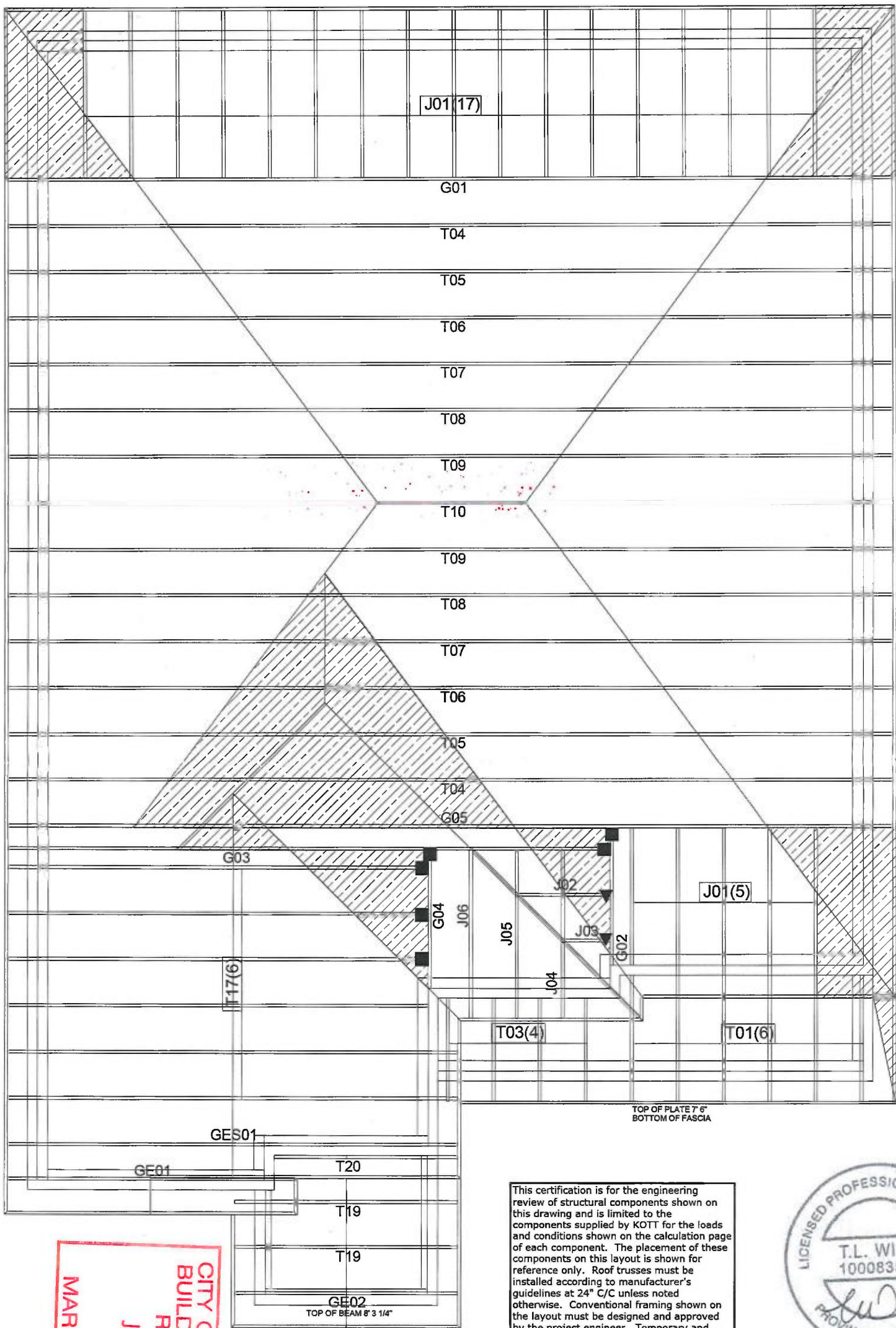


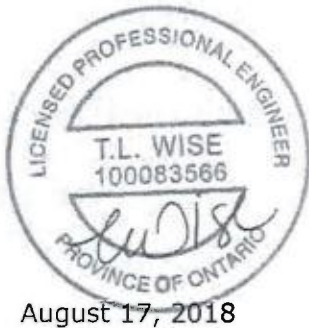
Roof Trusses 18-411398 000 000



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

CITY OF BRAMPTON
BUILDING DIVISION
REVIEWED
JAN 07 2019
BY
MARK DERKSEN

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.



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

Lot 25

Architectural Drawing Info:
Date: JULY, 2018
Project number: 17-04-07
Model: SANDSTONE 2A



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, NBCC 2010

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

Model: SANDSTONE 2A EL 2

Customer: GREENPARK

Project: MINNISALE HOMES

Location: BRAMPTON

Date: 6/28/2018 Drawn by: BB

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

RESPONSIBILITIES

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

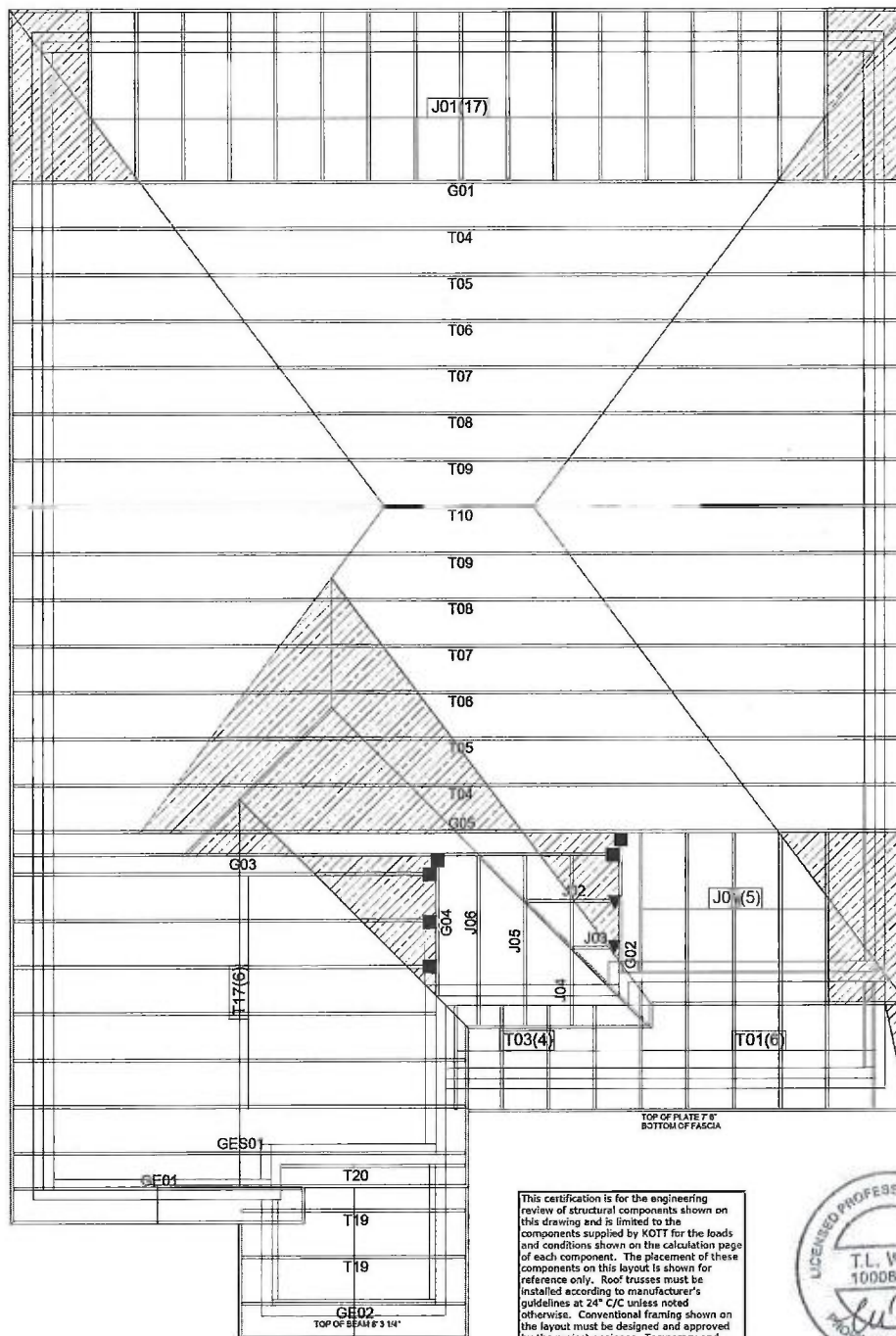
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing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

SUPPORTS

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

DIMENSIONS

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



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 BCS1 guidelines.



Architectural Drawing Info:
Date: JULY, 2018
Project Number: 17-04-07
Model: SANDSTONE 2A



CONVENTIONAL FRAMING BY OTHERS

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C. ROOF PARTS THAT CROSS MEET OVER TRUSSES TO BE 2x4 P.F. @ 24" O.C. WITH A 2x4 VERTICAL POST TO THE TRUSS UNDER EACH CROSS POINT. VERTICAL POST LONGER THAN 6' TO HAVE LATERAL BRACING SO THAT THE DISTANCE BETWEEN END POINT AND BETWEEN ROOFS OF BRACING DOES NOT EXCEED 6'.

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

HANGER LEGEND:

- ▼ LUS24
- LJS28DS
- HGUS26
- ✕ HGUS26-2

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3 PSF
BOT CH. LL = 9 PSF
TL = 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 2010, NBC 2010, NBC 2014
CSA S86-05
TPC 2011

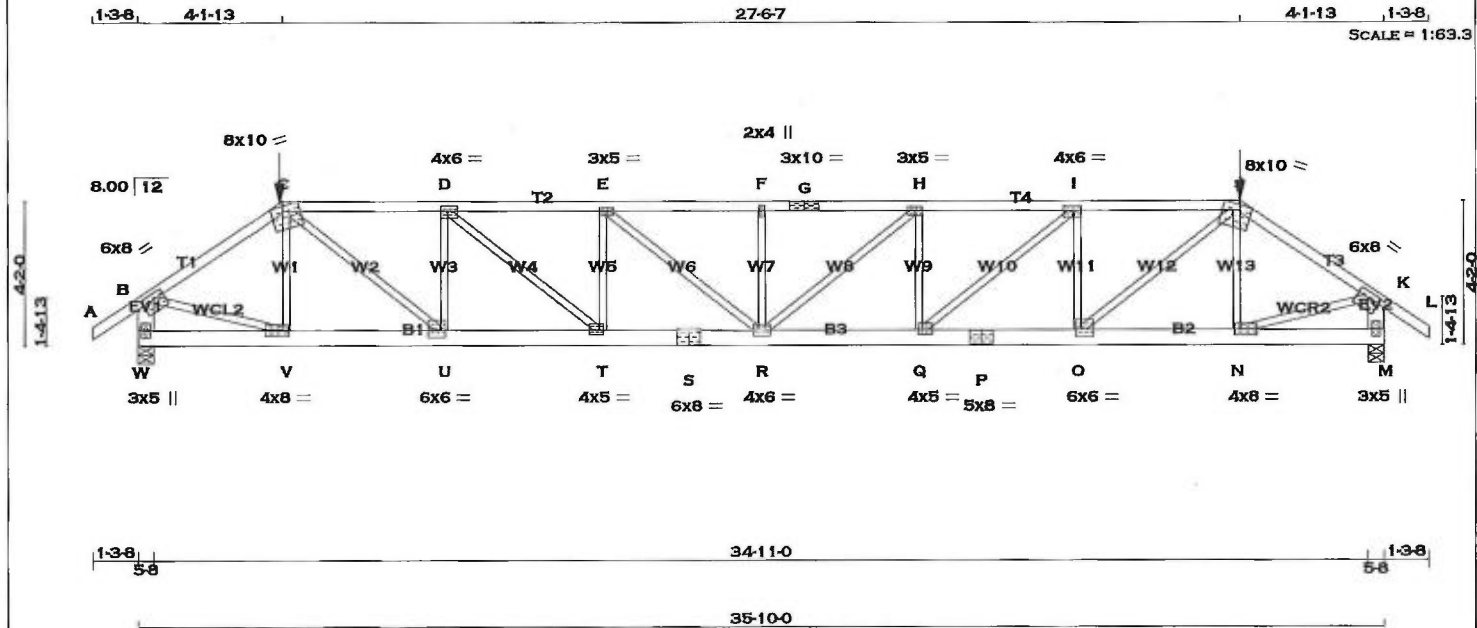
Model: SANDSTONE 2A EL 2

Customer: GREENPARK

Project: MINNISALE HOMES

Location: BRAMPTON

Date: 6/28/2018 Drawn by: BB



LUMBER

N. L. G. A. RULES	SIZE	LUMBER	DESCR.
CHORDS			
A - C	2x4	DRY 2100F 1.8E	SPF
C - G	2x4	DRY 2100F 1.8E	SPF
G - J	2x4	DRY 2100F 1.8E	SPF
J - L	2x4	DRY 2100F 1.8E	SPF
W - K	2x6	DRY No.2	SPF
M - K	2x6	DRY No.2	SPF
W - S	2x6	DRY 2100F 1.8E	SPF
S - P	2x6	DRY 2100F 1.8E	SPF
P - M	2x6	DRY 2100F 1.8E	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	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	BS-t	MT20	5.0	8.0	
Q	BMWW-t	MT20	4.0	5.0	1.75 1.50
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	HORZ	DOWN	HORZ
W	3267	0	3267	0
M	3267	0	3267	0

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	2292	1611 / 0	0 / 0	0 / 0	0 / 0	680 / 0	0 / 0
M	2292	1611 / 0	0 / 0	0 / 0	0 / 0	680 / 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. 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	0.07 (1)	10.00	V-C	-574 / 0	0.15 (1)
B-C	-3923 / 0	-77.4 -77.4	0.27 (1)	4.14	C-U	0 / 3274	0.81 (1)
C-D	-5785 / 0	-145.9 -145.9	0.55 (1)	3.22	U-D	-1939 / 0	0.50 (1)
D-E	-7230 / 0	-145.9 -145.9	0.68 (1)	2.78	D-T	0 / 1879	0.47 (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 / 616	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	-7230 / 0	-145.9 -145.9	0.68 (1)	2.78	R-H	0 / 616	0.15 (1)
I-J	-5785 / 0	-145.9 -145.9	0.55 (1)	3.22	Q-H	-1036 / 0	0.27 (1)
J-K	-3923 / 0	-77.4 -77.4	0.27 (1)	4.14	Q-I	0 / 1879	0.47 (1)
K-L	0 / 29	-77.4 -77.4	0.07 (1)	10.00	O-I	-1939 / 0	0.50 (1)
W-B	-3214 / 0	0.0 0.0	0.23 (1)	5.86	O-J	0 / 3274	0.81 (1)
M-K	-3214 / 0	0.0 0.0	0.23 (1)	5.86	N-J	-574 / 0	0.15 (1)
W-V	0 / 0	-33.0 -33.0	0.04 (4)	10.00	B-V	0 / 3347	0.83 (1)
V-U	0 / 3243	-33.0 -33.0	0.21 (1)	10.00	N-K	0 / 3347	0.83 (1)
U-T	0 / 5786	-33.0 -33.0	0.36 (1)	10.00			
T-S	0 / 7230	-33.0 -33.0	0.45 (1)	10.00			
S-R	0 / 7230	-33.0 -33.0	0.45 (1)	10.00			
R-Q	0 / 7230	-33.0 -33.0	0.45 (1)	10.00			
Q-P	0 / 5786	-33.0 -33.0	0.36 (1)	10.00			
P-O	0 / 5786	-33.0 -33.0	0.36 (1)	10.00			
O-N	0 / 3243	-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
SIDE SETBACK = 4-1-13
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/604 (0.71")

CSI: TC=0.68/1.00 (H-I:1), BC=0.45/1.00 (R-T:1), WB=0.83/1.00 (K-N: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) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618 354	1667 822	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



August 17, 2018

JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	DRWG NO.
TW0818-109	G01	1	1	TR-GREENPARK-MINNISALE HOMES-SANDSTONE 2A EL 2	Page 4 of 33 TW0818-109

Kott, Ottawa, Ontario, TW

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Fri Aug 17 10:08:42 2018 Page 2

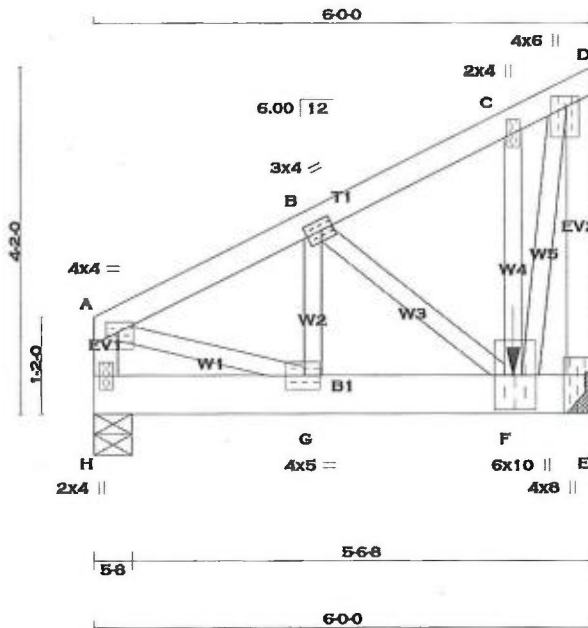
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A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES
 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 240.8 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.



