

Hanger Name	Symbol	QTY
LUS24	▲	6
LJS26DS	■	1
HGUS26-2	●	2



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



#### CONVENTIONAL FRAMING BY OTHERS

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE OBC. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE MIN. 2x4 SIF @ 24" C/C WITH A 2x4 VERTICAL POST TO THE TRUSS BELOW. VERTICAL POSTS TO BE LATERALLY BRACED SO THAT UNBRACED LENGTH DOES NOT EXCEED 6'. DESIGN OF CONVENTIONAL FRAMING IS THE RESPONSIBILITY OF THE PROJECT ENGINEER.

## JOB INFORMATION

Customer	GREENPARK HOMES
Job #	20-00421R0
Address	TRINAR HALL EAST GWILLIMBURY, ON
Model	BRENTWOOD 3 EL 2
Sales Rep	RALPH MIRIGELLO
Designer	KR
Date	12/18/2020
Path	C:\MITEK\CA\JOBS\GREENPARK HOMES\TRINAR HALL\BRENTWOOD 3\LEVEL 2\T-BRENTWOOD3-2\

## DESIGN INFORMATION

Code	NBCC 2010
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft <sup>2</sup>
TC DL	8.0 lb/ft <sup>2</sup>
BC LL	10.5 lb/ft <sup>2</sup>
BC DL	7.3 lb/ft <sup>2</sup>
Deflection	LL=L/360 TL=L/360
Spacing	24" O/C unless otherwise noted
Complies With	OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014

## IMPORTANT INFORMATION

Refer to truss drawings in the Truss Engineering Package for ply-to-ply attachment notes

For site-framed valleys: top chords of all roof trusses must be laterally supported using 2x4 continuous bracing @24 O/C - all bracing must be anchored at ends as per TPIC Installation Guidelines

Read all notes on this page in addition to those shown on the KOTT Truss Engineering package

Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

Unless noted otherwise, hurricane ties are to be installed at the bearings of all trusses > 40 ft clear span, and any girder or beam supporting trusses with a clear span >40 ft. See hanger legend for type.

Unless noted otherwise, for Part 9 bldgs, all trusses are to be anchored to the top of supporting walls as follows: trusses with a clear span <40 ft use 3-1/4" nails @ each bearing; trusses with a clear span >40 ft use 3-1/4" nails @ each bearing in addition to the appropriate hurricane tie.

KOTT Inc.  
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Uxbridge, ON  
905.642.4400





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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

NE1220-142  
GREENPARK - TRINAR HALL -  
BRENTWOOD 3 EL 2

## **ENGINEERING NOTE PAGE (ENP-1)**

### **PLEASE READ PRIOR TO INSTALLATION**

### **RESPONSIBILITIES**

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY KOTT DESIGN. 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 TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

### **USE AND OCCUPANCY**

- The building is of the type indicated on the drawing

### **LOADING**

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

### **HANDLING, INSTALLATION AND BRACING**

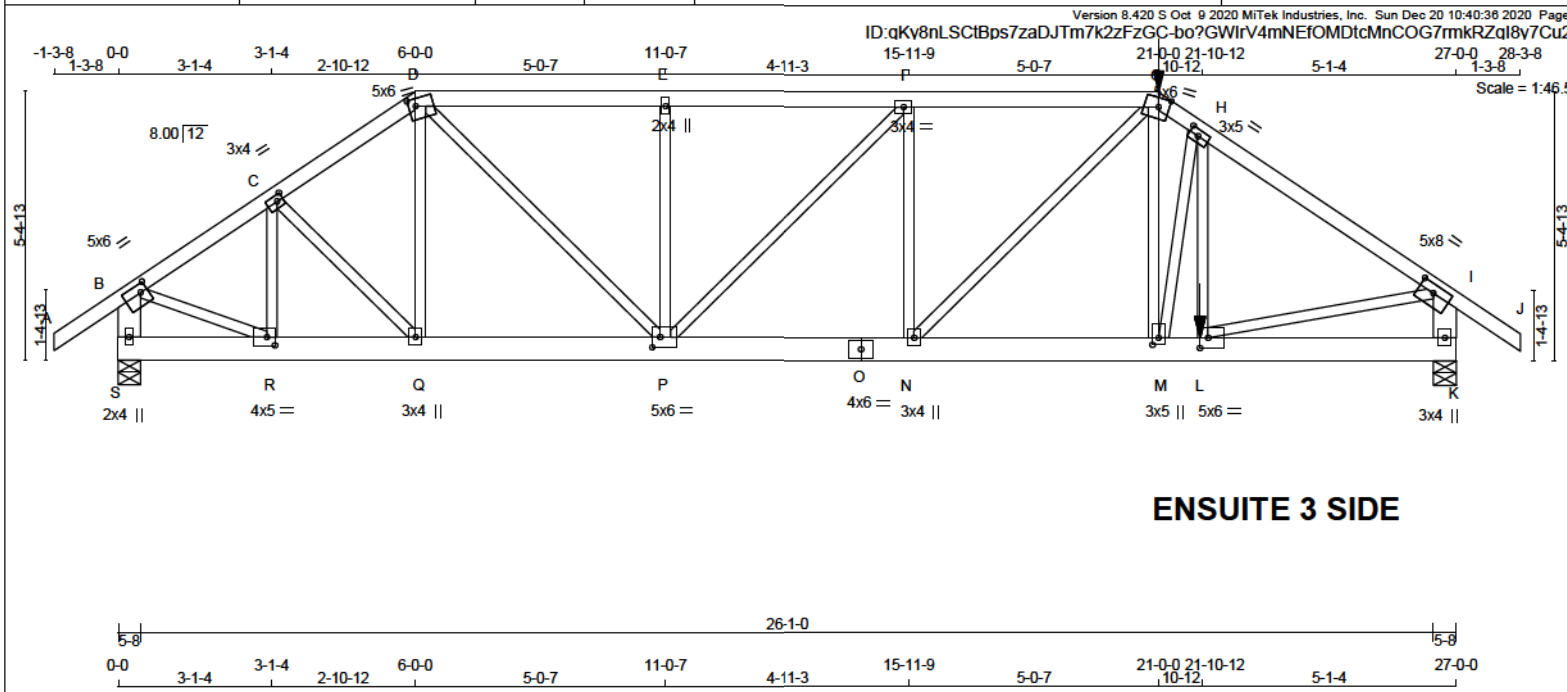
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing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

### **SUPPORTS**

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

### **DIMENSIONS**

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



## ENSUITE 3 SIDE

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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - D	12	TOP
D - G	12	SIDE(0.0)
G - J	12	SIDE(0.0)
S - B	12	TOP
K - I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
S - O	12	TOP
O - K	12	SIDE(22.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

### 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		
S	3066	0	3066	0	0	5-8	1-11		
K	5310	0	5310	0	0	5-8	3-2		

UNFACTORED REACTIONS									
1ST LCASE MAX/MIN COMPONENT REACTIONS									
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
S	2259	1334 / 0	365 / 0	0 / 0	0 / 0	560 / 0	0 / 0		
K	3931	2262 / 0	678 / 0	0 / 0	0 / 0	991 / 0	0 / 0		

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.53 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.  
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO			FR-TO				
A-B	0 / 47	-124.4 -124.4	0.06 (1)	10.00	R-C	-830 / 0	0.09 (1)		
B-C	-3204 / 0	-124.4 -124.4	0.07 (1)	6.13	C-Q	0 / 315	0.04 (1)		
C-D	-3516 / 0	-124.4 -124.4	0.07 (1)	5.92	Q-D	0 / 127	0.02 (3)		
D-E	-4431 / 0	-124.4 -124.4	0.18 (1)	5.30	D-P	0 / 2158	0.27 (1)		
E-F	-4432 / 0	-124.4 -124.4	0.18 (1)	5.30	P-E	-961 / 0	0.14 (1)		
F-G	-5103 / 0	-124.4 -124.4	0.19 (1)	5.00	P-F	-959 / 0	0.44 (1)		
G-H	-6178 / 0	-124.4 -124.4	0.11 (1)	4.71	N-F	0 / 172	0.02 (3)		
H-I	-6381 / 0	-124.4 -124.4	0.27 (1)	4.53	N-G	0 / 169	0.02 (1)		
I-J	0 / 47	-124.4 -124.4	0.06 (1)	10.00	M-G	0 / 2597	0.32 (1)		
S-B	-2979 / 0	0.0	0.0 0.11 (1)	7.81	M-H	-1639 / 0	0.29 (1)		
K-I	-5046 / 0	0.0	0.0 0.18 (1)	6.48	L-H	0 / 1155	0.14 (1)		
					B-R	0 / 2817	0.35 (1)		
S-R	0 / 0	-39.2	-39.2 0.04 (1)	10.00	L-I	0 / 5423	0.67 (1)		
R-Q	0 / 2682	-39.2	-39.2 0.21 (1)	10.00					
Q-P	0 / 2902	-39.2	-39.2 0.23 (1)	10.00					
P-O	0 / 5103	-39.2	-39.2 0.37 (1)	10.00					
O-N	0 / 5103	-39.2	-39.2 0.37 (1)	10.00					
N-M	0 / 4984	-39.2	-39.2 0.43 (1)	10.00					
M-L	0 / 5323	-74.0	-74.0 0.49 (1)	10.00					
L-K	0 / 0	-74.0	-74.0 0.17 (1)	10.00					

FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
G	21-0-0	-560	-560		FRONT	VERT	TOTAL		C1
L	21-10-0	-665	-745		FRONT	VERT	DEAD		C1
L	21-10-0	-366	-549		FRONT	VERT	LIVE		C1
L	21-10-0	-1818	-1818		FRONT	VERT	SNOW		C1

### CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

### 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 = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 = 6-0-0  
END SETBACK = 6-0-0  
END WALL WIDTH = 5-8  
CORNER FRAMING TYPE: CONVENTIONAL  
END JACK TYPE: CONVENTIONAL  
APPLIED TO FRONT SIDE  
- ADDTL LOADS BASED ON 55 % OF GSL.  
LOADS APPLIED TO FIRST 6-2-0 OF SPAN MEASURED FROM THE RIGHT.

\*\*\* NON STANDARD GIRDER \*\*\*  
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 086-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.27/1.00 (H-I:1), BC=0.49/1.00 (L-M:1),  
WB=0.67/1.00 (H-L:1), SSI=0.28/1.00 (L-M: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 = 1.00

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	650 371 1747 788	1987 1873	

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.**



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			



PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	5.0	6.0	2.00 1.75
C	TMWW-t	MT20	3.0	4.0	1.50 1.50
D	TTWW-m	MT20	5.0	6.0	1.75 1.75
E	TMW+w	MT20	2.0	4.0	
F	TMWW-t	MT20	3.0	4.0	
G	TTWW-m	MT20	5.0	6.0	Edge 2.50
H	TMWW-t	MT20	3.0	5.0	1.50 2.25
I	TMVW-t	MT20	5.0	8.0	2.00 3.75
K	BMV1+p	MT20	3.0	4.0	
L	BMWW-t	MT20	5.0	6.0	2.50 2.00
M	BMWW+t	MT20	3.0	5.0	1.75 1.50
N	BMWW+t	MT20	3.0	4.0	
O	BS-t	MT20	4.0	6.0	
P	BMWWW-t	MT20	5.0	6.0	2.50 2.00
Q	BMWW+t	MT20	3.0	4.0	
R	BMWW-t	MT20	4.0	5.0	2.00 2.00
S	BMV1+p	MT20	2.0	4.0	

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

PLATE PLACEMENT TOL. = 0.250 inches  
  
PLATE ROTATION TOL. = 5.0 Deg.  
  
JSI GRIP= 0.89 (L) (INPUT = 0.90 )  
JSI METAL= 0.60 (L) (INPUT = 1.00 )

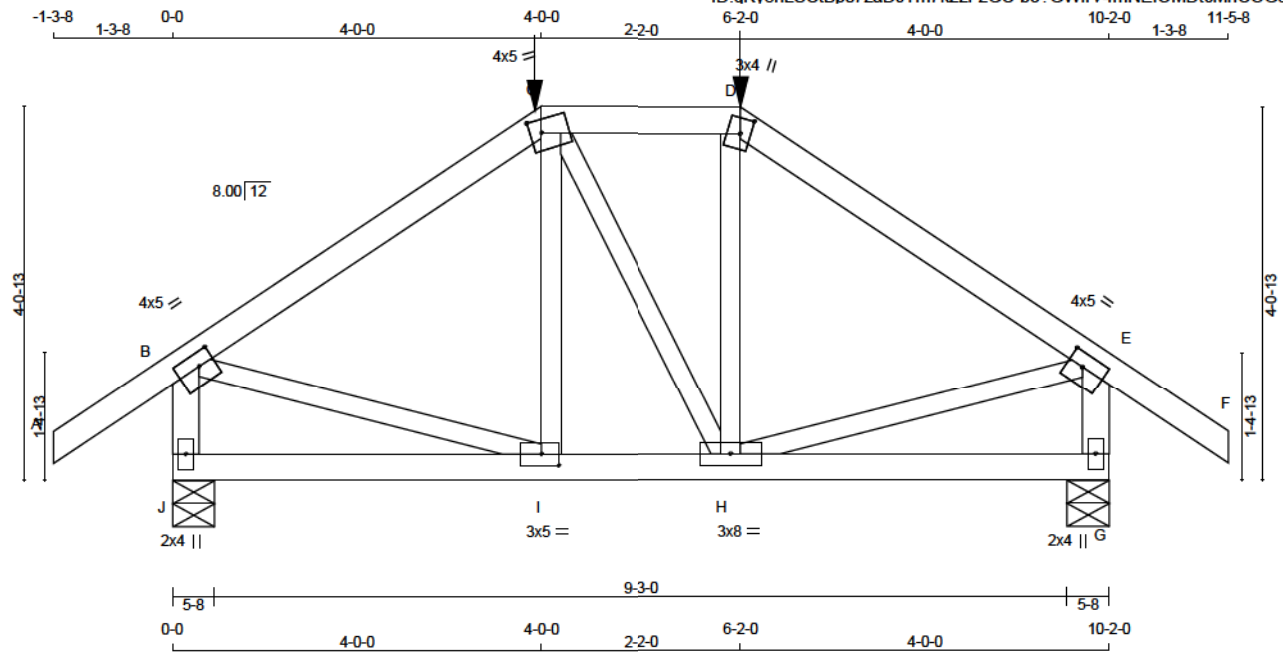
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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**LUMBER**

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
J - B	2x4	DRY No.2	SPF
G - E	2x4	DRY No.2	SPF
J - G	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	5.0	1.75	2.00
C	TTWW-m	MT20	4.0	5.0	1.75	1.50
D	TTW+m	MT20	3.0	4.0	2.00	1.25
E	TMVW-t	MT20	4.0	5.0	1.75	2.00
G	BMV1+p	MT20	2.0	4.0		
H	BMWW-t	MT20	3.0	8.0		
I	BMWW-t	MT20	3.0	5.0	1.50	2.25
J	BMV1+p	MT20	2.0	4.0		

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

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD	BRG	IN-SX
J	1339	0	1339	0	0	5-8	1-8		
G	1339	0	1339	0	0	5-8	1-8		

**UNFACTORED REACTIONS**

1ST LCASE MAX/MIN COMPONENT REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	982	595 / 0	148 / 0	0 / 0	0 / 0	239 / 0	0 / 0
G	982	595 / 0	148 / 0	0 / 0	0 / 0	239 / 0	0 / 0

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.51 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC)	MAX. FACTORED VERT. LOAD LC1 MAX (LC)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 47	-124.4 -124.4	0.18 (1)	10.00	I-C	-51 / 135	0.04 (3)
B-C	-1062 / 0	-124.4 -124.4	0.41 (1)	5.51	C-H	0 / 2	0.00 (3)
C-D	-880 / 0	-172.4 -172.4	0.16 (1)	6.25	H-D	-52 / 137	0.04 (3)
D-E	-1061 / 0	-124.4 -124.4	0.41 (1)	5.51	B-I	0 / 912	0.23 (1)
E-F	0 / 47	-124.4 -124.4	0.18 (1)	10.00	H-E	0 / 912	0.23 (1)
J-B	-1243 / 0	0.0 0.0	0.14 (1)	7.17			
G-E	-1243 / 0	0.0 0.0	0.14 (1)	7.17			
J-I	0 / 0	-54.4 -54.4	0.17 (3)	10.00			
I-H	0 / 880	-54.4 -54.4	0.26 (2)	10.00			
H-G	0 / 0	-54.4 -54.4	0.17 (3)	10.00			

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-0	-207	-207	—	FRONT	VERT	TOTAL	—	C1
D	6-2-0	-207	-207	—	FRONT	VERT	TOTAL	—	C1

**CONNECTION REQUIREMENTS**

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 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 = 4-0-0

END SETBACK = 4-0-0

END WALL WIDTH = 5-8

CORNER FRAMING TYPE: CONVENTIONAL

END JACK TYPE: CONVENTIONAL

APPLIED TO FRONT SIDE

- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.34")

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

ALLOWABLE DEFL.(TL)= L/360 (0.34")

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

CSI: TC=0.41/1.00 (B-C:1) , BC=0.26/1.00 (H-I:2) , WB=0.23/1.00 (B-I:1) , SSI=0.18/1.00 (B-C: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 = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (D) (INPUT = 0.90 )

JSI METAL = 0.35 (B) (INPUT = 1.00 )



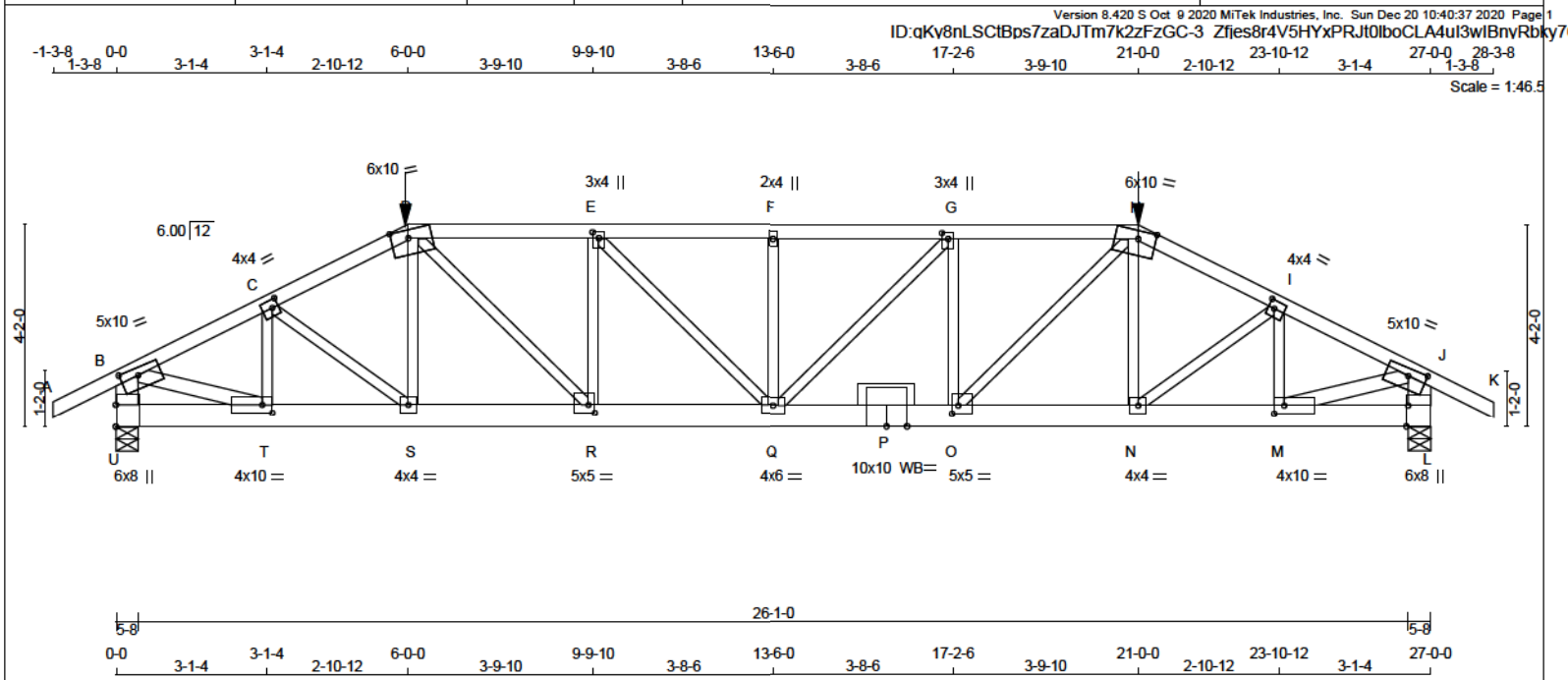
**READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.**



