

NE0618-009**GREEN YORK HOMES - GRANELLI HOME
CORP - CELESTIAL 1 ELEV 1****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

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

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.

Layout based on plans provided by
Jardin Design Group Inc.
Revision #2 dated May 22, 2018

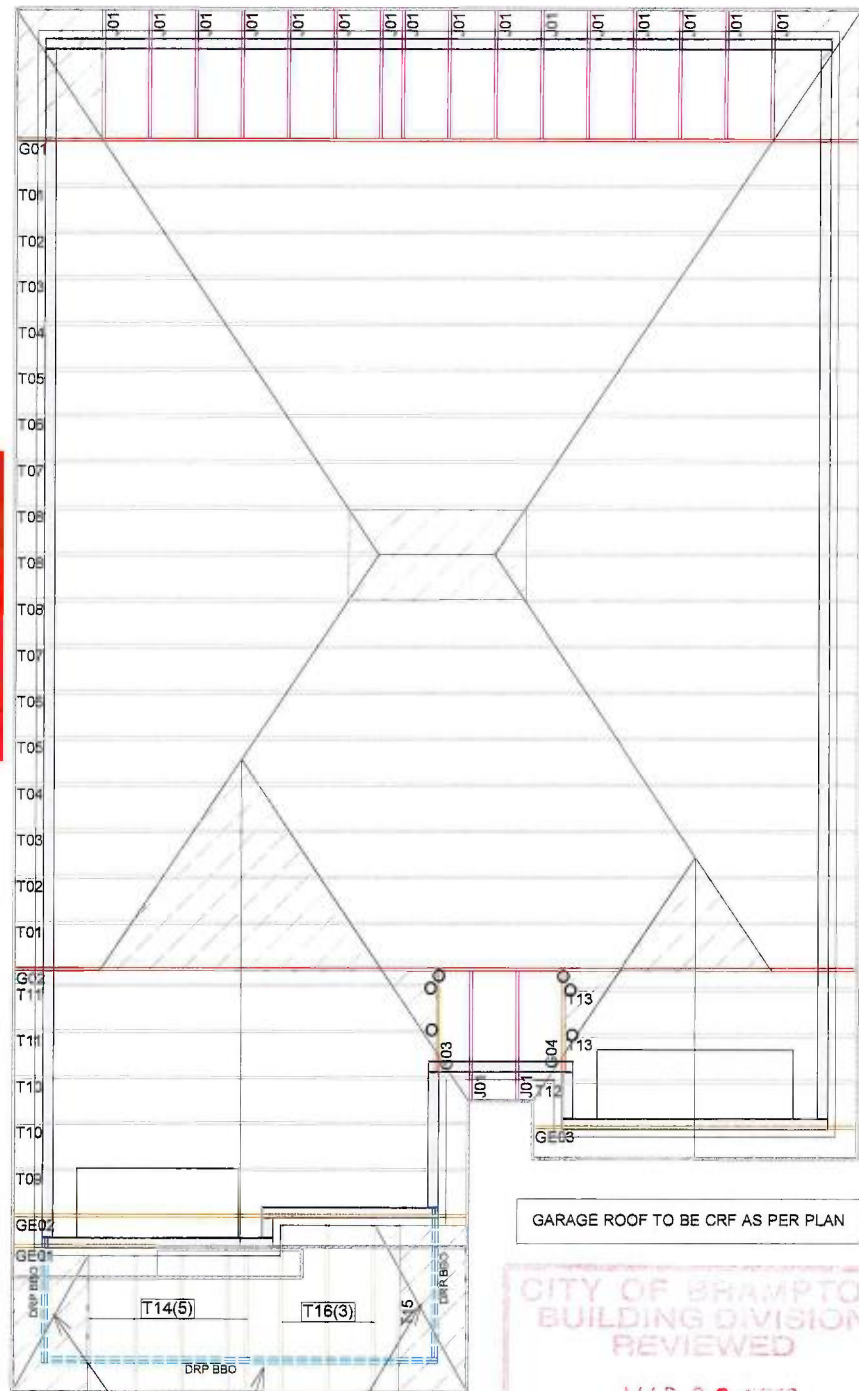
THIS CERTIFICATION IS FOR THE ENGINEERING REVIEW OF STRUCTURAL COMPONENTS SHOWN ON THIS DRAWING AND IS LIMITED TO THE COMPONENTS SUPPLIED BY KOTT LUMBER FOR THE LOADS AND CONDITIONS SHOWN ON THE CALCULATION PAGE OF EACH COMPONENT. THE PLACEMENT OF THESE COMPONENTS ON THIS LAYOUT IS SHOWN FOR REFERENCE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



ENG.JOB:NE0618-009

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

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



GARAGE ROOF TO BE CRF AS PER PLAN



PORCH BEAMS ASSUMED TO BE
2x2x10, NO BEAM SCHEDULE
PROVIDED ON PLANS
UNDERSIDE OF BEAMS TO BE 6"
BELOW COVERED PORCH FASCIA

ROOF TRUSS LAYOUT

19-44725/1,000.00 RR



HANGER LEGEND

X - LUS24
- HGUS26

O - LJS26DS
% - HGUS26-2

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" CENTERS.
THIS TRUSS SYSTEM IS DESIGN FOR RESIDENTIAL
OR SMALL BUILDING REQUIREMENTS OF
PART 9, NBC 2010

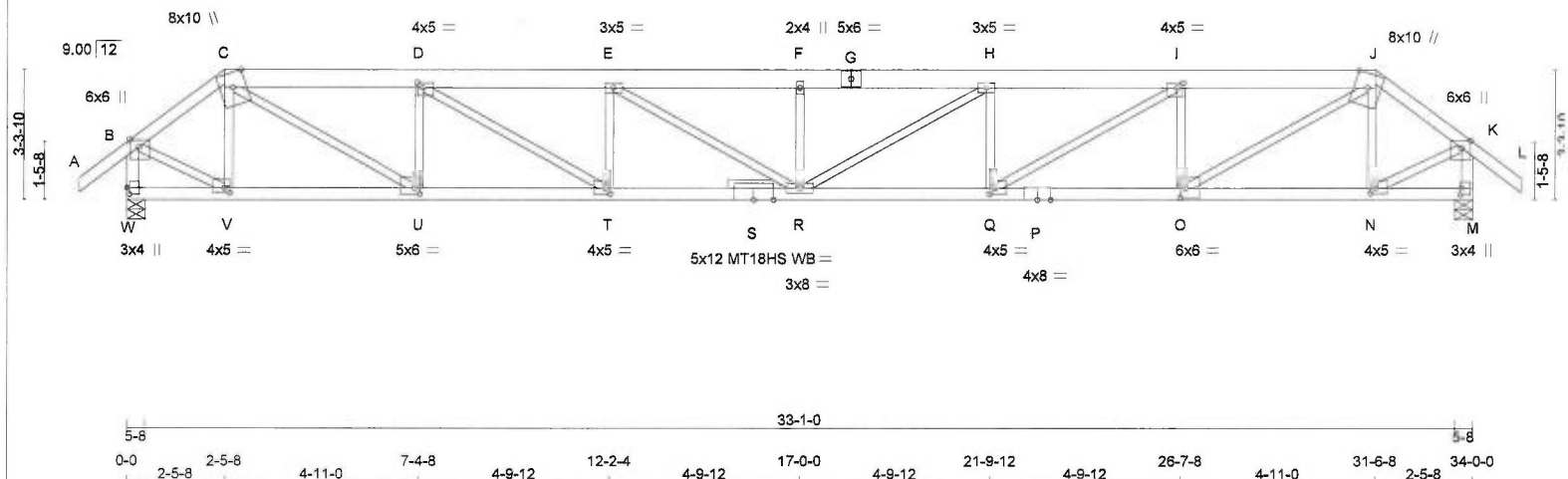
THIS DESIGN COMPLIES WITH PART 9 OF OBC 2012,
BCBC 2012, ASQ 2012, CSA 086-09, TPIC 2011

ALLOWABLE DEFLECTION OF EACH COMPONENT = L/360

Model:	CELESTIAL 1 ELE 1
Customer:	GREEN YORK HOMES
Project:	GRANELLI HOME
Location:	BRAMPTON, ON
Drawn By:	DM
Date:	5/31/2018

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"



TOTAL WEIGHT = 149 lb

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 - J	2x6	DRY	No.2	SPF
J - L	2x4	DRY	No.2	SPF
W - B	2x4	DRY	No.2	SPF
M - K	2x4	DRY	No.2	SPF
W - S	2x4	DRY	2100F 1.8E	SPF
S - P	2x4	DRY	2100F 1.8E	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+p	MT20	8.0	6.0	2.25	2.75
C	TMVW+m	MT20	8.0	10.0	Edge	
D	TMVW-t	MT20	4.0	5.0	1.50	1.75
E	TMVW-t	MT20	3.0	5.0		
F	TMW+w	MT20	2.0	4.0		
G	TS-t	MT20	5.0	6.0		
H	TMVW-t	MT20	3.0	5.0		
I	TMVW-t	MT20	4.0	5.0	1.50	1.75
J	TTVW+m	MT20	8.0	10.0	Edge	
K	TMVW+p	MT20	6.0	6.0	2.25	2.75
L	BMV1+p	MT20	3.0	4.0	2.00	0.25
M	BMVW-t	MT20	4.0	5.0	1.50	1.50
N	BMVW-t	MT20	6.0	6.0	1.75	1.50
O	BS-t	MT20	4.0	8.0		
P	BMVW-t	MT20	4.0	5.0	1.75	1.50
Q	BMVW-t	MT20	3.0	8.0		
R	BS-t	MT18HS	5.0	12.0		
S	BMVW-t	MT20	4.0	5.0	1.75	1.50
T	BMVW-t	MT20	5.0	6.0	1.75	1.50
U	BMVW-t	MT20	4.0	5.0	1.50	1.50
V	BMV1+p	MT20	3.0	4.0	2.00	0.75

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



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

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQD BRG
WT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
J	2496	0	2496	0	0	5-8	5-8
M	2496	0	2496	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
W	1752	1228 / 0	0 / 0	0 / 0	0 / 0	524 / 0	0 / 0
M	1752	1228 / 0	0 / 0	0 / 0	0 / 0	524 / 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 = 2.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY
APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S					W E B S				
MAX. FACTORED		FACTORED			MAX. FACTORED				
MEMB.	FORCE	VERT. LOAD	LC1	MAX	MAX.	MEMB.	FORCE	MAX	
	(LBS)	(PLF)	CSI (LC)		UNBRAC		(LBS)	CSI (LC)	
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0 / 30	-77.4	-77.4	0.10 (1)	10.00	V-C	-721 / 0	0.14 (1)	
B-C	-2414 / 0	-77.4	-77.4	0.17 (1)	4.25	C-U	0 / 3399	0.84 (1)	
C-D	-4829 / 0	-114.0	-114.0	0.37 (1)	3.66	U-D	-1631 / 0	0.32 (1)	
D-E	-6475 / 0	-114.0	-114.0	0.46 (1)	3.14	D-T	0 / 1927	0.48 (1)	
E-F	-7037 / 0	-114.0	-114.0	0.53 (1)	2.94	T-E	-871 / 0	0.17 (1)	
F-G	-7037 / 0	-114.0	-114.0	0.53 (1)	2.94	E-R	0 / 658	0.16 (1)	
G-H	-7037 / 0	-114.0	-114.0	0.53 (1)	2.94	R-F	-556 / 0	0.11 (1)	
H-I	-6478 / 0	-114.0	-114.0	0.46 (1)	3.14	R-H	0 / 655	0.16 (1)	
I-J	-4827 / 0	-114.0	-114.0	0.38 (1)	3.66	Q-H	-873 / 0	0.17 (1)	
J-K	-2411 / 0	-77.4	-77.4	0.17 (1)	4.25	Q-I	0 / 1932	0.48 (1)	
K-L	0 / 30	-77.4	-77.4	0.10 (1)	10.00	O-I	-1627 / 0	0.32 (1)	
W-B	-2487 / 0	0.0	0.0	0.28 (1)	5.37	O-J	0 / 3400	0.84 (1)	
M-K	-2484 / 0	0.0	0.0	0.28 (1)	5.37	N-J	-726 / 0	0.14 (1)	
						B-V	0 / 2120	0.52 (1)	
W-V	0 / 0	-26.9	-26.9	0.08 (4)	10.00	N-K	0 / 2117	0.52 (1)	
V-U	0 / 1914	-26.9	-26.9	0.22 (1)	10.00				
U-T	0 / 4829	-26.9	-26.9	0.46 (1)	10.00				
T-S	0 / 6475	-26.9	-26.9	0.60 (1)	10.00				
S-R	0 / 6475	-26.9	-26.9	0.60 (1)	10.00				
R-Q	0 / 6478	-26.9	-26.9	0.80 (1)	10.00				
Q-P	0 / 4827	-26.9	-26.9	0.94 (1)	10.00				
P-O	0 / 4827	-26.9	-26.9	0.94 (1)	10.00				
O-N	0 / 1912	-26.9	-26.9	0.42 (1)	10.00				
N-M	0 / 0	-26.9	-26.9	0.11 (4)	10.00				

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE
C	2-5-8	-90	-90	—	FRONT	VERT	TOTAL
J	31-6-8	-90	-90	—	FRONT	VERT	TOTAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL =	23.3	PSF
	DL =	3.0	PSF
BOT CH.	LL =	0.0	PSF
	DL =	7.3	PSF
TOTAL LOAD	=	33.6	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 = 2-5-8
END SETBACK = 4-4-4
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADD'L LOADS BASED ON 55 % OF GSL

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.13")
CALCULATED VERT. DEFL.(LL) = L/ 958 (0.43")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/ 542 (0.75")

CSI: TC=0.53/1.00 (E-F:1), BC=0.94/1.00 (O-Q:1),
WB=0.84/1.00 (J-O:1) SSI=0.21/1.00 (C-D: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
MT18HS	580	354	2729	1405	4191 2010

CONTINUED ON PAGE 2



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

WB - INDICATES BLOCKING REQUIRED

HANGERS NOTES
 1) SPECIAL HANGER(S) OR CONNECTION(S)
 REQUIRED TO SUPPORT CONCENTRATED
 LOAD(S) 90.5 lbs FACTORED DOWN AT 31-6-8,
 AND 90.5 lbs FACTORED DOWN AT 2-5-8 ON
 TOP CHORD. DESIGN FOR UNSPECIFIED
 CONNECTION(S) IS DELEGATED TO THE
 BUILDING DESIGNER.

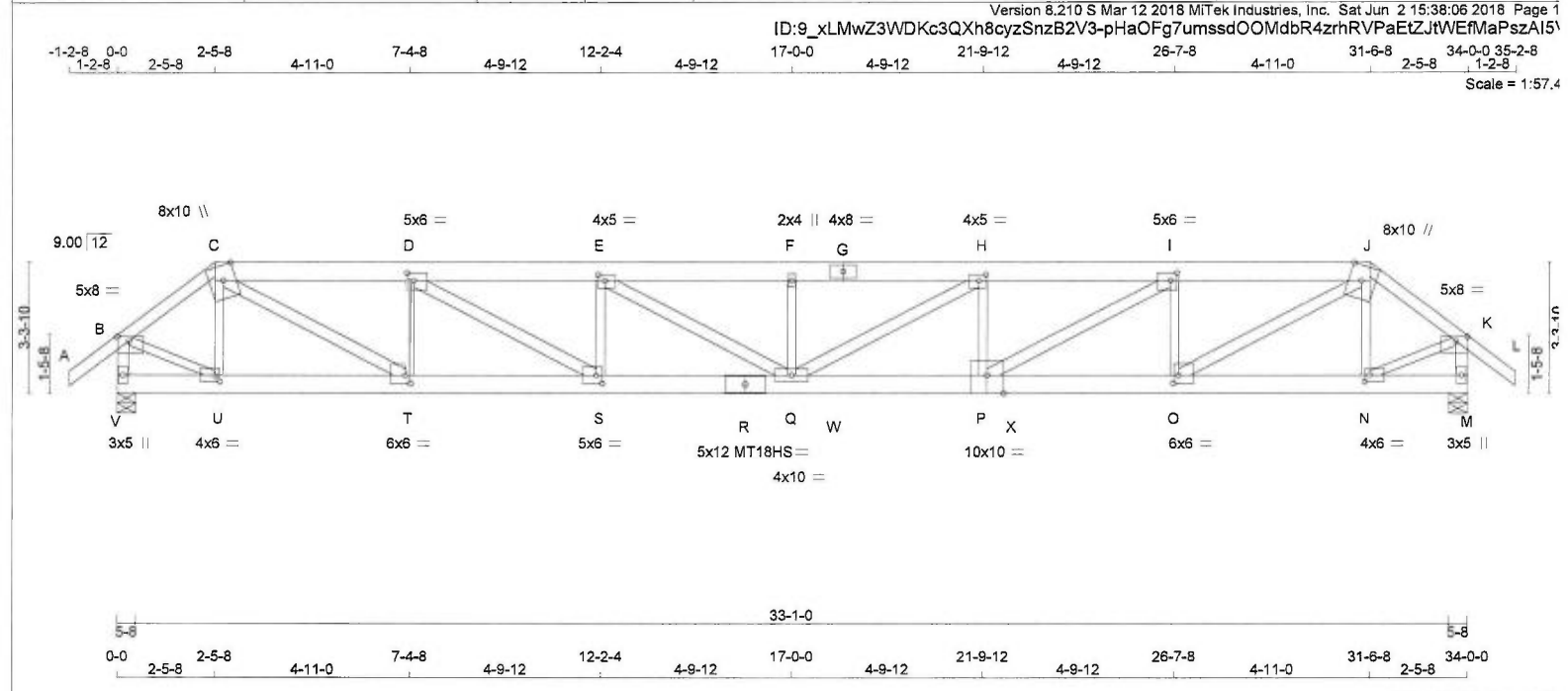
PLATE PLACEMENT TOL. = 0.250 inches

 PLATE ROTATION TOL. = 5.0 Deg.