SCALE = 1:26.5

TOTAL WEIGHT = 34 lb

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

H - A	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
H - E	2x6	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
A	TMVW-p	MT20	4.0	4.0	1.50	1.75
B	TMVW-t	MT20	3.0	4.0	1.50	1.75
C	TMVW-w	MT20	2.0	4.0		
D	TMVW+p	MT20	4.0	6.0	1.50	1.75
E	BMV1+t	MT20	4.0	8.0	Edge	0.50
F	BMVW+t	MT20	6.0	10.0	5.00	1.50
G	BMVW-t	MT20	4.0	5.0	2.00	2.25
H	BMV1+p	MT20	2.0	4.0		

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

A SIZE FOR SIZE SUBSTITUTION OF MITEK MH20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 2537.7 lbs FACTORED DOWN AT 5'-0-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
H	958	0	958	0	5-8	1-10
E	2624	0	2624	0	MECHANICAL	

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

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	672	470 / 0	0 / 0	0 / 0	0 / 0	202 / 0	0 / 0
E	1842	1288 / 0	0 / 0	0 / 0	0 / 0	554 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.84 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 MAX (LC)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX LC1 MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
H-A	-935 / 0	0.0	0.0 0.10 (1)	7.81	A-G	0 / 1015	0.25 (1)
A-B	-1070 / 0	-154.7	-154.7 0.18 (1)	5.84	G-B	0 / 110	0.04 (4)
B-C	-642 / 0	-154.7	-154.7 0.17 (1)	6.25	B-F	-564 / 0	0.12 (1)
C-D	-590 / 0	-77.4	-77.4 0.07 (1)	6.25	F-C	-110 / 8	0.02 (1)
E-D	-2006 / 0	0.0	0.0 0.51 (1)	5.91	F-D	0 / 2262	0.56 (1)
H-G	0 / 0	-35.0	-35.0 0.05 (1)	10.00			
G-F	0 / 974	-35.0	-35.0 0.55 (1)	10.00			
F-E	0 / 0	-17.5	-17.5 0.42 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
F	5'-0-12	-2538	-2538		FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

*** NON STANDARD GIRDER ***

ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.20")
 CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
 ALLOWABLE DEFL.(TL) = L/360 (0.20")
 CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.51/1.00 (D-E:1), BC=0.55/1.00 (F-G:1), WB=0.56/1.00 (D-F:1), SSI=0.41/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

CONTINUED ON PAGE 2



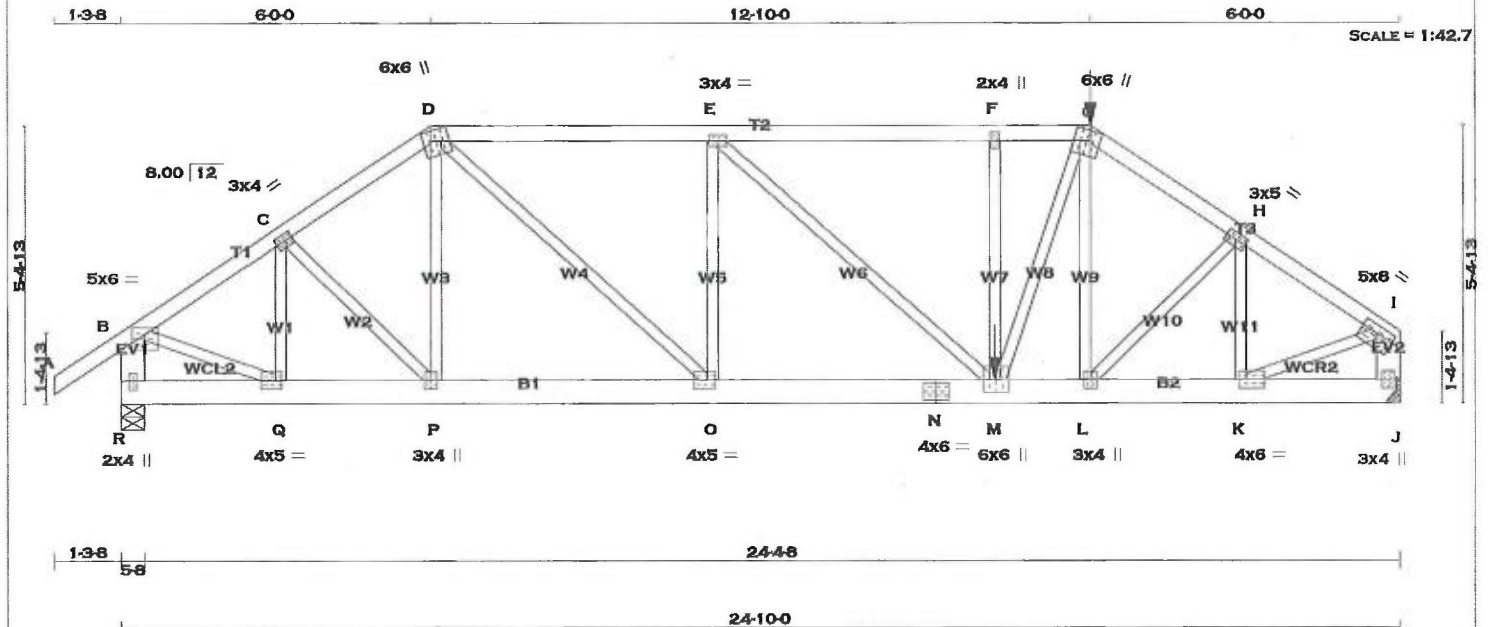
August 17, 2018



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.

Kott, Ottawa, Ontario, TW

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ID:19P4q3_4UbBoAho_w5IHSEz1nrU-NzHd7eyXUZY27_QKDwhufFyhws4vJNX9W1a1yn



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	
R - B	2x6	DRY	No.2	SPF	
J - I	2x6	DRY	No.2	SPF	
R - N	2x6	DRY	No.2	SPF	
N - J	2x6	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-p	MT20	5.0	6.0	1.50	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTVW+m	MT20	6.0	6.0	2.25	1.75
E	TMVW-t	MT20	3.0	4.0		
F	TMVW-w	MT20	2.0	4.0		
G	TTVW+m	MT20	6.0	6.0	2.25	2.25
H	TMVW-t	MT20	3.0	5.0	1.50	2.25
I	TMVW-t	MT20	5.0	8.0	1.75	3.75
J	BMV1+p	MT20	3.0	4.0		
K	BMVW-t	MT20	4.0	6.0	2.00	1.50
L	BMVW-t	MT20	3.0	4.0		
M	BMVWVW-t	MT20	6.0	6.0	3.00	1.50
N	BS-t	MT20	4.0	6.0		
O	BMVW-t	MT20	4.0	5.0	2.00	1.75
P	BMVW-t	MT20	3.0	4.0		
Q	BMVW-t	MT20	4.0	5.0	2.00	1.50
R	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

HANGERS NOTES

1)

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

BEARINGS	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
R	1838	0	1838	0
J	2534	0	2534	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
R	1287	918 / 0	0 / 0
J	1781	1233 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MAX. FACTORED	FACTORED	MEMB.	FORCE	VERT. LOAD	LC1	MAX	CS	UNBRAC	WEBS	MAX. FACTORED	MEMB.	FORCE	MAX	CS
FR-TO										FR-TO					
A-B	0 / 29	-77.4	-77.4	0.11 (1)	10.00	Q-C	-518 / 0	0.11 (1)							
B-C	-1920 / 0	-77.4	-77.4	0.16 (1)	4.69	C-P	0 / 195	0.05 (1)							
C-D	-2115 / 0	-77.4	-77.4	0.17 (1)	4.50	P-D	-28 / 49	0.02 (4)							
D-E	-2770 / 0	-77.4	-77.4	0.58 (1)	3.56	D-O	0 / 1390	0.34 (1)							
E-F	-3127 / 0	-77.4	-77.4	0.63 (1)	3.33	O-E	-816 / 0	0.34 (1)							
F-G	-3127 / 0	-145.9	-145.9	0.27 (1)	3.67	E-M	0 / 483	0.12 (1)							
G-H	-3217 / 0	-77.4	-77.4	0.24 (1)	3.69	M-F	-350 / 0	0.15 (1)							
H-I	-2856 / 0	-77.4	-77.4	0.22 (1)	3.91	F-G	0 / 1345	0.33 (1)							
R-B	-1792 / 0	0.0	0.0	0.13 (1)	7.41	L-G	-18 / 65	0.02 (4)							
J-I	-2456 / 0	0.0	0.0	0.18 (1)	6.55	L-H	0 / 394	0.10 (1)							
R-Q	0 / 0	-17.5	-17.5	0.05 (1)	10.00	K-H	-752 / 0	0.16 (1)							
Q-P	0 / 1608	-17.5	-17.5	0.25 (1)	10.00	B-Q	0 / 1689	0.42 (1)							
P-O	0 / 1744	-17.5	-17.5	0.26 (1)	10.00	K-I	0 / 2505	0.62 (1)							
O-N	0 / 2771	-17.5	-17.5	0.46 (1)	10.00										
N-M	0 / 2771	-17.5	-17.5	0.46 (1)	10.00										
M-L	0 / 2660	-33.0	-33.0	0.43 (1)	10.00										
L-K	0 / 2385	-33.0	-33.0	0.38 (1)	10.00										
K-J	0 / 0	-33.0	-33.0	0.07 (1)	10.00										

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	FACE	DIR.	TYPE
G	18-10-0	-348	-348	FRONT	VERT	TOTAL
M	16-11-17	-1314	-1314	FRONT	VERT	TOTAL



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.

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

GIRDER TYPE: CPrimeHip

SIDE SETBACK = 6-0-0

END SETBACK = 6-0-0

END WALL WIDTH = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADD'L LOADS BASED ON 55 % OF GSL.

LOADS APPLIED TO FIRST 7-10-4 OF SPAN

MEASURED FROM THE RIGHT.

*** NON STANDARD GIRDER ***

ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL) = L/360 (0.83")

CALCULATED VERT. DEFL.(LL) = L/999 (0.10")

ALLOWABLE DEFL.(TL) = L/360 (0.83")

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

CSI: TC=0.63/1.00 (E-F:1), BC=0.46/1.00 (M-O:1), WB=0.62/1.00 (I-K:1), SSI=0.22/1.00 (D-E: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
MT20	618	354	1667
	822	2284	1656

CONTINUED ON PAGE 2

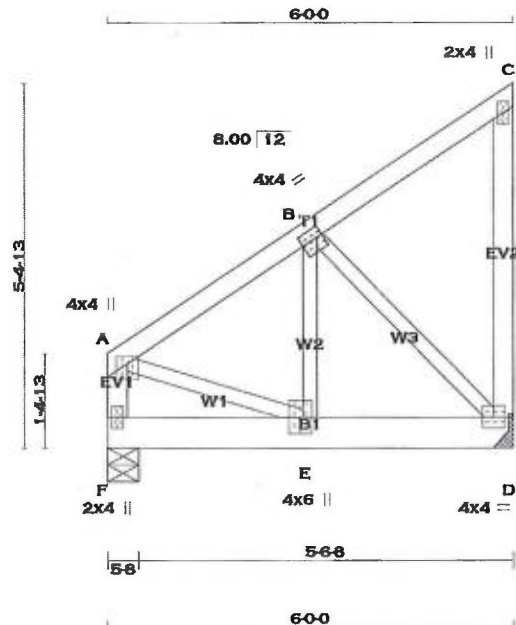


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HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 348.1 lbs FACTORED DOWN AT 18-10-0 ON TOP CHORD, AND 1313.8 lbs FACTORED DOWN AT 16-11-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL= 0.69 (N) (INPUT = 1.00)



SCALE = 1:32.5

TOTAL WEIGHT = 33 lb

LUMBER					DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		SPF	
F - A	2x4	DRY	No.2		SPF	
A - C	2x4	DRY	No.2		SPF	
D - C	2x4	DRY	No.2		SPF	
F - D	2x6	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
A	TMVW+p	MT20	4.0	4.0	1.25	2.00
B	TMVW-t	MT20	4.0	4.0	1.75	1.00
C	TMV+p	MT20	2.0	4.0		
D	BMVW-t	MT20	4.0	4.0		
E	BMVW-t	MT20	4.0	6.0	3.00	1.50
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 GROSS REACTION		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
F	1313	0	1313	0	0	5-8	2-4		
D	1313	0	1313	0	0	MECHANICAL			

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN		COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
F	922	645 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0		
D	922	645 / 0	0 / 0	0 / 0	0 / 0	277 / 0	0 / 0		

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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		FACTORED		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FORCE (LBS)	MAX. UNBRAC LENGTH (FT)	MAX. CSI (LC)
FR-TO		FROM	TO	FR-TO			
F-A	-867 / 0	0.0	0.0 0.10 (1)	A-E	0 / 818	0.20 (1)	
A-B	-920 / 0	-77.4	-77.4 0.12 (1)	E-B	0 / 1013	0.25 (1)	
B-C	-13 / 0	-77.4	-77.4 0.11 (1)	B-D	-1097 / 0	0.32 (1)	
D-C	-92 / 0	0.0	0.0 0.04 (1)				
F-E	0 / 0	-360.4	-360.4 0.21 (1)				
E-D	0 / 776	-360.4	-360.4 0.31 (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