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

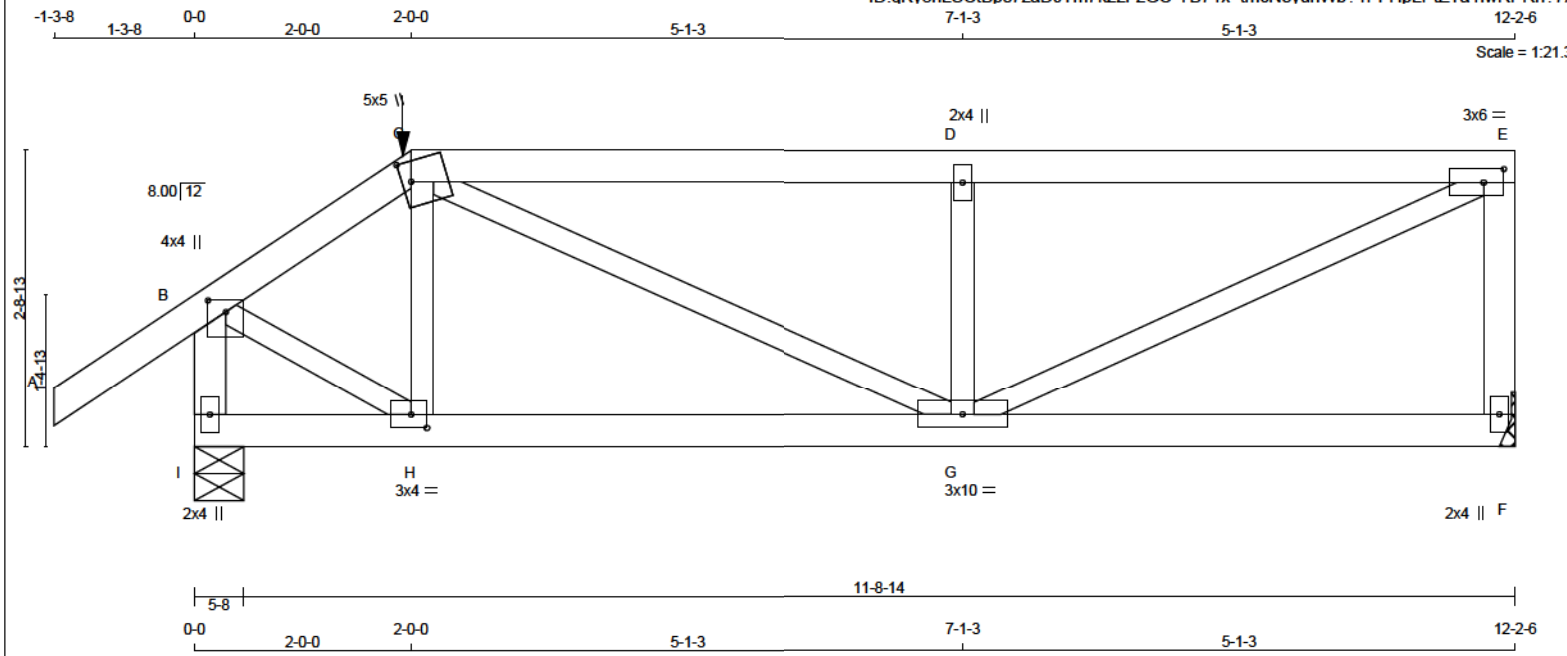




LUMBER					DIMENSIONS, SUPPORTS, AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA	
N. L. G. A. RULES					BEARINGS										SPECIFIED LOADS:	
CHORDS	SIZE	LUMBER	DESCR.		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG							TOP CH. LL = 34.8 PSF	
A - D	2x4	DRY	No.2		VERT	HORIZ	DOWN	HORIZ	UPLIFT	IN-SX	IN-SX				DL = 8.0 PSF	
D - H	2x4	DRY	2100F 1.8E		U	4234	0	4234	0	5-8	5-8				BOT CH. LL = 10.5 PSF	
H - K	2x4	DRY	No.2		L	4234	0	4234	0	5-8	5-8				DL = 7.3 PSF	
U - B	2x6	DRY	No.2		UNFACTORED REACTIONS										TOTAL LOAD = 60.6 PSF	
L - C	2x6	DRY	No.2		1ST LCASE MAX MIN. COMPONENT REACTIONS										SPACING = 24.0 IN. C/C	
U - P	2x6	DRY	2100F 1.8E		JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL			LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM	
P - L	2x6	DRY	2100F 1.8E		JT	3132	1810 / 0	535 / 0	0 / 0	0 / 0	788 / 0	0 / 0			GIRDER TYPE: CPrimeHip	
ALL WEBS EXCEPT B - T M - J	2x3 2x4	DRY	No.2		L	3132	1810 / 0	535 / 0	0 / 0	0 / 0	788 / 0	0 / 0			SIDE SETBACK = 6-0-0	
															END SETBACK = 6-0-0	
															END WALL WIDTH = 5-8	
															CORNER FRAMING TYPE: CONVENTIONAL	
															END JACK TYPE: CONVENTIONAL	
															APPLIED TO FRONT SIDE	
															- ADDTL LOADS BASED ON 55 % OF GSL.	
															THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCS 2015	
															THIS DESIGN COMPLIES WITH:	
															- PART 9 OF CBCS 2018 , ABC 2019	
															- PART 9 OF OBC 2012 (2019 AMENDMENT)	
															- CSA 086-14	
															- TPIC 2014	
															(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD	
															ALLOWABLE DEFL.(LL)= L/360 (0.90")	
															CALCULATED VERT. DEFL.(LL)= L/ 999 (0.27")	
															ALLOWABLE DEFL.(TL)= L/360 (0.90")	
															CALCULATED VERT. DEFL.(TL)= L/ 729 (0.44")	
															CSI: TC=0.871/1.00 (H=1), BC=0.47/1.00 (O-Q=1), WB=0.90/1.00 (J-M=1), SSI=0.45/1.00 (D-E=1)	
															DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00	
															COMPANION LIVE LOAD FACTOR = 1.00	
															TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .	

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TOTAL WEIGHT = 47 lb

**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - E	2x4	DRY No.2	SPF
F - E	2x4	DRY No.2	SPF
I - B	2x4	DRY No.2	SPF
I - F	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	1.25	2.00
C	TTWW+m	MT20	5.0	5.0	2.25	1.00
D	TMVW+w	MT20	2.0	4.0		
E	TMVW-l	MT20	3.0	6.0	1.50	2.25
F	BMV1+p	MT20	2.0	4.0		
G	BMVWV-l	MT20	3.0	10.0		
H	BMVW-l	MT20	3.0	4.0	1.50	1.75
I	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	890	0	0
F VERT	1098	0	0
I VERT	1098	0	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

**UNFACTORED REACTIONS**

1ST LCASE	MAX/MIN	COMPONENT REACTIONS
JT COMBINED	859	379 / 0
F COMBINED	1098	496 / 0
I COMBINED	1098	496 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.91 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)	FACTORED HORZ. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)
FR-TO	0 / 47	-124.4	-124.4 0.18 (1)	10.00	H-C	-197 / 25	0.04 (1)
A-B	-804 / 0	-124.4	-124.4 0.10 (1)	6.25	C-G	0 / 854	0.18 (1)
B-C	-1249 / 0	-110.2	-110.2 0.55 (1)	4.91	G-D	-888 / 0	0.12 (1)
C-D	-1249 / 0	-110.2	-110.2 0.55 (1)	4.91	G-E	0 / 1385	0.34 (1)
D-E	-815 / 0	0.0	0.0 0.12 (1)	7.81	B-H	0 / 750	0.19 (1)
E-F	-1087 / 0	0.0	0.0 0.12 (1)	7.55			
I-B	0 / 0	-34.8	-34.8 0.10 (3)	10.00			
H-G	0 / 859	-34.8	-34.8 0.25 (2)	10.00			
G-F	0 / 0	-34.8	-34.8 0.19 (3)	10.00			

**FACTORED CONCENTRATED LOADS (LBS)**

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	2-0-0	-21	-21	---	FRONT	VERT	TOTAL	---	C1

**CONNECTION REQUIREMENTS**

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

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

GIRDER TYPE: CPrimeHip  
LEFT SETBACK = 2-0-0  
RIGHT SETBACK = 0-0  
END SETBACK = 2-0-0  
END WALL WIDTH = 5-8  
CORNER FRAMING TYPE: CONVENTIONAL  
END JACK TYPE: CONVENTIONAL  
APPLIED TO FRONT SIDE  
- ADDTL LOADS BASED ON 55 % OF GSL.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 086-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.41")  
CALCULATED VERT. DEFL.(LL)= L/969 (0.03")  
ALLOWABLE DEFL.(TL)= L/360 (0.41")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.06")

CSI: TC=0.55/1.00 (D-E:1) , BC=0.25/1.00 (G-H:2) ,  
WB=0.34/1.00 (E-G:1) , SSI=0.30/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (C) (INPUT = 0.90 )  
JSI METAL= 0.30 (E) (INPUT = 1.00 )

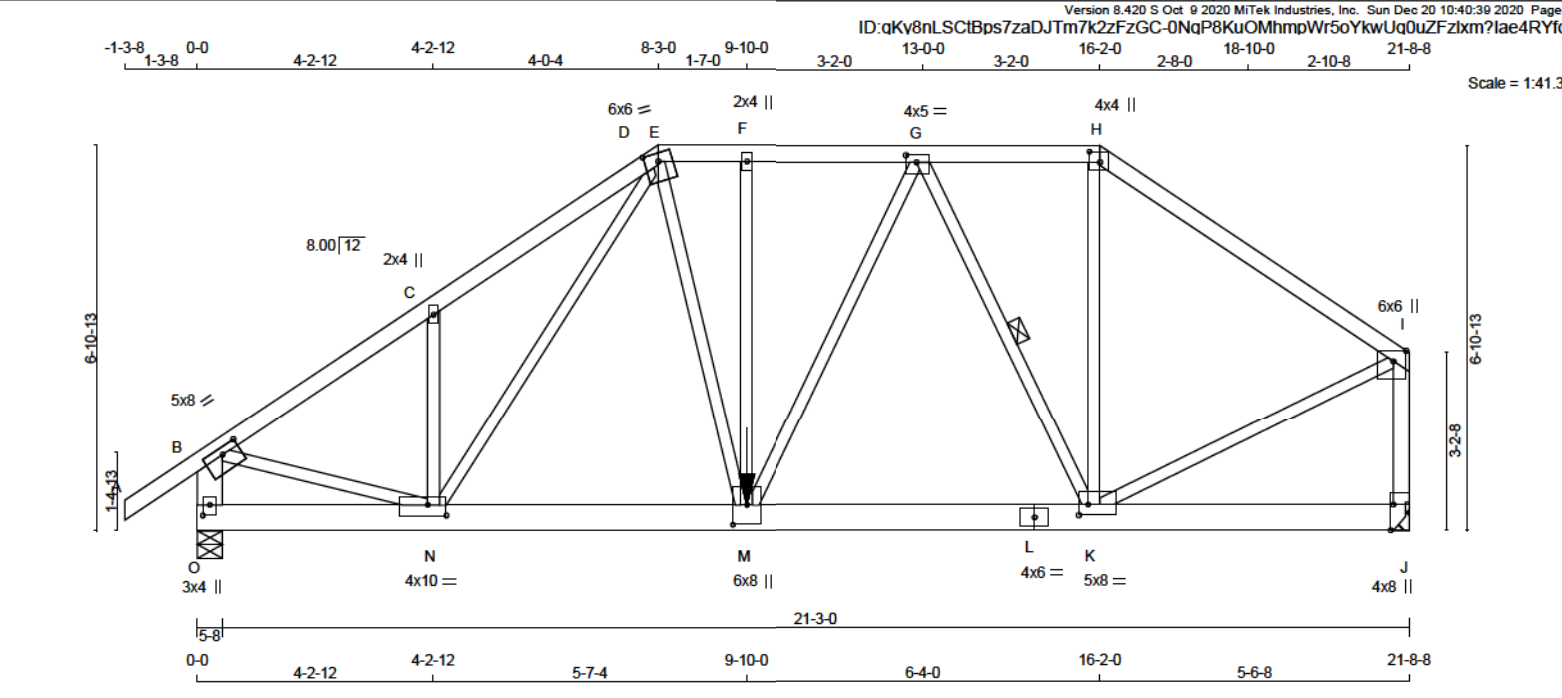


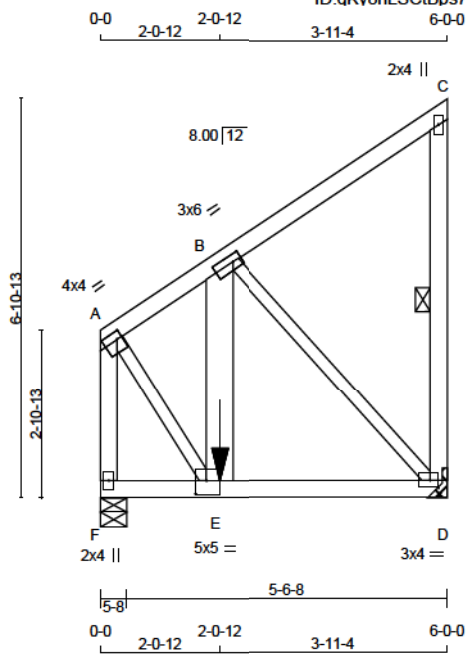
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



**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 = 1:39.8

TOTAL WEIGHT = 2 X 39 = 77 LB

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

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
F - A 1	12	TOP
A - C 1	12	TOP
C - D 1	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
F - D 1	4	SIDE(241.0)
WEBS : (0.122"x3") SPIRAL NAILS		
2x3 1	6	
2x6 2	6	

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TMVW-1	MT20	4.0	4.0	1.50	1.00
B TMWW-1	MT20	3.0	6.0	1.50	1.75
C TMV+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	1991	1991	0	5-8
F D	2386	2386	0	1-8 MECHANICAL

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

##### UNFACTORED REACTIONS

1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT COMBINED	848 / 0	255 / 0	0 / 0	0 / 0	372 / 0	0 / 0
F D	1752	1007 / 0	304 / 0	0 / 0	442 / 0	0 / 0

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

##### BRACING

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF C-D. DBS = 20-0-0. CBF = 26 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) TO EACH PLY 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. FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	UNBRAC LENGTH	MEMB.	MAX. FORCE (LBS)	FACTORED FORCE (LBS)	MAX (CSI (LC))	
FR-TO		FROM TO			FR-TO				
F-A	-2219 / 0	0.0	0.0 0.18 (1)	7.49	A-E	0 / 1810	0.22 (1)		
A-B	-1316 / 0	-124.4	-124.4 0.12 (1)	6.25	E-B	0 / 1399	0.09 (1)		
B-C	-22 / 0	-124.4	-124.4 0.13 (1)	6.25	B-D	-1602 / 0	0.40 (1)		
D-C	-205 / 0	0.0	0.0 0.02 (1)	6.25					
F-E	0 / 0	-137.3	-137.3 0.57 (1)	10.00					
E-D	0 / 1130	-619.3	-619.3 0.74 (1)	10.00					

##### FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
E	2-0-12	-208	-232	—	BACK	VERT	DEAD	—	C1
E	2-0-12	-113	-170	—	BACK	VERT	LIVE	—	C1
E	2-0-12	-568	-568	—	BACK	VERT	SNOW	—	C1

##### CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

##### 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 = 34.8 PSF
	DL = 8.0 PSF
BOT CH.	LL = 10.5 PSF
	DL = 7.3 PSF
TOTAL LOAD	= 60.6 PSF

##### SPACING = 24.0 IN. C/C

GIRDER TYPE: CStdGirder  
START DISTANCE = 0-0  
START SPAN CARRIED = 4-10-4  
END DISTANCE = 6-0-0  
END SPAN CARRIED = 4-10-4  
END WALL WIDTH = 5-8  
APPLIED TO FRONT SIDE OF BOTTOM CHORD.  
- ADDTL LOADS BASED ON 55 % OF GSL. (DEFINED BY USER)

\*\*\* NON STANDARD GIRDER \*\*\*  
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018 , ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 086-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/598 (0.12")

CSI: TC=0.18/1.00 (A-F:1) , BC=0.74/1.00 (D-E:1) ,  
WB=0.40/1.00 (B-D:1) , SS=0.61/1.00 (D-E:1)

DOL LUMBER-1.00 NAIL-1.00 L3 BEND-1.00 COMP-1.00  
SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

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.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			



PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
D	BMVW1-t	MT20	3.0	4.0	1.50 1.75
E	BMWW-t	MT20	5.0	5.0	2.75 2.25
F	BMV1+p	MT20	2.0	4.0	

JSI GRIP= 0.85 (B) (INPUT = 0.80 )  
JSI METAL= 0.32 (A) (INPUT = 1.00 )

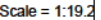
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





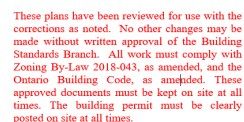
TOTAL WEIGHT =  $2 \times 10 = 20$  lb

DRY: SEASONED LUMBER.