 JSI GRIP= 0.89 (O) (INPUT = 0.90)
 JSI METAL= 0.94 (P) (INPUT = 1.00)

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 SPECIFICATIONS AND CRITERIA USED IN
 THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 179 lb

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
C - G	2x6	DRY	No.2
G - J	2x6	DRY	No.2
J - L	2x4	DRY	No.2
V - B	2x4	DRY	No.2
M - K	2x4	DRY	No.2
V - R	2x6	DRY	2100F 1.8E
R - P	2x6	DRY	2100F 1.8E
P - M	2x6	DRY	2100F 1.8E

ALL WEBS EXCEPT	2x3	DRY	No.2	SPF
C - T	2x4	DRY	No.2	SPF
D - S	2x4	DRY	No.2	SPF
E - Q	2x4	DRY	No.2	SPF
Q - H	2x4	DRY	No.2	SPF
P - I	2x4	DRY	No.2	SPF
O - J	2x4	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	8.0	1.25 3.50
C	TTWW+m	MT20	8.0	10.0	4.50 3.75
D	TMWW-t	MT20	5.0	6.0	2.25 2.00
E	TMWW-t	MT20	4.0	5.0	1.75 2.00
F	TMW+w	MT20	2.0	4.0	
G	TS-t	MT20	4.0	8.0	
H	TMWW-t	MT20	4.0	5.0	1.75 2.00
I	TMWW-t	MT20	5.0	6.0	2.25 2.00
J	TTWW+m	MT20	8.0	10.0	4.50 3.75
K	TMVW-p	MT20	5.0	8.0	1.25 3.50
M	BMV1+p	MT20	3.0	5.0	
N	BMWW-t	MT20	4.0	6.0	2.00 1.50
O	BMWW-t	MT20	6.0	6.0	2.50 1.50
P	BSWW-t	MT20	10.0	10.0	Edge 5.00
Q	BMWW-t	MT20	4.0	10.0	
R	BS-t	MT18HS	5.0	12.0	
S	BMWW-t	MT20	5.0	6.0	2.50 1.75
T	BMWW-t	MT20	6.0	6.0	2.50 1.50
U	BMWW-t	MT20	4.0	6.0	2.00 1.50

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

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

BEARINGS		FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
V	2500	0	2500	0	0	5-8	5-8		
M	2747	0	2747	0	0	5-8	5-8		

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	1755	1223 / 0	0 / 0	0 / 0	0 / 0	533 / 0	0 / 0
M	1930	1341 / 0	0 / 0	0 / 0	0 / 0	589 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				CHORDS				WEBS			
TOTAL LOAD CASES: (4)				MAX. FACTORED FORCE (LBS)		FACTORED VERT. LOAD LC1 MAX. (LBS)		MAX. FACTORED FORCE (LBS)		MAX. FACTORED VERT. LOAD LC1 MAX. (LBS)	
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH
A-B	0 / 30	-77.4	-77.4 0.10 (1)	10.00	U-C	-686 / 0	0.13 (1)				
B-C	-2507 / 0	-77.4	-77.4 0.17 (1)	4.18	C-T	0 / 3850	0.68 (1)				
C-D	-5316 / 0	-77.4	-77.4 0.35 (1)	3.55	T-D	-1894 / 0	0.36 (1)				
D-E	-7780 / 0	-77.4	-77.4 0.55 (1)	2.80	D-S	0 / 2863	0.51 (1)				
E-F	-9399 / 0	-77.4	-77.4 0.79 (1)	2.29	S-E	-1322 / 0	0.25 (1)				
F-G	-9399 / 0	-77.4	-77.4 0.86 (1)	2.20	E-Q	0 / 1880	0.33 (1)				
G-H	-9399 / 0	-112.8	-112.8 0.86 (1)	2.20	Q-F	-402 / 0	0.08 (1)				
H-I	-8714 / 0	-77.4	-77.4 0.67 (1)	2.53	Q-H	0 / 795	0.14 (1)				
I-J	-5977 / 0	-77.4	-77.4 0.41 (1)	3.31	P-H	-858 / 0	0.16 (1)				
J-K	-2768 / 0	-77.4	-77.4 0.19 (1)	3.99	P-I	0 / 3179	0.56 (1)				
K-L	0 / 30	-77.4	-77.4 0.10 (1)	10.00	O-I	-2046 / 0	0.39 (1)				
V-B	-2510 / 0	0.0	0.0 0.28 (1)	5.35	O-J	0 / 4378	0.77 (1)				
M-K	-2751 / 0	0.0	0.0 0.31 (1)	5.13	N-J	-798 / 0	0.15 (1)				
					B-U	0 / 2176	0.54 (1)				
					N-K	0 / 2403	0.59 (1)				
V-U	0 / 0	-18.2	-18.2 0.03 (1)	10.00							
U-T	0 / 1990	-18.2	-18.2 0.14 (1)	10.00							
T-S	0 / 5316	-18.2	-18.2 0.33 (1)	10.00							
S-R	0 / 7780	-18.2	-18.2 0.51 (1)	10.00							
R-Q	0 / 7780	-18.2	-18.2 0.51 (1)	10.00							
Q-W	0 / 8714	-18.2	-18.2 0.56 (1)	10.00							
W-P	0 / 8714	-26.9	-26.9 0.56 (1)	10.00							
P-X	0 / 5977	-18.2	-18.2 0.47 (1)	10.00							
X-O	0 / 5977	-18.2	-18.2 0.47 (1)	10.00							
O-N	0 / 2195	-18.2	-18.2 0.14 (1)	10.00							
N-M	0 / 0	-18.2	-18.2 0.03 (1)	10.00							

FACTORED CONCENTRATED LOADS (LBS)					
JT	LOC.	LC1	MAX-	MAX+	FACE DIR.
Q	17-1-4	-966	-966	—	FRONT VERT
X	22-6-12	-672	-672	—	FRONT VERT

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 = 7.3 PSF
TOTAL LOAD	= 33.6 PSF

SPACING = 24.0 IN. C/C

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

*** NON STANDARD GIRDER ***
ADDT'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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/ 883 (0.46")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/ 494 (0.83")

CSI: TC=0.86/1.00 (F-H:1) , BC=0.56/1.00 (P-Q:1) ,
WB=0.77/1.00 (J-O:1) , SS=0.42/1.00 (O-P: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	822	2284 1656
MT18HS	580	354	2729	1405	4191 2010

CONTINUED ON PAGE 2



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



JOB NAME	TRUSS NAME	QUANTITY	PLY	JOB DESC.	GREEN YORK HOMES - GRANELLI HOME CORP - CELESTIAL 1 ELEV 1	DRWG NO.
NE0618-009	G02	1	1	TRUSS DESC.		PAGE 6 OF 32

Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Sat Jun 2 15:38:06 2018 Page 2
ID:9_xLMwZ3WDKc3QXh8cyzSnzB2V3-pHaOFg7umssdOOMdbR4zrhRVPaEtZJtWEfMaPszAI5\

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
V	BMV1+p	MT20	3.0	5.0		

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

HANGERS NOTES

- 1) SPECIAL HANGER(S) OR CONNECTION(S)
REQUIRED TO SUPPORT CONCENTRATED
LOAD(S) 966.4 lbs FACTORED DOWN AT 17'-1-4,"
AND 671.8 lbs FACTORED DOWN AT 22'-6-12" ON
BOTTOM CHORD. DESIGN FOR UNSPECIFIED
CONNECTION(S) IS DELEGATED TO THE
BUILDING DESIGNER.

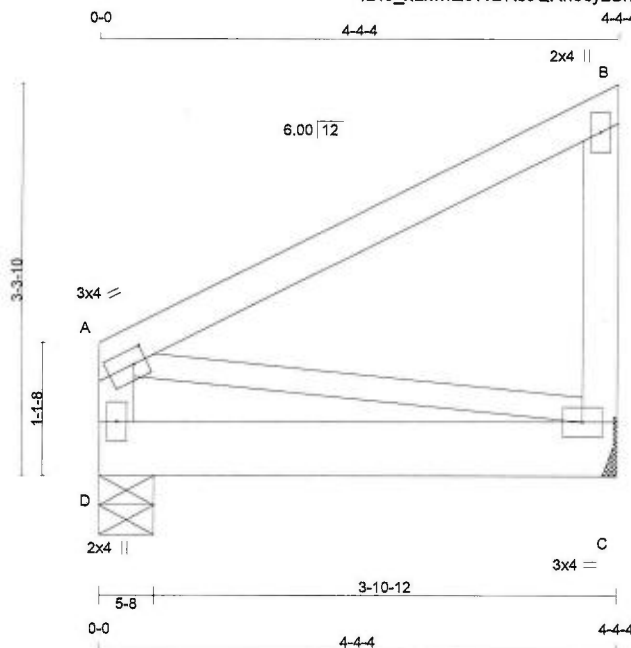
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.90)
JSI METAL= 0.97 (P) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
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THE DESIGN OF THIS COMPONENT.





Scale = 1:19.4

TOTAL WEIGHT = 20 lb
[M]

LUMBER					DESCR
N. L. G. A. RULES					
CHORDS	SIZE		LUMBER		
A - B	2x4	DRY	No.2	SPF	
C - B	2x4	DRY	No.2	SPF	
D - A	2x4	DRY	No.2	SPF	
D - C	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-t	MT20	3.0	4.0	1.50 1.25
B	TMV+p	MT20	2.0	4.0	
C	BMVW1-t	MT20	3.0	4.0	
D	BMV1+p	MT20	2.0	4.0	

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
	VERT	HORZ	DOWN	HORZ	IN-SX	IN-SX	IN-SX	IN-SX
C	967	0	967	0	0	MECHANICAL		
D	967	0	967	0	0	5-8	5-8	

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

UNFACTORED REACTIONS

JT	1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	
C	679	471 / 0	0 / 0	0 / 0	0 / 0	208 / 0	0 / 0	
D	679	471 / 0	0 / 0	0 / 0	0 / 0	208 / 0	0 / 0	

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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				WEBS		FACTORED	
	MAX.	FORCE	VERT.	LOAD	LC1	MAX	MEMB.	FORCE	MAX	
		(LBS)		(PLF)	CSI (LC)	UNBRAC			(LBS)	CSI (LC)
FR-TO			FROM	TO		LENGTH	FR-TO			
A-B	0 / 0		-77.4	-77.4	0.27 (1)	10.00	A-C	0 / 0	0.00 (1)	
C-B	-168 / 0		0.0	0.0	0.03 (1)	7.81				
D-A	-168 / 0		0.0	0.0	0.02 (1)	7.81				
D-C	0 / 0		-366.8	-366.8	0.64 (1)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 PSF

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStd Girder
START DISTANCE = 0-0
START SPAN CARRIED = 17-0-8
END DISTANCE = 4-4-4
END SPAN CARRIED = 17-0-8
END WALL WIDTH = 5-8
APPLIED TO BACK 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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/586 (0.09")

CSI: TC=0.27/1.00 (A-B:1), BC=0.64/1.00 (C-D:1),
WB=0.00/1.00 (A-C:1), SSI=0.53/1.00 (C-D: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

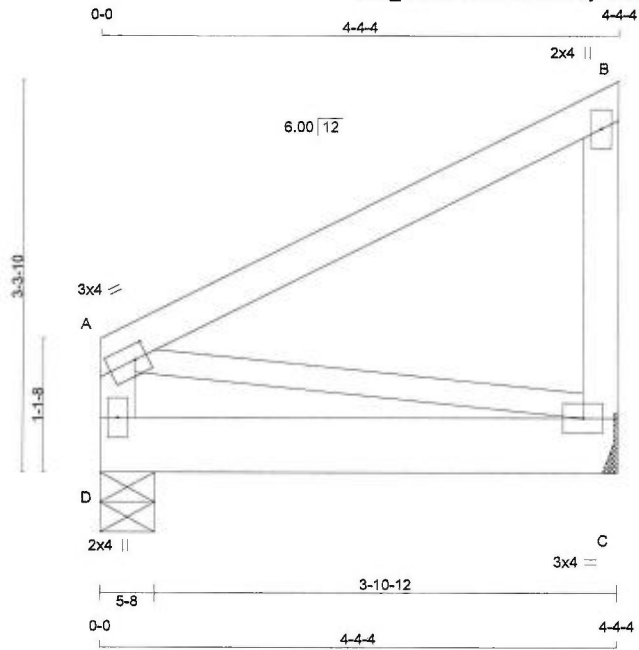


READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

JSI GRIP= 0.17 (C) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
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THE DESIGN OF THIS COMPONENT.





Scale = 1:19.4

TOTAL WEIGHT = 20 lb
[M]

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
C - B	2x4	DRY	No.2	SPF
D - A	2x4	DRY	No.2	SPF
D - C	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-t	MT20	3.0	4.0	1.50	1.25
B	TMV+p	MT20	2.0	4.0		
C	BMVW1-t	MT20	3.0	4.0		
D	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
C	672	0	672	0
D	672	0	672	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	472	327 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0
D	472	327 / 0	0 / 0	0 / 0	0 / 0	145 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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	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)
FR-TO								
A-B	0 / 0	-77.4	-77.4	0.27 (1)	10.00	A-C	0 / 0	0.00 (1)
C-B	-168 / 0	0.0	0.0	0.03 (1)	7.81			
D-A	-168 / 0	0.0	0.0	0.02 (1)	7.81			
D-C	0 / 0	-231.4	-231.4	0.40 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	23.3	PSF
DL	=	3.0	PSF	
BOT CH.	LL	=	0.0	PSF
DL	=	7.3	PSF	
TOTAL LOAD	=	33.6	PSF	

SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder
START DISTANCE = 0-0
START SPAN CARRIED = 11-4-8
END DISTANCE = 4-4-4
END SPAN CARRIED = 11-4-8
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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/931 (0.06")

CSI: TC=0.27/1.00 (A-B:1), BC=0.40/1.00 (C-D:1),
WB=0.00/1.00 (A-C:1), SSI=0.33/1.00 (C-D: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

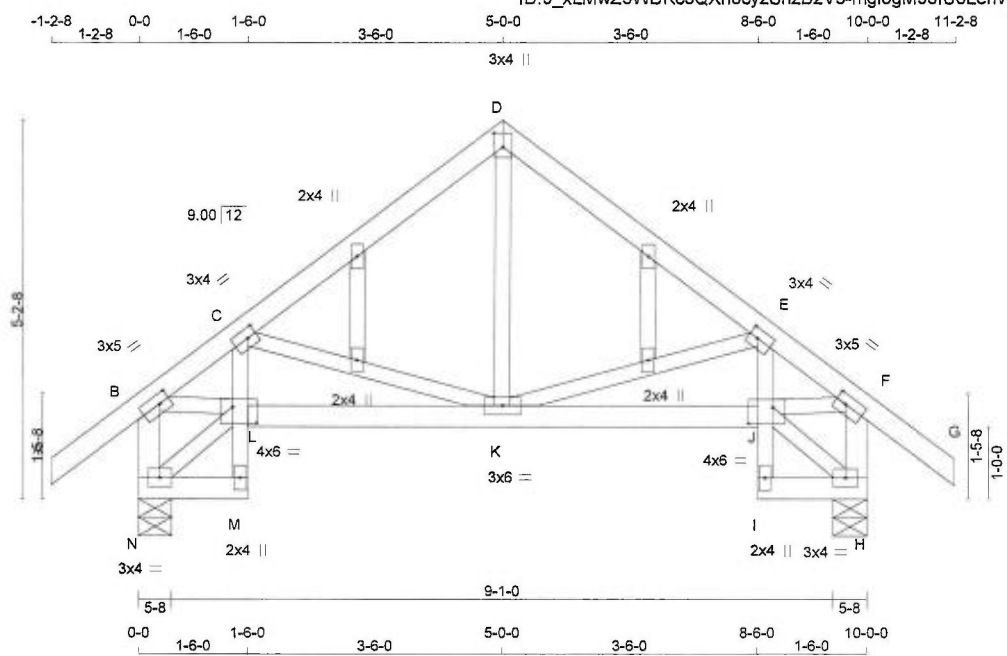


READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

JSI GRIP= 0.17 (C) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)

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





TOTAL WEIGHT = 50 T

[M/F]

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

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	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-t	MT20	3.0	5.0	1.50	1.75
H	BMVW1-t	MT20	3.0	4.0		
I	BMV+p	MT20	2.0	4.0		
J	BMVWW-t	MT20	4.0	6.0	2.75	4.00
K	BMVWW-t	MT20	3.0	6.0		
L	BMVWW-t	MT20	4.0	6.0	2.75	4.00
M	BMV+p	MT20	2.0	4.0		
N	BMVW1-t	MT20	3.0	4.0		
O, P, Q, R						
O	NP+w	MT20	2.0	4.0		

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		
N	578	0	578	0	0	5-8	5-8		
H	578	0	578	0	0	5-8	5-8		
UNFACTORED REACTIONS									
	1ST LCASE	MAX./MIN. COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
N	404	293 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0		
H	404	293 / 0	0 / 0	0 / 0	0 / 0	111 / 0	0 / 0		
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, 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					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH
FR-TO		FROM	TO		FR-TO		FROM	TO	
A-B	0 / 30	-77.4	-77.4	0.09 (1)	10.00	K-D	0 / 207	0.05 (1)	0.05 (1)
B-C	-645 / 0	-77.4	-77.4	0.08 (1)	6.25	K-E	-240 / 0	0.06 (1)	0.06 (1)
C-D	-384 / 0	-77.4	-77.4	0.12 (1)	6.25	C-K	-240 / 0	0.06 (1)	0.06 (1)
D-E	-384 / 0	-77.4	-77.4	0.12 (1)	6.25	N-L	-11 / 0	0.00 (1)	0.00 (1)
E-F	-645 / 0	-77.4	-77.4	0.08 (1)	6.25	B-L	0 / 518	0.12 (1)	0.12 (1)
F-G	0 / 30	-77.4	-77.4	0.09 (1)	10.00	J-H	-11 / 0	0.00 (1)	0.00 (1)
N-B	-559 / 0	0.0	0.0	0.06 (1)	7.81	J-F	0 / 518	0.12 (1)	0.12 (1)
H-F	-559 / 0	0.0	0.0	0.06 (1)	7.81				
N-M	0 / 9	-18.2	-18.2	0.01 (4)	10.00				
M-L	0 / 14	0.0	0.0	0.03 (1)	10.00				
L-C	0 / 38	0.0	0.0	0.03 (1)	10.00				
L-K	0 / 526	-18.3	-18.3	0.12 (1)	10.00				
K-J	0 / 526	-18.3	-18.3	0.12 (1)	10.00				
I-J	0 / 14	0.0	0.0	0.03 (1)	10.00				
J-E	0 / 38	0.0	0.0	0.03 (1)	10.00				
I-H	0 / 9	-18.2	-18.2	0.01 (4)	10.00				

DESIGN CRITERIA			
SPECIFIED LOADS:			
TOP CH.	LL	= 23.3	PSF
	DL	= 3.0	PSF
BOT CH.	LL	= 0.0	PSF
	DL	= 7.3	PSF
TOTAL LOAD	=	33.6	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 (0.33")	
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")	
ALLOWABLE DEFL.(TL)= L/360 (0.33")	
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")	
CSI: TC=0.12/1.00 (C-D:1), BC=0.12/1.00 (K-L:1), WB=0.12/1.00 (B-L:1), SSI=0.10/1.00 (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	

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

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

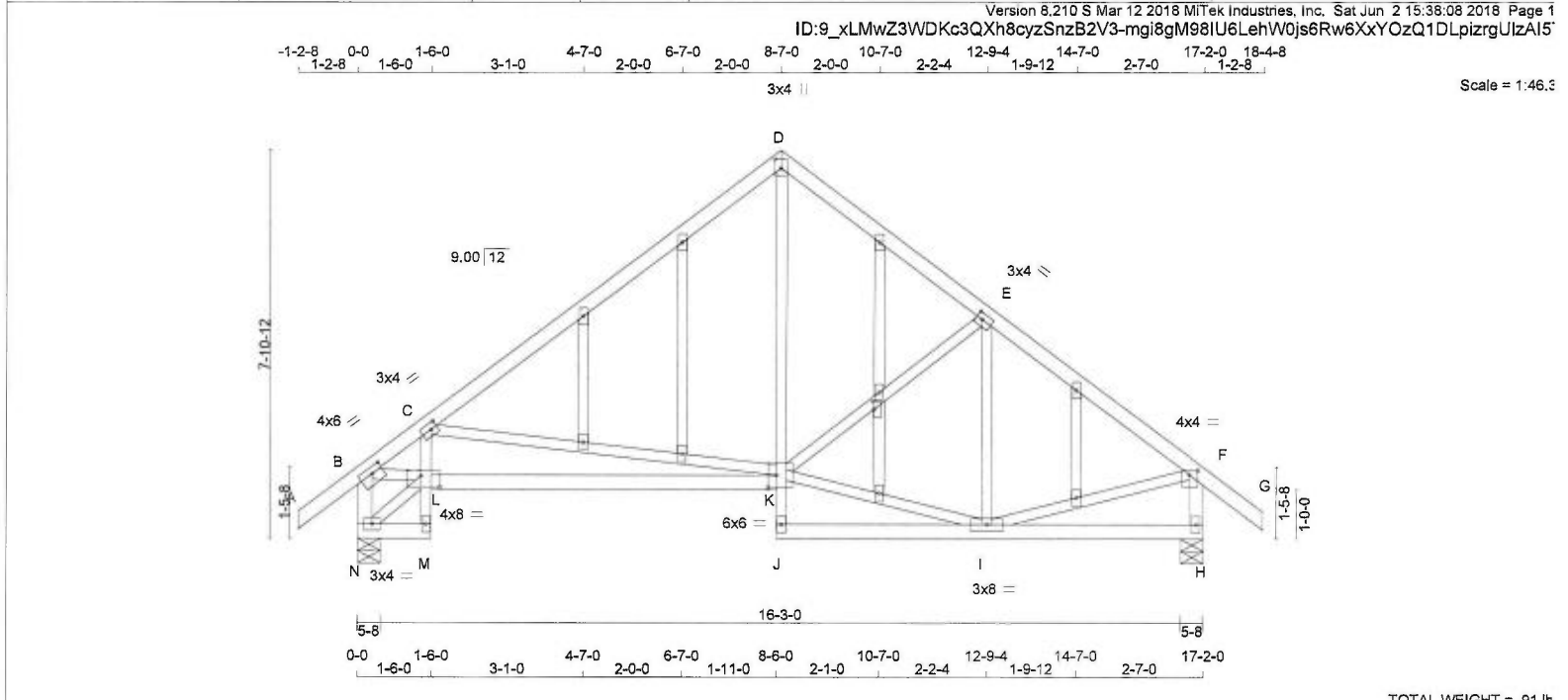
PLATE PLACEMENT TOL. = 0.250 inches	
PLATE ROTATION TOL. = 5.0 Deg.	
JSI GRIP= 0.76 (B) (INPUT = 0.90)	
JSI METAL= 0.22 (B) (INPUT = 1.00)	

