

PIGGYBACK TRUSSES TO BE SUPPORTED ON 2X4 SPF #1/2
MEMBERS @ 24"OC PLACED PERPENDICULAR TO THE
PIGGYBACK DIRECTION.
PLACE 2X4 MEMBERS BETWEEN THE BOTTOM CHORD OF
THE PIGGYBACK TRUSS AND THE TOP CHORD OF THE
SUPPORTING TRUSS.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02
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 SPF @ 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.

Customer	GREENPARK HOMES
Job #	T20-00770
Address	LOT 18 TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 7A ELEV 1
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/17/2020
Path	C:\DATA\REVIEWS\GREENPARK\TRINAR HALL\MO 18\T20-00770

Code	NBCC 2015
Bldg	Residential - HSB (NBCC Part 9)
TC LL	34.8 lb/ft ²
TC DL	8.0 lb/ft ²
BC LL	10.5 lb/ft ²
BC DL	7.3 lb/ft ²
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

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.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400





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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

NE1220-130
GREENPARK - TRINAR
HALL - LOT 18

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

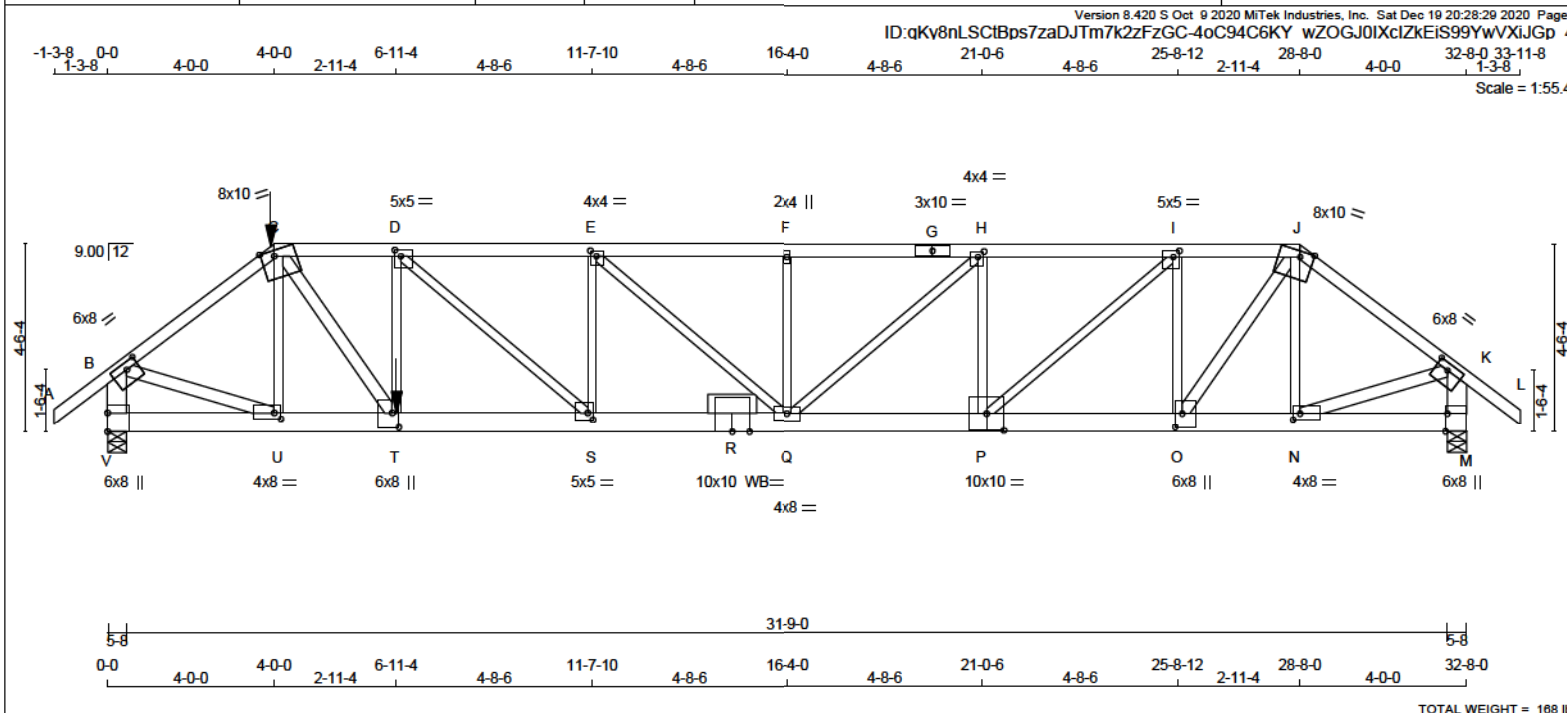
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing
- 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.



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	DESCR.
A - C	2x4	DRY	No.2
C - G	2x4	DRY	2100F 1.8E
G - J	2x4	DRY	2100F 1.8E
J - L	2x4	DRY	No.2
V - B	2x8	DRY	No.2
M - K	2x8	DRY	No.2
V - R	2x8	DRY	2100F 1.8E
R - P	2x8	DRY	2100F 1.8E
P - M	2x8	DRY	2100F 1.8E
ALL WEBS EXCEPT			
C - T	2x4	DRY	No.2
O - J	2x4	DRY	No.2
B - U	2x4	DRY	No.2
N - K	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMWV-t	MT20	6.0	8.0	2.00	3.50
C TTWW-m	MT20	8.0	10.0	Edge 4.00	
D TMWV-t	MT20	5.0	5.0	1.75	1.75
E TMWV-t	MT20	4.0	4.0	1.50	1.75
F TMWV-t	MT20	2.0	4.0		
G TS-t	MT20	3.0	10.0		
H TMWV-t	MT20	4.0	4.0	1.50	1.75
I TMWV-t	MT20	5.0	5.0	1.75	1.75
J TTWW-m	MT20	8.0	10.0	Edge 4.00	
K TMWV-t	MT20	6.0	8.0	2.00	3.50
M BMV1-t	MT20	6.0	8.0	Edge 0.50	
N BMWV-t	MT20	4.0	8.0	1.75	2.00
O BMWV-t	MT20	6.0	8.0	4.25	2.00
P BSWW-t	MT20	10.0	10.0	5.25	5.00
Q BMWV-t	MT20	4.0	8.0		
R BS-t	MT20	10.0	10.0		
S BMWV-t	MT20	5.0	5.0	2.00	1.50
T BMWV-t	MT20	6.0	8.0	4.25	2.00
U BMWV-t	MT20	4.0	8.0	1.75	2.00
V BMV1-t	MT20	6.0	8.0	5.50	

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

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX		
V	4893	0	4893	0	0	5-8	5-8		
M	3351	0	3351	0	0	5-8	3-10		
UNFACTORED REACTIONS									
1ST LCASE MAX/MIN COMPONENT REACTIONS									
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
V	3615	2104 / 0	608 / 0	0 / 0	0 / 0	905 / 0	0 / 0		
M	2472	1450 / 0	408 / 0	0 / 0	0 / 0	616 / 0	0 / 0		
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.13 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS									
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MAX. UNBRACED LENGTH (FT)	WEBS	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LC)		
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH		
A-B	0 / 51	-124.4	-124.4	0.19 (1)	10.00	U-C	-884 / 0	0.26 (1)	
B-C	-5351 / 0	-124.4	-124.4	0.97 (1)	2.13	C-T	0 / 4186	0.74 (1)	
C-D	-8678 / 0	-172.4	-172.4	0.40 (1)	3.13	T-D	-1229 / 0	0.36 (1)	
D-E	-7448 / 0	-124.4	-124.4	0.60 (1)	2.84	D-S	0 / 1030	0.25 (1)	
E-F	-7282 / 0	-124.4	-124.4	0.59 (1)	2.89	S-E	-456 / 0	0.13 (1)	
F-G	-7282 / 0	-124.4	-124.4	0.59 (1)	2.89	E-Q	-221 / 0	0.15 (1)	
G-H	-7282 / 0	-124.4	-124.4	0.59 (1)	2.89	Q-F	-572 / 0	0.17 (1)	
H-I	-8303 / 0	-124.4	-124.4	0.50 (1)	3.17	Q-H	0 / 1306	0.32 (1)	
I-J	-4422 / 0	-124.4	-124.4	0.28 (1)	3.90	P-H	-1463 / 0	0.43 (1)	
J-K	-3493 / 0	-124.4	-124.4	0.85 (1)	3.11	P-I	0 / 2508	0.62 (1)	
K-L	0 / 51	-124.4	-124.4	0.19 (1)	10.00	O-I	-2158 / 0	0.64 (1)	
V-B	-4798 / 0	0.0	0.0	0.35 (1)	4.87	O-J	0 / 2845	0.50 (1)	
M-K	-3278 / 0	0.0	0.0	0.24 (1)	5.81	N-J	-613 / 0	0.18 (1)	
V-U	0 / 0	-54.4	-54.4	0.05 (3)	10.00	B-U	0 / 4424	0.78 (1)	
U-T	0 / 4249	-54.4	-54.4	0.27 (1)	10.00	N-K	0 / 2889	0.51 (1)	
T-S	0 / 6076	-39.2	-39.2	0.42 (1)	10.00				
S-R	0 / 7448	-39.2	-39.2	0.46 (1)	10.00				
R-Q	0 / 7448	-39.2	-39.2	0.46 (1)	10.00				
Q-P	0 / 6303	-39.2	-39.2	0.40 (1)	10.00				
P-O	0 / 4423	-39.2	-39.2	0.27 (1)	10.00				
O-N	0 / 2773	-39.2	-39.2	0.16 (1)	10.00				
N-M	0 / 0	-39.2	-39.2	0.04 (3)	10.00				
FACTORED CONCENTRATED LOADS (LBS)									
JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-0	-207	-207	---	BACK	VERT	TOTAL	---	C1
T	6-11-4	-2101	-2101	---	BACK	VERT	TOTAL	---	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

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 BACK SIDE
- ADDTL LOADS BASED ON 55 % OF G.S.L.
LOADS APPLIED TO FIRST 6-10-8 OF SPAN MEASURED FROM THE LEFT.

*** 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 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 (1.09")
CALCULATED VERT. DEFL. (LL) = L/999 (0.31")
ALLOWABLE DEFL. (TL) = L/360 (1.09")
CALCULATED VERT. DEFL. (TL) = L/799 (0.52")

CSI: TC=0.97/1.00 (B-C-1), BC=0.48/1.00 (Q-S-1), WB=0.78/1.00 (B-U-1), SSI=0.26/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 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

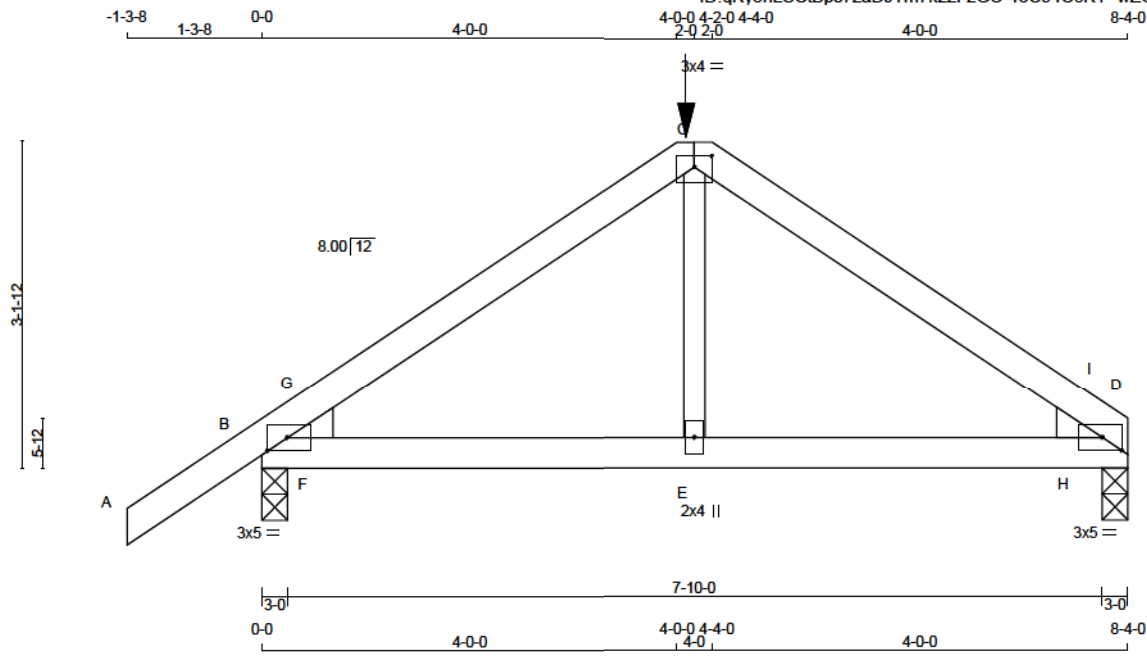


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



CONTINUED ON PAGE 2



Scale = 1:22.2

TOTAL WEIGHT = 26 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	
B - D	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
DRY: SEASONED LUMBER.					

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBH1-I	MT20	3.0	5.0	Edge 2.25
C	TTW-p	MT20	3.0	4.0	1.25 2.00
D	TMBH1-I	MT20	3.0	5.0	Edge 2.25
E	BMW+w	MT20	2.0	4.0	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	HEEL WEDGE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
B	1132	0	1132	0	0
D	961	0	961	0	0

UNFACTORED REACTIONS

1ST LCASE MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	830	502 / 0	126 / 0	0 / 0	0 / 0	203 / 0	0 / 0
D	713	406 / 0	126 / 0	0 / 0	0 / 0	181 / 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 = 5.70 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 41	-124.4 -124.4	0.18 (1)	10.00	E-C	0 / 386	0.10 (2)
B-G	-1123 / 0	-124.4 -124.4	0.13 (1)	5.81	F-G	-161 / 106	0.00 (1)
G-C	-1070 / 0	-124.4 -124.4	0.28 (1)	5.70	H-I	-161 / 106	0.00 (1)
C-I	-1070 / 0	-124.4 -124.4	0.28 (1)	5.70			
I-D	-1123 / 0	-124.4 -124.4	0.13 (1)	5.81			
B-F	0 / 880	-56.4 -56.4	0.32 (1)	10.00			
F-E	0 / 880	-56.4 -56.4	0.38 (1)	10.00			
E-H	0 / 880	-56.4 -56.4	0.38 (1)	10.00			
H-D	0 / 880	-56.4 -56.4	0.32 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-2-0	-415	-415	—	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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4'-0"
END SETBACK = 4'-0"
END WALL WIDTH = 3'-0"
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 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.28/1.00 (C-G-1), BC=0.38/1.00 (E-F-1),
WB=0.10/1.00 (C-E-2), SS=0.19/1.00 (B-F-1)

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

COMPANION LIVE LOAD FACTOR = 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= 0.81 (D) (INPUT = 0.90)
JSI METAL = 0.29 (B) (INPUT = 1.00)

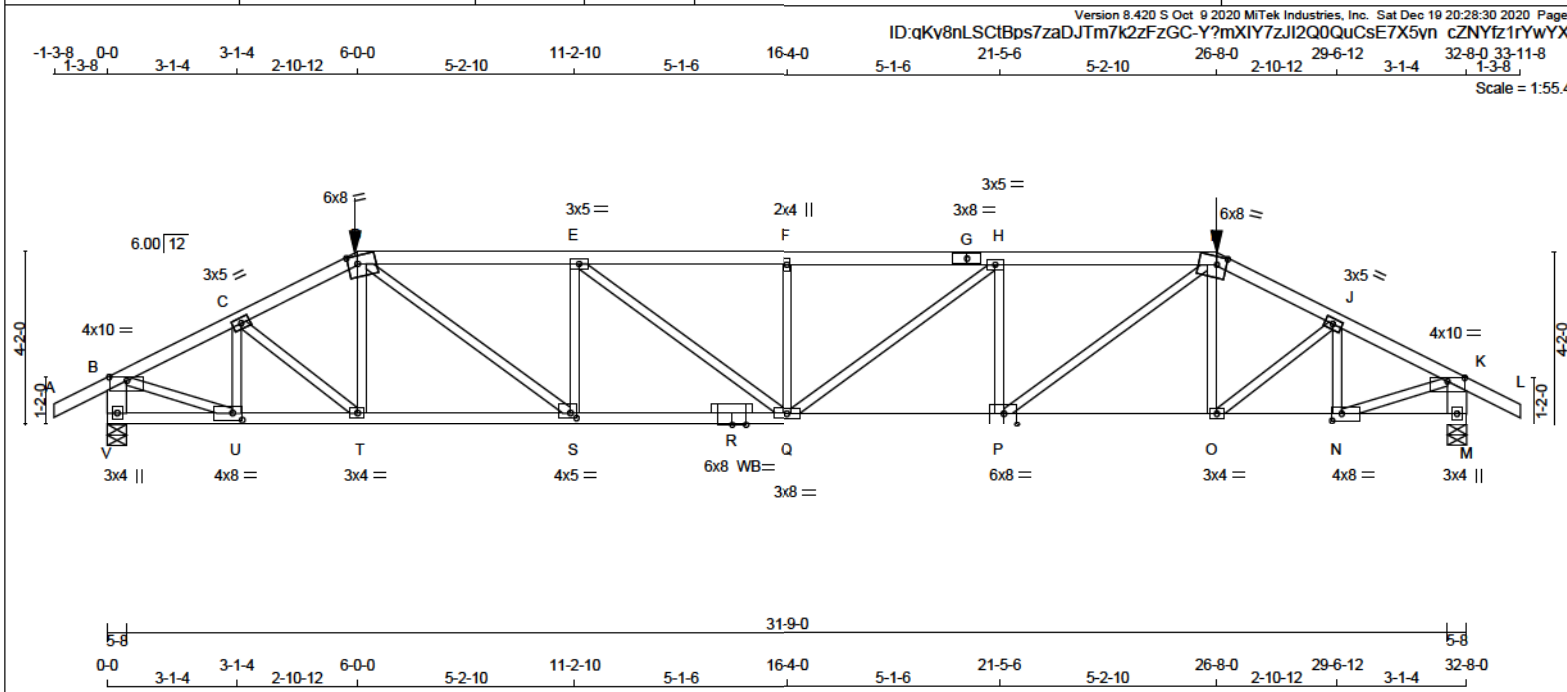


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Sewage System			
Zoning			



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	DESCR.
A - D	2x4	DRY	No.2 SPF
D - G	2x4	DRY	2100F 1.8E SPF
G - I	2x4	DRY	2100F 1.8E SPF
I - L	2x4	DRY	No.2 SPF
V - B	2x6	DRY	No.2 SPF
M - K	2x6	DRY	No.2 SPF
V - R	2x4	DRY	No.2 SPF
R - P	2x4	DRY	2100F 1.8E SPF
P - M	2x4	DRY	No.2 SPF
ALL WEBS	2x3	DRY	No.2 SPF

EXCEPT
DRY: SEASONED LUMBER.

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	SIDE(0.0)
D - G	12	SIDE(55.1)
G - I	12	SIDE(55.1)
I - L	12	SIDE(0.0)
V - B	2	TOP
M - K	2	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
V - R	12	SIDE(22.0)
R - P	12	SIDE(22.0)
P - M	12	SIDE(22.0)

WEBS : (0.122"x3") SPIRAL NAILS
2x3 1 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.

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
V	5108	0	5108	0	5-8 2-13
M	5108	0	5108	0	5-8 2-13

UNFACTORED REACTIONS							
1ST LCASE MAX/MIN COMPONENT REACTIONS							
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	3780	2182 / 0	647 / 0	0 / 0	0 / 0	951 / 0	0 / 0
M	3780	2182 / 0	647 / 0	0 / 0	0 / 0	951 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.28 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LBS)	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	0.09 (1)	10.00	U-C -1494 / 0	0.13 (1)
B-C	-8671 / 0	-124.4	-124.4	0.25 (1)	3.61	C-T 0 / 1047	0.13 (1)
C-D	-7606 / 0	-124.4	-124.4	0.28 (1)	3.38	T-D -294 / 181	0.04 (1)
D-E	-10121 / 0	-234.6	-234.6	0.52 (1)	3.47	D-S 0 / 4156	0.51 (1)
E-F	-11106 / 0	-234.6	-234.6	0.55 (1)	3.29	S-E -2104 / 0	0.28 (1)
F-G	-11106 / 0	-234.6	-234.6	0.56 (1)	3.28	E-Q 0 / 1240	0.15 (1)
G-H	-11106 / 0	-234.6	-234.6	0.56 (1)	3.28	Q-F -1110 / 0	0.15 (1)
H-I	-10094 / 0	-234.6	-234.6	0.52 (1)	3.47	I-H 0 / 1274	0.18 (1)
I-J	-7619 / 0	-124.4	-124.4	0.28 (1)	3.37	P-H -2127 / 0	0.29 (1)
J-K	-8666 / 0	-124.4	-124.4	0.25 (1)	3.62	P-I 0 / 4109	0.51 (1)
K-L	0 / 38	-124.4	-124.4	0.09 (1)	10.00	O-I -260 / 236	0.04 (1)
V-B	-4982 / 0	0.0	0.0	0.18 (1)	6.52	O-J 0 / 1064	0.13 (1)
M-K	-4979 / 0	0.0	0.0	0.18 (1)	6.52	N-J -1510 / 0	0.14 (1)
V-U	0 / 0	-74.0	-74.0	0.09 (2)	10.00	B-U 0 / 6197	0.77 (1)
U-T	0 / 5973	-74.0	-74.0	0.63 (1)	10.00	N-K 0 / 6193	0.77 (1)
T-S	0 / 6782	-74.0	-74.0	0.70 (1)	10.00		
S-R	0 / 10121	-74.0	-74.0	0.98 (1)	10.00		
R-Q	0 / 10121	-74.0	-74.0	0.98 (1)	10.00		
Q-P	0 / 10094	-74.0	-74.0	0.51 (1)	10.00		
P-O	0 / 6792	-74.0	-74.0	0.73 (1)	10.00		
O-N	0 / 5970	-74.0	-74.0	0.66 (1)	10.00		
N-M	0 / 0	-74.0	-74.0	0.09 (2)	10.00		

FACTORED CONCENTRATED LOADS (LBS)							
JT	LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE
D	6-0-0	-560	-560	---	FRONT	VERT	TOTAL
I	26-8-0	-560	-560	---	FRONT	VERT	TOTAL

CONNECTION REQUIREMENTS

- 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 = 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, NBCC 2015

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF CBC 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/969 (0.29")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/798 (0.49")

CSI: TC=0.56/1.00 (F-H:1), BC=0.98/1.00 (Q-S:1), WB=0.77/1.00 (B-U:1), SS=0.31/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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 (P) (INPUT = 0.90)
JSI METAL = 0.97 (P) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS 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	2021-02-03
Sewage System			
Zoning			



CONTINUED ON PAGE 2

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-p	MT20	4.0	10.0	1.00 5.00
C, E, H, J					
C	TMWW-t	MT20	3.0	5.0	
D	TTWW-m	MT20	6.0	8.0	2.25 2.75
F	TMW+w	MT20	2.0	4.0	
G	TS-t	MT20	3.0	8.0	
I	TTWW-m	MT20	6.0	8.0	2.25 2.75
K	TMVW-p	MT20	4.0	10.0	1.00 5.00
M	BMV1+p	MT20	3.0	4.0	
N	BMWW-t	MT20	4.0	8.0	2.00 2.75
O	BMWW-t	MT20	3.0	4.0	
P	BSWW-t	MT20	6.0	8.0	3.25 3.75
Q	BMWWW-t	MT20	3.0	8.0	
R	BS-t	MT20	6.0	8.0	
S	BMWW-t	MT20	4.0	5.0	1.50 1.75
T	BMWW-t	MT20	3.0	4.0	
U	BMWW-t	MT20	4.0	8.0	2.00 2.75
V	BMV1+p	MT20	3.0	4.0	

WB - INDICATES BLOCKING REQUIRED

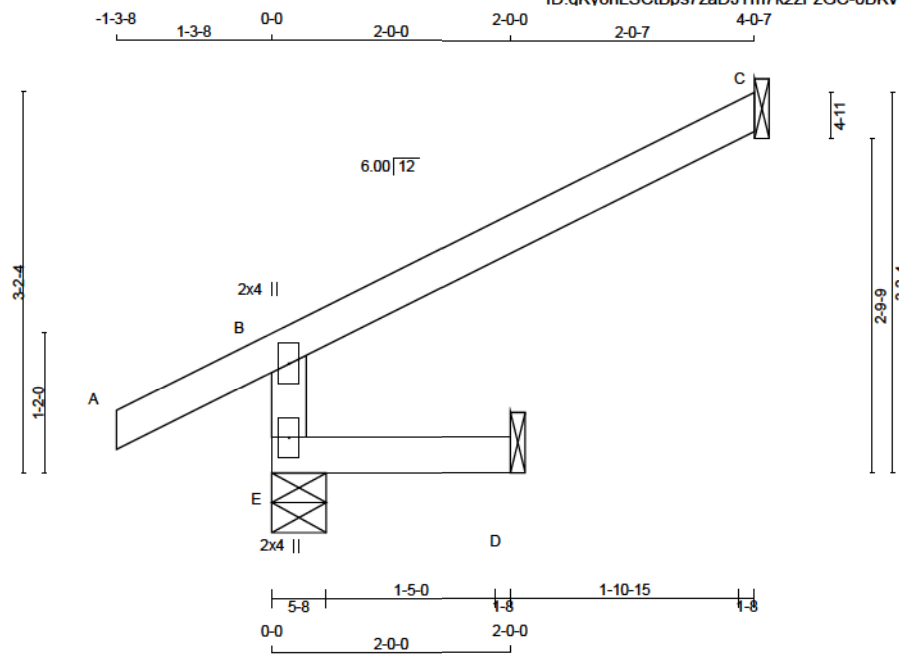
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





Scale = 1:19.2

TOTAL WEIGHT = 2 X 10 = 20 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	REACT	GROSS	REACT	BRG	IN-SX	BRG	IN-SX
E	528	0	528	0	0	5-8	1-8	1-8	1-8
C	188	0	188	0	0	1-8	1-8	1-8	1-8
D	35	0	44	0	0	1-8	1-8	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	WIND	DEAD	SOIL
E	372	270 / 0	23 / 0	0 / 0	0 / 0	78 / 0	0 / 0
C	130	105 / 0	0 / 0	0 / 0	0 / 0	24 / 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: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORIZ. LOAD (PLF)
FR-TO			
E-B	-483 / 0	0.0	0.0
A-B	0 / 38	-124.4	-124.4
B-C	-28 / 0	-124.4	-124.4
E-D	0 / 0	-39.2	-39.2

