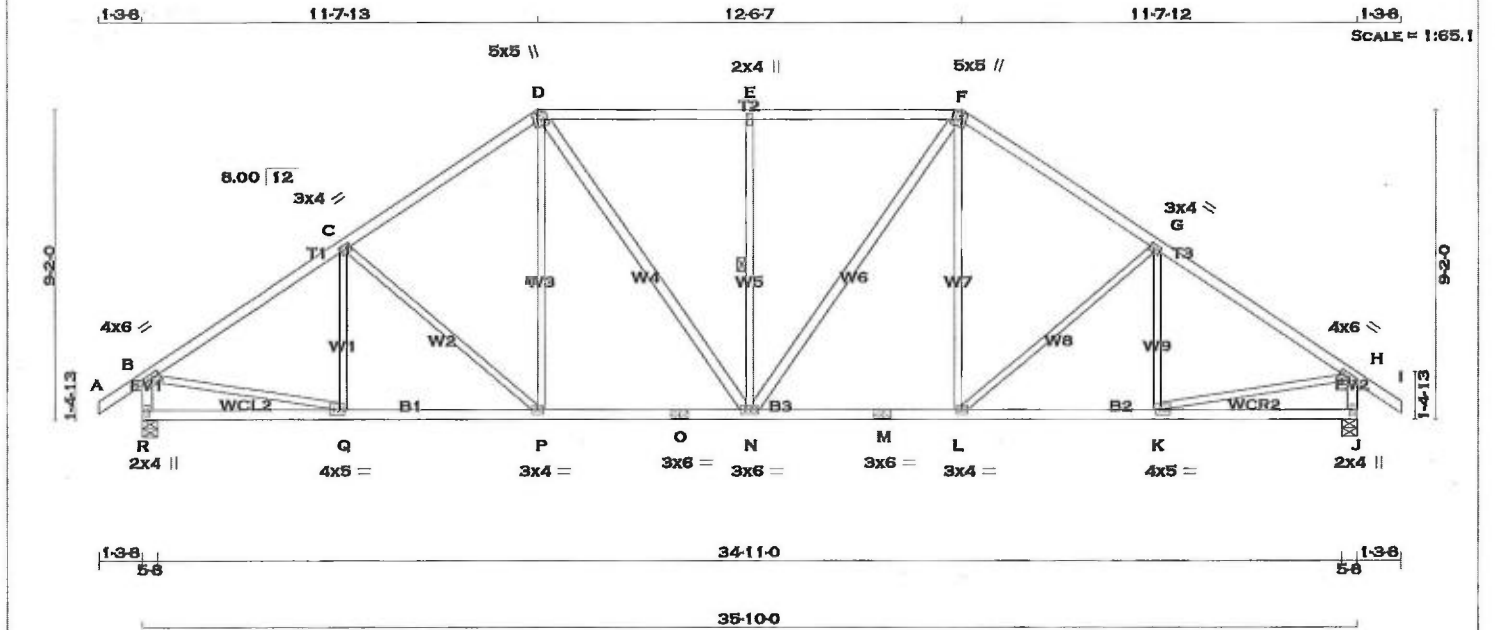
JSI GRIP= 0.90 (I) (INPUT = 0.90)
 JSI METAL= 0.55 (I) (INPUT = 1.00)



August 16, 2018



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



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
R - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - M	2x4	DRY	No.2	SPF	
M - J	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
D - N	2x4	DRY	No.2	SPF	
N - F	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)	PLATES	W	LEN	Y	X
JT	TMVW-1	MT20	4.0	6.0	1.50 3.00
B	TMVW-1	MT20	3.0	4.0	1.50 1.50
C	TTWW+m	MT20	5.0	5.0	2.25 1.50
E	TMVW-w	MT20	2.0	4.0	
F	TTWW+m	MT20	5.0	5.0	2.25 1.50
G	TMVW-1	MT20	3.0	4.0	1.50 1.50
H	TMVW-1	MT20	4.0	6.0	1.50 3.00
J	BMV1+p	MT20	2.0	4.0	2.25 1.00
K	BMVW-1	MT20	4.0	5.0	1.75 1.75
L	BMVW-1	MT20	3.0	4.0	
M	BS-1	MT20	3.0	6.0	
N	BMVW-1	MT20	3.0	6.0	
O	BS-1	MT20	3.0	6.0	
P	BMVW-1	MT20	3.0	4.0	
Q	BMVW-1	MT20	4.0	5.0	1.75 1.75
R	BMV1+p	MT20	2.0	4.0	2.25 1.00

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
R	1806	0	1806	0
J	1806	0	1806	0

UNFACTORED REACTIONS	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
R	1265	898 / 0	0 / 0
J	1265	898 / 0	0 / 0

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

BRACING
 TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.32 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 74 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	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)
FR-TO					FR-TO			
A-B	0 / 29	-77.4	-77.4	0.10 (1)	Q-C	-207 / 35	0.08 (1)	10.00
B-C	-2065 / 0	-77.4	-77.4	0.44 (1)	C-P	-306 / 0	0.37 (1)	10.00
C-D	-1848 / 0	-77.4	-77.4	0.40 (1)	P-D	0 / 305	0.07 (1)	10.00
D-E	-1763 / 0	-77.4	-77.4	0.44 (1)	D-N	0 / 431	0.07 (1)	10.00
E-F	-1763 / 0	-77.4	-77.4	0.44 (1)	N-E	-594 / 0	0.33 (1)	10.00
F-G	-1848 / 0	-77.4	-77.4	0.40 (1)	N-F	0 / 431	0.07 (1)	10.00
G-H	-2065 / 0	-77.4	-77.4	0.44 (1)	L-F	0 / 305	0.07 (1)	10.00
H-I	0 / 29	-77.4	-77.4	0.10 (1)	L-G	-306 / 0	0.37 (1)	10.00
R-B	-1762 / 0	0.0	0.0	0.18 (1)	K-G	-207 / 35	0.09 (1)	10.00
J-H	-1762 / 0	0.0	0.0	0.18 (1)	B-Q	0 / 1771	0.40 (1)	10.00
					K-H	0 / 1771	0.40 (1)	10.00
R-Q	0 / 0	-17.5	-17.5	0.14 (4)				
Q-P	0 / 1742	-17.5	-17.5	0.35 (1)				
P-O	0 / 1514	-17.5	-17.5	0.32 (1)				
O-N	0 / 1514	-17.5	-17.5	0.32 (1)				
N-M	0 / 1514	-17.5	-17.5	0.32 (1)				
M-L	0 / 1514	-17.5	-17.5	0.32 (1)				
L-K	0 / 1742	-17.5	-17.5	0.35 (1)				
K-J	0 / 0	-17.5	-17.5	0.14 (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