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



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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER DESCR.				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA				TOTAL TRUSS = 971L [M]F		
A - D	2x4	DRY	No.2	SPF	BEARINGS										SPECIFIED LOADS:				TOP CH. LL = 23.3 PSF	
D - G	2x4	DRY	No.2	SPF	FACTORED GROSS REACTION										MAXIMUM FACTORED GROSS REACTION				DL = 3.0 PSF	
N - B	2x4	DRY	No.2	SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 0.0 PSF							
H - F	2x4	DRY	No.2	SPF	H	917	0	917	0	0	5-8	5-8	DL = 7.3 PSF							
N - M	2x4	DRY	No.2	SPF	N	925	0	925	0	0	5-8	5-8	TOTAL LOAD = 33.6 PSF							
M - C	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C					
L - K	2x4	DRY	No.2	SPF	1ST LCASE MAX./MIN. COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010					
J - D	2x3	DRY	No.2	SPF	JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL	THIS DESIGN COMPLIES WITH:							
J - H	2x4	DRY	No.2	SPF	H	642	458 / 0	0 / 0	0 / 0	0 / 0	184 / 0	0 / 0	- PART 9 OF OBC 2012, CBC 2012, ABC 2014							
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	N	647	462 / 0	0 / 0	0 / 0	0 / 0	185 / 0	0 / 0	- CSA 086-09							
ALL GABLE WEBS	2x3	DRY	No.2	SPF	BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, N										- TPIC 2011					
DRY: SEASONED LUMBER.					BRACING										DESIGN ASSUMPTIONS					
GABLE STUDS SPACED AT 2-0-0 OC.					TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.99 FT.										- OVERHANG NOT TO BE ALTERED OR CUT OFF.					
					MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										(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					
					ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										ALLOWABLE DEFL.(LL)= L/360 (0.57")					
					LOADING										CALCULATED VERT. DEFL.(LL) = L/999 (0.02")					
					TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(TL)= L/360 (0.57")					
					CHORDS										CALCULATED VERT. DEFL.(TL) = L/999 (0.16")					
					MAX. FACTORED MEMB. FORCE (LBS)										CSI: TC=0.50/1.00 (C-D:1), BC=0.36/1.00 (K-L:1), WB=0.78/1.00 (C-K:1), SSI=0.21/1.00 (C-D:1)					
					FACTORED VERT. LOAD LC1 MAX (PLF)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10					
					MAX. FACTORED WEBS MEMB. FORCE (LBS)										COMP=1.10 SHEAR=1.10 TENS= 1.10					
					MAX. FACTORED WEBS MEMB. FORCE (LBS)										COMPANION LIVE LOAD FACTOR = 0.50					
					FR-TO FROM TO LENGTH FR-TO										AUTOSOLVE RIGHT HEEL ONLY					
					A- B 0 / 30 -77.4 -77.4 0.09 (1) 10.00 C- K -725 / 0 0.78 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .					
					B- C -1401 / 0 -77.4 -77.4 0.41 (1) 4.99 K- I 0 / 661 0.15 (1)										NAIL VALUES					
					C- D -695 / 0 -77.4 -77.4 0.50 (1) 6.25 K- E -152 / 0 0.07 (1)										PLATE GRIP(DRY) SHEAR SECTION					
					D- E -688 / 0 -77.4 -77.4 0.18 (1) 6.25 L- E -227 / 11 0.08 (1)										(PSI) (PLI) (PLI)					
					E- F -787 / 0 -77.4 -77.4 0.19 (1) 6.25 I- F 0 / 669 0.15 (1)										MAX MIN MAX MIN MAX MIN					
					F- G 0 / 30 -77.4 -77.4 0.09 (1) 10.00 N- L -24 / 0 0.00 (1)										MT20 618 354 1667 822 2284 1656					
					N- B -898 / 0 0.0 0.0 0.09 (1) 7.81 B- L 0 / 1229 0.28 (1)										PLATE PLACEMENT TOL. = 0.250 inches					
					H- F -885 / 0 0.0 0.0 0.09 (1) 7.81										PLATE ROTATION TOL. = 5.0 Deg.					
					N- M 0 / 19 -18.2 -18.2 0.01 (4) 10.00										JSI GRIP= 0.89 (N) (INPUT = 0.90)					
					M- L 0 / 14 0.0 0.0 0.06 (1) 10.00										JSI METAL= 0.37 (B) (INPUT = 1.00)					
					L- C 0 / 76 0.0 0.0 0.06 (1) 10.00															
					L- K 0 / 1246 -18.2 -18.2 0.36 (1) 10.00															
					J- K 0 / 32 0.0 0.0 0.02 (1) 10.00															
					K- D 0 / 449 0.0 0.0 0.12 (1) 10.00															
					J- I 0 / 5 -18.2 -18.2 0.09 (4) 10.00															
					I- H 0 / 0 -18.2 -18.2 0.09 (4) 10.00															

LICENSED PROFESSIONAL ENGINEER

N.A. EL-MASRI

PROVINCIAL ENGINEER

ON

Jun 02, 2018

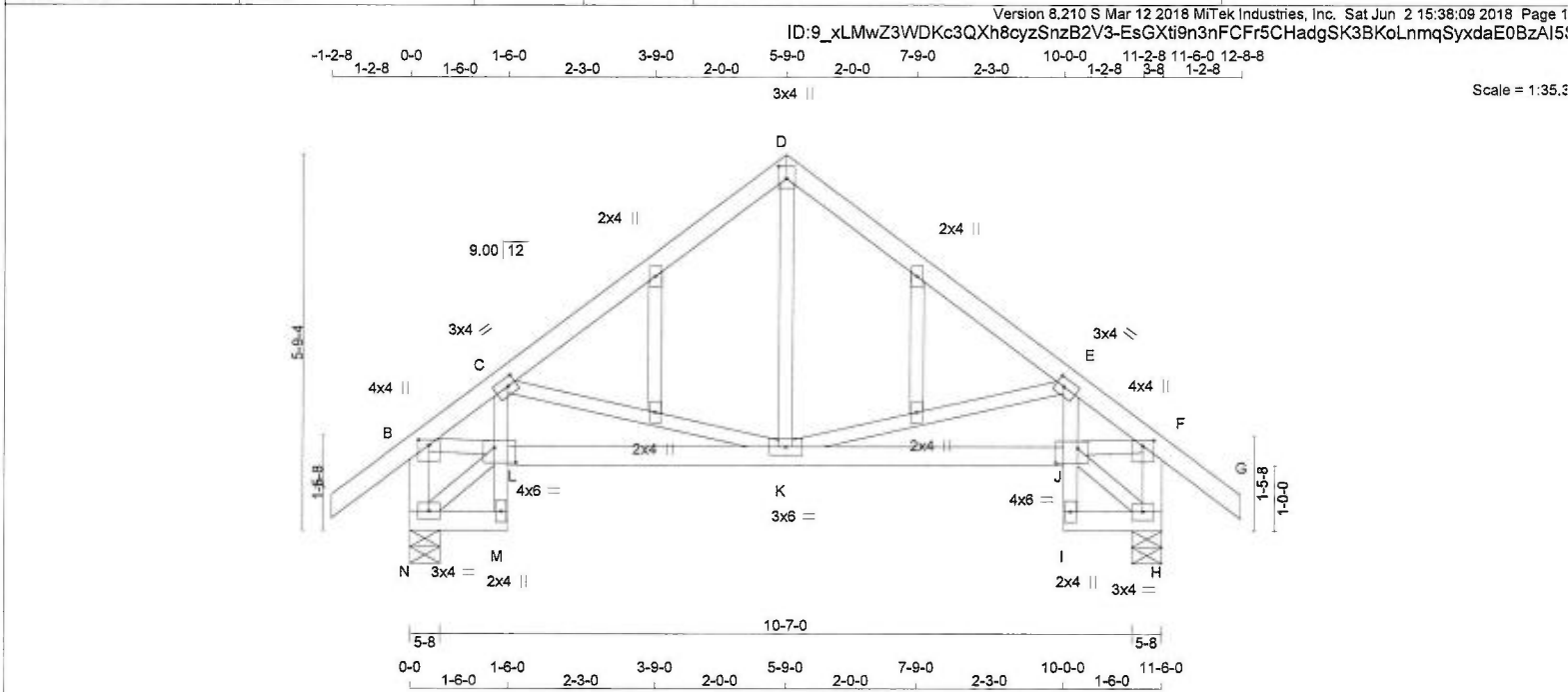
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

KOTT



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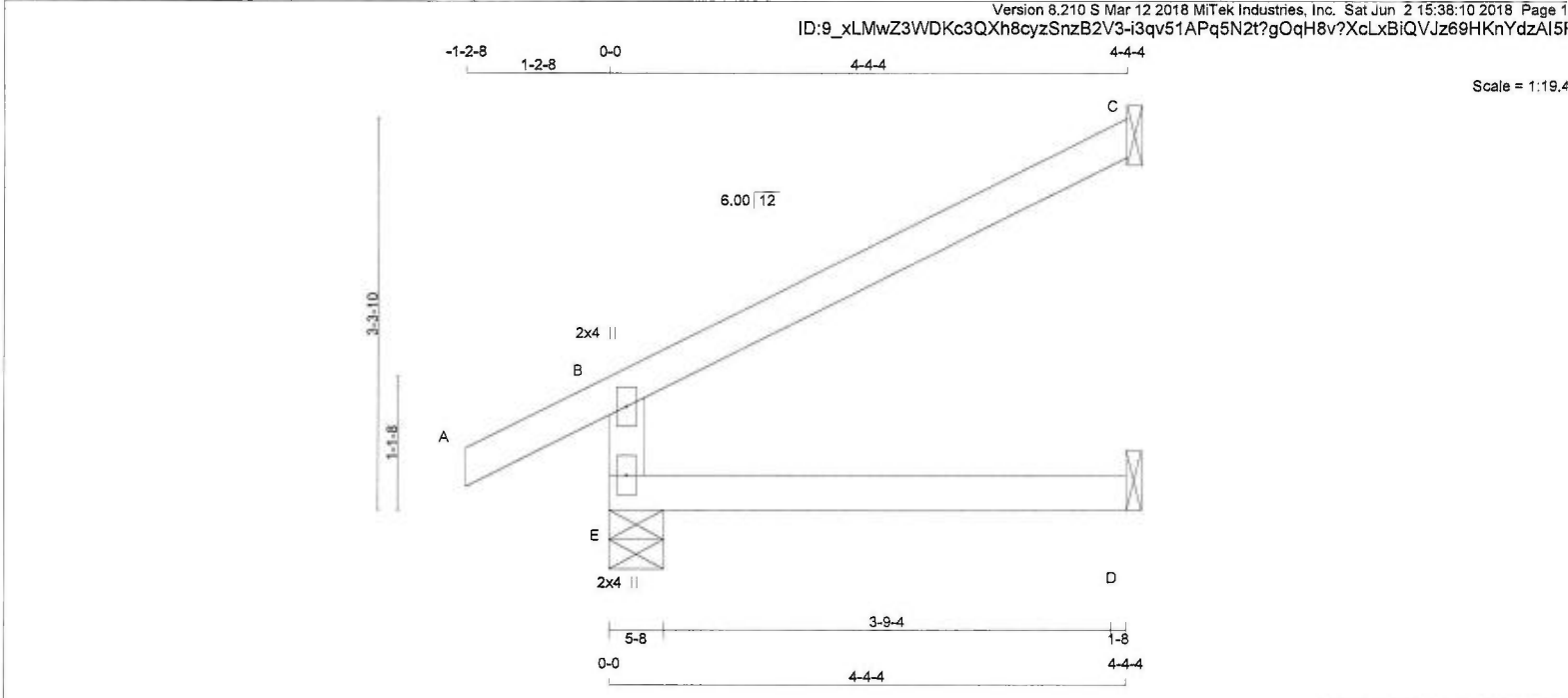
LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER
A - D 2x4 DRY No.2
D - G 2x4 DRY No.2
N - B 2x4 DRY No.2
H - F 2x4 DRY No.2
N - M 2x4 DRY No.2
M - C 2x3 DRY No.2
L - J 2x4 DRY No.2
I - E 2x3 DRY No.2
I - H 2x4 DRY No.2
ALL WEBS 2x3 DRY No.2 EXCEPT
ALL GABLE WEBS 2x3 DRY No.2 DRY: SEASONED LUMBER.
GABLE STUDS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

DESIGN CRITERIA
SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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, CBC 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 (0.38")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")
CSI: TC=0.18/1.00 (C-D:1), BC=0.16/1.00 (J-K:1), WB=0.15/1.00 (F-J:1), SSI=0.12/1.00 (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
AUTOSOLVE HEELS OFF
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656
PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.
JSI GRIP= 0.87 (B) (INPUT = 0.90)
JSI METAL= 0.23 (B) (INPUT = 1.00)

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER			
BEARINGS			
DESCR.	FACTORED	MAXIMUM FACTORED	INPUT
SPF	GROSS REACTION	GROSS REACTION	BRG
JT	VERT	HORZ	UPLIFT
N	650	0	0
H	650	0	0
UNFACTORED REACTIONS			
JT	1ST LCASE	MAX./MIN.	COMPONENT REACTIONS
N	454	328 / 0	0 / 0
H	454	328 / 0	0 / 0
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, 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			
MEMB.	MAX. FACTORED	FACTORED	WEBS
FR-TO	FORCE	VERT. LOAD LC1	MAX. MEMB.
	(LBS)	(PLF)	MAX. FACTORED
		CS1 (LC)	FORCE
			MAX
			CS1 (LC)
A-B	0 / 30	-77.4 -77.4 0.09 (1)	10.00
B-C	-789 / 0	-77.4 -77.4 0.13 (1)	6.25
C-D	-454 / 0	-77.4 -77.4 0.18 (1)	6.25
D-E	-454 / 0	-77.4 -77.4 0.18 (1)	6.25
E-F	-789 / 0	-77.4 -77.4 0.13 (1)	6.25
F-G	0 / 30	-77.4 -77.4 0.09 (1)	10.00
N-B	-629 / 0	0.0 0.0 0.07 (1)	7.81
H-F	-629 / 0	0.0 0.0 0.07 (1)	7.81
N-M	0 / 11	-18.2 -18.2 0.01 (4)	10.00
M-L	0 / 14	0.0 0.0 0.03 (1)	10.00
L-C	0 / 42	0.0 0.0 0.04 (1)	10.00
L-K	0 / 658	-18.2 -18.2 0.16 (1)	10.00
K-J	0 / 658	-18.2 -18.2 0.16 (1)	10.00
I-J	0 / 14	0.0 0.0 0.03 (1)	10.00
J-E	0 / 42	0.0 0.0 0.04 (1)	10.00
I-H	0 / 11	-18.2 -18.2 0.01 (4)	10.00

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TOTAL WEIGHT = 18 X 13 = 233.1 [M]

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

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	IN-SX	IN-SX
E	355	0	355	0	0	5-8	5-8	5-8	5-8
C	126	0	126	0	0	1-8	1-8	1-8	1-8
D	33	0	37	0	0	1-8	1-8	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	247	186 / 0	0 / 0	0 / 0	0 / 0	61 / 0	0 / 0
C	86	76 / 0	0 / 0	0 / 0	0 / 0	10 / 0	0 / 0
D	27	0 / 0	0 / 0	0 / 0	0 / 0	27 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO		FROM TO			FR-TO		
E-B	-309 / 0	0.0	0.0	0.06 (4)	7.81		
A-B	0 / 22	-77.4	-77.4	0.09 (1)	10.00		
B-C	-19 / 0	-77.4	-77.4	0.25 (1)	6.25		
E-D	0 / 0	-18.2	-18.2	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 = 7.3	PSF
TOTAL LOAD	= 33.6	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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.25/1.00 (B-C:1) , BC=0.07/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , 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

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= 0.18 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)

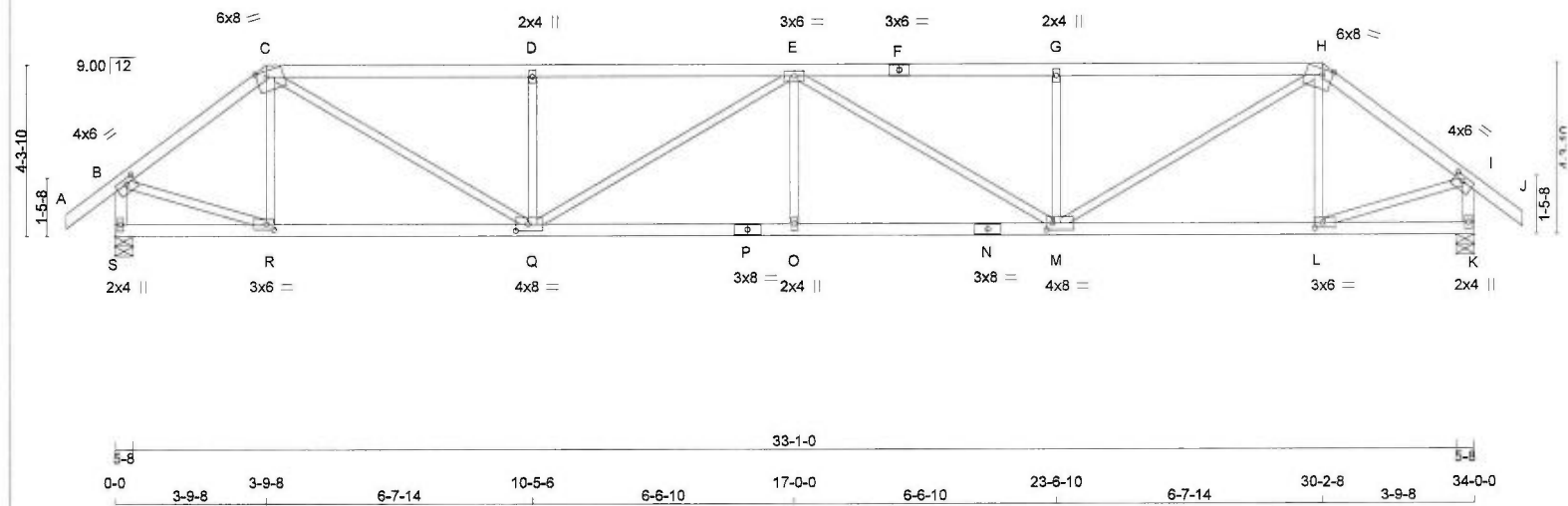
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Version 8.210 S Mar 12 2018 MiTek Industries, Inc. Sat Jun 2 15:38:11 2018 Page 1
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Scale = 1:57.4



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

A - C	2x4	DRY	No.2	SPF
C - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - J	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
K - I	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
ALL WEBS	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	TTWW-m	MT20	6.0	8.0	1.75	3.00
D	TMW-w	MT20	2.0	4.0		
E	TMWWW-t	MT20	3.0	6.0		
F	TS-t	MT20	3.0	6.0		
G	TMW-w	MT20	2.0	4.0		
H	TTWW-m	MT20	6.0	8.0	1.75	3.00
I	TMVW-t	MT20	4.0	6.0	1.50	2.75
K	BMV1+p	MT20	2.0	4.0		
L	BMWWW-t	MT20	3.0	6.0	1.50	2.25
M	BMWWW-t	MT20	4.0	8.0	2.00	1.75
N	BS-t	MT20	3.0	8.0		
O	BMW-w	MT20	2.0	4.0		
P	BS-t	MT20	3.0	8.0		
Q	BMWWW-t	MT20	4.0	8.0	2.00	3.75
R	BMW-w	MT20	3.0	6.0	1.50	2.25
S	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
S	1726 0	1726 0	5-8	5-8
K	1726 0	1726 0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX/MIN. SNOW	MAX/MIN. LIVE	MAX/MIN. PERM. LIVE	WIND	DEAD	SOIL
S	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
K	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.29 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 (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	MAX. FACTORED HORIZ. LOAD (LBS)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	0 / 30	-77.4 -77.4	0.09 (1)	10.00	R-C	-293 / 0	0.08 (1)
B-C	-1748 / 0	-77.4 -77.4	0.25 (1)	4.80	C-Q	0 / 1916	0.43 (1)
C-D	-3030 / 0	-77.4 -77.4	0.83 (1)	3.29	Q-D	-573 / 0	0.16 (1)
D-E	-3031 / 0	-77.4 -77.4	0.82 (1)	3.29	Q-E	-565 / 0	0.67 (1)
E-F	-3031 / 0	-77.4 -77.4	0.82 (1)	3.29	O-E	0 / 132	0.05 (4)
F-G	-3031 / 0	-77.4 -77.4	0.82 (1)	3.29	E-M	-565 / 0	0.67 (1)
G-H	-3030 / 0	-77.4 -77.4	0.83 (1)	3.29	M-G	-573 / 0	0.16 (1)
H-I	-1748 / 0	-77.4 -77.4	0.25 (1)	4.80	M-H	0 / 1916	0.43 (1)
I-J	0 / 30	-77.4 -77.4	0.09 (1)	10.00	L-H	-293 / 0	0.08 (1)
S-B	-1705 / 0	0.0 0.0	0.18 (1)	6.36	B-R	0 / 1453	0.33 (1)
K-I	-1705 / 0	0.0 0.0	0.18 (1)	6.36	L-I	0 / 1453	0.33 (1)
S-R	0 / 0	-18.2 -18.2	0.13 (4)	10.00			
R-Q	0 / 1388	-18.2 -18.2	0.30 (1)	10.00			
Q-P	0 / 3512	-18.2 -18.2	0.63 (1)	10.00			
P-O	0 / 3512	-18.2 -18.2	0.63 (1)	10.00			
O-N	0 / 3512	-18.2 -18.2	0.63 (1)	10.00			
N-M	0 / 3512	-18.2 -18.2	0.63 (1)	10.00			
M-L	0 / 1388	-18.2 -18.2	0.30 (1)	10.00			
L-K	0 / 0	-18.2 -18.2	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 = 7.3 PSF
TOTAL LOAD = 33.6 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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/990 (0.41")

CSI: TC=0.83/1.00 (G-H:1), BC=0.63/1.00 (O-Q:1), WB=0.67/1.00 (E-Q:1), SSI=0.24/1.00 (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.