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=0.34/1.00 (B-C:1) , BC=0.03/1.00 (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)	(PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

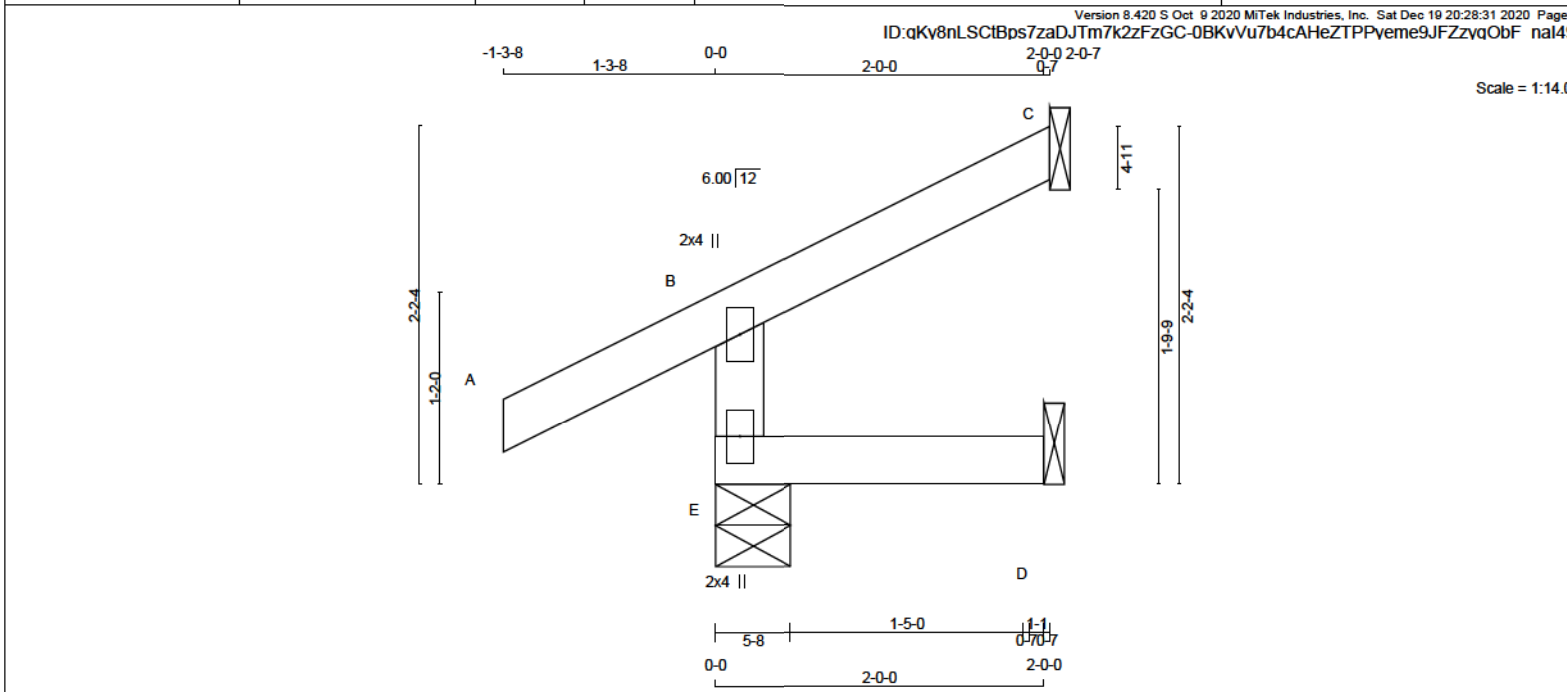


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



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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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
E	370	370	5-8	1-8
C	96	96	1-8	1-8
D	35	44	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	WIND	DEAD	SOIL
E	264	183 / 0	23 / 0	0 / 0	58 / 0
C	86	54 / 0	0 / 0	0 / 0	12 / 0
D	32	0 / 0	19 / 0	0 / 0	13 / 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 HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
E-B	-327 / 0	0.0	0.0	E-B	-327 / 0	0.0	0.0
A-B	0 / 38	-124.4	-124.4	A-B	0 / 38	-124.4	-124.4
B-C	-14 / 0	-124.4	-124.4	B-C	-14 / 0	-124.4	-124.4
E-D	0 / 0	-39.2	-39.2	E-D	0 / 0	-39.2	-39.2

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)



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.

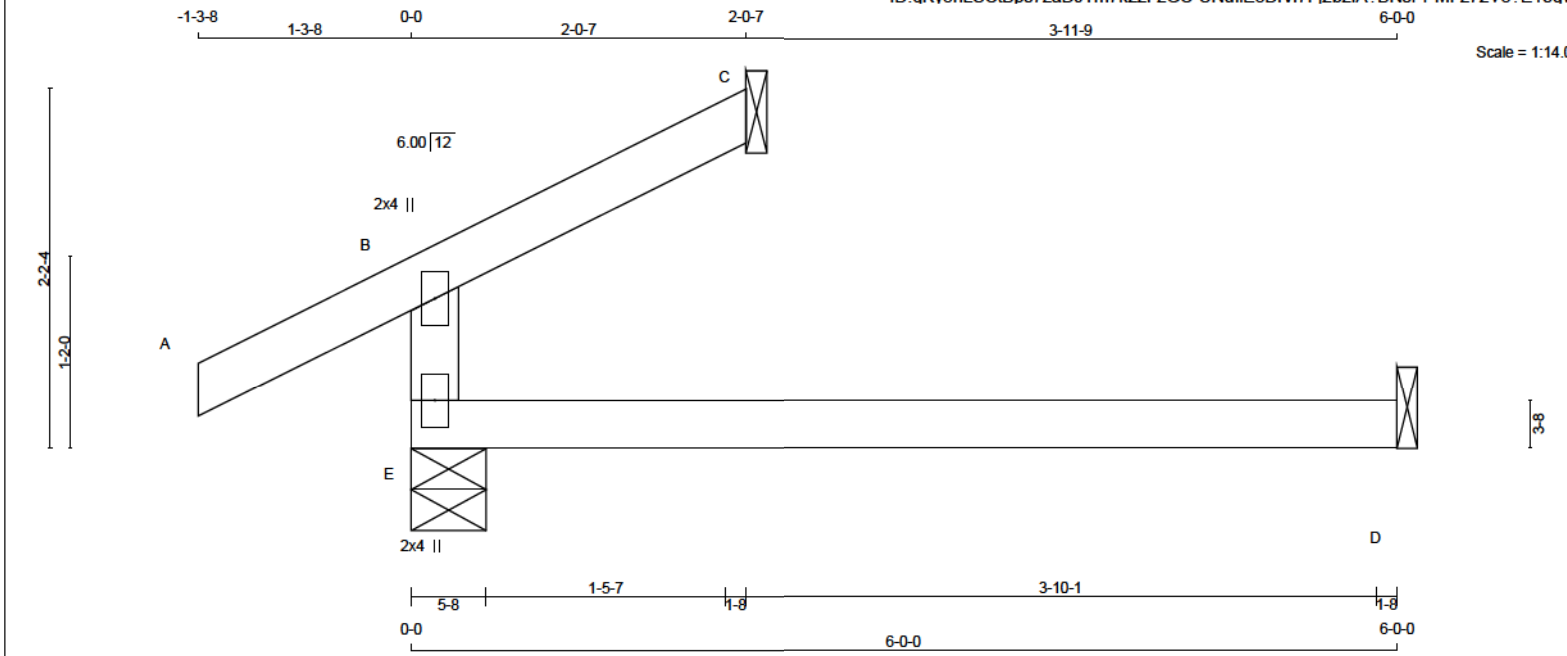


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Sat Dec 19 20:28:32 2020 Page 1
ID: qKy8nLScIbPs7zaDJTm7k2zFzGC-UNuIE8DrV17F12bz1A?BNsPPMFz72V8?E1eqWY7



TOTAL WEIGHT = 2 X 12 = 24 LB

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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	465	0	465	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	0 / 0	93 / 0	0 / 0
C	86	54 / 0	0 / 0	0 / 0	0 / 0	0 / 0	12 / 0	0 / 0
D	88	0 / 0	52 / 0	0 / 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 = 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)

MEMB.	CHORDS		WEBS	
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				
E-B	-327 / 0	0.0	0.0	0.22 (3)
A-B	0 / 38	-124.4	-124.4	0.16 (1)
B-C	-14 / 0	-124.4	-124.4	0.09 (1)
E-D	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

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 (PSI)	SECTION (PLI)
MT20	650	371	1747

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)



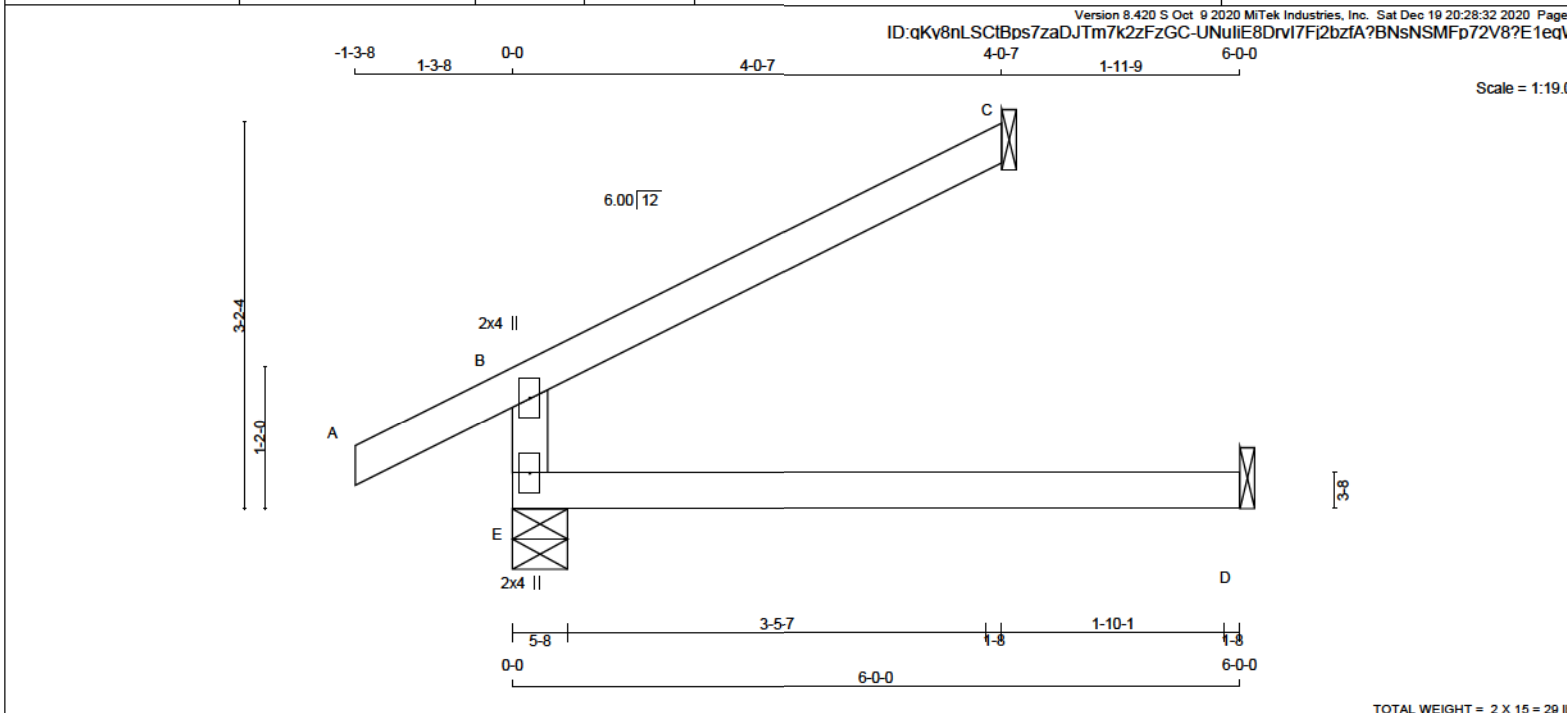
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





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

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	621	0	621	0	5-8	1-8
C	188	0	188	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	1ST LCASE	MAX / MIN COMPONENT REACTIONS					
		COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD
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)	FACTORED L1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
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:

- PART 9 OF CBC 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/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 (PSI)	SECTION (PLI)
MT20	650	371	1747

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

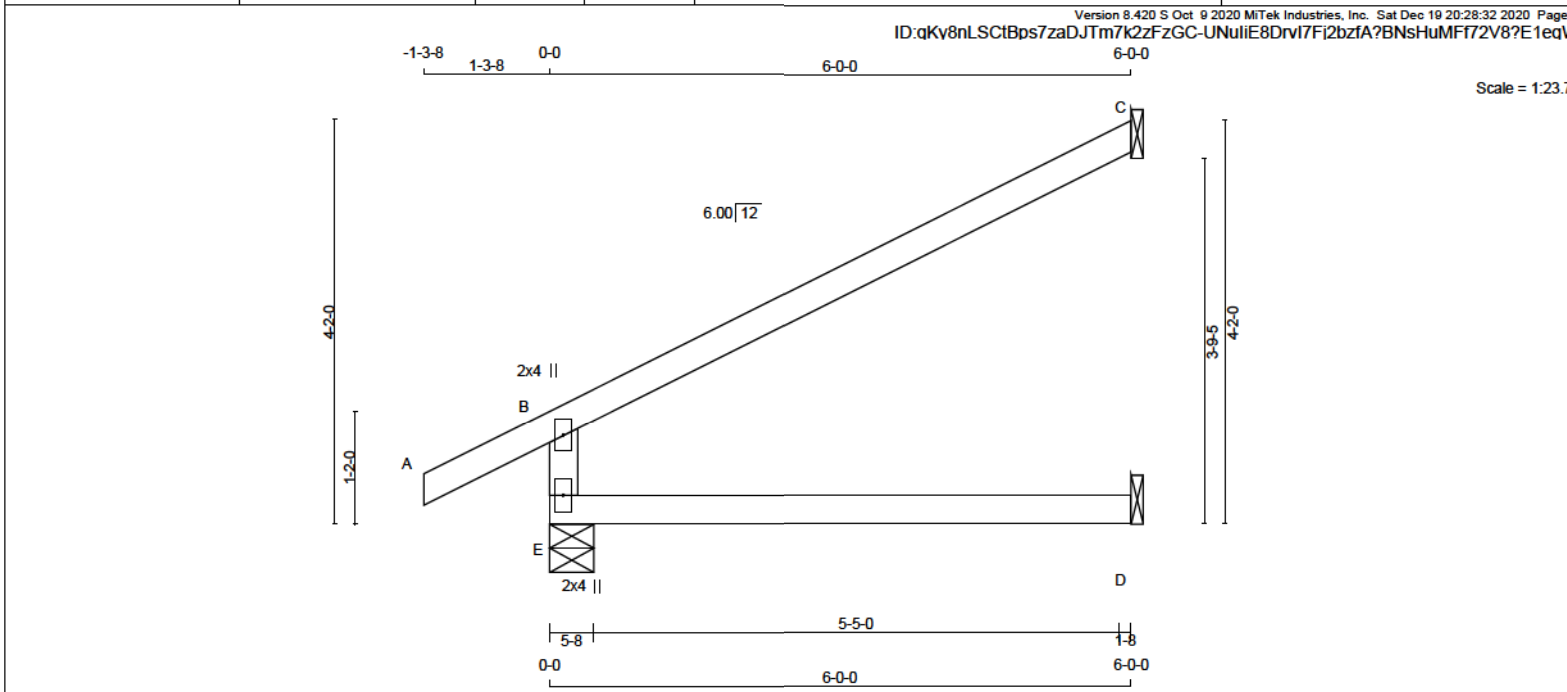
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JSI METAL= 0.20 (B) (INPUT = 1.00)

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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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

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD
E	774	0	774	0	0	5-8	1-8
C	280	0	280	0	0	1-8	1-8
D	97	0	123	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
E	COMBINED	563	355 / 0	74 / 0	0 / 0
C	COMBINED	193	157 / 0	0 / 0	0 / 0
D	COMBINED	88	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 VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
E-B	-835 / 0	0.0	0.0 0.24 (3)	E-B	-835 / 0	0.0	0.0 0.24 (3)
A-B	0 / 38	-124.4	-124.4 0.18 (1)	A-B	0 / 38	-124.4	-124.4 0.18 (1)
B-C	-42 / 0	-124.4	-124.4 0.78 (1)	B-C	-42 / 0	-124.4	-124.4 0.78 (1)
E-D	0 / 0	-39.2	-39.2 0.24 (3)	E-D	0 / 0	-39.2	-39.2 0.24 (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

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)



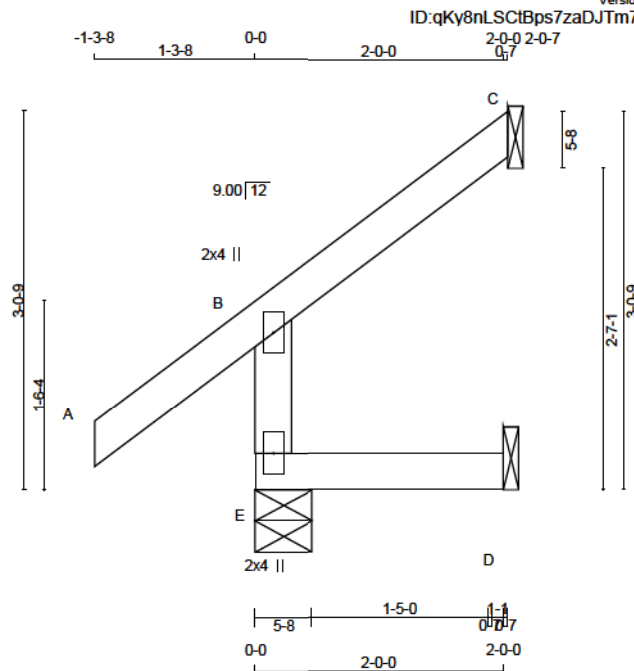
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





Scale = 1:18.5

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

DESCR.
SPF
SPF
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
E	372	0	372	0	5-8
C	96	0	96	0	1-8
D	36	0	45	0	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
E	265	184 / 0	23 / 0	0 / 0	58 / 0
C	86	54 / 0	0 / 0	0 / 0	12 / 0
D	32	0 / 0	19 / 0	0 / 0	13 / 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)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
E-B	-329 / 0	E-B	7.81
A-B	0 / 51	A-B	10.00
B-C	-18 / 0	B-C	6.25
E-D	0 / 0	E-D	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:
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- 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=0.17/1.00 (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)
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)

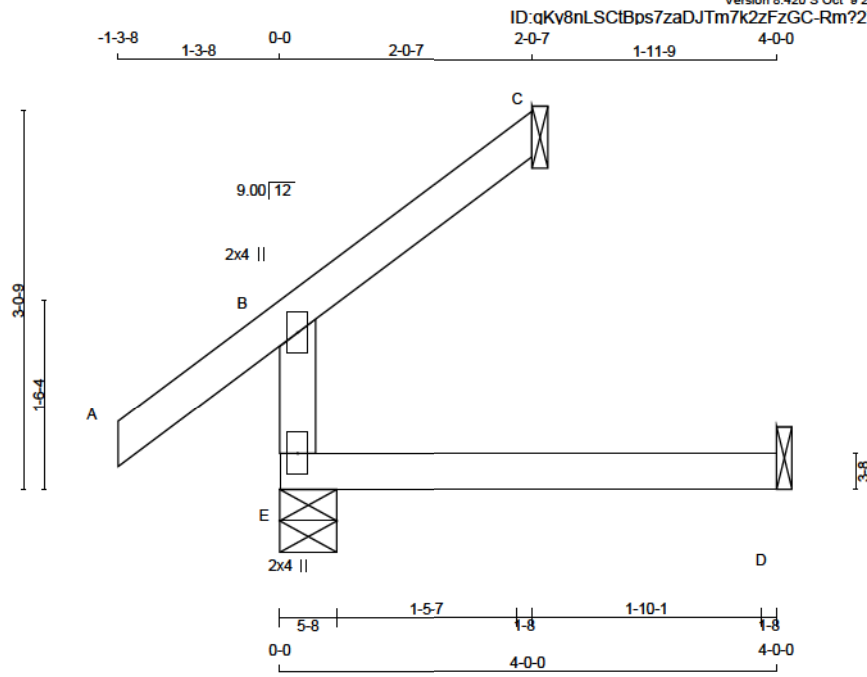


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Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



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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	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	418	0	418	0
C	96	0	96	0
D	68	0	68	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
E	307	184 / 0	48 / 0
C	66	54 / 0	0 / 0
D	62	0 / 0	36 / 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)	FACTORED L1 MAX. CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS (LC)	LENGTH
FR-TO		FROM TO		FR-TO			
E-B	-329 / 0	0.0	0.0 0.08 (3)	E-B	-329 / 0	0.0	7.81
A-B	0 / 51	-124.4	-124.4 0.17 (1)	A-B	0 / 51	-124.4	10.00
B-C	-18 / 0	-124.4	-124.4 0.09 (1)	B-C	-18 / 0	-124.4	6.25
E-D	0 / 0	-39.2	-39.2 0.11 (3)	E-D	0 / 0	-39.2	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

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



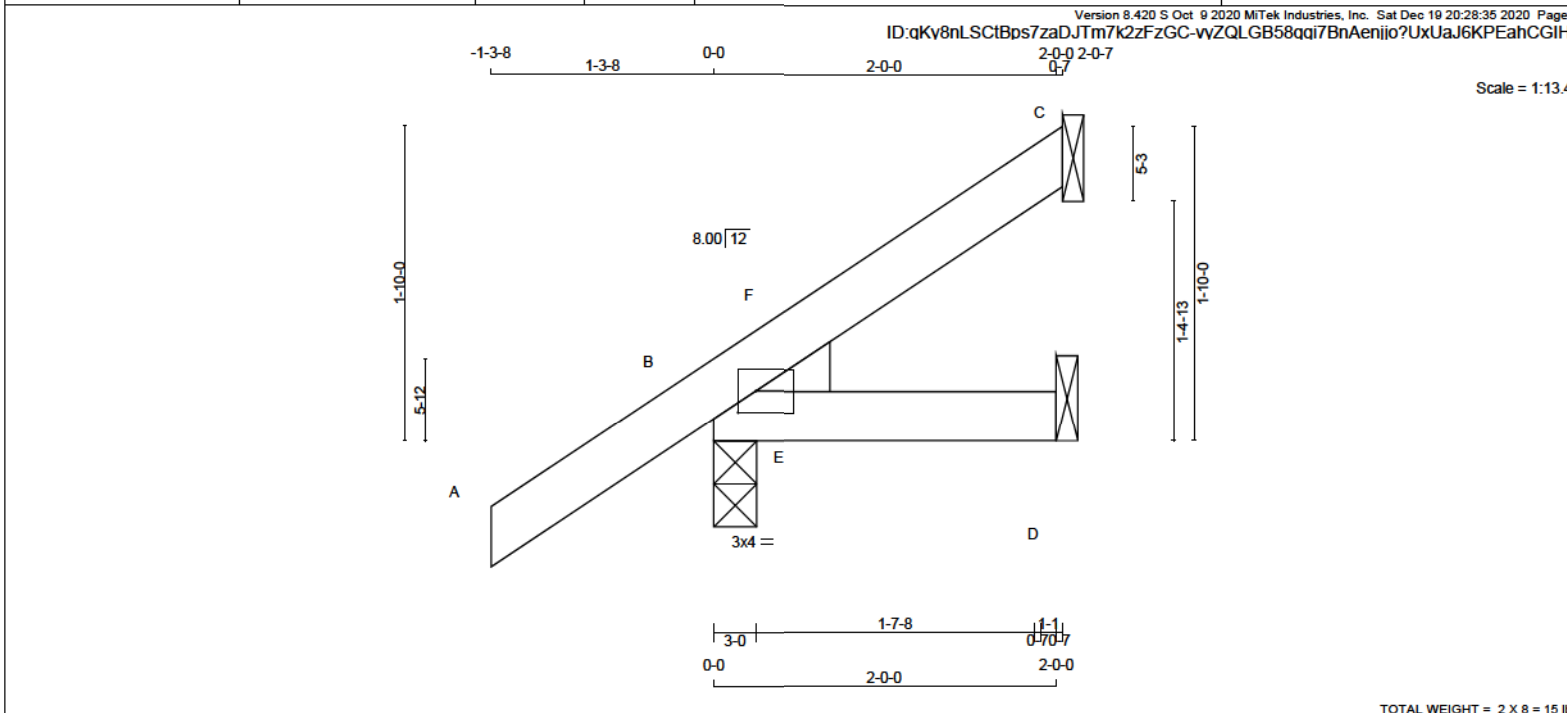
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

A - C 2x4 DRY No.2

B - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	3.0	4.0	1.50 1.25

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	HEEL WEDGE
C	106	106	0	1-8	
B	336	0	336	0	2x4 L
D	61	0	61	0	

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
C	74	55 / 0	4 / 0	0 / 0 0 / 0 15 / 0 0 / 0
B	240	166 / 0	21 / 0	0 / 0 0 / 0 53 / 0 0 / 0
D	49	16 / 0	17 / 0	0 / 0 0 / 0 16 / 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)
FR-TO					FR-TO		
A- B	0 / 41	-124.4	-124.4	0.17 (1)	10.00	E- F	-83 / 16 0.00 (1)
B- F	-24 / 0	-124.4	-124.4	0.02 (2)	6.25		
F- C	0 / 6	-124.4	-124.4	0.06 (1)	10.00		
B- E	0 / 0	-39.2	-39.2	0.06 (1)	10.00		
E- D	0 / 0	-39.2	-39.2	0.06 (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:

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- 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 (0.19")

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=0.06/1.00 (B-E:1),

WB=0.00/1.00 (E-F:1), 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

Dec 18, 2020

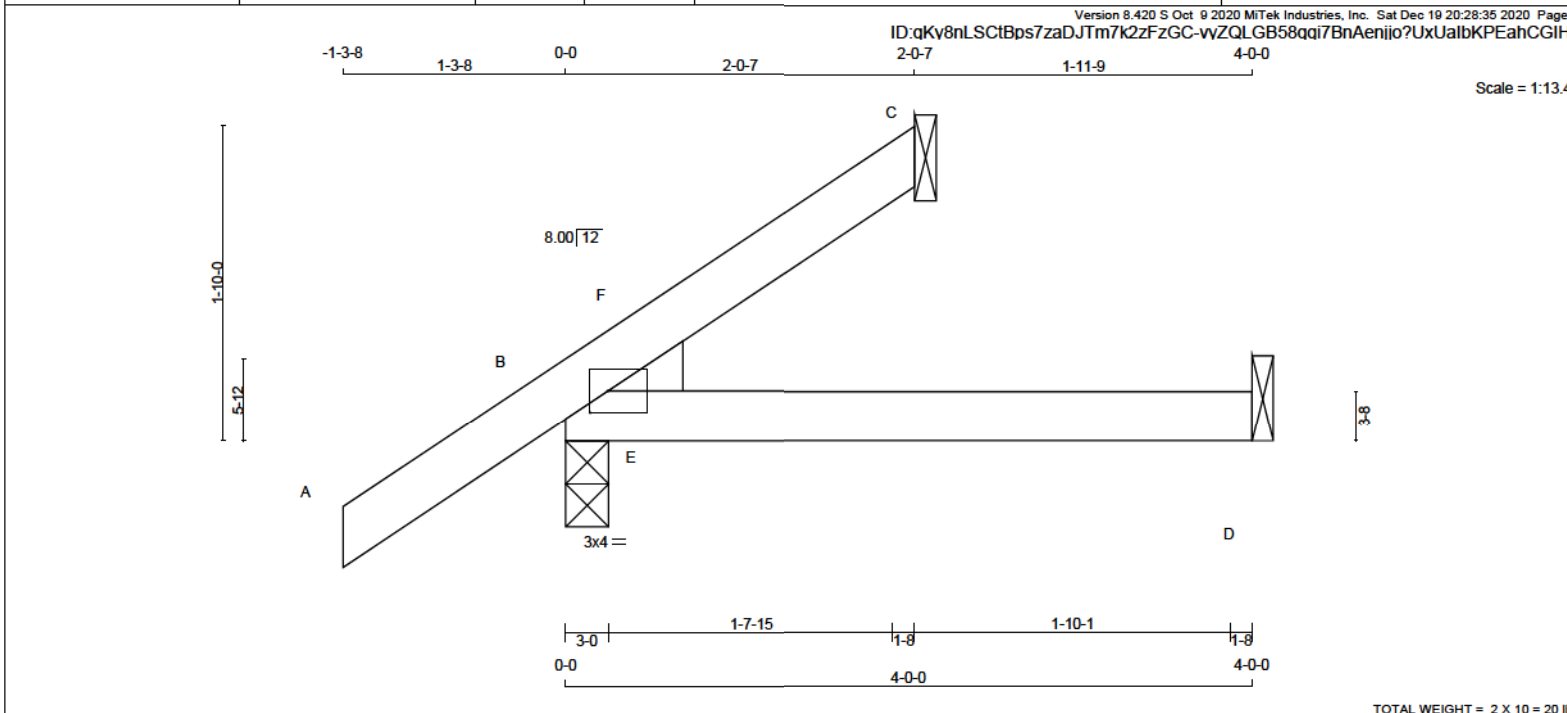
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY

B - D 2x4 DRY

No.2

No.2

DESCR.