GIRDER TYPE: CStdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 16-11-0

END DISTANCE = 6-0-0

END SPAN CARRIED = 16-11-0

END WALL WIDTH = 5-8

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADD'L LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

- CSA 086-09

- TPIC 2011

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

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

CSI: TC=0.12/1.00 (A-B:1), BC=0.31/1.00 (D-E:1), WB=0.32/1.00 (B-D:1), SSI=0.42/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

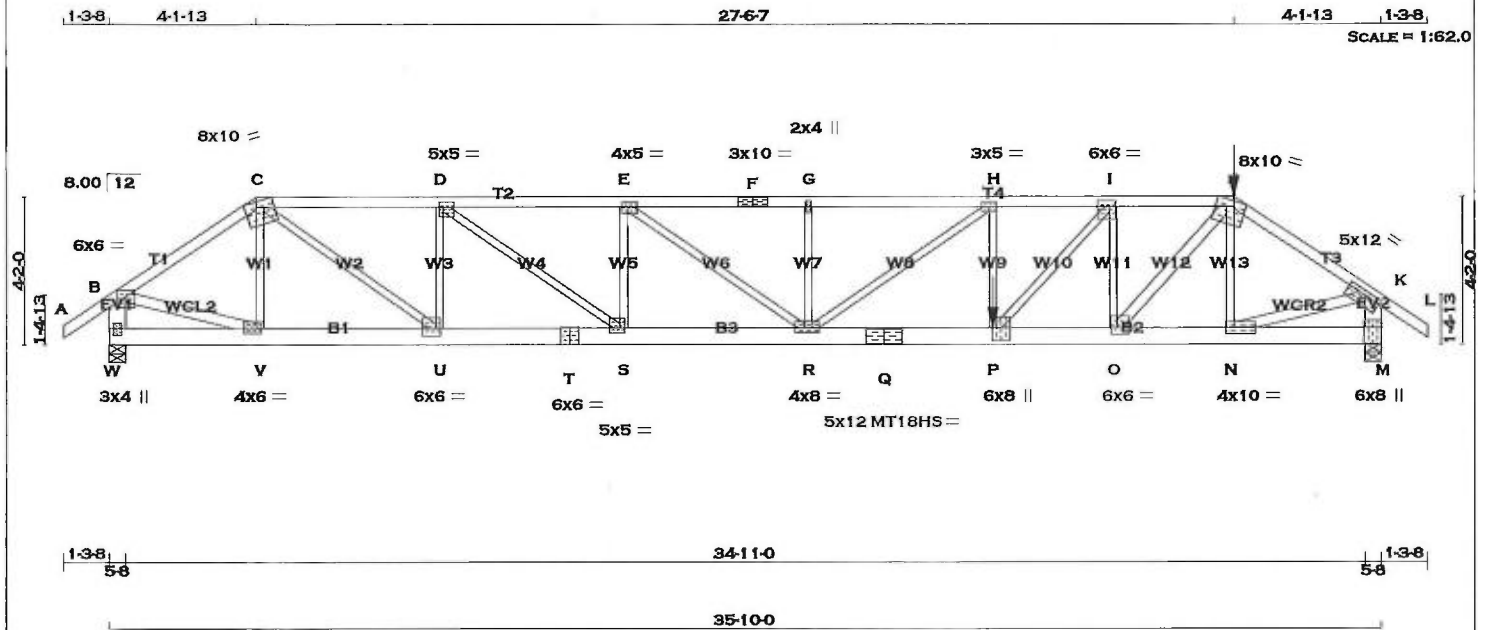
JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)



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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.

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 240.8 lbs FACTORED DOWN AT 31-8-3 ON TOP CHORD, AND 2624.7 lbs FACTORED DOWN AT 24-10-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

MT18HS 580 354 2729 1405 4191 2010

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (P) (INPUT = 0.90)

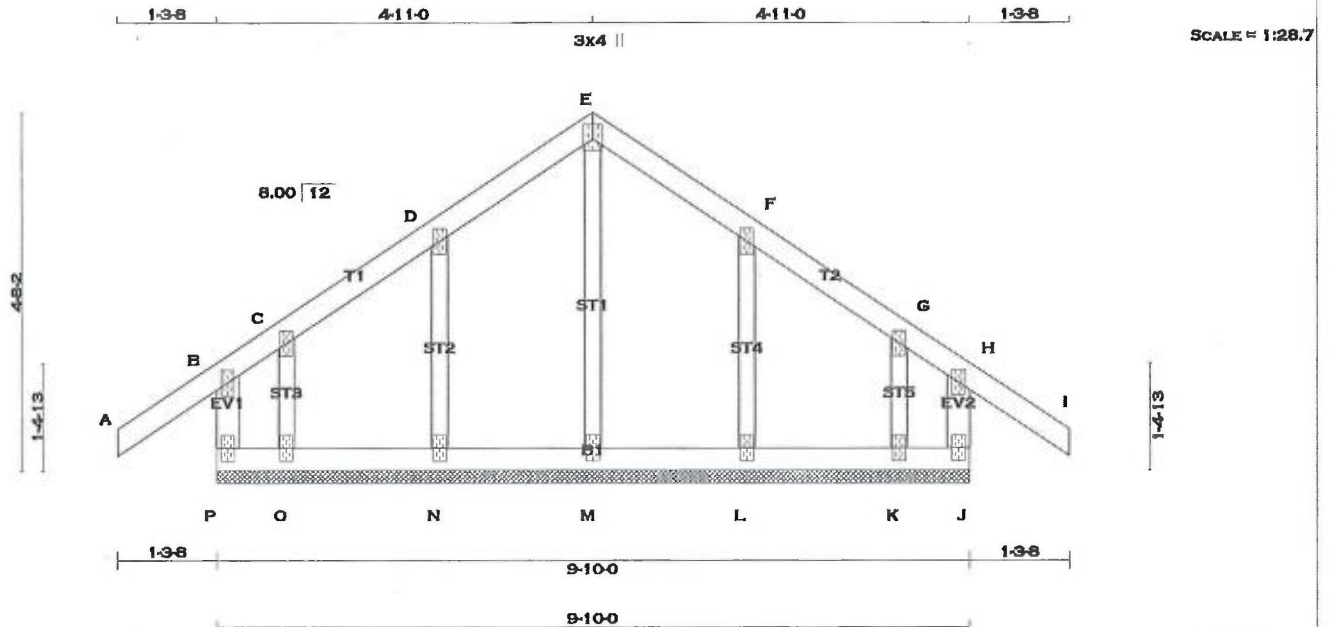
JSI METAL= 0.92 (J) (INPUT = 1.00)



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ID:19P4q3_4UbBoAhO_w5IHSEz1nrU-r9r7K_zzFB3Q9CiA_2k9D6GYx5M0pV



TOTAL WEIGHT = 41 lb

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
P - B	2x4	DRY	No.2
A - E	2x4	DRY	No.2
E - I	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - J	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
ALL GABLE WEBS	2x3	DRY	No.2
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, D, F, G					
C TMV+w	MT20	2.0	4.0		
E TTW+p	MT20	3.0	4.0	2.25	1.50
H TMV+p	MT20	2.0	4.0		
J BMV1+p	MT20	2.0	4.0		
K, L, M, N, O					
K BMV1+w	MT20	2.0	4.0		
P 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
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
P-B	-166 / 0	0.0	0.03 (1)	7.81	M-E	-192 / 0	0.06 (1)
A-B	0 / 29	-77.4	-77.4 0.10 (1)	10.00	N-D	-167 / 0	0.03 (1)
B-C	0 / 2	-77.4	-77.4 0.07 (1)	10.00	O-C	-58 / 0	0.01 (1)
C-D	0 / 33	-77.4	-77.4 0.05 (1)	10.00	L-F	-167 / 0	0.03 (1)
D-E	0 / 32	-77.4	-77.4 0.05 (1)	10.00	K-G	-58 / 0	0.01 (1)
E-F	0 / 32	-77.4	-77.4 0.05 (1)	10.00			
F-G	0 / 33	-77.4	-77.4 0.05 (1)	10.00			
G-H	0 / 2	-77.4	-77.4 0.07 (1)	10.00			
H-I	0 / 29	-77.4	-77.4 0.10 (1)	10.00			
J-H	-166 / 0	0.0	0.03 (1)	7.81			
P-O	-21 / 0	-17.5	-17.5 0.01 (4)	6.25			
O-N	-23 / 0	-17.5	-17.5 0.01 (4)	6.25			
N-M	-28 / 0	-17.5	-17.5 0.01 (4)	6.25			
M-L	-28 / 0	-17.5	-17.5 0.01 (4)	6.25			
L-K	-23 / 0	-17.5	-17.5 0.01 (4)	6.25			
K-J	-21 / 0	-17.5	-17.5 0.01 (4)	6.25			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

CSI: TC=0.10/1.00 (H-I:1), BC=0.01/1.00 (M-N:4), WB=0.06/1.00 (E-M:1), SSI=0.07/1.00 (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.

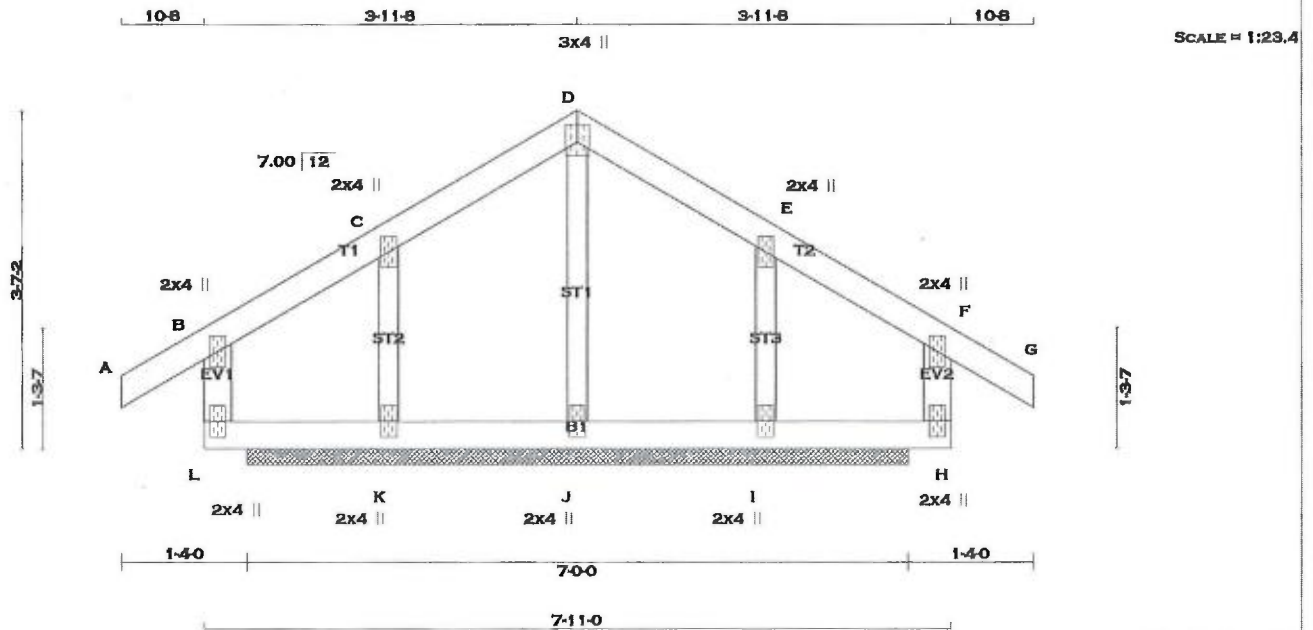
JSI GRIP= 0.13 (E) (INPUT = 0.90)
JSI METAL= 0.06 (E) (INPUT = 1.00)



August 17, 2018



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TOTAL WEIGHT = 30 lb [M]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
L - B	2x4	DRY	No.2	SPF	
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
L - H	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	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMW+p	MT20	2.0	4.0		
F	TMV+p	MT20	2.0	4.0		
H	BMV+p	MT20	2.0	4.0		
I, J, K						
I	BMW1+w	MT20	2.0	4.0		
L	BMV+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
 THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.
 THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.
 BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S)

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. UNBRAC LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO						FR-TO			
L-B	-33 / 7	0.0	0.0	0.09 (1)	7.81	J-D	-270 / 0	0.06 (1)	
A-B	0 / 18	-77.4	-77.4	0.05 (1)	10.00	K-C	-212 / 0	0.03 (1)	
B-C	0 / 164	-77.4	-77.4	0.10 (1)	10.00	I-E	-212 / 0	0.03 (1)	
C-D	0 / 141	-77.4	-77.4	0.10 (1)	10.00				
D-E	0 / 141	-77.4	-77.4	0.10 (1)	10.00				
E-F	0 / 164	-77.4	-77.4	0.10 (1)	10.00				
F-G	0 / 18	-77.4	-77.4	0.05 (1)	10.00				
H-F	-33 / 7	0.0	0.0	0.09 (1)	7.81				
L-K	-124 / 0	-17.5	-17.5	0.08 (1)	6.25				
K-J	-131 / 0	-17.5	-17.5	0.06 (1)	6.25				
J-I	-131 / 0	-17.5	-17.5	0.06 (1)	6.25				
I-H	-124 / 0	-17.5	-17.5	0.08 (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=0.10/1.00 (B-C:1), BC=0.08/1.00 (K-L:1), WB=0.06/1.00 (D-J:1), SSI=0.10/1.00 (B-L: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.

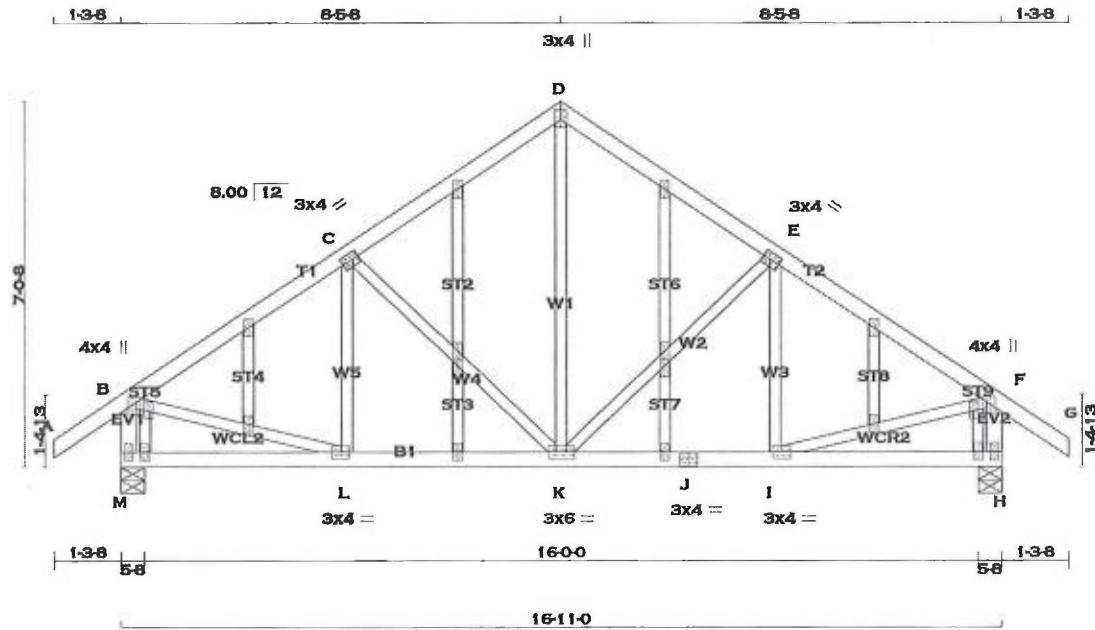
JSI GRIP= 0.21 (D) (INPUT = 0.90)
 JSI METAL= 0.08 (L) (INPUT = 1.00)



August 17, 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	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - D	2x4	DRY	No.2	SPF
D - G	2x4	DRY	No.2	SPF
M - B	2x4	DRY	No.2	SPF
H - F	2x4	DRY	No.2	SPF
M - J	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				
ALL GABLE WEBS	2x3	DRY	No.2	SPF
DRY: SEASONED LUMBER.				
GABLE STUDS SPACED AT	2-0-0	OC.		