**LOADING**  
TOTAL LOAD CASES: (4)

**TOTAL LOAD CASES: (4)**

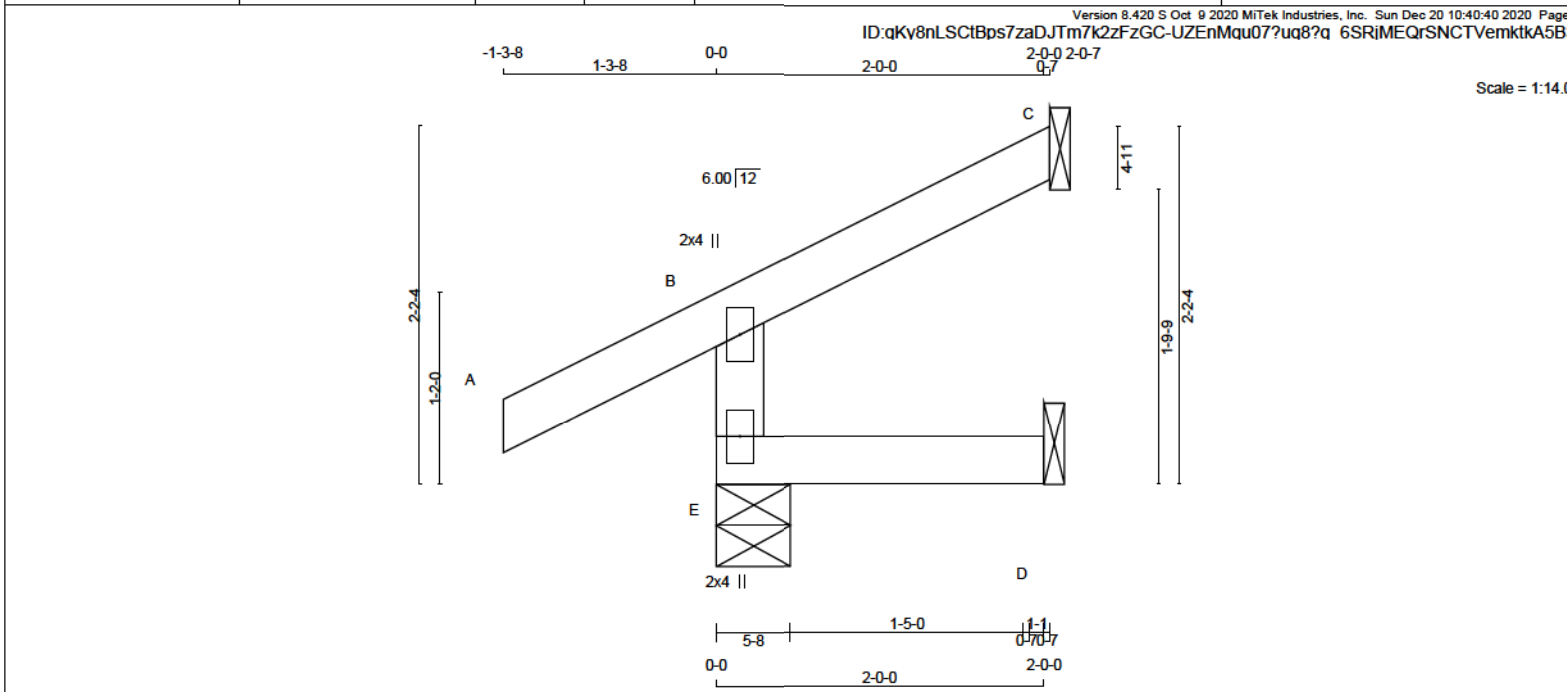
JSI GRIP= 0.27 (B) (INPUT = 0.90 )  
JSI METAL= 0.20 (B) (INPUT = 1.00 )



Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-06
Sewage System			
Zoning			



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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.
E - B	2x4	DRY	No.2
A - C	2x4	DRY	No.2
E - D	2x4	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		
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	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
E	370	0	370	0
C	96	0	96	0
D	35	0	44	0

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM. LIVE
E	264	183 / 0	23 / 0	0 / 0
C	66	54 / 0	0 / 0	0 / 0
D	32	0 / 0	19 / 0	0 / 0

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

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

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

**LOADING**  
TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
E-B	-327 / 0	0.0	0.0	0.02 (3)	7.81		
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00		
B-C	-14 / 0	-124.4	-124.4	0.09 (1)	6.25		
E-D	0 / 0	-39.2	-39.2	0.03 (3)	10.00		

**CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN**

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 086-14  
- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.16/1.00 (A-B:1) , BC=0.03/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.12/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90 )  
JSI METAL= 0.14 (B) (INPUT = 1.00 )



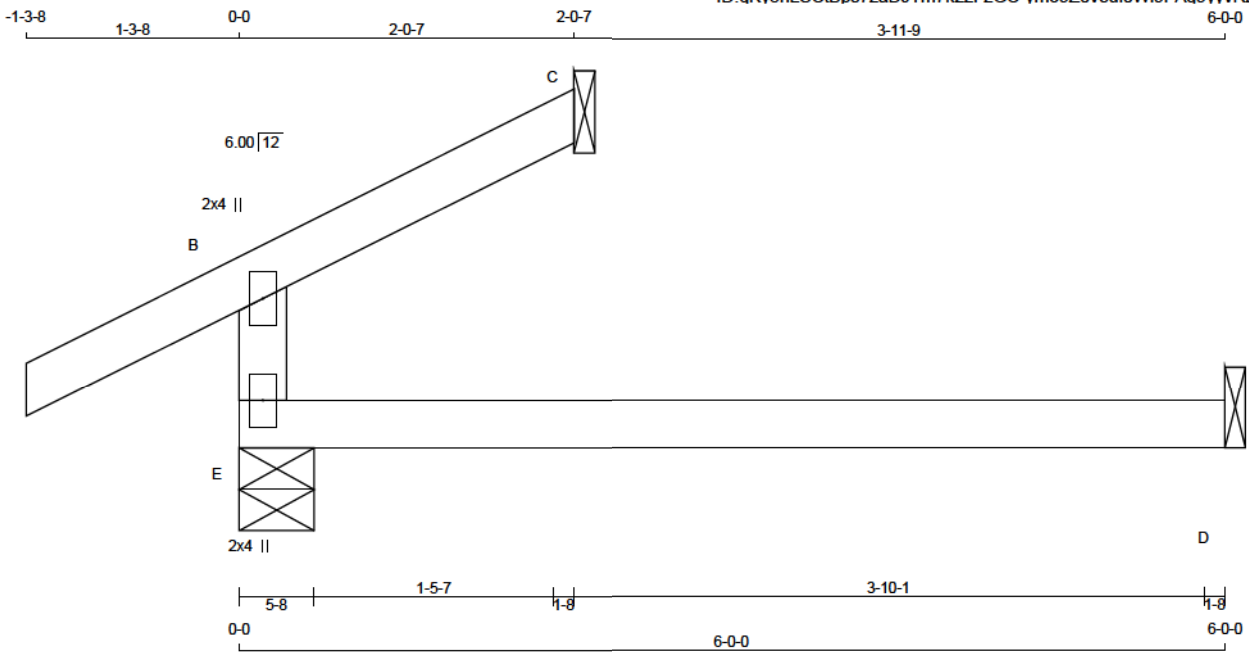
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





Scale = 1:14.0

TOTAL WEIGHT = 2 X 12 = 24 lb

**LUMBER**  
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

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

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	485	0	485	0	5-8	1-8
C	96	0	96	0	1-8	1-8
D	97	0	123	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	COMBINED	1ST LCASE		MAX / MIN COMPONENT REACTIONS		WIND	DEAD	SOIL
		SNOW	LIVE	PERM. LIVE	UNBRAC			
E	350	183 / 0	74 / 0	0 / 0	0 / 0	93 / 0	0 / 0	0 / 0
C	86	54 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0	0 / 0
D	88	0 / 0	52 / 0	0 / 0	0 / 0	36 / 0	0 / 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 = 8.25 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)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRAC LENGTH
FR-TO		FROM TO		FR-TO			
E-B	-327 / 0	0.0 0.0 0.22 (3)	7.81	E-B	-327 / 0		
A-B	0 / 38	-124.4 -124.4 0.16 (1)	10.00	A-B	0 / 38		
B-C	-14 / 0	-124.4 -124.4 0.09 (1)	6.25	B-C	-14 / 0		
E-D	0 / 0	-39.2 -39.2 0.22 (3)	10.00	E-D	0 / 0		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

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- PART 9 OF OBC 2012 (2019 AMENDMENT)  
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**DESIGN ASSUMPTIONS**  
- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/ 874 (0.08")

CSI: TC=0.22/1.00 (B-E:3) , BC=0.22/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.14/1.00 (D-E:3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.18 (B) (INPUT = 0.90 )  
JSI METAL= 0.14 (B) (INPUT = 1.00 )



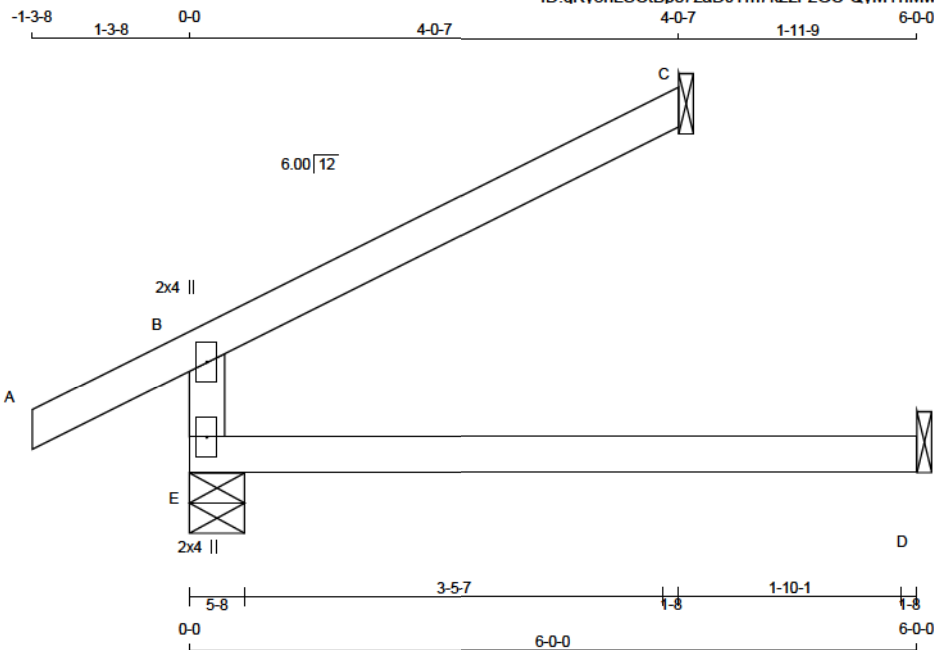
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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



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TOTAL WEIGHT = 2 X 15 = 29 lb

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
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		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	BRG	IN-SX	BRG	IN-SX
E	621	0	0	621	0	0	5-8	1-8	
C	188	0	0	188	0	0	1-8	1-8	
D	97	0	0	123	0	0	1-8	1-8	

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS		1ST LCASE		MAX / MIN		COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	458	270 / 0	74 / 0	0 / 0	0 / 0	114 / 0	0 / 0
C	130	105 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
D	88	0 / 0	52 / 0	0 / 0	0 / 0	36 / 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)

C H O R D S		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH
E-B	-483 / 0	0.0 0.0 0.23 (3)	7.81
A-B	0 / 38	-124.4 -124.4 0.16 (1)	10.00
B-C	-28 / 0	-124.4 -124.4 0.34 (1)	6.25
E-D	0 / 0	-39.2 -39.2 0.23 (3)	10.00

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

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- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

**DESIGN ASSUMPTIONS**

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/ 874 (0.08")

CSI: TC=0.34/1.00 (B-C:1) , BC=0.23/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.22/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90 )  
JSI METAL= 0.20 (B) (INPUT = 1.00 )



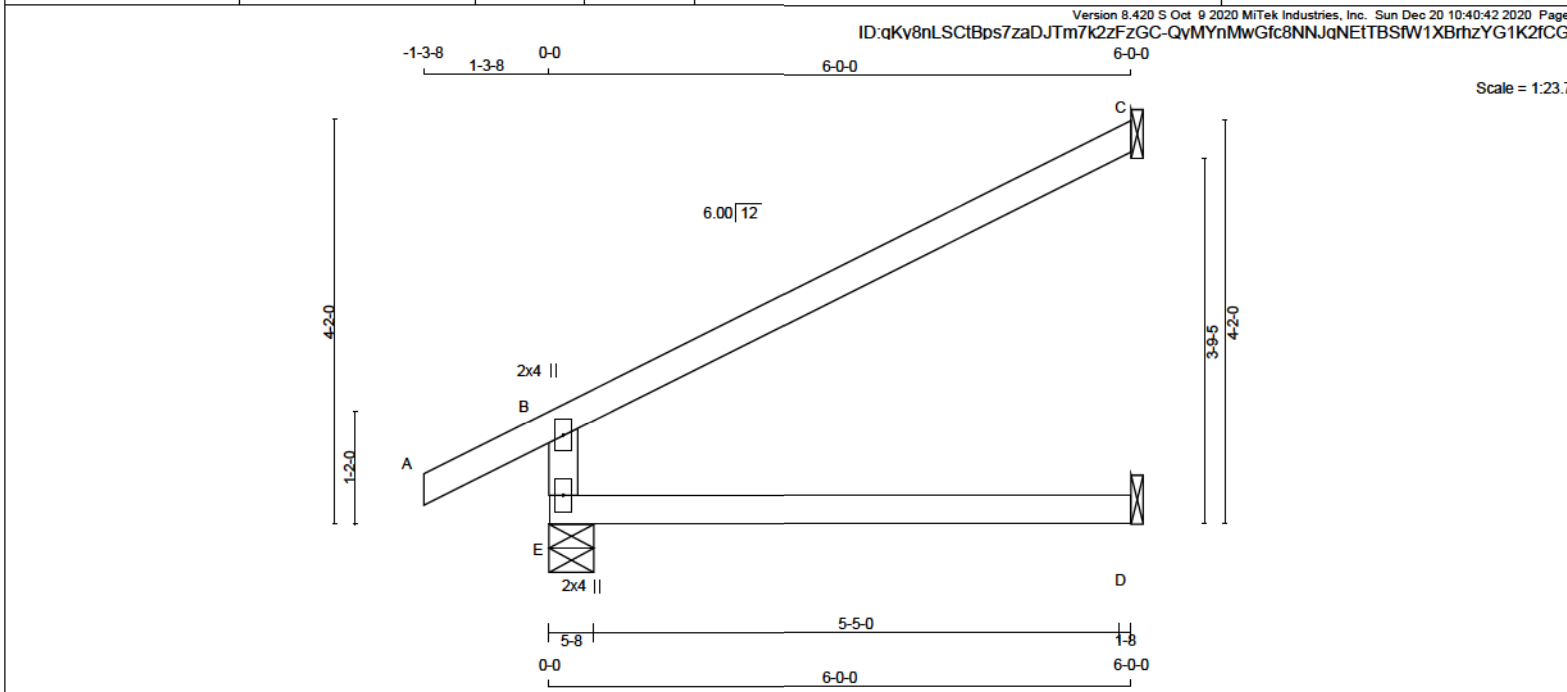
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER
E - B	2x4 DRY	No.2
A - C	2x4 DRY	No.2
E - D	2x4 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		
E	BMV1+p	MT20	2.0	4.0		

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

**BEARINGS**

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
E	774	774	5-8	1-8
C	280	280	1-8	1-8
D	97	123	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

**UNFACTORED REACTIONS**

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
E	COMBINED	355 / 0	74 / 0	0 / 0
C	COMBINED	157 / 0	0 / 0	0 / 0
D	COMBINED	0 / 0	52 / 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 = 8.25 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)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED HORZ. LOAD (LC)	MAX. FACTORED LENGTH
E-B	-835 / 0	0.0	0.0	E-B	0 / 38	-124.4	7.81
A-B	0 / 38	-124.4	0.18	A-B	-42 / 0	-124.4	10.00
B-C	-42 / 0	-124.4	0.78	B-C	0 / 0	-39.2	6.25
E-D	0 / 0	-39.2	0.24	E-D			10.00

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

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- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/874 (0.08")

CSI: TC=0.76/1.00 (B-C:1) , BC=0.24/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.33/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.36 (B) (INPUT = 0.90 )  
JSI METAL= 0.26 (B) (INPUT = 1.00 )



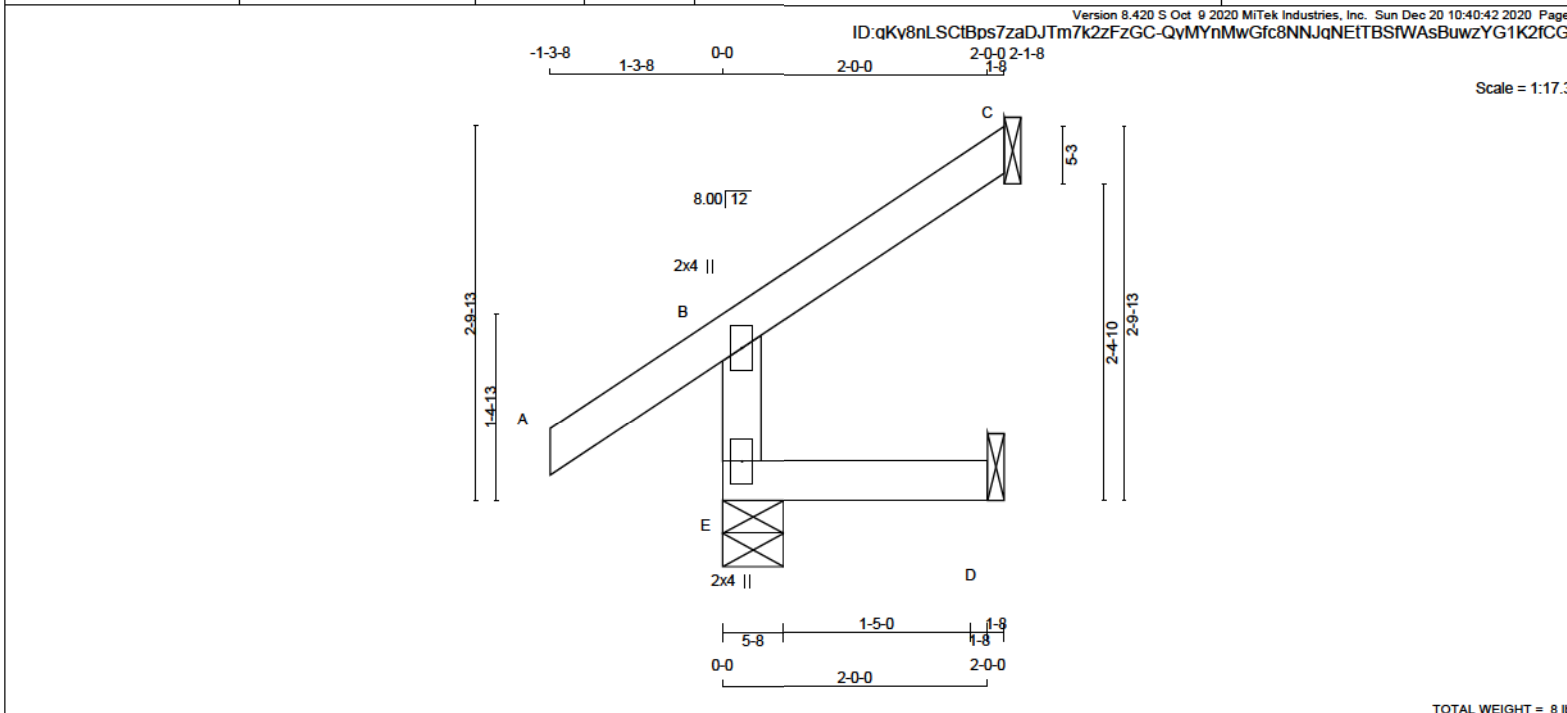
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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

E - B 2x4 DRY No.2

A - C 2x4 DRY No.2

E - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

SPF

SPF

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
E	378	0	378	0	5-8	1-8
C	100	0	100	0	1-8	1-8
D	36	0	45	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H 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	270	188 / 0	23 / 0	0 / 0	0 / 0	59 / 0	0 / 0
C	69	56 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0
D	32	0 / 0	19 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRACED LENGTH
FR-TO		FROM TO		FR-TO			
E-B	-335 / 0	0.0	0.0 0.02 (3)	7.81			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00			
B-C	-18 / 0	-124.4	-124.4 0.09 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 0.03 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
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DESIGN ASSUMPTIONS  
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(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.17/1.00 (A-B:1) , BC=0.03/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

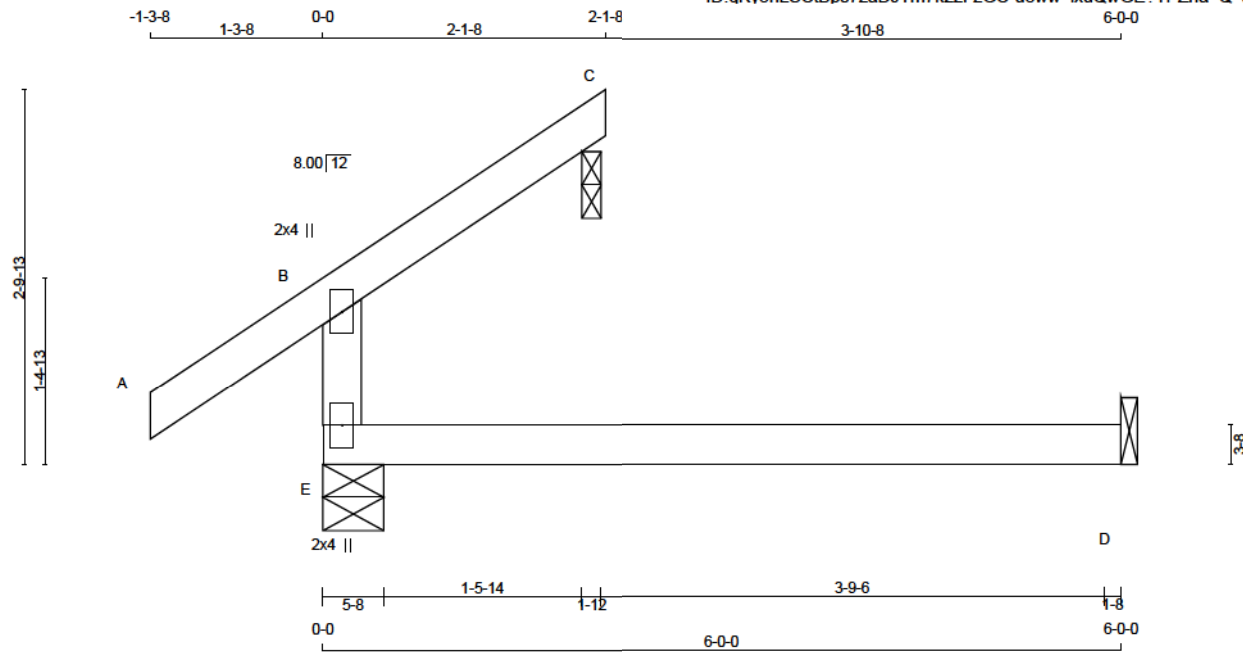
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Zoning			