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
 ALLOWABLE DEFL.(TL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.17")

CSI: TC=0.44/1.00 (D-E:1), BC=0.35/1.00 (P-Q:1), WB=0.40/1.00 (B-Q:1), SSI=0.24/1.00 (D-E: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

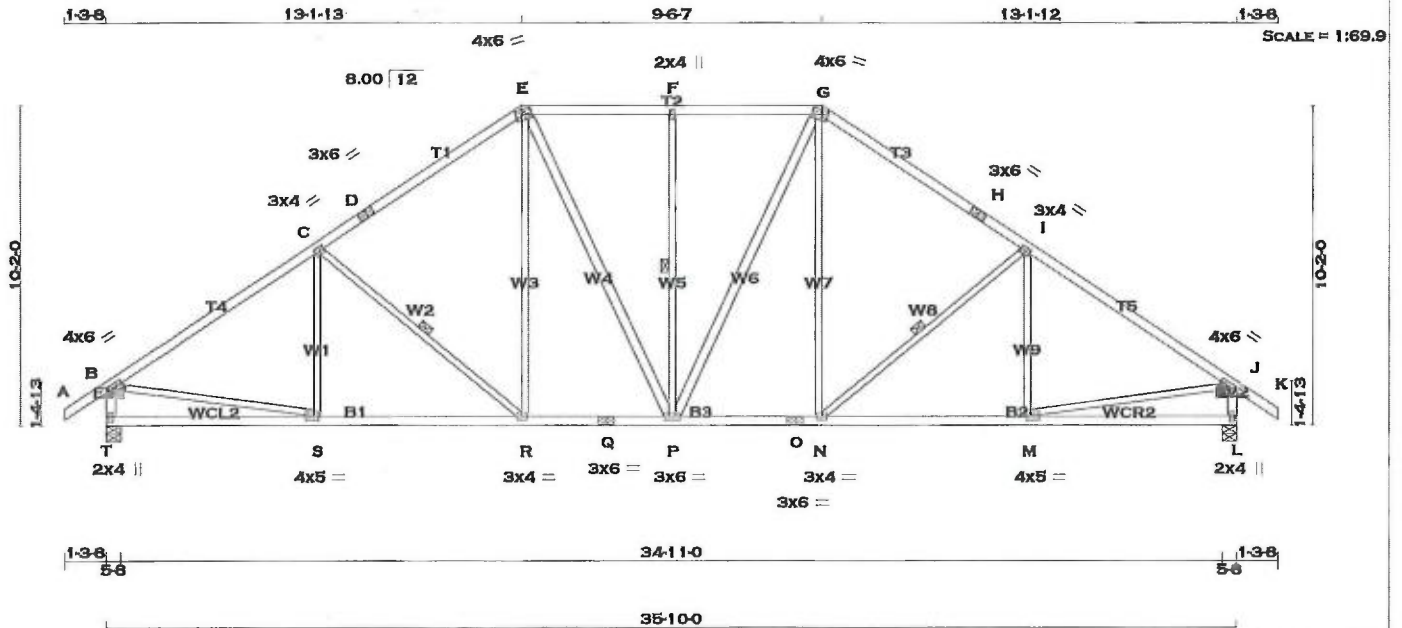
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (D) (INPUT = 0.90)
 JSI METAL= 0.56 (B) (INPUT = 1.00)



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



LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - E	2x4	DRY	No.2	SPF	
E - G	2x4	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
H - K	2x4	DRY	No.2	SPF	
T - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
T - Q	2x4	DRY	No.2	SPF	
Q - O	2x4	DRY	No.2	SPF	
O - L	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
E - P	2x4	DRY	No.2	SPF	
P - G	2x4	DRY	No.2	SPF	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	4.0	6.0	1.50	3.00
C	TMVW-I	MT20	3.0	4.0	1.50	1.50
D	TS-I	MT20	3.0	6.0		
E	TTWW-m	MT20	4.0	6.0	1.75	2.25
F	TMVW-w	MT20	2.0	4.0		
G	TTWW-m	MT20	4.0	6.0	1.75	2.25
H	TS-I	MT20	3.0	6.0		
I	TMVW-I	MT20	3.0	4.0	1.50	1.50
J	TMVW-I	MT20	4.0	6.0	1.50	3.00
L	BMV1+p	MT20	2.0	4.0	2.25	1.00
M	BMVW-I	MT20	4.0	5.0	1.75	1.75
N	BMVW-I	MT20	3.0	4.0		
O	BS-I	MT20	3.0	6.0		
P	BMVW-I	MT20	3.0	6.0		
Q	BS-I	MT20	3.0	6.0		
R	BMVW-I	MT20	3.0	4.0		
S	BMVW-I	MT20	4.0	5.0	1.75	1.75
T	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ		
T	1806	0	1806	0	5-8	3-1
L	1806	0	1806	0	5-8	3-1

