



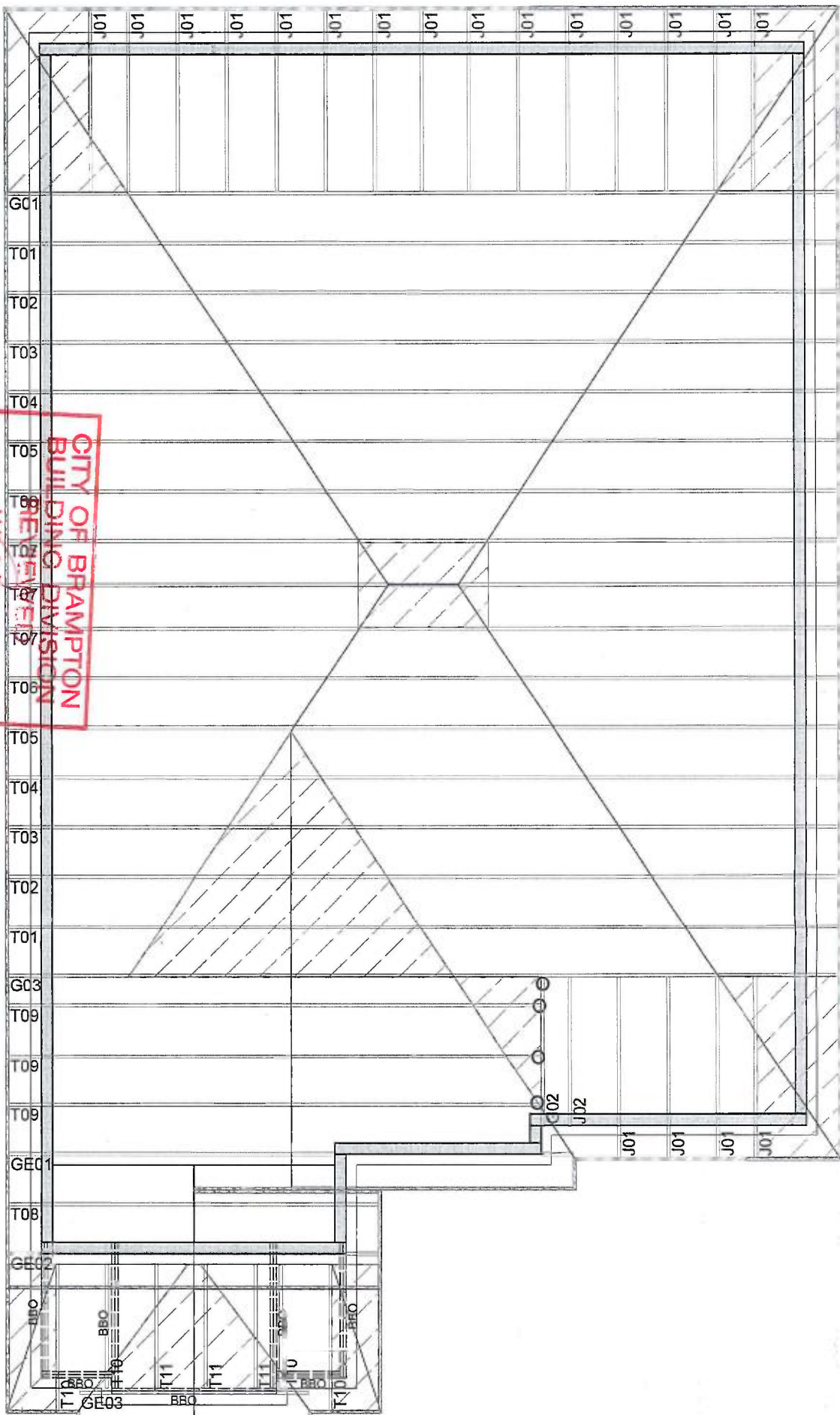
Layout based on plans provided by
JARDIN DESIGN GROUP INC
Dated April 26/18

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.

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



September 14, 2018



UNDERSIDE OF DROPPED PORCH
BEAMS TO BE 7' 6" ABOVE FINISHED
1ST FLOOR

ROOF TRUSS LAYOUT

LOT 34



CONVENTIONAL
FRAMING BY OTHERS

HANGER LEGEND

X - LUS24
- HGUS26

O - LJS26DS
% - HGUS26-2

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 31.3 psf
DL = 3.0 psf
BOT CH. LL = 0.0 psf
DL = 7.0 psf
TOTAL LOAD = 41.3 psf

SPACING @ 24" CENTERS.
THIS TRUSS SYSTEM IS DESIGN FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010

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

ALLOWABLE DEFLECTION OF EACH COMPONENT = L/360

Model:	MILLWOOD 2 EL 2
Customer:	GREENPARK
Project:	MINNISALE HOMES
Location:	BRAMPTON
Drawn By:	DM
Date:	6/22/2018

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

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C RAFTER THAT
CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O/C WITH 2X4 VERT POST TO THE
TRUSS BELOW EA CROSS PT. VERT POS. THAN 6' TO HAVE A LATERAL BRACING SO THAT
THE DISTANCE BETEN PT & VERT ROWS OF BRACING DOES NOT EXCEED 6'

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.

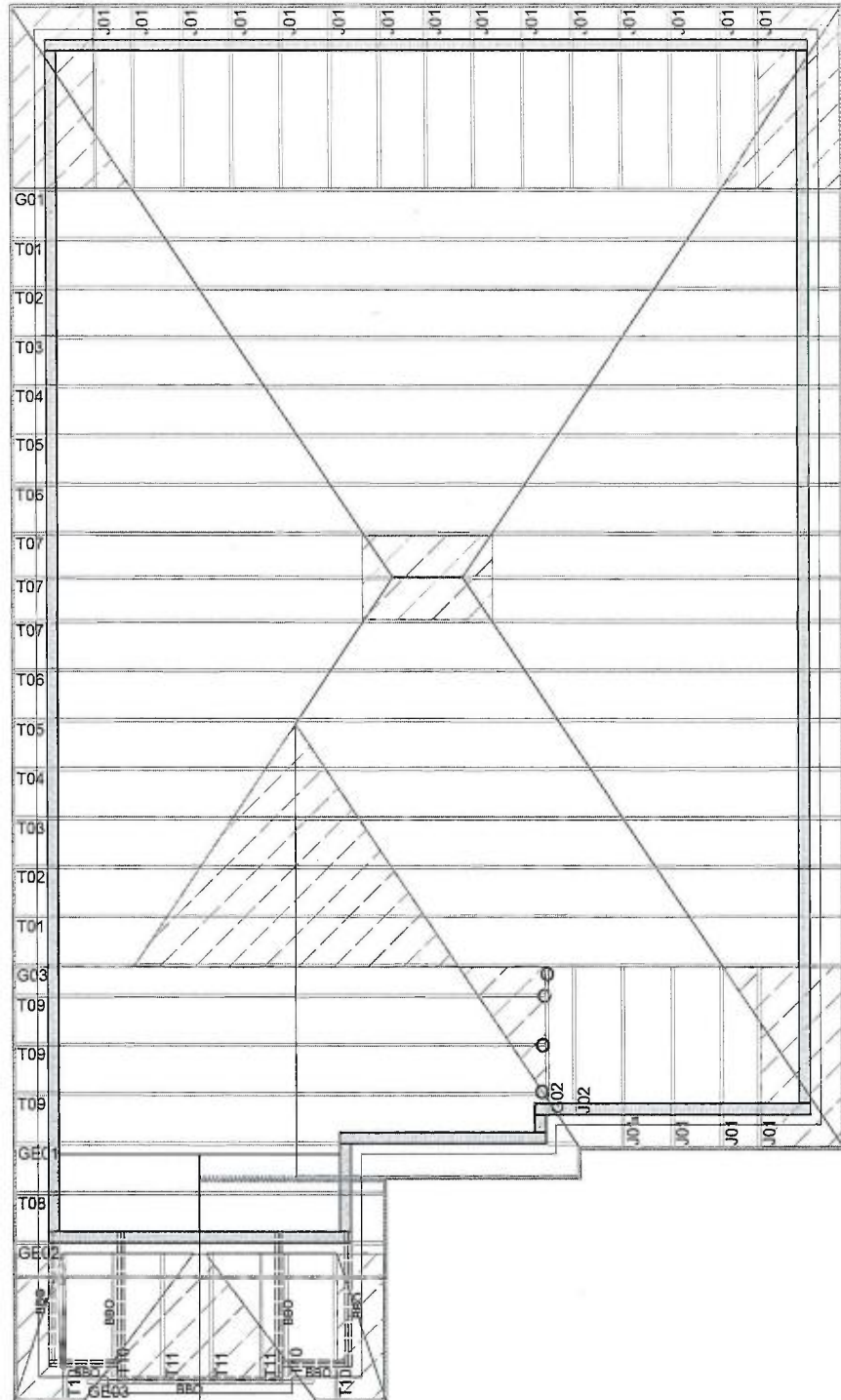


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JARDIN DESIGN GROUP INC
Dated April 26/18

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.



September 14, 2018



ROOF TRUSS LAYOUT



**CONVENTIONAL
FRAMING** BY OTHERS

HANGER LEGEND

X - LUS24
- HGUS26

O - LJS26DS
% - HGUS26-2

DESIGN CRITERIA SPECIFIED LOADS

TOP CH. LL = 31.3 psf
DL = 3.0 psf
BOT CH. LL = 0.0 psf
DL = 7.0 psf
TOTAL LOAD = 41.3 psf