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TOTAL WEIGHT = 13 lb

**LUMBER**  
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

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

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

**BEARINGS**

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	472	0	472	0	5-8	1-8
C	100	0	100	0	1-12	1-12
D	99	0	125	0	1-8	1-8

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S) C  
SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) D

UNFACTORED REACTIONS							
1ST LCASE		MAX / MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	355	188 / 0	73 / 0	0 / 0	0 / 0	94 / 0	0 / 0
C	89	56 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0
D	89	0 / 0	53 / 0	0 / 0	0 / 0	37 / 0	0 / 0

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

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

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

**LOADING**  
TOTAL LOAD CASES: (4)

MEMB.	C H O R D S			W E B S		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED VERT. LOAD LC1 MAX (PLF)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. MEMB. FORCE (LBS)
FR-TO						
E-B	-335 / 0	0.0	0.0	0.20 (3)	7.81	
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	
B-C	-18 / 0	-124.4	-124.4	0.09 (1)	6.25	
E-D	0 / 0	-39.2	-39.2	0.22 (3)	10.00	

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 086-14  
- TPIC 2014

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

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")  
ALLOWABLE DEFL.(TL)= L/360 (0.20")  
CALCULATED VERT. DEFL.(TL) = L/ 832 (0.09")

CSI: TC=0.20/1.00 (B-E:3) , BC=0.22/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.14/1.00 (D-E:3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.90 )  
JSI METAL= 0.17 (B) (INPUT = 1.00 )

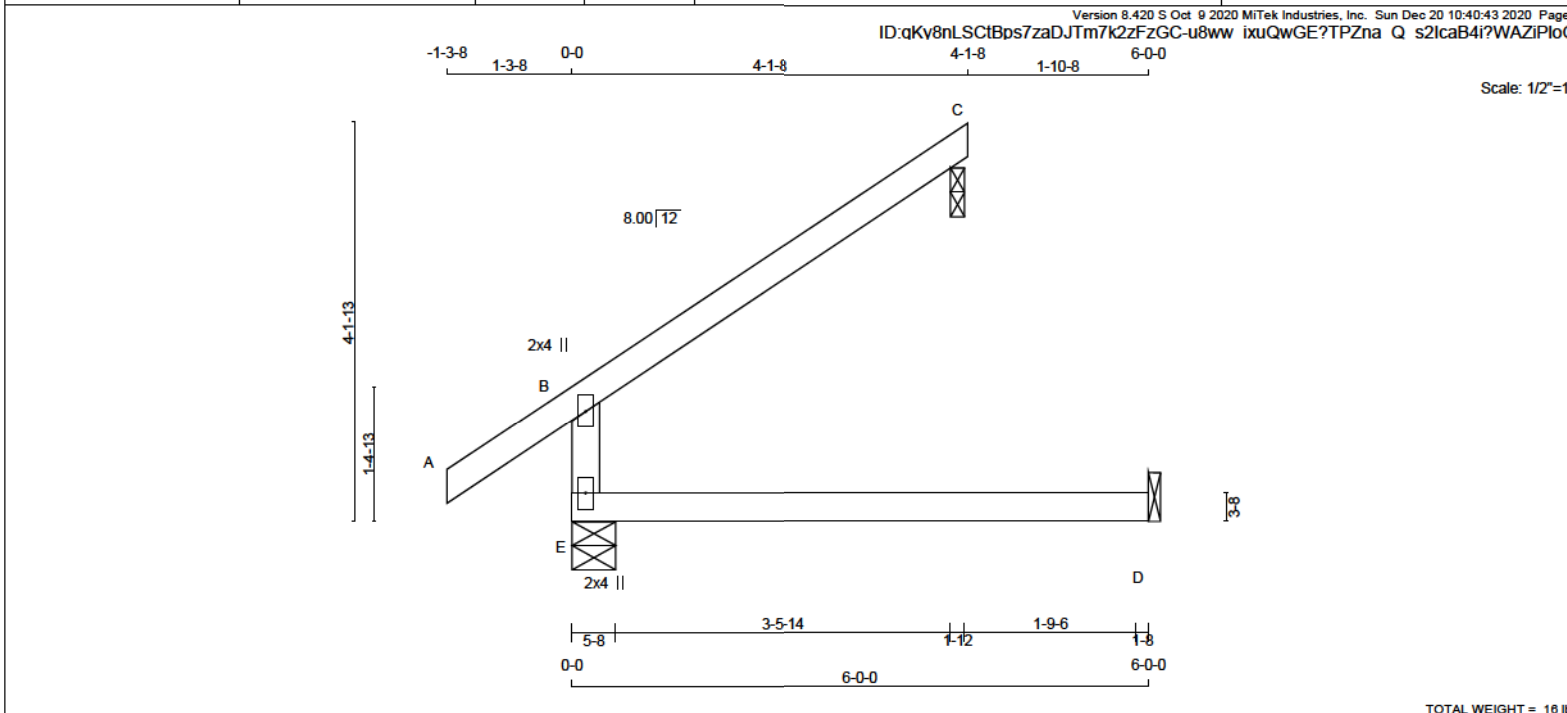


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

**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

E - B 2x4 DRY No.2

A - C 2x4 DRY No.2

E - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

SPF

SPF

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	DOWN	HORIZ	UPLIFT
E	628	0	628	0
C	193	0	193	0
D	99	0	125	0

BEVELED PLATE OR SHIM REQUIRED TO PROVIDE FULL BEARING SURFACE WITH TRUSS CHORD AT JT(S) C

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) D

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE WIND DEAD SOIL
E	462	275 / 0	73 / 0 0 / 0 0 / 0 114 / 0 0 / 0
C	133	108 / 0	0 / 0 0 / 0 0 / 0 25 / 0 0 / 0
D	89	0 / 0	53 / 0 0 / 0 0 / 0 37 / 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)

C H O R D S		W E B S	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO			
E-B	-491 / 0	0.0 0.0 0.21 (3)	7.81
A-B	0 / 47	-124.4 -124.4 0.17 (1)	10.00
B-C	-36 / 0	-124.4 -124.4 0.36 (1)	6.25
E-D	0 / 0	-39.2 -39.2 0.23 (3)	10.00

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)

EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")

ALLOWABLE DEFL.(TL)= L/360 (0.20")

CALCULATED VERT. DEFL.(TL) = L/ 832 (0.09")

CSI: TC=0.36/1.00 (B-C-1) , BC=0.23/1.00 (D-E-3) ,

WB=0.00/1.00 (n/a:0) , SSI=0.21/1.00 (B-C-1)

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

SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

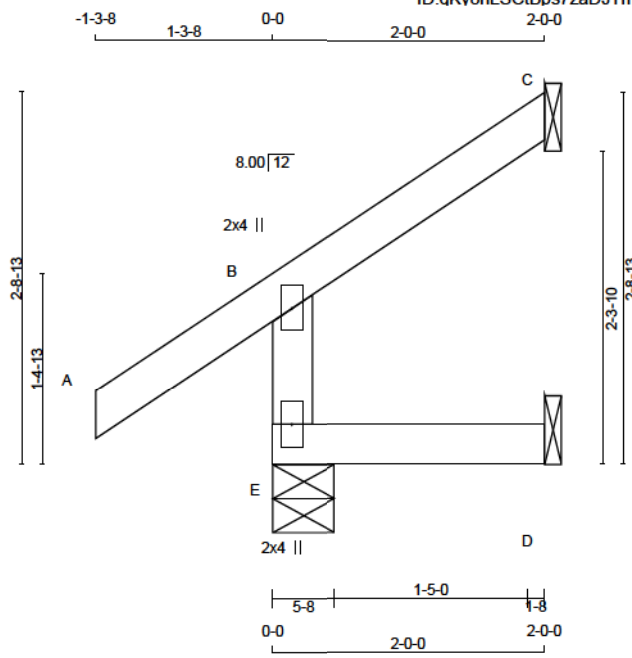
JSI GRIP= 0.30 (B) (INPUT = 0.90 )

JSI METAL= 0.25 (B) (INPUT = 1.00 )

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

**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 = 1:16.9

TOTAL WEIGHT = 6 X 8 = 48 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	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
E	368	0	368	0	0	5-8	1-8
C	94	0	94	0	0	1-8	1-8
D	36	0	45	0	0	1-8	1-8

SEE MITEK STANDARD DETAIL B97791H 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	263	182 / 0	23 / 0	0 / 0	0 / 0	58 / 0	0 / 0		
C	65	53 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0		
D	32	0 / 0	19 / 0	0 / 0	0 / 0	13 / 0	0 / 0		

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
E-B	-325 / 0	0.0	0.0 0.02 (3)	7.81			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00			
B-C	-17 / 0	-124.4	-124.4 0.08 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 0.03 (3)	10.00			

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

TOP CH.	LL = 34.8	PSF
	DL = 8.0	PSF
BOT CH.	LL = 10.5	PSF
	DL = 7.3	PSF
TOTAL LOAD	= 60.6	PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

**DESIGN ASSUMPTIONS**

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CSI: TC=0.17/1.00 (A-B:1) , BC=0.03/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MT20	650	371	1747
	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.20 (B) (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.**

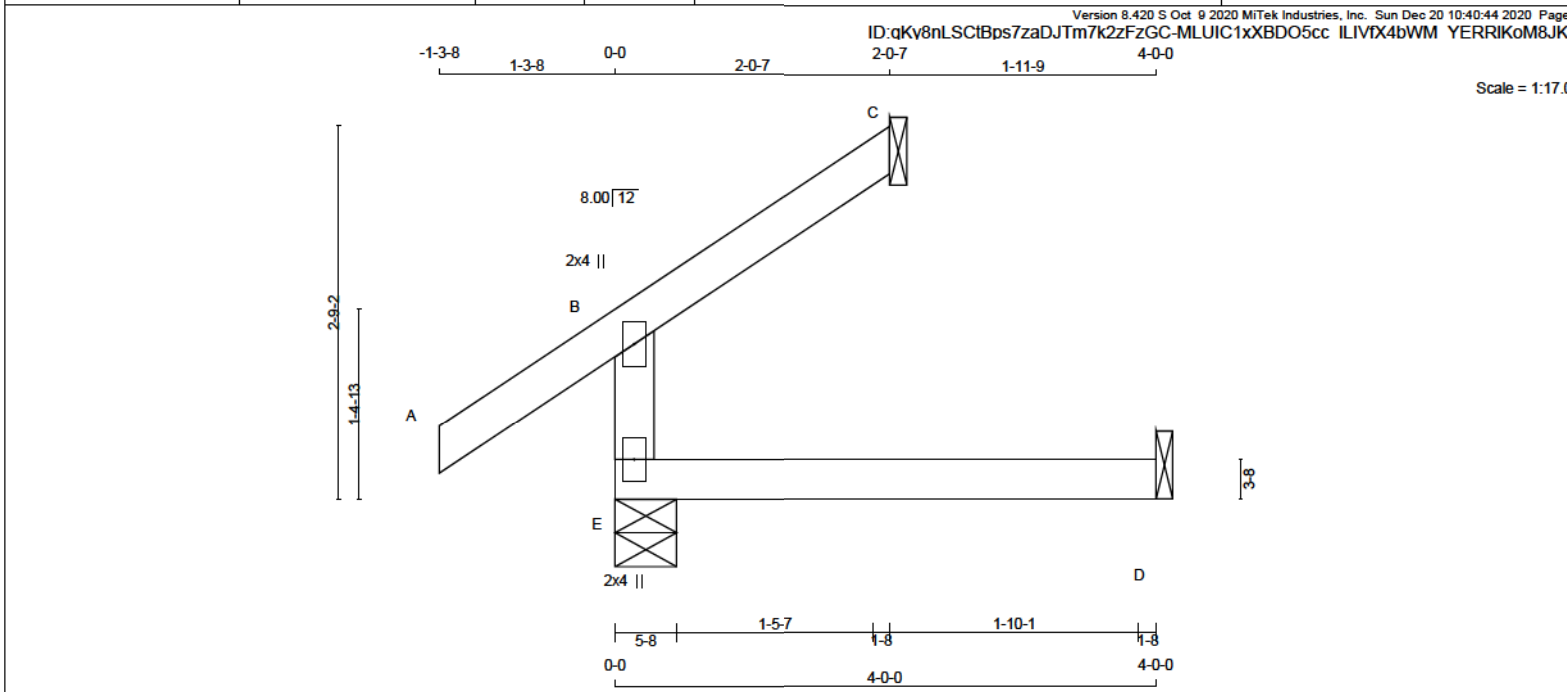


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			







LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

E - B 2x4 DRY No.2

A - C 2x4 DRY No.2

E - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

SPF

SPF

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
E	418	0	418	0	0	5-8
C	96	0	96	0	0	1-8
D	68	0	68	0	0	1-8

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
E	307	184 / 0	48 / 0	0 / 0
C	66	54 / 0	0 / 0	0 / 0
D	61	0 / 0	36 / 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 (1)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRAC LENGTH
FR-TO		FROM	TO		FR-TO		
E-B	-328 / 0	0.0	0.0	0.08 (3)	7.81		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00		
B-C	-17 / 0	-124.4	-124.4	0.09 (1)	6.25		
E-D	0 / 0	-39.2	-39.2	0.11 (3)	10.00		

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")

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

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

CSI: TC=0.17/1.00 (A-B:1) , BC=0.11/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL= 0.17 (B) (INPUT = 1.00 )

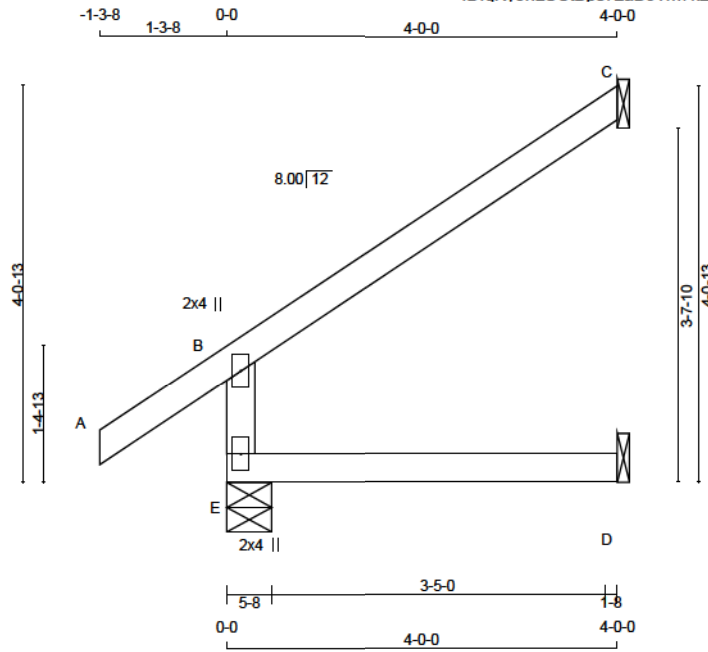
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			

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Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Sun Dec 20 10:40:44 2020 Page 1  
ID:qKy8nLSCIBps7zaDJTm7k2ZfZGc-MLUIC1xXBDO5cc ILIVIX4bTh Y6RRIKoM8JKpy77

Scale = 1:23.5



TOTAL WEIGHT = 2 X 13 = 26 lb

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

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

#### 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	
E	571	0	571	0	0	5-8	1-8	1-8	
C	187	0	187	0	0	1-8	1-8	1-8	
D	68	0	68	0	0	1-8	1-8	1-8	

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS									
		1ST LCASE		MAX / MIN		COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL		
E	412	270 / 0	48 / 0	0 / 0	0 / 0	95 / 0	0 / 0		
C	129	105 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0		
D	61	0 / 0	36 / 0	0 / 0	0 / 0	25 / 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 = 8.25 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)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH
E-B	-482 / 0	0.0	0.0 0.09 (3)	7.81			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00			
B-C	-34 / 0	-124.4	-124.4 0.34 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 0.11 (3)	10.00			

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

##### DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.34/1.00 (B-C:1) , BC=0.11/1.00 (D-E:3) ,  
WB=0.00/1.00 (n/a:0) , SSI=0.20/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.30 (B) (INPUT = 0.90 )  
JSI METAL= 0.25 (B) (INPUT = 1.00 )



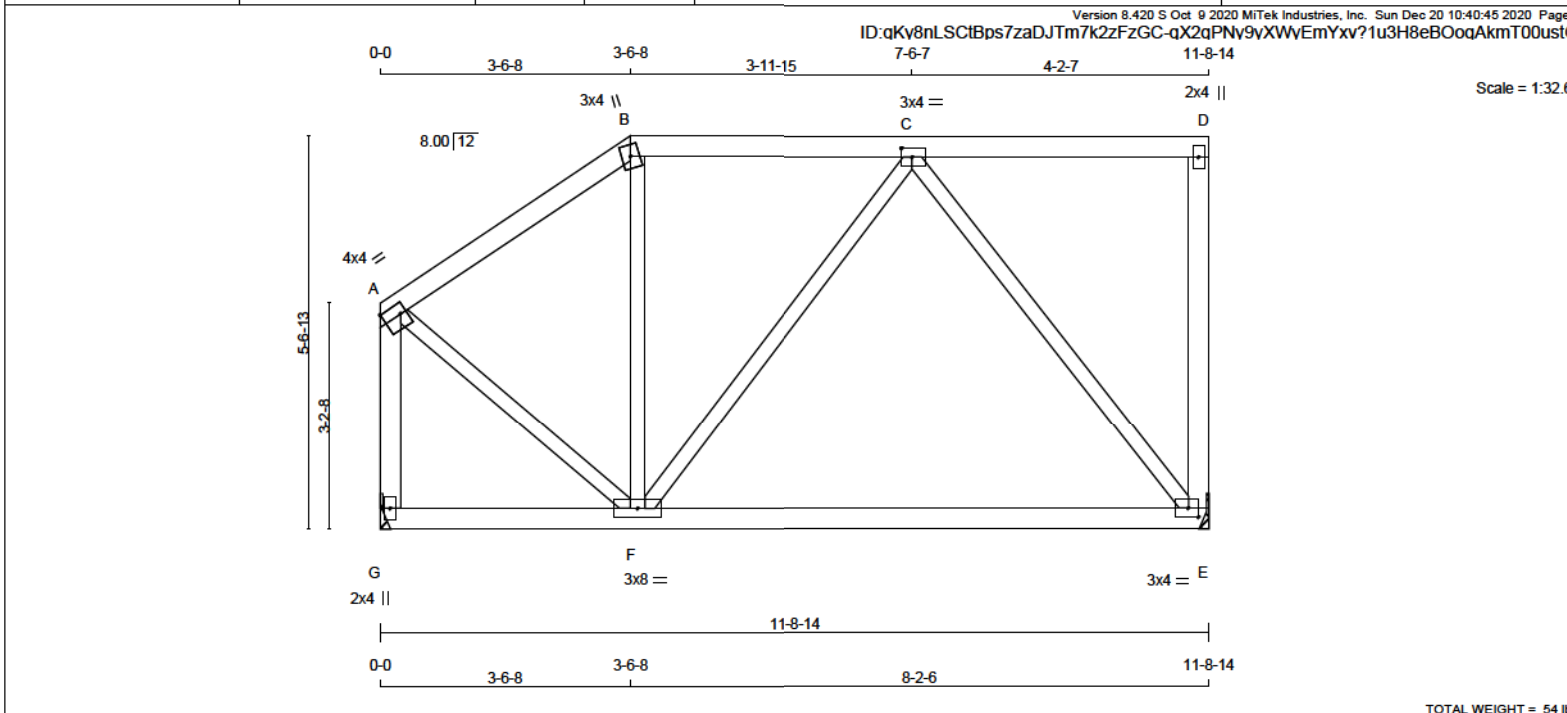
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	DRY	LUMBER	DESCR.
A - B	2x4	DRY	No.2	SPF
B - D	2x4	DRY	No.2	SPF
E - D	2x4	DRY	No.2	SPF
G - A	2x4	DRY	No.2	SPF
G - E	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
A	TMVW-t	MT20	4.0	4.0	1.75	Edge
B	TTW+m	MT20	3.0	4.0		
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TMV+p	MT20	2.0	4.0		
E	BMVW1-t	MT20	3.0	4.0	1.50	1.75
F	BMVW1-t	MT20	3.0	8.0		
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**

**BEARINGS**

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	961	0	961	0	0	MECHANICAL	
G	961	0	961	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E, G. MINIMUM BEARING LENGTH AT JOINT E = 1-8, JOINT G = 1-8.