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

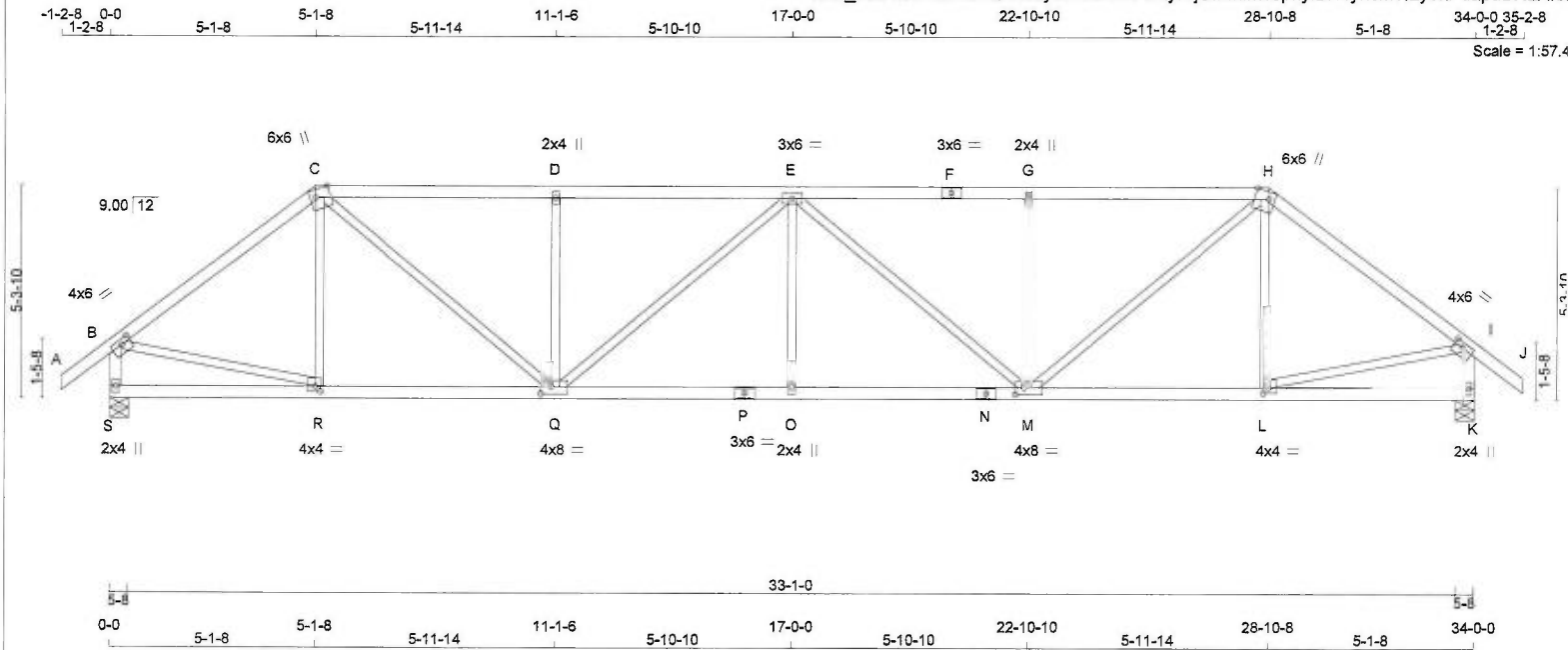
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (L) (INPUT = 0.90)
JSI METAL= 0.93 (N) (INPUT = 1.00)



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LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - C	2x4	DRY	No.2
C - F	2x4	DRY	No.2
F - H	2x4	DRY	No.2
H - J	2x4	DRY	No.2
S - B	2x4	DRY	No.2
K - I	2x4	DRY	No.2
S - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - K	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	4.0	6.0	1.50 2.75
C	TTWW+m	MT20	6.0	6.0	Edge 4.25
D	TMW+w	MT20	2.0	4.0	
E	TMWWW-t	MT20	3.0	6.0	
F	TS-t	MT20	3.0	6.0	
G	TMW+w	MT20	2.0	4.0	
H	TTWW+m	MT20	6.0	6.0	Edge 4.25
I	TMVW-t	MT20	4.0	6.0	1.50 2.75
K	BMV1+p	MT20	2.0	4.0	
L	BMWWW-t	MT20	4.0	4.0	1.50 1.50
M	BMWWW-t	MT20	4.0	8.0	2.00 2.50
N	BS-t	MT20	3.0	6.0	
O	BMW+w	MT20	2.0	4.0	
P	BS-t	MT20	3.0	6.0	
Q	BMWWW-t	MT20	4.0	8.0	2.00 3.00
R	BMWWW-t	MT20	4.0	4.0	1.50 1.50
S	BMV1+p	MT20	2.0	4.0	

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	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	GROSS REACTION	DOWN	UP	BRG
S	1726	0	1726	0	5-8
K	1726	0	1726	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX./MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
S	1210	852 / 0	0 / 0
K	1210	852 / 0	0 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 30	-77.4	-77.4 0.09 (1)	R-C	-195 / 32	0.08 (1)	
B-C	-1795 / 0	-77.4	-77.4 0.46 (1)	C-Q	0 / 1381	0.31 (1)	
C-D	-2490 / 0	-77.4	-77.4 0.57 (1)	Q-D	-515 / 0	0.22 (1)	
D-E	-2490 / 0	-77.4	-77.4 0.57 (1)	Q-E	-410 / 0	0.49 (1)	
E-F	-2490 / 0	-77.4	-77.4 0.57 (1)	O-E	0 / 121	0.04 (4)	
F-G	-2490 / 0	-77.4	-77.4 0.57 (1)	E-M	-410 / 0	0.49 (1)	
G-H	-2490 / 0	-77.4	-77.4 0.57 (1)	M-G	-515 / 0	0.22 (1)	
H-I	-1795 / 0	-77.4	-77.4 0.46 (1)	M-H	0 / 1381	0.31 (1)	
I-J	0 / 30	-77.4	-77.4 0.09 (1)	L-H	-195 / 32	0.08 (1)	
S-B	-1689 / 0	0.0	0.0 0.18 (1)	B-R	0 / 1467	0.33 (1)	
K-I	-1689 / 0	0.0	0.0 0.18 (1)	L-I	0 / 1467	0.33 (1)	
S-R	0 / 0	-18.2	-18.2 0.13 (4)				
R-Q	0 / 1430	-18.2	-18.2 0.31 (1)				
Q-P	0 / 2802	-18.2	-18.2 0.51 (1)				
P-O	0 / 2802	-18.2	-18.2 0.51 (1)				
O-N	0 / 2802	-18.2	-18.2 0.51 (1)				
N-M	0 / 2802	-18.2	-18.2 0.51 (1)				
M-L	0 / 1430	-18.2	-18.2 0.31 (1)				
L-K	0 / 0	-18.2	-18.2 0.13 (4)				

TOTAL WEIGHT = 2 X 138 = 276 lb

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.28")

CSI: TC=0.57/1.00 (C-D:1), BC=0.51/1.00 (O-Q:1), WB=0.49/1.00 (E-Q:1), SSI=0.22/1.00 (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)
MT20	618	354	1667	822	2284

PLATE PLACEMENT TOL. = 0.250 inches

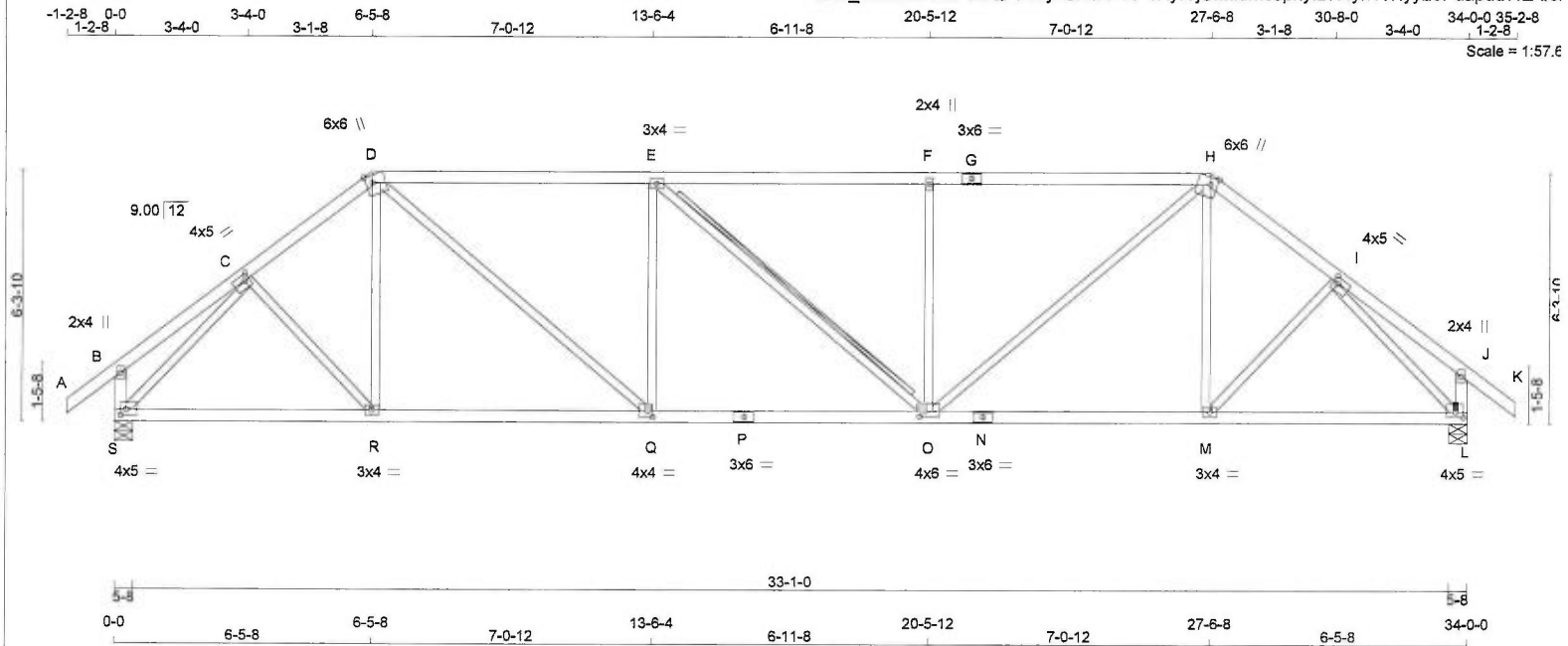
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (R) (INPUT = 0.90)
JSI METAL= 0.71 (P) (INPUT = 1.00)



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





TOTAL WEIGHT = $2 \times 142 = 285 \text{ lb}$

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 - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
S - B	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
S - P	2x4	DRY	No.2	SPF
P - N	2x4	DRY	No.2	SPF
N - L	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	BMWV-t	MT20	4.0	5.0	1.75 1.50
D	TTWVW+m	MT20	6.0	6.0	Edge 2.00
E	TMWV-t	MT20	3.0	4.0	
F	TMW+w	MT20	2.0	4.0	
G	TS-t	MT20	3.0	6.0	
H	TTWVW+m	MT20	6.0	6.0	Edge 2.00
I	TMWV-t	MT20	4.0	5.0	1.75 1.50
J	TMV+p	MT20	2.0	4.0	
L	BMWV1-t	MT20	4.0	5.0	1.50 2.25
M	BMWV-t	MT20	3.0	4.0	
N	BS-t	MT20	3.0	6.0	
O	BMWVWV-t	MT20	4.0	6.0	1.50 1.50
P	BS-t	MT20	3.0	6.0	
Q	BMWV-t	MT20	4.0	4.0	2.00 1.50
R	BMWV-t	MT20	3.0	4.0	
S	BMWV1-t	MT20	4.0	5.0	1.75 1.75

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



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	GROSS	HORZ	UPLIFT	IN-SX	IN-SX
S	1726	0	1726	0	0	5-8	5-8
L	1726	0	1726	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
S	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
L	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.75 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-O

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				
MAX. FACTORED		FACTORED			MAX. FACTORED			MAX. FACTORED	
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX		
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0/30	-77.4	-77.4	0.09 (1)	10.00	C-R	0/134	0.03 (1)	
B-C	0/14	-77.4	-77.4	0.11 (1)	10.00	R-D	0/94	0.03 (4)	
C-D	-1811/0	-77.4	-77.4	0.15 (1)	4.85	D-Q	0/1103	0.25 (1)	
D-E	-2275/0	-77.4	-77.4	0.77 (1)	3.75	Q-E	-589/0	0.37 (1)	
E-F	-2273/0	-77.4	-77.4	0.76 (1)	3.75	E-O	-2/0	0.00 (1)	
F-G	-2273/0	-77.4	-77.4	0.76 (1)	3.75	O-F	-587/0	0.37 (1)	
G-H	-2273/0	-77.4	-77.4	0.76 (1)	3.77	M-H	0/1100	0.25 (1)	
H-I	-1811/0	-77.4	-77.4	0.15 (1)	4.85	M-O	0/94	0.03 (4)	
I-J	0/14	-77.4	-77.4	0.11 (1)	10.00	M-I	0/134	0.03 (1)	
J-K	0/30	-77.4	-77.4	0.09 (1)	10.00	S-C	-1995/0	0.72 (1)	
S-B	-200/0	0.0	0.0	0.02 (1)	7.81	I-L	-1996/0	0.72 (1)	
L-J	-200/0	0.0	0.0	0.02 (1)	7.81				
S-R	0/1341	-18.2	-18.2	0.33 (1)	10.00				
R-Q	0/1434	-18.2	-18.2	0.34 (1)	10.00				
Q-P	0/2275	-18.2	-18.2	0.45 (1)	10.00				
P-O	0/2275	-18.2	-18.2	0.45 (1)	10.00				
O-N	0/1434	-18.2	-18.2	0.34 (1)	10.00				
N-M	0/1434	-18.2	-18.2	0.34 (1)	10.00				
M-L	0/1341	-18.2	-18.2	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 =	7.3	PSF
TOTAL LOAD	=	33.6	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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.24")

CSI: TC=0.77/1.00 (D-E:1), BC=0.45/1.00 (O-Q:1),
WB=0.72/1.00 (I-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)
	MAX	MIN	MAX	MIN	MAX MIN
MT20	618	354	1667	822	2284 1656

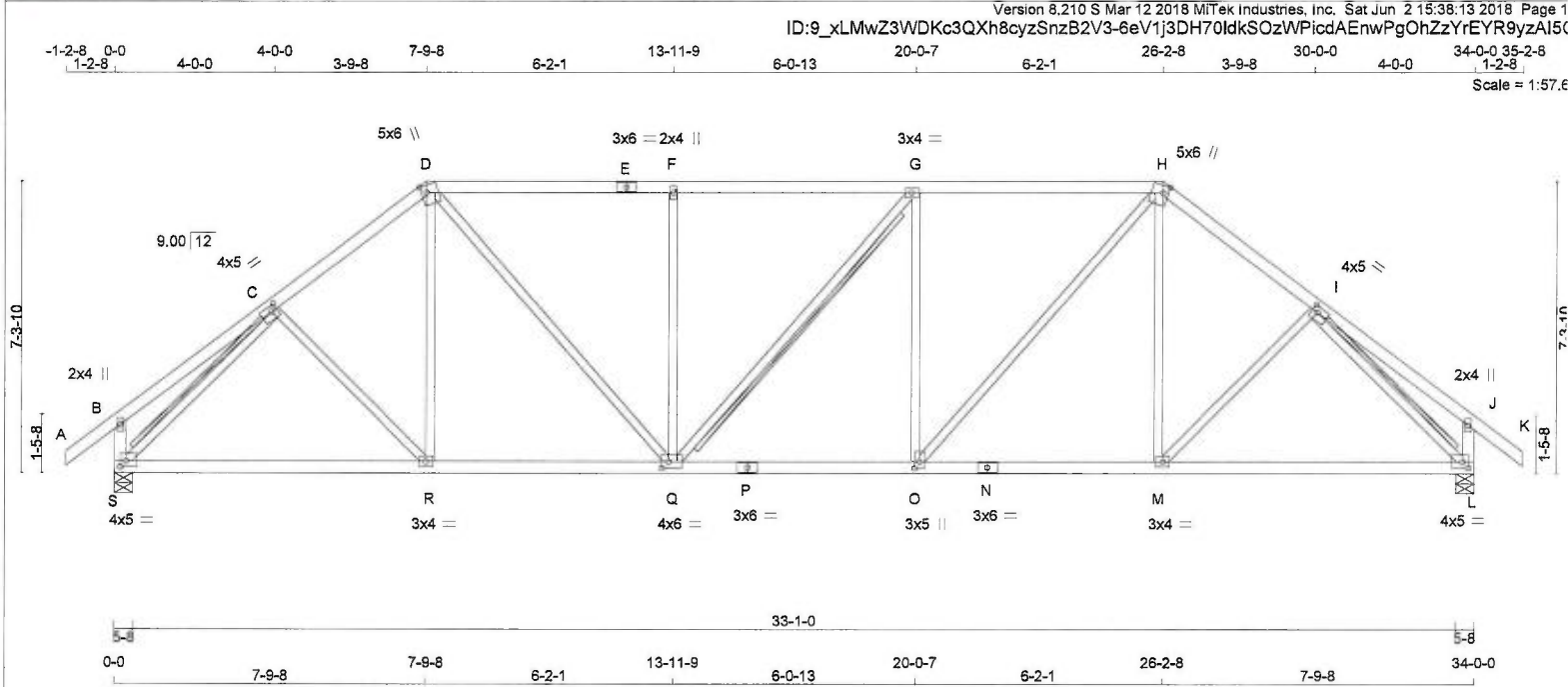
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (O) (INPUT = 0.90)
JSI METAL= 0.64 (P) (INPUT = 1.00)