SPACING @ 24" CENTERS.
THIS TRUSS SYSTEM IS DESIGN FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBCC 2010

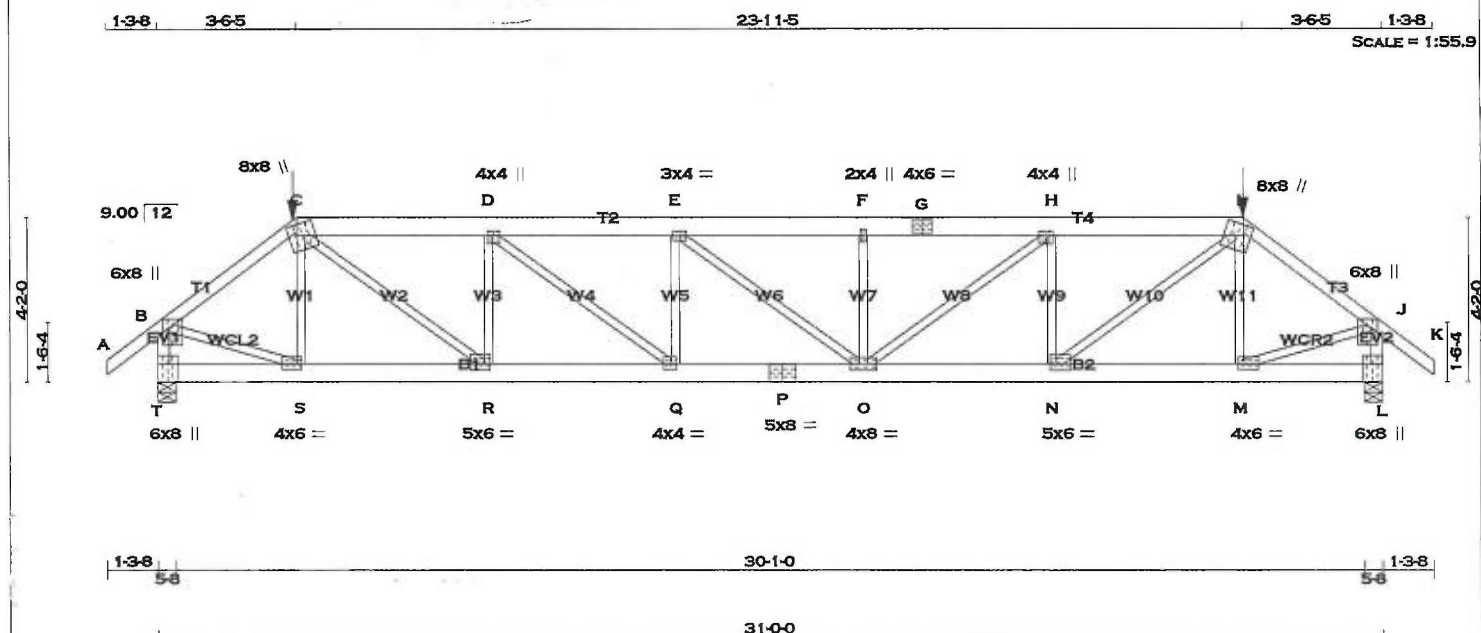
THIS DESIGN COMPLIES WITH PART 9 OF OBC 2012,
BCBC 2012, ABC 2012, CSA 088-09, TPIC 2011

ALLOWABLE DEFLECTION OF EACH COMPONENT = L/360

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

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE O.B.C RAFTER THAT
CROSS MEET OVER TRUSSES TO BE 2X4 SPF @ 24" O/C WITH 2X4 VERT POST TO THE
TRUSS BELOW EA CROSS PT. VERT POS. THAN 6" TO HAVE A LATERAL BRACING SO THAT
THE DISTANCE BETEN PT & VERT ROWS OF BRACING DOES NOT EXCEED 6'

Model:	MILLWOOD 2 EL 2
Customer:	GREENPARK
Project:	MINNISALE HOMES
Location:	BRAMPTON
Drawn By:	DM
Date:	6/22/2018



TOTAL WEIGHT = 159 lb

<u>LUMBER</u>					
N. L. G. A. RULES					
CHORDS		SIZE	LUMBER		DESCR.
A -	C	2x4	DRY	No.2	SPF
C -	G	2x6	DRY	No.2	SPF
G -	I	2x6	DRY	No.2	SPF
I -	K	2x4	DRY	No.2	SPF
T -	B	2x4	DRY	No.2	SPF
L -	J	2x4	DRY	No.2	SPF
T -	P	2x6	DRY	No.2	SPF
P -	L	2x6	DRY	No.2	SPF

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

PLATES (table is in inches)						
BT	PLATE TYPE	PLATES	W	LEN	Y	X
C	TMWV+p	MT20	6.0	8.0	2.75	2.00
D	TMWV+m	MT20	8.0	8.0	4.00	3.25
E	TMWV+t	MT20	4.0	4.0	1.50	1.50
F	TMWV-t	MT20	3.0	4.0		
G	TMWV+w	MT20	2.0	4.0		
H	TS-t	MT20	4.0	6.0		
I	TMWV+t	MT20	4.0	4.0	1.50	1.50
J	TMWV+m	MT20	8.0	8.0	4.00	3.25
K	TMWV+p	MT20	6.0	8.0	2.75	2.00
L	BMV1+t	MT20	6.0	8.0	Edge	2.50
M	BMWV-t	MT20	4.0	6.0	1.75	1.50
N	BMWV-t	MT20	5.0	6.0	2.00	1.75
O	BMWVW-t	MT20	4.0	8.0		
P	BS-t	MT20	5.0	8.0		
Q	BMWV-t	MT20	4.0	4.0	1.75	1.50
R	BMWV-t	MT20	5.0	6.0	2.00	1.75
S	BMWV-t	MT20	4.0	6.0	1.75	1.50
T	BMV1+t	MT20	6.0	8.0	5.50	

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

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

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

BEARINGS							
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
T	2842	0	2842	0	0	5-8	5-8
L	2842	0	2842	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1993	1403 / 0	0 / 0	0 / 0	0 / 0	590 / 0	0 / 0
L	1993	1403 / 0	0 / 0	0 / 0	0 / 0	590 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.31 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX. UNBRAC	MEMB.	FORCE	MAX	CS1 (LC)	
	(LBS)	(PLF)	CSI (LC)	LENGTH		(LBS)			
FR-TO		FROM TO			FR-TO				
A-B	0/32	-77.4	-77.4	0.12 (1)	10.00	S-C	-569.0	0	0.14 (1)
B-C	-3039.0	-77.4	-77.4	0.34 (1)	3.69	C-R	0	2892	0.72 (1)
C-D	-4716.0	-145.9	-145.9	0.39 (1)	3.67	R-D	-1625.0	0	0.40 (1)
D-E	-5783.0	-145.9	-145.9	0.43 (1)	3.31	D-E	0	1354	0.34 (1)
E-F	-5774.0	-145.9	-145.9	0.41 (1)	3.34	Q-P	-674.0	0	0.16 (1)
F-G	-5774.0	-145.9	-145.9	0.43 (1)	3.31	E-O	-12.0	0	0.01 (1)
G-H	-5774.0	-145.9	-145.9	0.43 (1)	3.31	O-F	-669.0	0	0.16 (1)
H-I	-4716.0	-145.9	-145.9	0.39 (1)	3.67	O-H	0	1340	0.33 (1)
I-J	-3039.0	-77.4	-77.4	0.34 (1)	3.69	N-H	-1621.0	0	0.40 (1)
J-K	0/32	-77.4	-77.4	0.12 (1)	10.00	N-I	0	2895	0.72 (1)
T-B	-2801.0	0.0	0.0	0.32 (1)	5.08	M-I	-571.0	0	0.14 (1)
L-J	-2801.0	0.0	0.0	0.32 (1)	5.08	B-S	0	2550	0.63 (1)
						M-J	0	2550	0.63 (1)
T-S	0/0	-33.0	-33.0	0.07 (4)	10.00				
S-R	0/2423	-33.0	-33.0	0.37 (1)	10.00				
R-Q	0/4716	-33.0	-33.0	0.69 (1)	10.00				
Q-P	0/5783	-33.0	-33.0	0.84 (1)	10.00				
P-O	0/5783	-33.0	-33.0	0.84 (1)	10.00				
O-N	0/4718	-33.0	-33.0	0.70 (1)	10.00				
N-M	0/2423	-33.0	-33.0	0.37 (1)	10.00				
M-L	0/0	-33.0	-33.0	0.07 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	3-6-5	-205	-205	--	FRONT	VERT	TOTAL
I	27-5-11	-205	-205	--	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 3-6-5
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL

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

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

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

ALLOWABLE DEFL.(LL)= $L/360$ (1.03")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.25")
 ALLOWABLE DEFL.(TL)= $L/360$ (1.03")
 CALCULATED VERT. DEFL.(TL) = $L/842$ (0.44")

CSI: TC=0.43/1.00 (F-H:1) , BC=0.84/1.00 (O-Q:1)
 , WB=0.72/1.00 (I-N:1) , SSI=0.27/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (Q) (INPUT = 0.90)
JSI METAL= 0.95 (P) (INPUT = 1.00)

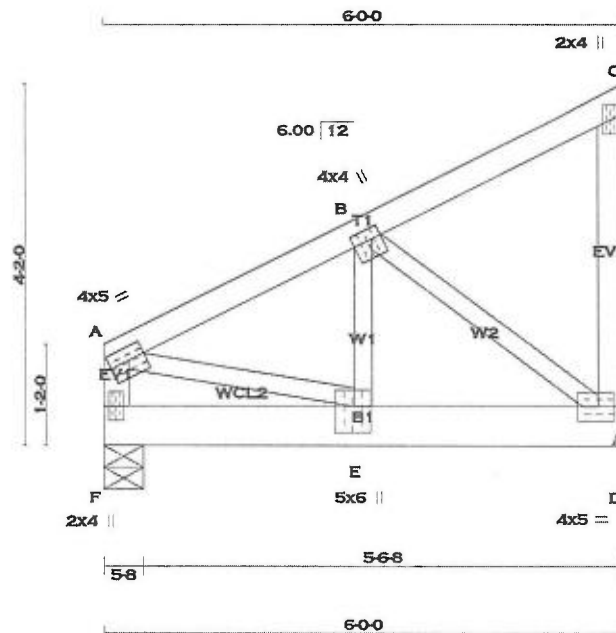
CONTINUED ON PAGE 2

HANGERS NOTES

1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 204.6 lbs FACTORED DOWN AT 27-5-11, AND 204.6 lbs FACTORED DOWN AT 3-6-5 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 = 1:25.5

TOTAL WEIGHT = 29 lb [M]

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

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
A TMVW-t MT20 4.0 5.0 1.75 2.25
B TMVW+t MT20 4.0 4.0 1.50 1.25
C TMV+p MT20 2.0 4.0
D BMVW1-t MT20 4.0 5.0 2.00 2.25
E BMVW+t MT20 5.0 6.0 3.75 2.25
F 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	1550	0	1550	0	MECHANICAL	
F	1550	0	1550	0	5-8	2-10

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

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED		MAX./MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	SNOW	LIVE	PERM.LIVE	WIND			
D	1088	761 / 0	0 / 0	0 / 0	327 / 0	0 / 0	0 / 0
F	1088	761 / 0	0 / 0	0 / 0	327 / 0	0 / 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 = 5.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	CHORDS		FACTORED		MAX. UNBRAC LENGTH	MEMB.	WEBS	
	MAX. FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (PLF)	LC1 MAX (PLF)			MAX. FORCE (LBS)	MAX. CS (L/C)
FR-TO						FR-TO		
A-B	-1323 / 0	-77.4	-77.4	0.12 (1)	5.49	E-B	0 / 1227	0.30 (1)
B-C	-9 / 0	-77.4	-77.4	0.09 (1)	10.00	B-D	-1495 / 0	0.36 (1)
D-C	-96 / 0	0.0	0.0	0.02 (1)	7.81	A-E	0 / 1230	0.30 (1)
F-A	-999 / 0	0.0	0.0	0.11 (1)	7.79			
F-E	0 / 0	-439.4	-439.4	0.25 (1)	10.00			
E-D	0 / 1191	-439.4	-439.4	0.41 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

GIRDER TYPE: CSIdGirder

START DISTANCE = 0-0

START SPAN CARRIED = 20-3-0

END DISTANCE = 6-0-0

END SPAN CARRIED = 20-3-0

END WALL WIDTH = 5-8

APPLIED TO FRONT SIDE OF BOTTOM CHORD.