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
T	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0
L	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.14 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 C-R, F-P, I-N. DBS = 20-0-0. CBF = 56 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	FACTORED			MAX. UNBRAC	MEMB.	MAX. FACTORED	MAX	
	FORCE (LBS)	VERT. LOAD (PLF)	LC1	LC2			FORCE (LBS)		CSI (LC)
FR-TO		FROM	TO			FR-TO			
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00	S-C	-154 / 66	0.08 (1)	
B-C	-2076 / 0	-77.4	-77.4	0.58 (1)	4.14	C-R	-417 / 0	0.21 (1)	
C-D	-1762 / 0	-77.4	-77.4	0.52 (1)	4.47	R-E	0 / 368	0.08 (1)	
D-E	-1762 / 0	-77.4	-77.4	0.52 (1)	4.47	E-P	0 / 288	0.05 (1)	
E-F	-1565 / 0	-77.4	-77.4	0.25 (1)	5.02	P-F	-446 / 0	0.32 (1)	
F-G	-1565 / 0	-77.4	-77.4	0.25 (1)	5.02	P-G	0 / 288	0.05 (1)	
G-H	-1762 / 0	-77.4	-77.4	0.52 (1)	4.47	N-G	0 / 368	0.08 (1)	
H-I	-1762 / 0	-77.4	-77.4	0.52 (1)	4.47	N-I	-417 / 0	0.21 (1)	
I-J	-2076 / 0	-77.4	-77.4	0.58 (1)	4.14	M-I	-154 / 66	0.08 (1)	
J-K	0 / 29	-77.4	-77.4	0.10 (1)	10.00	B-S	0 / 1778	0.40 (1)	
T-B	-1758 / 0	0.0	0.0	0.18 (1)	6.29	M-J	0 / 1778	0.40 (1)	
L-J	-1758 / 0	0.0	0.0	0.18 (1)	6.29				

T-S	0 / 0	-17.5	-17.5	0.19 (4)	10.00
S-R	0 / 1755	-17.5	-17.5	0.38 (1)	10.00
R-Q	0 / 1440	-17.5	-17.5	0.29 (1)	10.00
Q-P	0 / 1440	-17.5	-17.5	0.29 (1)	10.00
P-O	0 / 1440	-17.5	-17.5	0.29 (1)	10.00
O-N	0 / 1440	-17.5	-17.5	0.29 (1)	10.00
N-M	0 / 1440	-17.5	-17.5	0.29 (1)	10.00
M-L	0 / 1440	-17.5	-17.5	0.29 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
 ALLOWABLE DEFL.(TL) = L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.58/1.00 (B-C:1), BC=0.38/1.00 (R-S:1), WB=0.40/1.00 (B-S:1), SSI=0.21/1.00 (B-C: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

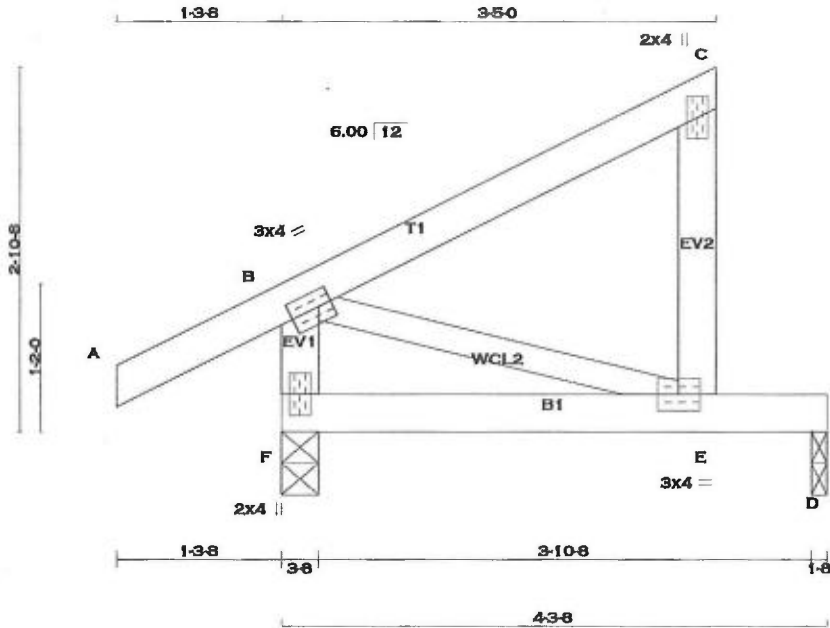
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
 JSI METAL= 0.57 (B) (INPUT = 1.00)



August 16, 2018

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



SCALE = 1:17.3

TOTAL WEIGHT = 6 X 17 = 101 lb

LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

A - C

2x4

DRY

No.2

SPF

E - C

2x4

DRY

No.2

SPF

F - B

2x4

DRY

No.2

SPF

F - D

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

B

TMVW-t

MT20

3.0

4.0

1.50

1.25

C

TMV+p

MT20

2.0

4.0

E

BMVW-t

MT20

3.0

4.0

F

BMV+p

MT20

2.0

4.0

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

F

302

0

302

0

0

3-8

1-8

D

143

0

143

0

0

1-8

1-8

UNFACTORED REACTIONS

1ST LCASE

MAX/MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

F

210

159 / 0

0 / 0

0 / 0

0 / 0

51 / 0

0 / 0

D

102

63 / 0

0 / 0

0 / 0

0 / 0

38 / 0

0 / 0

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

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

MAX. FACTORED

MEMB.

FORCE (LBS)

FACTORED

VERT. LOAD

LC1

MAX

MAX.