SPF

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE PLATES W LEN Y X

B TMBH1-I MT20 3.0 4.0 1.50 1.25

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	HEEL WEDGE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
C	144	0	144	0	0
B	368	0	368	0	0
D	70	0	84	0	0

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
C	106	62 / 0 18 / 0 0 / 0 0 / 0 27 / 0 0 / 0
B	267	171 / 0 33 / 0 0 / 0 0 / 0 62 / 0 0 / 0
D	61	4 / 0 33 / 0 0 / 0 0 / 0 24 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (LC1 MAX)	
FR-TO				FR-TO			
A- B	0 / 41	-124.4	-124.4 0.17 (1)	10.00	E- F	0 / 156 0.00 (1)	
B- F	-111 / 0	-124.4	-124.4 0.11 (2)	6.25			
F- C	0 / 30	-124.4	-124.4 0.12 (1)	10.00			
B- E	0 / 0	-39.2	-39.2 0.04 (3)	10.00			
E- D	0 / 0	-39.2	-39.2 0.10 (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

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 (0.19")

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=0.10/1.00 (D-E-2) ,

WB=0.00/1.00 (E-F-1) , 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

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 (0.01")
 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=0.10/1.00 (D-E:2), WB=0.00/1.00 (E-F:1), 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 850 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.32 (B) (INPUT = 0.90)
 JSI METAL= 0.04 (B) (INPUT = 1.00)



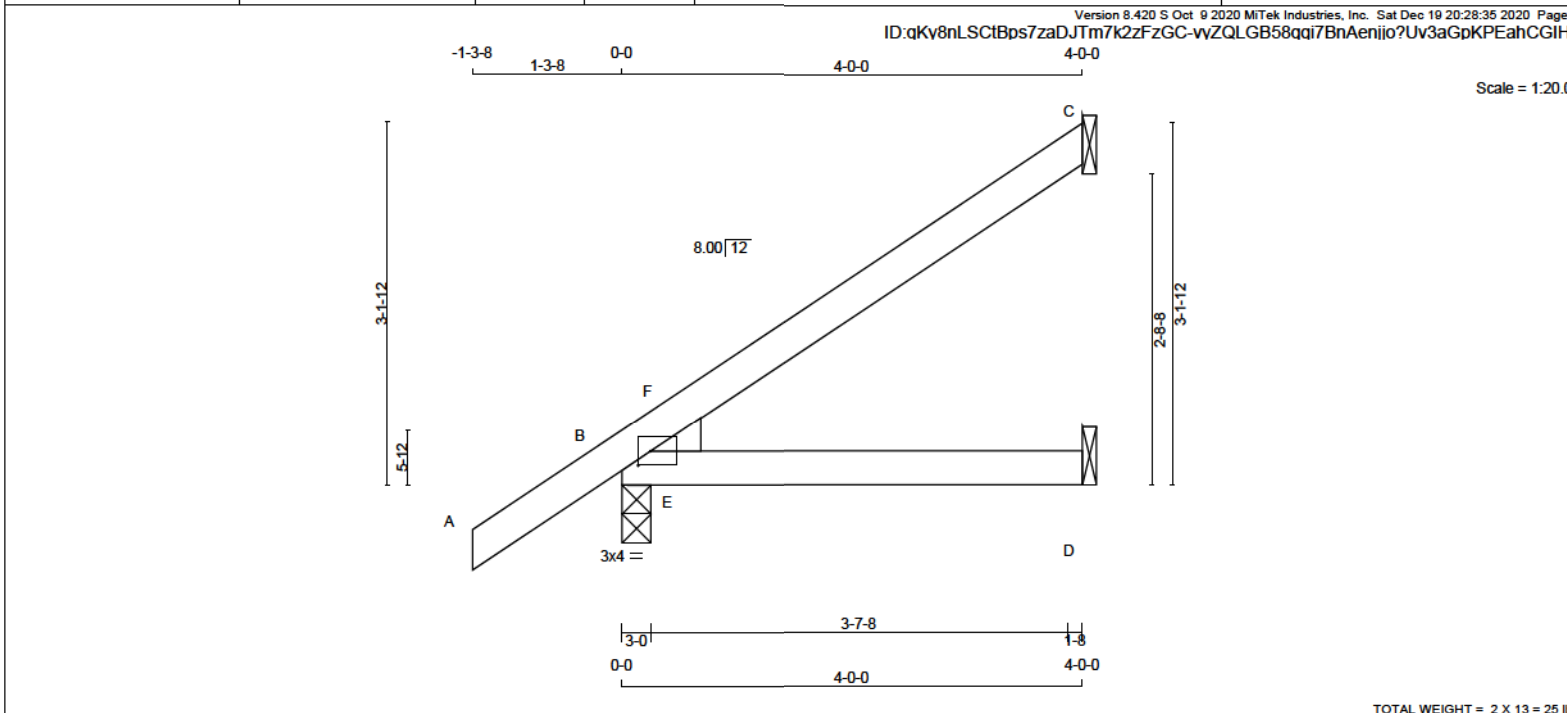
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

A - C 2x4 DRY No.2

B - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	3.0	4.0	1.50 1.25

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	HEEL WEDGE
JT VERT	HORZ	DOWN	HORZ	UPLIFT
C 217	0	217	0	0
B 498	0	498	0	0
D 110	0	110	0	0

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
C 152	115 / 0	6 / 0	0 / 0 0 / 0 31 / 0 0 / 0
B 360	235 / 0	42 / 0	0 / 0 0 / 0 83 / 0 0 / 0
D 91	24 / 0	36 / 0	0 / 0 0 / 0 31 / 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)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)	
FR-TO		FROM	TO	FR-TO			
A- B	0 / 41	-124.4	-124.4 0.17 (1)	10.00	E- F	-248 / 56	0.00 (1)
B- F	-58 / 0	-124.4	-124.4 0.07 (3)	6.25			
F- C	0 / 7	-124.4	-124.4 0.26 (1)	10.00			
B- E	0 / 0	-39.2	-39.2 0.20 (1)	10.00			
E- D	0 / 0	-39.2	-39.2 0.21 (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 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 (0.19")

CALCULATED VERT. DEFL.(LL) = L/999 (0.03")

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

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

CSI: TC=0.26/1.00 (C-F:1), BC=0.21/1.00 (D-E:1),

WB=0.00/1.00 (E-F:1), SSI=0.23/1.00 (B-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) (PSI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

Dec 18, 2020

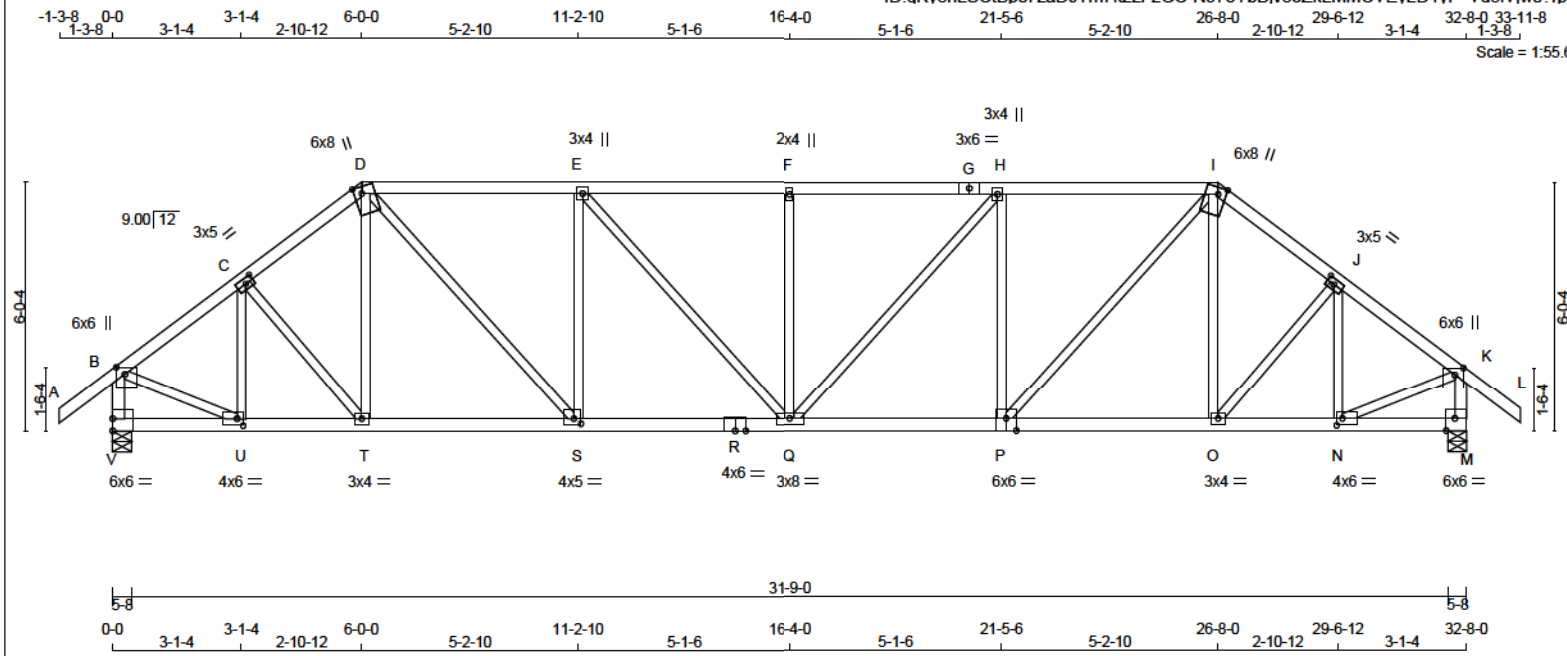
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MTEK Industries, Inc. Sat Dec 19 20:28:36 2020 Page 1



LUMBER

N. L. G. A. RULES

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.00	2.50
C	TMVW-t	MT20	3.0	5.0	1.50	2.25
D	TTVW+m	MT20	6.0	8.0	2.00	2.25
E	TMVW-t	MT20	3.0	4.0		
F	TMVW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMVW-t	MT20	3.0	4.0		
I	TTVW+m	MT20	6.0	8.0	2.00	2.25
J	TMVW-t	MT20	3.0	5.0	1.50	2.25
K	TMVW+p	MT20	6.0	6.0	2.00	2.50
M	BMV1-t	MT20	6.0	6.0	Edge	2.50
N	BMVW-t	MT20	4.0	6.0	2.00	1.75
O	BMVW-t	MT20	3.0	4.0		
P	BSWW-t	MT20	6.0	6.0	Edge	3.00
Q	BMVW-t	MT20	3.0	8.0		
R	BS-t	MT20	4.0	6.0		
S	BMVW-t	MT20	4.0	5.0	1.50	2.00
T	BMVW-t	MT20	3.0	4.0		
U	BMVW-t	MT20	4.0	6.0	2.00	1.75
V	BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2845	0	5-8
V	2845	0	5-8
M	2845	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1233	0	343
V	2098	1233	0
M	2098	1233	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.82 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.

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)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC) (LBS)
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4	0.17 (1)	10.00	U-C	-735 / 0
B-C	-2686 / 0	-124.4	-124.4	0.26 (1)	4.01	C-T	0 / 216
C-D	-2916 / 0	-124.4	-124.4	0.27 (1)	3.86	T-D	0 / 133
D-E	-3506 / 0	-124.4	-124.4	0.76 (1)	3.01	D-S	0 / 1782
E-F	-3862 / 0	-124.4	-124.4	0.80 (1)	2.82	S-E	-1116 / 0
F-G	-3862 / 0	-124.4	-124.4	0.80 (1)	2.82	E-Q	0 / 530
G-H	-3862 / 0	-124.4	-124.4	0.80 (1)	2.82	Q-F	-586 / 0
H-I	-3496 / 0	-124.4	-124.4	0.76 (1)	3.02	Q-H	0 / 549
I-J	-2921 / 0	-124.4	-124.4	0.27 (1)	3.85	P-H	-1131 / 0
J-K	-2684 / 0	-124.4	-124.4	0.25 (1)	4.02	P-I	0 / 1757
K-L	0 / 51	-124.4	-124.4	0.17 (1)	10.00	O-I	0 / 164
V-B	-2785 / 0	0.0	0.0	0.29 (1)	5.17	O-J	0 / 225
M-K	-2783 / 0	0.0	0.0	0.29 (1)	5.17	N-J	-746 / 0
V-U	0 / 0	-39.2	-39.2	0.07 (2)	10.00	B-U	0 / 2321
U-T	0 / 2167	-39.2	-39.2	0.45 (1)	10.00	N-K	0 / 2319
T-S	0 / 2307	-39.2	-39.2	0.47 (1)	10.00		
S-R	0 / 3509	-39.2	-39.2	0.68 (1)	10.00		
R-Q	0 / 3509	-39.2	-39.2	0.68 (1)	10.00		
Q-P	0 / 3467	-39.2	-39.2	0.69 (1)	10.00		
P-O	0 / 2312	-39.2	-39.2	0.50 (1)	10.00		
O-N	0 / 2165	-39.2	-39.2	0.48 (1)	10.00		
N-M	0 / 0	-39.2	-39.2	0.08 (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 CBC 2018, ABC 2019
- PART 9 OF CBC 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 (1.09")

CALCULATED VERT. DEFL.(LL) = L/999 (0.19")

ALLOWABLE DEFL.(TL)= L/360 (1.09")

CALCULATED VERT. DEFL.(TL) = L/999 (0.32")

CSI: TC=0.80/1.00 (F-H:1), BC=0.60/1.00 (P-Q:1), WB=0.64/1.00 (H-P:1), SSI=0.30/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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 (J) (INPUT = 0.90)

JSI METAL = 0.80 (R) (INPUT = 1.00)

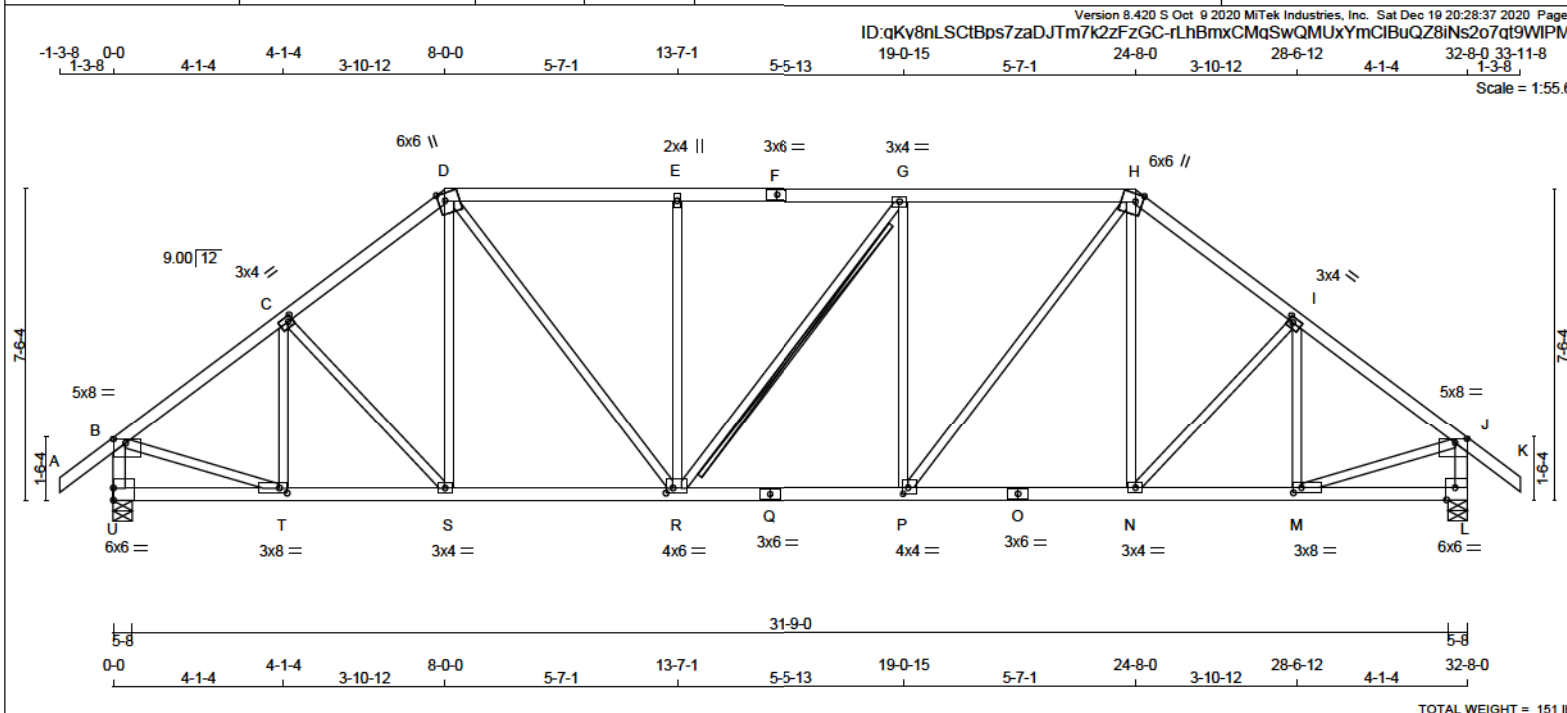


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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					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		REQD BRG		TOP CH. LL = 34.8 PSF				
A - D 2x4 DRY No.2 SPF					JT VERT		DOWN		UPLIFT		IN-SX		DL = 8.0 PSF				
D - F 2x4 DRY No.2 SPF					U 2845 0		0 0		5-8		5-8		BOT CH. LL = 10.5 PSF				
F - H 2x4 DRY No.2 SPF					L 2845 0		0 0		5-8		5-8		DL = 7.3 PSF				
H - K 2x4 DRY No.2 SPF															TOTAL LOAD = 60.6 PSF		
U - B 2x4 DRY No.2 SPF															SPACING = 24.0 IN. C/C		
L - J 2x4 DRY No.2 SPF															LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM		
U - Q 2x4 DRY No.2 SPF															THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015		
Q - O 2x4 DRY No.2 SPF															THIS DESIGN COMPLIES WITH:		
O - L 2x4 DRY No.2 SPF															- PART 9 OF BCBC 2018, ABC 2019		
ALL WEBS 2x3 DRY No.2 SPF															- PART 9 OF OBC 2012 (2019 AMENDMENT)		
EXCEPT															- CSA 088-14		
DRY: SEASONED LUMBER															- TPIC 2014		
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L												

						BRACING						BUILDING REQUIREMENTS OF PART 9, NBCS 2015					
						TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.23 FT.						THIS DESIGN COMPLIES WITH:					
						MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.						- PART 9 OF CBC 2018 , ABC 2019					
						ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.						- PART 9 OF OBC 2012 (2019 AMENDMENT)					
						2x4 DRY SPF No.2 T-BRACE AT G-R						- CSA 086-14					
						FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS						- TPIC 2014					
						@ 6" O.C WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.						(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)					
						END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN						EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD					
						THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW						ALLOWABLE DEFL.(LL)= L/360 (1.09")					
						LOADING						CALCULATED VERT. DEFL.(LL)= L/999 (0.14")					
						TOTAL LOAD CASES: (4)						ALLOWABLE DEFL.(TL)= L/360 (1.09")					
												CALCULATED VERT. DEFL.(TL)= L/999 (0.24")					
												CSI: TC=0.76/1.00 (G-H:1) , BC=0.61/1.00 (P-R:1) ,					
												WB=0.76/1.00 (G-P:1) , SSI=0.32/1.00 (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 (J) (INPUT = 0.90)					
												JSI METAL = 0.98 (Q) (INPUT = 1.00)					

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	5.0	8.0	1.25	3.50
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	6.0	6.0	Edge	2.00
E TMVW+w	MT20	2.0	4.0		
F TS-t	MT20	3.0	6.0		
G TMVW-t	MT20	3.0	4.0		
H TTWW+m	MT20	6.0	6.0	Edge	2.00
I TMVW-t	MT20	3.0	4.0	1.50	1.50
J TMVW-p	MT20	5.0	8.0	1.25	3.50
L BMV1-t	MT20	6.0	6.0	Edge	2.50
M BMVW-t	MT20	3.0	8.0	1.50	2.25
N BMVW-t	MT20	3.0	4.0		
O BS-t	MT20	3.0	6.0		
P BMVW-t	MT20	4.0	4.0	1.75	1.50
Q BS-t	MT20	3.0	6.0		
R BMVW-t	MT20	4.0	6.0	1.50	2.00
S BMVW-t	MT20	3.0	4.0		
T BMVW-t	MT20	3.0	8.0	1.50	2.25
U BMV1-t	MT20	6.0	6.0	3.50	

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

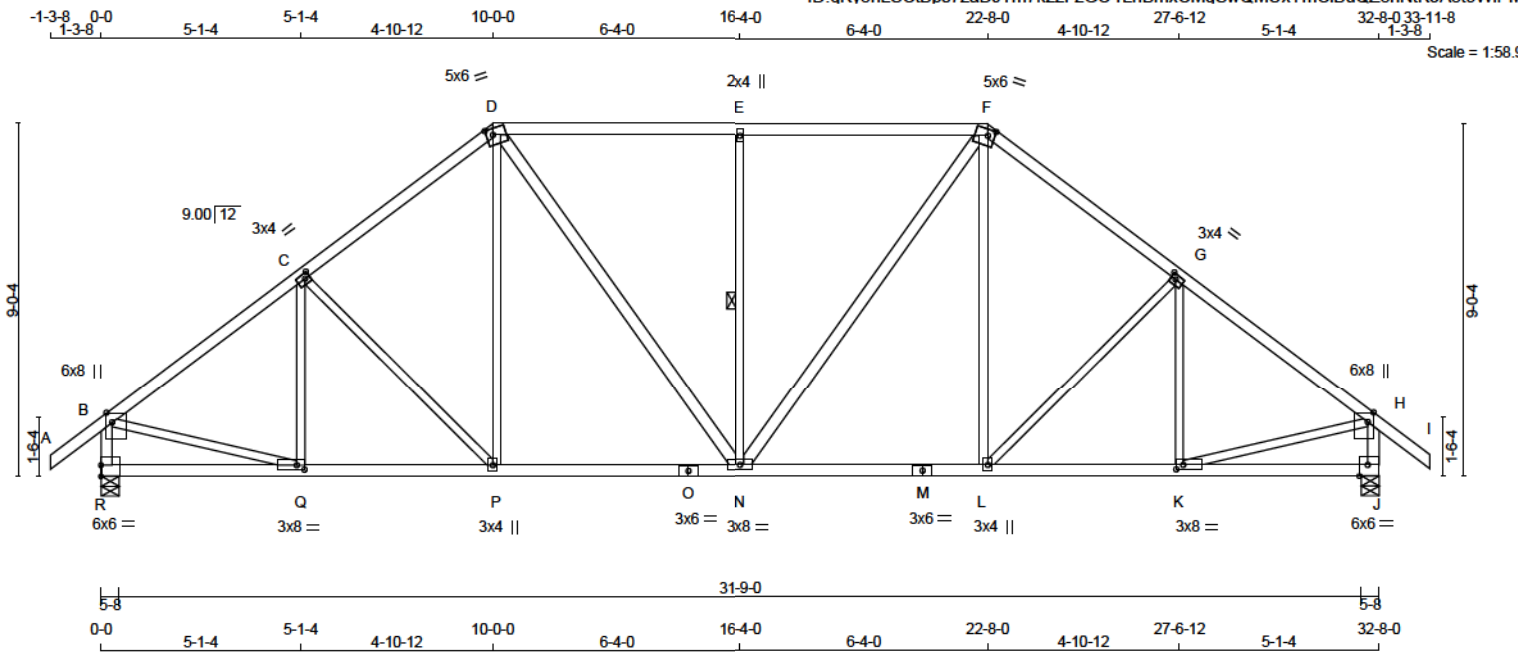
C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	
FR-TO				FR-TO			
A-B	0 / 51	-124.4 -124.4 0.17 (1)	10.00	T-C	-515 / 0	0.18 (1)	
B-C	-2851 / 0	-124.4 -124.4 0.47 (1)	3.69	C-S	-86 / 0	0.05 (1)	
C-D	-2852 / 0	-124.4 -124.4 0.46 (1)	3.69	S-D	0 / 292	0.07 (2)	
D-E	-2997 / 0	-124.4 -124.4 0.75 (1)	3.25	D-R	0 / 1216	0.27 (1)	
E-F	-2997 / 0	-124.4 -124.4 0.75 (1)	3.23	R-E	-743 / 0	0.76 (1)	
F-G	-2997 / 0	-124.4 -124.4 0.75 (1)	3.23	R-G	-3 / 0	0.00 (1)	
G-H	-2999 / 0	-124.4 -124.4 0.76 (1)	3.23	P-G	-744 / 0	0.76 (1)	
H-I	-2852 / 0	-124.4 -124.4 0.46 (1)	3.69	P-H	0 / 1219	0.27 (1)	
I-J	-2851 / 0	-124.4 -124.4 0.47 (1)	3.69	N-H	0 / 290	0.07 (2)	
J-K	0 / 51	-124.4 -124.4 0.17 (1)	10.00	N-I	-86 / 0	0.05 (1)	
U-B	-2773 / 0	0.0 0.0 0.29 (1)	5.17	M-I	-514 / 0	0.18 (1)	
L-J	-2773 / 0	0.0 0.0 0.29 (1)	5.17	B-T	0 / 2403	0.54 (1)	
				M-J	0 / 2403	0.54 (1)	
U-T	0 / 0	-39.2 -39.2 0.11 (3)	10.00				
T-S	0 / 2307	-39.2 -39.2 0.48 (1)	10.00				
S-R	0 / 2253	-39.2 -39.2 0.48 (1)	10.00				
R-Q	0 / 2999	-39.2 -39.2 0.61 (1)	10.00				
Q-P	0 / 2999	-39.2 -39.2 0.61 (1)	10.00				
P-O	0 / 2252	-39.2 -39.2 0.49 (1)	10.00				
O-N	0 / 2252	-39.2 -39.2 0.49 (1)	10.00				
N-M	0 / 2308	-39.2 -39.2 0.48 (1)	10.00				
M-L	0 / 0	-39.2 -39.2 0.11 (3)	10.00				

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	2021-02-03
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.