- ADDTL LOADS BASED ON 55 % OF GSL.

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL)= L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.03")

CSI: TC=0.12/1.00 (A-B:1), BC=0.41/1.00 (D-E:1), WB=0.36/1.00 (B-D:1), SSI=0.51/1.00 (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 (PSI)	SECTION (PLI)	MAX MIN	MAX MIN
MT20	618	354	1667	622	2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

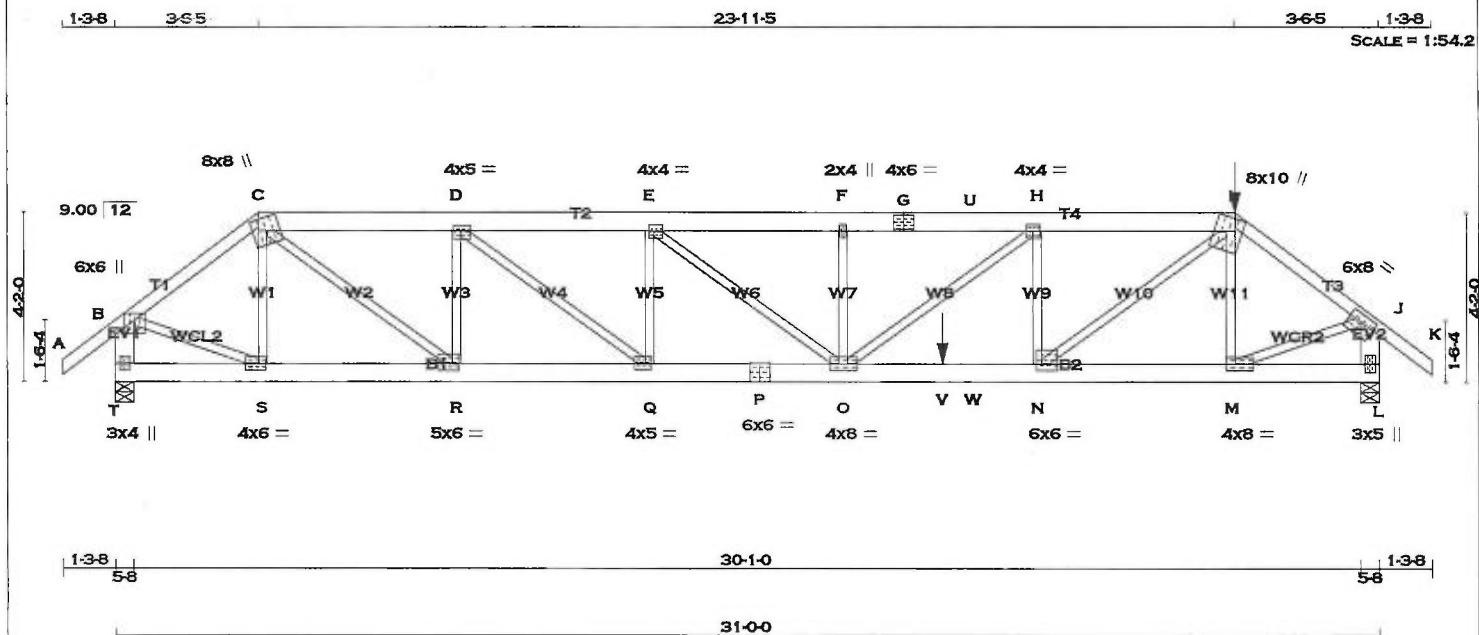
JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL= 0.41 (B) (INPUT = 1.00)



September 14, 2018



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



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

A - C	2x4	DRY	No.2	SPF
C - G	2x6	DRY	No.2	SPF
G - I	2x6	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
T - B	2x6	DRY	No.2	SPF
L - J	2x6	DRY	No.2	SPF
T - P	2x6	DRY	No.2	SPF
P - L	2x6	DRY	2100F 1.8E	SPF

ALL WEBS 2x3 DRY No.2 SPF
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	8.0	2.25	2.75
C	TTVW+m	MT20	8.0	8.0	4.00	3.75
D	MTMW-t	MT20	4.0	5.0	1.50	2.00
E	MTMW-t	MT20	4.0	4.0	1.75	1.50
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	4.0	6.0		
H	MTMW-t	MT20	4.0	4.0		
I	TTVW+m	MT20	8.0	10.0	4.50	3.50
J	MTMW-t	MT20	6.0	8.0	2.25	3.50
L	BMV1+p	MT20	3.0	5.0		
M	BMVW-t	MT20	4.0	8.0	2.00	2.75
N	BMVW-t	MT20	6.0	6.0	2.00	1.50
O	BMVW-t	MT20	4.0	8.0		
P	BS-t	MT20	6.0	6.0		
Q	BMVW-t	MT20	4.0	5.0	1.75	1.75
R	BMVW-t	MT20	5.0	6.0	2.25	2.00
S	BMVW-t	MT20	4.0	6.0	2.00	2.00
T	BMV1+p	MT20	3.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITEK MII20 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	DOWN	IN-SX	IN-SX
T	2256	0	5-8	2-7
L	3251	0	5-8	3-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	1581	1121 / 0	0 / 0	0 / 0	0 / 0	460 / 0	0 / 0
L	2280	1603 / 0	0 / 0	0 / 0	0 / 0	677 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.17 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	FORCE (LBS)	MAX. FACTORED UNBRAC (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 32	-77.4 -77.4	0.12 (1)	10.00	S-C	-486 / 0	0.12 (1)
B-C	-2369 / 0	-77.4 -77.4	0.28 (1)	4.17	C-R	0 / 2655	0.66 (1)
C-D	-3992 / 0	-77.4 -77.4	0.24 (1)	4.12	R-D	-1515 / 0	0.37 (1)
D-E	-5393 / 0	-77.4 -77.4	0.29 (1)	3.58	D-Q	0 / 1777	0.44 (1)
E-F	-6397 / 0	-77.4 -77.4	0.41 (1)	3.19	Q-E	-1161 / 0	0.28 (1)
F-G	-6397 / 0	-77.4 -77.4	0.43 (1)	3.17	E-O	0 / 1275	0.32 (1)
G-U	-6397 / 0	-77.4 -77.4	0.43 (1)	3.17	O-F	-333 / 0	0.08 (1)
U-H	-6397 / 0	-145.9 -145.9	0.43 (1)	3.17	O-H	0 / 810	0.20 (1)
H-I	-5759 / 0	-145.9 -145.9	0.49 (1)	3.24	N-H	-1234 / 0	0.30 (1)
I-J	-3487 / 0	-77.4 -77.4	0.39 (1)	3.41	N-I	0 / 3764	0.93 (1)
J-K	0 / 32	-77.4 -77.4	0.12 (1)	10.00	M-I	-841 / 0	0.21 (1)
T-B	-2237 / 0	0.0 0.0	0.16 (1)	6.80	B-S	0 / 1988	0.49 (1)
L-J	-3178 / 0	0.0 0.0	0.23 (1)	5.89	M-J	0 / 2926	0.72 (1)
T-S	0 / 0	-17.5 -17.5	0.04 (4)	10.00			
S-R	0 / 1888	-17.5 -17.5	0.28 (1)	10.00			
R-Q	0 / 3992	-17.5 -17.5	0.62 (1)	10.00			
Q-P	0 / 5393	-17.5 -17.5	0.80 (1)	10.00			
P-O	0 / 5393	-17.5 -17.5	0.80 (1)	10.00			
O-V	0 / 5758	-17.5 -17.5	0.88 (1)	10.00			
V-W	0 / 5758	-17.5 -17.5	0.88 (1)	10.00			
W-N	0 / 5758	-33.0 -33.0	0.88 (1)	10.00			
N-M	0 / 2775	-33.0 -33.0	0.34 (1)	10.00			
M-L	0 / 0	-33.0 -33.0	0.03 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
I	27-5-11	-205	-205	—	FRONT	VERT	TOTAL
V	20-3-12	-1550	-1550	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

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

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C/C

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

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

*** NON STANDARD GIRDER ***
ADDTL 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 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.28")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/756 (0.49")

CSI: TC=0.49/1.00 (H-I:1), BC=0.88/1.00 (N-O:1), WB=0.93/1.00 (I-N:1), SSI=0.58/1.00 (N-O: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

AUTOSOLVE HEELS OFF

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



September 14, 2018

HANGERS NOTES
 1) SPECIAL HANGER(S) OR CONNECTION(S) REQUIRED TO SUPPORT CONCENTRATED LOAD(S) 204.6 lbs FACTORED DOWN AT 27-5-11 ON TOP CHORD, AND 1550.3 lbs FACTORED DOWN AT 20-3-12 ON BOTTOM CHORD. DESIGN FOR UNSPECIFIED CONNECTION(S) IS DELEGATED TO THE BUILDING DESIGNER.

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

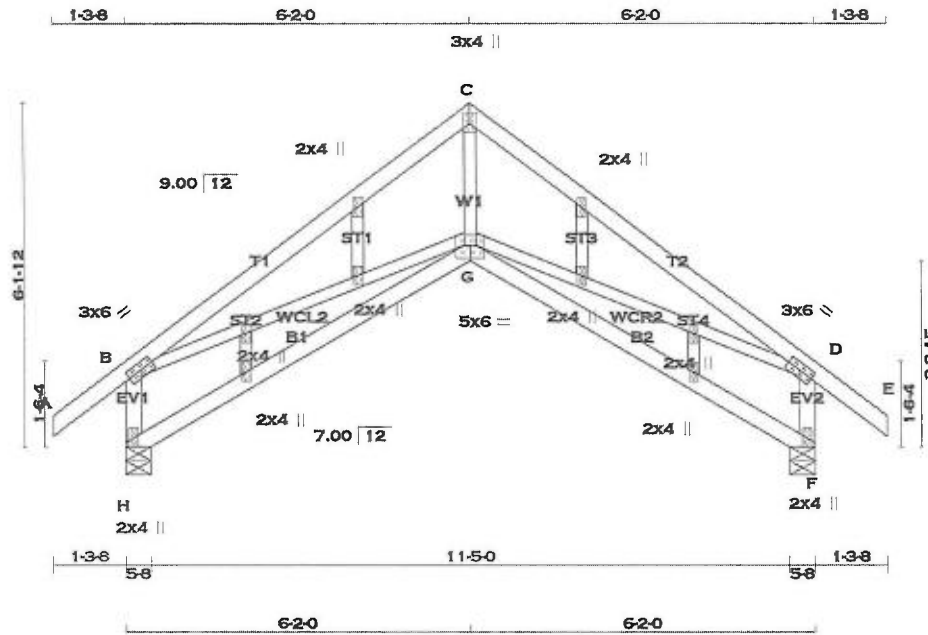
 PLATE ROTATION TOL. = 5.0 Deg.

 JSI GRIP= 0.90 (R) (INPUT = 0.90)
 JSI METAL= 0.75 (N) (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.