(PLF)

CSI (LC)

UNBRAC

LENGTH

FR-TO

FROM

TO

FR-TO

A-B

0 / 23

-77.4

-77.4

0.10 (1)

10.00

A-B

0 / 0

0.00

0.00

(1)

7.81

B-C

0 / 0

-77.4

-77.4

0.15 (1)

10.00

B-E

0 / 0

0.00

0.00

(1)

7.81

E-C

-132 / 0

0.0

0.0

0.02 (1)

7.81

F-B

-237 / 0

0.0

0.0

0.02 (1)

7.81

F-E

0 / 0

-17.5

-17.5

0.16 (1)

10.00

E-D

0 / 0

-17.5

-17.5

0.16 (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 (0.02")

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

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

CSI: TC=0.15/1.00 (B-C:1), BC=0.16/1.00 (E-F:1), WB=0.00/1.00 (B-E:1), SSI=0.11/1.00 (D-E: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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-I	MT20	3.0	4.0	1.50	1.25
C	TMV+p	MT20	2.0	4.0		
E	BMVW-I	MT20	3.0	4.0		
F	BMV1+p	MT20	2.0	4.0		

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	210	159 / 0	0 / 0	0 / 0	0 / 0	51 / 0	0 / 0
D	102	63 / 0	0 / 0	0 / 0	0 / 0	38 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

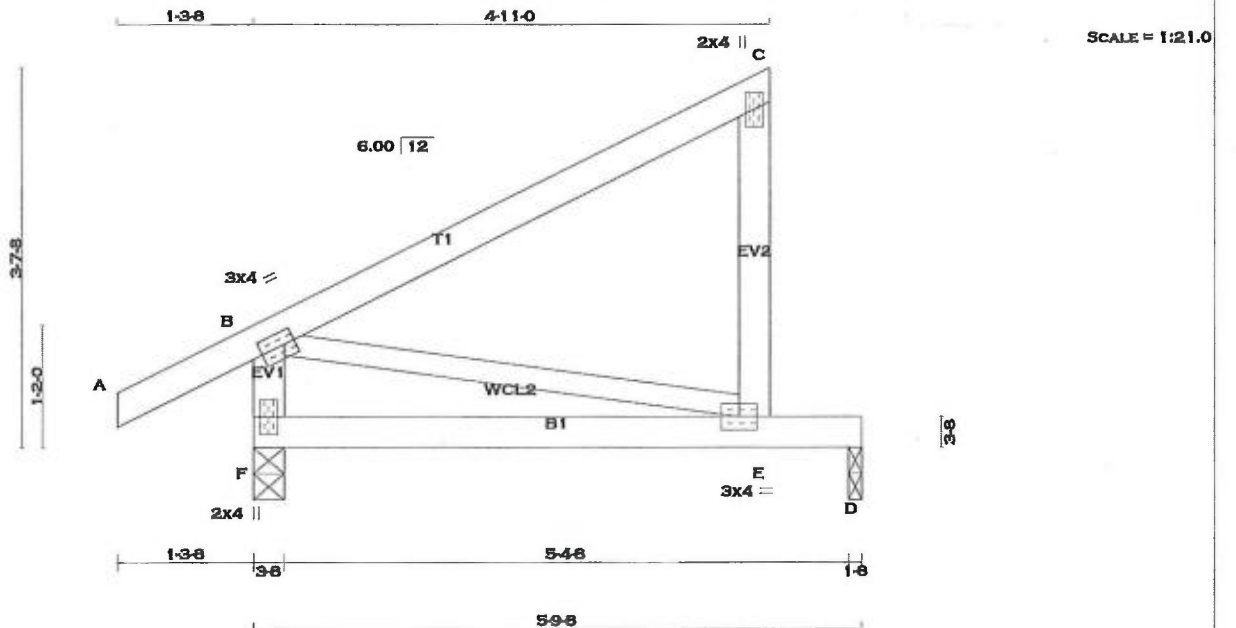
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO	MAX. LC1 (LC)
FR-TO		FROM	TO	FR-TO			
A-B	0 / 23	-77.4	-77.4 0.10 (1)	B-E	0 / 0	10.00	0.00 (1)
B-C	0 / 0	-77.4	-77.4 0.15 (1)				
E-C	-132 / 0	0.0	0.0 0.02 (1)				
F-B	-237 / 0	0.0	0.0 0.02 (1)				
F-E	0 / 0	-17.5	-17.5 0.16 (1)				
E-D	0 / 0	-17.5	-17.5 0.16 (1)				



August 16, 2018



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LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
F - B	2x4	DRY	No.2	SPF
F - D	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
B	TMVW-I	MT20	3.0	4.0	1.50 1.25
C	TMV+p	MT20	2.0	4.0	
E	BMVW-I	MT20	3.0	4.0	
F	BMV1+p	MT20	2.0	4.0	

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED		GROSS REACTION		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	BRG	IN-SX	BRG	IN-SX		
F	375	0	375	0	0	3-8	1-8				
D	212	0	212	0	0	1-8	1-8				

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
F	261	195 / 0	0 / 0	0 / 0	0 / 0	68 / 0	0 / 0
D	150	97 / 0	0 / 0	0 / 0	0 / 0	53 / 0	0 / 0

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

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		FACTORED		MAX		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1	MAX	CS1 (LC)	MEMB.	FORCE (LBS)	MAX	CS1 (LC)
FR-TO		FROM	TO			FR-TO			
A-B	0 / 23	-77.4	-77.4	0.10 (1)	10.00	B-E	0 / 0	0.00 (1)	
B-C	0 / 0	-77.4	-77.4	0.32 (1)	10.00				
E-C	-190 / 0	0.0	0.0	0.04 (1)	7.81				
F-B	-295 / 0	0.0	0.0	0.03 (1)	7.81				
F-E	0 / 0	-17.5	-17.5	0.25 (1)	10.00				
E-D	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
- 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 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 586 (0.12")

CSI: TC=0.32/1.00 (B-C:1), BC=0.25/1.00 (E-F:1)
WB=0.00/1.00 (B-E:1), SSI=0.17/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