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	4.0	4.0	1.25	2.00
C	NP+u	MT20	2.0	4.0	2.00	
B	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMVW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW+p	MT20	4.0	4.0	1.25	2.00
F	NP+u	MT20	2.0	4.0	2.00	
H	BMV1+p	MT20	2.0	4.0		
H, M, N, O, P, Q, R, S, T, U, V, W						
H	NP+u	MT20	2.0	4.0		
I	BMVW-t	MT20	3.0	4.0	1.50	1.75
J	BS-t	MT20	3.0	4.0		
K	BMVW-t	MT20	3.0	4.0		
L	BMVW-t	MT20	3.0	4.0	1.50	1.75
M	BMV1+p	MT20	2.0	4.0		
N	NP+u	MT20	2.0	4.0	1.50	1.00
U	NP+u	MT20	2.0	4.0	1.50	1.00

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	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
M	909	0	909	0	0	5-8	1-9		
H	909	0	909	0	0	5-8	1-9		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS						
M	635	458 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0	0 / 0	0 / 0
H	635	458 / 0	0 / 0	0 / 0	0 / 0	177 / 0	0 / 0	0 / 0	0 / 0

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

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		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	FORCE (LBS)	MAX (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 29	-77.4 -77.4	0.10 (1)	10.00	K-D	0 / 438	0.10 (1)
B-C	-819 / 0	-77.4 -77.4	0.18 (1)	6.25	K-E	-264 / 0	0.15 (1)
C-D	-633 / 0	-77.4 -77.4	0.18 (1)	6.25	I-E	-94 / 43	0.03 (1)
D-E	-633 / 0	-77.4 -77.4	0.18 (1)	6.25	C-K	-264 / 0	0.15 (1)
E-F	-819 / 0	-77.4 -77.4	0.18 (1)	6.25	L-C	-94 / 43	0.03 (1)
F-G	0 / 29	-77.4 -77.4	0.10 (1)	10.00	B-L	0 / 720	0.16 (1)
M-B	-876 / 0	0.0 0.0	0.09 (1)	7.81	I-F	0 / 720	0.16 (1)
H-F	-876 / 0	0.0 0.0	0.09 (1)	7.81			
M-L	0 / 0	-17.5 -17.5	0.07 (4)	10.00			
L-K	0 / 699	-17.5 -17.5	0.14 (1)	10.00			
K-J	0 / 699	-17.5 -17.5	0.14 (1)	10.00			
J-I	0 / 699	-17.5 -17.5	0.14 (1)	10.00			
I-H	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

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

CSI: TC=0.18/1.00 (E-F:1), BC=0.14/1.00 (I-K:1),
 WB=0.16/1.00 (B-L:1), 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	SECTION
	(PSI)	(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.

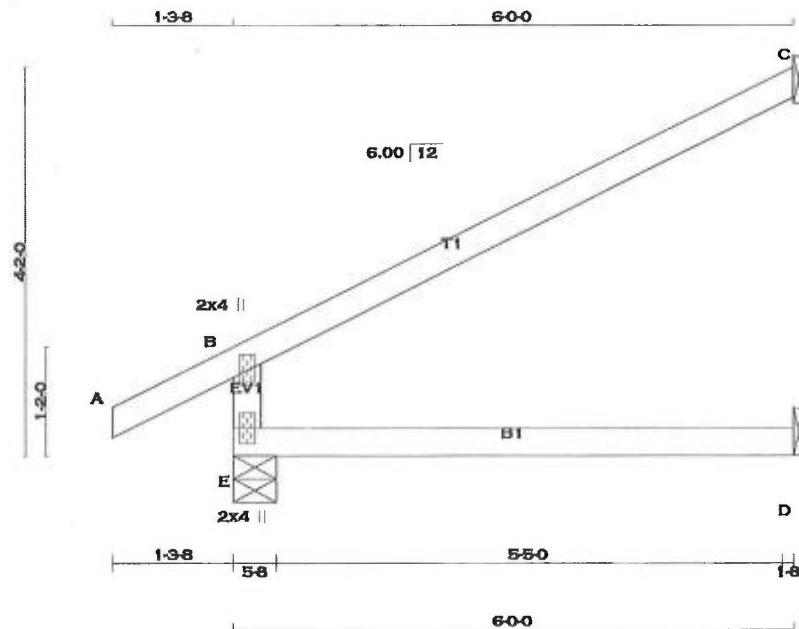
JSI GRIP= 0.90 (I) (INPUT = 0.90)
 JSI METAL= 0.26 (L) (INPUT = 1.00)



August 17, 2018



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SCALE = 1:23.6

TOTAL WEIGHT = 22 X 17 = 376 lb

LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	SPF	SPF	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 M120 WITH TEE-LOK TL20 PLATES IS ALLOWED.

UNFACTORED REACTIONS							
JT	COMBINED	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

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	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, 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)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		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 LS BEND=1.10
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

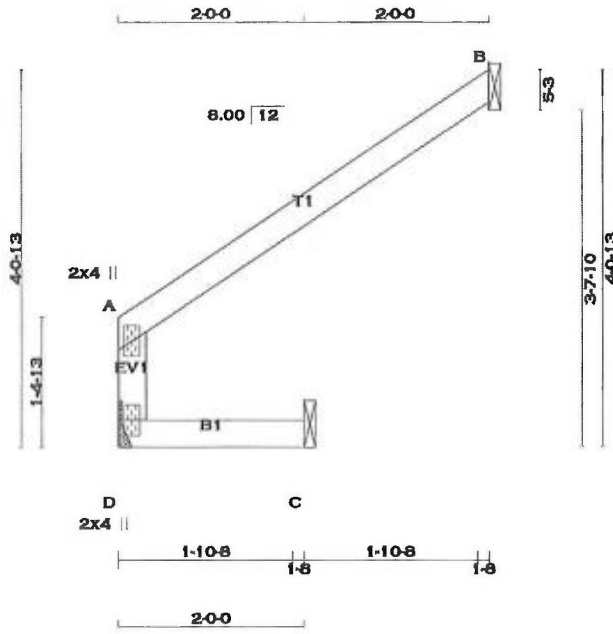
JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.09 (B) (INPUT = 1.00)



August 17, 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 = 1:23.7

TOTAL WEIGHT = 9 lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	SPF
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
A	TMV+p	MT20	2.0	4.0	X
D	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		REQD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
D	154	0	154	0	0	MECHANICAL		
B	137	0	137	0	0	1-8	1-8	
C	54	0	54	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 B3759H FOR CONNECTION TO JOINT(S) B , C

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
D	107	82/0	0/0	0/0	0/0	0/0	25/0
B	93	82/0	0/0	0/0	0/0	0/0	11/0
C	38	22/0	0/0	0/0	0/0	0/0	16/0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		WEBS		MAX. FACTORED	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	MAX. FROM	MAX. TO	MEMB. UNBRAC LENGTH	MEMB. FR-TO	MAX. FORCE (LBS)	MAX. CSI (LC)
D-A	-173/0	0.0	0.0	0.09 (1)	7.81			
A-B	-10/0	-77.4	-77.4	0.16 (1)	6.25			
D-C	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

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

CSI: TC=0.16/1.00 (A-B:1) , BC=0.10/1.00 (C-D:1) , WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (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	616	354	1667	822 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

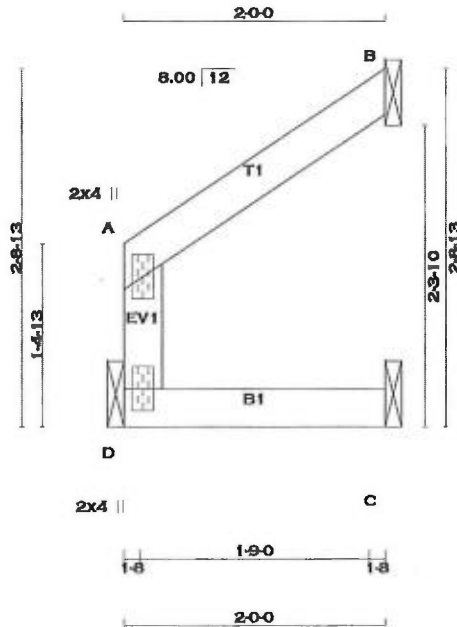
JSI GRIP= 0.11 (A) (INPUT = 0.90)
JSI METAL= 0.04 (A) (INPUT = 1.00)



August 17, 2018



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SCALE = 1:16.8

TOTAL WEIGHT = 6 lb [M/F]

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE	LUMBER	DESCR.	
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 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 IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
D	95	0	95	0	1-8	1-8
B	72	0	72	0	1-8	1-8
C	22	0	22	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
D	67	47/0	0/0	0/0	0/0	0/0	0/0
B	49	43/0	0/0	0/0	0/0	0/0	0/0
C	17	4/0	0/0	0/0	0/0	0/0	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) CSI (LC)	MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 MAX (PLF) CSI (LC)
D-A	-82/0	0.0 0.0 0.01 (1)	7.81	
A-B	-3/0	-77.4 -77.4 0.04 (1)	10.00	
D-C	0/0	-17.5 -17.5 0.02 (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 (0.00")
 ALLOWABLE DEFL.(TL)= L/360 (0.19")
 CALCULATED VERT. DEFL.(TL) = L/ 999 (0.00")

CSI: TC=0.04/1.00 (A-B:1), BC=0.02/1.00 (C-D:1)
 , WB=0.00/1.00 (n/a:0), SSI=0.05/1.00 (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.

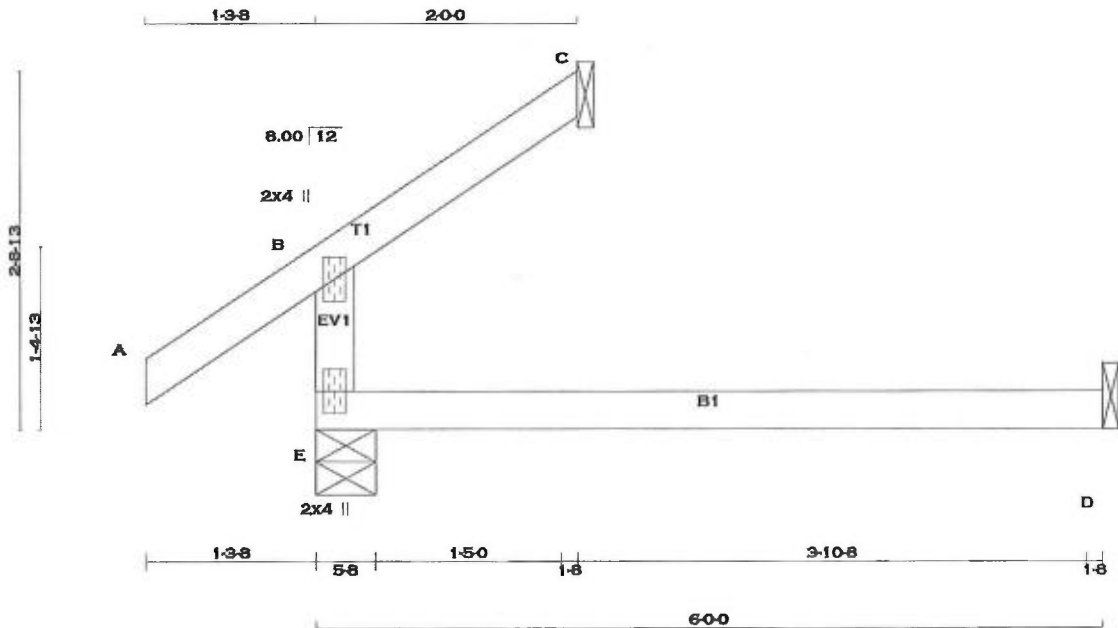
JSI GRIP= 0.05 (A) (INPUT = 0.90)
 JSI METAL= 0.02 (A) (INPUT = 1.00)



August 17, 2018



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SCALE = 1:16.8

TOTAL WEIGHT = 13 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

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)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM TO			FR-TO				
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)	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 (B) (INPUT = 0.90)
 JSI METAL= 0.05 (B) (INPUT = 1.00)



August 17, 2018



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TOTAL WEIGHT = 15 lb

DRY: SEASONED LUMBER.

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 WITH TEE-LOK TL 20 PLATES IS ALLOWED.

BEARINGS

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

1ST LCASE MAX/MIN. COMPONENT REACTIONS

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

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.

TOTAL LOAD CASES: (4)

E-D	0/0	-17.5	-17.5	0.13 (4)	10.00
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MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
-------	---------------------------------	-----------------

SPECIFIED LOADS:

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

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

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

-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.