**UNFACTORED REACTIONS**

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
E	712	409 / 0	123 / 0	0 / 0	0 / 0	180 / 0	0 / 0
G	712	409 / 0	123 / 0	0 / 0	0 / 0	180 / 0	0 / 0

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 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.	FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	FORCE (LBS)	FACTORED MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-604 / 0	-124.4	-124.4	0.28 (1)	6.25	F-B	-71 / 102
B-C	-500 / 0	-124.4	-124.4	0.35 (1)	6.25	F-C	-3 / 140
C-D	0 / 0	-124.4	-124.4	0.35 (1)	10.00	C-E	-805 / 0
E-D	-201 / 0	0.0	0.0	0.11 (1)	7.81	A-F	0 / 639
G-A	-953 / 0	0.0	0.0	0.17 (1)	7.81		
G-F	0 / 0	-39.2	-39.2	0.45 (3)	10.00		
F-E	0 / 502	-39.2	-39.2	0.48 (3)	10.00		

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.39")  
CALCULATED VERT. DEFL.(LL)= L/ 891 (0.16")  
ALLOWABLE DEFL.(TL)= L/360 (0.39")  
CALCULATED VERT. DEFL.(TL)= L/ 525 (0.27")

CSI: TC=0.35/1.00 (B-C-1) , BC=0.48/1.00 (E-F-3) ,  
WB=0.66/1.00 (C-E-1) , SSI=0.25/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (E) (INPUT = 0.80 )  
JSI METAL = 0.25 (A) (INPUT = 1.00 )



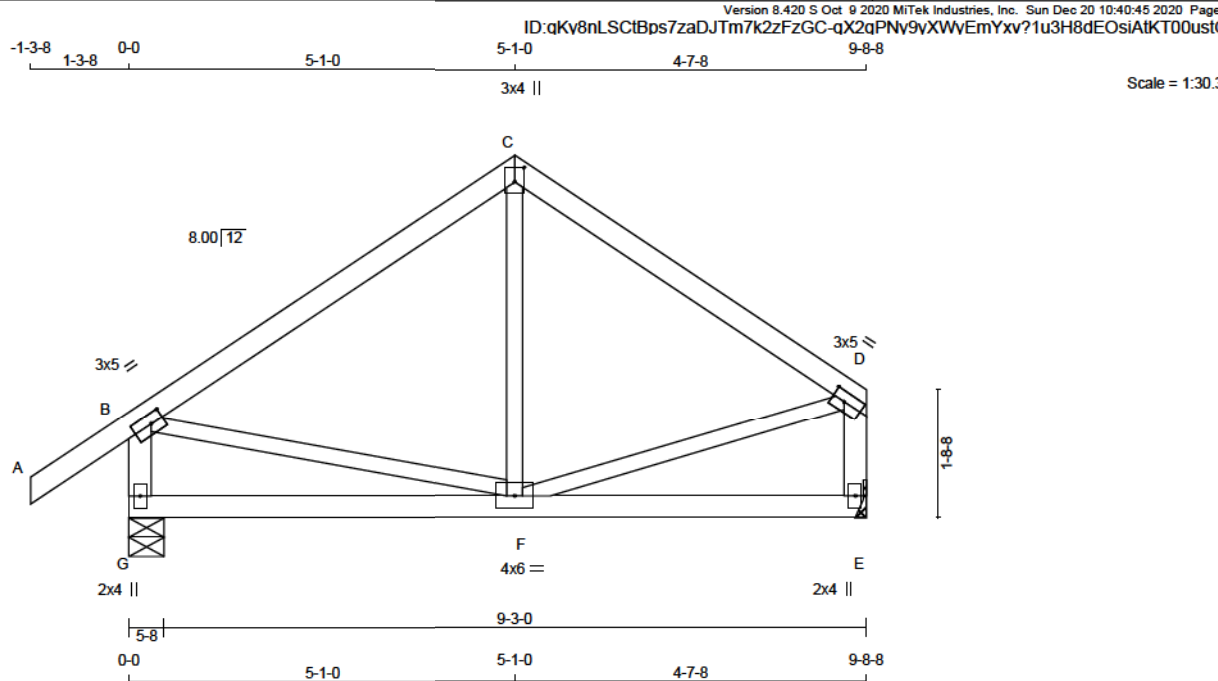
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 3 X 40 = 120 LB

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	No.2		SPF
C - D	2x4	DRY	No.2		SPF
G - B	2x4	DRY	No.2		SPF
E - D	2x4	DRY	No.2		SPF
G - E	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	3.0	5.0	1.50	2.00
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMVW-t	MT20	3.0	5.0	1.50	2.00
E	BMV1+p	MT20	2.0	4.0		
F	BMVW-t	MT20	4.0	6.0		
G	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
G	965	0	965	0
E	795	0	795	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

##### UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
G	COMBINED	433 / 0	102 / 0	0 / 0	0 / 0	170 / 0	0 / 0
E		588 / 0	102 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

##### 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)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO		FROM TO		FR-TO		FROM TO	
A-B	0 / 47	-124.4 -124.4	0.17 (1)	F-C	0 / 190	0.05 (3)	
B-C	-546 / 0	-124.4 -124.4	0.42 (1)	B-F	0 / 464	0.10 (1)	
C-D	-546 / 0	-124.4 -124.4	0.34 (1)	F-D	0 / 476	0.11 (1)	
G-B	-883 / 0	0.0	0.00 (1)				
E-D	-732 / 0	0.0	0.00 (1)				
G-F	0 / 0	-39.2 -39.2	0.22 (3)				
F-E	0 / 0	-39.2 -39.2	0.22 (3)				

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH.	LL	= 34.8	PSF
	DL	= 8.0	PSF
BOT CH.	LL	= 10.5	PSF
	DL	= 7.3	PSF
TOTAL LOAD	= 60.6	PSF	

##### SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.32")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.03")  
ALLOWABLE DEFL.(TL)= L/360 (0.32")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.05")

CSI: TC=0.42/1.00 (B-C:1), BC=0.22/1.00 (F-G:3),  
WB=0.11/1.00 (D-F:1), SSI=0.21/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

##### NAIL VALUES

PLATE	GRIP(DRY)	SHEAR	SECTION
	(PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	850	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.77 (B) (INPUT = 0.90 )  
JSI METAL = 0.23 (B) (INPUT = 1.00 )



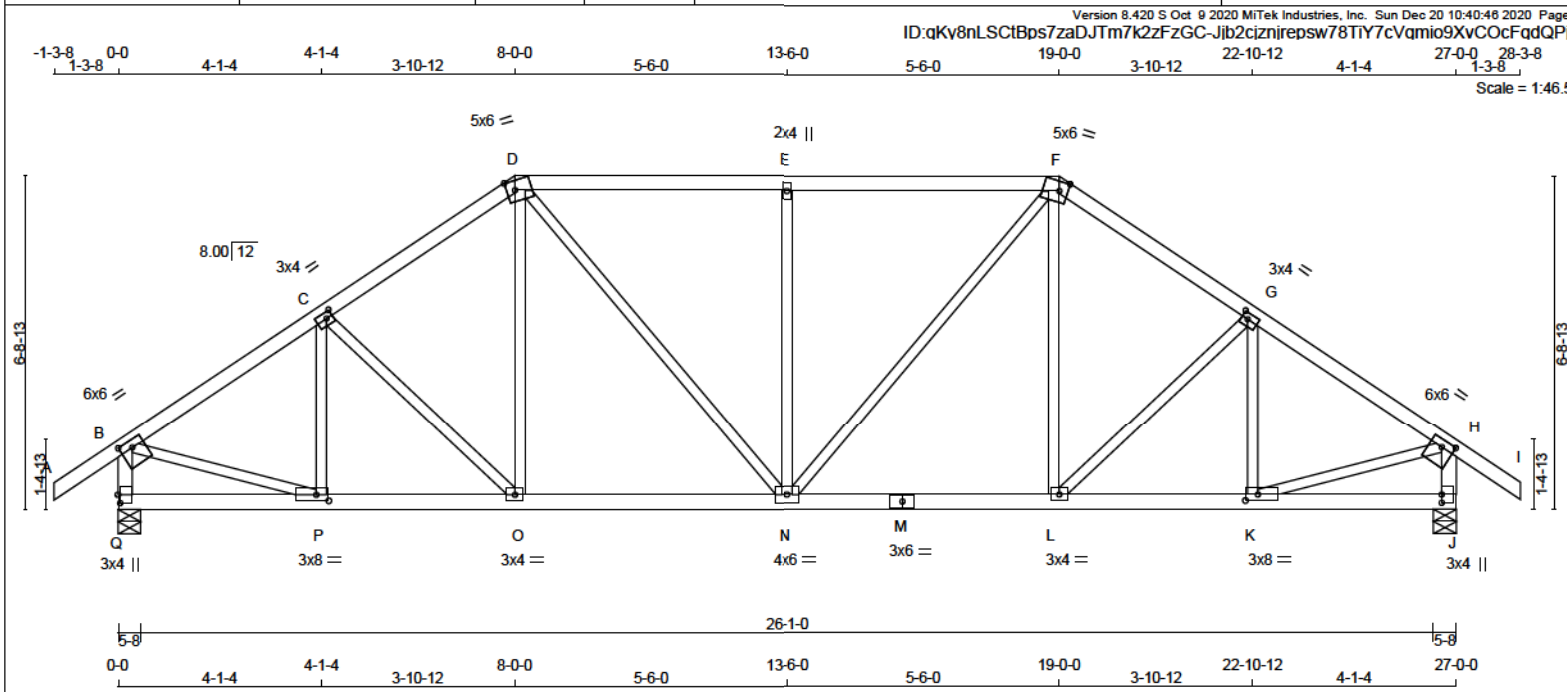
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			





**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
C	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
Q - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
Q - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-t	MT20	6.0	4.0	1.75	3.00
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW-m	MT20	5.0	6.0	2.25	2.00
E TMVW-t	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	6.0	2.25	2.00
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW-t	MT20	6.0	6.0	1.75	3.00
J BMV1+p	MT20	3.0	4.0	2.00	
K BMVW-t	MT20	3.0	8.0	1.50	3.00
L BMVW-t	MT20	3.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMVW-t	MT20	4.0	6.0		
O BMVW-t	MT20	3.0	4.0		
P BMVW-t	MT20	3.0	8.0	1.50	3.00
Q BMV1+p	MT20	3.0	4.0	2.00	0.50

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

**BEARINGS**

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	DOWN	UPLIFT	IN-SX
Q 2380	0	2380	0
J 2380	0	2380	0

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE WIND DEAD SOIL
Q 1754	1035 / 0	284 / 0	0 / 0 0 / 0 435 / 0 0 / 0
J 1754	1035 / 0	284 / 0	0 / 0 0 / 0 435 / 0 0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.81 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.  
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	P-C	-390 / 0	0.10 (1)
B-C	-2474 / 0	-124.4 -124.4	0.32 (1)	4.10	C-O	-194 / 0	0.10 (1)
C-D	-2372 / 0	-124.4 -124.4	0.31 (1)	4.18	O-D	0 / 346	0.08 (2)
D-E	-2398 / 0	-124.4 -124.4	0.56 (1)	3.81	D-N	0 / 693	0.16 (1)
E-F	-2398 / 0	-124.4 -124.4	0.56 (1)	3.81	N-E	-835 / 0	0.63 (1)
F-G	-2372 / 0	-124.4 -124.4	0.31 (1)	4.18	N-F	0 / 693	0.16 (1)
G-H	-2474 / 0	-124.4 -124.4	0.32 (1)	4.10	L-F	0 / 346	0.08 (2)
H-I	0 / 47	-124.4 -124.4	0.17 (1)	10.00	L-G	-194 / 0	0.10 (1)
Q-B	-2309 / 0	0.0	0.0 0.24 (1)	5.82	K-G	-390 / 0	0.10 (1)
J-H	-2309 / 0	0.0	0.0 0.24 (1)	5.82	B-P	0 / 2155	0.48 (1)
					K-H	0 / 2155	0.48 (1)
Q-P	0 / 0	-39.2	-39.2 0.11 (3)	10.00			
P-O	0 / 2084	-39.2	-39.2 0.44 (1)	10.00			
O-N	0 / 1949	-39.2	-39.2 0.44 (1)	10.00			
N-M	0 / 1949	-39.2	-39.2 0.44 (1)	10.00			
M-L	0 / 1949	-39.2	-39.2 0.44 (1)	10.00			
L-K	0 / 2084	-39.2	-39.2 0.44 (1)	10.00			
K-J	0 / 0	-39.2	-39.2 0.11 (3)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.56/1.00 (D-E-1) , BC=0.44/1.00 (L-N-1) ,  
WB=0.63/1.00 (E-N-1) , SSI=0.33/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90 )  
JSI METAL = 0.69 (M) (INPUT = 1.00 )



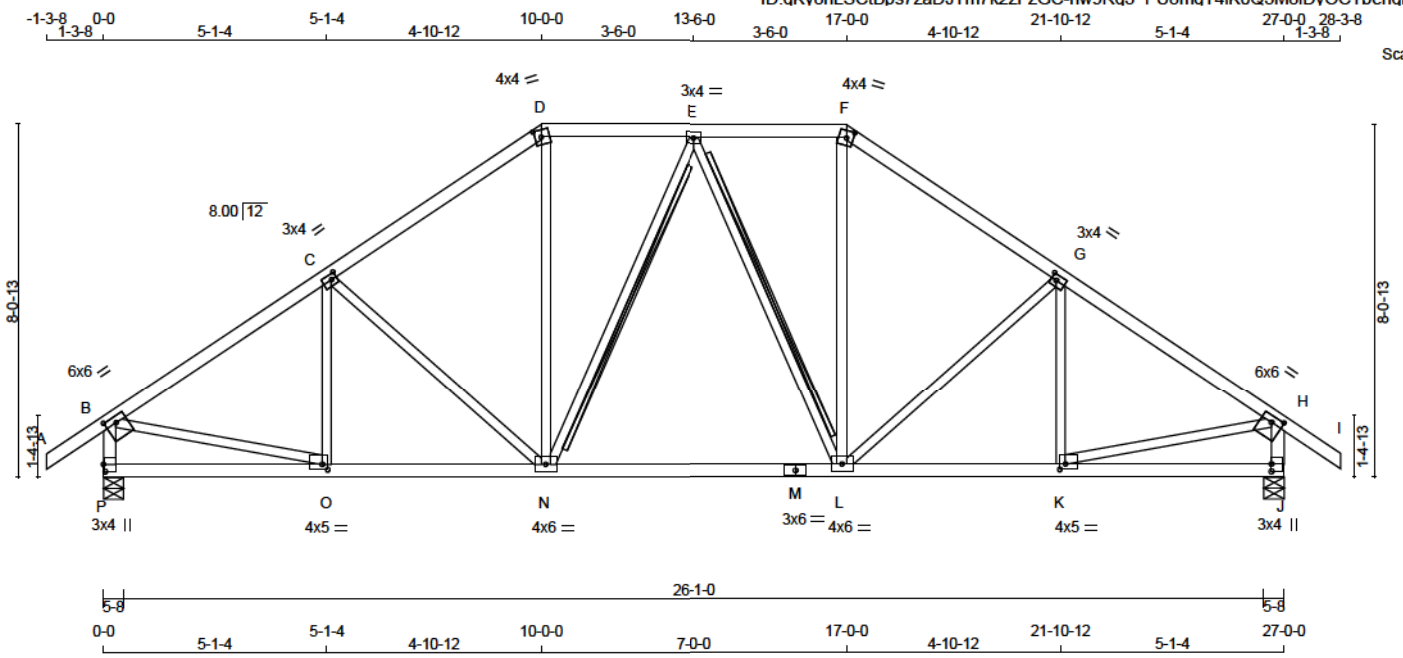
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





Scale = 1:52.7

TOTAL WEIGHT = 123 lb

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

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTW-m	MT20	4.0	4.0	2.00	1.75
E	TMVW-t	MT20	3.0	4.0		
F	TTW-m	MT20	4.0	4.0	2.00	1.75
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	6.0	6.0	1.75	3.00
J	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	4.0	5.0	1.50	1.50
L	BMVW-t	MT20	4.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	6.0		
O	BMVW-t	MT20	4.0	5.0	1.50	1.50
P	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

**BEARINGS**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT				
P	2380	0	2380	0
J	2380	0	2380	0

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS						
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
P	1754	1035 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0		
J	1754	1035 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0		

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

**BRACING**

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.88 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-N, E-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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.
FR-TO				FR-TO			
A-B	0 / 47	-124.4 -124.4 0.17 (1)	10.00	O-C	-251 / 71	0.09 (1)	
B-C	-2529 / 0	-124.4 -124.4 0.50 (1)	3.88	C-N	-449 / 0	0.37 (1)	
C-D	-2212 / 0	-124.4 -124.4 0.47 (1)	4.11	N-D	0 / 799	0.18 (1)	
D-E	-1814 / 0	-124.4 -124.4 0.21 (1)	4.78	N-E	-280 / 0	0.16 (1)	
E-F	-1814 / 0	-124.4 -124.4 0.21 (1)	4.78	E-L	-280 / 0	0.16 (1)	
F-G	-2212 / 0	-124.4 -124.4 0.47 (1)	4.11	L-F	0 / 799	0.18 (1)	
G-H	-2529 / 0	-124.4 -124.4 0.50 (1)	3.88	L-G	-449 / 0	0.37 (1)	
H-I	0 / 47	-124.4 -124.4 0.17 (1)	10.00	K-G	-251 / 71	0.09 (1)	
P-B	-2264 / 0	0.0 0.0 0.24 (1)	5.63	B-O	0 / 2185	0.49 (1)	
J-H	-2264 / 0	0.0 0.0 0.24 (1)	5.63	K-H	0 / 2185	0.49 (1)	
P-O	0 / 0	-39.2 -39.2 0.17 (3)	10.00				
O-N	0 / 2138	-39.2 -39.2 0.51 (1)	10.00				
N-M	0 / 1926	-39.2 -39.2 0.48 (1)	10.00				
M-L	0 / 1926	-39.2 -39.2 0.48 (1)	10.00				
L-K	0 / 2138	-39.2 -39.2 0.51 (1)	10.00				
K-J	0 / 0	-39.2 -39.2 0.17 (3)	10.00				

**DESIGN CRITERIA**

**SPECIFIED LOADS:**

TOP CH.	LL = 34.8	PSF
	DL = 8.0	PSF
BOT CH.	LL = 10.5	PSF
	DL = 7.3	PSF
TOTAL LOAD	= 60.6	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 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

(55% OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.10")