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





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - E	2x4	DRY	No.2
E - H	2x4	DRY	No.2
H - K	2x4	DRY	No.2
S - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
S - P	2x4	DRY	No.2
P - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	4.0	5.0	1.75	1.75
D	TTWW+m	MT20	5.0	6.0	2.25	1.50
E	TS-t	MT20	3.0	6.0		
F	TMW+w	MT20	2.0	4.0		
G	TMWW-t	MT20	3.0	4.0		
H	TTWW+m	MT20	5.0	6.0	2.25	1.50
I	TMWW-t	MT20	4.0	5.0	1.75	1.75
J	TMV+p	MT20	2.0	4.0		
L	BMVW1-t	MT20	4.0	5.0	1.75	1.75
M	BMWW-t	MT20	3.0	4.0		
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	3.0	5.0	2.00	1.50
P	BS-t	MT20	3.0	6.0		
Q	BMWW-t	MT20	4.0	6.0	2.00	2.00
R	BMWW-t	MT20	3.0	4.0		
S	BMVW1-t	MT20	4.0	5.0	1.75	1.75



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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
S	1726	0	0	5-8
L	1726	0	0	5-8

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
S	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
L	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.27 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT G-Q, C-S, I-L

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. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 30	-77.4 -77.4	0.09 (1)	C-R	0 / 61	0.02 (4)	
B-C	0 / 19	-77.4 -77.4	0.17 (1)	R-D	0 / 132	0.04 (4)	
C-D	-1785 / 0	-77.4 -77.4	0.23 (1)	D-Q	0 / 817	0.18 (1)	
D-E	-1953 / 0	-77.4 -77.4	0.51 (1)	Q-F	-511 / 0	0.48 (1)	
E-F	-1953 / 0	-77.4 -77.4	0.51 (1)	Q-G	-3 / 0	0.00 (1)	
F-G	-1953 / 0	-77.4 -77.4	0.52 (1)	G-H	-513 / 0	0.48 (1)	
G-H	-1954 / 0	-77.4 -77.4	0.52 (1)	H-I	0 / 820	0.18 (1)	
H-I	-1785 / 0	-77.4 -77.4	0.23 (1)	I-J	0 / 131	0.04 (4)	
I-J	0 / 19	-77.4 -77.4	0.17 (1)	J-K	0 / 61	0.02 (4)	
J-K	0 / 30	-77.4 -77.4	0.09 (1)	K-L	-2008 / 0	0.50 (1)	
S-B	-218 / 0	0.0 0.0	0.02 (1)	L-L	-2008 / 0	0.50 (1)	
L-J	-218 / 0	0.0 0.0	0.02 (1)				

S-R	0 / 1391	-18.2 -18.2	0.36 (1)	10.00
R-Q	0 / 1412	-18.2 -18.2	0.36 (1)	10.00
Q-P	0 / 1954	-18.2 -18.2	0.37 (1)	10.00
P-O	0 / 1954	-18.2 -18.2	0.37 (1)	10.00
O-N	0 / 1412	-18.2 -18.2	0.36 (1)	10.00
N-M	0 / 1412	-18.2 -18.2	0.36 (1)	10.00
M-L	0 / 1391	-18.2 -18.2	0.36 (1)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 PSF

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.19")

CSI: TC=0.52/1.00 (G-H:1), BC=0.37/1.00 (O-Q:1), WB=0.50/1.00 (C-S: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 SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

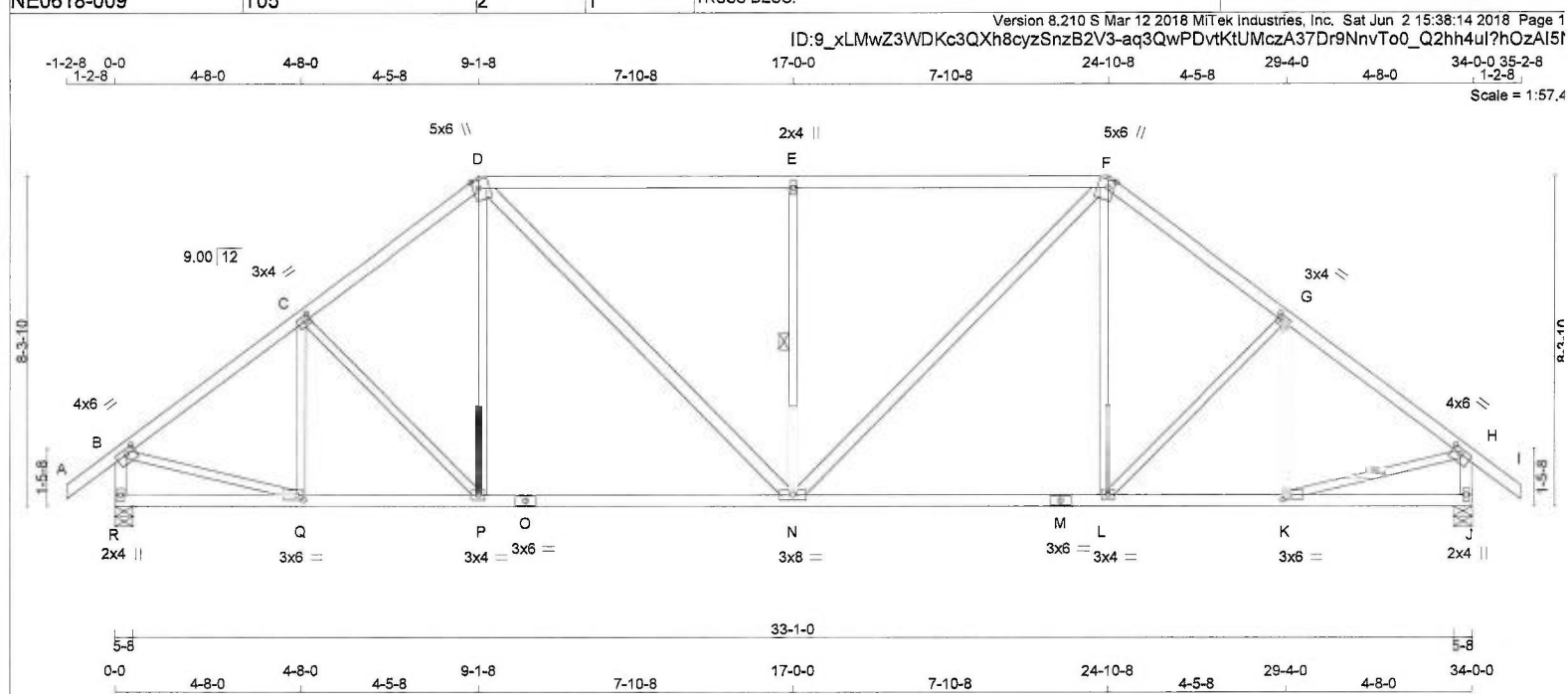
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (S) (INPUT = 0.90)
JSI METAL= 0.60 (C) (INPUT = 1.00)

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





TOTAL WEIGHT = 2 X 157 = 314 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					
R - B	2x4	DRY	No.2	SPF					
J - H	2x4	DRY	No.2	SPF					
R - O	2x4	DRY	No.2	SPF					
O - M	2x4	DRY	No.2	SPF					
M - J	2x4	DRY	No.2	SPF					
ALL WEBS	2x3	DRY	No.2	SPF					
EXCEPT									
D - N	2x4	DRY	No.2	SPF					
N - F	2x4	DRY	No.2	SPF					

DRY: SEASONED LUMBER.

PLATES (table is in inches)									
JT	TYPE	PLATES	W	LEN	Y	X			
B	TMVW-t	MT20	4.0	6.0	1.50	2.75			
C	TMWW-t	MT20	3.0	4.0	1.50	1.50			
D	TTWW+m	MT20	5.0	6.0	2.25	1.75			
E	TMW+w	MT20	2.0	4.0					
F	TTWW+m	MT20	5.0	6.0	2.25	1.75			
G	TMWW-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	BMWW-t	MT20	3.0	6.0	1.50	2.00			
L	BMWW-t	MT20	3.0	4.0					
M	BS-t	MT20	3.0	6.0					
N	BMWWW-t	MT20	3.0	8.0					
O	BS-t	MT20	3.0	6.0					
P	BMWW-t	MT20	3.0	4.0					
Q	BMWW-t	MT20	3.0	6.0	1.50	2.00			
R	BMV1+p	MT20	2.0	4.0					

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

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	DOWN	HORZ	UPLIFT	IN-SX	IN-SX								
R	1726	0	1726	0	0	5-8	5-8										
J	1726	0	1726	0	0	5-8	5-8										
UNFACTORED REACTIONS																	
			1ST LCASE		MAX./MIN. COMPONENT REACTIONS												
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL										
R	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0										
J	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 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 = 4.03 FT.
 MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 94 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING
 TOTAL LOAD CASES: (4)

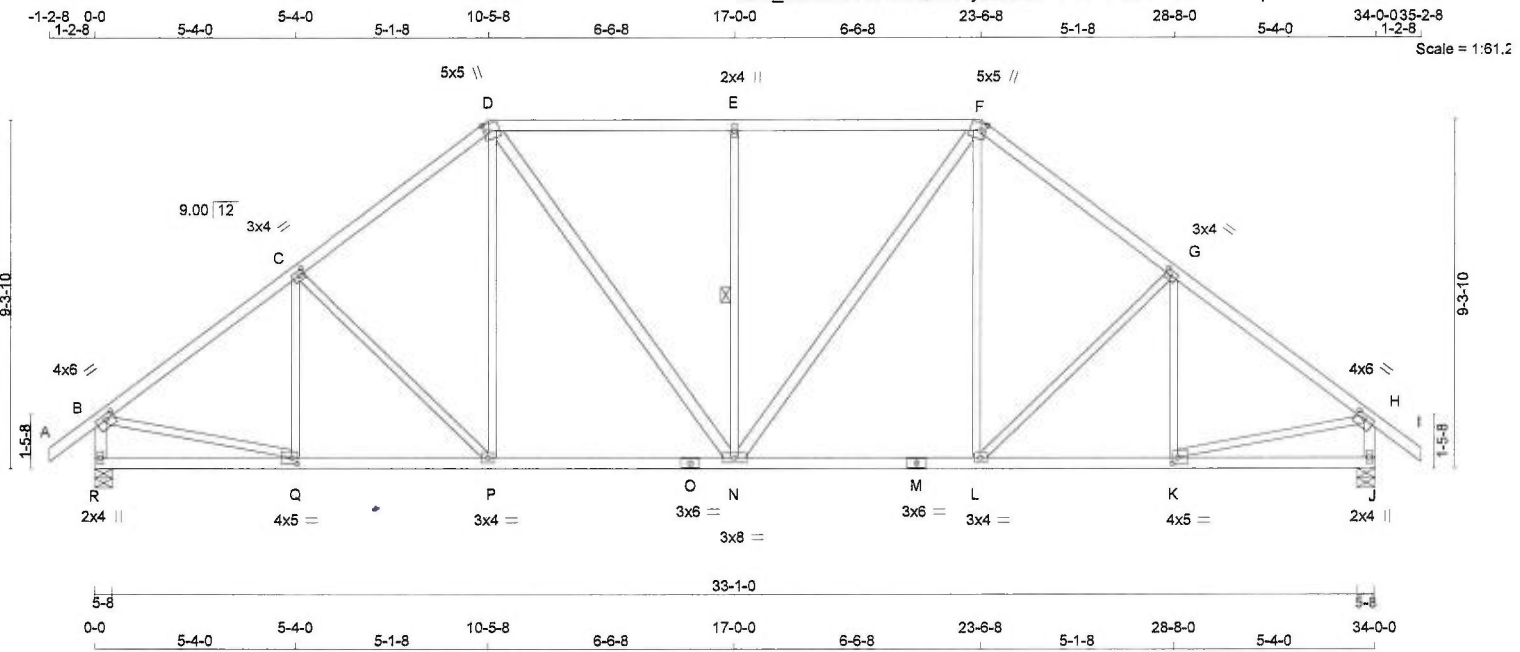
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 30	-77.4 -77.4	0.09 (1)	Q-C	-276 / 0	0.10 (1)	
B-C	-1798 / 0	-77.4 -77.4	0.25 (1)	C-P	-133 / 0	0.10 (1)	
C-D	-1734 / 0	-77.4 -77.4	0.24 (1)	P-D	0 / 214	0.05 (4)	
D-E	-1810 / 0	-77.4 -77.4	0.73 (1)	D-N	0 / 632	0.10 (1)	
E-F	-1810 / 0	-77.4 -77.4	0.73 (1)	N-E	-750 / 0	0.33 (1)	
F-G	-1734 / 0	-77.4 -77.4	0.24 (1)	N-F	0 / 632	0.10 (1)	
G-H	-1798 / 0	-77.4 -77.4	0.25 (1)	L-F	0 / 214	0.05 (4)	
H-I	0 / 30	-77.4 -77.4	0.09 (1)	L-G	-133 / 0	0.10 (1)	
R-B	-1687 / 0	0.0 0.0	0.17 (1)	K-G	-276 / 0	0.10 (1)	
J-H	-1687 / 0	0.0 0.0	0.17 (1)	B-Q	0 / 1500	0.34 (1)	
				K-H	0 / 1500	0.34 (1)	
R-Q	0 / 0	-18.2 -18.2	0.09 (4)				
Q-P	0 / 1458	-18.2 -18.2	0.33 (1)				
P-O	0 / 1367	-18.2 -18.2	0.35 (1)				
O-N	0 / 1367	-18.2 -18.2	0.35 (1)				
N-M	0 / 1367	-18.2 -18.2	0.35 (1)				
M-L	0 / 1367	-18.2 -18.2	0.35 (1)				
L-K	0 / 1458	-18.2 -18.2	0.33 (1)				
K-J	0 / 0	-18.2 -18.2	0.09 (4)				

DESIGN CRITERIA																										
SPECIFIED LOADS:																										
TOP CH.	LL	=	23.3	PSF																						
	DL	=	3.0	PSF																						
BOT CH.	LL	=	0.0	PSF																						
	DL	=	7.3	PSF																						
TOTAL LOAD	=	33.6	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 (1.13")																										
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")																										
ALLOWABLE DEFL.(TL)= L/360 (1.13")																										
CALCULATED VERT. DEFL.(TL) = L/999 (0.17")																										
CSI: TC=0.73/1.00 (D-E:1), BC=0.35/1.00 (L-N:1), WB=0.34/1.00 (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= 0.88 (J) (INPUT = 0.90)																										
JSI METAL= 0.49 (B) (INPUT = 1.00)																										



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





LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	No.2
D - F	2x4	DRY	No.2
F - I	2x4	DRY	No.2
R - B	2x4	DRY	No.2
J - H	2x4	DRY	No.2
R - O	2x4	DRY	No.2
O - M	2x4	DRY	No.2
M - J	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2
D - N	2x4	DRY	No.2
N - F	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	2.75
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	5.0	5.0	2.25	1.50
E	TMVW-w	MT20	2.0	4.0		
F	TTWW+m	MT20	5.0	5.0	2.25	1.50
G	TMVW-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	4.0	5.0	2.00	1.50
L	BMVW-t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-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	2.00	1.50
R	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
R	1726	0	1726	0	5-8	5-8
J	1726	0	1726	0	5-8	5-8

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
R	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0
J	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 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 = 4.65 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 = 78 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 30	-77.4 -77.4	0.09 (1)	Q-C	-213 / 23	0.10 (1)	
B-C	-1823 / 0	-77.4 -77.4	0.34 (1)	C-P	-237 / 0	0.25 (1)	
C-D	-1672 / 0	-77.4 -77.4	0.32 (1)	P-D	0 / 273	0.06 (1)	
D-E	-1585 / 0	-77.4 -77.4	0.47 (1)	D-N	0 / 459	0.07 (1)	
E-F	-1585 / 0	-77.4 -77.4	0.47 (1)	N-E	-620 / 0	0.35 (1)	
F-G	-1672 / 0	-77.4 -77.4	0.32 (1)	N-F	0 / 459	0.07 (1)	
G-H	-1823 / 0	-77.4 -77.4	0.34 (1)	L-F	0 / 273	0.06 (1)	
H-I	0 / 30	-77.4 -77.4	0.09 (1)	L-G	-237 / 0	0.25 (1)	
R-B	-1684 / 0	0.0 0.0	0.17 (1)	K-G	-213 / 23	0.10 (1)	
J-H	-1684 / 0	0.0 0.0	0.17 (1)	B-Q	0 / 1514	0.34 (1)	
				K-H	0 / 1514	0.34 (1)	
R-Q	0 / 0	-18.2 -18.2	0.11 (4)				
Q-P	0 / 1481	-18.2 -18.2	0.31 (1)				
P-O	0 / 1315	-18.2 -18.2	0.30 (1)				
O-N	0 / 1315	-18.2 -18.2	0.30 (1)				
N-M	0 / 1315	-18.2 -18.2	0.30 (1)				
M-L	0 / 1315	-18.2 -18.2	0.30 (1)				
L-K	0 / 1481	-18.2 -18.2	0.31 (1)				
K-J	0 / 0	-18.2 -18.2	0.11 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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 (1.13")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI: TC=0.47/1.00 (D-E:1) BC=0.31/1.00 (P-Q:1) WB=0.35/1.00 (E-N: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)
MAX MIN MAX MIN MAX MIN
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

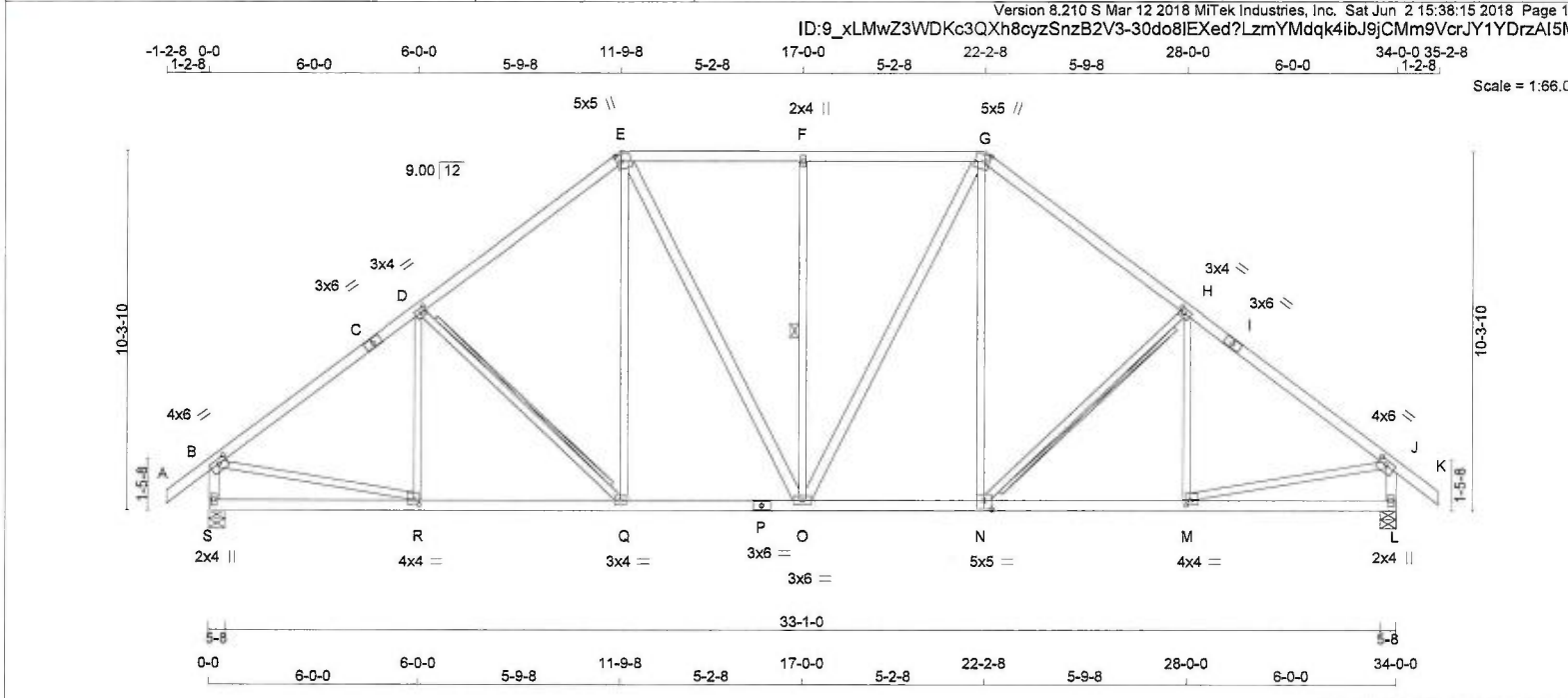
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90)
JSI METAL= 0.50 (B) (INPUT = 1.00)



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





TOTAL WEIGHT = 2 X 170 = 340 [M]F

LUMBER				DESCR.	
N. L. G. A. RULES				SPF	
CHORDS	SIZE	LUMBER			
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	
S - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
S - P	2x4	DRY	No.2	SPF	
P - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
ALL WEBS EXCEPT				SPF	
E - O	2x4	DRY	No.2	SPF	
O - G	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	2.75
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW+m	MT20	5.0	5.0	2.25	1.50
F	TMW+w	MT20	2.0	4.0		
G	TTWW+m	MT20	5.0	5.0	2.25	1.50
H	TMVW-t	MT20	3.0	4.0	1.50	1.50
I	TS-t	MT20	3.0	6.0		
J	TMVW-t	MT20	4.0	6.0	1.50	2.75
L	BMV1+p	MT20	2.0	4.0		
M	BMVW-t	MT20	4.0	4.0	1.50	1.50
N	BSWW-t	MT20	5.0	5.0	3.00	2.50
O	BMVW-t	MT20	3.0	6.0		
P	BS-t	MT20	3.0	6.0		
Q	BMVW-t	MT20	3.0	4.0		
R	BMVW-t	MT20	4.0	4.0	1.50	1.50
S	BMV1+p	MT20	2.0	4.0		

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

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		
S	1726	0	1726	0	0	5-8	5-8		
L	1726	0	1726	0	0	5-8	5-8		
UNFACTORED REACTIONS									
1ST LCASE	MAX./MIN. COMPONENT REACTIONS								
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
S	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0		
L	1210	852 / 0	0 / 0	0 / 0	0 / 0	358 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-O. DBS = 20-0-0 . CBF = 61 LBS.
2x4 DRY SPF No.2 T-BRACE AT D-Q, H-N

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.