CONTINUED ON PAGE 2



SCALE = 1:39.5

TOTAL WEIGHT = 57 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
H - B	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
H - G	2x4	DRY	No.2	SPF
G - F	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" OC.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-1	MT20	3.0	6.0	1.50	2.75
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-1	MT20	3.0	6.0	1.50	2.75
F	BMV1+p	MT20	2.0	4.0	Edge	
G	BBVWW+p	MT20	5.0	6.0	2.75	3.00
H	BMV1+p	MT20	2.0	4.0	Edge	
I, J, K, L, M, N, O, P	NP+w	MT20	2.0	4.0		

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
H	692	0	692	0
F	692	0	692	0

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	483	351/0	0/0	0/0	0/0	132/0	0/0
F	483	351/0	0/0	0/0	0/0	132/0	0/0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (LC1 MAX)	MAX. FACTORED UNBRACED LENGTH (LC)	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORIZ. LOAD (LC)
FR-TO						FR-TO			
A-B	0/32	-77.4	-77.4	0.11 (1)	10.00	G-C	0/621	0.14 (1)	
B-C	-915/0	-77.4	-77.4	0.40 (1)	5.93	B-G	0/775	0.17 (1)	
C-D	-915/0	-77.4	-77.4	0.40 (1)	5.93	G-D	0/775	0.17 (1)	
D-E	0/32	-77.4	-77.4	0.11 (1)	10.00				
H-B	-638/0	0.0	0.0	0.07 (1)	7.81				
F-D	-638/0	0.0	0.0	0.07 (1)	7.81				
H-G	0/0	-17.5	-17.5	0.20 (4)	10.00				
G-F	0/0	-17.5	-17.5	0.20 (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 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.11")

CSI: TC=0.40/1.00 (C-D:1), BC=0.20/1.00 (F-G:4), WB=0.17/1.00 (B-G:1), SSI=0.15/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

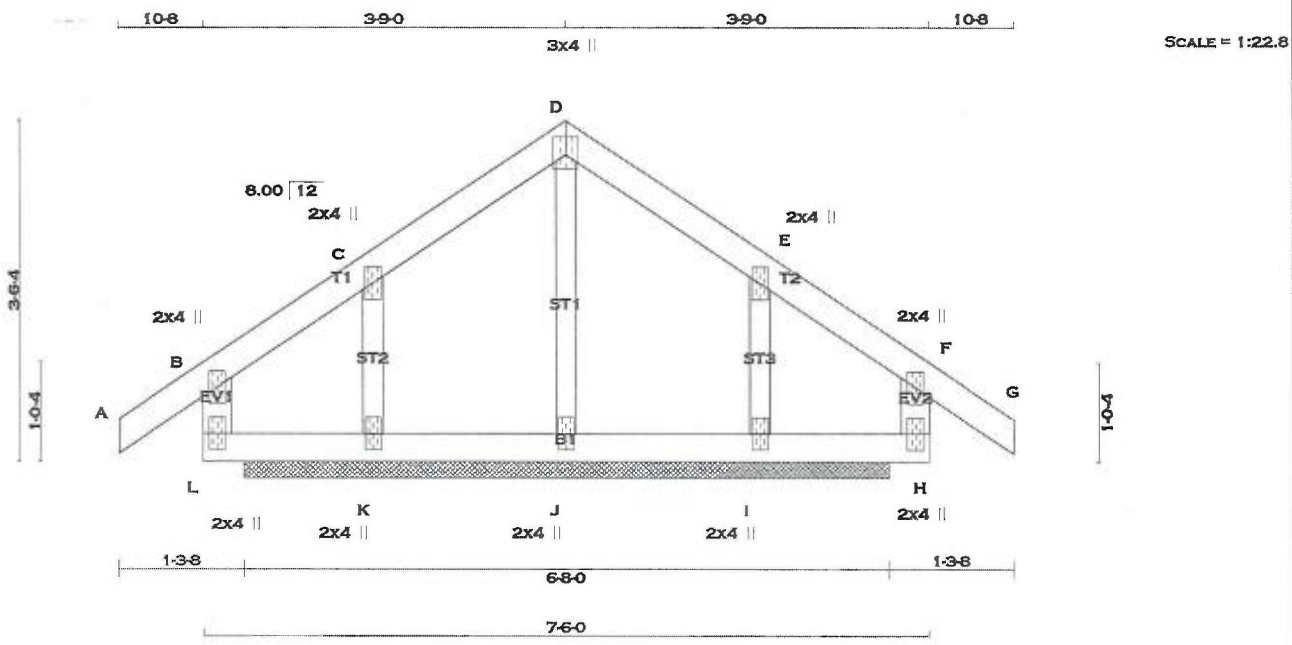
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.28 (D) (INPUT = 1.00)



September 14, 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 = 28 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+w	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 MII20 WITH TEE-LOK TL20 PLATES IS ALLOWED.

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

BEARINGS

THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 6.25 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	LC1 MAX (LC)
FR-TO		FROM TO		FR-TO			
L-B	-25 / 7	0.0	0.0 0.06 (1)	J-D	-295 / 0	7.81	0.06 (1)
A-B	0 / 21	-77.4	-77.4 0.05 (1)	K-C	-192 / 0	10.00	0.03 (1)
B-C	0 / 158	-77.4	-77.4 0.09 (1)	I-E	-192 / 0	10.00	0.03 (1)
C-D	0 / 139	-77.4	-77.4 0.09 (1)				
D-E	0 / 139	-77.4	-77.4 0.09 (1)				
E-F	0 / 158	-77.4	-77.4 0.09 (1)				
F-G	0 / 21	-77.4	-77.4 0.05 (1)				
H-F	-25 / 7	0.0	0.0 0.06 (1)				
L-K	-114 / 0	-17.5	-17.5 0.05 (1)				6.25
K-J	-123 / 0	-17.5	-17.5 0.04 (1)				6.25
J-I	-123 / 0	-17.5	-17.5 0.04 (1)				6.25
I-H	-114 / 0	-17.5	-17.5 0.05 (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=0.09/1.00 (B-C:1), BC=0.05/1.00 (H-I:1), WB=0.06/1.00 (D-J:1), SSI=0.09/1.00 (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 (PSI)	SECTION (PLI)
MT20	618	354	1667
	822	2284	1656

PLATE PLACEMENT TOL. = 0.250 inches

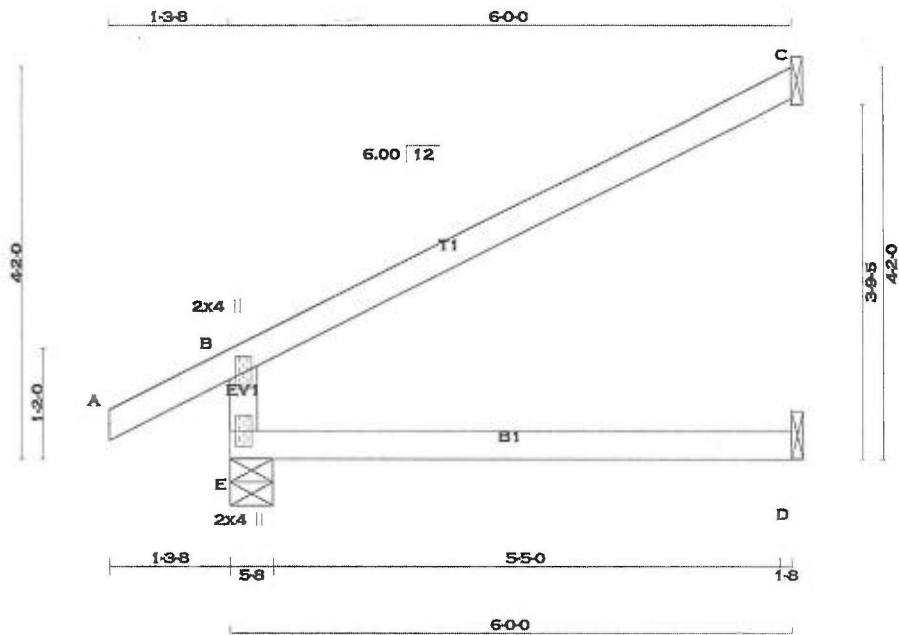
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (D) (INPUT = 0.90)

JSI METAL= 0.07 (L) (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.



SCALE = 1:23.6

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

DRY: SEASONED LUMBER.

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

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

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

FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	JT	DOWN	JT	IN-SX	JT	IN-SX
E	457	E	457	E	5-8	E	1-8
C	174	C	174	C	1-8	C	1-8
D	43	D	49	D	1-8	D	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	318	238 / 0	0 / 0	0 / 0	0 / 0	80 / 0	0 / 0
C	118	105 / 0	0 / 0	0 / 0	0 / 0	14 / 0	0 / 0
D	35	0 / 0	0 / 0	0 / 0	0 / 0	35 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		FACTORED		WEBS		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	FORCE (LBS)	MAX. UNBRACED LENGTH FR-TO	MAX. FACTORED CSI (LC)
FR-TO				FR-TO			
E-B	-395 / 0	0.0	0.0 0.13 (4)	E-B	7.81		
A-B	0 / 23	-77.4	-77.4 0.10 (1)	A-B	10.00		
B-C	-26 / 0	-77.4	-77.4 0.47 (1)	B-C	6.25		
E-D	0 / 0	-17.5	-17.5 0.13 (4)	E-D	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

AUTOSOLVE RIGHT HEEL ONLY

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.50)
JSI METAL= 0.09 (B) (INPUT = 1.00)