CSI: TC=0.50/1.00 (G-H:1), BC=0.51/1.00 (K-L:1), WB=0.49/1.00 (H-K:1), SSI=0.25/1.00 (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 = 1.00

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	650	371
	1747	788
	1987	1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90 )  
JSI METAL = 0.67 (B) (INPUT = 1.00 )

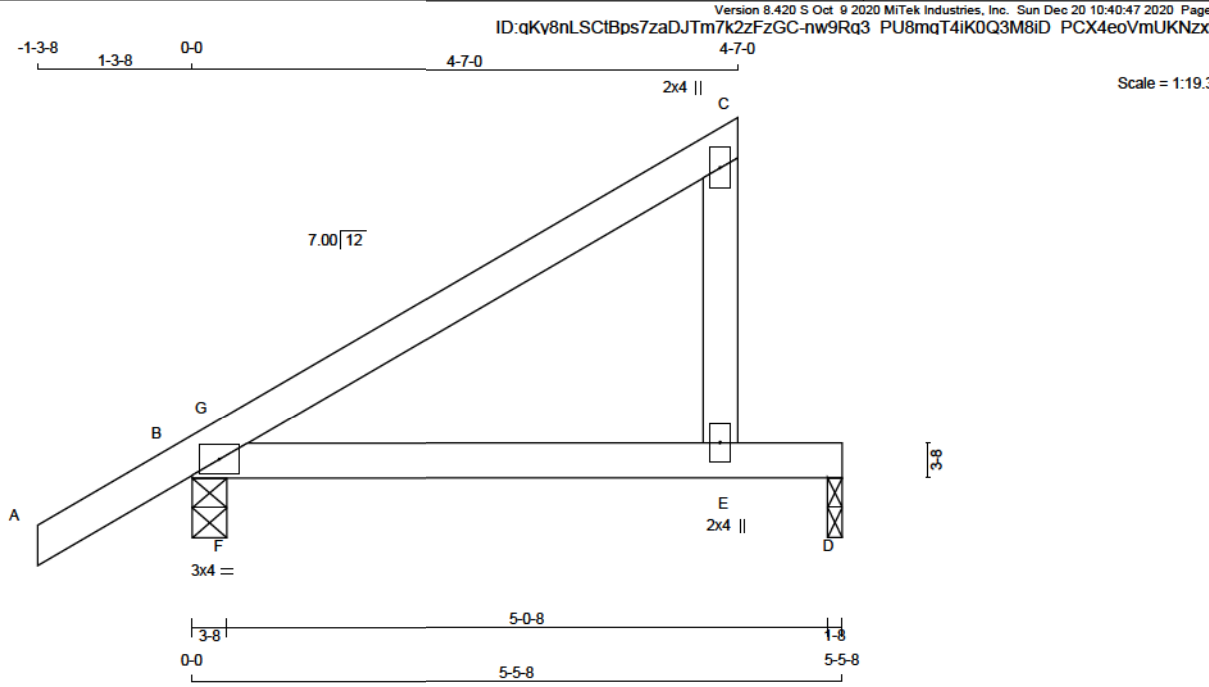


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



**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  
E - C 2x4 DRY No.2 SPF  
B - D 2x4 DRY 2100F 1.8E SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMV+p	MT20	2.0	4.0		
E	BMV+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	608	608	3-8	1-8
B HORZ	0	0	0	0
D HORZ	347	347	0	1-8

**UNFACTORED REACTIONS**

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	442	280 / 0	SNOW LIVE PERM. LIVE WIND DEAD SOIL
B	262	134 / 0	57 / 0 0 / 0 0 / 0 104 / 0 0 / 0
D	262	134 / 0	57 / 0 0 / 0 0 / 0 71 / 0 0 / 0

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

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

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

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO		FROM TO			FR-TO		
A-B	0 / 41	-124.4 -124.4	0.16 (1)	10.00	F-G	-326 / 155	0.00 (1)
B-G	-108 / 22	-124.4 -124.4	0.10 (3)	6.25			
G-C	-2 / 8	-124.4 -124.4	0.37 (1)	10.00			
E-C	-260 / 0	0.0	0.04 (1)	7.81			
B-F	0 / 0	-39.2 -39.2	0.14 (1)	10.00			
F-E	0 / 0	-39.2 -39.2	0.29 (1)	10.00			
E-D	0 / 0	-39.2 -39.2	0.26 (1)	10.00			

**DESIGN CRITERIA**

SPECIFIED LOADS:  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/736 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/427 (0.15")

CSI: TC=0.37/1.00 (C-G-1), BC=0.29/1.00 (E-F-1),  
WB=0.00/1.00 (F-G-1), SSI=0.35/1.00 (B-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 = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	850	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.41 (B) (INPUT = 0.90 )  
JSI METAL = 0.12 (C) (INPUT = 1.00 )



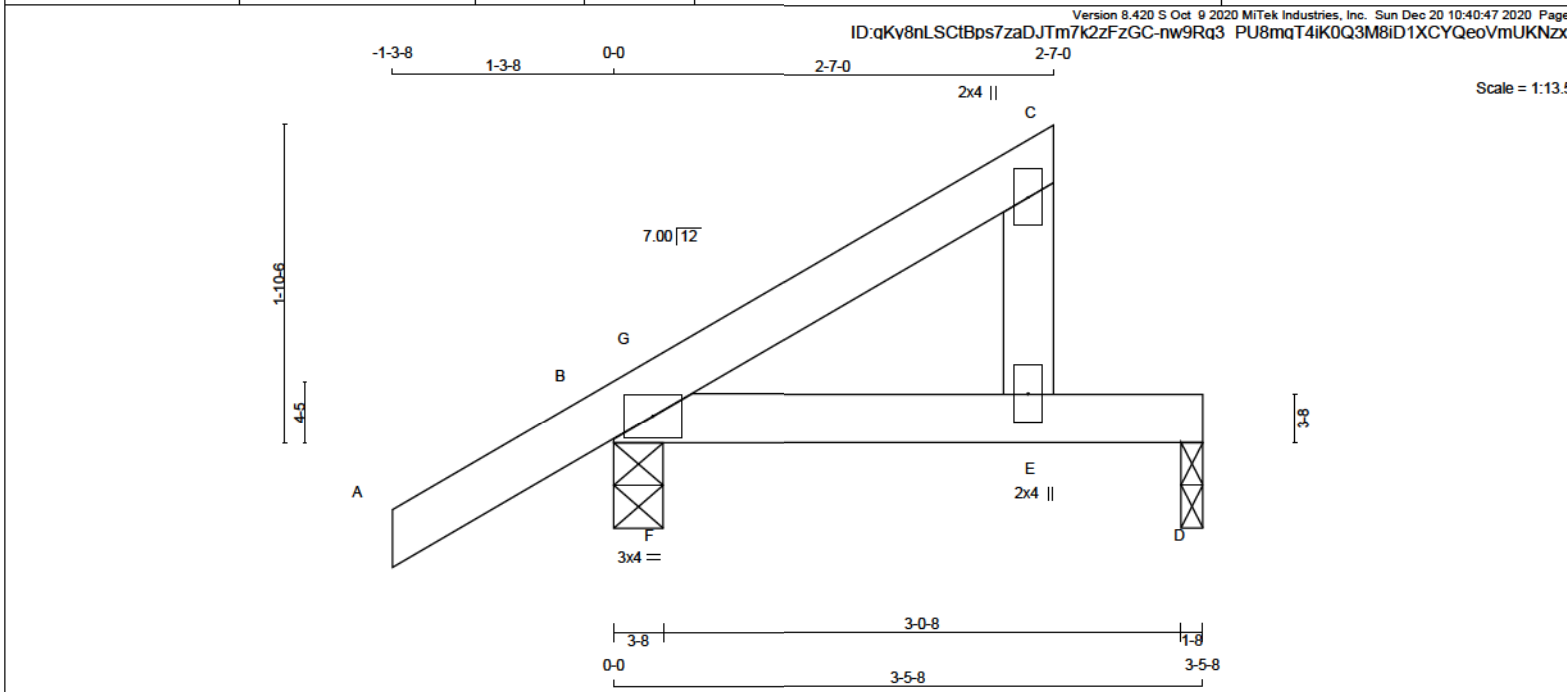
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**LUMBER**  
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	4.0		
C	TMV+p	MT20	2.0	4.0		
E	BMV+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	439	0	3-8
B	439	0	1-8
D	188	0	1-8

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	317	208 / 0	SNOW LIVE PERM. LIVE WIND DEAD SOIL
B	144	67 / 0	38 / 0 0 / 0 0 / 0 41 / 0 0 / 0

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

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

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

**LOADING**  
TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO					FR-TO		
A-B	0 / 41	-124.4	-124.4	0.17 (5)	10.00	F-G	-22 / 100
B-G	-76 / 0	-124.4	-124.4	0.06 (2)	6.25		
G-C	0 / 10	-124.4	-124.4	0.14 (1)	10.00		
E-C	-158 / 0	0.0	0.0	0.02 (1)	7.81		
B-F	0 / 0	-39.2	-39.2	0.06 (1)	10.00		
F-E	0 / 0	-39.2	-39.2	0.20 (1)	10.00		
E-D	0 / 0	-39.2	-39.2	0.20 (1)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 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 (0.03")

CSI: TC=0.17/1.00 (A-B-5), BC=0.20/1.00 (E-F-1), WB=0.00/1.00 (F-G-1), SSI=0.15/1.00 (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 = 1.00

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

**NAIL VALUES**

PLATE	GRIP(DRY)	SHEAR (PSI)	SECTION (PLI)
MT20	850	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90 )  
JSI METAL = 0.07 (C) (INPUT = 1.00 )



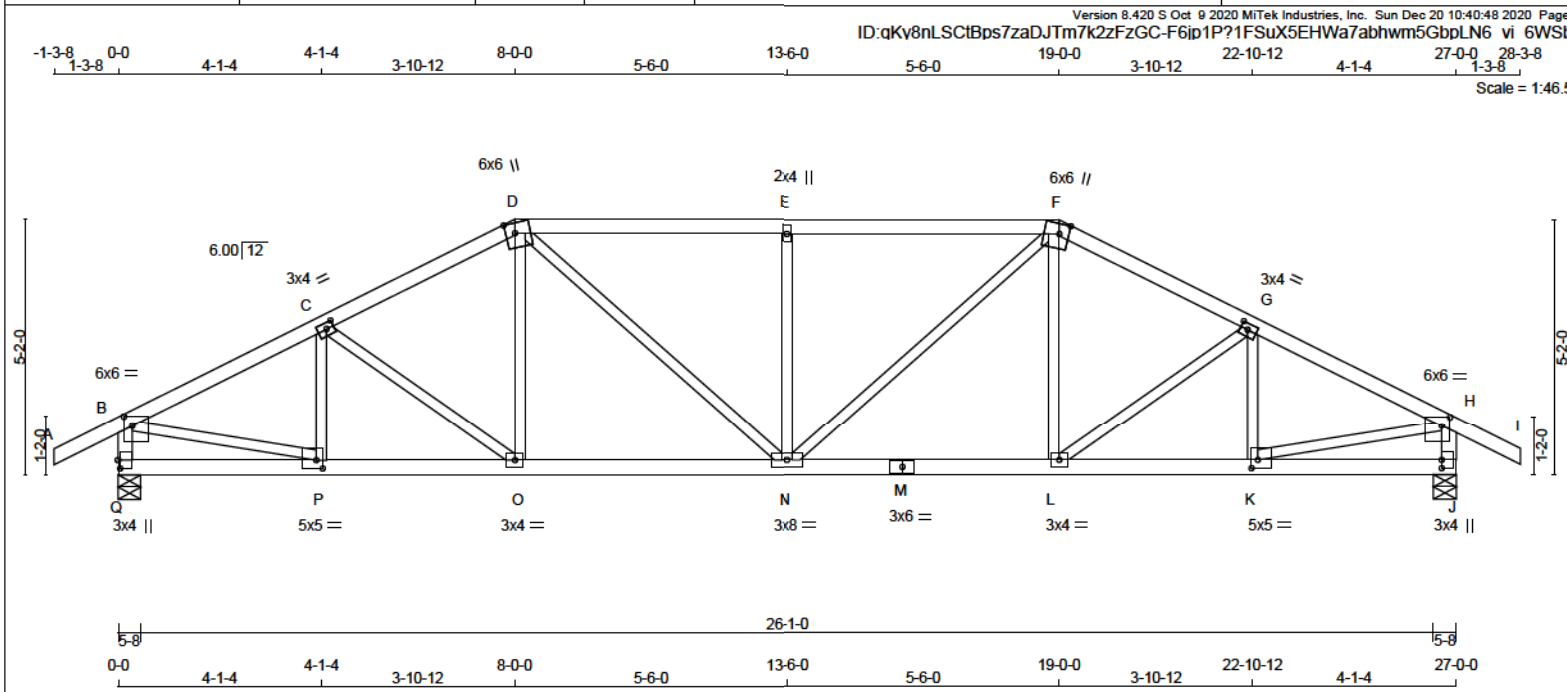
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**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
Q - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
Q - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B - TMVW-p	MT20	6.0	4.0	2.25	2.00
C - TMVW-t	MT20	3.0	4.0	1.50	1.75
D - TTWW+m	MT20	6.0	6.0	2.50	2.25
E - TMW+w	MT20	2.0	4.0		
F - TTWW+m	MT20	6.0	6.0	2.50	2.25
G - TMVW-t	MT20	3.0	4.0	1.50	1.75
H - TMVW-p	MT20	6.0	6.0	2.25	2.00
J - BMV1+p	MT20	3.0	4.0	2.00	
K - BMW-t	MT20	5.0	5.0	2.00	1.50
L - BMW-t	MT20	3.0	4.0		
M - BS-t	MT20	3.0	6.0		
N - BMW-t	MT20	3.0	8.0		
O - BMW-t	MT20	3.0	4.0		
P - BMW-t	MT20	5.0	5.0	2.00	1.50
Q - BMV1+p	MT20	3.0	4.0	2.00	0.50



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

**BEARINGS**

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	2378	2378	0	5-8
Q VERT	2378	2378	0	5-8

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1753	1034 / 0	284 / 0
Q COMBINED	1753	1034 / 0	284 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 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)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO				FR-TO			
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00	P-C	-419 / 0	0.08 (1)
B-C	-3021 / 0	-124.4	-124.4 0.34 (1)	3.74	C-O	-192 / 0	0.08 (1)
C-D	-2898 / 0	-124.4	-124.4 0.33 (1)	3.82	O-D	0 / 333	0.07 (2)
D-E	-3167 / 0	-124.4	-124.4 0.62 (1)	3.30	D-N	0 / 792	0.18 (1)
E-F	-3167 / 0	-124.4	-124.4 0.62 (1)	3.30	N-E	-836 / 0	0.33 (1)
F-G	-2898 / 0	-124.4	-124.4 0.33 (1)	3.82	N-F	0 / 792	0.18 (1)
G-H	-3021 / 0	-124.4	-124.4 0.34 (1)	3.74	L-F	0 / 333	0.07 (2)
H-I	0 / 38	-124.4	-124.4 0.16 (1)	10.00	L-G	-192 / 0	0.08 (1)
Q-B	-2303 / 0	0.0	0.0 0.23 (1)	5.82	K-G	-419 / 0	0.08 (1)
J-H	-2303 / 0	0.0	0.0 0.23 (1)	5.82	B-P	0 / 2782	0.63 (1)
					K-H	0 / 2782	0.63 (1)
Q-P	0 / 0	-39.2	-39.2 0.11 (2)	10.00			
P-O	0 / 2723	-39.2	-39.2 0.54 (1)	10.00			
O-N	0 / 2574	-39.2	-39.2 0.53 (1)	10.00			
N-M	0 / 2574	-39.2	-39.2 0.53 (1)	10.00			
M-L	0 / 2574	-39.2	-39.2 0.53 (1)	10.00			
L-K	0 / 2723	-39.2	-39.2 0.54 (1)	10.00			
K-J	0 / 0	-39.2	-39.2 0.11 (2)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.62/1.00 (D-E-1) , BC=0.54/1.00 (K-L-1) ,  
WB=0.63/1.00 (H-K-1) , SSI=0.33/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

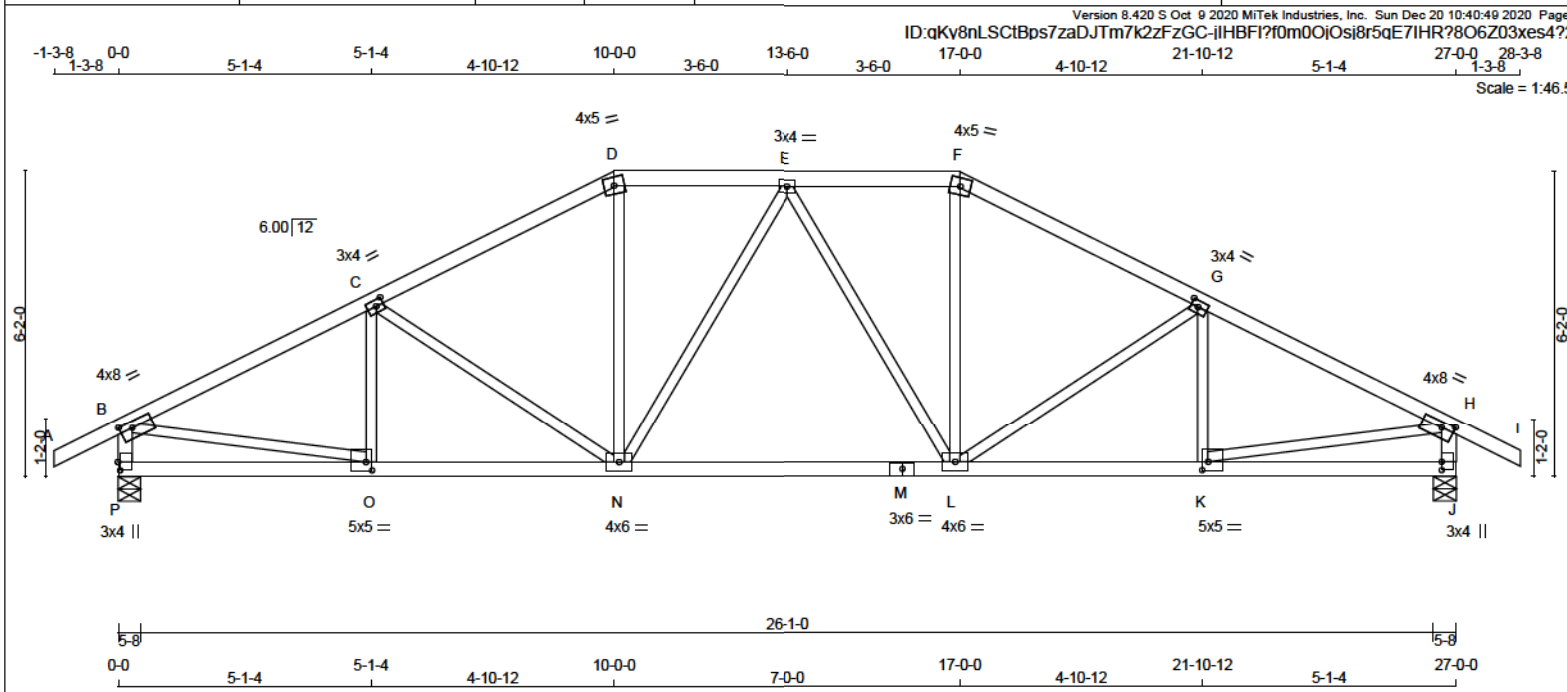
JSI GRIP= 0.87 (H) (INPUT = 0.80 )  
JSI METAL = 0.88 (M) (INPUT = 1.00 )