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 / 30	-77.4 -77.4	0.09 (1)	10.00	R-D	-161 / 54	0.09 (1)
B-C	-1835 / 0	-77.4 -77.4	0.44 (1)	4.52	D-Q	-332 / 0	0.17 (1)
C-D	-1835 / 0	-77.4 -77.4	0.44 (1)	4.52	Q-E	0 / 328	0.07 (1)
D-E	-1604 / 0	-77.4 -77.4	0.40 (1)	4.80	E-O	0 / 327	0.05 (1)
E-F	-1409 / 0	-77.4 -77.4	0.29 (1)	5.18	O-F	-489 / 0	0.36 (1)
F-G	-1409 / 0	-77.4 -77.4	0.29 (1)	5.18	O-G	0 / 327	0.05 (1)
G-H	-1604 / 0	-77.4 -77.4	0.40 (1)	4.80	N-G	0 / 328	0.07 (1)
H-I	-1835 / 0	-77.4 -77.4	0.44 (1)	4.52	N-H	-332 / 0	0.17 (1)
I-J	-1835 / 0	-77.4 -77.4	0.44 (1)	4.52	M-H	-161 / 54	0.09 (1)
J-K	0 / 30	-77.4 -77.4	0.09 (1)	10.00	B-R	0 / 1520	0.34 (1)
S-B	-1680 / 0	0.0 0.0	0.17 (1)	6.41	M-J	0 / 1520	0.34 (1)
L-J	-1680 / 0	0.0 0.0	0.17 (1)	6.41			
S-R	0 / 0	-18.2 -18.2	0.16 (4)	10.00			
R-Q	0 / 1494	-18.2 -18.2	0.32 (1)	10.00			
Q-P	0 / 1258	-18.2 -18.2	0.26 (1)	10.00			
P-O	0 / 1258	-18.2 -18.2	0.26 (1)	10.00			
O-N	0 / 1258	-18.2 -18.2	0.26 (1)	10.00			
N-M	0 / 1494	-18.2 -18.2	0.32 (1)	10.00			
M-L	0 / 0	-18.2 -18.2	0.16 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL = 23.3	PSF
	DL = 3.0	PSF
BOT CH.	LL = 0.0	PSF
	DL = 7.3	PSF
TOTAL LOAD	= 33.6	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 (1.13")
CALCULATED VERT. DEFL.(LL)= L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (1.13")
CALCULATED VERT. DEFL.(TL)= L/999 (0.13")

CSI: TC=0.44/1.00 (B-D:1) , BC=0.32/1.00 (M-N:1) ,
WB=0.36/1.00 (F-O:1) , SSI=0.19/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

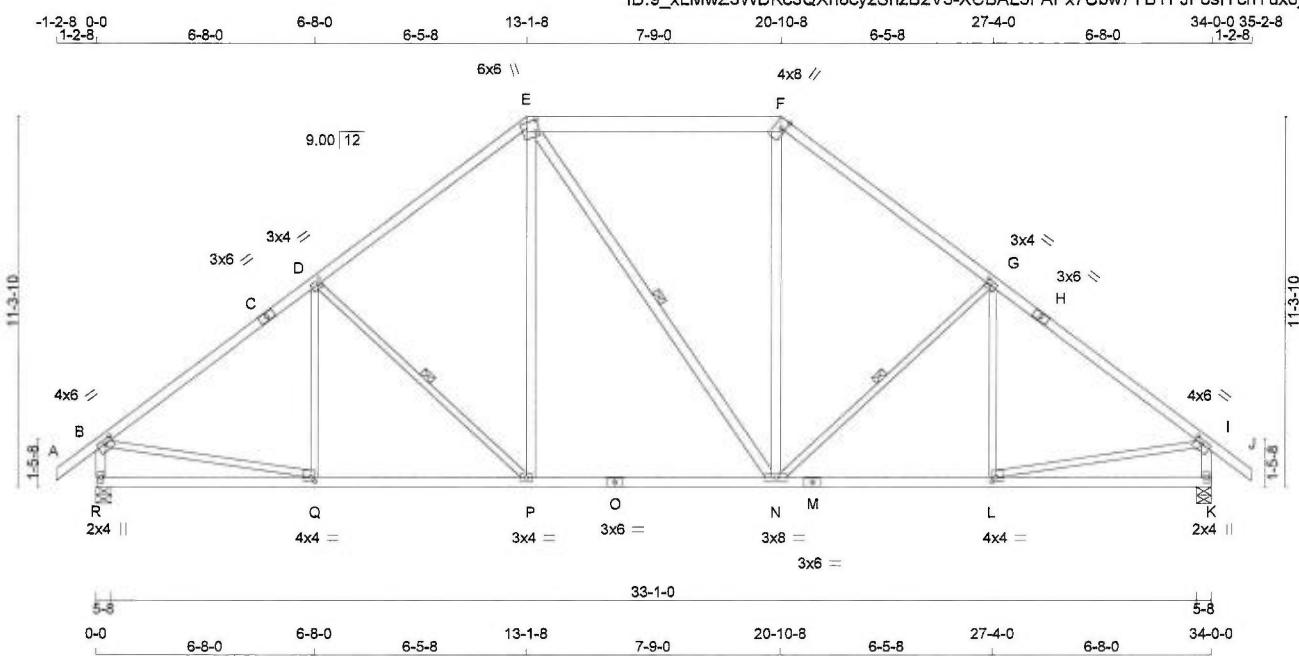
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.56 (M) (INPUT = 1.00)



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





LUMBER

N. L. G. A. RULES

CHORDS SIZE

LUMBER

DESCR.

A - C

2x4

DRY

No.2

SPF

C - E

2x4

DRY

No.2

SPF

E - F

2x6

DRY

No.2

SPF

F - H

2x4

DRY

No.2

SPF

H - J

2x4

DRY

No.2

SPF

R - B

2x4

DRY

No.2

SPF

K - I

2x4

DRY

No.2

SPF

R - O

2x4

DRY

No.2

SPF

O - M

2x4

DRY

No.2

SPF

M - K

2x4

DRY

No.2

SPF

ALL WEBS EXCEPT

2x3

DRY

No.2

SPF

P - E

2x4

DRY

No.2

SPF

E - N

2x4

DRY

No.2

SPF

N - F

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	2.75
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW+m	MT20	6.0	6.0	4.25	1.25
F	TTW+h	MT20	4.0	8.0	Edge	1.50
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TS-t	MT20	3.0	6.0		
I	TMVW-t	MT20	4.0	6.0	1.50	2.75
K	BMV1+p	MT20	2.0	4.0		
L	BMVW-t	MT20	4.0	4.0	1.50	1.50
M	BS-t	MT20	3.0	6.0		
N	BMVW-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	4.0	1.50	1.50
R	BMV1+p	MT20	2.0	4.0		

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

MAXIMUM FACTORED

INPUT

REQ'D

GROSS REACTION

GROSS REACTION

BRG

BRG

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

R

1726

0

1726

0

0

5-8

5-8

K

1726

0

1726

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

R

1210

852 / 0

0 / 0

0 / 0

0 / 0

358 / 0

0 / 0

K

1210

852 / 0

0 / 0

0 / 0

0 / 0

358 / 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 = 4.38 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 D-P, E-N, G-N. DBS = 20-0-0. CBF = 51 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

FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX

CSI (LC)

MAX.

MEMB.

MAX. FACTORED

FORCE

MAX

CSI (LC)

FR-TO

FROM

TO

FR-TO

A-B

0 / 30

-77.4

-77.4

0.09 (1)

10.00

Q-D

-123 / 73

0.08 (1)

B-C

-1837 / 0

-77.4

-77.4

0.56 (1)

4.38

D-P

-409 / 0

0.23 (1)

C-D

-1837 / 0

-77.4

-77.4

0.56 (1)

4.38

P-E

0 / 407

0.07 (1)

D-E

-1533 / 0

-77.4

-77.4

0.51 (1)

4.75

E-N

0 / 0

0.00 (1)

E-F

-1204 / 0

-77.4

-77.4

0.30 (1)

6.25

N-F

0 / 408

0.07 (1)

F-G

-1533 / 0

-77.4

-77.4

0.51 (1)

4.75

N-G

-409 / 0

0.23 (1)

G-H

-1836 / 0

-77.4

-77.4

0.56 (1)

4.38

L-G

-124 / 73

0.08 (1)

H-I

-1836 / 0

-77.4

-77.4

0.56 (1)

4.38

B-Q

0 / 1520

0.34 (1)

I-J

0 / 30

-77.4

-77.4

0.09 (1)

10.00

L-I

0 / 1520

0.34 (1)

R-B

-1675 / 0

0.0

0.0

0.17 (1)

6.41

K-I

-1675 / 0

0.0

0.0

0.17 (1)

6.41

R-Q

0 / 0

-18.2

-18.2

0.18 (4)

10.00

Q-P

0 / 1498

-18.2

-18.2

0.34 (1)

10.00

P-O

0 / 1204

-18.2

-18.2

0.30 (1)

10.00

O-N

0 / 1204

-18.2

-18.2

0.30 (1)

10.00

N-M

0 / 1498

-18.2

-18.2

0.35 (1)

10.00

M-L

0 / 1498

-18.2

-18.2

0.35 (1)

10.00

L-K

0 / 0

-18.2

-18.2

0.18 (4)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.3 PSF

TOTAL LOAD = 33.6 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 (1.13")

CALCULATED VERT. DEFL.(LL) = L/999 (0.07")

ALLOWABLE DEFL.(TL)= L/360 (1.13")

CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.56/1.00 (B-D:1) , BC=0.35/1.00 (L-N:1) , WB=0.34/1.00 (B-Q:1) , SSI=0.20/1.00 (B-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)

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 (Q) (INPUT = 0.90)

JSI METAL= 0.56 (Q) (INPUT = 1.00)

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

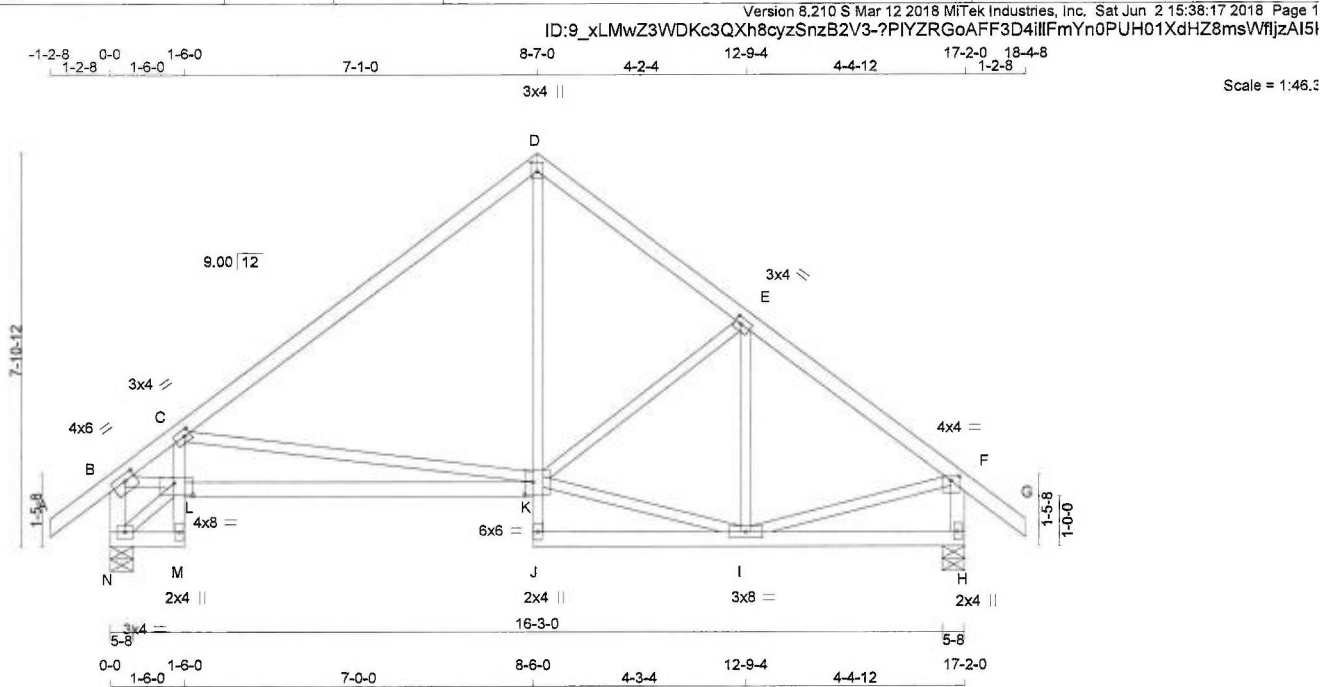
LICENSED PROFESSIONAL ENGINEER

N.A. EL-MASRI

Jun 02, 2018

KOTT

CONTINUED ON PAGE 2



LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.	BEARINGS	FACTORED	MAXIMUM FACTORED	INPUT	REQRD	SPECIFIED LOADS:	
A - D	2x4	DRY	No.2	SPF	GROSS REACTION	VERT	HORZ	DOWN	UP	TOP CH.	LL = 23.3 PSF
D - G	2x4	DRY	No.2	SPF						DL = 3.0 PSF	
N - B	2x4	DRY	No.2	SPF						BOT CH.	LL = 0.0 PSF
H - F	2x4	DRY	No.2	SPF						DL = 7.3 PSF	
N - M	2x4	DRY	No.2	SPF						TOTAL LOAD = 33.6 PSF	
M - C	2x3	DRY	No.2	SPF						SPACING = 24.0 IN. C/C	
L - K	2x4	DRY	No.2	SPF						THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010	
J - D	2x3	DRY	No.2	SPF						THIS DESIGN COMPLIES WITH: - PART 9 OF OBC 2012, BCBC 2012, ABC 2014 - CSA 086-09 - TPIC 2011	
J - H	2x4	DRY	No.2	SPF						DESIGN ASSUMPTIONS - OVERHANG NOT TO BE ALTERED OR CUT OFF.	
ALL WEBS EXCEPT	2x3	DRY	No.2	SPF	UNFACTORED REACTIONS	1ST LCASE	MAX./MIN. COMPONENT REACTIONS	WIND	DEAD	(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	
						COMBINED	SNOW	LIVE	PERM. LIVE	ALLOWABLE DEFL.(LL)= L/360 (0.57")	
										CALCULATED VERT. DEFL.(LL) = L/999 (0.02")	
										ALLOWABLE DEFL.(TL)= L/360 (0.57")	
										CALCULATED VERT. DEFL.(TL) = L/999 (0.16")	
										CSI: TC=0.50/1.00 (C-D:1), BC=0.36/1.00 (K-L:1), WB=0.78/1.00 (C-K:1), SSI=0.21/1.00 (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	
										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= 0.89 (N) (INPUT = 0.90)	
										JSI METAL= 0.37 (B) (INPUT = 1.00)	

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVV-t	MT20	4.0	6.0	1.50	2.75
C	TMVV-t	MT20	3.0	4.0	1.50	1.50
D	TTV+p	MT20	3.0	4.0	2.25	1.50
E	TMVV-t	MT20	3.0	4.0	1.50	1.50
F	TMVV-p	MT20	4.0	4.0	1.00	2.25
H	BMV1+p	MT20	2.0	4.0		
I	BMVWW-t	MT20	3.0	8.0		
J	BMV+p	MT20	2.0	4.0		
K	BVMWW-t	MT20	6.0	6.0	3.00	2.00
L	BVMWW-t	MT20	4.0	8.0	2.75	4.50
M	BMV+p	MT20	2.0	4.0		
N	BMVW1-t	MT20	3.0	4.0		

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.99 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0/30	-77.4	-77.4 0.09 (1)	C-K	-725/0	0.78 (1)	
B-C	-1401/0	-77.4	-77.4 0.41 (1)	K-I	0/661	0.15 (1)	
C-D	-895/0	-77.4	-77.4 0.50 (1)	K-E	-152/0	0.07 (1)	
D-E	-688/0	-77.4	-77.4 0.18 (1)	E-I	-227/11	0.08 (1)	
E-F	-787/0	-77.4	-77.4 0.19 (1)	I-F	0/669	0.15 (1)	
F-G	0/30	-77.4	-77.4 0.09 (1)	N-L	-24/0	0.00 (1)	
N-B	-898/0	0.0	0.0 0.09 (1)	B-L	0/1229	0.28 (1)	
H-F	-885/0	0.0	0.0 0.09 (1)				
N-M	0/19	-18.2	-18.2 0.01 (4)				
M-L	0/14	0.0	0.0 0.06 (1)				
L-C	0/76	0.0	0.0 0.06 (1)				
L-K	0/1246	-18.2	-18.2 0.36 (1)				
J-K	0/32	0.0	0.0 0.02 (1)				
K-D	0/449	0.0	0.0 0.12 (1)				
J-I	0/5	-18.2	-18.2 0.09 (4)				
I-H	0/0	-18.2	-18.2 0.09 (4)				

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 23.3 PSF

DL = 3.0 PSF

BOT CH. LL = 0.0 PSF

DL = 7.3 PSF

TOTAL LOAD = 33.6 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 (0.57")

CALCULATED VERT. DEFL.(LL) = L/999 (0.02")

ALLOWABLE DEFL.(TL)= L/360 (0.57")

CALCULATED VERT. DEFL.(TL) = L/999 (0.16")

CSI: TC=0.50/1.00 (C-D:1), BC=0.36/1.00 (K-L:1), WB=0.78/1.00 (C-K:1), SSI=0.21/1.00 (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

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.