Version 8.420 S Oct 9 2020 MTEK Industries, Inc. Sat Dec 19 20:28:37 2020 Page 1
ID: qKv8nLSCiBps7zaDJTm7k2zFzGC-rLhBmxCMqSwQMuxYmCiBuQZ8hNtKoA8t9WIPMky7



TOTAL WEIGHT = 158 LB
[M]F

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

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW+p	MT20	6.0	8.0	3.00 1.75
C	TMVW-l	MT20	3.0	4.0	1.50 1.50
D	TTWW-m	MT20	5.0	6.0	2.00 2.00
E	TMVW+w	MT20	2.0	4.0	
F	TTWW-m	MT20	5.0	6.0	2.00 2.00
G	TMVW-l	MT20	3.0	4.0	1.50 1.50
H	TMVW+p	MT20	6.0	8.0	3.00 1.75
J	BMV-l	MT20	6.0	6.0	Edge 2.50
K	BMVW-l	MT20	3.0	8.0	1.50 2.25
L	BMVW+l	MT20	3.0	4.0	
M	BS-l	MT20	3.0	6.0	
N	BMVW+l	MT20	3.0	6.0	
O	BS-l	MT20	3.0	6.0	
P	BMVW+l	MT20	3.0	4.0	
Q	BMVW-l	MT20	3.0	8.0	1.50 2.25
R	BMV-l	MT20	6.0	6.0	3.50

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

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

BEARINGS					
	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT DOWN	REGRD BRG UPLIFT	REGRD BRG IN-SX
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
R	2845	0	2845	0	5-8
J	2845	0	2845	0	5-8

UNFACTORED REACTIONS						
1ST LCASE	MAX/MIN COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
JT	2098	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0
R	2098	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 121 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	Q-C	-348 / 36	0.15 (1)	10.00
B-C	-2934 / 0	-124.4	-124.4 0.55 (1)	C-P	-347 / 0	0.33 (1)	3.57
C-D	-2721 / 0	-124.4	-124.4 0.52 (1)	P-D	0 / 479	0.11 (2)	3.72
D-E	-2585 / 0	-124.4	-124.4 0.76 (1)	D-N	0 / 754	0.12 (1)	3.33
E-F	-2585 / 0	-124.4	-124.4 0.76 (1)	N-E	-965 / 0	0.51 (1)	3.33
F-G	-2721 / 0	-124.4	-124.4 0.52 (1)	N-F	0 / 754	0.12 (1)	3.72
G-H	-2934 / 0	-124.4	-124.4 0.55 (1)	L-F	0 / 479	0.11 (2)	3.57
H-I	0 / 51	-124.4	-124.4 0.17 (1)	L-G	-347 / 0	0.33 (1)	10.00
R-B	-2760 / 0	0.0	0.0 0.29 (1)	K-G	-348 / 36	0.15 (1)	5.19
J-H	-2760 / 0	0.0	0.0 0.29 (1)	B-Q	0 / 2446	0.55 (1)	5.19
				K-H	0 / 2446	0.55 (1)	
R-Q	0 / 0	-39.2	-39.2 0.17 (3)				10.00
Q-P	0 / 2382	-39.2	-39.2 0.52 (1)				10.00
P-O	0 / 2142	-39.2	-39.2 0.53 (2)				10.00
O-N	0 / 2142	-39.2	-39.2 0.53 (2)				10.00
N-M	0 / 2142	-39.2	-39.2 0.53 (2)				10.00
M-L	0 / 2142	-39.2	-39.2 0.53 (2)				10.00
L-K	0 / 2382	-39.2	-39.2 0.52 (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 CBC 2018, ABC 2019
- PART 9 OF CBC 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.76/1.00 (D-E-1), BC=0.53/1.00 (N-P-2), WB=0.55/1.00 (B-Q-1), SSI=0.38/1.00 (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
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (F) (INPUT = 0.90)
JSI METAL = 0.69 (M) (INPUT = 1.00)

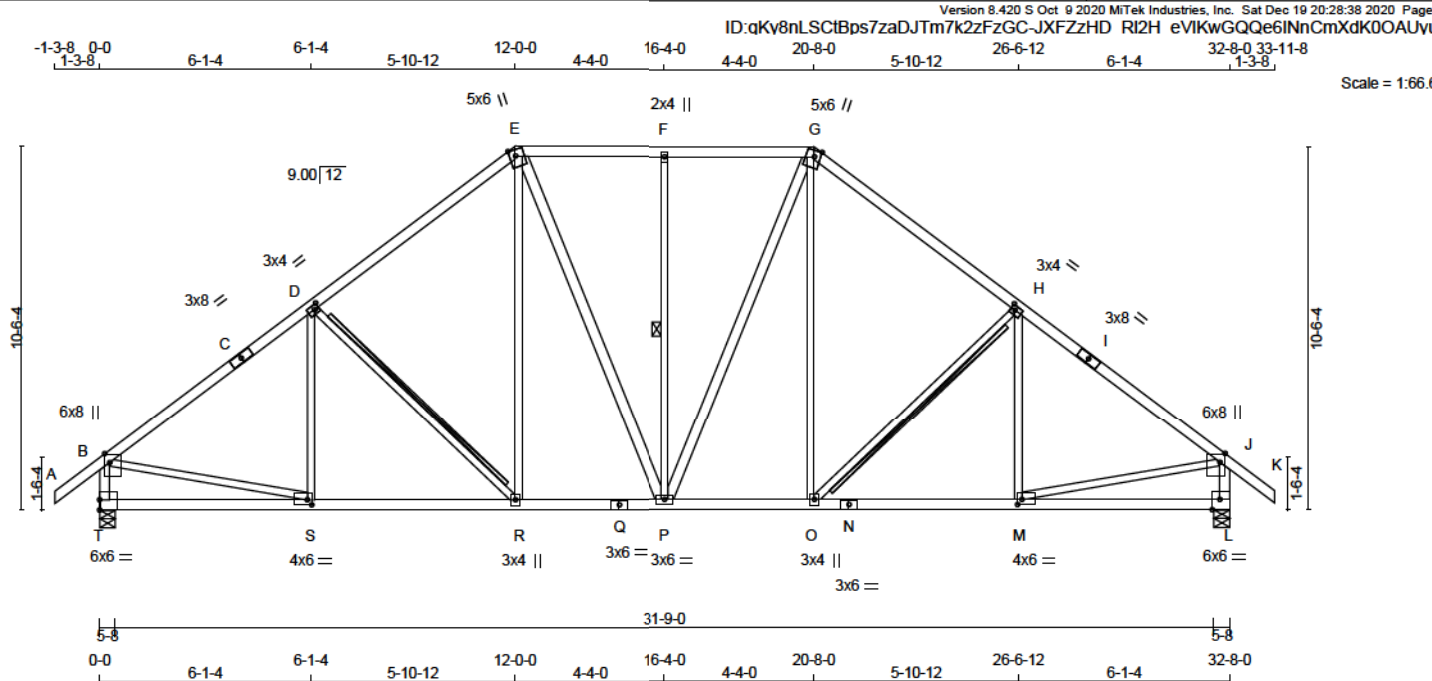


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



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
A - C	2x4	DRY	No.2
C - E	2x4	DRY	No.2
E - G	2x4	DRY	No.2
G - I	2x4	DRY	No.2
I - K	2x4	DRY	No.2
T - B	2x4	DRY	No.2
L - J	2x4	DRY	No.2
T - Q	2x4	DRY	No.2
Q - N	2x4	DRY	No.2
N - L	2x4	DRY	No.2
ALL WEBS	2x3	DRY	No.2
EXCEPT			
E - P	2x4	DRY	No.2
P - G	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	6.0	8.0	3.00	1.75
C TS-t	MT20	3.0	8.0		
D TMWW-t	MT20	3.0	4.0	1.50	1.50
E TTWW+m	MT20	5.0	6.0	Edge 2.00	
F TMW+w	MT20	2.0	4.0		
G TTWW+m	MT20	5.0	6.0	Edge 2.00	
H TMWW-t	MT20	3.0	4.0	1.50	1.50
I TS-t	MT20	3.0	8.0		
J TMVW+p	MT20	6.0	8.0	3.00	1.75
L BMV1-t	MT20	6.0	6.0	Edge 2.50	
M BMWW-t	MT20	4.0	6.0	1.75	1.50
N BS-t	MT20	3.0	6.0		
O BMWW+t	MT20	3.0	4.0		
P BMWWW-t	MT20	3.0	6.0		
Q BS-t	MT20	3.0	6.0		
R BMWW+t	MT20	3.0	4.0		
S BMWW-t	MT20	4.0	6.0	1.75	1.50
T BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT DOWN	REQD BRG IN-SX
JT	VERT	HORZ	DOWN	HORZ
T	2845	0	2845	0
L	2845	0	2845	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
T	2098	1233	0
L	2098	1233	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.19 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P. DBS = 20-0-0. CBF = 81 LBS.
2x4 DRY SPF No.2 T-BRACE AT D-R, H-O

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LCI MAX (LC)	UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO					FR-TO		
A-B	0 / 51	-124.4	-124.4	0.17 (1)	10.00	S-D	-203 / 146
B-C	-2968 / 0	-124.4	-124.4	0.83 (1)	3.19	D-R	-592 / 0
C-D	-2968 / 0	-124.4	-124.4	0.83 (1)	3.19	R-E	0 / 610
D-E	-2547 / 0	-124.4	-124.4	0.73 (1)	3.52	E-P	0 / 432
E-F	-2165 / 0	-124.4	-124.4	0.34 (1)	4.30	P-F	-840 / 0
F-G	-2165 / 0	-124.4	-124.4	0.34 (1)	4.30	P-G	0 / 432
G-H	-2547 / 0	-124.4	-124.4	0.73 (1)	3.52	O-G	0 / 610
H-I	-2968 / 0	-124.4	-124.4	0.83 (1)	3.19	O-H	-592 / 0
I-J	-2968 / 0	-124.4	-124.4	0.83 (1)	3.19	M-H	-203 / 146
J-K	0 / 51	-124.4	-124.4	0.17 (1)	10.00	B-S	0 / 2462
T-B	-2748 / 0	0.0	0.0	0.29 (1)	5.20	M-J	0 / 2462
L-J	-2748 / 0	0.0	0.0	0.29 (1)	5.20		
T-S	0 / 0	-39.2	-39.2	0.29 (3)	10.00		
S-R	0 / 2417	-39.2	-39.2	0.58 (2)	10.00		
R-Q	0 / 1967	-39.2	-39.2	0.43 (1)	10.00		
Q-P	0 / 1967	-39.2	-39.2	0.43 (1)	10.00		
P-O	0 / 1967	-39.2	-39.2	0.43 (1)	10.00		
O-N	0 / 2417	-39.2	-39.2	0.58 (2)	10.00		
N-M	0 / 2417	-39.2	-39.2	0.58 (2)	10.00		
M-L	0 / 0	-39.2	-39.2	0.29 (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 (1.09")
CALCULATED VERT. DEFL.(LL)= L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/999 (0.19")

CSI: TC=0.83/1.00 (B-D-1), BC=0.58/1.00 (R-S-2), WB=0.55/1.00 (B-S-1), SSI=0.29/1.00 (B-D-1)

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

COMPANION LIVE LOAD FACTOR = 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= 0.88 (P) (INPUT = 0.80)
JSI METAL = 0.71 (N) (INPUT = 1.00)



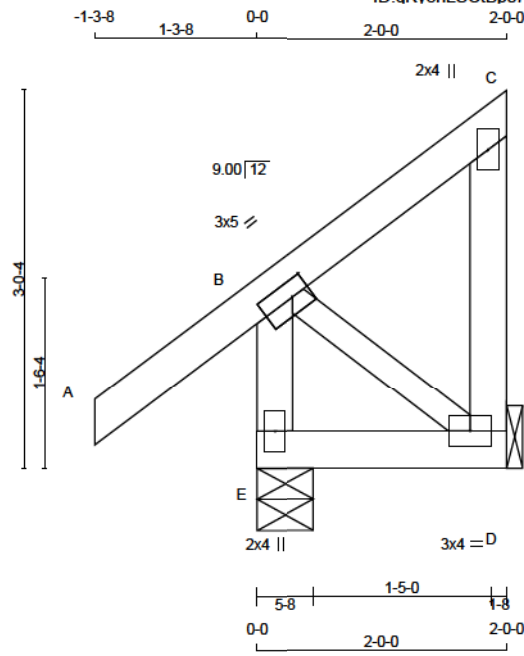
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			





Scale = 1:18.4

TOTAL WEIGHT = 7 X 13 = 88 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
D - C	2x4	DRY	No.2		SPF
E - D	2x4	DRY	No.2		SPF
ALL WEBS 2x3 DRY					SPF
					NO.2
					NO.2

PLATES (table is in inches)						
JT TYPE	PLATES	W	LEN	Y	X	
B	TMVW-t	MT20	3.0	5.0	1.50	1.75
C	TMV+p	MT20	2.0	4.0		
D	BMVW1-t	MT20	3.0	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			
E	335	0	335	0	5-8	1-8	
D	164	0	164	0	1-8	1-8	

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS			
E	COMBINED	239	166 / 0	21 / 0	LIVE	0 / 0	0 / 0
D	COMBINED	121	70 / 0	21 / 0	LIVE	0 / 0	0 / 0

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

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

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

LOADING							
TOTAL LOAD CASES: (5)							
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. MEMB. FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO							
E-B	-298 / 0	0.0	0.0 0.03 (1)	7.81	B-D	0 / 0	0.00 (1)
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00			
B-C	0 / 0	-124.4	-124.4 0.08 (1)	10.00			
D-C	-124 / 0	0.0	0.0 0.02 (1)	7.81			
E-D	0 / 0	-39.2	-39.2 0.04 (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

(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=0.04/1.00 (D-E:3) ,
WB=0.00/1.00 (B-D:1) , SS=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	850	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.24 (B) (INPUT = 0.90)
JSI METAL= 0.07 (C) (INPUT = 1.00)

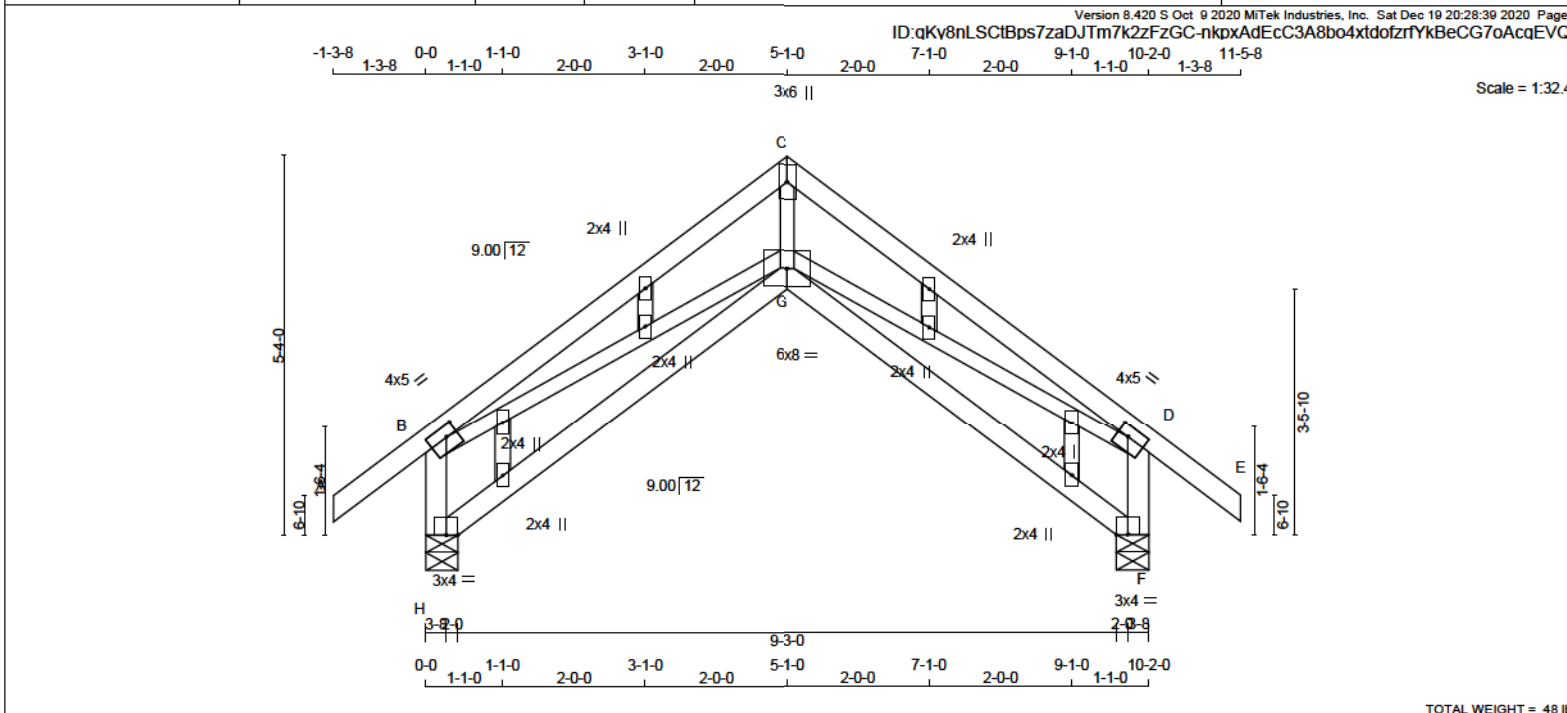


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			

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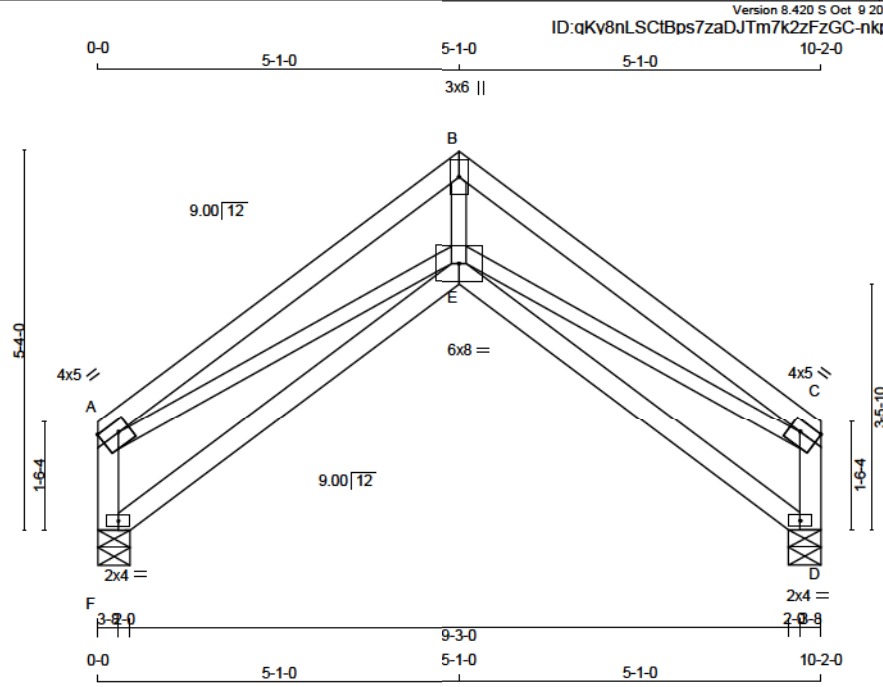


LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										TOP CH. LL = 34.8 PSF									
H - B 2x4 DRY No.2										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF									
A - C 2x4 DRY No.2										H 1004 0 1004 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
C - E 2x4 DRY No.2										F 1004 0 1004 0 0 5-8 5-8										DL = 7.3 PSF									
F - D 2x4 DRY No.2																				TOTAL LOAD = 60.6 PSF									
H - G 2x4 DRY No.2																													
G - F 2x4 DRY No.2																													
ALL WEBS 2x3 DRY No.2										UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
ALL GABLE WEBS 2x3 DRY No.2										1ST LCASE MAX/MIN COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
DRY: SEASONED LUMBER.										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										THIS DESIGN COMPLIES WITH:									
										H 734 450 / 0 107 / 0 0 / 0 0 / 0 178 / 0 0 / 0										- PART 9 OF BCBC 2018, ABC 2019									
										F 734 450 / 0 107 / 0 0 / 0 0 / 0 178 / 0 0 / 0										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
																				- CSA 086-14									
																				- TPIC 2014									
GABLE STUDS SPACED AT 2-0-0 OC.										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, F										(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									

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	2021-02-03
Sewage System			
Zoning			



LUMBER
N. L. G. A. RULES

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

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

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
A TMVW-t	MT20	4.0	5.0	1.75	Edge
B TTW+p	MT20	3.0	6.0		
C TMVW-t	MT20	4.0	5.0	1.75	Edge
D BVM1-p	MT20	2.0	4.0		
E BBWW-p	MT20	6.0	8.0		
F BVM1-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	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
F	832 0	832 0	5-8	1-8
D	832 0	832 0	5-8	1-8

UNFACTORED REACTIONS

JT	1ST CASE	MAX. MIN. COMPONENT REACTIONS
F	618 354 / 0	107 / 0 0 / 0 156 / 0 0 / 0
D	618 354 / 0	107 / 0 0 / 0 156 / 0 0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLINE SPACING = 4.51 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)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED LC1 MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
F-A	-732 / 0	0.0	0.0 0.08 (1)	7.81	E-B	0 / 1482	0.33 (1)
A-B	-1762 / 0	-124.4	-124.4 0.47 (1)	4.51	E-C	0 / 1549	0.35 (1)
B-C	-1762 / 0	-124.4	-124.4 0.47 (1)	4.51	A-E	0 / 1549	0.35 (1)
D-C	-732 / 0	0.0	0.0 0.08 (1)	7.81			
F-E	0 / 0	-39.2	-39.2 0.24 (3)	10.00			
E-D	0 / 0	-39.2	-39.2 0.24 (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

(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/969 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/821 (0.15")

CSI: TC=0.47/1.00 (B-C:1), BC=0.24/1.00 (E-F:3),
WB=0.35/1.00 (C-E:1), 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 (PSI)	SECTION (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= 0.82 (C) (INPUT = 0.90)
JSI METAL = 0.84 (D) (INPUT = 1.00)