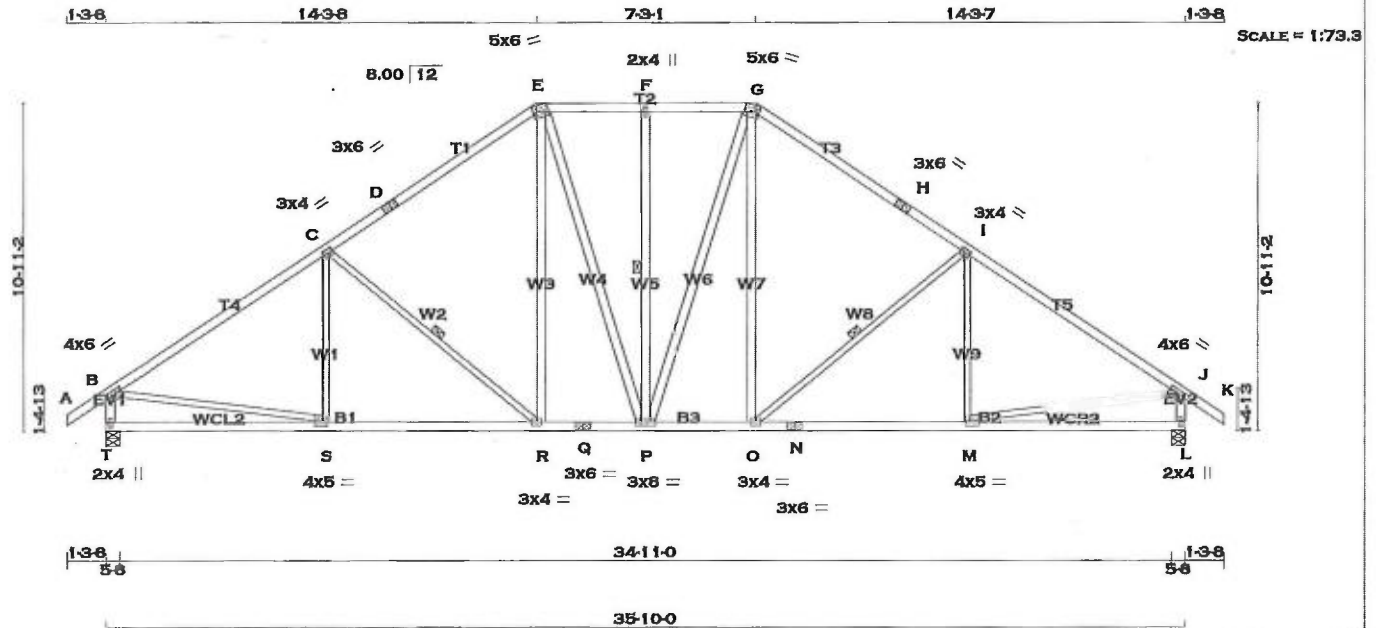
JSI GRIP= 0.27 (B) (INPUT = 0.90)
JSI METAL= 0.05 (F) (INPUT = 1.00)



August 16, 2018



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CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - E	2x4	DRY No.2	SPF
E - G	2x4	DRY No.2	SPF
G - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
T - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
T - Q	2x4	DRY No.2	SPF
Q - N	2x4	DRY No.2	SPF
N - L	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x4	DRY No.2	SPF
S - C	2x3	DRY No.2	SPF
C - R	2x3	DRY No.2	SPF
O - I	2x3	DRY No.2	SPF
M - I	2x3	DRY No.2	SPF
B - S	2x3	DRY No.2	SPF
M - J	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	1.50	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TS-t	MT20	3.0	6.0		
E	TTWW-m	MT20	5.0	6.0	2.25	1.50
F	TMVW-w	MT20	2.0	4.0		
G	TTWW-m	MT20	5.0	6.0	2.25	1.50
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	3.0	4.0	1.50	1.50
J	TMVW-t	MT20	4.0	6.0	1.50	3.00
L	BMV1+p	MT20	2.0	4.0	2.25	1.00
M	BMVW-t	MT20	4.0	5.0	1.75	1.75
N	BS-t	MT20	3.0	6.0		
O	BMVW-t	MT20	3.0	4.0		
P	BMVWW-t	MT20	3.0	8.0		
Q	BS-t	MT20	3.0	6.0		
R	BMVW-t	MT20	3.0	4.0		
S	BMVW-t	MT20	4.0	5.0	1.75	1.75
T	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

FACTORED		GROSS REACTION		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
T	1806	0	1806	0	0	5-8	3-1		
L	1806	0	1806	0	0	5-8	3-1		

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0
L	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.98 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 C-R, F-P, I-O. DBS = 20-0-0. CBF = 62 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)	CS
FR-TO		FROM TO		FR-TO			
A-B	0 / 29	-77.4 -77.4	0.10 (1)	10.00	S-C	-119 / 87	0.07 (1)
B-C	-2076 / 0	-77.4 -77.4	0.70 (1)	3.98	C-R	-497 / 0	0.30 (1)
C-D	-1891 / 0	-77.4 -77.4	0.63 (1)	4.39	R-E	0 / 418	0.07 (1)
D-E	-1691 / 0	-77.4 -77.4	0.63 (1)	4.39	E-P	0 / 193	0.03 (1)
E-F	-1442 / 0	-77.4 -77.4	0.14 (1)	5.31	P-F	-332 / 0	0.20 (1)
F-G	-1442 / 0	-77.4 -77.4	0.14 (1)	5.31	P-G	0 / 193	0.03 (1)
G-H	-1691 / 0	-77.4 -77.4	0.63 (1)	4.39	O-G	0 / 418	0.07 (1)
H-I	-1891 / 0	-77.4 -77.4	0.63 (1)	4.39	O-I	-497 / 0	0.30 (1)
I-J	-2076 / 0	-77.4 -77.4	0.70 (1)	3.98	M-I	-119 / 87	0.07 (1)
J-K	0 / 29	-77.4 -77.4	0.10 (1)	10.00	B-S	0 / 1778	0.40 (1)
T-B	-1754 / 0	0.0 0.0	0.18 (1)	6.29	M-J	0 / 1778	0.40 (1)
L-J	-1754 / 0	0.0 0.0	0.18 (1)	6.29			