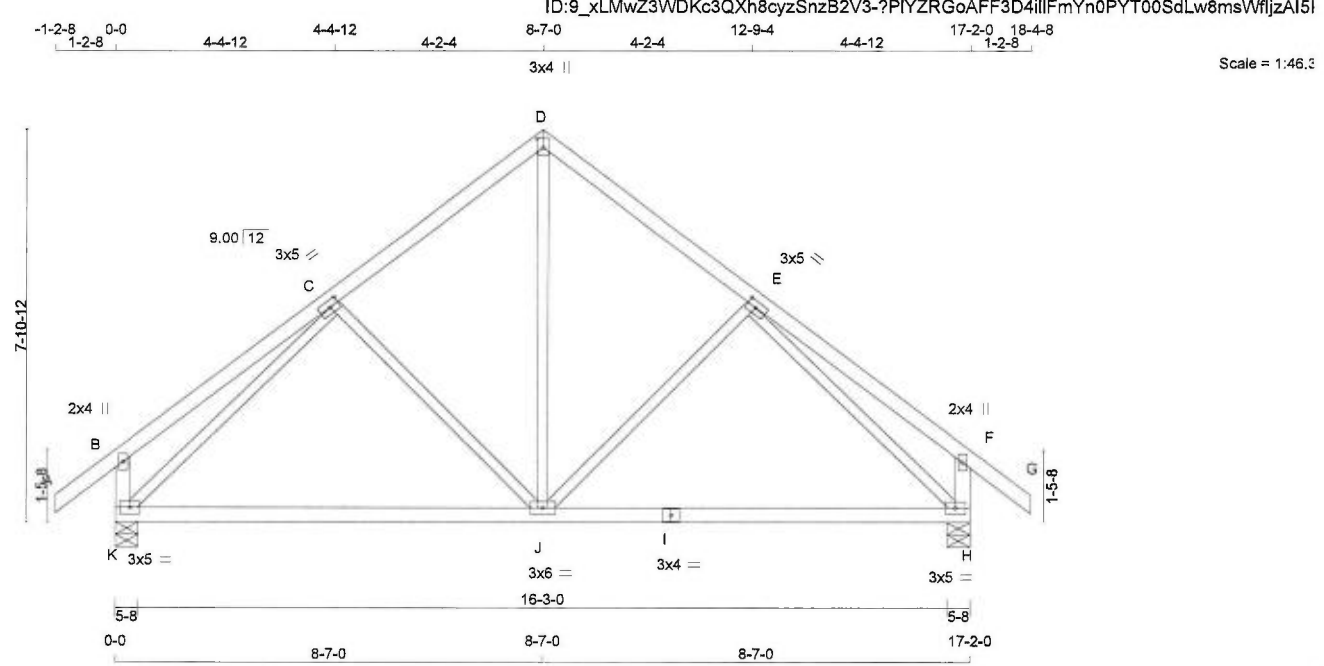
JSI GRIP= 0.89 (N) (INPUT = 0.90)

JSI METAL= 0.37 (B) (INPUT = 1.00)



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





LUMBER

N. L. G. A. RULES

CHORDS

SIZE

LUMBER

DESCR.

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 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

3.0

5.0

1.50

2.25

D

TTW+p

MT20

3.0

4.0

2.25

1.50

E

TMVW+t

MT20

3.0

5.0

1.50

2.25

F

TMV+p

MT20

2.0

4.0

H

BMVW1-t

MT20

3.0

5.0

I

BS-t

MT20

3.0

4.0

J

BMVW+t

MT20

3.0

6.0

K

BMVW1-t

MT20

3.0

5.0

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

BEARINGS

FACTORED

GROSS REACTION

MAXIMUM FACTORED

INPUT

REQRD

JT

VERT

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

K

921

0

921

0

0

5-8

5-8

H

921

0

921

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX./MIN. COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

K

645

460 / 0

0 / 0

0 / 0

0 / 0

185 / 0

0 / 0

H

645

460 / 0

0 / 0

0 / 0

0 / 0

185 / 0

0 / 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)

CHORDS

MAX. FACTORED

FACTORED

WEBS

MAX. FACTORED

MEMB.

FORCE

VERT. LOAD

LC1

MAX

MAX.

MEMB.

FORCE

MAX

(LBS)

(PLF)

CSI (LC)

UNBRAC

LENGTH

(LBS)

CSI (LC)

FR-TO

FROM

TO

FR-TO

A- B

0 / 30

-77.4

-77.4

0.09 (1)

10.00

J- D

0 / 474

0.11 (1)

B- C

0 / 23

-77.4

-77.4

0.23 (1)

10.00

J- E

-197 / 0

0.13 (1)

C- D

-632 / 0

-77.4

-77.4

0.18 (1)

6.25

C- J

-197 / 0

0.13 (1)

D- E

-632 / 0

-77.4

-77.4

0.18 (1)

6.25

K- C

-891 / 0

0.56 (1)

E- F

0 / 23

-77.4

-77.4

0.23 (1)

10.00

E- H

-891 / 0

0.56 (1)

F- G

0 / 30

-77.4

-77.4

0.09 (1)

10.00

K- B

-227 / 0

0.0

0.0

0.02 (1)

7.81

H- F

-227 / 0

0.0

0.0

0.02 (1)

7.81

K- J

0 / 626

-18.2

-18.2

0.43 (4)

10.00

J- I

0 / 626

-18.2

-18.2

0.43 (4)

10.00

I- H

0 / 626

-18.2

-18.2

0.43 (4)

10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.

LL

=

23.3

PSF

DL

=

3.0

PSF

BOT CH.

LL

=

0.0

PSF

DL

=

7.3

PSF

TOTAL LOAD

=

33.6

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 , CBC 2012 , ABC 2014

- CSA 086-09

- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.57")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")

ALLOWABLE DEFL.(TL)= L/360 (0.57")

CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.23/1.00 (B-C:1) , BC=0.43/1.00 (H-J:4) ,

WB=0.56/1.00 (C-K:1) , SS=0.13/1.00 (J-K: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 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 (C) (INPUT = 0.90)

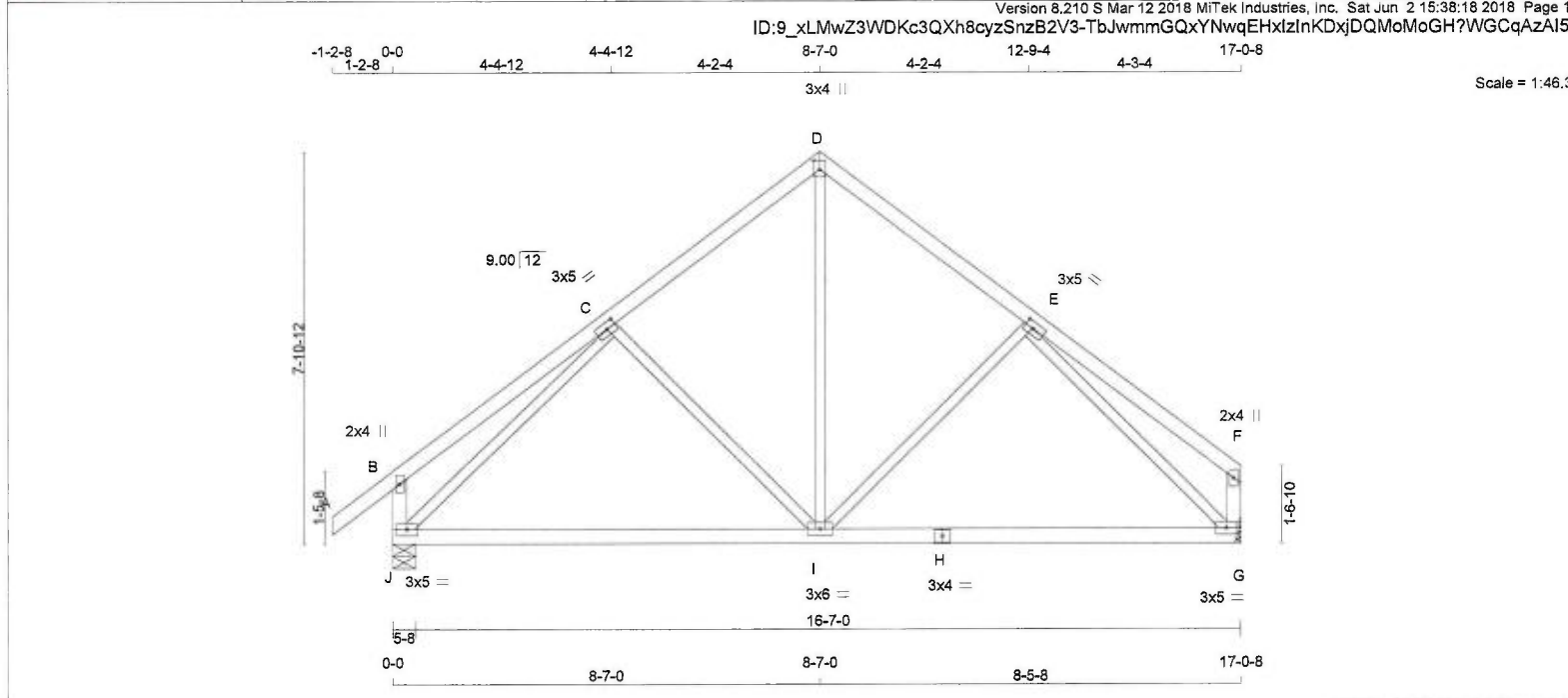
JSI METAL= 0.26 (E) (INPUT = 1.00)

PROFESSIONAL ENGINEER



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





TOTAL WEIGHT = 2 X 73 = 146 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			
J - B	2x4	DRY	No.2	SPF			
G - F	2x4	DRY	No.2	SPF			
J - H	2x4	DRY	No.2	SPF			
H - 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	TMV+p	MT20	2.0	4.0	
C	TMWW-t	MT20	3.0	5.0	1.50 2.25
D	TTW+p	MT20	3.0	4.0	2.25 1.50
E	TMWW-t	MT20	3.0	5.0	1.50 2.00
F	TMV+p	MT20	2.0	4.0	
G	BMVW1-t	MT20	3.0	5.0	
H	BS-t	MT20	3.0	4.0	
I	BMVWW-t	MT20	3.0	6.0	
J	BMVW1-t	MT20	3.0	5.0	

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		
J	915	0	915	0	0	5-8	5-8		
G	815	0	815	0	0	MECHANICAL			

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

UNFACTORED REACTIONS						
1ST LCASE		MAX/MIN. COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	SOIL
J	641	457 / 0	0 / 0	0 / 0	0 / 0	183 / 0
G	572	397 / 0	0 / 0	0 / 0	0 / 0	176 / 0

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

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				
MAX. FACTORED		FACTORED			MAX. FACTORED		FACTORED		
MEMB.	FORCE (LBS)	VERT.	LOAD (PLF)	MAX LC1 (LC)	MEMB.	FORCE (LBS)	MAX LC1 (LC)		
FR-TO		FROM	TO		FR-TO				
A- B	0 / 30	-77.4	-77.4	0.09 (1)	10.00	C- I	-199 / 0	0.13 (1)	
B- C	0 / 23	-77.4	-77.4	0.23 (1)	10.00	I- D	0 / 462	0.10 (1)	
C- D	-623 / 0	-77.4	-77.4	0.18 (1)	6.25	I- E	-181 / 4	0.12 (1)	
D- E	-622 / 0	-77.4	-77.4	0.18 (1)	6.25	J- C	-883 / 0	0.56 (1)	
E- F	0 / 23	-77.4	-77.4	0.22 (1)	10.00	E- G	-879 / 0	0.53 (1)	
J- B	-227 / 0	0.0	0.0	0.02 (1)	7.81				
G- F	-121 / 0	0.0	0.0	0.01 (1)	7.81				
J- I	0 / 620	-18.2	-18.2	0.42 (4)	10.00				
I- H	0 / 607	-18.2	-18.2	0.42 (4)	10.00				
H- G	0 / 607	-18.2	-18.2	0.42 (4)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:		
TOP CH.	LL	= 23.3 PSF
	DL	= 3.0 PSF
BOT CH.	LL	= 0.0 PSF
	DL	= 7.3 PSF
TOTAL LOAD		= 33.6 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 (0.57")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.57")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.12")

CSI: TC=0.23/1.00 (B-C:1), BC=0.42/1.00 (I-J:4), WB=0.56/1.00 (C-J:1), SSI=0.13/1.00 (I-J: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		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.

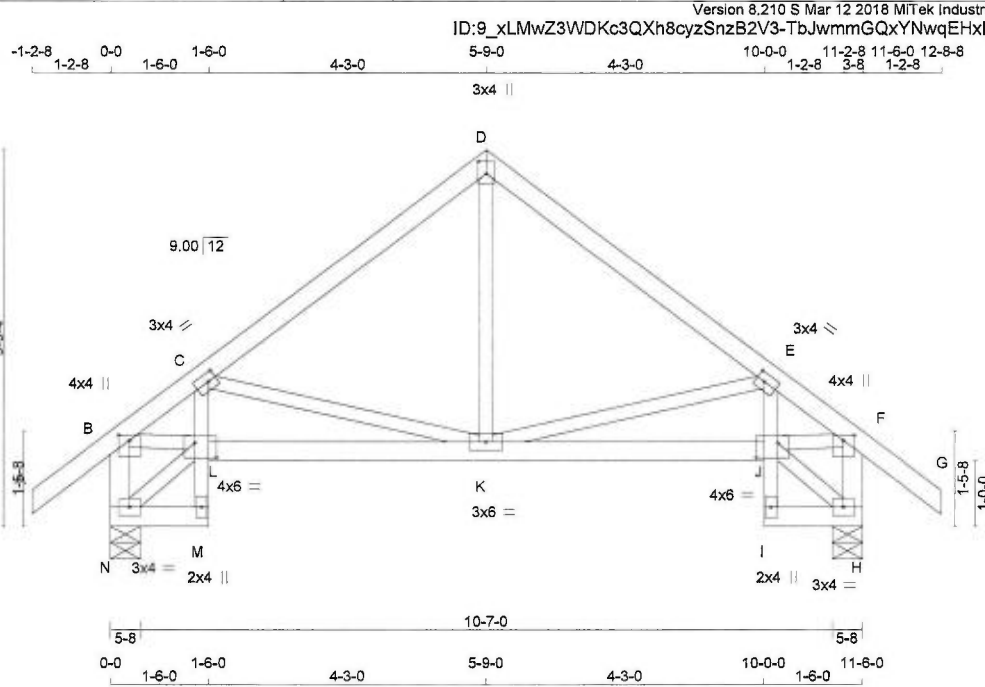
JSI GRIP= 0.89 (C) (INPUT = 0.90)
JSI METAL= 0.25 (C) (INPUT = 1.00)

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



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Scale = 1:35.3

TOTAL WEIGHT = 53 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	
N - B	2x4	DRY	No.2	SPF	
H - F	2x4	DRY	No.2	SPF	
N - M	2x4	DRY	No.2	SPF	
M - C	2x3	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
I - E	2x3	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	TMVW+p	MT20	4.0	4.0	1.00	2.00	
C	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	1.00	2.00	
H	BMVW1-t	MT20	3.0	4.0			
I	BMV+p	MT20	2.0	4.0			
J	BVMWW-I	MT20	4.0	6.0	2.75	4.00	
K	BVMWW-t	MT20	3.0	6.0			
L	BVMWW-I	MT20	4.0	6.0	2.75	4.00	
M	BMV+p	MT20	2.0	4.0			
N	BMVW1-t	MT20	3.0	4.0			

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

BEARINGS		FACTORED	MAXIMUM FACTORED	INPUT	REQRD
JT	GROSS REACTION	VERT	HORZ	BRG	BRG
N	650	0	650	0	5-8
H	650	0	650	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN. COMPONENT REACTIONS	DEAD	SOIL
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND
N	454	328 / 0	0 / 0	0 / 0	126 / 0
H	454	328 / 0	0 / 0	0 / 0	126 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) N, 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD LC1 (LC)	MAX. FACTORED VERT. LOAD LC1 (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 30	-77.4	-77.4 0.09 (1)	10.00	K-D	0 / 241	0.05 (1)
B-C	-789 / 0	-77.4	-77.4 0.13 (1)	6.25	K-E	-319 / 0	0.11 (1)
C-D	-454 / 0	-77.4	-77.4 0.18 (1)	6.25	C-K	-319 / 0	0.11 (1)
D-E	-454 / 0	-77.4	-77.4 0.18 (1)	6.25	N-L	-13 / 0	0.00 (1)
E-F	-789 / 0	-77.4	-77.4 0.13 (1)	6.25	B-L	0 / 648	0.15 (1)
F-G	0 / 30	-77.4	-77.4 0.09 (1)	10.00	J-H	-13 / 0	0.00 (1)
N-B	-629 / 0	0.0	0.0 0.07 (1)	7.81	J-F	0 / 648	0.15 (1)
H-F	-629 / 0	0.0	0.0 0.07 (1)	7.81			
N-M	0 / 11	-18.2	-18.2 0.01 (4)	10.00			
M-L	0 / 14	0.0	0.0 0.03 (1)	10.00			
L-C	0 / 42	0.0	0.0 0.04 (1)	10.00			
L-K	0 / 658	-18.2	-18.2 0.16 (1)	10.00			
K-J	0 / 658	-18.2	-18.2 0.16 (1)	10.00			
I-J	0 / 14	0.0	0.0 0.03 (1)	10.00			
J-E	0 / 42	0.0	0.0 0.04 (1)	10.00			
I-H	0 / 11	-18.2	-18.2 0.01 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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, CBC 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 (0.38")
CALCULATED VERT. DEFL.(LL) = L/999 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.18/1.00 (C-D:1), BC=0.16/1.00 (J-K:1), WB=0.15/1.00 (F-J:1), SSI=0.12/1.00 (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

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

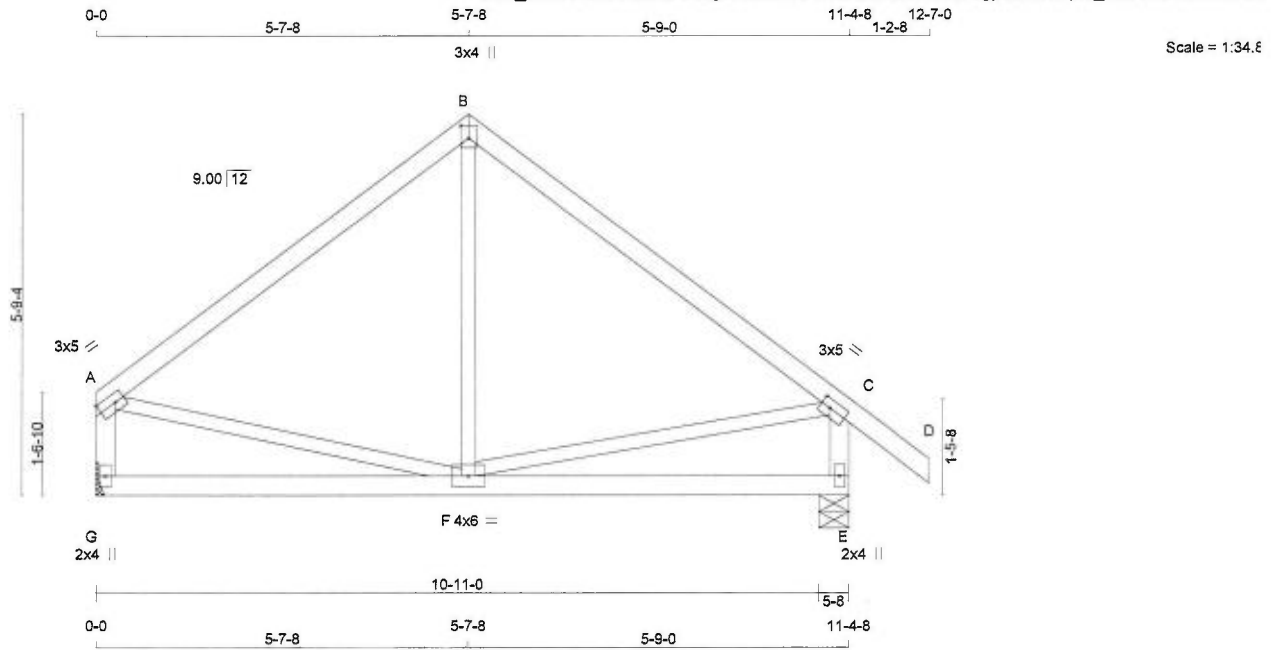
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (B) (INPUT = 0.90)
JSI METAL= 0.23 (B) (INPUT = 1.00)



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





Scale = 1:34.8

TOTAL WEIGHT = 2 X 47 = 94 lb
[M][F]

LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	LUMBER
A - B	2x4	DRY	No.2
B - D	2x4	DRY	No.2
G - A	2x4	DRY	No.2
E - C	2x4	DRY	No.2
G - E	2x4	DRY	No.2
ALL WEBS EXCEPT	2x3	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	3.0	5.0	1.50	Edge
B	TTW+p	MT20	3.0	4.0	2.25	1.50
C	TMVW-t	MT20	3.0	5.0	1.50	1.75
E	BMV1+p	MT20	2.0	4.0		
F	BMVWW-t	MT20	4.0	6.0		
G	BMV1+p	MT20	2.0	4.0		