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT TYPE	PLATES	W	LEN	Y	X
B - TMVW-t	MT20	4.0	8.0	1.50	3.00
C - TMVW-t	MT20	3.0	4.0	1.50	1.75
D - TTW-m	MT20	4.0	5.0		
E - TMVW-t	MT20	3.0	4.0		
F - TTW-m	MT20	4.0	5.0		
G - TMVW-t	MT20	3.0	4.0	1.50	1.75
H - TMVW-t	MT20	4.0	8.0	1.50	3.00
J - BMV1+p	MT20	3.0	4.0	2.00	
K - BMVW-t	MT20	5.0	5.0	2.00	1.50
L - BMVW-t	MT20	4.0	6.0		
M - BS-t	MT20	3.0	6.0		
N - BMVW-t	MT20	4.0	6.0		
O - BMVW-t	MT20	5.0	5.0	2.00	1.50
P - BMV1+p	MT20	3.0	4.0	2.00	0.50



**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	DOWN	UPLIFT	IN-SX
P 2378 0	2378 0	0 5-8	4-4
J 2378 0	2378 0	0 5-8	4-4

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE WIND DEAD SOIL
P 1753	1034 / 0	284 / 0	0 / 0 0 / 0 435 / 0 0 / 0
J 1753	1034 / 0	284 / 0	0 / 0 0 / 0 435 / 0 0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.49 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (CSI (LC))	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 38	-124.4 -124.4	0.16 (1)	10.00	O-C	-275 / 81	0.06 (1)
B-C	-3103 / 0	-124.4 -124.4	0.53 (1)	3.49	C-N	-505 / 0	0.32 (1)
C-D	-2702 / 0	-124.4 -124.4	0.48 (1)	3.75	N-E	0 / 788	0.18 (1)
D-E	-2400 / 0	-124.4 -124.4	0.24 (1)	4.24	E-L	-299 / 0	0.26 (1)
E-F	-2400 / 0	-124.4 -124.4	0.24 (1)	4.24	L-F	0 / 788	0.18 (1)
F-G	-2702 / 0	-124.4 -124.4	0.48 (1)	3.75	L-G	-505 / 0	0.32 (1)
G-H	-3103 / 0	-124.4 -124.4	0.53 (1)	3.49	H-K	-275 / 81	0.06 (1)
H-I	0 / 38	-124.4 -124.4	0.16 (1)	10.00	K-O	-275 / 81	0.06 (1)
P-B	-2290 / 0	0.0 0.0	0.23 (1)	5.83	B-O	0 / 2842	0.64 (1)
J-H	-2290 / 0	0.0 0.0	0.23 (1)	5.83	K-H	0 / 2842	0.64 (1)
P-O	0 / 0	-39.2 -39.2	0.17 (3)	10.00			
O-N	0 / 2803	-39.2 -39.2	0.82 (1)	10.00			
N-M	0 / 2549	-39.2 -39.2	0.58 (1)	10.00			
M-L	0 / 2549	-39.2 -39.2	0.58 (1)	10.00			
L-K	0 / 2803	-39.2 -39.2	0.82 (1)	10.00			
K-J	0 / 0	-39.2 -39.2	0.17 (3)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.14")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.25")

CSI: TC=0.53/1.00 (G-H:1) , BC=0.62/1.00 (K-L:1) ,  
WB=0.64/1.00 (H-K:1) , SSI=0.27/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873			

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

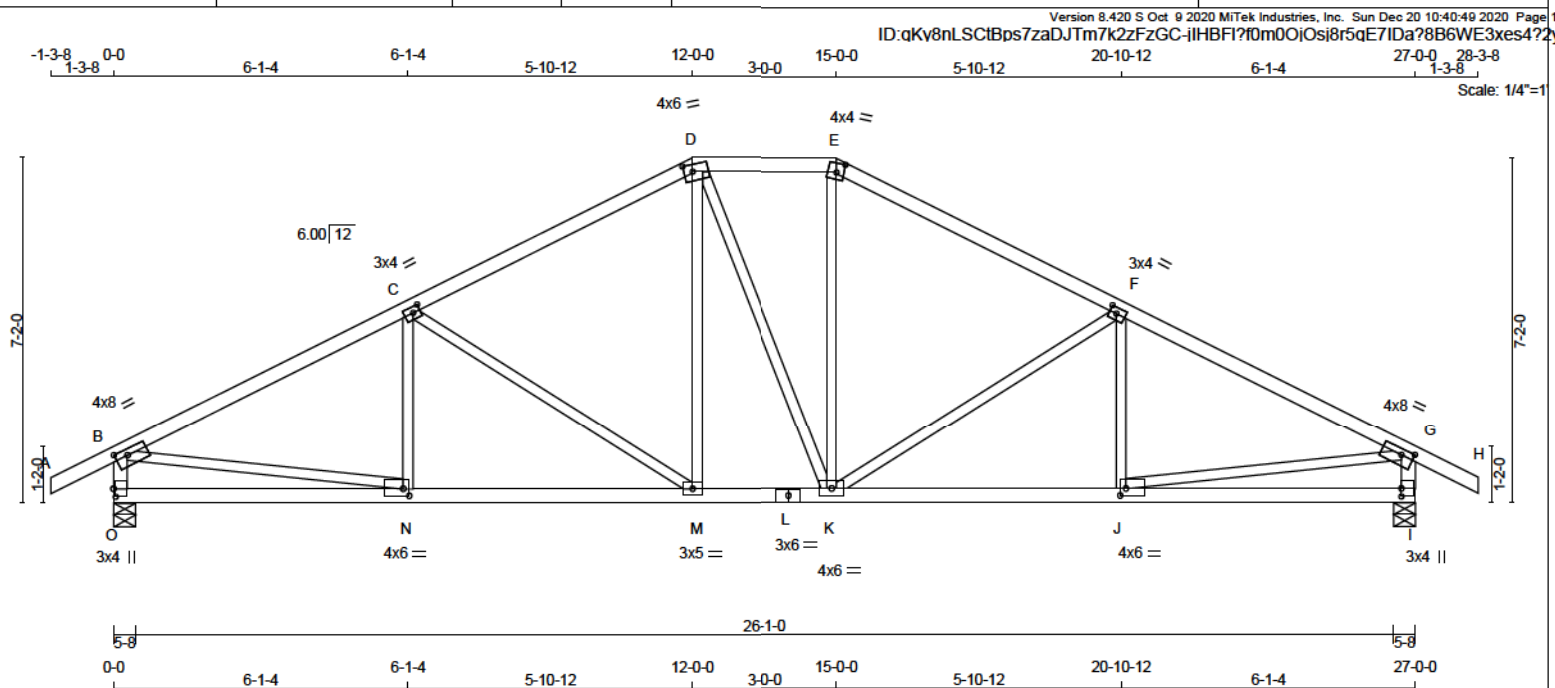
JSI GRIP= 0.90 (B) (INPUT = 0.90 )  
JSI METAL = 0.76 (O) (INPUT = 1.00 )



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 113 lb

LUMBER			
N. L. G. A. RULES			
CHAR	THICK	SIZE	DESCR.
A - D	2x4	DRY	No.2 SPF
D - E	2x4	DRY	No.2 SPF
E - H	2x4	DRY	No.2 SPF
O - B	2x4	DRY	No.2 SPF
I - G	2x4	DRY	No.2 SPF
O - L	2x4	DRY	No.2 SPF
L - L	2x4	DRY	No.2 SPF

ALL WEBS 2x3 DRY  
EXCEPT

DRY: SEASONED LUMBER.

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

## BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
O	2378	0	2378	0	0	5-8	4-4
I	2378	0	2378	0	0	5-8	4-4

### UNFACTORED REACTIONS

1ST LCASE      MAX./MIN. COMPONENT REACTIONS.

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1753	1034 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0
I	1753	1034 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0

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

## BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.12 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)	LOCT1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00	N-C	-129 / 181	0.04 (3)	
B-C	-3134 / 0	-124.4	-124.4	0.78 (1)	3.12	C-M	-826 / 0	0.82 (1)	
C-D	-2441 / 0	-124.4	-124.4	0.67 (1)	3.63	M-D	0 / 608	0.14 (1)	
D-E	-2158 / 0	-124.4	-124.4	0.19 (1)	4.47	D-K	0 / 5	0.00 (1)	
E-F	-2443 / 0	-124.4	-124.4	0.67 (1)	3.63	K-E	0 / 614	0.14 (1)	
F-G	-3133 / 0	-124.4	-124.4	0.78 (1)	3.12	K-F	-822 / 0	0.81 (1)	
G-H	0 / 38	-124.4	-124.4	0.16 (1)	10.00	J-F	-132 / 179	0.04 (3)	
O-B	-2280 / 0	0.0	0.0	0.23 (1)	5.65	B-N	0 / 2866	0.64 (1)	
I-G	-2279 / 0	0.0	0.0	0.23 (1)	5.65	J-G	0 / 2865	0.64 (1)	
Q-N	0 / 0	-39.2	-39.2	0.29 (3)	10.00				
N-M	0 / 2838	-39.2	-39.2	0.63 (1)	10.00				
M-L	0 / 2156	-39.2	-39.2	0.45 (1)	10.00				
L-K	0 / 2156	-39.2	-39.2	0.45 (1)	10.00				
K-J	0 / 2837	-39.2	-39.2	0.63 (1)	10.00				
J-I	0 / 0	-39.2	-39.2	0.28 (3)	10.00				

## DESIGN CRITERIA

**SPECIFIED LOADS:-**

TOP	CH.	LL = 34.8	PSF
		DL = 8.0	PSF
BOT	CH.	LL = 10.5	PSF
		DL = 7.3	PSF
TOTAL LOAD		= 60.6	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 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.14")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.78/1.00 (B-C:1) , BC=0.63/1.00 (M-N:1) ,  
WB=0.82/1.00 (C-M:1) , SS=0.33/1.00 (E-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 = 1.00

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	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.89 (B) (INPUT = 0.90 )  
JSI METAL= 0.71 (L) (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.**

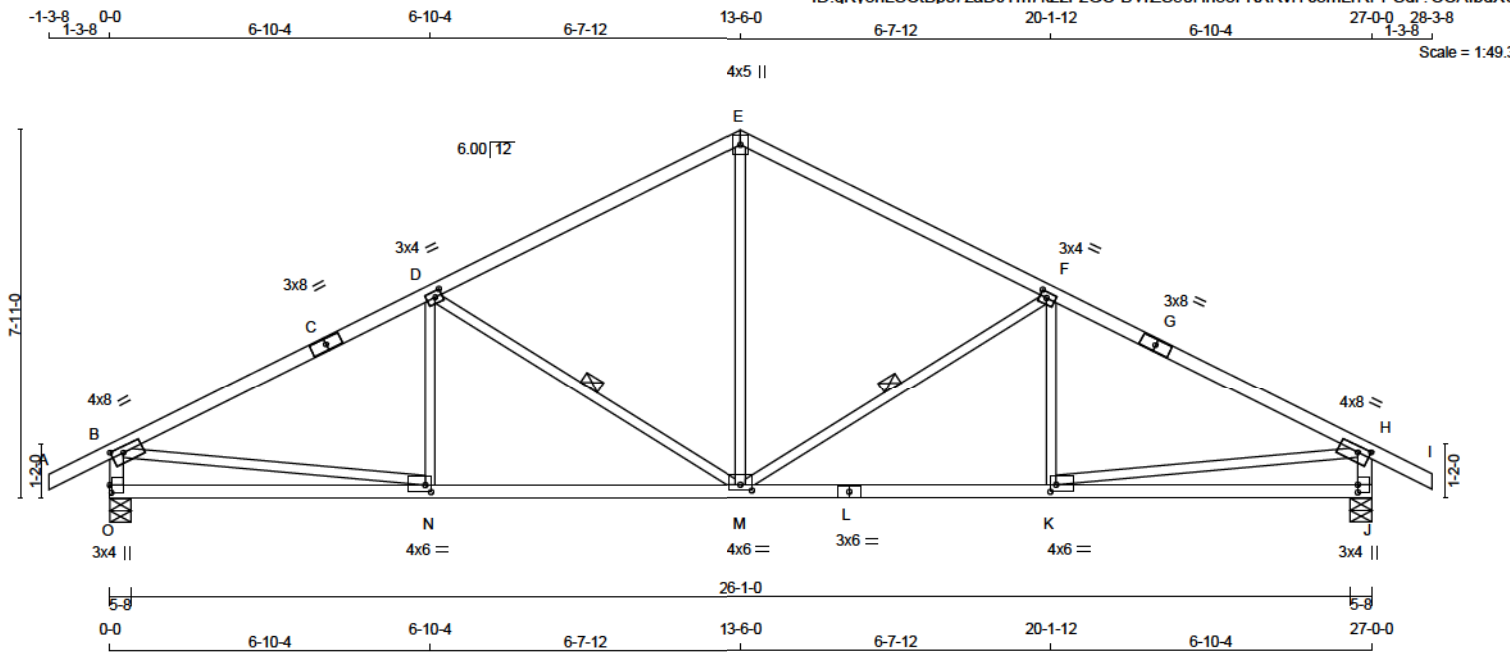


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-04
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Sun Dec 20 10:40:50 2020 Page 1  
ID:qKv8nLSctBps7zaDJTm7K2zFzGC-BVrZS50Hn38FKXRViYc3mLrPPSdr?CCAlbdXUy76



TOTAL WEIGHT = 12 X 106 = 1271 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	2100F 1.8E	SPF
C - E	2x4	DRY	2100F 1.8E	SPF
E - G	2x4	DRY	2100F 1.8E	SPF
G - I	2x4	DRY	2100F 1.8E	SPF
O - B	2x4	DRY	No.2	SPF
J - H	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - J	2x4	DRY	No.2	SPF
ALL WEBS	2x3	DRY	No.2	SPF
EXCEPT				

DRY: SEASONED LUMBER.

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN	Y X
B TMVW-t	MT20	4.0	8.0	1.50 3.00
C TS-t	MT20	3.0	8.0	
D TMVW-t	MT20	3.0	4.0	1.50 1.75
E TTW+p	MT20	4.0	5.0	
F TMVW-t	MT20	3.0	4.0	1.50 1.75
G TS-t	MT20	3.0	8.0	
H TMVW-t	MT20	4.0	8.0	1.50 3.00
J BMV1+p	MT20	3.0	4.0	2.00
K BMVW-t	MT20	4.0	6.0	1.75 1.50
L BS-t	MT20	3.0	6.0	
M BMVW-t	MT20	4.0	6.0	1.50 3.00
N BMVW-t	MT20	4.0	6.0	1.75 1.50
O BMV1+p	MT20	3.0	4.0	2.00 0.50

**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	0	0	0	0	
O 2378	0	2378	0	5-8	4-4
J 2378	0	2378	0	5-8	4-4

UNFACTORED REACTIONS							
1ST LCASE	MAX/MIN COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
O	1753	1034 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0
J	1753	1034 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.20 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.  
1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-M, D-M. DBS = 20-0-0 . CBF = 127 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)	FACTORED LC1 MAX (LC) (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
A-B	0 / 38	-124.4 -124.4	0.11 (1)	10.00	M-E	0 / 1353	0.30 (1)
B-C	-3122 / 0	-124.4 -124.4	0.58 (1)	4.20	M-F	-1016 / 0	0.43 (1)
C-D	-3122 / 0	-124.4 -124.4	0.58 (1)	4.20	K-F	-62 / 230	0.06 (3)
D-E	-2257 / 0	-124.4 -124.4	0.52 (1)	4.84	D-M	-1016 / 0	0.43 (1)
E-F	-2257 / 0	-124.4 -124.4	0.52 (1)	4.84	N-D	-62 / 230	0.06 (3)
F-G	-3122 / 0	-124.4 -124.4	0.58 (1)	4.20	B-N	0 / 2854	0.64 (1)
G-H	-3122 / 0	-124.4 -124.4	0.58 (1)	4.20	K-H	0 / 2854	0.64 (1)
H-I	0 / 38	-124.4 -124.4	0.11 (1)	10.00			
O-B	-2267 / 0	0.0	0.0 0.23 (1)	5.66			
J-H	-2267 / 0	0.0	0.0 0.23 (1)	5.66			
O-N	0 / 0	-39.2 -39.2	0.35 (3)	10.00			
N-M	0 / 2832	-39.2 -39.2	0.68 (2)	10.00			
M-L	0 / 2832	-39.2 -39.2	0.68 (2)	10.00			
L-K	0 / 2832	-39.2 -39.2	0.68 (2)	10.00			
K-J	0 / 0	-39.2 -39.2	0.35 (3)	10.00			

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.13")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.22")

CSI: TC=0.58/1.00 (F-H:1) , BC=0.68/1.00 (K-M:2) ,  
WB=0.64/1.00 (H-K:1) , SSI=0.37/1.00 (F-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 = 1.00

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 850 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90 )  
JSI METAL = 0.94 (L) (INPUT = 1.00 )



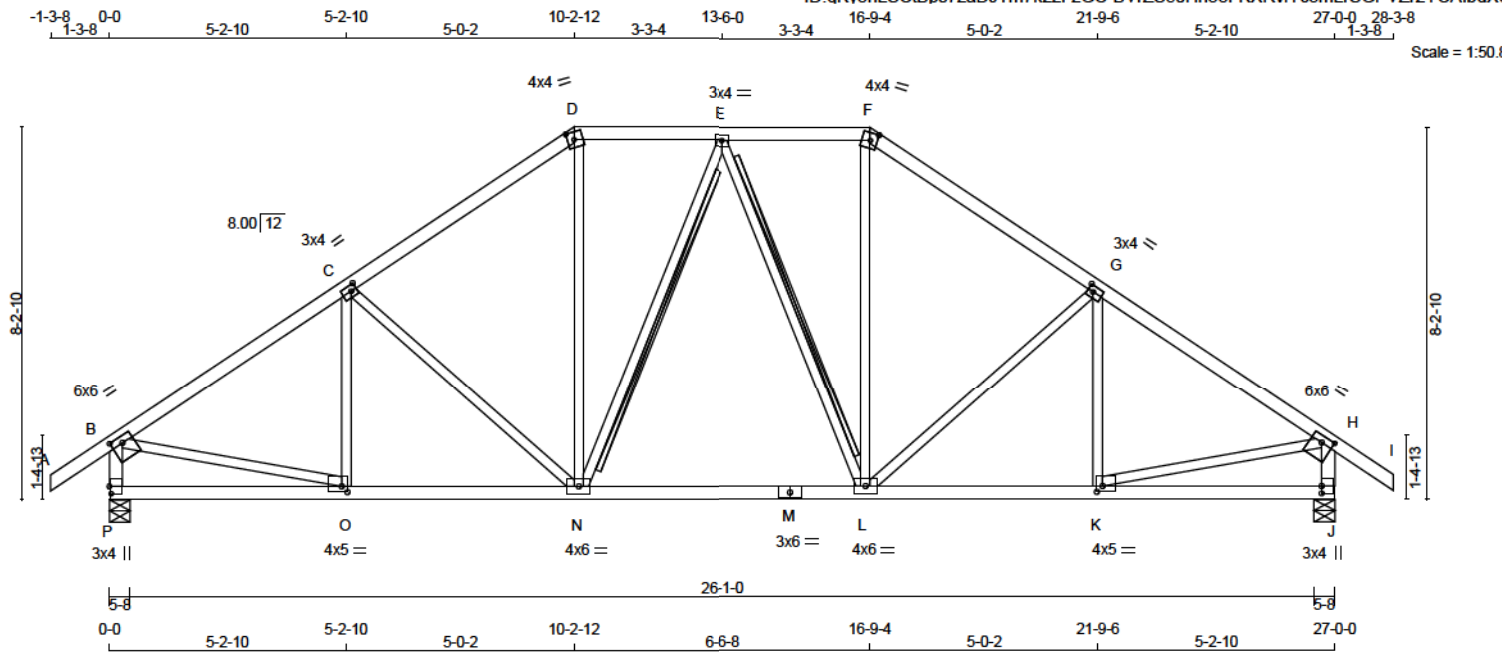
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			

**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.**



Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Sun Dec 20 10:40:50 2020 Page 1  
ID: qKv8nLSCfBps7zaDJTm7k2ZfZGC-BVrZS50Hn38FKXRViYc3mLrSGPVZr2YCAIbdXUy76



**LUMBER**  
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
P - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