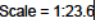
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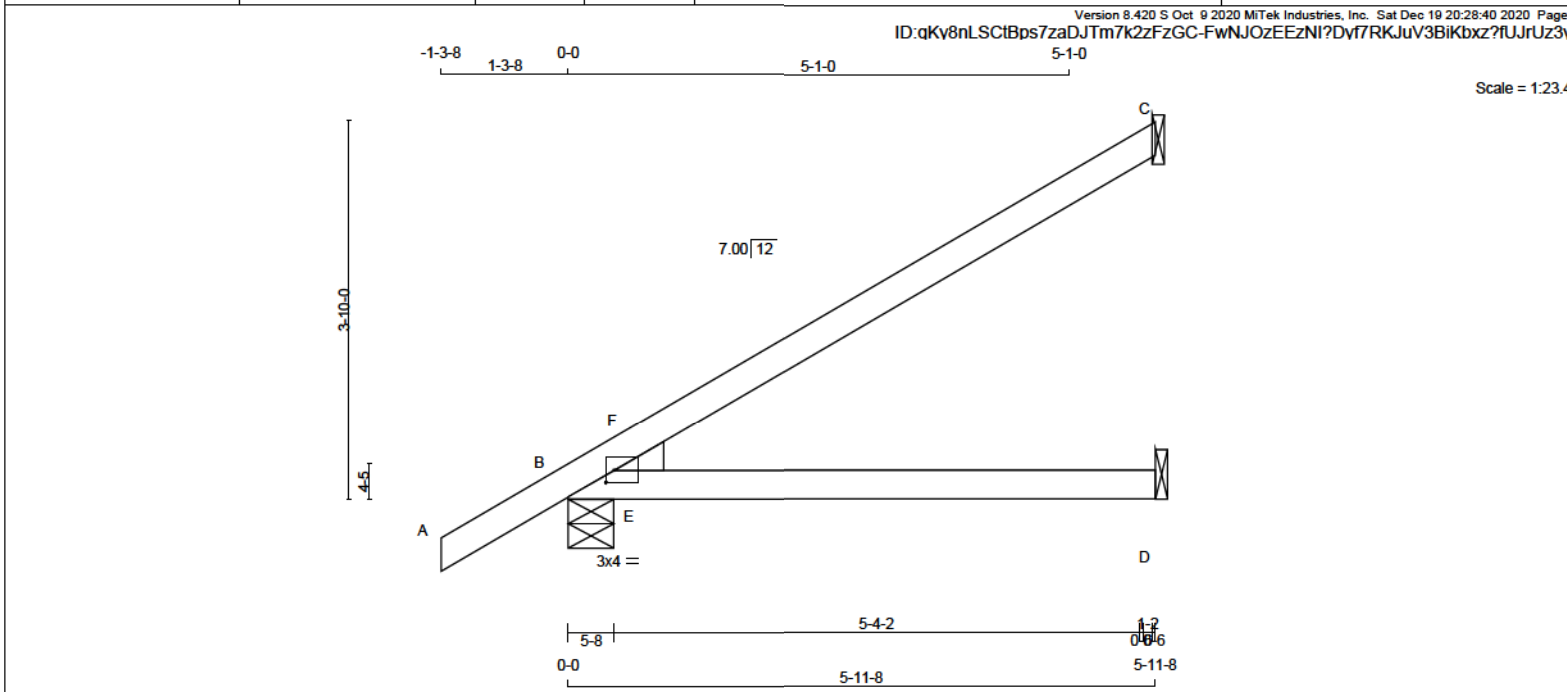
Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			





CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN





LUMBER
N. L. G. A. RULES
CHORDS SIZE LUMBER DESCR.
A - 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 TMBH1-I MT20 3.0 4.0 1.50 1.00

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		HEEL WEDGE	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX	IN-SX	WEDGE
C	315	0	315	0	0	1-8	1-8	1-8	1-8	1-8	2x4 L
B	657	0	657	0	0	5-8	1-8	1-8	1-8	1-8	
D	172	0	180	0	0	1-8	1-8	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		MEMB. FORCE		MAX		CS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	JT	COMBINED	SNOW	LIVE
C	220	168 / 0	8 / 0	0 / 0	0 / 0	44 / 0	0 / 0	C	220	168 / 0	8 / 0
B	478	302 / 0	63 / 0	0 / 0	0 / 0	113 / 0	0 / 0	B	478	302 / 0	63 / 0
D	141	39 / 0	55 / 0	0 / 0	0 / 0	47 / 0	0 / 0	D	141	39 / 0	55 / 0

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

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		MAX. FACTORED		FACTORED		VERT. LOAD		LC1 MAX		MAX. CS		MEMB. FORCE		MAX		CS	
MEMB.	FORCE (LBS)	VERT.	PLF	CS	LC	UNBRAC	LENGTH	FR-TO	MEMB.	FORCE (LBS)	MAX	CS	LC	MEMB.	FORCE (LBS)	MAX	CS
A-B	0 / 41	-124.4	-124.4	0.16	(1)	10.00	E-F	-457 / 80	0.00	(1)							
B-F	-67 / 41	-124.4	-124.4	0.12	(3)	6.25											
F-C	-5 / 7	-124.4	-124.4	0.54	(1)	10.00											
B-E	0 / 0	-39.2	-39.2	0.33	(1)	10.00											
E-D	0 / 0	-39.2	-39.2	0.34	(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 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/ 626 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 365 (0.20")

CSI: TC=0.54/1.00 (C-F:1), BC=0.34/1.00 (D-E:1),
WB=0.00/1.00 (E-F:1), SSI=0.40/1.00 (B-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= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.10 (B) (INPUT = 1.00)



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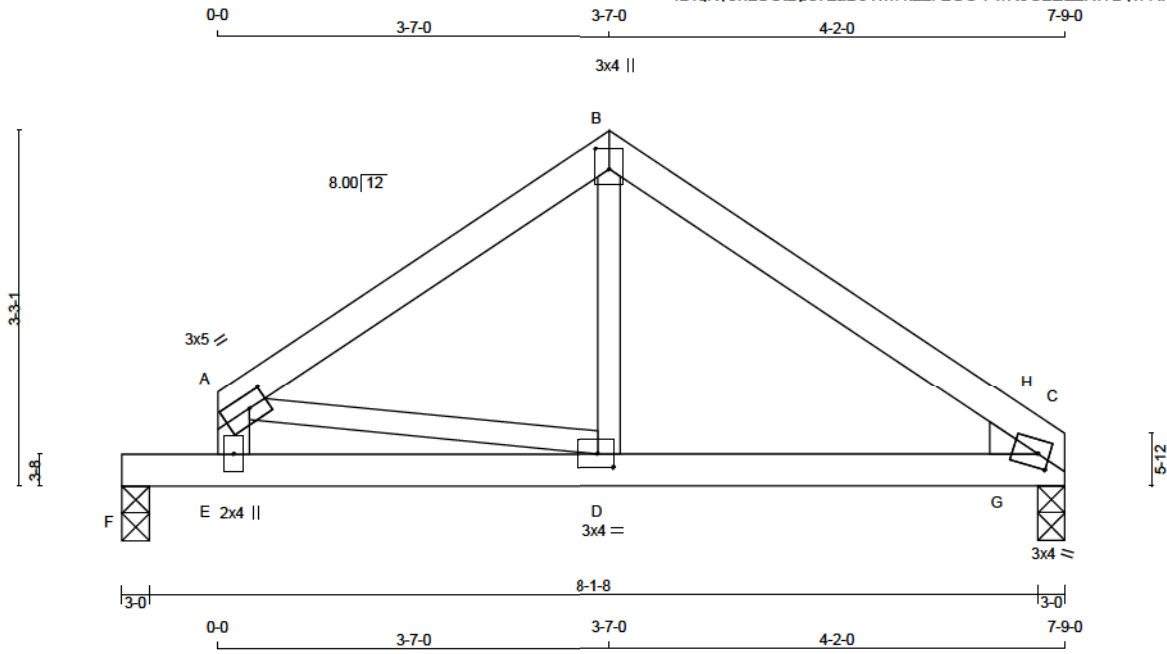


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			



Scale = 1:21.1



TOTAL WEIGHT = 2 X 27 = 53 lb

LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
A - B	2x4	DRY	No.2	SPF
B - C	2x4	DRY	No.2	SPF
E - A	2x4	DRY	No.2	SPF
F - C	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
A - TMVW-t	MT20	3.0	5.0	1.50	2.00
B - TTW+p	MT20	3.0	4.0	2.25	1.50
C - TMBH1-m	MT20	3.0	4.0	1.50	1.25
D - BMWW-t	MT20	3.0	4.0	1.50	1.75
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	REQD BRG	HEEL WEDGE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
F	706	0	706	0	0	3-0
C	706	0	706	0	0	3-0

UNFACTORED REACTIONS							
1ST CASE	MAX	MIN	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
F	523	300 / 0	91 / 0	0 / 0	0 / 0	132 / 0	0 / 0
C	523	300 / 0	91 / 0	0 / 0	0 / 0	132 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, 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)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)
FR-TO		FROM	TO		FR-TO		
A-B	-717 / 0	-124.4	-124.4	0.28 (1)	6.25	D-B	0 / 380
B-H	-732 / 0	-124.4	-124.4	0.23 (1)	6.25	A-D	0 / 604
H-C	-700 / 0	-124.4	-124.4	0.14 (1)	6.25	G-H	-294 / 29
E-A	-712 / 0	0.0	0.0	0.07 (1)	7.81		
F-E	0 / 0	-163.7	-163.7	0.76 (1)	10.00		
E-D	0 / 0	-39.2	-39.2	0.76 (1)	10.00		
D-G	0 / 597	-39.2	-39.2	0.41 (1)	10.00		
G-C	0 / 597	-39.2	-39.2	0.29 (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 (0.29")
CALCULATED VERT. DEFL.(LL) = L/969 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.29")
CALCULATED VERT. DEFL.(TL) = L/605 (0.17")

CSI: TC=0.28/1.00 (A-B:1), BC=0.76/1.00 (E-F:1),
WB=0.14/1.00 (A-D:1), SSI=0.55/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 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= 0.86 (D) (INPUT = 0.90)
JSI METAL = 0.27 (C) (INPUT = 1.00)



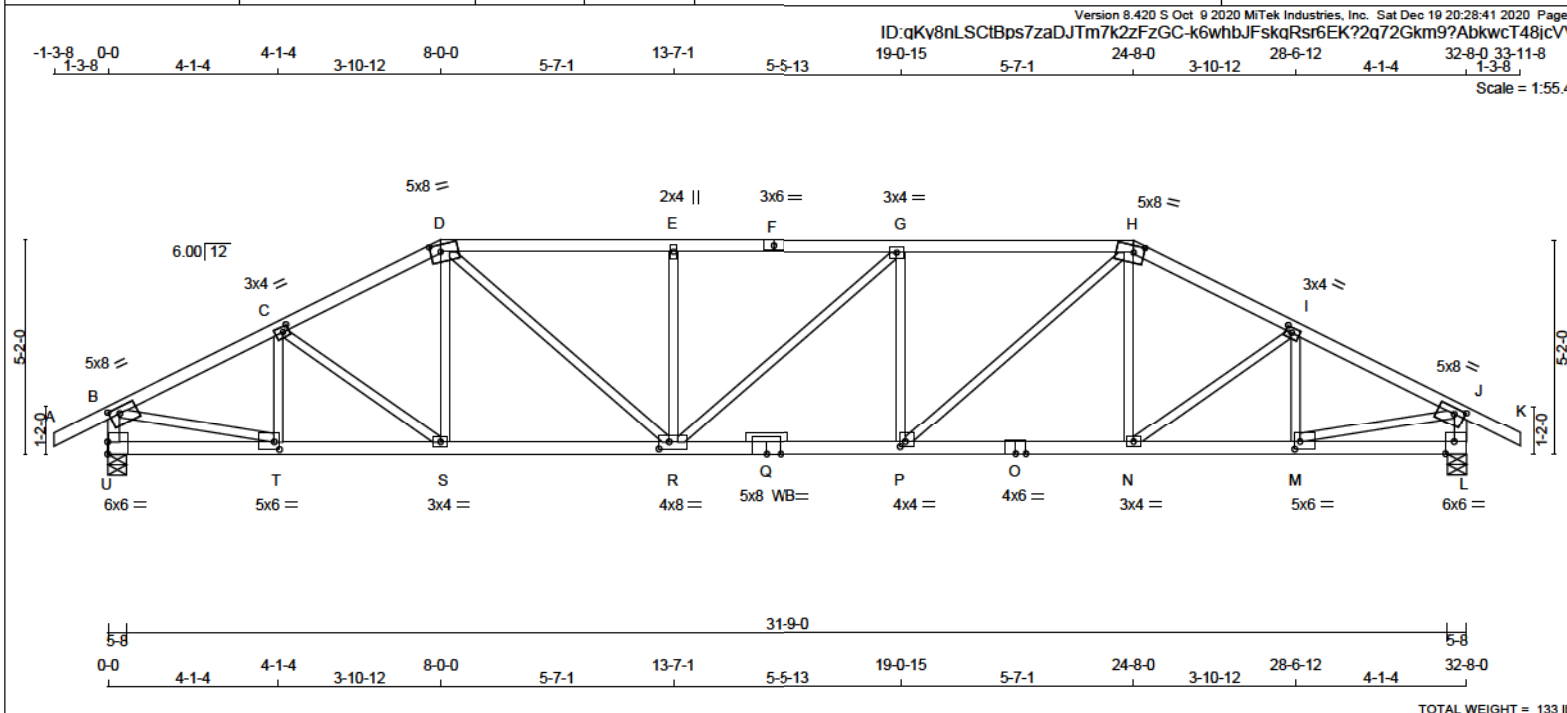
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
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 - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
U - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
U - Q	2x4	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	3.00
C	TMVW-t	MT20	3.0	4.0	1.50	1.75
D	TTWW-m	MT20	5.0	8.0	2.00	3.00
E	TMW+ w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	3.0	4.0		
H	TTWW-m	MT20	5.0	8.0	2.00	3.00
I	TMVW-t	MT20	3.0	4.0	1.50	1.75
J	TMVW-t	MT20	5.0	8.0	1.75	3.00
L	BMV1-t	MT20	6.0	6.0	Edge 2.50	
M	BMVW-t	MT20	5.0	6.0	2.25	1.50
N	BMVW-t	MT20	3.0	4.0		
O	BS-t	MT20	4.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BS-t	MT20	5.0	8.0		
R	BMVWW-t	MT20	4.0	8.0	2.00	3.00
S	BMVW-t	MT20	3.0	4.0		
T	BMVW-t	MT20	5.0	6.0	2.25	1.50
U	BMV1-t	MT20	6.0	6.0	3.50	

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

WB - INDICATES BLOCKING REQUIRED

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
U	2842 0	2842 0	5-8	5-8
L	2842 0	2842 0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
U	2098	1232 / 0	343 / 0
L	2098	1232 / 0	343 / 0

PERM. LIVE WIND DEAD SOIL

U 0 / 0 522 / 0 0 / 0

L 0 / 0 522 / 0 0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.46 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO					FR-TO		
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00	T-C	-560 / 0	0.11 (1)
B-C	-3747 / 0	-124.4	-124.4 0.51 (1)	3.21	C-S	-47 / 0	0.02 (1)
C-D	-3753 / 0	-124.4	-124.4 0.50 (1)	3.21	S-D	0 / 269	0.06 (2)
D-E	-4441 / 0	-124.4	-124.4 0.98 (1)	2.48	D-R	0 / 1462	0.33 (1)
E-F	-4441 / 0	-124.4	-124.4 0.97 (1)	2.47	R-E	-745 / 0	0.29 (1)
F-G	-4441 / 0	-124.4	-124.4 0.97 (1)	2.47	R-G	-3 / 0	0.00 (1)
G-H	-4443 / 0	-124.4	-124.4 0.99 (1)	2.46	P-G	-746 / 0	0.29 (1)
H-I	-3753 / 0	-124.4	-124.4 0.50 (1)	3.21	P-H	0 / 1466	0.33 (1)
I-J	-3747 / 0	-124.4	-124.4 0.51 (1)	3.21	N-H	0 / 268	0.06 (2)
J-K	0 / 38	-124.4	-124.4 0.16 (1)	10.00	N-I	-48 / 0	0.02 (1)
U-B	-2765 / 0	0.0	0.0 0.28 (1)	5.18	M-I	-560 / 0	0.11 (1)
L-J	-2765 / 0	0.0	0.0 0.28 (1)	5.18	B-T	0 / 3444	0.78 (1)
					M-J	0 / 3444	0.78 (1)
U-T	0 / 0	-39.2	-39.2 0.12 (2)	10.00			
T-S	0 / 3371	-39.2	-39.2 0.66 (1)	10.00			
S-R	0 / 3338	-39.2	-39.2 0.65 (1)	10.00			
R-Q	0 / 4443	-39.2	-39.2 0.83 (1)	10.00			
Q-P	0 / 4443	-39.2	-39.2 0.83 (1)	10.00			
P-O	0 / 3338	-39.2	-39.2 0.65 (1)	10.00			
O-N	0 / 3338	-39.2	-39.2 0.65 (1)	10.00			
N-M	0 / 3371	-39.2	-39.2 0.65 (1)	10.00			
M-L	0 / 0	-39.2	-39.2 0.12 (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 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 DEF(L)=(L)= L/380 (1.09")

CALCULATED VERT. DEF.(LL)= L/ 999 (0.26")

ALLOWABLE DEF.(TL)= L/380 (1.09")

CALCULATED VERT. DEF.(TL)= L/ 905 (0.43")

CSI: TC=0.99/1.00 (G-H:1) , BC=0.83/1.00 (P-R:1) , WB=0.78/1.00 (J-M:1) , SSI=0.32/1.00 (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)

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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:

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- 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.26")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/905 (0.43")

CSI: TC=0.96/1.00 (G-H:1) , BC=0.83/1.00 (P-R:1) , WB=0.78/1.00 (J-M:1) , SSI=0.32/1.00 (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

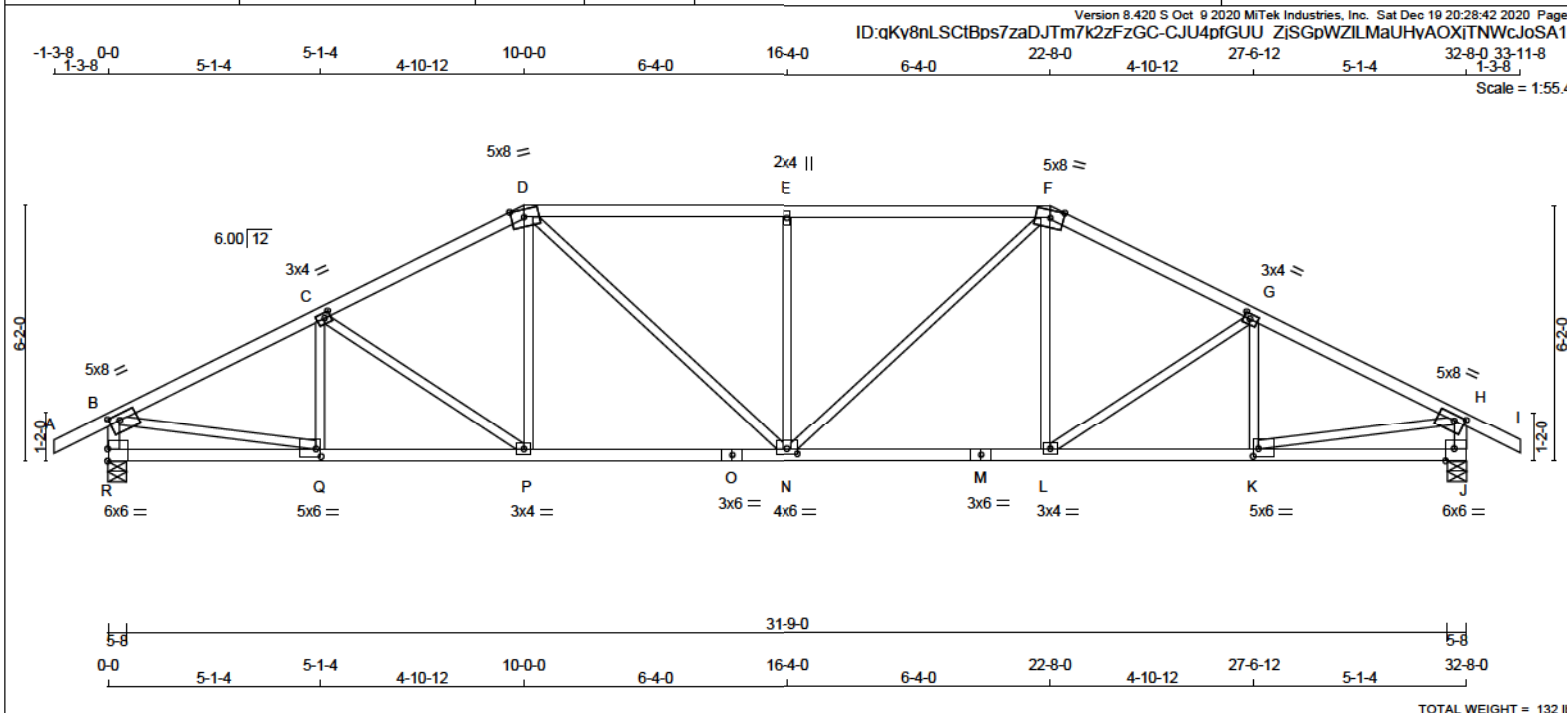
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.90 (R) (INPUT = 0.90)
JSI METAL = 0.97 (Q) (INPUT = 1.00)

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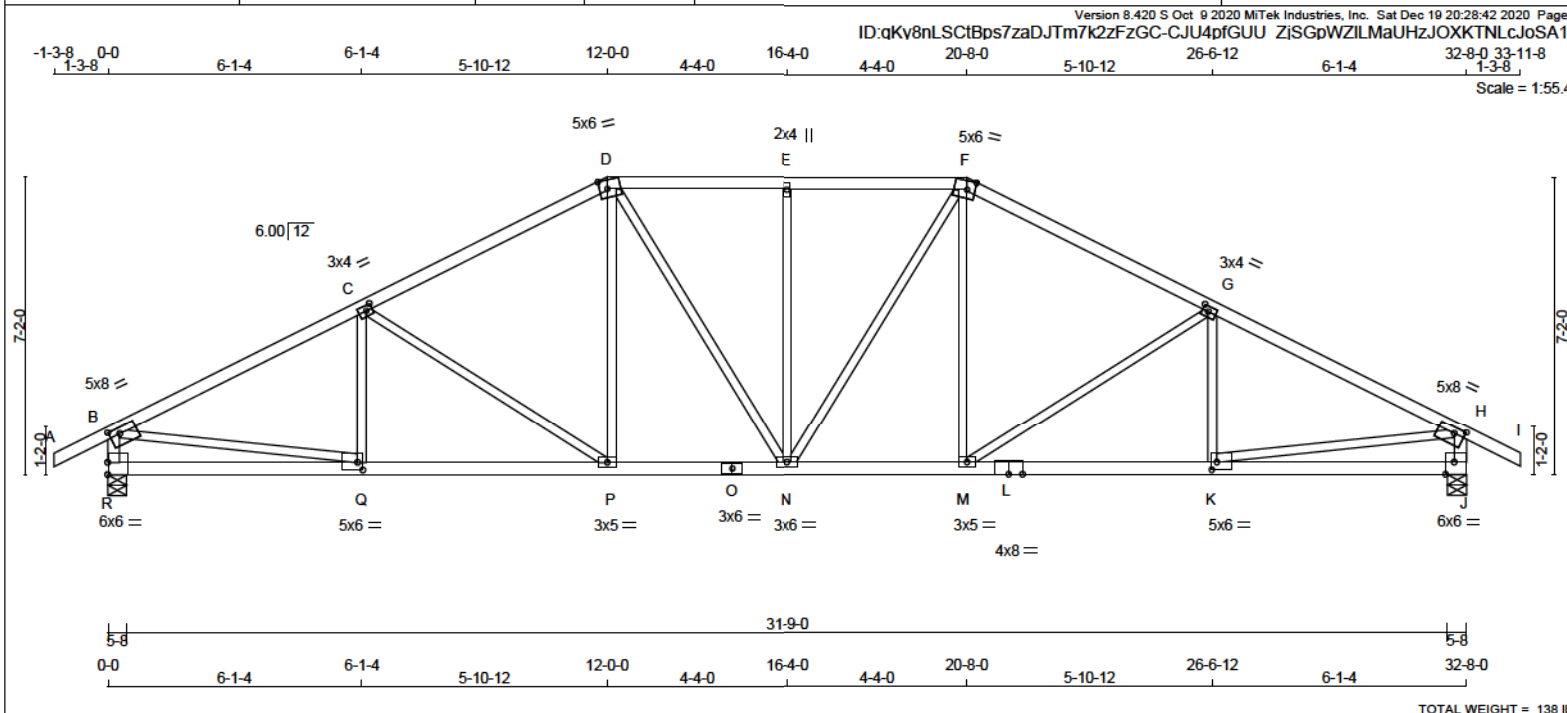


LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										DESIGN CRITERIA									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										SPECIFIED LOADS:									
A - D 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										TOP CH. LL = 34.8 PSF									
D - F 2x4 DRY No.2 SPF										R 2842 0 2842 0 0 5-8 5-8										DL = 8.0 PSF									
F - I 2x4 DRY No.2 SPF										J 2842 0 2842 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
R - B 2x4 DRY No.2 SPF																				DL = 7.3 PSF									
J - H 2x4 DRY No.2 SPF																				TOTAL LOAD = 60.6 PSF									
R - O 2x4 DRY No.2 SPF																				SPACING = 24.0 IN. C/C									
O - M 2x4 DRY No.2 SPF																				LOADING IN PLATE SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
M - J 2x4 DRY No.2 SPF																				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
ALL WEBS 2x3 DRY No.2 SPF																				THIS DESIGN COMPLIES WITH:									
EXCEPT																				- PART 9 OF CBC 2018, ABC 2019									
DRY: SEASONED LUMBER.																				- PART 9 OF OBC 2012 (2019 AMENDMENT)									
																				- CSA 086-14									
																				- TPIC 2014									
PLATES (table is in inches)										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J										(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									
JT TYPE PLATES W LEN Y X										BRACING										ALLOWABLE DEFL.(LL)= L/360 (1.09")									
B TMVW-t MT20 5.0 8.0 1.75 3.00										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.55 FT.										CALCULATED VERT. DEFL.(LL)= L/ 999 (0.21")									
C TMVW-t MT20 3.0 4.0 1.50 1.75										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										ALLOWABLE DEFL.(TL)= L/360 (1.09")									
D TTWW-m MT20 5.0 8.0 2.25 3.75										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										CALCULATED VERT. DEFL.(TL)= L/ 999 (0.36")									
E TMW+w MT20 2.0 4.0										LOADING										CSI: TC=0.90/1.00 (D-E-1) , BC=0.71/1.00 (P-Q-1) ,									
F TTWW-m MT20 5.0 8.0 2.25 3.75										TOTAL LOAD CASES: (4)										WB=0.80/1.00 (B-Q-1) , SSI=0.38/1.00 (D-E-1)									
G TMVW-t MT20 3.0 4.0 1.50 1.75										CHORDS WEBS										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
H TMVW-t MT20 5.0 8.0 1.75 3.00										MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX										SHEAR=1.10 TENS= 1.10									
J BMV1-t MT20 6.0 6.0 Edge 2.50										(LBS) CSI (LC) UNBRAC (LBS) CSI (LC)										COMPANION LIVE LOAD FACTOR = 1.00									
K BMVW-t MT20 5.0 6.0 2.25 1.50										FR-TO FROM TO LENGTHFR-TO										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE									
L BMVW-t MT20 3.0 4.0										A-B -124.4 -124.4 0.16 (1) 10.00 Q-C -388 / 19 0.09 (1)										FOR QUALITY CONTROL IN THE TRUSS									
M BS-t MT20 3.0 6.0										B-C -3877 / 0 -124.4 -124.4 0.61 (1) 3.06 C-P -388 / 0 0.25 (1)										MANUFACTURING PLANT .									
N BMVW-t MT20 4.0 6.0 1.50 3.00										C-D -3583 / 0 -124.4 -124.4 0.56 (1) 3.22 P-D 0 / 463 0.10 (2)										NAIL VALUES									
O BS-t MT20 3.0 6.0										D-E -3838 / 0 -124.4 -124.4 0.90 (1) 2.56 D-N 0 / 893 0.20 (1)										PLATE GRIP(DRY) SHEAR SECTION									
P BMVW-t MT20 3.0 4.0										E-F -3838 / 0 -124.4 -124.4 0.90 (1) 2.55 N-E -966 / 0 0.58 (1)										(PSI) (PLI) (PLI)									
Q BMVW-t MT20 5.0 6.0 2.25 1.50										F-G -3583 / 0 -124.4 -124.4 0.56 (1) 3.22 N-F 0 / 893 0.20 (1)										MAXIMUM ALLOWABLE MINIMUM									
R BMV1-t MT20 6.0 6.0 3.50										G-H -3877 / 0 -124.4 -124.4 0.61 (1) 3.06 L-F 0 / 463 0.10 (2)																			
										H-I 0 / 38 -124.4 -124.4 0.16 (1) 10.00 L-G -388 / 0 0.25 (1)																			
										R-B -2753 / 0 0.0 0.0 0.28 (1) 5.19 K-G -388 / 19 0.09 (1)																			
										J-H -2753 / 0 0.0 0.0 0.28 (1) 5.19 B-Q 0 / 3544 0.80 (1)																			

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
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
R - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
R - O	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	5.0	8.0	1.75	3.00
C TMVW-t	MT20	3.0	4.0	1.50	1.75
D TTWW-m	MT20	5.0	8.0	2.50	2.25
E TMW+w	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	8.0	2.50	2.25
G TMVW-t	MT20	3.0	4.0	1.50	1.75
H TMVW-t	MT20	5.0	8.0	1.75	3.00
J BMV1-t	MT20	6.0	6.0	Edge	2.50
K BMWW-t	MT20	5.0	6.0	2.25	1.50
L BS-t	MT20	4.0	8.0		
M BMWW-t	MT20	3.0	5.0		
N BMWW-t	MT20	3.0	6.0		
O BS-t	MT20	3.0	6.0		
P BMWW-t	MT20	3.0	5.0		
Q BMWW-t	MT20	5.0	6.0	2.25	1.50
R BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2842	0	5-8	5-8
R	2842	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1232	0	343
R	1232	0	343

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.06 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 FORCE (LBS)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 38	-124.4	-124.4 0.16 (1)	Q-C	-239 / 131	0.06 (1)	0.70 (1)
B-C	-3939 / 0	-124.4	-124.4 0.90 (1)	C-P	-711 / 0	0.70 (1)	0.13 (1)
C-D	-3352 / 0	-124.4	-124.4 0.78 (1)	P-D	0 / 598	0.13 (1)	0.11 (1)
D-E	-3219 / 0	-124.4	-124.4 0.41 (1)	D-N	0 / 487	0.58 (1)	0.11 (1)
E-F	-3219 / 0	-124.4	-124.4 0.41 (1)	N-E	-850 / 0	0.11 (1)	0.13 (1)
F-G	-3352 / 0	-124.4	-124.4 0.78 (1)	G-H	0 / 487	0.13 (1)	0.70 (1)
G-H	-3939 / 0	-124.4	-124.4 0.90 (1)	H-I	-711 / 0	0.70 (1)	0.08 (1)
H-I	0 / 38	-124.4	-124.4 0.16 (1)	I-J	-239 / 131	0.08 (1)	0.81 (1)
R-B	-2742 / 0	0.0	0.0 0.28 (1)	K-H	0 / 3592	0.81 (1)	
J-H	-2742 / 0	0.0	0.0 0.28 (1)				
R-Q	0 / 0	-39.2	-39.2 0.27 (3)				
Q-P	0 / 3557	-39.2	-39.2 0.73 (1)				
P-O	0 / 2970	-39.2	-39.2 0.60 (1)				
O-N	0 / 2970	-39.2	-39.2 0.60 (1)				
N-M	0 / 2970	-39.2	-39.2 0.60 (1)				
M-L	0 / 3557	-39.2	-39.2 0.73 (1)				
L-K	0 / 3557	-39.2	-39.2 0.73 (1)				
K-J	0 / 0	-39.2	-39.2 0.27 (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

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 (1.09")
CALCULATED VERT. DEFL.(LL)= L/999 (0.19")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/999 (0.32")

CSI: TC=0.90/1.00 (G-H:1) , BC=0.73/1.00 (K-M:1) , WB=0.81/1.00 (H-K:1) , SSI=0.32/1.00 (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 (N) (INPUT = 0.90)
JSI METAL= 0.90 (O) (INPUT = 1.00)



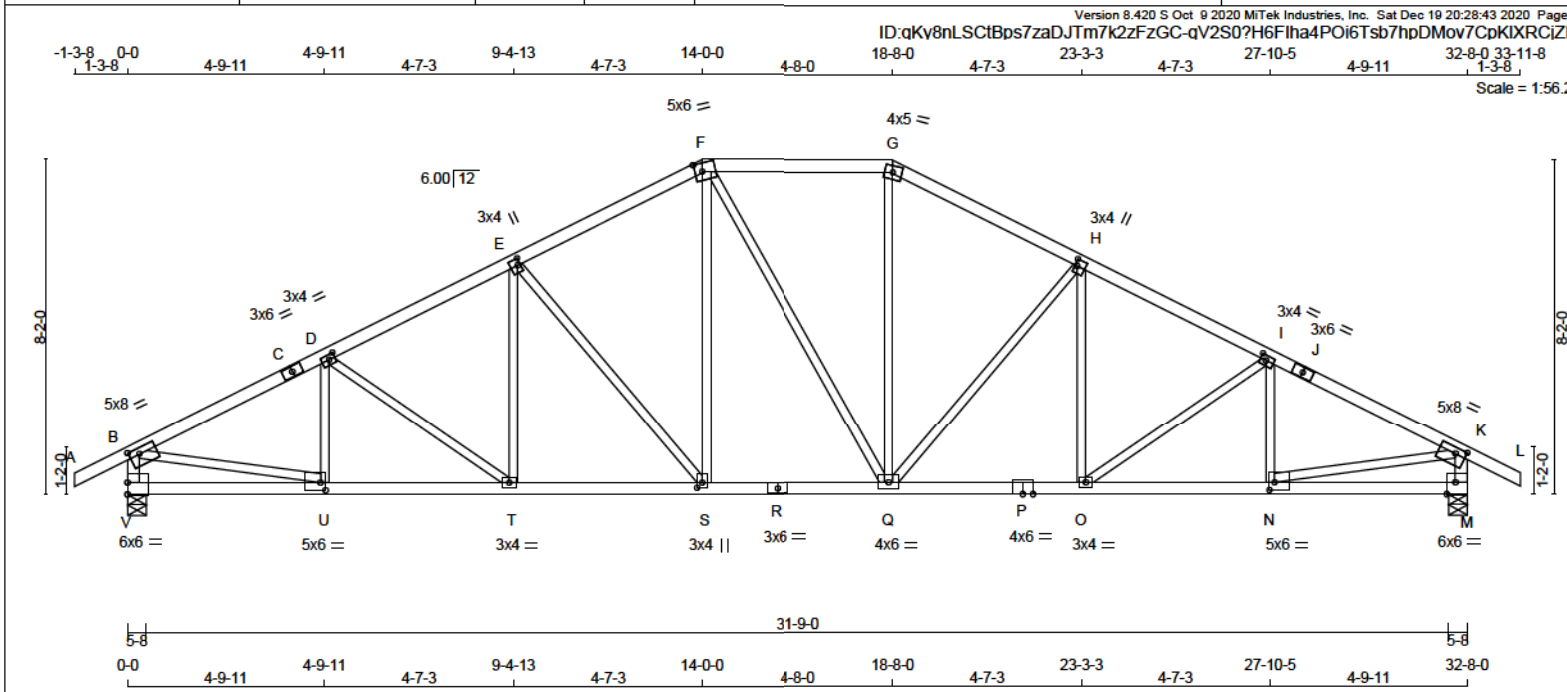
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - F	2x4	DRY No.2	SPF
F - G	2x4	DRY No.2	SPF
G - J	2x4	DRY No.2	SPF
J - L	2x4	DRY No.2	SPF
V - B	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
V - R	2x4	DRY No.2	SPF
R - P	2x4	DRY No.2	SPF
P - M	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	8.0	1.75	3.00
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.75
E	TMVW-t	MT20	3.0	4.0	2.00	0.75
F	TTWW-m	MT20	5.0	6.0	2.50	2.25
G	TTWW-m	MT20	4.0	5.0		
H	TMVW-t	MT20	3.0	4.0	2.00	0.75
I	TMVW-t	MT20	3.0	4.0	1.50	1.75
J	TS-t	MT20	3.0	6.0		
K	TMVW-t	MT20	5.0	8.0	1.75	3.00
N	BMVW-t	MT20	6.0	6.0	Edge 2.50	
O	BMVW-t	MT20	5.0	6.0	2.25	1.50
P	BS-t	MT20	3.0	4.0		
Q	BMVW-t	MT20	4.0	6.0		
R	BS-t	MT20	3.0	6.0		
S	BMVW-t	MT20	3.0	4.0	1.50	1.50
T	BMVW-t	MT20	3.0	4.0		
U	BMVW-t	MT20	5.0	6.0	2.25	1.50
V	BMVW-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
V	2842	0	0	5-8
M	2842	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
V	2098	1232	0
M	2098	1232	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

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 MAX CSI (LC)	
FR-TO				FR-TO			
A-B	0 / 38	-124.4	-124.4	U-D	-422	0	0.09 (1)
B-C	-3835 / 0	-124.4	-124.4	D-T	-215	0	0.12 (1)
C-D	-3835 / 0	-124.4	-124.4	T-E	0 / 336		0.08 (2)
D-E	-3861 / 0	-124.4	-124.4	E-S	-864	0	0.89 (1)
E-F	-3064 / 0	-124.4	-124.4	S-F	0 / 838		0.19 (1)
F-G	-2729 / 0	-124.4	-124.4	F-Q	0 / 4		0.00 (1)
G-H	-3066 / 0	-124.4	-124.4	Q-G	0 / 842		0.19 (1)
H-I	-3860 / 0	-124.4	-124.4	Q-H	-861	0	0.89 (1)
I-J	-3835 / 0	-124.4	-124.4	O-H	0 / 332		0.07 (2)
J-K	-3835 / 0	-124.4	-124.4	O-I	-216	0	0.12 (1)
K-L	0 / 38	-124.4	-124.4	N-I	-421	0	0.09 (1)
V-B	-2758 / 0	0.0	0.0	B-U	0 / 3505		0.79 (1)
M-K	-2759 / 0	0.0	0.0	N-K	0 / 3505		0.79 (1)
V-U	0 / 0	-39.2	-39.2				
U-T	0 / 3450	-39.2	-39.2				
T-S	0 / 3275	-39.2	-39.2				
S-R	0 / 2728	-39.2	-39.2				
R-Q	0 / 2728	-39.2	-39.2				
Q-P	0 / 3274	-39.2	-39.2				
P-O	0 / 3274	-39.2	-39.2				
O-N	0 / 3450	-39.2	-39.2				
N-M	0 / 0	-39.2	-39.2				

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

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- PART 9 OF CBC 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

CSI: TC=0.56/1.00 (I-K:1) , BC=0.63/1.00 (T-U:1) ,
WB=0.89/1.00 (E-S:1) , SSI=0.24/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 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 (E) (INPUT = 0.80)
JSI METAL = 0.83 (R) (INPUT = 1.00)



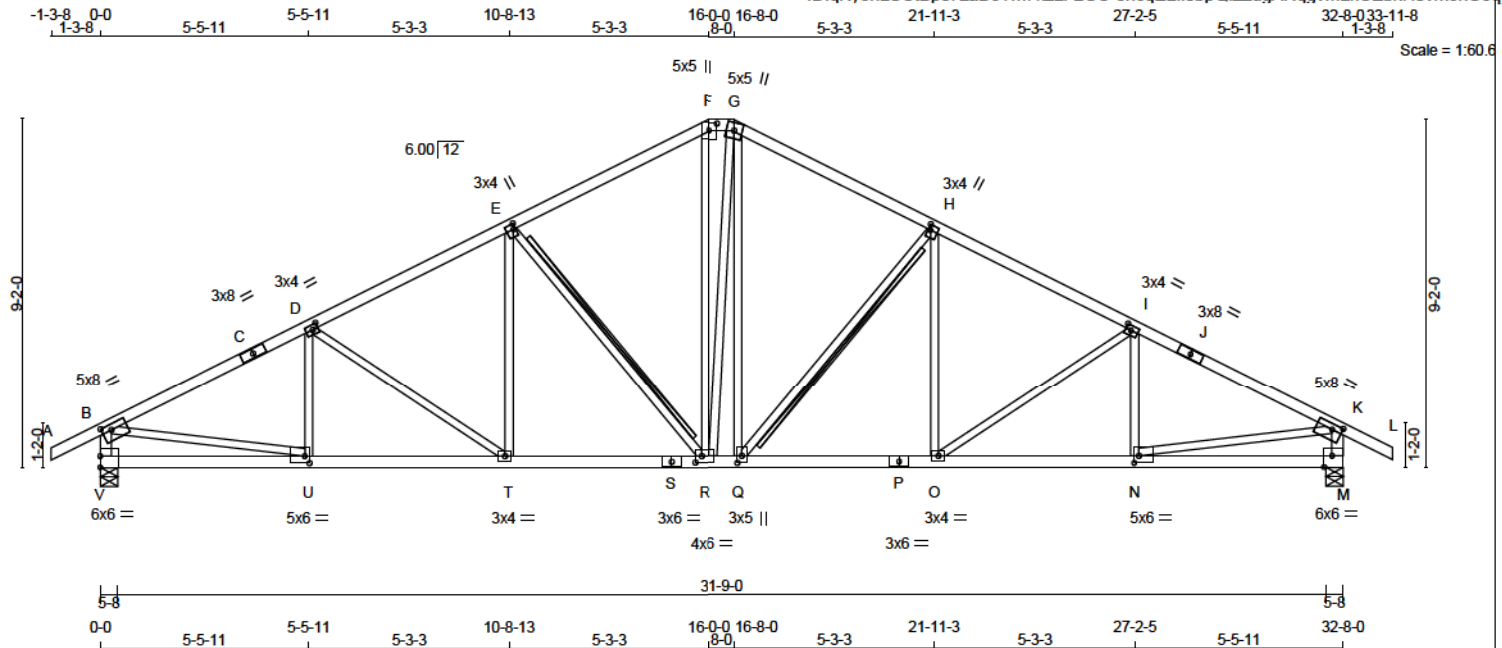
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	5.0	8.0	1.75 3.00
C	TS-t	MT20	3.0	8.0	
D	TMVW-t	MT20	3.0	4.0	1.50 1.75
E	TMVW-t	MT20	3.0	4.0	1.75 0.75
F	TTW+p	MT20	5.0	5.0	2.25 2.50
G	TTW+m	MT20	5.0	5.0	
H	TMVW-t	MT20	3.0	4.0	1.75 0.75
I	TMVW-t	MT20	3.0	4.0	1.50 1.75
J	TS-t	MT20	3.0	8.0	
K	TMVW-t	MT20	5.0	8.0	1.75 3.00
N	BMV1-t	MT20	6.0	6.0	Edge 2.50
O	BMVW-t	MT20	5.0	6.0	2.25 1.50
P	BS-t	MT20	3.0	8.0	
Q	BMVW-t	MT20	3.0	5.0	2.25 1.50
R	BMVW-t	MT20	4.0	6.0	2.00 2.00
S	BS-t	MT20	3.0	8.0	
T	BMVW-t	MT20	3.0	4.0	
U	BMVW-t	MT20	5.0	6.0	2.25 1.50
V	BMV1-t	MT20	6.0	6.0	3.50

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT DOWN	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
V	2842	0	2842	0
M	2842	0	2842	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
V	2098	1232 / 0	343 / 0
M	2098	1232 / 0	343 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.97 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-R, H-Q

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. CS1 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CS1 (LC)
FR-TO					FR-TO		
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00	U-D	-319 / 85	0.08 (1)
B-C	-3890 / 0	-124.4	-124.4 0.71 (1)	2.97	D-T	-418 / 0	0.30 (1)
C-D	-3890 / 0	-124.4	-124.4 0.71 (1)	2.97	T-E	0 / 446	0.10 (2)
D-E	-3531 / 0	-124.4	-124.4 0.57 (1)	3.28	E-R	-1054 / 0	0.52 (1)
E-F	-2809 / 0	-124.4	-124.4 0.52 (1)	3.66	R-F	0 / 941	0.21 (1)
F-G	-2475 / 0	-124.4	-124.4 0.07 (1)	4.35	R-G	0 / 102	0.02 (1)
G-H	-2798 / 0	-124.4	-124.4 0.52 (1)	3.67	Q-G	0 / 834	0.19 (1)
H-I	-3535 / 0	-124.4	-124.4 0.57 (1)	3.28	Q-H	-1075 / 0	0.53 (1)
I-J	-3888 / 0	-124.4	-124.4 0.71 (1)	2.97	O-H	0 / 467	0.11 (2)
J-K	-3888 / 0	-124.4	-124.4 0.71 (1)	2.97	O-I	-412 / 0	0.30 (1)
K-L	0 / 38	-124.4	-124.4 0.16 (1)	10.00	N-I	-325 / 62	0.08 (1)
V-B	-2750 / 0	0.0	0.0 0.28 (1)	5.19	B-U	0 / 3548	0.80 (1)
M-K	-2749 / 0	0.0	0.0 0.28 (1)	5.20	N-K	0 / 3549	0.80 (1)
V-U	0 / 0	-39.2	-39.2 0.20 (3)	10.00			
U-T	0 / 3503	-39.2	-39.2 0.68 (1)	10.00			
T-S	0 / 3158	-39.2	-39.2 0.67 (1)	10.00			
S-R	0 / 3158	-39.2	-39.2 0.67 (1)	10.00			
R-Q	0 / 2466	-39.2	-39.2 0.56 (1)	10.00			
Q-P	0 / 3162	-39.2	-39.2 0.62 (1)	10.00			
P-O	0 / 3162	-39.2	-39.2 0.62 (1)	10.00			
O-N	0 / 3502	-39.2	-39.2 0.68 (1)	10.00			
N-M	0 / 0	-39.2	-39.2 0.20 (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

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- 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.20")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.34")

CSI: TC=0.71/1.00 (B-D-1), BC=0.68/1.00 (N-O-1),
WB=0.80/1.00 (B-U-1), SSI=0.28/1.00 (B-D-1)

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

COMPANION LIVE LOAD FACTOR = 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 (Q) (INPUT = 0.90)
JSI METAL = 0.98 (S) (INPUT = 1.00)

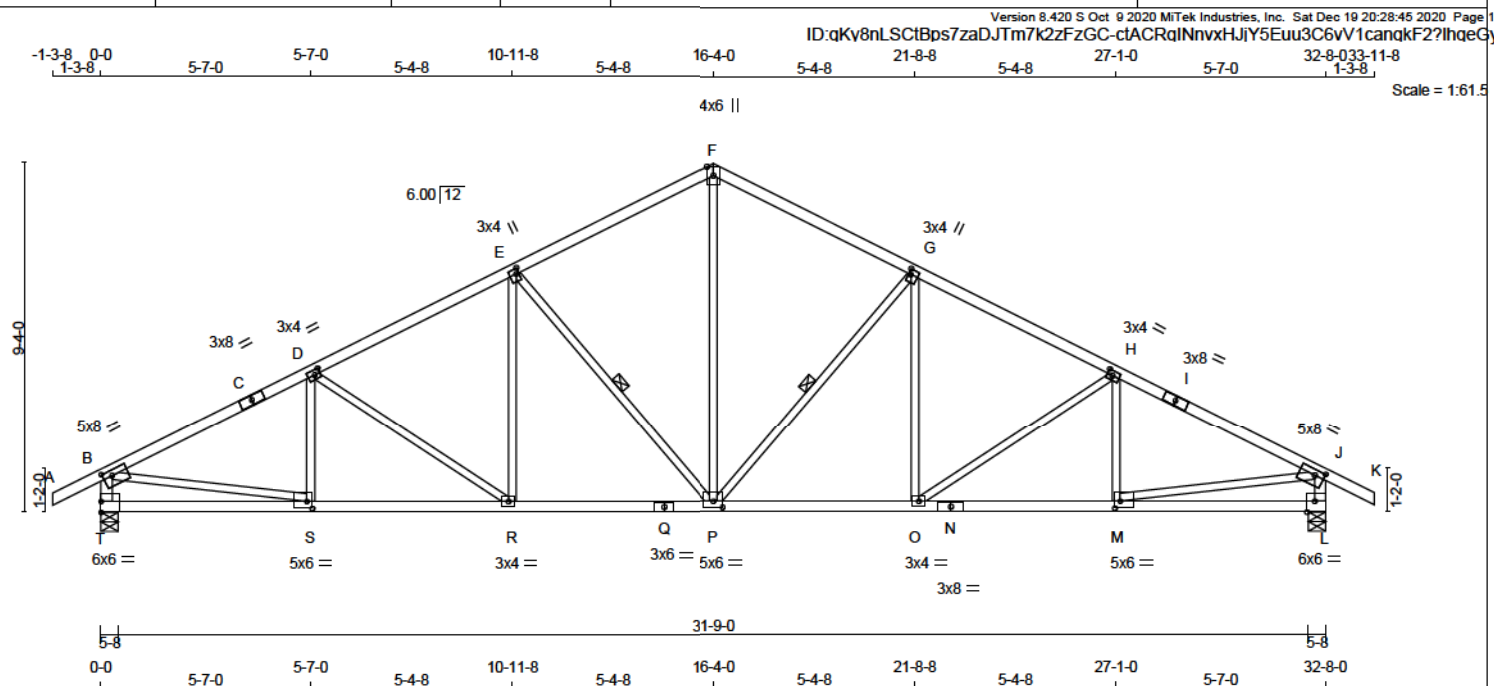


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



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TOTAL WEIGHT = $7 \times 138 = 968$ lb

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

DRY- SEASONED LUMBER

PLATES (table is in inches)					
J	T	PLATES	W	LEN	Y X
B	TMWV-t	MT20	5.0	8.0	1.75 3.00
C	TMWV-t	MT20	3.0	8.0	
D	TMWV-t	MT20	3.0	8.0	1.50 1.75
E	TMWV+t	MT20	3.0	4.0	1.75 0.75
F	TTW+g	MT20	4.0	6.0	Edge
G	TMWV+t	MT20	3.0	4.0	1.75 0.75
H	TMWV-t	MT20	3.0	4.0	1.50 1.75
I	TS-t	MT20	3.0	8.0	
J	TMVW-t	MT20	6.0	8.0	1.75 3.00
L	BMV1-t	MT20	6.0	8.0	Edge 2.50
M	BMWV-t	MT20	5.0	6.0	2.25 1.75
N	BS-t	MT20	3.0	8.0	
O	BMWV-t	MT20	3.0	4.0	
P	BMWVWV-t	MT20	5.0	6.0	2.00 3.00
Q	BS-t	MT20	3.0	6.0	
R	BMWV-t	MT20	3.0	4.0	
S	BMWV-t	MT20	5.0	6.0	2.25 1.75
T	BMV1-t	MT20	6.0	6.0	3.50

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES
EDGE OF CHORD

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

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

UNFACTORED REACTIONS

UNFACTORED REACTIONS							
1ST LCASE		MAX./MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	2096	1232 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0
L	2096	1232 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94 FT.