T-S	0 / 0	-17.5 -17.5	0.23 (4)	10.00
S-R	0 / 1759	-17.5 -17.5	0.40 (1)	10.00
R-Q	0 / 1380	-17.5 -17.5	0.29 (1)	10.00
Q-P	0 / 1380	-17.5 -17.5	0.29 (1)	10.00
P-O	0 / 1380	-17.5 -17.5	0.29 (1)	10.00
O-N	0 / 1759	-17.5 -17.5	0.40 (1)	10.00
N-M	0 / 1759	-17.5 -17.5	0.40 (1)	10.00
M-L	0 / 1759	-17.5 -17.5	0.40 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.19")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
 ALLOWABLE DEFL.(TL)= L/360 (1.19")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.70/1.00 (B-C:1), BC=0.40/1.00 (R-S:1), WB=0.40/1.00 (B-S:1), SSI=0.23/1.00 (B-C: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= 0.88 (B) (INPUT = 0.90)
 JSI METAL= 0.57 (B) (INPUT = 1.00)

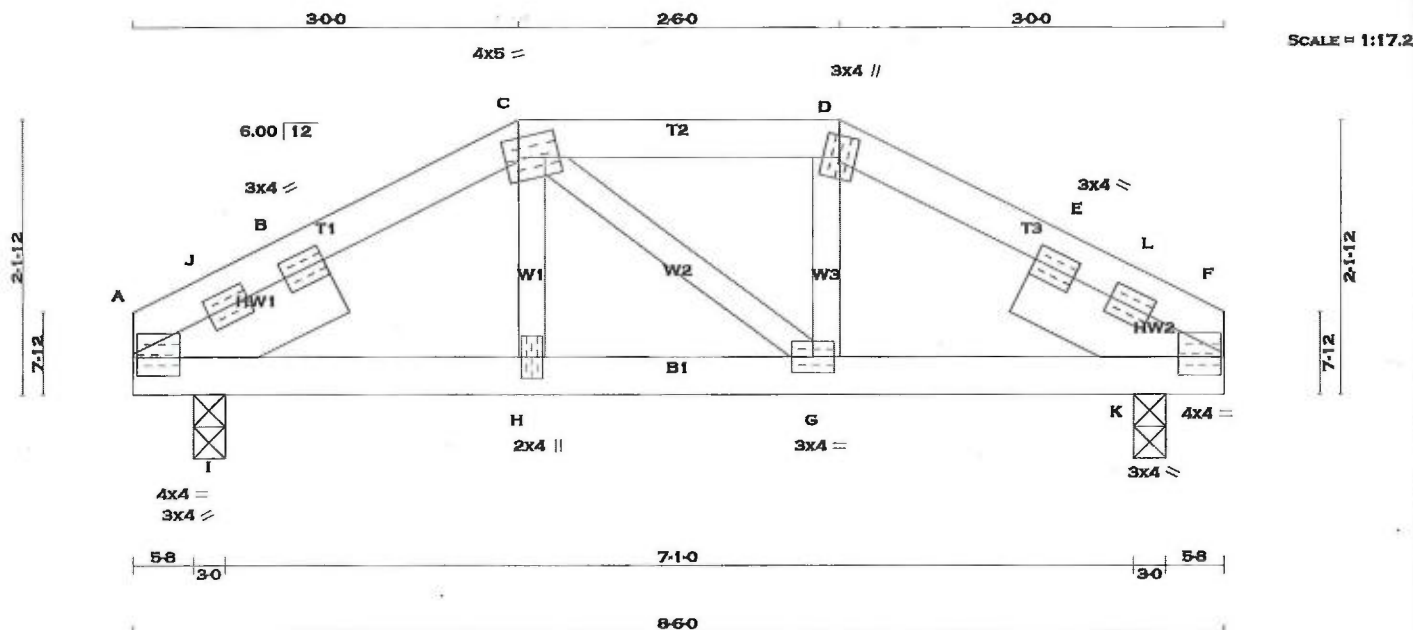


August 16, 2018

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TOTAL WEIGHT = 31 lb [MJJF]

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
A - F	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF
HW2	2x6	DRY	No.2	SPF
ALL WEBS 2x3 DRY: SEASONED LUMBER.				
	2x3	DRY	No.2	SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMR1-I	MT20	4.0	4.0	1.75	0.25
A, A, F, F						
A	RT-I	MT20	3.0	4.0		
C	TTWW-m	MT20	4.0	5.0	1.75	1.25
D	TTW+m	MT20	3.0	4.0		
F	TMBMR1-I	MT20	4.0	4.0	2.00	0.25
G	BMWW-t	MT20	3.0	4.0		
H	BMW+w	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT		REQD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
A	403	0	403	0	0	3-0	1-8		
F	403	0	403	0	0	3-0	1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN. COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	283	198 / 0	0 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
F	283	198 / 0	0 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	FACTORED MAX. (LC)
FR-TO		FROM TO		FR-TO			
A-J	-490 / 0	-77.4 -77.4	0.01 (1)	H-C	0 / 52	6.25	0.02 (4)
J-B	-421 / 0	-77.4 -77.4	0.04 (1)	C-G	0 / 0	6.25	0.00 (1)
B-C	-421 / 0	-77.4 -77.4	0.04 (1)	G-D	0 / 52	6.25	0.02 (4)
C-D	-430 / 0	-77.4 -77.4	0.06 (1)	I-J	0 / 133	6.25	0.00 (1)
D-E	-421 / 0	-77.4 -77.4	0.04 (1)	I-B	-161 / 0	6.25	0.01 (1)
E-L	-421 / 0	-77.4 -77.4	0.04 (1)	K-L	0 / 133	6.25	0.00 (1)
L-F	-490 / 0	-77.4 -77.4	0.01 (1)	K-E	-162 / 0	6.25	0.01 (1)
A-I	0 / 348	-17.5 -17.5	0.08 (1)				10.00
I-H	0 / 427	-17.5 -17.5	0.10 (1)				10.00
H-G	0 / 430	-17.5 -17.5	0.08 (1)				10.00
G-K	0 / 427	-17.5 -17.5	0.10 (1)				10.00
K-F	0 / 348	-17.5 -17.5	0.08 (1)				10.00

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.06/1.00 (C-D:1), BC=0.10/1.00 (H-I:1), WB=0.02/1.00 (D-G:4), SSI=0.08/1.00 (C-D: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= 0.60 (D) (INPUT = 0.90)
JSI METAL= 0.16 (F) (INPUT = 1.00)