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

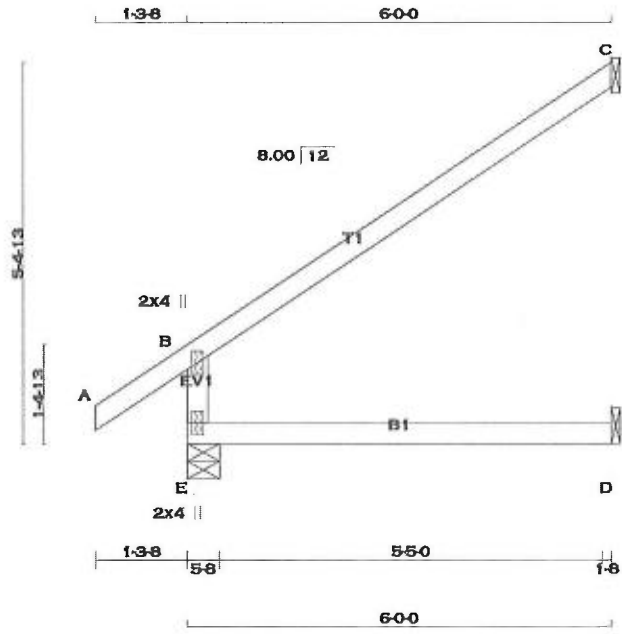
PLATE PLACEMENT TOL. = 0.250 inches

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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IN THE DESIGN OF THIS COMPONENT.**



SCALE = 1:31.2

TOTAL WEIGHT = 18 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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	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	44	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	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, 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.	CHORDS		FACTORED		WEBS		MAX. FACTORED	
	FORCE (LBS)	VERT. LOAD LC1 (PLF)	MAX	MIN	MAX	MIN	FORCE (LBS)	MAX
FR-TO								
E-B	-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 (m/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)
MT20	618	354	1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

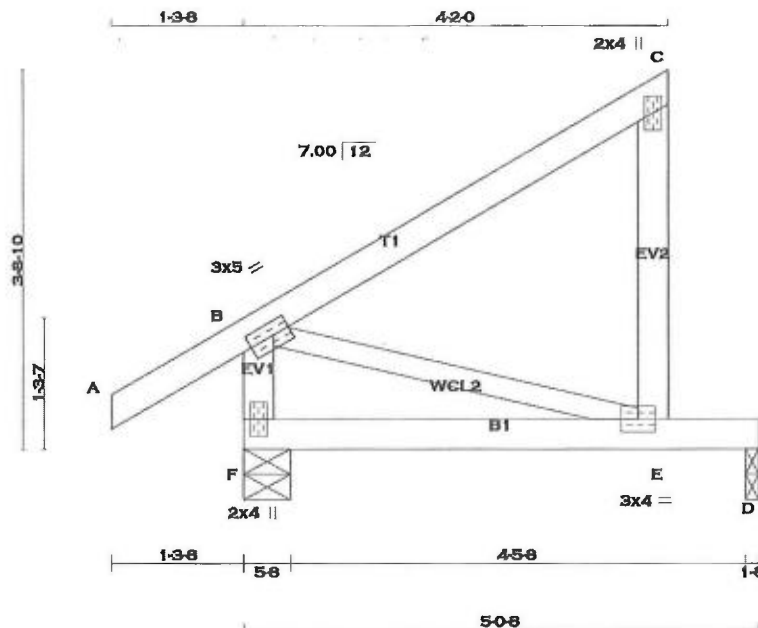
JSI GRIP= 0.25 (B) (INPUT = 0.90)
 JSI METAL= 0.10 (B) (INPUT = 1.00)



August 17, 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-t	MT20	3.0	5.0	1.50 2.00
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 MITK 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		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
F	339	0	339	0	0	5-8	1-8	
D	177	0	177	0	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE		MAX/MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM.LIVE			
F	236	177 / 0	0 / 0	0 / 0	0 / 0	58 / 0	0 / 0
D	126	80 / 0	0 / 0	0 / 0	0 / 0	46 / 0	0 / 0

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

MEMB.	CHORDS		FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MAX. UNBRACED LENGTH	MEMB.	WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)					MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO				FR-TO		
A-B	0 / 27	-77.4 -77.4	0.10 (1)	10.00	B-E	0 / 0	0.00 (1)	
B-C	0 / 0	-77.4 -77.4	0.23 (1)	10.00				
E-C	-161 / 0	0.0 0.0	0.03 (1)	7.81				
F-B	-267 / 0	0.0 0.0	0.03 (1)	7.81				
F-E	0 / 0	-17.5 -17.5	0.20 (1)	10.00				
E-D	0 / 0	-17.5 -17.5	0.20 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.23/1.00 (B-C:1), BC=0.20/1.00 (E-F:1), WB=0.00/1.00 (B-E:1), SSI=0.14/1.00 (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)	(PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

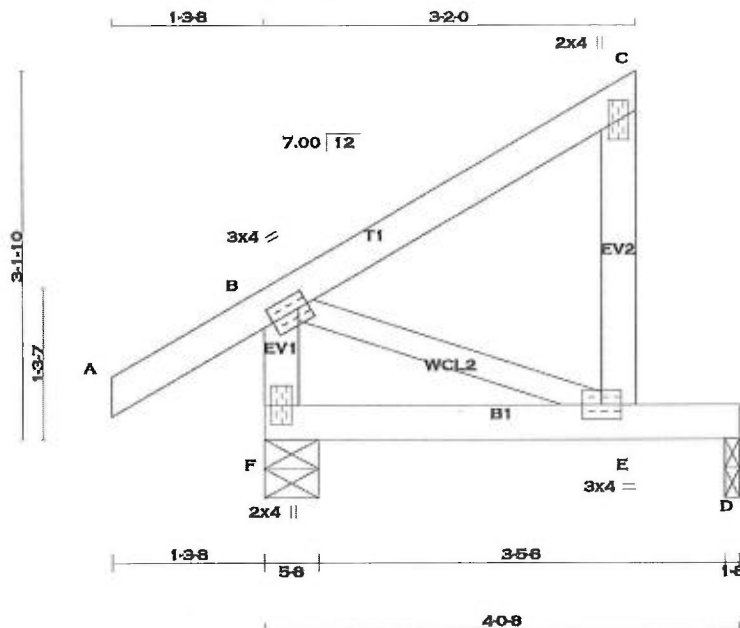
JSI GRIP= 0.23 (B) (INPUT = 0.90)
JSI METAL= 0.05 (F) (INPUT = 1.00)



August 17, 2018



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SCALE = 1:18.7

TOTAL WEIGHT = 4 X 17 = 67 lb [M]

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
C	TMV+p	MT20	2.0	4.0	
E	BMVW-t	MT20	3.0	4.0	
F	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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	GROSS REACTION	GROSS REACTION	DOWN	HORZ	UPLIFT	BRG	BRG	IN-SX
F	290	0	290	0	0	5-8	1-8		
D	131	0	131	0	0	1-8	1-8		

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
F	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
F	201	153 / 0	0 / 0	0 / 0	0 / 0	48 / 0
D	94	58 / 0	0 / 0	0 / 0	0 / 0	36 / 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		WEBS		FACTORED	
MEMB.	MAX. FORCE (LBS)	VERT. LOAD	LC1 MAX	MAX. MEMB.	MAX. FORCE (LBS)	MAX. CSI (LC)	MAX. CSI (LC)
FR-TO		FROM	TO	UNBRAC	LENGTH	FR-TO	
A-B	0 / 27	-77.4	-77.4	0.10 (1)	10.00	B-E	0 / 0
B-C	0 / 0	-77.4	-77.4	0.13 (1)	10.00		
E-C	-122 / 0	0.0	0.0	0.02 (1)	7.81		
F-B	-228 / 0	0.0	0.0	0.02 (1)	7.81		
F-E	0 / 0	-17.5	-17.5	0.15 (1)	10.00		
E-D	0 / 0	-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) = $L/360$ (0.19")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.01")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.19")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.03")

CSI: TC=0.13/1.00 (B-C:1), BC=0.15/1.00 (E-F:1), WB=0.00/1.00 (B-E:1), SSI=0.10/1.00 (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.

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.

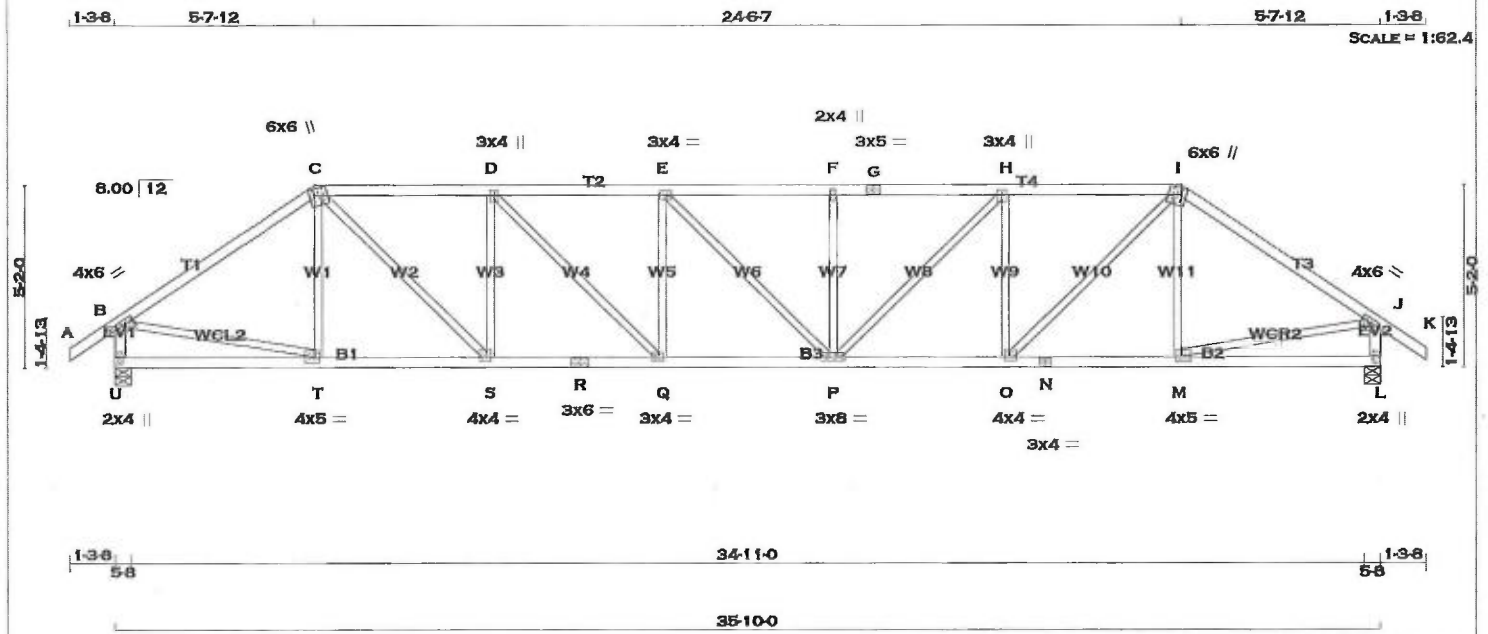
JSI GRIP= 0.20 (B) (INPUT = 0.90)
 JSI METAL= 0.04 (B) (INPUT = 1.00)



August 17, 2018



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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - G	2x4	DRY	No.2	SPF	
G - I	2x4	DRY	No.2	SPF	
I - K	2x4	DRY	No.2	SPF	
U - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
U - R	2x4	DRY	No.2	SPF	
R - N	2x4	DRY	No.2	SPF	
N - 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	5.0		
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	BS-t	MT20	3.0	4.0		
O	BMVW-t	MT20	4.0	4.0	1.50	1.50
P	BMVW-t	MT20	3.0	8.0		
Q	BMVW-t	MT20	3.0	4.0	1.50	1.75
R	BS-t	MT20	3.0	6.0		
S	BMVW-t	MT20	4.0	4.0	1.50	1.50
T	BMVW-t	MT20	4.0	5.0	1.75	1.75
U	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

UNFACTORED REACTIONS

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

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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)	VERT. LOAD LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED (PLF)	VERT. LOAD LC1 MAX (LC)
FR-TO				FR-TO			
A-B	0 / 29	-77.4	-77.4 0.10 (1)	10.00	T-C	-207 / 26	0.08 (1)
B-C	-2021 / 0	-77.4	-77.4 0.60 (1)	4.15	C-S	0 / 1358	0.31 (1)
C-D	-2646 / 0	-77.4	-77.4 0.40 (1)	3.91	S-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)	3.91	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	O-H	-871 / 0	0.34 (1)
J-K	0 / 29	-77.4	-77.4 0.10 (1)	10.00	O-I	0 / 1359	0.31 (1)
U-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-T	0 / 1709	0.38 (1)
					M-J	0 / 1709	0.38 (1)
U-T	0 / 0	-17.5	-17.5 0.13 (4)	10.00			
T-S	0 / 1675	-17.5	-17.5 0.34 (1)	10.00			
S-R	0 / 2647	-17.5	-17.5 0.47 (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 / 1675	-17.5	-17.5 0.34 (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-T: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.

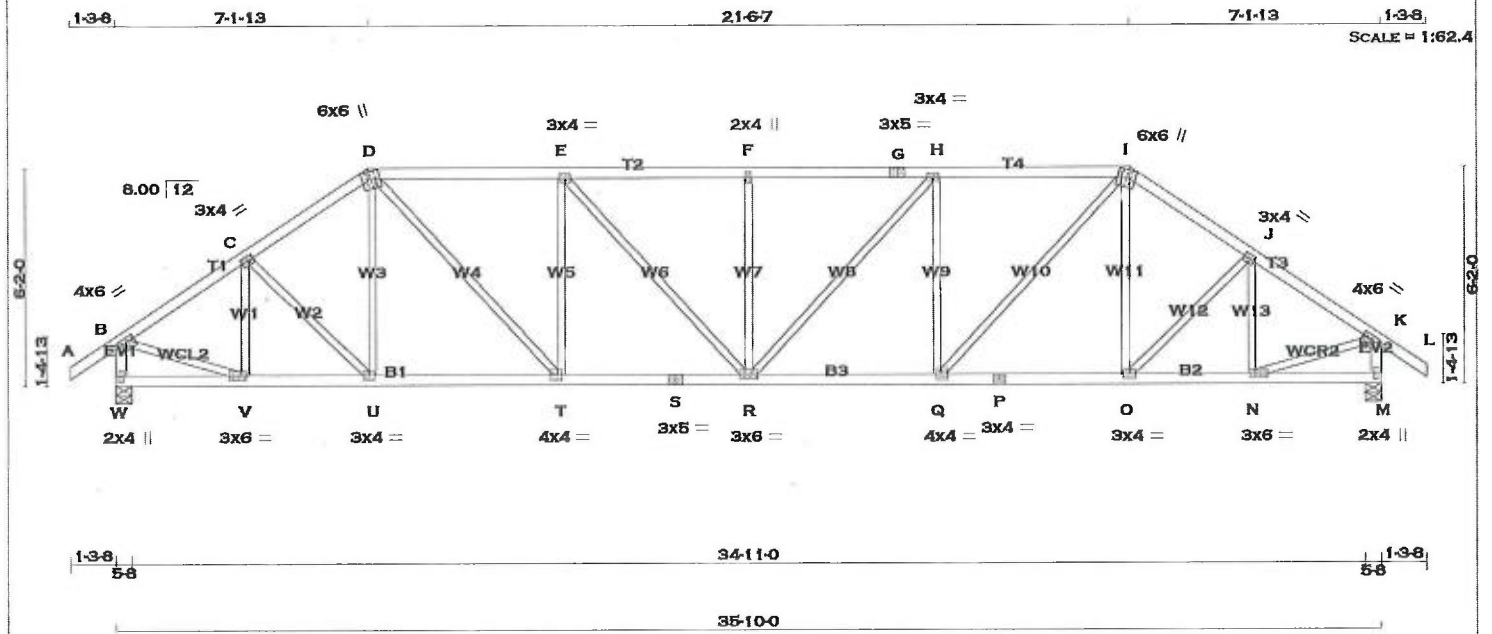
JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.72 (R) (INPUT = 1.00)



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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 - I	2x4	DRY No.2	SPF
I - L	2x4	DRY No.2	SPF
W - B	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
W - S	2x4	DRY No.2	SPF
S - P	2x4	DRY No.2	SPF
P - M	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	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTVW+m	MT20	6.0	6.0	2.25	2.25
E	TMVW-t	MT20	3.0	4.0		
F	TMVW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	5.0		
H	TMVW-t	MT20	3.0	4.0		
I	TTVW+m	MT20	6.0	6.0	2.25	2.25
J	TMVW-t	MT20	3.0	4.0	1.50	1.50
K	TMVW-t	MT20	4.0	6.0	1.50	3.00
N	BMV1+p	MT20	2.0	4.0	2.25	1.00
M	BMVW-t	MT20	3.0	6.0	1.50	1.75
O	BMVW-t	MT20	3.0	4.0		
P	BS-t	MT20	3.0	4.0		
Q	BMVW-t	MT20	4.0	4.0	2.00	1.50
R	BMVW-t	MT20	3.0	6.0		
S	BS-t	MT20	3.0	5.0		
T	BMVW-t	MT20	4.0	4.0	2.00	1.50
U	BMVW-t	MT20	3.0	4.0		
V	BMVW-t	MT20	3.0	6.0	1.50	1.75
W	BMV1+p	MT20	2.0	4.0	2.25	1.00