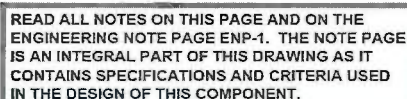


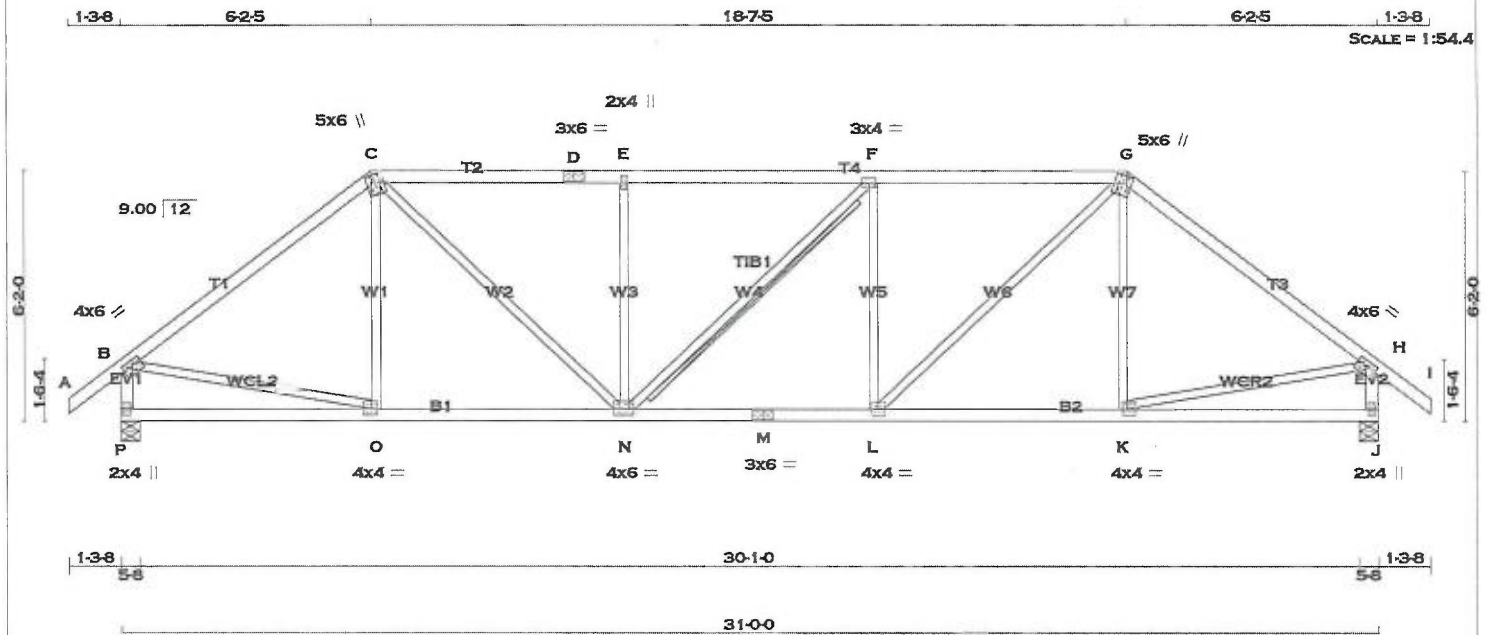
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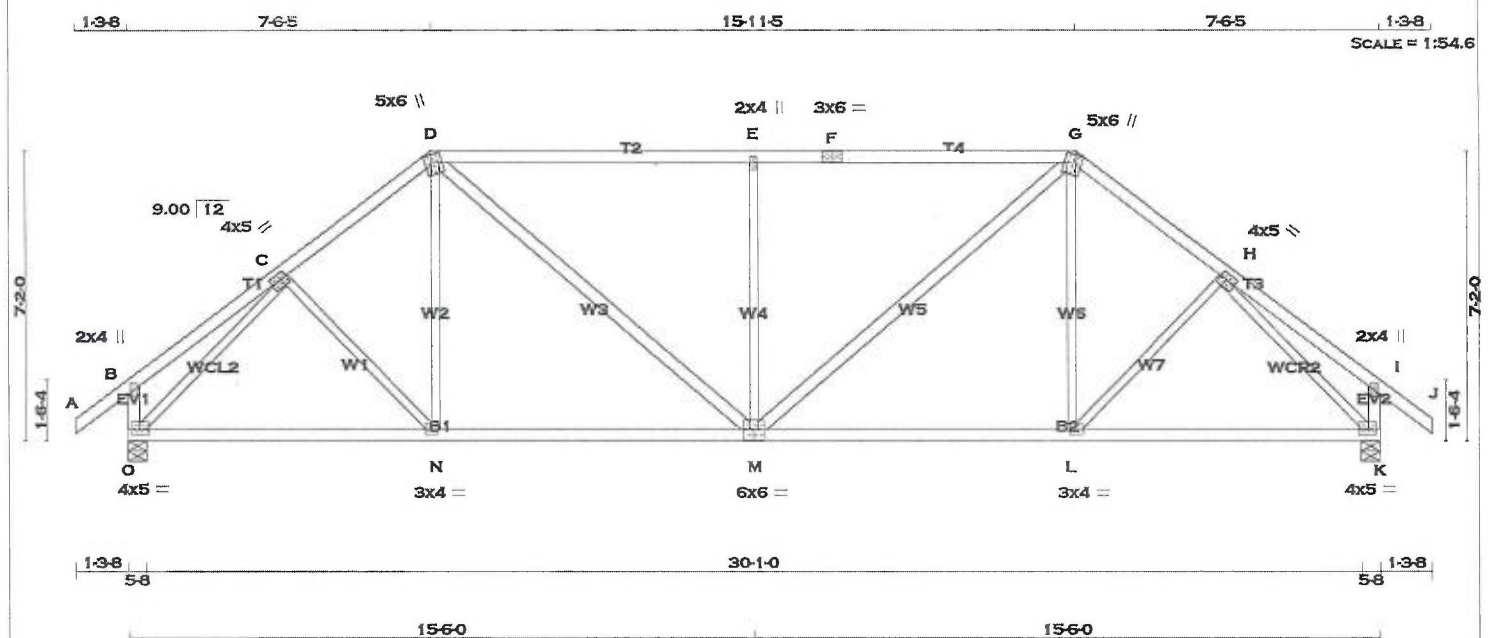
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

JSI GRIP= 0.88 (O) (INPUT = 0.90)
JSI METAL= 0.68 (M) (INPUT = 1.00)





LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - D	2x4	DRY	No.2
D - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
P - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
P - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
DRY: SEASONED LUMBER.			



15'-60 15'-60 TOTAL WEIGHT = 2 X 138 = 276 lb

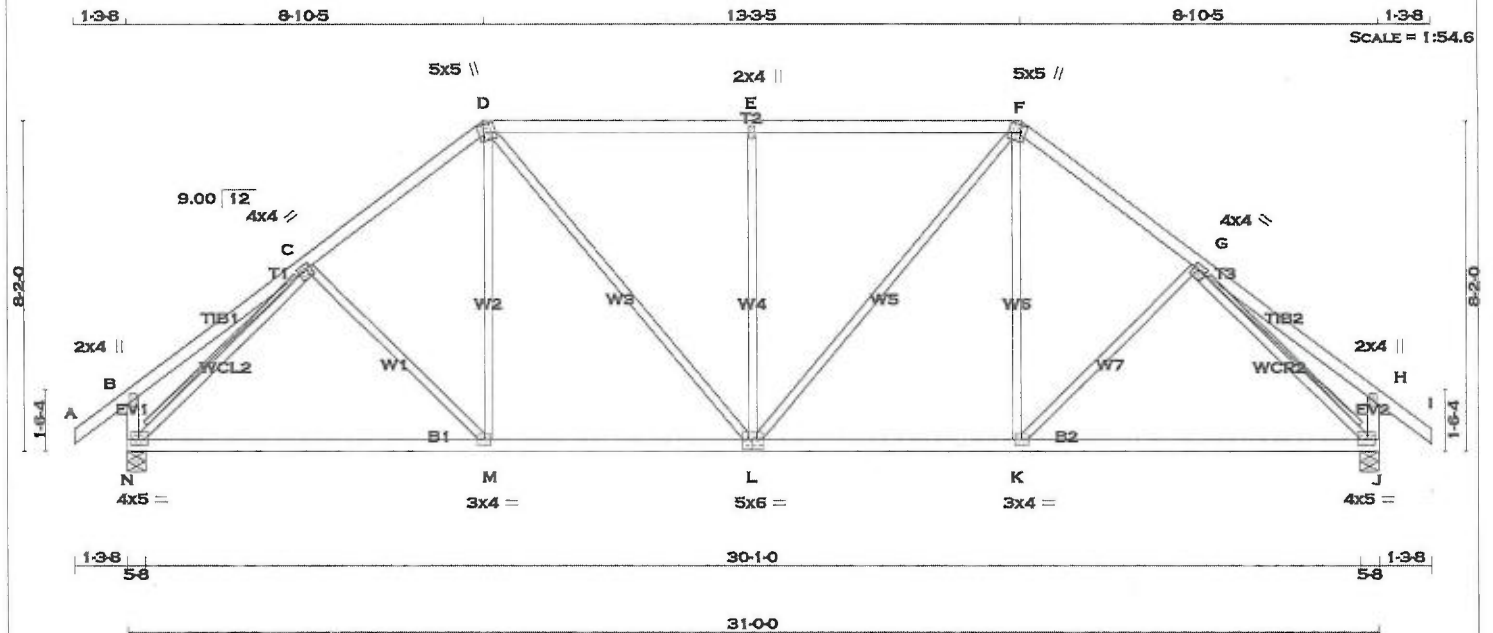
N. L. G. A. RULES				BUILDING DESIGNER				DESIGN CRITERIA			
CHORDS SIZE				LUMBER				DESCR.			
A - D	2x4	DRY	No.2	SPF				FACTORED			
D - F	2x4	DRY	2100F 1.8E	SPF				GROSS REACTION			
F - G	2x4	DRY	No.2	SPF				MAXIMUM FACTORED			
G - J	2x4	DRY	No.2	SPF				INPUT			
O - B	2x4	DRY	No.2	SPF				BRG			
K - I	2x4	DRY	No.2	SPF				REQRD			
O - M	2x4	DRY	No.2	SPF				IN-SX			
M - K	2x4	DRY	No.2	SPF				IN-SX			
ALL WEBS 2x3 DRY No.2 SPF				UNFACTORED REACTIONS				SPECIFIED LOADS:			
EXCEPT				1ST LCASE				TOP CH. LL = 23.3 PSF			
D - M	2x4	DRY	No.2	JT COMBINED				DL = 3.0 PSF			
M - G	2x4	DRY	No.2	O				BOT CH. LL = 0.0 PSF			
DRY: SEASONED LUMBER.				K				DL = 7.0 PSF			
								TOTAL LOAD = 33.3 PSF			
								SPACING = 24.0 IN./C			
								LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
								THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010			
								THIS DESIGN COMPLIES WITH:			
								- PART 9 OF CBC 2012 , CBC 2012 , ABC 2014			
								- CSA 086-09			
								- TPIC 2011			
								(5% 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 (1.03")			
								CALCULATED VERT. DEFL.(LL) = L/ 999 (0.07")			
								ALLOWABLE DEFL.(TL)= L/360 (1.03")			
								CALCULATED VERT. DEFL.(TL) = L/ 999 (0.14")			
								CSI: TC=0.68/1.00 (E-G:1) , BC=0.35/1.00 (L-M:4) , WB=0.87/1.00 (H-K:1) , SSI=0.30/1.00 (D-E:1)			
								DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10			
								COMP=1.10 SHEAR=1.10 TENS= 1.10			
								COMPANION LIVE LOAD FACTOR = 0.50			
								TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
								NAIL VALUES			
								PLATE GRIP(DRY) SHEAR SECTION			
								(PSI) (PLI) (PLI)			
								MAX MIN MAX MIN MAX MIN			
								MT20 618 354 1667 822 2284 1656			
								PLATE PLACEMENT TOL. = 0.250 inches			
								PLATE ROTATION TOL. = 5.0 Deg.			
								JSI GRIP= 0.89 (H) (INPUT = 0.90)			
								JSI METAL= 0.53 (H) (INPUT = 1.00)			

LICENSED PROFESSIONAL ENGINEER
T.L. WISE
100083566
PROVINCE OF ONTARIO

KOTT

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.