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-P, E-P. DBS = 20-0-0 . CBF = 137 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)	LOAD L1 MAX CSI (LBS)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LBS)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00	P-F	0 / 1889	0.43 (1)	
B-C	-3896 / 0	-124.4	-124.4	0.74 (1)	2.94	P-G	-1093 / 0	0.51 (1)	
C-D	-3896 / 0	-124.4	-124.4	0.74 (1)	2.94	O-G	0 / 473	0.11 (2)	
D-E	-3508 / 0	-124.4	-124.4	0.59 (1)	3.27	O-H	-449 / 0	0.34 (1)	
E-F	-2746 / 0	-124.4	-124.4	0.54 (1)	3.67	M-H	-306 / 76	0.07 (1)	
F-G	-2746 / 0	-124.4	-124.4	0.54 (1)	3.67	E-P	-1093 / 0	0.51 (1)	
G-H	-3508 / 0	-124.4	-124.4	0.59 (1)	3.27	R-P	0 / 473	0.11 (2)	
H-I	-3896 / 0	-124.4	-124.4	0.74 (1)	2.94	D-R	-449 / 0	0.34 (1)	
I-J	-3896 / 0	-124.4	-124.4	0.74 (1)	2.94	S-D	-306 / 76	0.07 (1)	
J-K	0 / 38	-124.4	-124.4	0.16 (1)	10.00	B-S	0 / 3551	0.80 (1)	
T-B	-2746 / 0	0.0	0.0	0.28 (1)	5.20	M-J	0 / 3551	0.80 (1)	
L-J	-2746 / 0	0.0	0.0	0.28 (1)	5.20				
T-S	0 / 0	-39.2	-39.2	0.21 (3)	10.00				
S-R	0 / 3509	-39.2	-39.2	0.68 (1)	10.00				
R-Q	0 / 3138	-39.2	-39.2	0.84 (1)	10.00				
Q-P	0 / 3138	-39.2	-39.2	0.84 (1)	10.00				
P-O	0 / 3138	-39.2	-39.2	0.84 (1)	10.00				
O-N	0 / 3509	-39.2	-39.2	0.68 (1)	10.00				
N-M	0 / 3509	-39.2	-39.2	0.68 (1)	10.00				
M-L	0 / 0	-39.2	-39.2	0.21 (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
- TPIQ 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)= $L/360$ (1.09")
CALCULATED VERT. DEFL.(LL)= $L/999$ (0.20")
ALLOWABLE DEFL.(TL)= $L/360$ (1.09")
CALCULATED VERT. DEFL.(TL)= $L/999$ (0.34")

CSI: TC=0.74/1.00 (B-D:1), BC=0.68/1.00 (M-O:1),
WB=0.80/1.00 (J-M:1), SSI=0.29/1.00 (B-D:1)

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

COMPANION LIVE LOAD FACTOR = 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 (M) (INPUT = 0.90)
JSI METAL= 1.00 (N) (INPUT = 1.00)



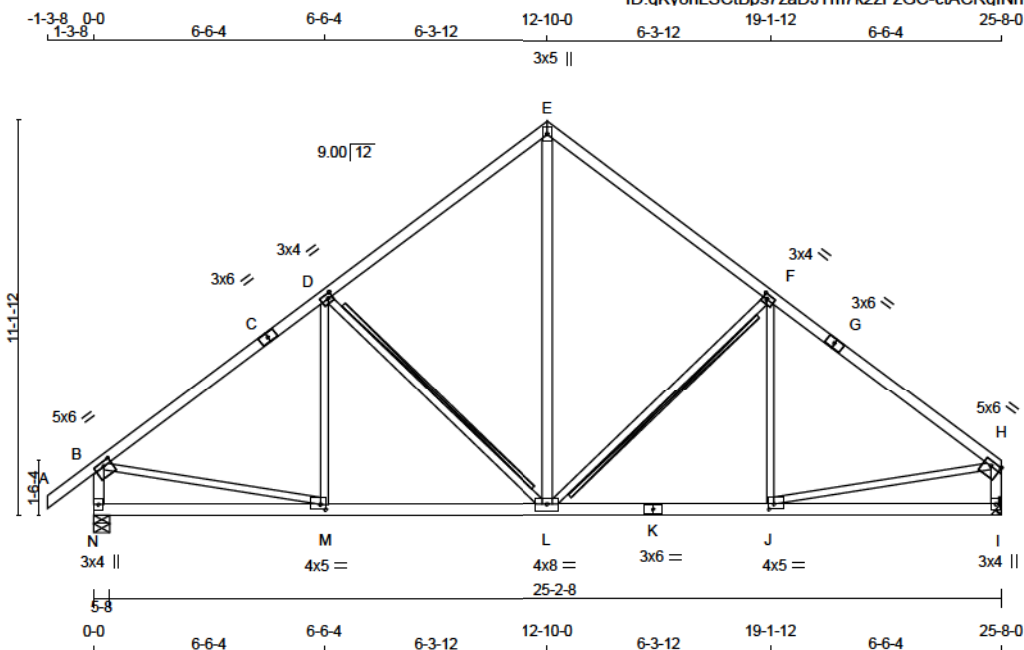
**READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.**



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	2021-02-0
Sewage System			
Zoning			





Scale = 1:65.1

TOTAL WEIGHT = 116 LB

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.50	2.75
C	TS-t	MT20	3.0	6.0		
D	TMVW-t	MT20	3.0	4.0	1.50	1.50
E	TTW-t	MT20	3.0	4.0		
F	TMVW-t	MT20	3.0	4.0	1.50	1.50
G	TS-t	MT20	3.0	6.0		
H	TMVW-t	MT20	5.0	6.0	1.50	Edge
I	BMV-t	MT20	3.0	4.0		
J	BMVW-t	MT20	4.0	5.0	1.75	1.75
K	BS-t	MT20	3.0	6.0		
L	BMVW-t	MT20	4.0	8.0		
M	BMVW-t	MT20	4.0	5.0	1.75	1.75
N	BMV-t	MT20	3.0	4.0		

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
N	2272	0	2272	0
I	2101	0	2101	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT I. MINIMUM BEARING LENGTH AT JOINT I = 3-5.

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1674	989 / 0	270 / 0	0 / 0	0 / 0	415 / 0	0 / 0
I	1556	893 / 0	270 / 0	0 / 0	0 / 0	393 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.52 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT F-L, D-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 (LC1 MAX)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (LC1 MAX)
FR-TO				FR-TO			
A-B	0 / 51	-124.4 -124.4 0.17 (1)	10.00	L-E	0 / 1297	0.21 (1)	
B-C	-2202 / 0	-124.4 -124.4 0.84 (1)	3.52	L-F	-766 / 0	0.45 (1)	
C-D	-2202 / 0	-124.4 -124.4 0.84 (1)	3.52	J-F	-48 / 223	0.06 (3)	
D-E	-1630 / 0	-124.4 -124.4 0.74 (1)	4.14	D-L	-766 / 0	0.45 (1)	
E-F	-1630 / 0	-124.4 -124.4 0.74 (1)	4.14	M-D	-48 / 223	0.06 (3)	
F-G	-2202 / 0	-124.4 -124.4 0.84 (1)	3.52	B-M	0 / 1838	0.41 (1)	
G-H	-2202 / 0	-124.4 -124.4 0.84 (1)	3.52	J-H	0 / 1838	0.41 (1)	
N-B	-2108 / 0	0.0 0.0 0.23 (1)	5.77				
I-H	-1997 / 0	0.0 0.0 0.21 (1)	5.97				
N-M	0 / 0	-39.2 -39.2 0.32 (3)	10.00				
M-L	0 / 1808	-39.2 -39.2 0.53 (2)	10.00				
L-K	0 / 1808	-39.2 -39.2 0.53 (2)	10.00				
K-J	0 / 1808	-39.2 -39.2 0.53 (2)	10.00				
J-I	0 / 0	-39.2 -39.2 0.32 (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) = $L/360 (0.86")$
CALCULATED VERT. DEFL.(LL) = $L/999 (0.08")$
ALLOWABLE DEFL.(TL) = $L/360 (0.86")$
CALCULATED VERT. DEFL.(TL) = $L/999 (0.14")$

CSI: TC=0.84/1.00 (F-H:1), BC=0.53/1.00 (J-L:2),
WB=0.45/1.00 (F-L:1), SS=0.31/1.00 (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= 0.87 (J) (INPUT = 0.90)
JSI METAL = 0.87 (K) (INPUT = 1.00)



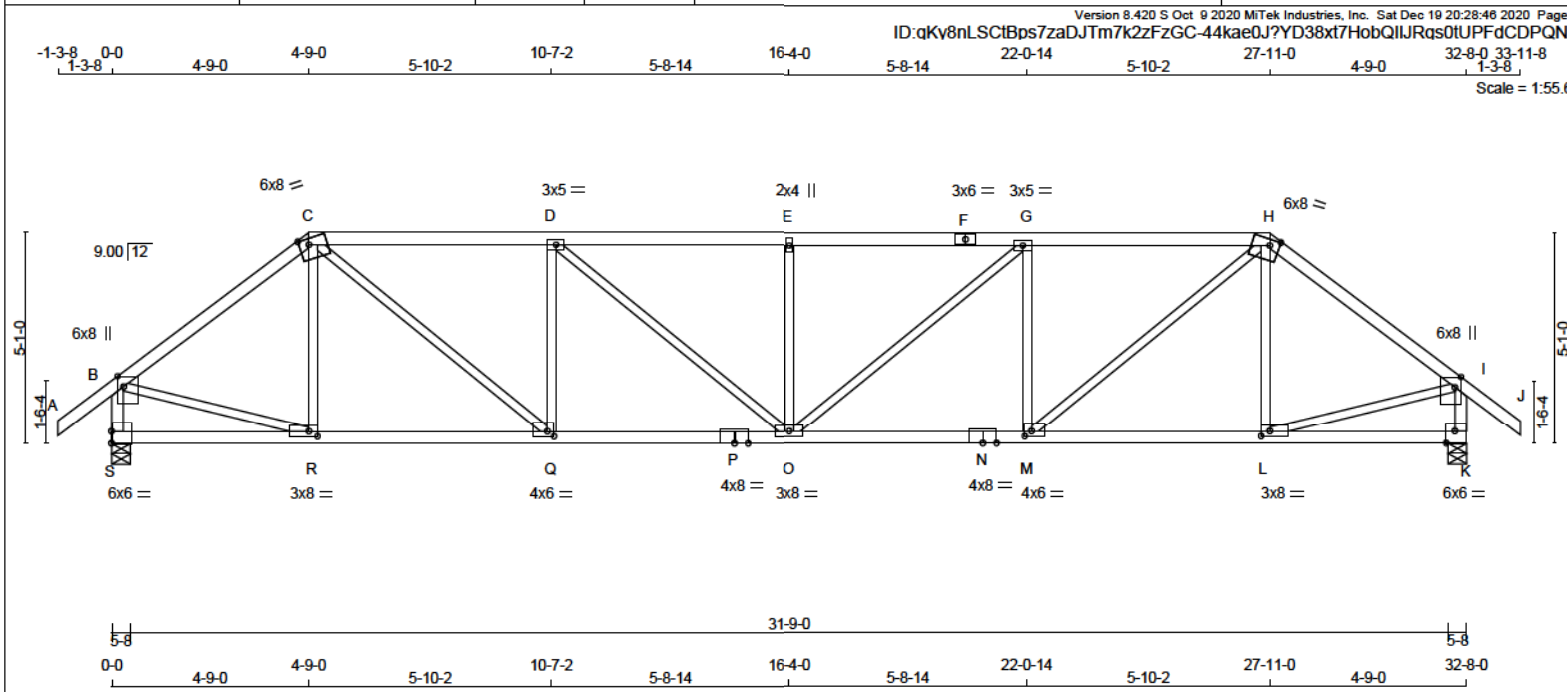
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - F	2x4	DRY 2100F 1.8E	SPF
F - H	2x4	DRY 2100F 1.8E	SPF
H - J	2x4	DRY No.2	SPF
S - B	2x4	DRY No.2	SPF
K - I	2x4	DRY No.2	SPF
S - P	2x4	DRY No.2	SPF
P - N	2x4	DRY No.2	SPF
N - K	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	8.0	3.00	1.75
C	TTWW-m	MT20	6.0	8.0	1.75	2.75
D	TMWW-t	MT20	3.0	5.0		
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	3.0	5.0		
H	TTWW-m	MT20	6.0	8.0	1.75	2.75
I	TMVW+p	MT20	6.0	8.0	3.00	1.75
K	BMV-t	MT20	6.0	6.0	Edge	2.50
L	BMWW-t	MT20	3.0	8.0	1.50	2.50
M	BMWW-t	MT20	4.0	6.0	1.50	2.00
N	BS-t	MT20	4.0	8.0		
O	BMWW-t	MT20	3.0	8.0		
P	BS-t	MT20	4.0	8.0		
Q	BMWW-t	MT20	4.0	6.0	1.50	2.00
R	BMWW-t	MT20	3.0	8.0	1.50	2.50
S	BMV-t	MT20	6.0	6.0	3.50	

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



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	2845	0	5-8	5-8
S K	2845	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1233	0	343
S K	1233	0	343

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.36 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FORCE (LBS)	MAX. FORCE (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 51	-124.4	-124.4	0.17 (1)	10.00	R-C	-333 / 48
B-C	-2888 / 0	-124.4	-124.4	0.73 (1)	3.36	C-Q	0 / 2326
C-D	-4100 / 0	-124.4	-124.4	0.56 (1)	3.79	Q-D	-1250 / 0
D-E	-4631 / 0	-124.4	-124.4	0.60 (1)	3.56	D-O	0 / 691
E-F	-4631 / 0	-124.4	-124.4	0.60 (1)	3.56	O-E	-860 / 0
F-G	-4631 / 0	-124.4	-124.4	0.60 (1)	3.56	O-G	0 / 691
G-H	-4100 / 0	-124.4	-124.4	0.56 (1)	3.79	M-G	-1250 / 0
H-I	-2888 / 0	-124.4	-124.4	0.73 (1)	3.36	M-H	0 / 2326
I-J	0 / 51	-124.4	-124.4	0.17 (1)	10.00	L-H	-333 / 48
S-B	-2772 / 0	0.0	0.0	0.29 (1)	5.17	B-R	0 / 2375
K-I	-2772 / 0	0.0	0.0	0.29 (1)	5.17	L-I	0 / 2375
S-R	0 / 0	-39.2	-39.2	0.21 (3)	10.00		
R-Q	0 / 2299	-39.2	-39.2	0.52 (1)	10.00		
Q-P	0 / 4100	-39.2	-39.2	0.78 (1)	10.00		
P-O	0 / 4100	-39.2	-39.2	0.78 (1)	10.00		
O-N	0 / 4100	-39.2	-39.2	0.78 (1)	10.00		
N-M	0 / 4100	-39.2	-39.2	0.78 (1)	10.00		
M-L	0 / 2299	-39.2	-39.2	0.52 (1)	10.00		
L-K	0 / 0	-39.2	-39.2	0.21 (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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.38")

CSI: TC=0.73/1.00 (H-I-I), BC=0.78/1.00 (M-O-I),
WB=0.53/1.00 (I-L-I), SSI=0.34/1.00 (C-D-I)

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.

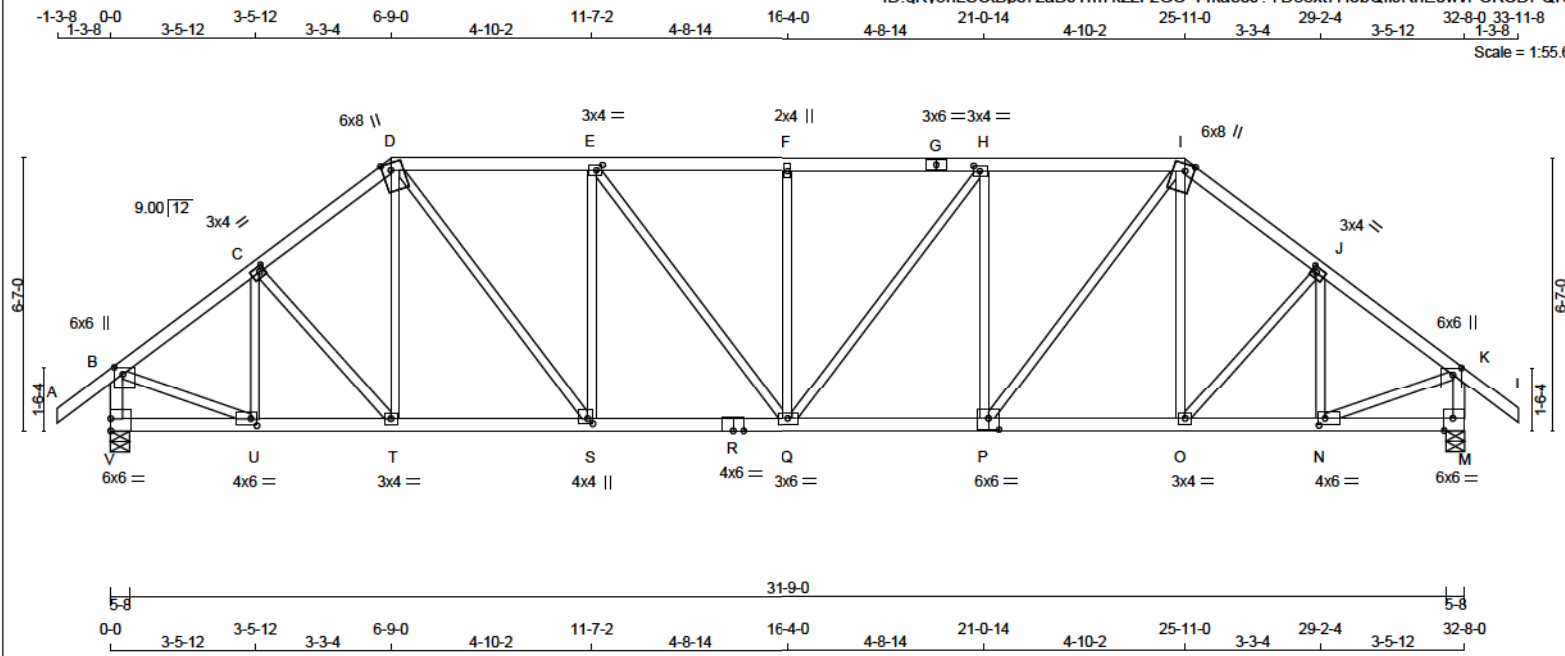
JSI GRIP= 0.89 (D) (INPUT = 0.90)
JSI METAL= 0.91 (P) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





TOTAL WEIGHT = 153 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV+p	MT20	6.0	8.0	2.00	2.50
C	CTMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	6.0	8.0	2.00	2.50
E	TMWW-t	MT20	3.0	4.0	1.50	1.75
F	TMW+t	MT20	2.0	4.0		
G	CTMWW-t	MT20	3.0	4.0		
H	TTWW+m	MT20	3.0	4.0	1.50	1.75
I	TTWW+m	MT20	6.0	8.0	2.00	2.50
J	TMWW-t	MT20	3.0	4.0	1.50	1.50
K	TMWW-t	MT20	6.0	8.0	2.00	2.50
M	BMV1-t	MT20	6.0	6.0	Edge 2.50	
N	BMWW-t	MT20	4.0	4.0	2.00	1.75
O	BMWW-t	MT20	3.0	4.0		
P	BSWW-t	MT20	6.0	8.0	3.25	3.00
Q	BMWWW-t	MT20	3.0	6.0		
R	BSW-t	MT20	3.0	6.0		
S	BMWW+t	MT20	4.0	4.0	1.50	1.50
T	BMWW-t	MT20	3.0	4.0		
U	BMWW-t	MT20	4.0	6.0	2.00	1.75
V	BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS			MAXIMUM FACTORED INPUT			REQRD
FACTORED GROSS REACTION			GROSS REACTION			BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
V	2845	0	2845	0	0	5-8
M	2845	0	2845	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
V	2098	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0
M	2098	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LBS)	LOCI MAX (PLF)	MAX. CSCI (LBS)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSCI (LBS)	
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0 / 51	-124.4	-124.4	0.17 (1)	10.00	U-C	-839 / 0	0.17 (1)	
B-C	-2762 / 0	-124.4	-124.4	0.33 (1)	3.89	C-T	0 / 93	0.02 (1)	
C-D	-2901 / 0	-124.4	-124.4	0.33 (1)	10.00	T-D	0 / 167	0.04 (3)	
D-E	-3234 / 0	-124.4	-124.4	0.62 (1)	3.30	D-S	0 / 1540	0.35 (1)	
E-F	-3510 / 0	-124.4	-124.4	0.84 (1)	3.14	S-E	-1033 / 0	0.74 (1)	
F-G	-3510 / 0	-124.4	-124.4	0.94 (1)	3.14	E-Q	0 / 457	0.10 (1)	
G-H	-3510 / 0	-124.4	-124.4	0.94 (1)	3.14	Q-F	-542 / 0	0.39 (1)	
H-I	-3224 / 0	-124.4	-124.4	0.62 (1)	3.30	Q-H	0 / 474	0.11 (1)	
I-J	-2905 / 0	-124.4	-124.4	0.33 (1)	3.89	P-H	-1047 / 0	0.75 (1)	
J-K	-2780 / 0	-124.4	-124.4	0.33 (1)	3.89	P-I	0 / 1518	0.34 (1)	
K-L	0 / 51	-124.4	-124.4	0.17 (1)	10.00	O-I	0 / 195	0.05 (3)	
V-B	-2781 / 0	0.0	0.0	0.29 (1)	5.17	O-J	0 / 99	0.02 (1)	
M-K	-2780 / 0	0.0	0.0	0.29 (1)	5.17	N-J	-847 / 0	0.17 (1)	
						B-U	0 / 2358	0.53 (1)	
						N-K	0 / 2357	0.53 (1)	
V-U	0 / 0	-39.2	-39.2	0.08 (3)	10.00				
U-T	0 / 2230	-39.2	-39.2	0.44 (1)	10.00				
T-S	0 / 2294	-39.2	-39.2	0.46 (1)	10.00				
S-R	0 / 3235	-39.2	-39.2	0.81 (1)	10.00				
R-Q	0 / 3235	-39.2	-39.2	0.81 (1)	10.00				
Q-P	0 / 3224	-39.2	-39.2	0.63 (1)	10.00				
P-O	0 / 2297	-39.2	-39.2	0.48 (1)	10.00				
O-N	0 / 2229	-39.2	-39.2	0.47 (1)	10.00				
N-M	0 / 0	-39.2	-39.2	0.09 (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 (1.09")
CALCULATED VERT. DEFL(LL) = L/ 999 (0.17")
ALLOWABLE DEFL(TL)= L/360 (1.09")
CALCULATED VERT. DEFL(TL) = L/ 999 (0.28")

CSI: TC=0.64/1.00 (F-H:1) , BC=0.63/1.00 (P-Q:1) ,
WB=0.75/1.00 (H-P:1) , SS=0.28/1.00 (H-I:1)

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

COMPANION LIVE LOAD FACTOR = 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)	(PSI)	(PLI)	(PSI)	(PLI)
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (C) (INPUT = 0.90)
JSI METAL= 0.75 (R) (INPUT = 1.00)

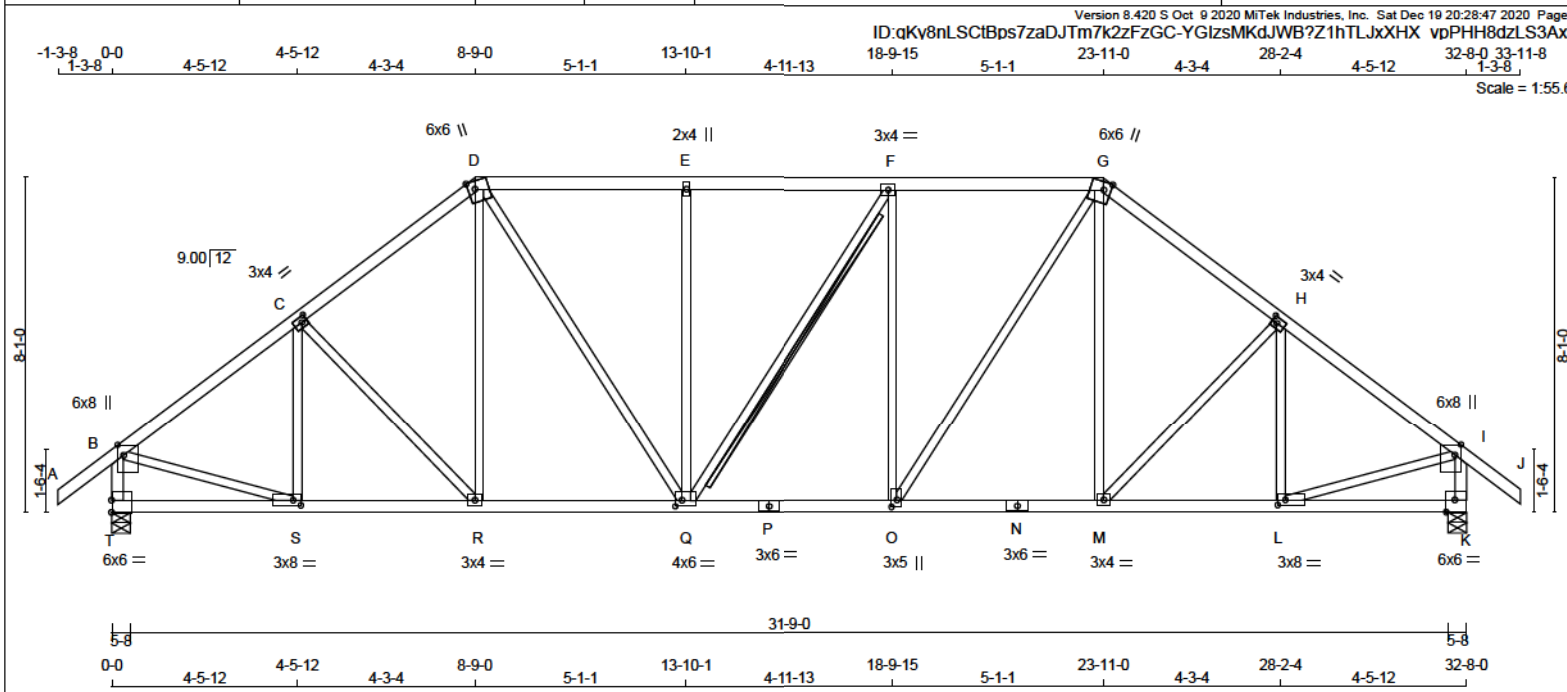


These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with the Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept 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	2021-02-0
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 - G	2x4	DRY No.2	SPF
G - J	2x4	DRY No.2	SPF
T - B	2x4	DRY No.2	SPF
K - I	2x4	DRY No.2	SPF
T - P	2x4	DRY No.2	SPF
P - N	2x4	DRY No.2	SPF
N - K	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

PLATES (Table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	6.0	8.0	3.00	1.75
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	6.0	8.0	Edge 2.00	
E TMVW+w	MT20	2.0	4.0		
F TMVW-t	MT20	3.0	4.0		
G TTWW+m	MT20	6.0	6.0	Edge 2.00	
H TMVW-t	MT20	3.0	4.0	1.50	1.50
I TMVW+p	MT20	6.0	8.0	3.00	1.75
K BMV1-t	MT20	6.0	6.0	Edge 2.50	
L BMVW-t	MT20	3.0	8.0	1.50	2.25
M BMVW-t	MT20	3.0	4.0		
N BS-t	MT20	3.0	6.0		
O BMVW+t	MT20	3.0	5.0	2.00	1.50
P BS-t	MT20	3.0	6.0		
Q BMVW-t	MT20	4.0	6.0	1.75	2.00
R BMVW-t	MT20	3.0	4.0		
S BMVW-t	MT20	3.0	8.0	1.50	2.25
T BMV1-t	MT20	6.0	6.0	3.50	