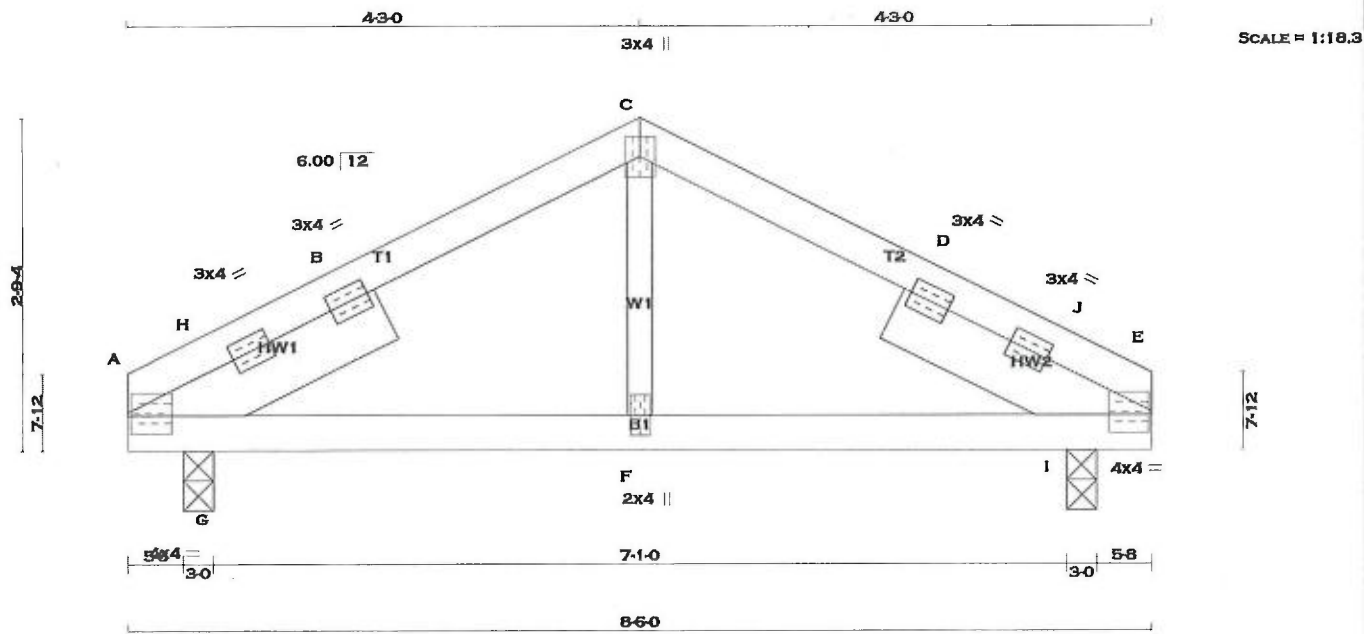


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Kott, Ottawa, Ontario, TW Version 8.210 S Mar 12 2018 MITek Industries, Inc. Thu Aug 16 15:43:03 2018 Page 1 ID: gJO8EEKItORByaYzMgpMx9z1q9X-FRK1017pQDwIH999iSYAVLW1bAE?asudB9heynEu



LUMBER

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

REINFORCING MEMBERS

MEMBER	SIZE	LUMBER	DESCR.
HW1	2x6	DRY	No.2
HW2	2x6	DRY	No.2

ALL WEBS 2x3 DRY
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMR1-I	MT20	4.0	4.0	1.75	0.25
A, A, E, E	RT-I	MT20	3.0	4.0		
C	TTW+p	MT20	3.0	4.0		
E	TMBMR1-I	MT20	4.0	4.0	2.00	0.25
F	BMW+w	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MI120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	VERT	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
A	403	0	403	0	0	3-0	1-8	
E	403	0	403	0	0	3-0	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
A	283	198 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
E	283	198 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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.	MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD L1 (PLF)		MAX. UNBRAC LENGTH	MAX. FACTORED FORCE (LBS)		MAX. CSI (LC)	
	FROM	TO	FROM	TO		FR-TO			
A-H	-394 / 0		-77.4	-77.4	0.01 (1)	6.25	F-C	0 / 149	0.03 (1)
H-B	-372 / 0		-77.4	-77.4	0.11 (1)	6.25	G-H	-11 / 38	0.00 (1)
B-C	-372 / 0		-77.4	-77.4	0.11 (1)	6.25	G-B	-132 / 0	0.01 (1)
C-D	-372 / 0		-77.4	-77.4	0.11 (1)	6.25	I-J	-11 / 38	0.00 (1)
D-J	-372 / 0		-77.4	-77.4	0.11 (1)	6.25	I-D	-132 / 0	0.01 (1)
J-E	-394 / 0		-77.4	-77.4	0.01 (1)	6.25			
A-G	0 / 292		-17.5	-17.5	0.15 (1)	10.00			
G-F	0 / 379		-17.5	-17.5	0.17 (1)	10.00			
F-I	0 / 379		-17.5	-17.5	0.17 (1)	10.00			
I-E	0 / 292		-17.5	-17.5	0.15 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.28")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
 ALLOWABLE DEFL.(TL) = L/360 (0.28")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.11/1.00 (C-H:1), BC=0.17/1.00 (F-G:1), WB=0.03/1.00 (C-F:1), SS=0.09/1.00 (A-G: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.