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LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
N - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
L - J	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	TMV+p	MT20	2.0	4.0			
C	TMVW-t	MT20	4.0	4.0	1.50	1.50	
D	TTVW+m	MT20	5.0	5.0	2.25	1.50	
E	TMV+w	MT20	2.0	4.0			
F	TTVW+m	MT20	5.0	5.0	2.25	1.50	
G	TMVW-t	MT20	4.0	4.0	1.50	1.50	
H	TMV+p	MT20	2.0	4.0			
J	BMVW-1	MT20	4.0	5.0	1.75	2.25	
K	BMVW-t	MT20	3.0	4.0			
L	BSVWV-1	MT20	5.0	6.0	3.00	3.00	
M	BMVW-t	MT20	3.0	4.0			
N	BMVW-1	MT20	4.0	5.0	1.75	2.25	

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	HORZ	DOWN	HORZ
N	1577	0	1577	0
J	1577	0	1577	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN. COMPONENT REACTIONS	JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
N	1104	786 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
J	1104	786 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.79 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.

2x4 DRY SPF No.2 T-BRACE AT C-N, G-J

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO									
A-B	0 / 32	-77.4	-77.4	0.11 (1)	10.00	C-M	-71 / 38	0.05 (1)	
B-C	0 / 23	-77.4	-77.4	0.24 (1)	10.00	M-D	0 / 216	0.06 (4)	
C-D	-1525 / 0	-77.4	-77.4	0.22 (1)	5.12	D-L	0 / 466	0.10 (1)	
D-E	-1502 / 0	-77.4	-77.4	0.48 (1)	4.79	L-E	-630 / 0	0.82 (1)	
E-F	-1502 / 0	-77.4	-77.4	0.48 (1)	4.79	L-F	0 / 466	0.10 (1)	
F-G	-1525 / 0	-77.4	-77.4	0.22 (1)	5.12	K-F	0 / 216	0.06 (4)	
G-H	0 / 23	-77.4	-77.4	0.24 (1)	10.00	K-G	-71 / 38	0.05 (1)	
H-I	0 / 32	-77.4	-77.4	0.11 (1)	10.00	N-C	-1785 / 0	0.53 (1)	
N-B	-238 / 0	0.0	0.0	0.02 (1)	7.81	G-J	-1785 / 0	0.53 (1)	
J-H	-238 / 0	0.0	0.0	0.02 (1)	7.81				
N-M	0 / 1249	-17.5	-17.5	0.40 (4)	10.00				
M-L	0 / 1202	-17.5	-17.5	0.40 (4)	10.00				
L-K	0 / 1202	-17.5	-17.5	0.40 (4)	10.00				
K-J	0 / 1249	-17.5	-17.5	0.40 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN./C

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

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

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

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

ALLOWABLE DEFL.(LL) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.07")
ALLOWABLE DEFL.(TL) = $L/360$ (1.03")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.20")

CSI: TC=0.48/1.00 (D-E-1), BC=0.40/1.00 (K-L-4), WB=0.82/1.00 (E-L-1), SSI=0.25/1.00 (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)
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.

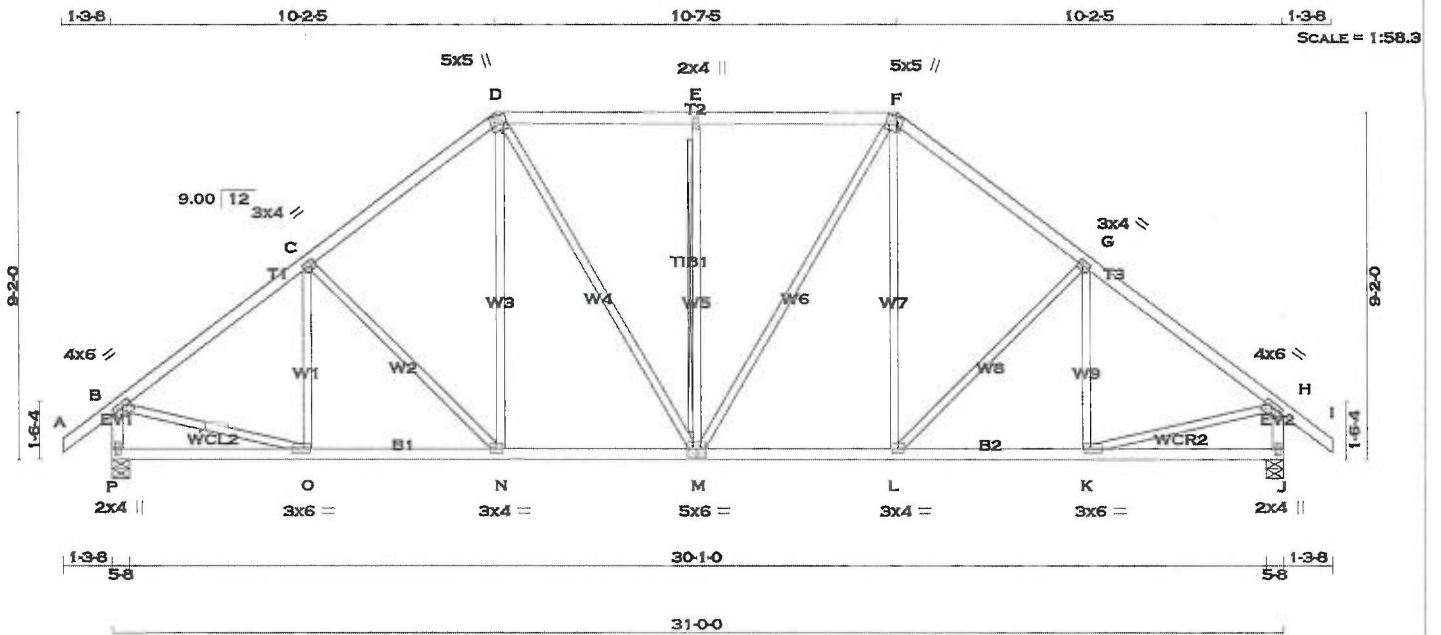
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.66 (C) (INPUT = 1.00)



September 14, 2018



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TOTAL WEIGHT = 2 X 147 = 295 lb [M/F]

LUMBER	N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF	
D - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
P - B	2x4	DRY	No.2	SPF	
J - H	2x4	DRY	No.2	SPF	
P - M	2x4	DRY	No.2	SPF	
M - J	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	2.75
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTVW+m	MT20	5.0	5.0	2.25	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TTVW+m	MT20	5.0	5.0	2.25	1.50
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	4.0	6.0	1.50	2.75
J	BMV1+p	MT20	2.0	4.0		
K	BMVW-t	MT20	3.0	6.0	1.50	2.25
L	BMVW-t	MT20	3.0	4.0		
M	BSVWV-t	MT20	5.0	6.0	3.00	3.00
N	BMVW-t	MT20	3.0	4.0		
O	BMVW-t	MT20	3.0	6.0	1.50	2.25
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		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
P	1577	0	1577	0	0	5-8	2-11		
J	1577	0	1577	0	0	5-8	2-11		

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
P	1104	786 / 0 0 / 0 0 / 0 318 / 0 0 / 0
J	1104	786 / 0 0 / 0 0 / 0 0 / 0 318 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.93 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT E-M

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 32	-77.4 -77.4 0.11 (1)	10.00	C-C	-202 / 25	0.09 (1)	
B-C	-1602 / 0	-77.4 -77.4 0.30 (1)	4.93	C-N	-235 / 0	0.24 (1)	
C-D	-1453 / 0	-77.4 -77.4 0.29 (1)	5.13	N-D	0 / 256	0.06 (1)	
D-E	-1317 / 0	-77.4 -77.4 0.30 (1)	5.30	D-M	0 / 344	0.08 (1)	
E-F	-1317 / 0	-77.4 -77.4 0.30 (1)	5.30	M-E	-499 / 0	0.31 (1)	
F-G	-1453 / 0	-77.4 -77.4 0.29 (1)	5.13	M-F	0 / 344	0.08 (1)	
G-H	-1602 / 0	-77.4 -77.4 0.30 (1)	4.93	L-F	0 / 256	0.06 (1)	
H-I	0 / 32	-77.4 -77.4 0.11 (1)	10.00	L-G	-235 / 0	0.24 (1)	
P-B	-1538 / 0	0.0 0.0 0.16 (1)	6.64	K-G	-202 / 25	0.09 (1)	
J-H	-1538 / 0	0.0 0.0 0.16 (1)	6.64	B-O	0 / 1337	0.30 (1)	
				K-H	0 / 1337	0.30 (1)	
P-O	0 / 0	-17.5 -17.5 0.11 (4)	10.00				
O-N	0 / 1304	-17.5 -17.5 0.26 (1)	10.00				
N-M	0 / 1141	-17.5 -17.5 0.23 (1)	10.00				
M-L	0 / 1141	-17.5 -17.5 0.23 (1)	10.00				
L-K	0 / 1304	-17.5 -17.5 0.26 (1)	10.00				
K-J	0 / 0	-17.5 -17.5 0.11 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

(5% 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 (1.03")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.30/1.00 (G-H:1), BC=0.26/1.00 (K-L:1), WB=0.31/1.00 (E-M:1), SSI=0.20/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES	PLATE GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
	MAX MIN	MAX MIN	MAX MIN
MT20	618	354	1667 822 2264 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

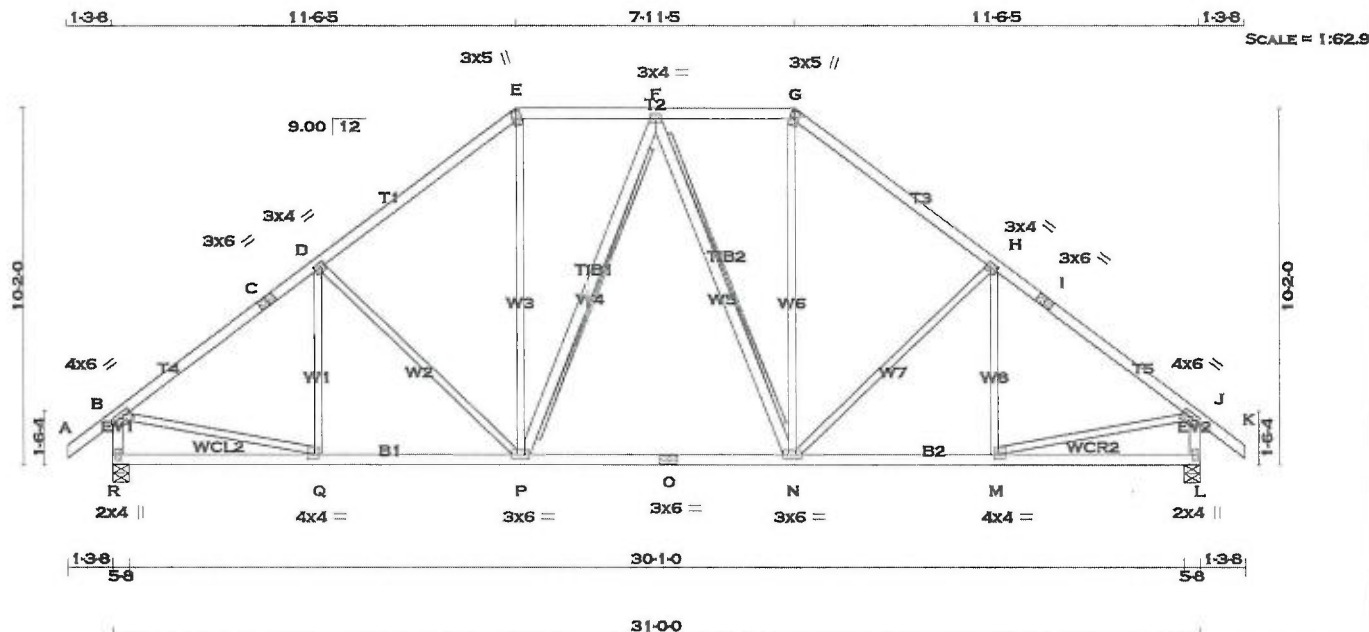
JSI GRIP= 0.83 (K) (INPUT = 0.90)
JSI METAL= 0.45 (B) (INPUT = 1.00)