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	REQRD BRG
JT	VERT	HORZ	DOWN	UPLIFT
W	1806	0	1806	0
M	1806	0	1806	0

UNFACTORED REACTIONS

	1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
W	1265	898 / 0	0 / 0
M	1265	898 / 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 = 3.84 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 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 29	-77.4	-77.4 0.10 (1)	V-C	-421 / 0	10.00	0.10 (1)
B-C	-1929 / 0	-77.4	-77.4 0.20 (1)	C-U	0 / 167	10.00	0.01 (1)
C-D	-2023 / 0	-77.4	-77.4 0.20 (1)	U-D	0 / 71	10.00	0.02 (4)
D-E	-2407 / 0	-77.4	-77.4 0.46 (1)	D-T	0 / 1089	10.00	0.25 (1)
E-F	-2621 / 0	-77.4	-77.4 0.48 (1)	T-E	-704 / 0	10.00	0.42 (1)
F-G	-2621 / 0	-77.4	-77.4 0.48 (1)	E-R	0 / 317	10.00	0.07 (1)
G-H	-2621 / 0	-77.4	-77.4 0.48 (1)	R-F	-380 / 0	10.00	0.23 (1)
H-I	-2407 / 0	-77.4	-77.4 0.46 (1)	I-H	0 / 317	10.00	0.07 (1)
I-J	-2023 / 0	-77.4	-77.4 0.20 (1)	Q-H	-704 / 0	10.00	0.42 (1)
J-K	-1929 / 0	-77.4	-77.4 0.20 (1)	Q-I	0 / 1089	10.00	0.25 (1)
K-L	0 / 29	-77.4	-77.4 0.10 (1)	O-I	0 / 71	10.00	0.02 (4)
W-B	-1774 / 0	0.0	0.0 0.18 (1)	O-J	0 / 67	10.00	0.01 (1)
M-K	-1774 / 0	0.0	0.0 0.18 (1)	N-J	-421 / 0	10.00	0.10 (1)
				B-V	0 / 1687	10.00	0.38 (1)
W-V	0 / 0	-17.5	-17.5 0.05 (4)	N-K	0 / 1687	10.00	0.38 (1)
V-U	0 / 1618	-17.5	-17.5 0.31 (1)				
U-T	0 / 1666	-17.5	-17.5 0.32 (1)				
T-S	0 / 2407	-17.5	-17.5 0.44 (1)				
S-R	0 / 2407	-17.5	-17.5 0.44 (1)				
R-Q	0 / 2407	-17.5	-17.5 0.44 (1)				
Q-P	0 / 1666	-17.5	-17.5 0.32 (1)				
P-O	0 / 1666	-17.5	-17.5 0.32 (1)				
O-N	0 / 1618	-17.5	-17.5 0.31 (1)				
N-M	0 / 0	-17.5	-17.5 0.05 (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 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.19")
CALCULATED VERT. DEFL.(TL)= L/999 (0.26")

CSI: TC=0.48/1.00 (E-F:1), BC=0.44/1.00 (R-T:1), WB=0.42/1.00 (E-T:1), SSI=0.20/1.00 (D-E: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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

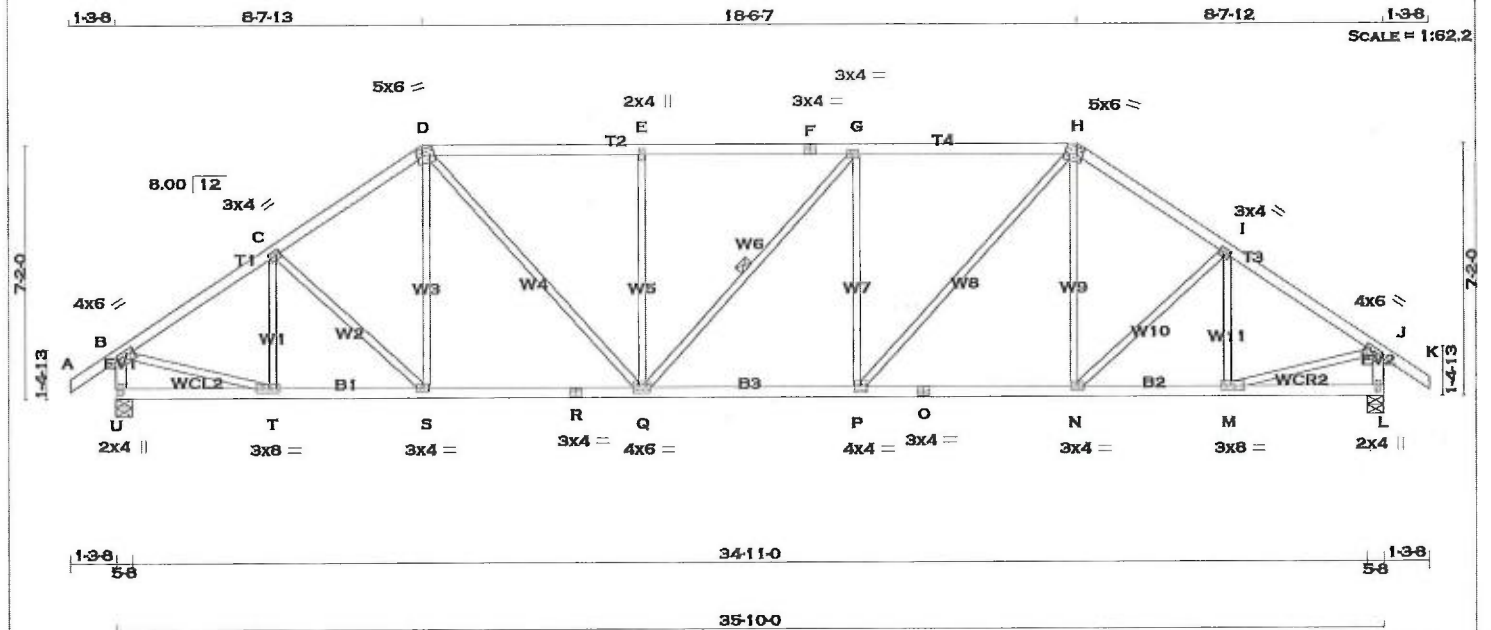
JSI GRIP= 0.90 (S) (INPUT = 0.90)
JSI METAL= 0.66 (S) (INPUT = 1.00)



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TOTAL WEIGHT = 2 X 157 = 314 lb [M]

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 - H	2x4	DRY	No.2	SPF	
H - K	2x4	DRY	No.2	SPF	
U - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
U - R	2x4	DRY	No.2	SPF	
R - 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 TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW-m	MT20	5.0	6.0	2.00	2.00
E TMVW-w	MT20	2.0	4.0		
F TS-t	MT20	3.0	4.0		
G TMVW-t	MT20	3.0	4.0		
H TTWW-m	MT20	5.0	6.0	2.00	2.00
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	3.0	8.0	1.50	3.50
N BMVW-t	MT20	3.0	4.0		
O BS-t	MT20	3.0	4.0		
P BMVW-t	MT20	4.0	4.0		
Q BMVW-t	MT20	4.0	6.0	2.00	2.00
R BS-t	MT20	3.0	4.0		
S BMVW-t	MT20	3.0	4.0		
T BMVW-t	MT20	3.0	8.0	1.50	3.50
U BMV1+p	MT20	2.0	4.0	2.25	1.00

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	REQRD BRG
JT VERT	DOWN	HORZ	UPLIFT	IN-SX
U	1806	0	1806	0
L	1806	0	1806	0

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.04 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 G-Q. 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	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRAC LENGTH	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 29	-77.4	-77.4	0.10 (1)	10.00	T-C	-338 / 0
B-C	-1998 / 0	-77.4	-77.4	0.31 (1)	4.49	C-S	-67 / 0
C-D	-1985 / 0	-77.4	-77.4	0.30 (1)	4.50	S-D	0 / 145
D-E	-2198 / 0	-77.4	-77.4	0.55 (1)	4.05	D-Q	0 / 842
E-F	-2198 / 0	-77.4	-77.4	0.55 (1)	4.05	Q-E	-516 / 0
F-G	-2198 / 0	-77.4	-77.4	0.55 (1)	4.05	Q-G	-2 / 0
G-H	-2199 / 0	-77.4	-77.4	0.56 (1)	4.04	P-G	-517 / 0
H-I	-1985 / 0	-77.4	-77.4	0.30 (1)	4.50	P-H	0 / 844
I-J	-1998 / 0	-77.4	-77.4	0.31 (1)	4.49	N-H	0 / 144
J-K	0 / 29	-77.4	-77.4	0.10 (1)	10.00	N-I	-67 / 0
U-B	-1770 / 0	0.0	0.0	0.18 (1)	6.27	M-I	-338 / 0
L-J	-1770 / 0	0.0	0.0	0.18 (1)	6.27	B-T	0 / 1729
						M-J	0 / 1729
U-T	0 / 0	-17.5	-17.5	0.07 (4)	10.00		
T-S	0 / 1680	-17.5	-17.5	0.33 (1)	10.00		
S-R	0 / 1633	-17.5	-17.5	0.32 (1)	10.00		
R-Q	0 / 1633	-17.5	-17.5	0.32 (1)	10.00		
Q-P	0 / 2199	-17.5	-17.5	0.42 (1)	10.00		
P-O	0 / 1633	-17.5	-17.5	0.33 (1)	10.00		
O-N	0 / 1633	-17.5	-17.5	0.33 (1)	10.00		
N-M	0 / 1633	-17.5	-17.5	0.33 (1)	10.00		
M-L	0 / 1633	-17.5	-17.5	0.33 (1)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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, NBCS 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 (0.22")

CSI: TC=0.58/1.00 (G-H:1), BC=0.42/1.00 (P-Q:1), WB=0.46/1.00 (G-P:1), SSI=0.22/1.00 (G-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 (PSI)	SECTION (PLI)	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667	822
			2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

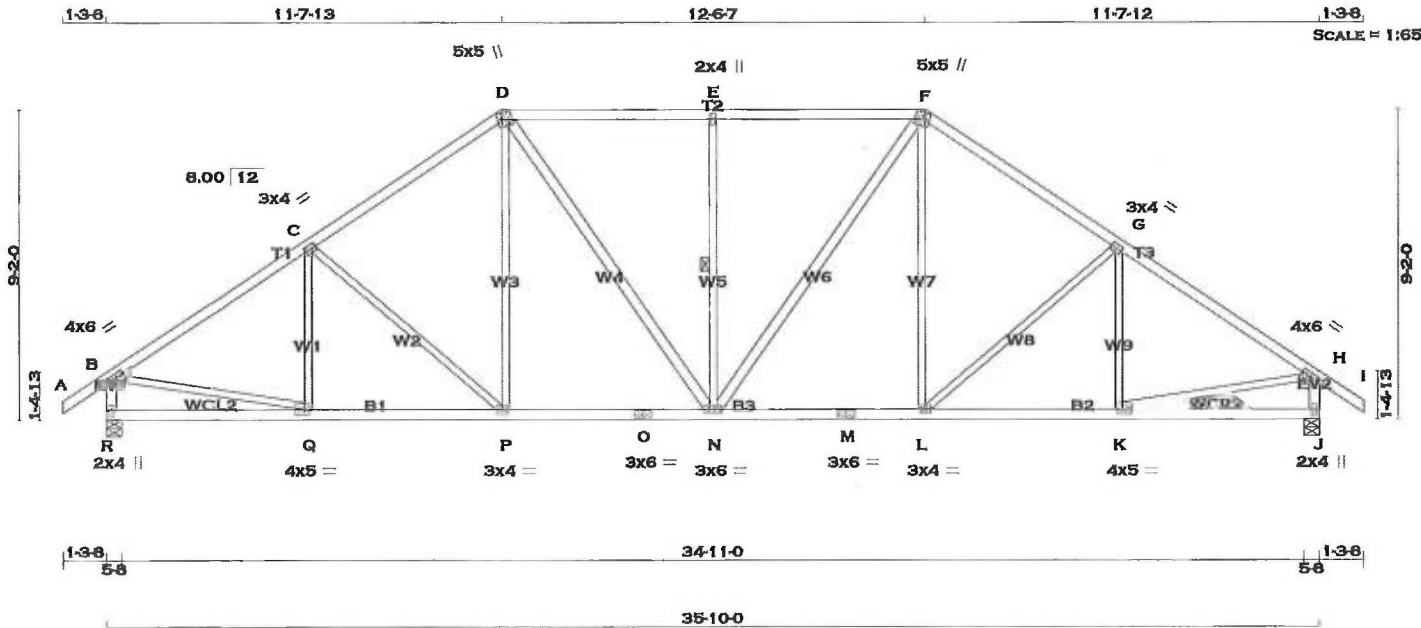
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.54 (J) (INPUT = 1.00)



August 17, 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 = 2 X 167 = 334 lb
(MIF)

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

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	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	5.0	5.0	2.25	1.50
E	TMW+w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	5.0	2.25	1.50
G	TMWW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	4.0	6.0	1.50	3.00
J	BMV1+p	MT20	2.0	4.0	2.25	1.00
K	BMWW-t	MT20	4.0	5.0	1.75	1.75
L	BMWW-t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMWWW-t	MT20	3.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMWW-t	MT20	3.0	4.0		
Q	BMWW-t	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 MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS				FACTORED				INPUT				REQ'D			
GROSS REACTION				GROSS REACTION				BRG				BRG			
JT	VERT	HORZ	DOWN	JT	VERT	HORZ	DOWN	JT	VERT	HORZ	UP	JT	VERT	HORZ	UP
R	1806	0	1806	0	0	0	0	5-8	3-1	3-1	3-1	5-8	3-1	3-1	3-1
J	1806	0	1806	0	0	0	0	5-8	3-1	3-1	3-1	5-8	3-1	3-1	3-1

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0
J	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) 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

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 29	-77.4	-77.4 0.10 (1)	Q-C	-207 / 35	0.09 (1)	
B-C	-2065 / 0	-77.4	-77.4 0.44 (1)	C-P	-306 / 0	0.37 (1)	
C-D	-1848 / 0	-77.4	-77.4 0.40 (1)	P-D	0 / 305	0.07 (1)	
D-E	-1763 / 0	-77.4	-77.4 0.44 (1)	D-N	0 / 431	0.07 (1)	
E-F	-1763 / 0	-77.4	-77.4 0.44 (1)	N-E	-594 / 0	0.33 (1)	
F-G	-1848 / 0	-77.4	-77.4 0.40 (1)	N-F	0 / 431	0.07 (1)	
G-H	-2065 / 0	-77.4	-77.4 0.44 (1)	L-F	0 / 305	0.07 (1)	
H-I	0 / 29	-77.4	-77.4 0.10 (1)	L-G	-306 / 0	0.37 (1)	
R-B	-1762 / 0	0.0	0.0 0.18 (1)	K-G	-207 / 35	0.09 (1)	
J-H	-1762 / 0	0.0	0.0 0.18 (1)	B-Q	0 / 1771	0.40 (1)	
R-Q	0 / 0	-17.5	-17.5 0.14 (4)	K-H	0 / 1771	0.40 (1)	
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 (PSI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