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

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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	GROSS REACTION	JT	GROSS REACTION	BRG	BRG	IN-SX	IN-SX
	VERT		DOWN				
G	544	0	544	0	0	MECHANICAL	
E	644	0	644	0	0	5-8	5-8

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

UNFACTORED REACTIONS

JT	1ST CASE		MAX/MIN. COMPONENT REACTIONS		WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE			
G	382	265 / 0	0 / 0	0 / 0	0 / 0	117 / 0	0 / 0
E	450	325 / 0	0 / 0	0 / 0	0 / 0	125 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX LC1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-371 / 0	-77.4	-77.4 0.32 (1)	6.25	F-B	0 / 103	0.04 (4)
B-C	-371 / 0	-77.4	-77.4 0.33 (1)	6.25	A-F	0 / 304	0.07 (1)
C-D	0 / 30	-77.4	-77.4 0.09 (1)	10.00	F-C	0 / 302	0.07 (1)
G-A	-508 / 0	0.0	0.0 0.05 (1)	7.81			
E-C	-601 / 0	0.0	0.0 0.06 (1)	7.81			
G-F	0 / 0	-18.2	-18.2 0.17 (4)	10.00			
F-E	0 / 0	-18.2	-18.2 0.17 (4)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 PSF

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.38")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.38")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.33/1.00 (B-C:1), BC=0.17/1.00 (F-G:4), WB=0.07/1.00 (A-F:1), SI=0.14/1.00 (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
MT20 618 354 1667 822 2284 1656

PLATE PLACEMENT TOL. = 0.250 inches

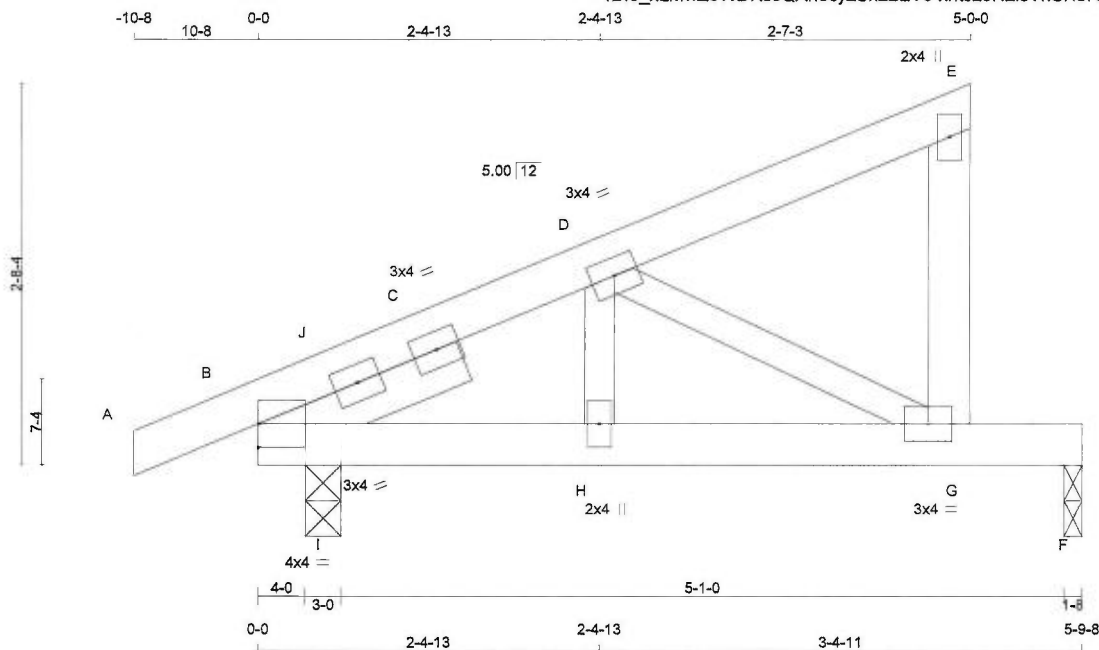
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.56 (F) (INPUT = 0.90)
JSI METAL= 0.17 (C) (INPUT = 1.00)



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





Scale = 1:16.2

TOTAL WEIGHT = 5 X 21 = 105 lb
[M][F]

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBR1-I	MT20	4.0	4.0	
B	RT-I	MT20	3.0	4.0	
B	RT-I	MT20	3.0	4.0	
B	TMWW-t	MT20	3.0	4.0	
B	TMV+p	MT20	2.0	4.0	
G	BMVW-t	MT20	3.0	4.0	
H	BMVW+w	MT20	2.0	4.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	JT	VERT	IN-SX		IN-SX	
F	220	F	220	1-8		1-8	
B	345	B	345	3-0		3-0	

UNFACTORED REACTIONS

JT	1ST LCASE	MAX./MIN. COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	
F	156	101 / 0	0 / 0	0 / 0	0 / 0	55 / 0	0 / 0	
B	241	176 / 0	0 / 0	0 / 0	0 / 0	65 / 0	0 / 0	

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LC1 (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. LC1 (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 3	-77.4 -77.4	0.05 (1)	H-D	0 / 152	0.03 (1)	
B-J	-330 / 0	-77.4 -77.4	0.01 (1)	D-G	-388 / 0	0.07 (1)	
J-C	-303 / 0	-77.4 -77.4	0.03 (1)	C-I	-179 / 0	0.02 (1)	
C-D	-303 / 0	-77.4 -77.4	0.03 (1)	I-J	0 / 119	0.00 (1)	
D-E	-4 / 0	-77.4 -77.4	0.06 (1)				
G-E	-90 / 0	0.0 0.0	0.01 (1)				
B-I	0 / 236	-18.2 -18.2	0.05 (1)				
I-H	0 / 347	-18.2 -18.2	0.12 (1)				
H-G	0 / 347	-18.2 -18.2	0.28 (1)				
G-F	0 / 0	-18.2 -18.2	0.23 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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, CBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")

CSI: TC=0.06/1.00 (D-E:1), BC=0.28/1.00 (G-H:1), WB=0.07/1.00 (D-G:1), SSI=0.17/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

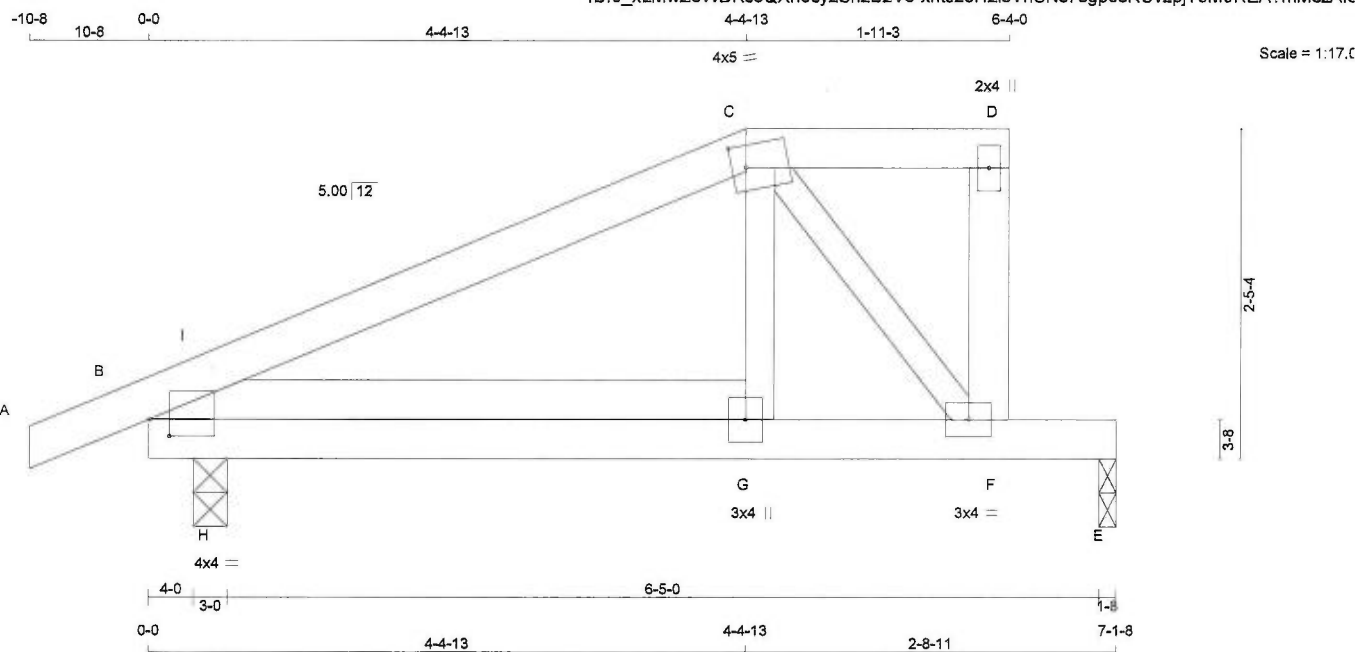
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.53 (G) (INPUT = 0.90)
JSI METAL= 0.13 (B) (INPUT = 1.00)



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





TOTAL WEIGHT = 28 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBW1-I	MT20	4.0	4.0	1.50 1.75
C	TTWW-m	MT20	4.0	5.0	2.00 1.25
D	TMV+p	MT20	2.0	4.0	
F	BMVW-t	MT20	3.0	4.0	
G	BMVW-t	MT20	3.0	4.0	

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

FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
GROSS REACTION		GROSS REACTION		BRG		BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	307	0	307	0	0	1-8	1-8
H(B)	446	0	446	0	0	3-0	3-0

UNFACTORED REACTIONS

1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	216	149 / 0	0 / 0	0 / 0	0 / 0	67 / 0	0 / 0
H(B)	311	226 / 0	0 / 0	0 / 0	0 / 0	85 / 0	0 / 0

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

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			
MAX. FACTORED		FACTORED		MAX. FACTORED		FACTORED	
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX	MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 3	-77.4	-77.4 0.05 (1)	G-C	0 / 193		
B-I	-52 / 0	-77.4	-77.4 0.16 (1)	C-F	-381 / 0		
I-C	-279 / 0	-77.4	-77.4 0.17 (1)	G-I	0 / 98		
C-D	0 / 0	-77.4	-77.4 0.05 (1)	H-I	-396 / 0		
F-D	-75 / 0	0.0	0.0 0.01 (1)				
B-H	0 / 149	-18.2	-18.2 0.06 (4)				
H-G	0 / 149	-18.2	-18.2 0.09 (1)				
G-F	0 / 256	-18.2	-18.2 0.33 (1)				
F-E	0 / 0	-95.6	-95.6 0.29 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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 (0.24")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.17/1.00 (C-I:1), BC=0.33/1.00 (F-G:1), WB=0.07/1.00 (C-F:1), SSI=0.24/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

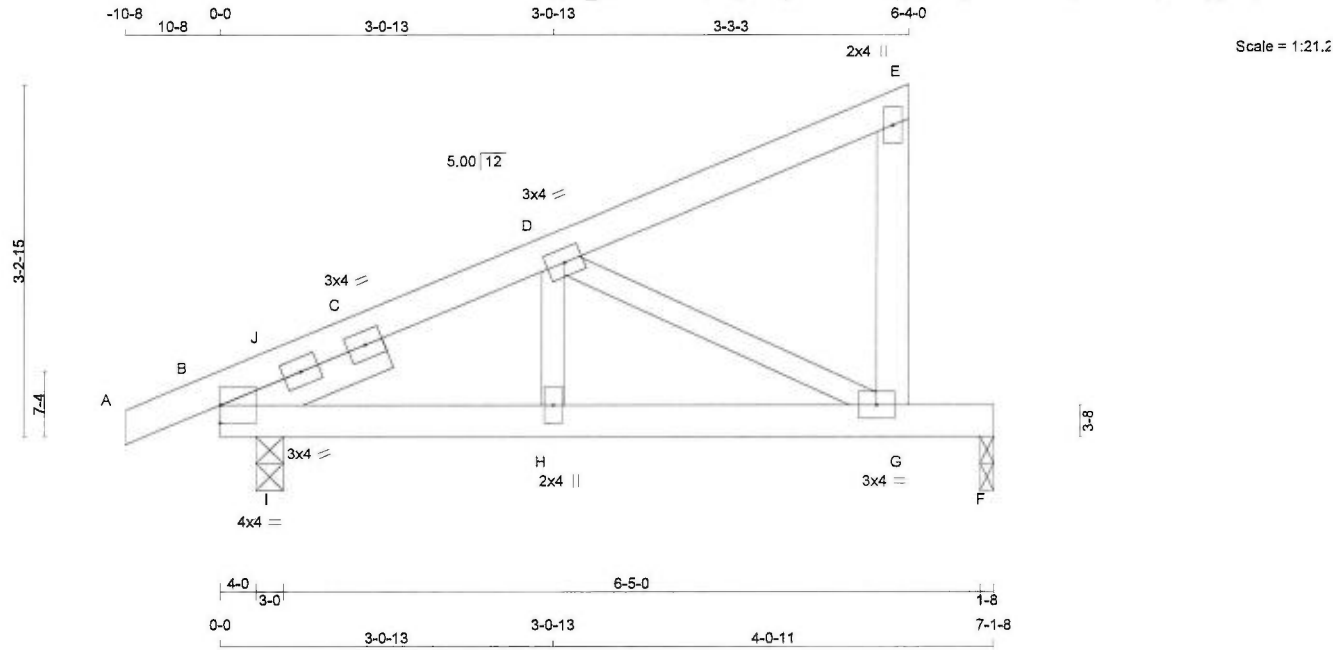
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.60 (C) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)



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





TOTAL WEIGHT = 3 X 26 = 77 lb [M][F]

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - E	2x4	DRY	No.2	SPF	
G - E	2x4	DRY	No.2	SPF	
B - F	2x4	DRY	No.2	SPF	
REINFORCING MEMBERS					
HW1	2x4	DRY	No.2	SPF	
ALL WEBS 2x3 DRY					
NO.2 DRY: SEASONED LUMBER.					

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMBR1-I	MT20	4.0	4.0		
B	RT-I	MT20	3.0	4.0		
B	RT-I	MT20	3.0	4.0		
D	TMWW-t	MT20	3.0	4.0		
E	TMV+p	MT20	2.0	4.0		
G	BMVW-t	MT20	3.0	4.0		
H	BMVW+w	MT20	2.0	4.0		

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQD	
JT	VERT	HORZ	GROSS REACTION	GROSS REACTION	DOWN	HORZ	BRG	BRG	IN-SX
F	283	0	283	0	0	0	1-8	1-8	IN-SX
B	409	0	409	0	0	0	3-0	3-0	IN-SX

UNFACTORED REACTIONS		1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
F	200	131 / 0	0 / 0	0 / 0	0 / 0	69 / 0	0 / 0		
B	286	207 / 0	0 / 0	0 / 0	0 / 0	79 / 0	0 / 0		

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	
FR-TO		FROM TO		FR-TO			
A-B	0 / 3	-77.4 -77.4	0.05 (1)	H-D	0 / 170	0.04 (1)	
B-J	-415 / 0	-77.4 -77.4	0.01 (1)	D-G	-496 / 0	0.11 (1)	
J-C	-384 / 0	-77.4 -77.4	0.06 (1)	C-I	-230 / 0	0.02 (1)	
C-D	-384 / 0	-77.4 -77.4	0.06 (1)	I-J	0 / 153	0.00 (1)	
D-E	-6 / 0	-77.4 -77.4	0.10 (1)				
E-F	-110 / 0	0.0 0.0	0.02 (1)				
B-I	0 / 297	-18.2 -18.2	0.06 (1)				
I-H	0 / 447	-18.2 -18.2	0.16 (1)				
H-G	0 / 447	-18.2 -18.2	0.37 (1)				
G-F	0 / 0	-18.2 -18.2	0.30 (1)				

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 23.3 PSF
DL = 3.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 33.6 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, CBC 2012, ABC 2014
- CSA 086-09
- TPIC 2011

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

ALLOWABLE DEFL.(LL)= L/360 (0.24")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.24")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.07")

CSI: TC=0.10/1.00 (D-E:1) , BC=0.37/1.00 (G-H:1) , WB=0.11/1.00 (D-G:1) , SS=0.22/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 0.50

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.68 (G) (INPUT = 0.90)
JSI METAL= 0.17 (B) (INPUT = 1.00)



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



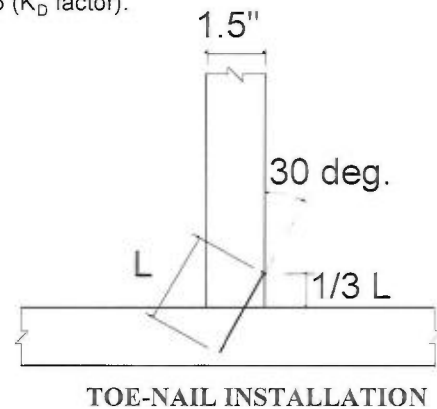
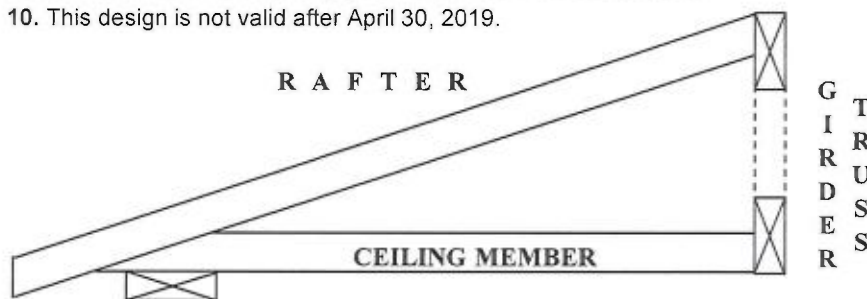
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B37579H1

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

NOTES:

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



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



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

PEO
Certificate No. 10889485



April 26, 2017

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B37579H2

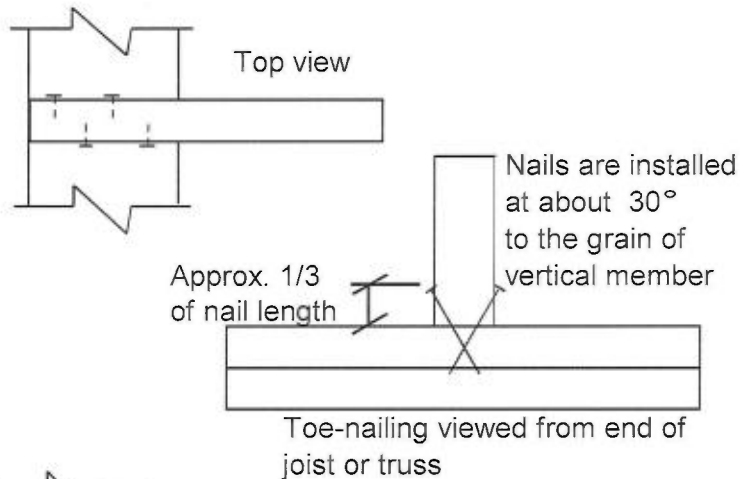
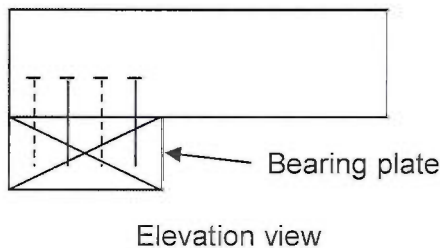
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52

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

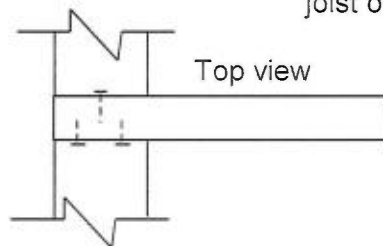
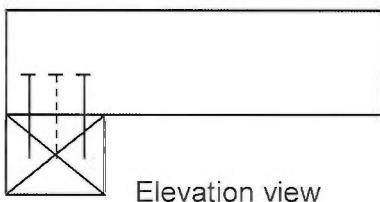
NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind or earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-09, section 10.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-09, section 10.9.5
9. This design is not valid after April 30, 2019

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



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

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Certificate No. 10889485



April 26, 2017