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TOTAL WEIGHT = $2 \times 153 = 307 \text{ lb}$

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
G - I	2x4	DRY	No.2	SPF
I - K	2x4	DRY	No.2	SPF
R - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
R - O	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
P - F	2x4	DRY	No.2	SPF
F - N	2x4	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in Inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-t	MT20	4.0	6.0	1.50	2.75
C	TS-t	MT20	3.0	6.0		
D	TMWVW-t	MT20	3.0	4.0	1.50	1.50
E	TTW+m	MT20	3.0	5.0	Edge	1.25
F	TMWVW-t	MT20	3.0	4.0		
G	TTW+m	MT20	3.0	5.0	Edge	1.25
H	TMWVW-t	MT20	3.0	4.0	1.50	1.50
I	TS-t	MT20	3.0	6.0		
J	TMWV-t	MT20	4.0	6.0	1.50	2.75
L	BMV1+p	MT20	2.0	4.0		
M	BMWVW-t	MT20	4.0	4.0	1.50	1.50
N	BMWVWVW-t	MT20	3.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMWVWVW-t	MT20	3.0	6.0		
Q	BMWV-t	MT20	4.0	4.0	1.50	1.50
R	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS							
	FACTORED		MAXIMUM FACTORED			INPUT	REQRD
	GROSS REACTION		GROSS REACTION			BRG	BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	1577	0	1577	0	0	5-8	2-11
L	1577	0	1577	0	0	5-8	2-11

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	1104	786 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0
L	1104	786 / 0	0 / 0	0 / 0	0 / 0	318 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED

2x4 DRY SPF No.2 T-BRACE AT F-P, F-N

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)	
FR-TO		FROM TO		LENGTH	FR-TO			
A-B	0/32	-77.4	-77.4	0.11 (1)	10.00	Q-D	-163 / 42	0.09 (1)
B-C	-1610 / 0	-77.4	-77.4	0.40 (1)	4.81	D-P	-319 / 0	0.43 (1)
C-D	-1610 / 0	-77.4	-77.4	0.40 (1)	4.81	P-E	0 / 529	0.12 (1)
D-E	-1391 / 0	-77.4	-77.4	0.37 (1)	5.11	P-F	-197 / 0	0.16 (1)
E-F	-1090 / 0	-77.4	-77.4	0.16 (1)	5.88	F-N	-197 / 0	0.16 (1)
F-G	-1090 / 0	-77.4	-77.4	0.16 (1)	5.88	N-G	0 / 529	0.12 (1)
G-H	-1391 / 0	-77.4	-77.4	0.37 (1)	5.11	N-H	-319 / 0	0.43 (1)
H-I	-1610 / 0	-77.4	-77.4	0.40 (1)	4.81	M-H	-163 / 42	0.09 (1)
I-J	-1610 / 0	-77.4	-77.4	0.40 (1)	4.81	B-Q	0 / 1340	0.30 (1)
J-K	0/32	-77.4	-77.4	0.11 (1)	10.00	M-J	0 / 1340	0.30 (1)
R-B	-1533 / 0	0.0	0.0	0.16 (1)	6.64			
L-J	-1533 / 0	0.0	0.0	0.16 (1)	6.64			
R-Q	0/0	-17.5	-17.5	0.12 (4)	10.00			
Q-P	0/1314	-17.5	-17.5	0.31 (1)	10.00			
P-O	0/1162	-17.5	-17.5	0.29 (1)	10.00			
O-N	0/1162	-17.5	-17.5	0.29 (1)	10.00			
N-M	0/1314	-17.5	-17.5	0.31 (1)	10.00			
M-L	0/0	-17.5	-17.5	0.12 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.03")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (1.03")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.15")

CSI: TC=0.40/1.00 (H-J:1), BC=0.31/1.00 (M-N:1)
 , WB=0.43/1.00 (H-N:1), SSI=0.17/1.00 (H-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

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (P) (INPUT = 0.90)
JSI METAL= 0.49 (Q) (INPUT = 1.00)



September 14, 2018

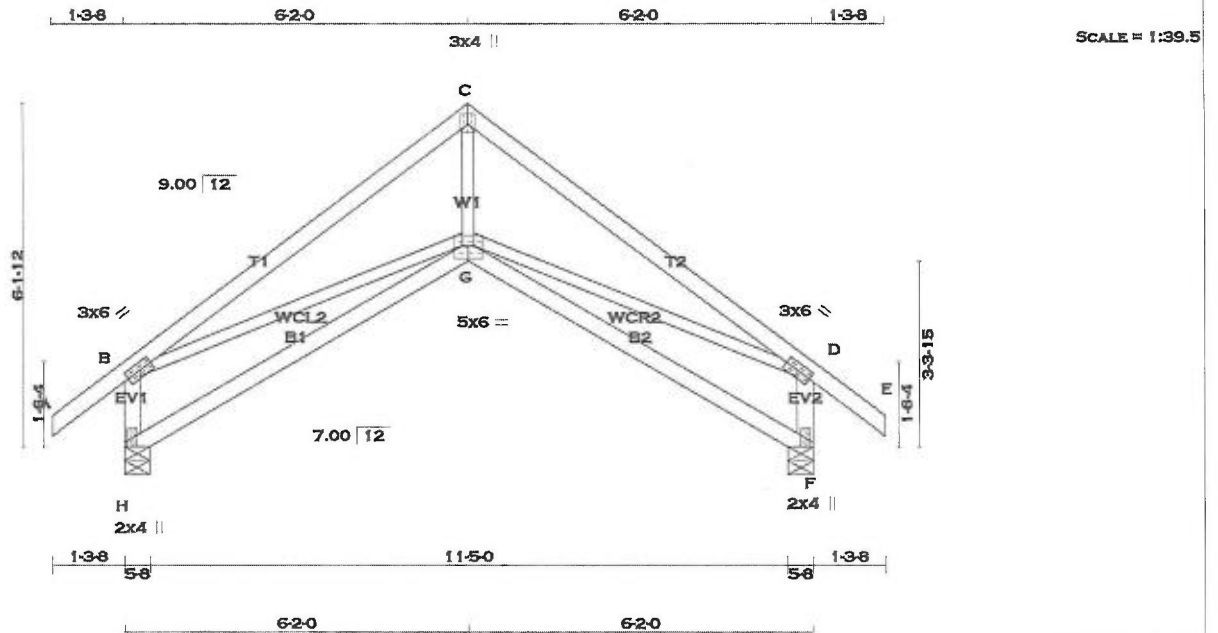


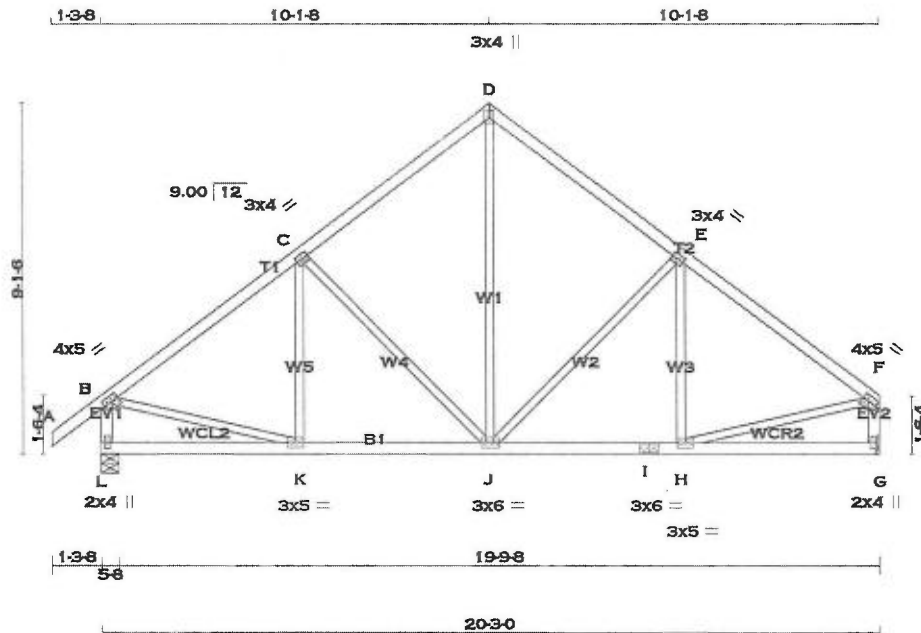
READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTE PAGE ENP-1. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



MIF

JSI GRIP= 0.88 (F) (INPUT = 0.90)
JSI METAL= 0.49 (P) (INPUT = 1.00)





TOTAL WEIGHT = 3 X 90 = 271 lb [M][F]

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	5.0	1.75	2.00
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMWW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW-t	MT20	4.0	5.0	1.75	Edge
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	3.0	5.0		
I	BS-t	MT20	3.0	6.0		
J	BMWWW-t	MT20	3.0	6.0		
K	BMWW-t	MT20	3.0	5.0		
L	BMV1+p	MT20	2.0	4.0		

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

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX
L	1067	0	1067	0	0	5-8	1-13		
G	960	0	960	0	0	MECHANICAL			

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	747	536	0	0/0	0/0	0/0	0/0	0/0	211/0	0/0
G	674	472	0	0/0	0/0	0/0	0/0	0/0	202/0	0/0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.04 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.

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	UNBRAC LENGTH
FR-TO		FROM	TO	FR-TO			
A-B	0/32	-77.4	-77.4 0.11 (1)	10.00	J-D	0/548	0.12 (1)
B-C	-953/0	-77.4	-77.4 0.27 (1)	6.04	J-E	-325/0	0.31 (1)
C-D	-725/0	-77.4	-77.4 0.26 (1)	6.25	H-E	-83/60	0.04 (1)
D-E	-725/0	-77.4	-77.4 0.26 (1)	6.25	C-J	-325/0	0.31 (1)
E-F	-953/0	-77.4	-77.4 0.27 (1)	6.04	K-C	-83/60	0.04 (1)
L-B	-1030/0	0.0	0.0 0.11 (1)	7.74	B-K	0/805	0.18 (1)
G-F	-923/0	0.0	0.0 0.10 (1)	7.81	H-F	0/805	0.18 (1)
L-K	0/0	-17.5	-17.5 0.11 (4)	10.00			
K-J	0/784	-17.5	-17.5 0.18 (1)	10.00			
J-I	0/784	-17.5	-17.5 0.18 (1)	10.00			
I-H	0/784	-17.5	-17.5 0.18 (1)	10.00			
H-G	0/0	-17.5	-17.5 0.11 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.67")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.67")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CSI: TC=0.27/1.00 (B-C:1), BC=0.18/1.00 (H-J:1), WB=0.31/1.00 (E-J:1), SSI=0.15/1.00 (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.