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



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 DOWN	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
T	2845	0	2845	0
K	2845	0	2845	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
T	2098	1233	0
K	2098	1233	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.72 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

2x4 DRY SPF No.2 T-BRACE AT F-Q
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)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00	S-C	-443 / 0	0.18 (1)
B-C	-2891 / 0	-124.4	-124.4 0.42 (1)	3.74	C-R	-191 / 0	0.14 (1)
C-D	-2807 / 0	-124.4	-124.4 0.41 (1)	3.80	R-D	0 / 348	0.08 (2)
D-E	-2784 / 0	-124.4	-124.4 0.46 (1)	3.73	D-Q	0 / 1040	0.23 (1)
E-F	-2784 / 0	-124.4	-124.4 0.43 (1)	3.77	Q-E	-674 / 0	0.85 (1)
F-G	-2786 / 0	-124.4	-124.4 0.46 (1)	3.72	Q-F	-4 / 0	0.00 (1)
G-H	-2806 / 0	-124.4	-124.4 0.41 (1)	3.80	O-F	-675 / 0	0.85 (1)
H-I	-2891 / 0	-124.4	-124.4 0.42 (1)	3.74	O-G	0 / 1045	0.24 (1)
I-J	0 / 51	-124.4	-124.4 0.17 (1)	10.00	M-G	0 / 348	0.08 (2)
T-B	-2768 / 0	0.0	0.0 0.29 (1)	5.17	M-H	-192 / 0	0.14 (1)
K-I	-2768 / 0	0.0	0.0 0.29 (1)	5.17	L-H	-442 / 0	0.15 (1)
					B-S	0 / 2424	0.55 (1)
					L-I	0 / 2424	0.59 (1)
T-S	0 / 0	-39.2	-39.2 0.13 (3)	10.00			
S-R	0 / 2342	-39.2	-39.2 0.48 (1)	10.00			
R-Q	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
Q-P	0 / 2786	-39.2	-39.2 0.55 (1)	10.00			
P-O	0 / 2786	-39.2	-39.2 0.55 (1)	10.00			
O-N	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
N-M	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
M-L	0 / 2342	-39.2	-39.2 0.47 (1)	10.00			
L-K	0 / 0	-39.2	-39.2 0.13 (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 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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.46/1.00 (D-E-1), BC=0.55/1.00 (O-Q-1),
WB=0.85/1.00 (F-O-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
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

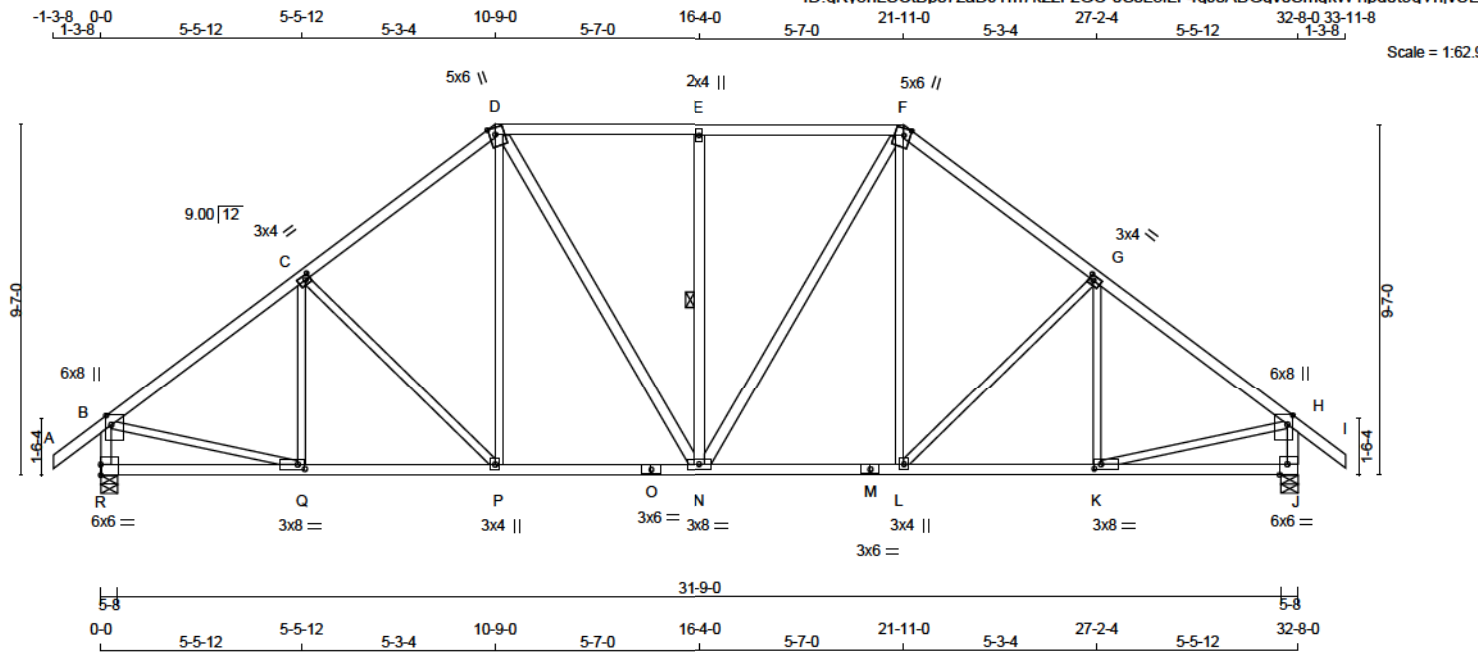
JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL = 0.90 (P) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





TOTAL WEIGHT = 164 LB

LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW+p	MT20	6.0	8.0	3.00	1.75
C TMWW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	5.0	6.0	Edge	2.00
E TMW+w	MT20	2.0	4.0		
F TTWW+m	MT20	5.0	6.0	Edge	2.00
G TMWW-t	MT20	3.0	4.0	1.50	1.50
H TMVW+p	MT20	6.0	8.0	3.00	1.75
J BMV1-t	MT20	6.0	6.0	Edge	2.50
K BMWW-t	MT20	3.0	8.0	1.50	2.25
L BMWW+t	MT20	3.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMWW-t	MT20	3.0	8.0		
O BS-t	MT20	3.0	6.0		
P BMWW+t	MT20	3.0	4.0		
Q BMWW-t	MT20	3.0	8.0	1.50	2.25
R BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
R 2845 0	2845 0	0 0	5-8 5-8
J 2845 0	2845 0	0 0	5-8 5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE
R 2098 1233 / 0	343 / 0	0 / 0	0 / 0
J 2098 1233 / 0	343 / 0	0 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 108 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00	Q-C	-289 / 81	0.14 (1)
B-C	-2952 / 0	-124.4	-124.4 0.85 (1)	3.45	C-P	-442 / 0	0.50 (1)
C-D	-2658 / 0	-124.4	-124.4 0.59 (1)	3.86	P-D	0 / 522	0.12 (2)
D-E	-2410 / 0	-124.4	-124.4 0.58 (1)	3.77	D-N	0 / 622	0.10 (1)
E-F	-2410 / 0	-124.4	-124.4 0.58 (1)	3.77	N-E	-847 / 0	0.37 (1)
F-G	-2658 / 0	-124.4	-124.4 0.59 (1)	3.86	N-F	0 / 622	0.10 (1)
G-H	-2952 / 0	-124.4	-124.4 0.85 (1)	3.45	L-F	0 / 522	0.12 (2)
H-I	0 / 51	-124.4	-124.4 0.17 (1)	10.00	L-G	-442 / 0	0.50 (1)
R-B	-2758 / 0	0.0	0.0 0.29 (1)	5.19	K-G	-289 / 81	0.14 (1)
J-H	-2758 / 0	0.0	0.0 0.29 (1)	5.19	B-Q	0 / 2455	0.55 (1)
					K-H	0 / 2455	0.55 (1)
R-Q	0 / 0	-39.2	-39.2 0.22 (3)	10.00			
Q-P	0 / 2399	-39.2	-39.2 0.52 (1)	10.00			
P-O	0 / 2090	-39.2	-39.2 0.47 (1)	10.00			
O-N	0 / 2090	-39.2	-39.2 0.47 (1)	10.00			
N-M	0 / 2090	-39.2	-39.2 0.47 (1)	10.00			
M-L	0 / 2090	-39.2	-39.2 0.47 (1)	10.00			
L-K	0 / 2399	-39.2	-39.2 0.52 (1)	10.00			
K-J	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

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 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.10")

CSI: TC=0.85/1.00 (G-H-1), BC=0.52/1.00 (P-Q-1),
WB=0.55/1.00 (B-Q-1), SSI=0.34/1.00 (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 (N) (INPUT = 0.80)
JSI METAL = 0.63 (M) (INPUT = 1.00)

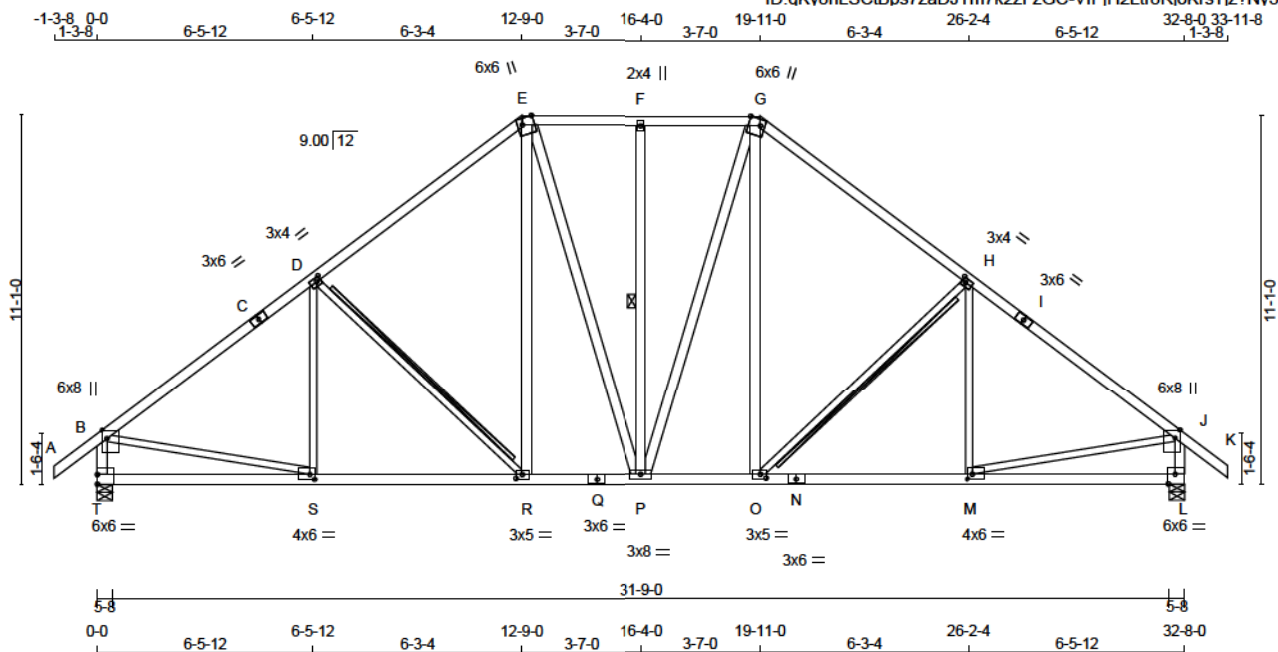


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



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.



TOTAL WEIGHT = 183 LB

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	8.0	3.00	1.75
C	TS-t	MT20	3.0	6.0		
D	TMWW-t	MT20	3.0	4.0	1.50	1.50
E	TTWW+m	MT20	6.0	6.0	Edge 4.25	
F	TMW+w	MT20	2.0	4.0		
G	TTWW+m	MT20	6.0	6.0	Edge 4.25	
H	TMWW-t	MT20	3.0	4.0	1.50	1.50
I	TS-t	MT20	3.0	6.0		
J	TMVW+p	MT20	6.0	8.0	3.00	1.75
L	BMV1-t	MT20	6.0	6.0	Edge 2.50	
M	BMWW-t	MT20	4.0	6.0	1.75	1.75
N	BS-t	MT20	3.0	6.0		
O	BMWW-t	MT20	3.0	5.0	1.50	2.25
P	BMWW-t	MT20	3.0	8.0		
Q	BS-t	MT20	3.0	6.0		
R	BMWW-t	MT20	3.0	5.0	1.50	2.25
S	BMWW-t	MT20	4.0	6.0	1.75	1.75
T	BMV1-t	MT20	6.0	6.0	3.50	

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
T	2845	0	0	5-8
L	2845	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM.LIVE
T	2098	1233	0	0
L	2098	1233	0	0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.97 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P. DBS = 20-00. CBF = 88 LBS.
2x4 DRY SPF No.2 T-BRACE AT D-R, H-O

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX (LC)	UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 51	-124.4	-124.4	0.17 (1)	10.00	S-D	-157 / 182
B-C	-2971 / 0	-124.4	-124.4	0.95 (1)	2.97	D-R	-677 / 0
C-D	-2971 / 0	-124.4	-124.4	0.95 (1)	2.97	R-E	0 / 669
D-E	-2474 / 0	-124.4	-124.4	0.83 (1)	3.37	E-P	0 / 325
E-F	-2041 / 0	-124.4	-124.4	0.24 (1)	4.53	P-F	-526 / 0
F-G	-2041 / 0	-124.4	-124.4	0.24 (1)	4.53	P-G	0 / 325
G-H	-2474 / 0	-124.4	-124.4	0.83 (1)	3.37	O-G	0 / 669
H-I	-2971 / 0	-124.4	-124.4	0.95 (1)	2.97	O-H	-677 / 0
I-J	-2971 / 0	-124.4	-124.4	0.95 (1)	2.97	M-H	-157 / 182
J-K	0 / 51	-124.4	-124.4	0.17 (1)	10.00	B-S	0 / 2463
T-B	-2742 / 0	0.0	0.0	0.29 (1)	5.20	M-J	0 / 2463
L-J	-2742 / 0	0.0	0.0	0.29 (1)	5.20		
T-S	0 / 0	-39.2	-39.2	0.33 (3)	10.00		
S-R	0 / 2422	-39.2	-39.2	0.62 (2)	10.00		
R-Q	0 / 1939	-39.2	-39.2	0.43 (1)	10.00		
Q-P	0 / 1939	-39.2	-39.2	0.43 (1)	10.00		
P-O	0 / 1939	-39.2	-39.2	0.43 (1)	10.00		
O-N	0 / 2422	-39.2	-39.2	0.62 (2)	10.00		
N-M	0 / 2422	-39.2	-39.2	0.62 (2)	10.00		
M-L	0 / 0	-39.2	-39.2	0.33 (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 (1.09")
CALCULATED VERT. DEFL.(LL)= L/999 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/999 (0.20")

CSI: TC=0.95/1.00 (H-J-1) . BC=0.62/1.00 (R-S-2) .
WB=0.55/1.00 (B-S-1) . SSI=0.31/1.00 (H-J-1)

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

COMPANION LIVE LOAD FACTOR = 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= 0.88 (S) (INPUT = 0.80)

JSI METAL= 0.74 (N) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

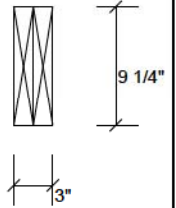
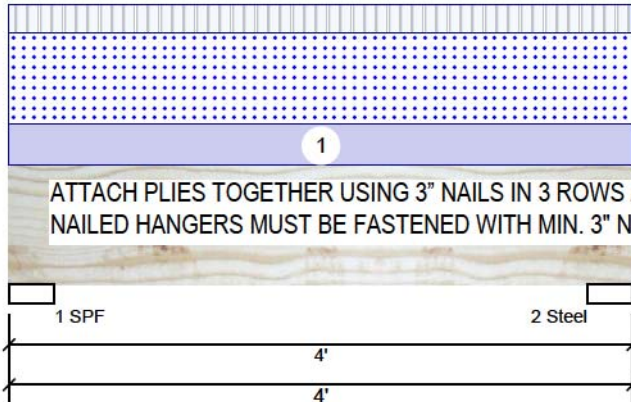
CONTINUED ON PAGE 2



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.

B1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof (Residential)
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	LSD
Deflection LL:	360	Building Code:	NBCC 2015 / OBC 2012
Deflection TL:	360	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
		Vibration:	Not Checked

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	270	393	893	0
2	270	393	893	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	33%	491 / 1609	2100	L	1.25D+1.5S +L
2 - Steel	3.500"	33%	491 / 1609	2100	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1646 ft-lb	2'	6039 ft-lb	0.273 (27%)	1.25D+1.5S +L	L
Unbraced	1646 ft-lb	2'	5667 ft-lb	0.291 (29%)	1.25D+1.5S +L	L
Shear	1860 lb	1'	3984 lb	0.467 (47%)	1.25D+1.5S +L	L
LL Defl inch	0.007 (L/6366)	2' 1/16"	0.118 (L/360)	0.060 (6%)	S+0.5L	L
TL Defl inch	0.009 (L/4607)	2' 1/16"	0.118 (L/360)	0.080 (8%)	D+S+0.5L	L

Design Notes

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top braced at bearings.
- Bottom braced at bearings.
- Lateral slenderness ratio based on single ply width.



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		12-10-0	Far Face	15.3 PSF	10.5 PSF	34.8 PSF	0 PSF	

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Kott Group
14 Anderson Blvd., On
L4A7X4
905-642-4400



CSD | DRAW DESIGN BUILD

This design is valid until 10/10/2023

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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)

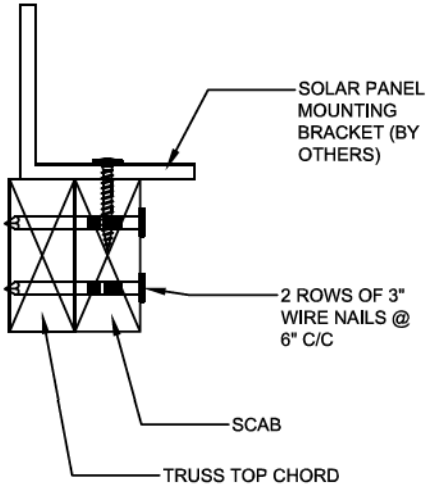
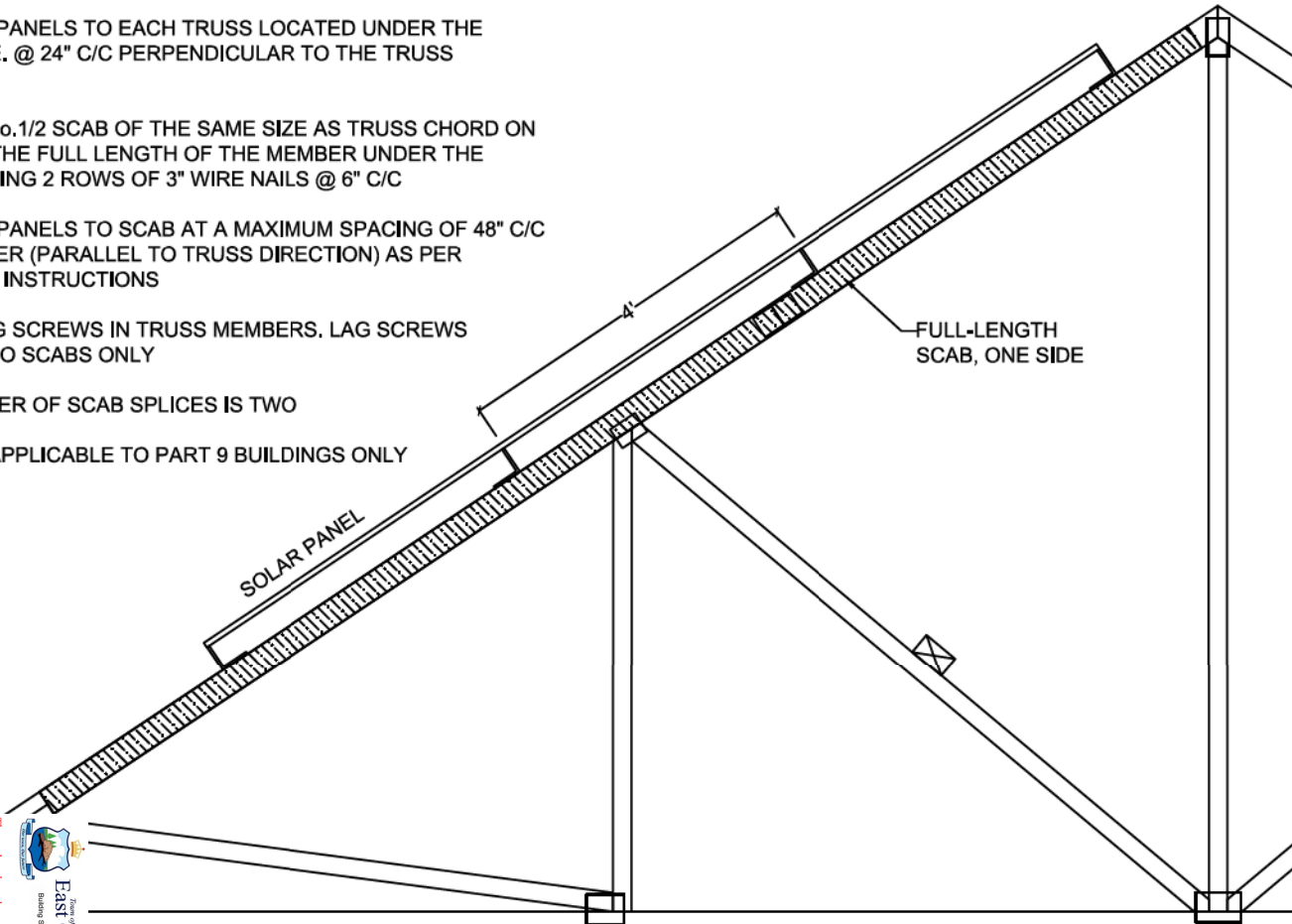
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

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





City of
East Gwillimbury
Building Standards Branch (BSCB) #16467

These plans have been reviewed for use with the Building Code of Ontario (B.C.O.) and the Ontario Building Code (O.B.C.), as amended, and the Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These plans are subject to the approval of the Building Standards Branch (BSCB) and the Building Standards Branch (BSCB) is not responsible for the design or construction of the building. The building permit must be clearly posted on the site at all times.

Building Drawing Scale	Revision	BCIN	Date
1:1	1	42726	2021-02-01
Zoning			

NE1220-130
GREENPARK - TRINAR
HALL - LOT 18



Detail for Installation of Solar Panels - Scab Method



NE1220-130
GREENPARK - TRINAR
HALL - LOT 18

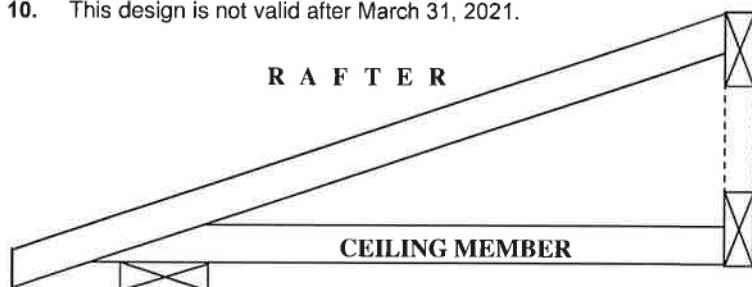
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

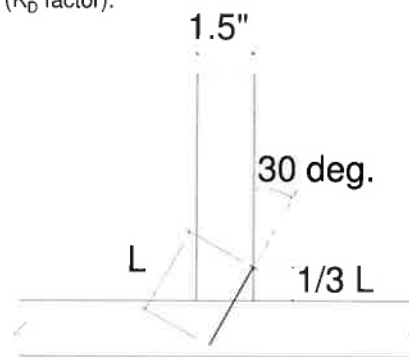
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

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
T
R
U
S
S



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



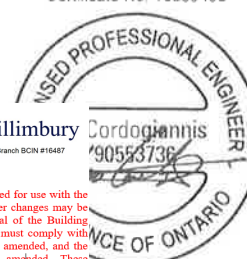
Town of
East Gwillimbury
Building Standards Branch BCIN #16487

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December

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

PEO
Certificate No. 10889485



NE1220-130
GREENPARK - TRINAR
HALL - LOT 18

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

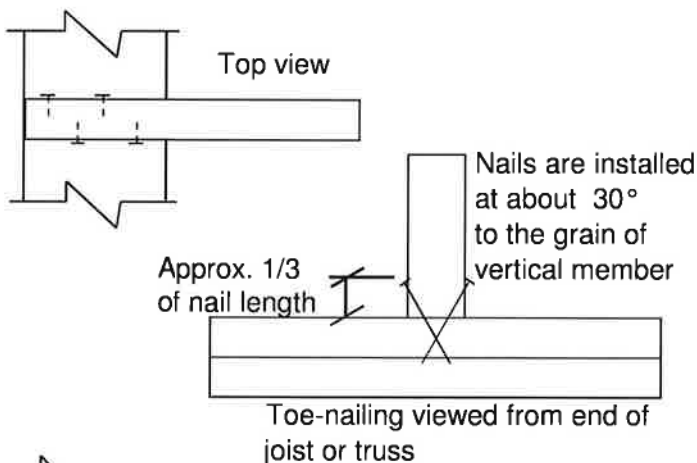
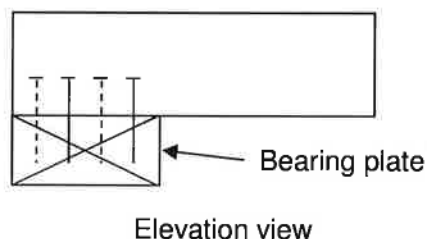
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

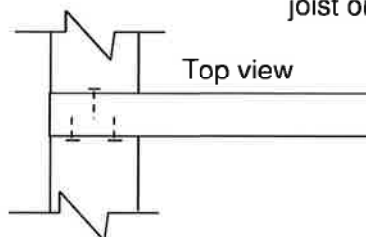
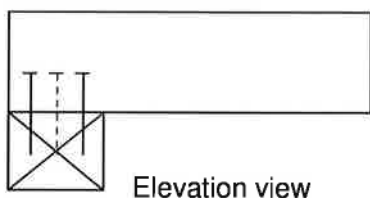
NOTES:

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	2021-02-03
Seismic System			
Zoning			