**PLATES (table is in inches)**

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	6.0	6.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTW-m	MT20	4.0	4.0	2.00	1.75
E	TMVW-t	MT20	3.0	4.0		
F	TTW-m	MT20	4.0	4.0	2.00	1.75
G	TMVW-t	MT20	3.0	4.0	1.50	1.50
H	TMVW-t	MT20	6.0	6.0	1.75	3.00
J	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	4.0	5.0	1.50	1.50
L	BMVW-t	MT20	4.0	6.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW-t	MT20	4.0	6.0		
O	BMVW-t	MT20	4.0	5.0	1.50	1.50
P	BMV1+p	MT20	3.0	4.0	2.00	0.50

**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
P	2380 0	2380 0	5-8	4-4
J	2380 0	2380 0	5-8	4-4

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
P	1754	1035 / 0	284 / 0
J	1754	1035 / 0	284 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.82 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-N, E-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. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.
FR-TO				FR-TO			
A-B	0 / 47	-124.4 -124.4 0.17 (1)	10.00	O-C	-231 / 88	0.08 (1)	
B-C	-2534 / 0	-124.4 -124.4 0.52 (1)	3.82	C-N	-482 / 0	0.42 (1)	
C-D	-2188 / 0	-124.4 -124.4 0.49 (1)	4.11	N-D	0 / 789	0.18 (1)	
D-E	-1793 / 0	-124.4 -124.4 0.18 (1)	4.84	N-E	-256 / 0	0.14 (1)	
E-F	-1793 / 0	-124.4 -124.4 0.18 (1)	4.84	E-L	-256 / 0	0.14 (1)	
F-G	-2188 / 0	-124.4 -124.4 0.49 (1)	4.11	L-F	0 / 789	0.18 (1)	
G-H	-2534 / 0	-124.4 -124.4 0.52 (1)	3.82	L-G	-482 / 0	0.42 (1)	
H-I	0 / 47	-124.4 -124.4 0.17 (1)	10.00	K-G	-231 / 88	0.08 (1)	
P-B	-2293 / 0	0.0 0.0 0.24 (1)	5.63	B-O	0 / 2188	0.49 (1)	
J-H	-2293 / 0	0.0 0.0 0.24 (1)	5.63	K-H	0 / 2188	0.49 (1)	
P-O	0 / 0	-39.2 -39.2 0.18 (3)	10.00				
O-N	0 / 2142	-39.2 -39.2 0.50 (1)	10.00				
N-M	0 / 1888	-39.2 -39.2 0.45 (1)	10.00				
M-L	0 / 1888	-39.2 -39.2 0.45 (1)	10.00				
L-K	0 / 2142	-39.2 -39.2 0.50 (1)	10.00				
K-J	0 / 0	-39.2 -39.2 0.18 (3)	10.00				

**DESIGN CRITERIA**  
SPECIFIED LOADS:  
TOP CH. LL = 34.8 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.3 PSF  
TOTAL LOAD = 60.6 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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55% OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL)= L/999 (0.10")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL)= L/999 (0.17")

CSI: TC=0.52/1.00 (G-H:1), BC=0.50/1.00 (K-L:1),  
WB=0.49/1.00 (H-K:1), SSI=0.28/1.00 (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 = 1.00

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 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.89 (H) (INPUT = 0.90 )  
JSI METAL = 0.67 (B) (INPUT = 1.00 )

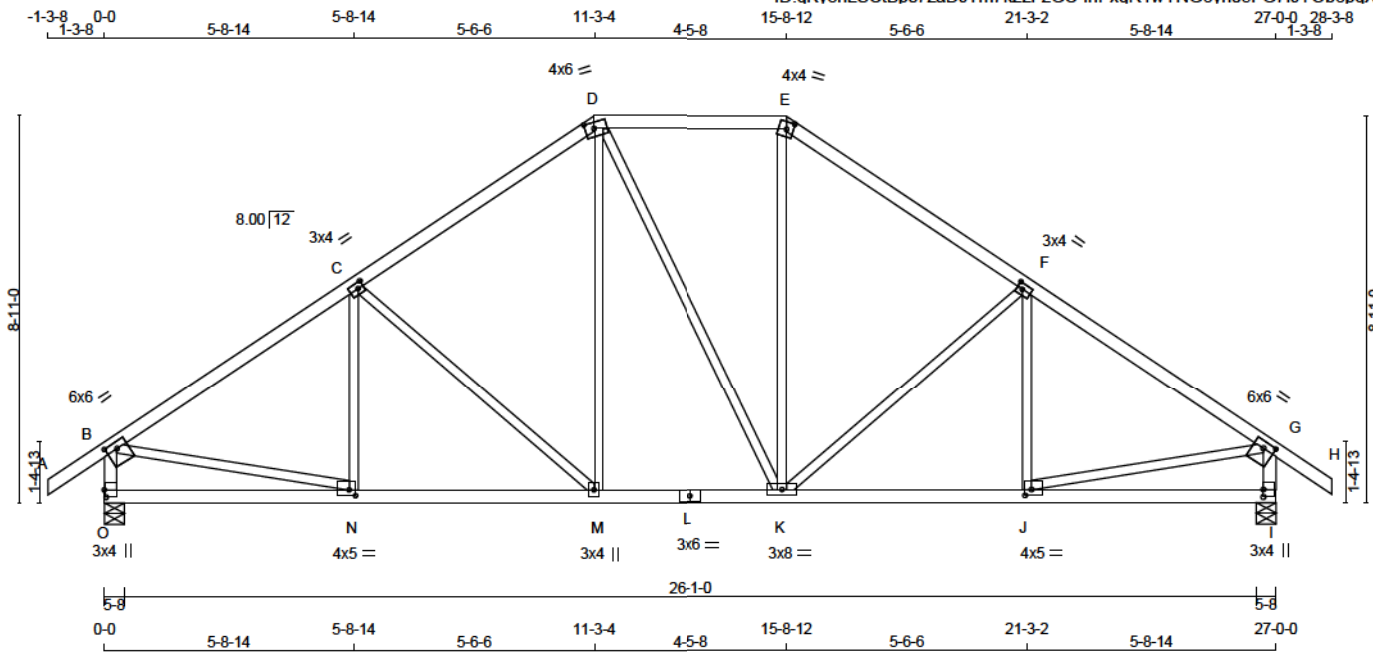


These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



**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 - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
O - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
O - L	2x4	DRY	No.2	SPF
L - I	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	6.0	6.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	4.0	6.0	1.75	2.50
E	TTW-m	MT20	4.0	4.0	2.00	1.75
F	TMVW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW-t	MT20	6.0	6.0	1.75	3.00
I	BMV1+p	MT20	3.0	4.0	2.00	
K	BMVW-t	MT20	4.0	5.0	1.50	1.75
L	BS-t	MT20	3.0	8.0		
M	BMVW-t	MT20	3.0	4.0		
N	BMVW-t	MT20	4.0	5.0	1.50	1.75
O	BMV1+p	MT20	3.0	4.0	2.00	0.50

**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
O 2380	0	0	5-8
I 2380	0	0	5-8

**UNFACTORED REACTIONS**

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE WIND DEAD SOIL
O 1754	1035 / 0	284 / 0	0 / 0 435 / 0 0 / 0
I 1754	1035 / 0	284 / 0	0 / 0 435 / 0 0 / 0

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

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.64 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.  
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	N-C	-153 / 154
B-C	-2546 / 0	-124.4	-124.4	0.65 (1)	3.64	C-M	-622 / 0
C-D	-2078 / 0	-124.4	-124.4	0.58 (1)	4.04	M-D	0 / 591
D-E	-1696 / 0	-124.4	-124.4	0.35 (1)	4.73	D-K	0 / 3
E-F	-2079 / 0	-124.4	-124.4	0.59 (1)	4.04	K-E	0 / 594
F-G	-2545 / 0	-124.4	-124.4	0.65 (1)	3.64	K-F	-620 / 0
G-H	0 / 47	-124.4	-124.4	0.17 (1)	10.00	J-F	-155 / 153
O-B	-2289 / 0	0.0	0.0	0.24 (1)	5.63	B-N	0 / 2194
I-G	-2288 / 0	0.0	0.0	0.24 (1)	5.63	J-G	0 / 2194
O-N	0 / 0	-39.2	-39.2	0.25 (3)	10.00		
N-M	0 / 2156	-39.2	-39.2	0.51 (2)	10.00		
M-L	0 / 1694	-39.2	-39.2	0.38 (1)	10.00		
L-K	0 / 1694	-39.2	-39.2	0.38 (1)	10.00		
K-J	0 / 2156	-39.2	-39.2	0.51 (2)	10.00		
J-I	0 / 0	-39.2	-39.2	0.25 (3)	10.00		

**DESIGN CRITERIA**

SPECIFIED LOADS:

TOP CH.	LL = 34.8	PSF
	DL = 8.0	PSF
BOT CH.	LL = 10.5	PSF
	DL = 7.3	PSF
TOTAL LOAD	= 60.6	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 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, ABC 2019  
- PART 9 OF OBC 2012 (2019 AMENDMENT)  
- CSA 088-14  
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)  
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")  
ALLOWABLE DEFL.(TL)= L/360 (0.90")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.15")

CSI: TC=0.65/1.00 (B-C-1) , BC=0.51/1.00 (M-N-2) ,  
WB=0.69/1.00 (C-M-1) , SSI=0.29/1.00 (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 = 1.00

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

**NAIL VALUES**

PLATE GRIP(DRY) SHEAR	SECTION (PSI)	(PLI)	(PLI)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.80 )  
JSI METAL = 0.88 (B) (INPUT = 1.00 )



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

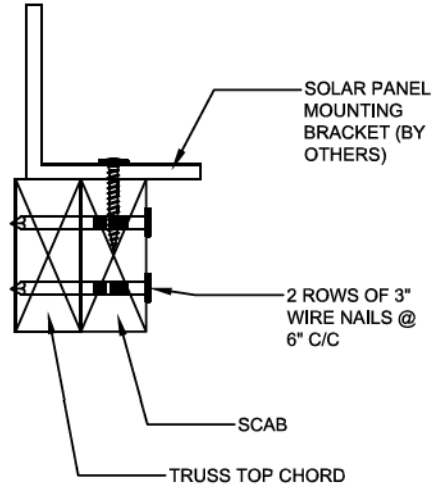
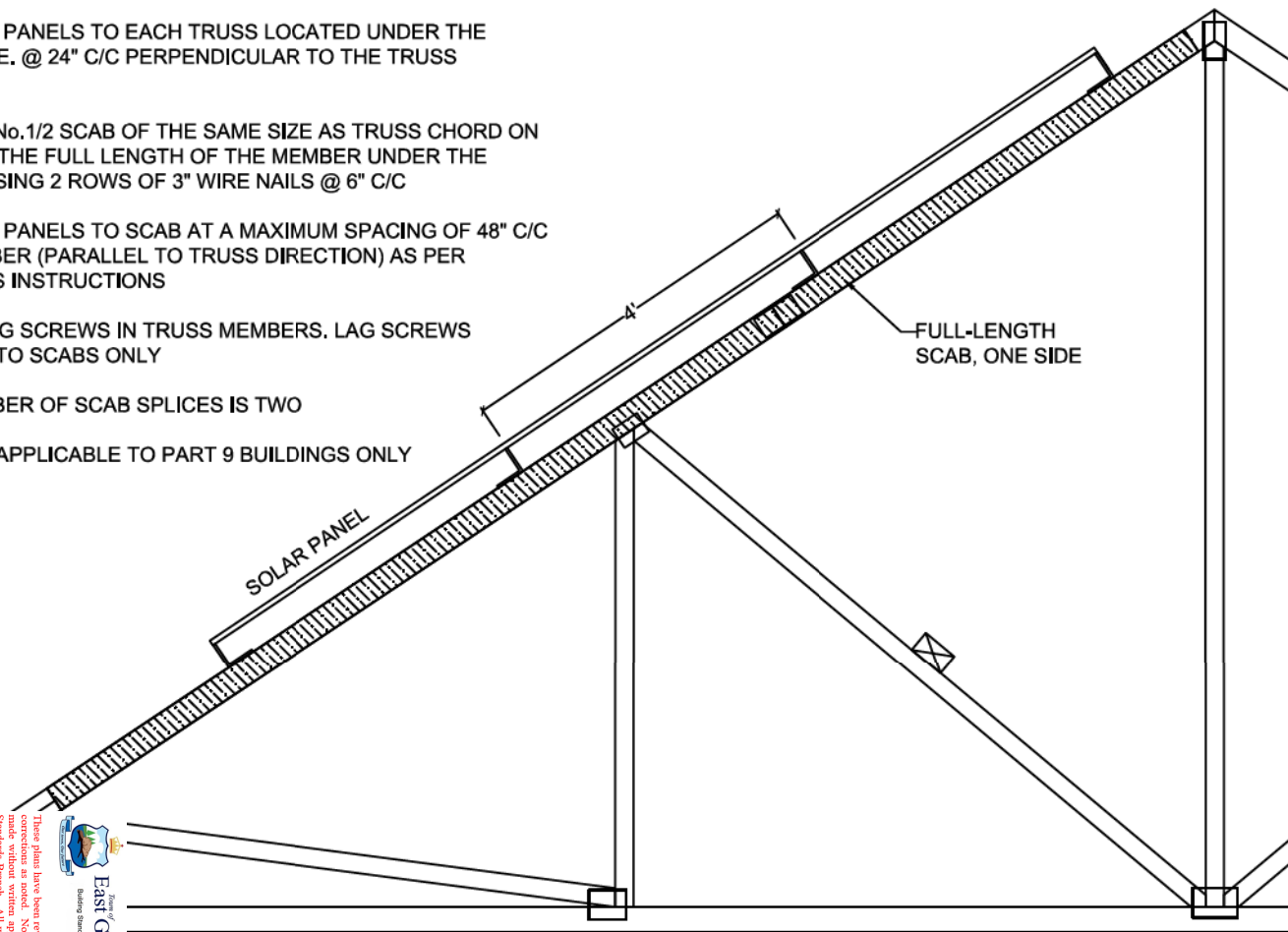
Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

**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.**





- 1) ENSURE TRUSS HAS BEEN DESIGNED WITH ADDITIONAL TOP CHORD DEAD LOAD EQUAL TO OR GREATER THAN WEIGHT OF SOLAR PANELS BEING INSTALLED
- 2) ATTACH SOLAR PANELS TO EACH TRUSS LOCATED UNDER THE SOLAR PANELS (I.E. @ 24" C/C PERPENDICULAR TO THE TRUSS DIRECTION)
- 3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C
- 4) ATTACH SOLAR PANELS TO SCAB AT A MAXIMUM SPACING OF 48" C/C ALONG THE MEMBER (PARALLEL TO TRUSS DIRECTION) AS PER MANUFACTURER'S INSTRUCTIONS
- 5) DO NOT USE LAG SCREWS IN TRUSS MEMBERS. LAG SCREWS SHOULD ATTACH TO SCABS ONLY
- 6) MAXIMUM NUMBER OF SCAB SPLICES IS TWO
- 7) THIS DETAIL IS APPLICABLE TO PART 9 BUILDINGS ONLY



These plans have been reviewed for use with the Building Standards Branch BCN #16447. All work must comply with the Ontario Building Code, as amended, and the Zoning By-Law 2015-043, as amended, and the Building Standards Branch BCN #16447. The building permit must be clearly posted on site at all times.

**East Gwillimbury**  
Building Standards Branch BCN #16447

Building Code	Revisions	BCN	Date
Storage System	1. Addendum	44228	2017-09-05
Zoning			

NE1220-142  
GREENPARK - TRINAR HALL  
- BRENTWOOD 3 EL 2

### Detail for Installation of Solar Panels - Scab Method



NE1220-142  
GREENPARK - TRINAR HALL -  
BRENTWOOD 3 EL 2

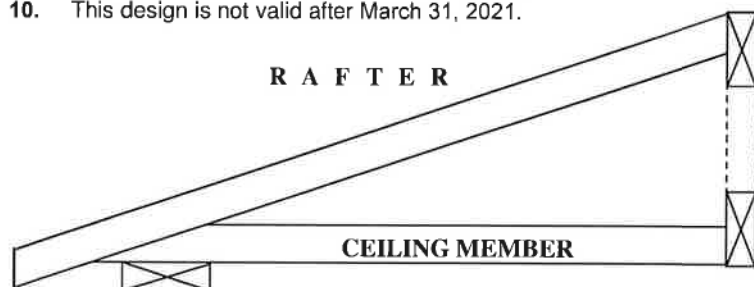
# BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

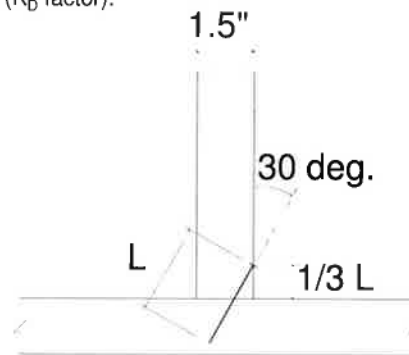
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

## 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 O86-14, section 12.9.4.1.
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 O86-14, section 12.9.4
10. This design is not valid after March 31, 2021.



G  
I  
R  
D  
E  
R



TOE-NAIL INSTALLATION

Nail type	Common wire	Common spiral	Common wire	Common spiral
Nail dia. (in)	0.160	0.152	0.144	0.122
	( 3.5" nail )		( 3" and 3.25" nail )	
LUMBER SIZE	MAXIMUM NUMBER OF TOE-NAILS			
2X4 SPF	2	2	3	3
2X4 D. Fir	2	2	2	2
2X6 SPF	4	4	4	5
2X6 D. Fir	3	3	3	4

**MiTek**

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



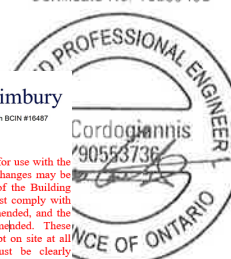
Town of  
East Gwillimbury  
Building Standards Branch BCIN #16487

These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

December

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

PEO  
Certificate No. 10889485



# BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

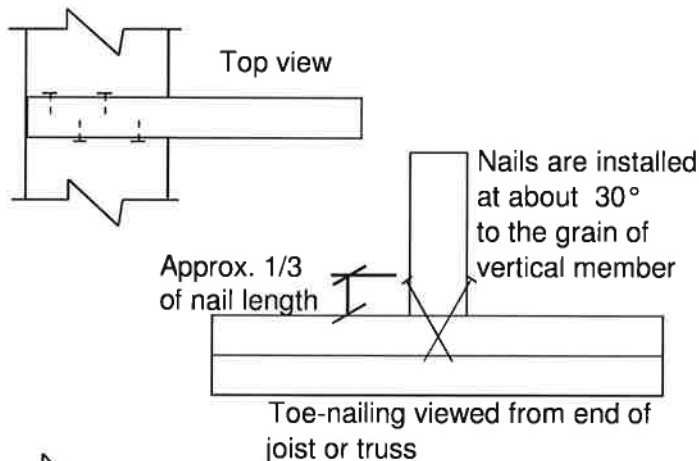
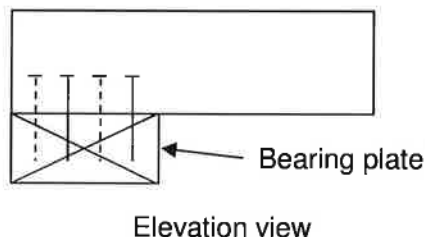
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

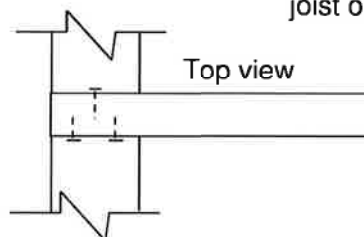
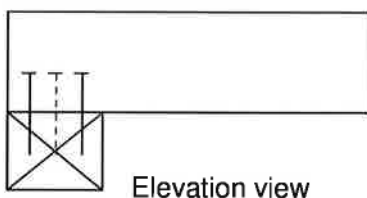
## NOTES:

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 O86-14, section 12.9.5.2.
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 O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

## Toe-nailing on 2x6 Bearing Plate



## Toe-nailing on 2x4 Bearing Plate



**MiTek**

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

PEO  
Certificate No. 10889485