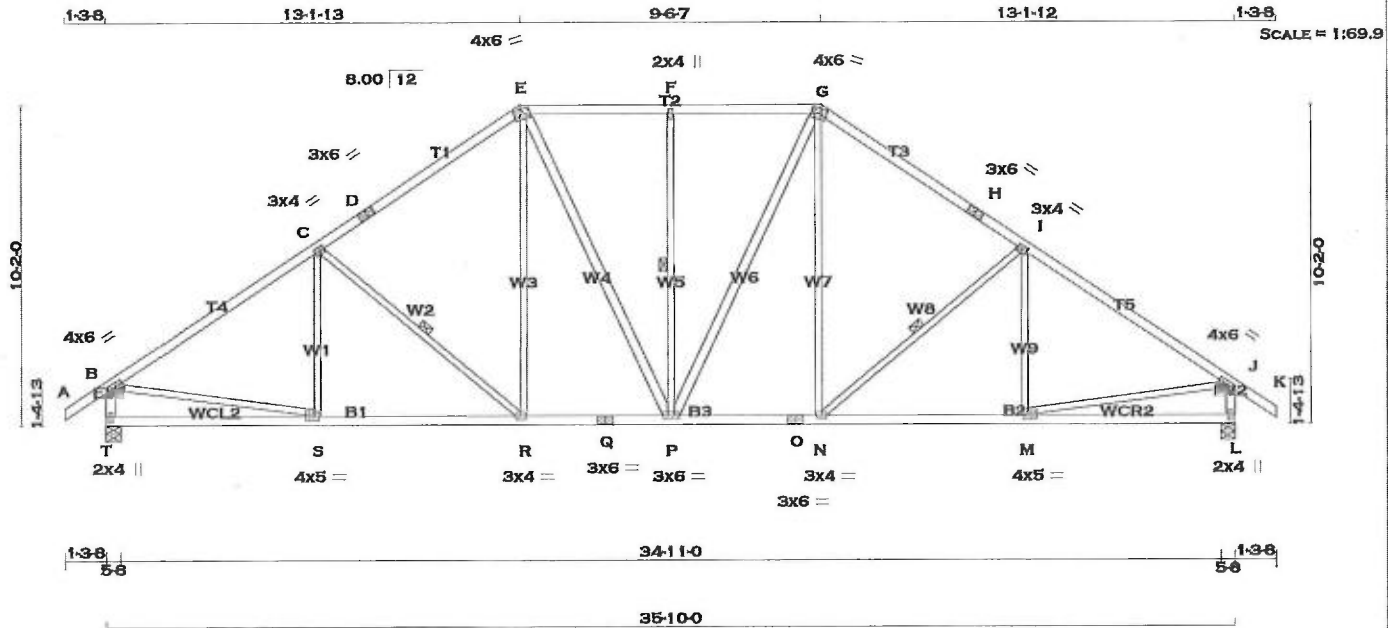
JSI GRIP=0.89 (D) (INPUT = 0.90)
JSI METAL=0.56 (B) (INPUT = 1.00)



August 17, 2018



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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/s 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	4.0	6.0	1.75 2.25
F	TMW-w	MT20	2.0	4.0	
G	TTWW-m	MT20	4.0	6.0	1.75 2.25
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	BMVW-t	MT20	3.0	4.0	
O	BS-t	MT20	3.0	6.0	
P	BMVW-t	MT20	3.0	6.0	
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

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

UNFACTORED REACTIONS		1ST LCASE		MAX/MIN. COMPONENT REACTIONS	
JT	VERT	SNOW	LIVE	PERM.LIVE	WIND
T	1265	898 / 0	0 / 0	0 / 0	0 / 0
L	1265	898 / 0	0 / 0	0 / 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			
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	FORCE (LBS)	MAX 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, NBC 2010

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

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

ALLOWABLE DEFL.(LL) = L/360 (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	SECTION
(PSI)	(PLI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667 822 2284 1656

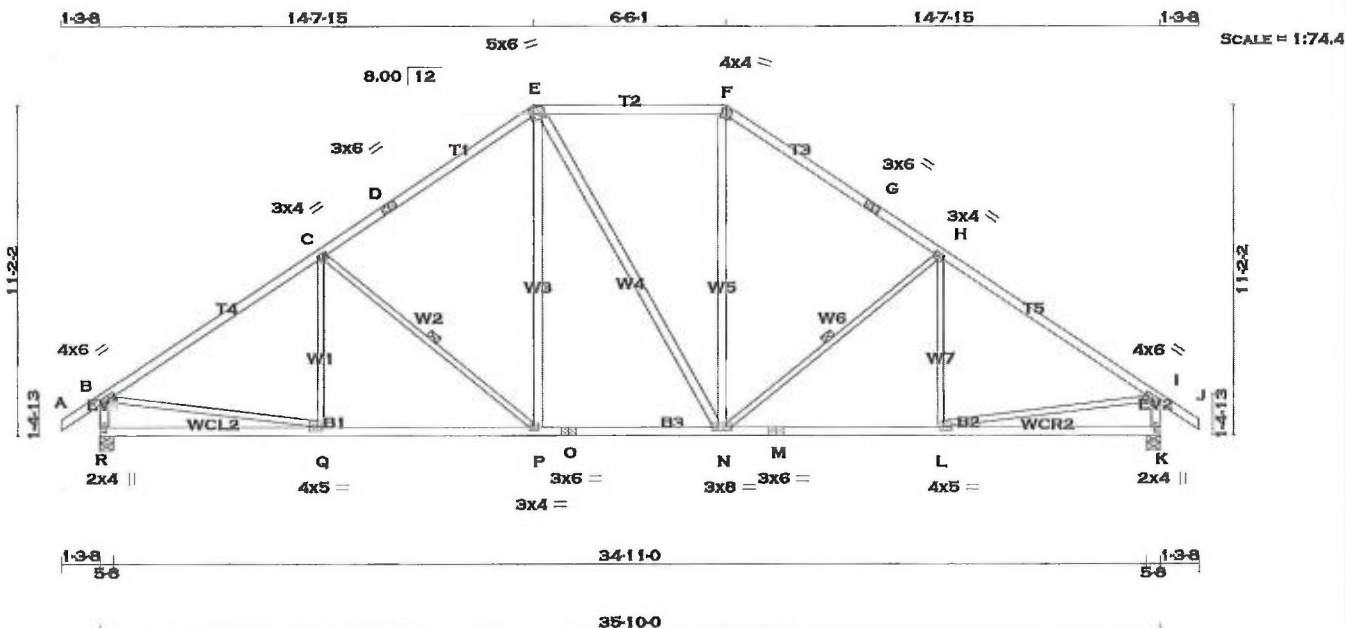
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.57 (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 - F	2x4	DRY	No.2	SPF	
F - G	2x4	DRY	No.2	SPF	
G - H	2x4	DRY	No.2	SPF	
H - I	2x4	DRY	No.2	SPF	
I - J	2x4	DRY	No.2	SPF	
J - K	2x4	DRY	No.2	SPF	
K - L	2x4	DRY	No.2	SPF	
L - M	2x4	DRY	No.2	SPF	
M - N	2x4	DRY	No.2	SPF	
N - O	2x4	DRY	No.2	SPF	
O - P	2x4	DRY	No.2	SPF	
P - Q	2x4	DRY	No.2	SPF	
Q - R	2x4	DRY	No.2	SPF	
R - S	2x4	DRY	No.2	SPF	
S - T	2x4	DRY	No.2	SPF	
T - U	2x4	DRY	No.2	SPF	
U - V	2x4	DRY	No.2	SPF	
V - W	2x4	DRY	No.2	SPF	
W - X	2x4	DRY	No.2	SPF	
X - Y	2x4	DRY	No.2	SPF	
Y - Z	2x4	DRY	No.2	SPF	
Z - A	2x4	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	TTW-m	MT20	4.0	4.0		
G	TS-t	MT20	3.0	6.0		
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	BS-t	MT20	3.0	6.0		
N	BMVWV-t	MT20	3.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	3.0	4.0		
Q	BMVW-t	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 M120 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
R	1806	1806	5-8	3-1
K	1806	1806	5-8	3-1

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1265	898 / 0	0 / 0	0 / 0	0 / 0	367 / 0	0 / 0
K	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) R, K

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.92 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-P, H-N. DBS = 20-0-0 . CBF = 65 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)

MEMB.	CHORDS	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (L)	MEMB.	WEBS	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	Q-C	-110 / 91	0.07 (1)
B-C	-2075 / 0	-77.4	-77.4	0.75 (1)	3.92	C-P	-522 / 0	0.33 (1)
C-D	-1669 / 0	-77.4	-77.4	0.66 (1)	4.36	P-E	0 / 445	0.07 (1)
D-E	-1669 / 0	-77.4	-77.4	0.66 (1)	4.36	E-N	0 / 0	0.00 (1)
E-F	-1361 / 0	-77.4	-77.4	0.45 (1)	5.01	N-F	0 / 445	0.07 (1)
F-G	-1669 / 0	-77.4	-77.4	0.66 (1)	4.36	N-H	-521 / 0	0.33 (1)
G-H	-1669 / 0	-77.4	-77.4	0.66 (1)	4.36	L-H	-110 / 91	0.07 (1)
H-I	-2075 / 0	-77.4	-77.4	0.75 (1)	3.92	B-Q	0 / 1777	0.40 (1)
I-J	0 / 29	-77.4	-77.4	0.10 (1)	10.00	L-I	0 / 1777	0.40 (1)
R-B	-1753 / 0	0.0	0.0	0.18 (1)	6.30			
K-I	-1753 / 0	0.0	0.0	0.18 (1)	6.30			
R-Q	0 / 0	-17.5	-17.5	0.24 (4)	10.00			
Q-P	0 / 1758	-17.5	-17.5	0.41 (1)	10.00			
P-O	0 / 1361	-17.5	-17.5	0.30 (1)	10.00			
O-N	0 / 1361	-17.5	-17.5	0.30 (1)	10.00			
N-M	0 / 1758	-17.5	-17.5	0.40 (1)	10.00			
M-L	0 / 1758	-17.5	-17.5	0.40 (1)	10.00			
L-K	0 / 0	-17.5	-17.5	0.24 (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 088-09
- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (1.19")
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=0.75/1.00 (B-C:1), BC=0.41/1.00 (P-Q:1), WB=0.40/1.00 (B-Q:1), SSI=0.23/1.00 (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.

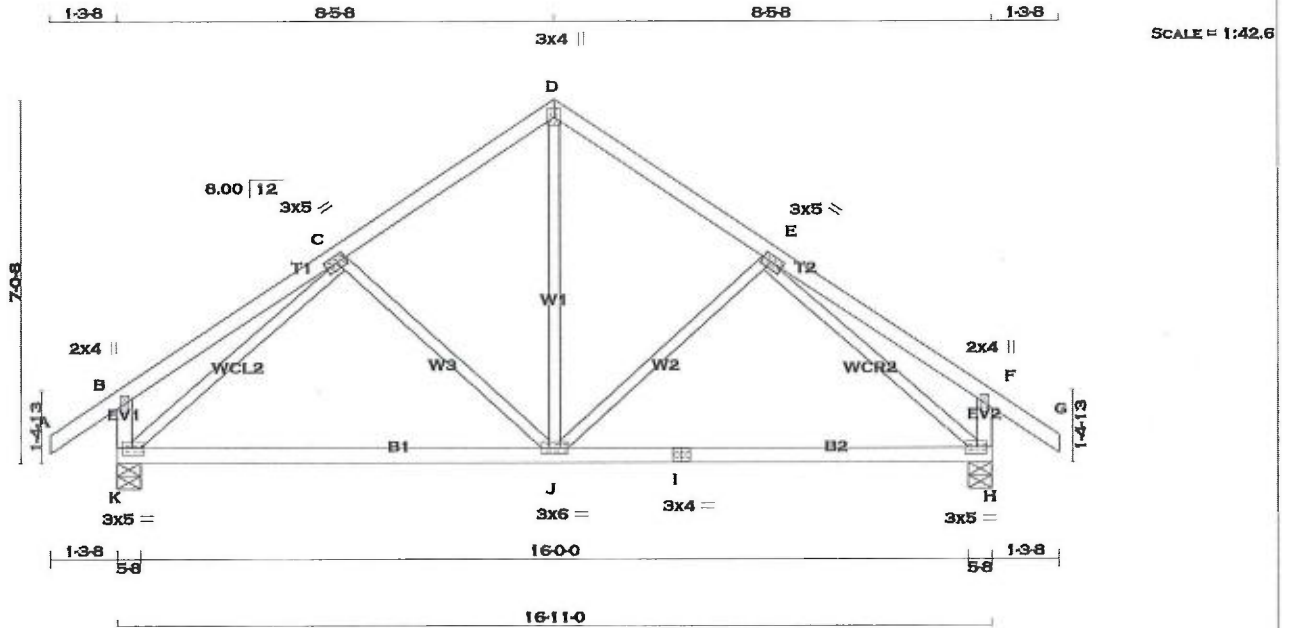
JSI GRIP= 0.89 (P) (INPUT = 0.90)
JSI METAL= 0.57 (B) (INPUT = 1.00)



August 17, 2018



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TOTAL WEIGHT = 6 X 71 = 429 lb [M] [F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - G	2x4	DRY	No.2	SPF	
K - B	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
I - H	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	TMV+p	MT20	2.0	4.0			
C	TMVW-1	MT20	3.0	5.0	1.50	2.25	
D	TTW+p	MT20	3.0	4.0	2.25	1.50	
E	TMVW-1	MT20	3.0	5.0	1.50	2.25	
F	TMV+p	MT20	2.0	4.0			
H	BMVW-1	MT20	3.0	5.0	1.50	2.25	
I	BS-1	MT20	3.0	4.0			
J	BMVW-1	MT20	3.0	6.0			
K	BMVW-1	MT20	3.0	5.0	1.50	2.25	

A SIZE FOR SIZE SUBSTITUTION OF MITEK M1120 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 IN-SX	REQRD BRG IN-SX
	VERT	HORZ	DOWN	HORZ		
JT	909	0	909	0	5-8	1-8
K	909	0	909	0	5-8	1-8
H	909	0	909	0	5-8	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	635	458 / 0	0 / 0	0 / 0	0 / 0	177 / 0
K	635	458 / 0	0 / 0	0 / 0	0 / 0	177 / 0
H	635	458 / 0	0 / 0	0 / 0	0 / 0	177 / 0