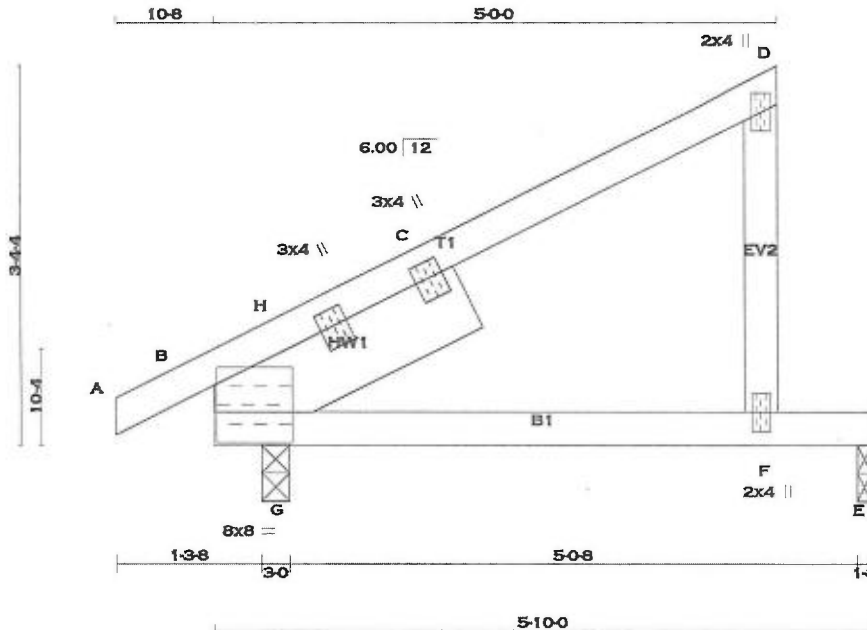
JSI GRIP= 0.88 (J) (INPUT = 0.90)
JSI METAL= 0.34 (B) (INPUT = 1.00)



September 14, 2018



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SCALE = 1:19.6

TOTAL WEIGHT = 4 X 23 = 93 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - D	2x4	DRY	No.2	SPF
F - D	2x4	DRY	No.2	SPF
B - E	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x8	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBMR1-I	MT20	8.0	8.0	6.00	0.25
B	RT-t	MT20	3.0	4.0	1.75	12.75
B	RT-t	MT20	3.0	4.0	1.75	24.00
D	TMV+p	MT20	2.0	4.0		
F	BMV+p	MT20	2.0	4.0		

A SIZE FOR SIZE SUBSTITUTION OF MITK M1120 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	IN-SX	IN-SX	IN-SX	IN-SX
B	345	0	345	0	0	3-0	1-8	
E	217	0	217	0	0	1-8	1-8	

UNFACTORED REACTIONS

	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	240	177 / 0	0 / 0	0 / 0	0 / 0	64 / 0	0 / 0
E	153	100 / 0	0 / 0	0 / 0	0 / 0	54 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEB S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO	FR-TO				
A-B	-3 / 0	-77.4	-77.4	0.04 (1)	10.00	G-H	-239 / 0	0.00 (1)
B-H	-189 / 0	-77.4	-77.4	0.06 (1)	6.25	G-C	0 / 240	0.02 (1)
H-C	-102 / 0	-77.4	-77.4	0.32 (1)	6.25			
C-D	-102 / 0	-77.4	-77.4	0.32 (1)	6.25			
F-D	-186 / 0	0.0	0.0	0.03 (1)	7.81			
B-G	0 / 154	-17.5	-17.5	0.13 (1)	10.00			
G-F	0 / 0	-17.5	-17.5	0.25 (1)	10.00			
F-E	0 / 0	-17.5	-17.5	0.24 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/986 (0.07")
ALLOWABLE DEFL.(TL) = L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/525 (0.13")

CSI: TC=0.32/1.00 (D-H:1), BC=0.25/1.00 (F-G:1), WB=0.02/1.00 (C-G:1), SSI=0.18/1.00 (D-H:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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.

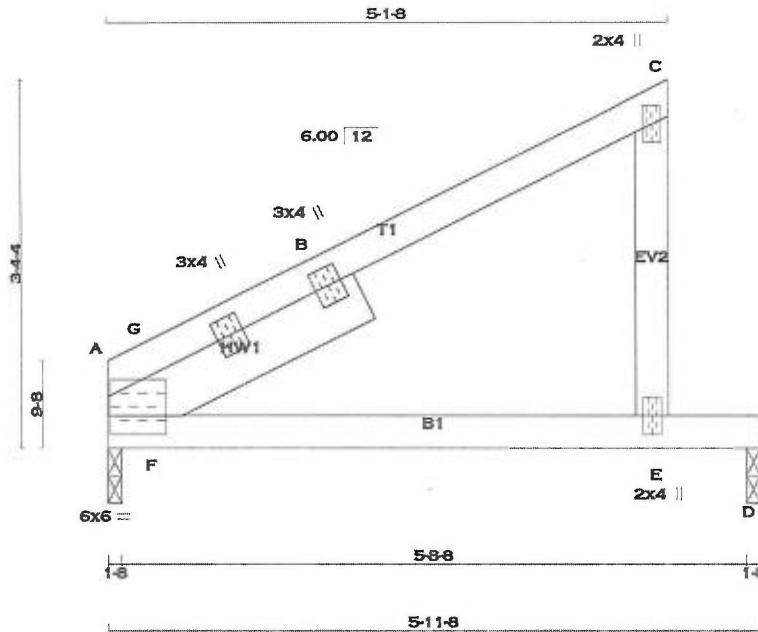
JSI GRIP= 0.12 (B) (INPUT = 0.90)
JSI METAL= 0.04 (D) (INPUT = 1.00)



September 14, 2018



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SCALE = 1:20.2

TOTAL WEIGHT = 3 X 21 = 64 lb

LUMBER	CHORDS	SIZE	LUMBER	DESCR.
N. L. G. A. RULES				
A - C	2x4	DRY	No.2	SPF
E - C	2x4	DRY	No.2	SPF
A - D	2x4	DRY	No.2	SPF
REINFORCING MEMBERS				
HW1	2x6	DRY	No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMBMR1-I	MT20	6.0	6.0	2.00	0.25
A	RT-t	MT20	3.0	4.0		
A	RT-t	MT20	3.0	4.0		
C	TMV+p	MT20	2.0	4.0		
E	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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
A	278	0	278	0	1-8	1-8
D	223	0	223	0	1-8	1-8

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
A	195	136 / 0	0 / 0	0 / 0	0 / 0	59 / 0	0 / 0
D	158	103 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD			MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
		FROM	TO	PLF				
FR-TO								
A-G	-192 / 0	-77.4	-77.4	0.08 (1)	6.25	F-G	-245 / 13	0.00 (1)
G-B	-111 / 0	-77.4	-77.4	0.34 (1)	6.25	F-B	0 / 246	0.03 (1)
B-C	-111 / 0	-77.4	-77.4	0.34 (1)	6.25			
E-C	-191 / 0	0.0	0.0	0.03 (1)	7.81			
A-F	0 / 176	-17.5	-17.5	0.13 (1)	10.00			
F-E	0 / 0	-17.5	-17.5	0.26 (1)	10.00			
E-D	0 / 0	-17.5	-17.5	0.24 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL)= L/ 941 (0.08")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL)= L/ 497 (0.14")

CSI: TC=0.34/1.00 (C-G:1), BC=0.26/1.00 (E-F:1), WB=0.03/1.00 (B-F:1), SSI=0.17/1.00 (C-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

AUTOSOLVE LEFT HEEL ONLY

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= 0.11 (C) (INPUT = 0.90)
JSI METAL= 0.04 (C) (INPUT = 1.00)



September 14, 2018



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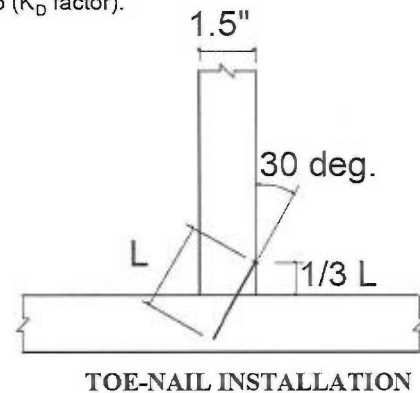
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

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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April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

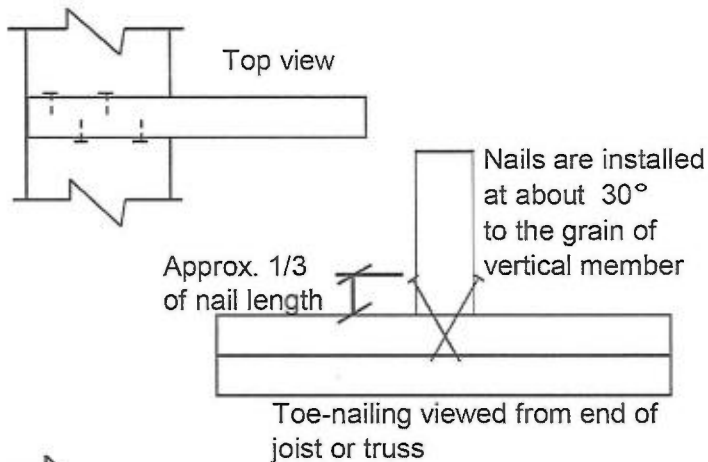
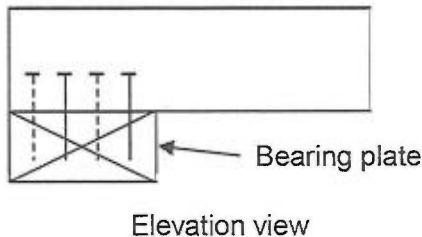
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

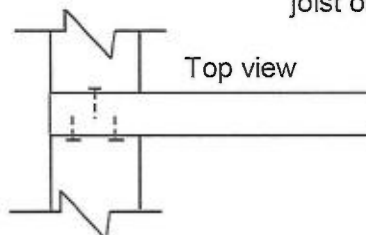
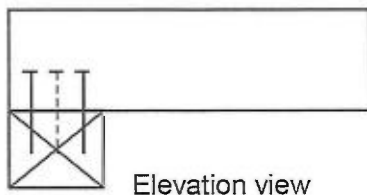
NOTES:

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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