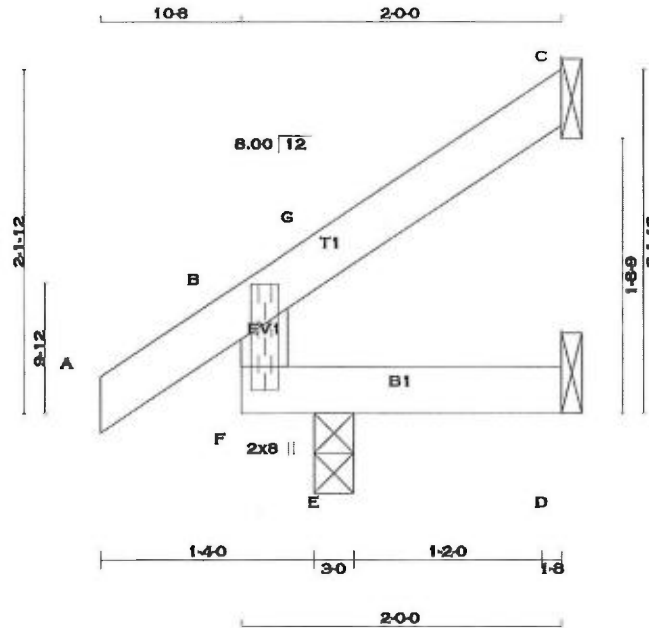
JSI GRIP= 0.29 (E) (INPUT = 0.90)
 JSI METAL= 0.14 (E) (INPUT = 1.00)



August 16, 2018



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



TOTAL WEIGHT = 3 X 7 = 21 lb

LUMBER
 N. L. G. A. RULES
 CHORDS SIZE LUMBER DESCR.
 F - B 2x4 DRY No.2 SPF
 A - C 2x4 DRY No.2 SPF
 F - D 2x4 DRY No.2 SPF
 DRY: SEASONED LUMBER.

PLATES (table is in inches)
 JT TYPE PLATES W LEN Y X
 B
 F TMBMV+p MT20 2.0 8.0
 A SIZE FOR SIZE SUBSTITUTION OF MITEK M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG IN-SX	REQD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
C	63	0	63	0	1-8	1-8
D	-24	0	8	0	-24	1-8
E	225	0	225	0	3-0	1-8

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

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS FACTORED UPLIFT

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN COMPONENT REACTIONS					
		SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	43	38 / 0	0 / 0	0 / 0	0 / 0	5 / 0	0 / 0
D	-15	0 / -21	0 / 0	0 / 0	0 / 0	6 / 0	0 / 0
E	156	120 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CS1 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CS1 (LC)
FR-TO		FROM TO			FR-TO		
F-B	-165 / 0	0.0	0.0 0.07 (1)	7.81			
A-B	0 / 21	-77.4	-77.4 0.05 (1)	10.00			
B-G	-9 / 0	-77.4	-77.4 0.04 (1)	10.00			
G-C	-9 / 0	-77.4	-77.4 0.04 (1)	10.00			
F-E	0 / 0	-17.5	-17.5 0.07 (1)	10.00			
E-D	0 / 0	-17.5	-17.5 0.07 (1)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN.C/C

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

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

CANTILEVER DEFLECTION:

ALLOWABLE DEFL.(LL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(LL)= L/999 (0.00")
 ALLOWABLE DEFL.(TL)= L/120 (0.19")
 CALCULATED VERT. DEFL.(TL)= L/999 (0.00")

CSI: TC=0.07/1.00 (B-F:1), BC=0.07/1.00 (D-E:1), WB=0.00/1.00 (n/a:0), SSI=0.14/1.00 (E-F: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= 0.10 (F) (INPUT = 0.90)
 JSI METAL= 0.04 (F) (INPUT = 1.00)



August 16, 2018



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

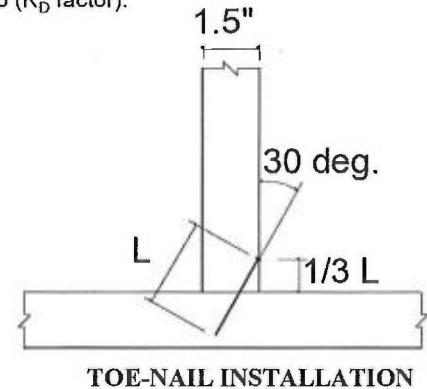
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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



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Bradford, Ontario L3Z 3G7

PEO
Certificate No. 10889485



April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

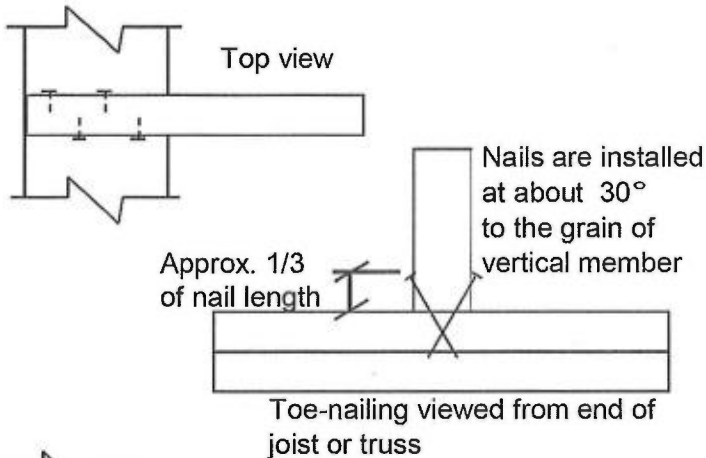
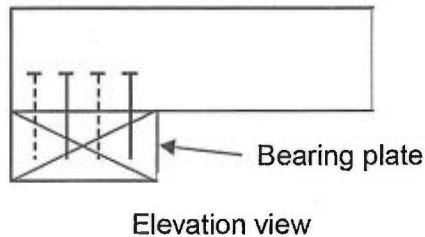
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

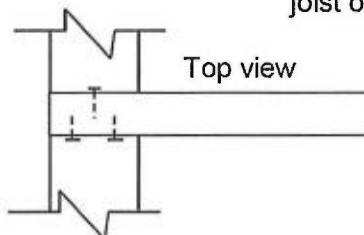
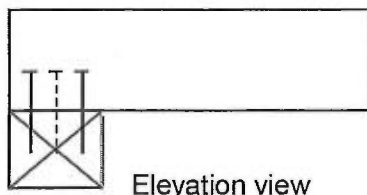
NOTES:

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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April 26, 2017