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

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			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)
FR-TO						
A-B	0 / 29	-77.4	-77.4 0.10 (1)	10.00	J-D	0 / 451
B-C	0 / 21	-77.4	-77.4 0.22 (1)	10.00	J-E	-198 / 1
C-D	-655 / 0	-77.4	-77.4 0.17 (1)	6.25	C-J	-198 / 1
D-E	-655 / 0	-77.4	-77.4 0.17 (1)	6.25	K-C	-915 / 0
E-F	0 / 21	-77.4	-77.4 0.22 (1)	10.00	E-H	-915 / 0
F-G	0 / 29	-77.4	-77.4 0.10 (1)	10.00		
K-B	-231 / 0	0.0	0.0 0.02 (1)	7.81		
H-F	-231 / 0	0.0	0.0 0.02 (1)	7.81		
K-J	0 / 673	-17.5	-17.5 0.41 (4)	10.00		
J-I	0 / 673	-17.5	-17.5 0.41 (4)	10.00		
I-H	0 / 673	-17.5	-17.5 0.41 (4)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (0.56")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.02")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.56")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.11")

CSI: TC=0.22/1.00 (E-F:1), BC=0.41/1.00 (J-K:4), WB=0.50/1.00 (E-H:1), SSI=0.13/1.00 (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)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90)
 JSI METAL= 0.26 (E) (INPUT = 1.00)



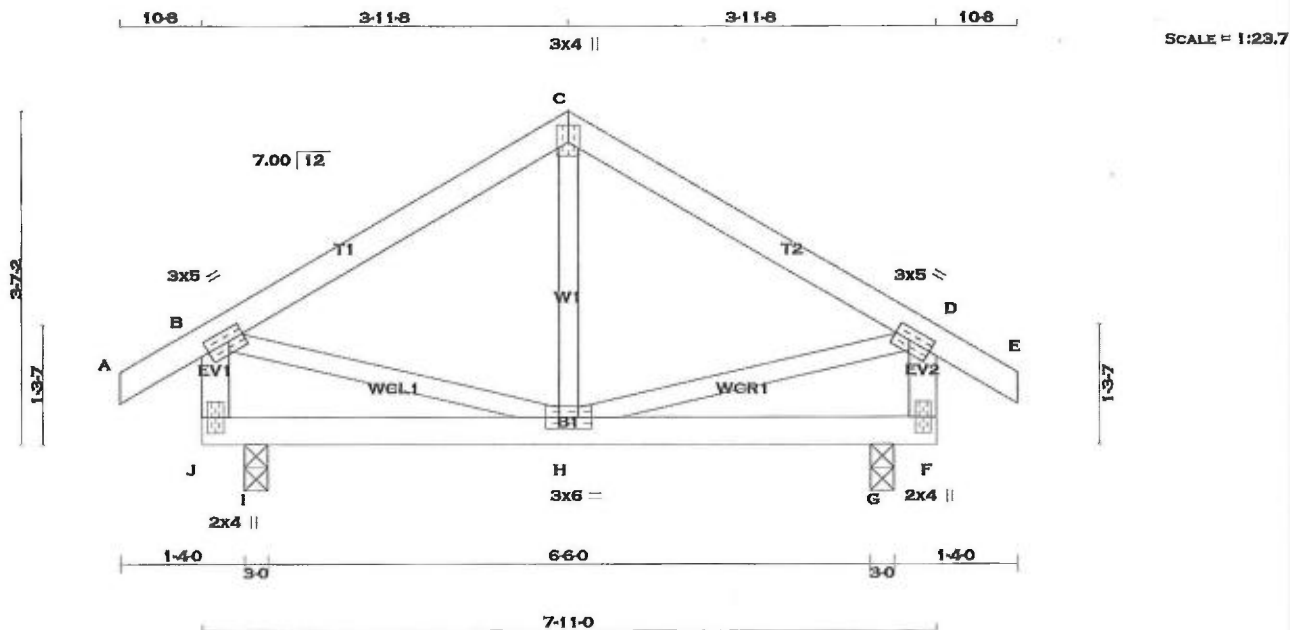
August 17, 2018



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Kott, Ottawa, Ontario, TW

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Fri Aug 17 10:08:48 2018 Page 1 ID: 9P4q3_4UbBoAhO_w5IHSEz1nrU-C7euNh1h4jiiGza7nbKKw9zOq62zUmXGv5zLohyn_id



TOTAL WEIGHT = 2 X 32 = 65 LB

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4 DRY	No.2	SPF		
C - E	2x4 DRY	No.2	SPF		
J - B	2x4 DRY	No.2	SPF		
F - D	2x4 DRY	No.2	SPF		
J - F	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-1	MT20	3.0	5.0	1.50	2.00
C TMVW-1	MT20	3.0	4.0	2.25	1.50
D TMVW-1	MT20	3.0	5.0	1.50	2.00
F BMVW-1	MT20	2.0	4.0		
H BMVW-1	MT20	3.0	6.0		
J BMVW-1	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	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	449	449	0	0
I	449	449	0	0
G	449	449	0	0

UNFACTORED REACTIONS

JT	1ST LCASE	MAX/MIN	COMPONENT REACTIONS	PERM. LIVE	WIND	DEAD	SOIL
I	313	229 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0
G	313	229 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MAX. UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO						FR-TO			
A-B	0 / 18	-77.4	-77.4	0.05 (1)	10.00	H-C	-155 / 24	0.03 (1)	
B-C	-145 / 0	-77.4	-77.4	0.15 (1)	6.25	B-H	0 / 272	0.06 (1)	
C-D	-145 / 0	-77.4	-77.4	0.15 (1)	6.25	H-D	0 / 272	0.06 (1)	
D-E	0 / 18	-77.4	-77.4	0.05 (1)	10.00				
J-B	-367 / 0	0.0	0.0	0.16 (1)	7.81				
F-D	-367 / 0	0.0	0.0	0.16 (1)	7.81				
J-I	-140 / 0	-17.5	-17.5	0.16 (1)	6.25				
I-H	-140 / 0	-17.5	-17.5	0.14 (1)	6.25				
H-G	-140 / 0	-17.5	-17.5	0.14 (1)	6.25				
G-F	-140 / 0	-17.5	-17.5	0.16 (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, NBC 2010

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.22")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.22")
CALCULATED VERT. DEFL.(TL)= L/999 (0.01")

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 (0.01")

CSI: TC=0.16/1.00 (D-F:1), BC=0.16/1.00 (F-G:1), WB=0.06/1.00 (B-H:1), SS=0.29/1.00 (I-J:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE	GRIP(DRY)	SHEAR (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= 0.49 (H) (INPUT = 0.90)
JSI METAL= 0.09 (J) (INPUT = 1.00)



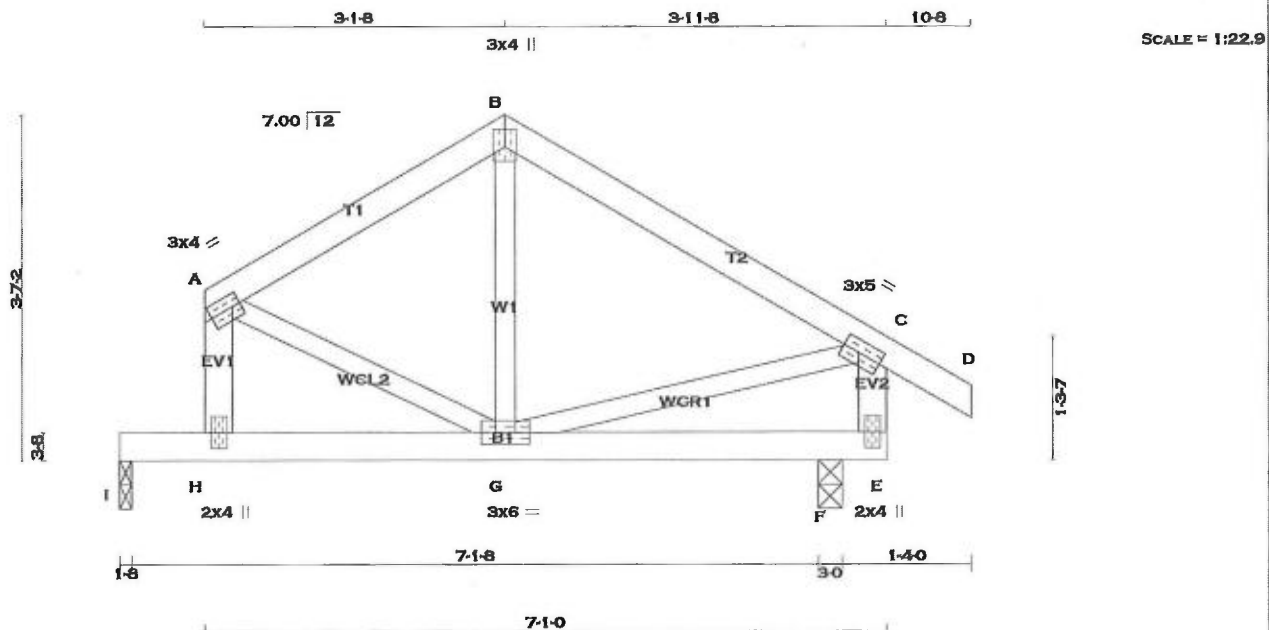
August 17, 2018



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Kott, Ottawa, Ontario, TW

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Fri Aug 17 10:08:49 2018 Page 1
ID:19P4q3_4UbBoAhO_w5IHSEz1nrU-gJCGb12Kr1qZi79KKirZTNWX_WKWDCPLP8iuk7yn_jC



TOTAL WEIGHT = 30 lb

LUMBER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	FACTORED	MAXIMUM FACTORED	INPUT
A - B	2x4	DRY	No.2	SPF	GROSS REACTION	BRG	REQD
B - D	2x4	DRY	No.2	SPF	VERT	DOWN	IN-SX
H - A	2x4	DRY	No.2	SPF	HORZ	HORZ	IN-SX
E - C	2x4	DRY	No.2	SPF	UP	UP	1-8
I - E	2x4	DRY	No.2	SPF	DOWN	DOWN	1-8
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF			

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	4.0	1.50	1.00
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	2.00
E	BMV+p	MT20	2.0	4.0		
G	BMVW-t	MT20	3.0	6.0		
H	BMV+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				UNFACTORED REACTIONS			
JT	VERT	HORZ	DOWN	1ST LCASE	SNOW	LIVE	PERM.LIVE
I	318	0	318	223	154 / 0	0 / 0	0 / 0
F	511	0	511	356	261 / 0	0 / 0	0 / 0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
I	223	154 / 0	0 / 0	0 / 0	0 / 0	70 / 0	0 / 0
F	356	261 / 0	0 / 0	0 / 0	0 / 0	95 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	-204 / 0	-77.4	-77.4 0.10 (1)	G-B	-57 / 44	0.02 (4)	
B-C	-212 / 0	-77.4	-77.4 0.17 (1)	A-G	0 / 6	0.00 (4)	
C-D	0 / 18	-77.4	-77.4 0.05 (1)	G-C	0 / 399	0.09 (1)	
H-A	-223 / 0	0.0	0.0 0.26 (1)				
E-C	-438 / 0	0.0	0.0 0.21 (1)				
I-H	0 / 0	-94.9	-94.9 0.33 (1)				
H-G	0 / 176	-17.5	-17.5 0.10 (1)				
G-F	-210 / 0	-17.5	-17.5 0.15 (1)				
F-E	-210 / 0	-17.5	-17.5 0.21 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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 (0.25")
CALCULATED VERT. DEFL.(LL)= L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.25")
CALCULATED VERT. DEFL.(TL)= L/999 (0.03")

CANTILEVER DEFLECTION:
ALLOWABLE DEFL.(LL)= L/120 (0.19")
CALCULATED VERT. DEFL.(LL)= L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/120 (0.19")
CALCULATED VERT. DEFL.(TL)= L/880 (0.01")

CSI: TC=0.26/1.00 (A-H:1), BC=0.33/1.00 (H-I:1), WB=0.09/1.00 (C-G:1), SSI=0.35/1.00 (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

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.72 (G) (INPUT = 0.90)
JSI METAL= 0.14 (E) (INPUT = 1.00)



August 17, 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.

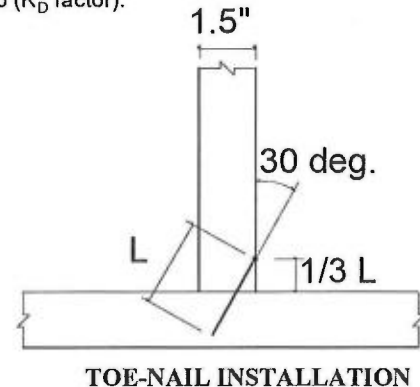
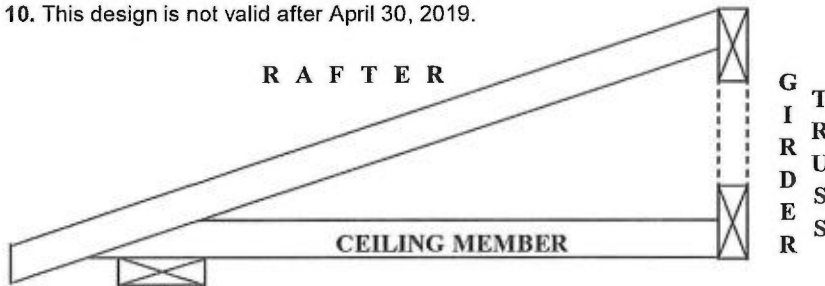
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to wind the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-09, section 10.9.4
10. This design is not valid after April 30, 2019.



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



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Certificate No. 10889485



April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

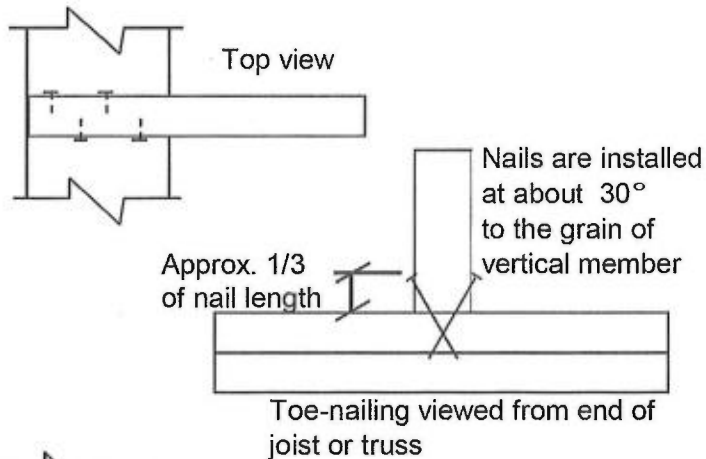
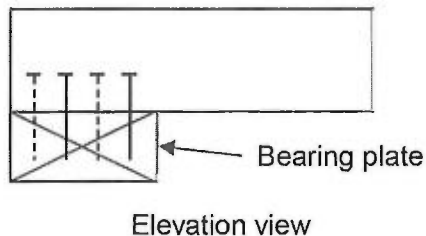
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

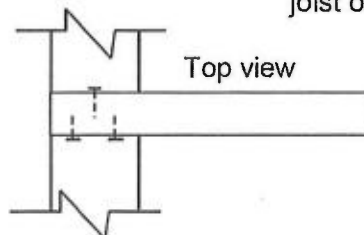
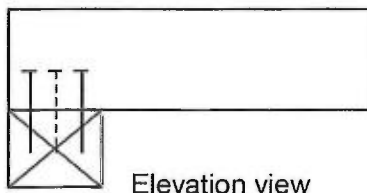
NOTES:

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