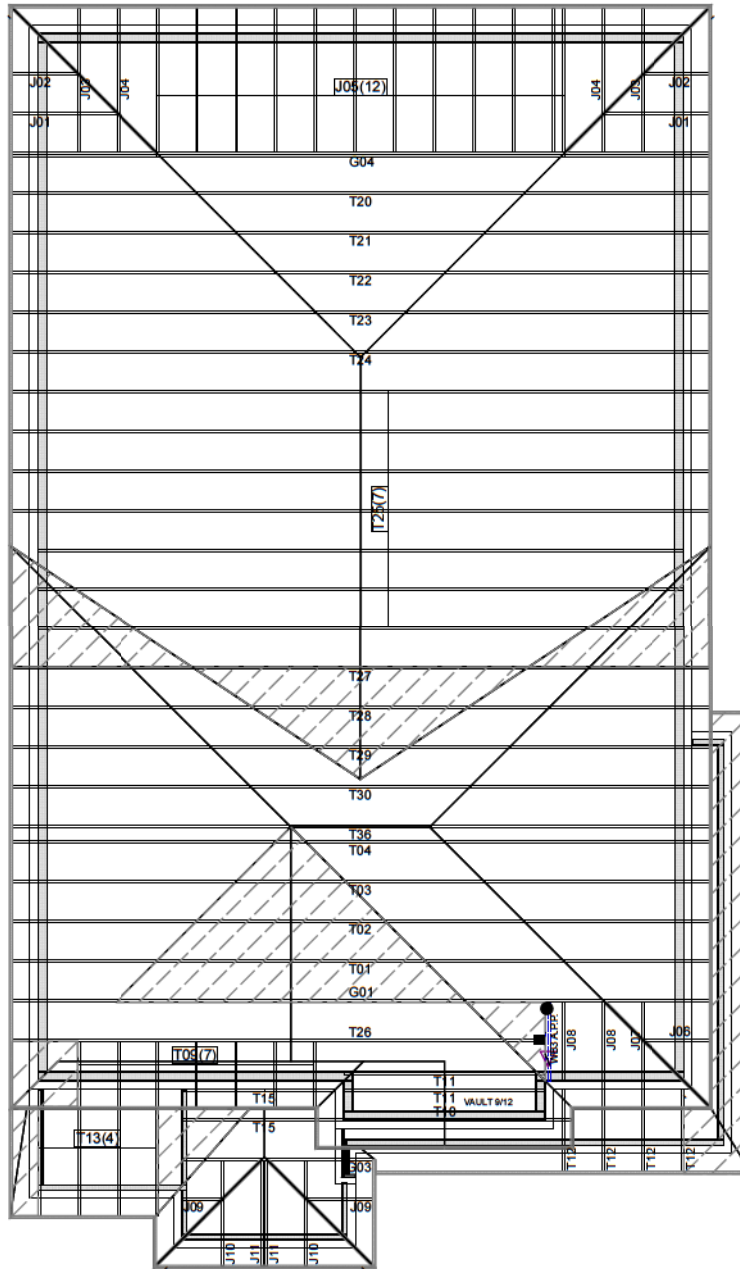




Hanger Name	Symbol	QTY
LUS24	▲	0
LJS26DS	■	1
HGUS26-2	●	1

PIGGYBACK TRUSSES TO BE SUPPORTED ON 2X4 SPF #1/2 MEMBERS @ 24" O/C 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.



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	2021-02-06
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.

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	T20-00766
Address	TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 7A ELEV 1
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/16/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\GLENWAY 7A ELEV 1\T-GLENWAY7A-1\

DESIGN INFORMATION

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

IMPORTANT INFORMATION

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

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

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

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

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

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

KOTT Inc.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400

NE1220-118
GREENPARK - TRINAR HALL -
GLENWAY 7A ELE 1

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 supports and do not necessarily take into account stability of the overall building structure
- Elevation of bearings must be carefully checked and shimmed to provide level bearings
- Adequate wood truss bearing is the responsibility of the building designer

DIMENSIONS

- Geometry of the truss and dimensions indicated on the drawing must be followed to the use of the installed truss.

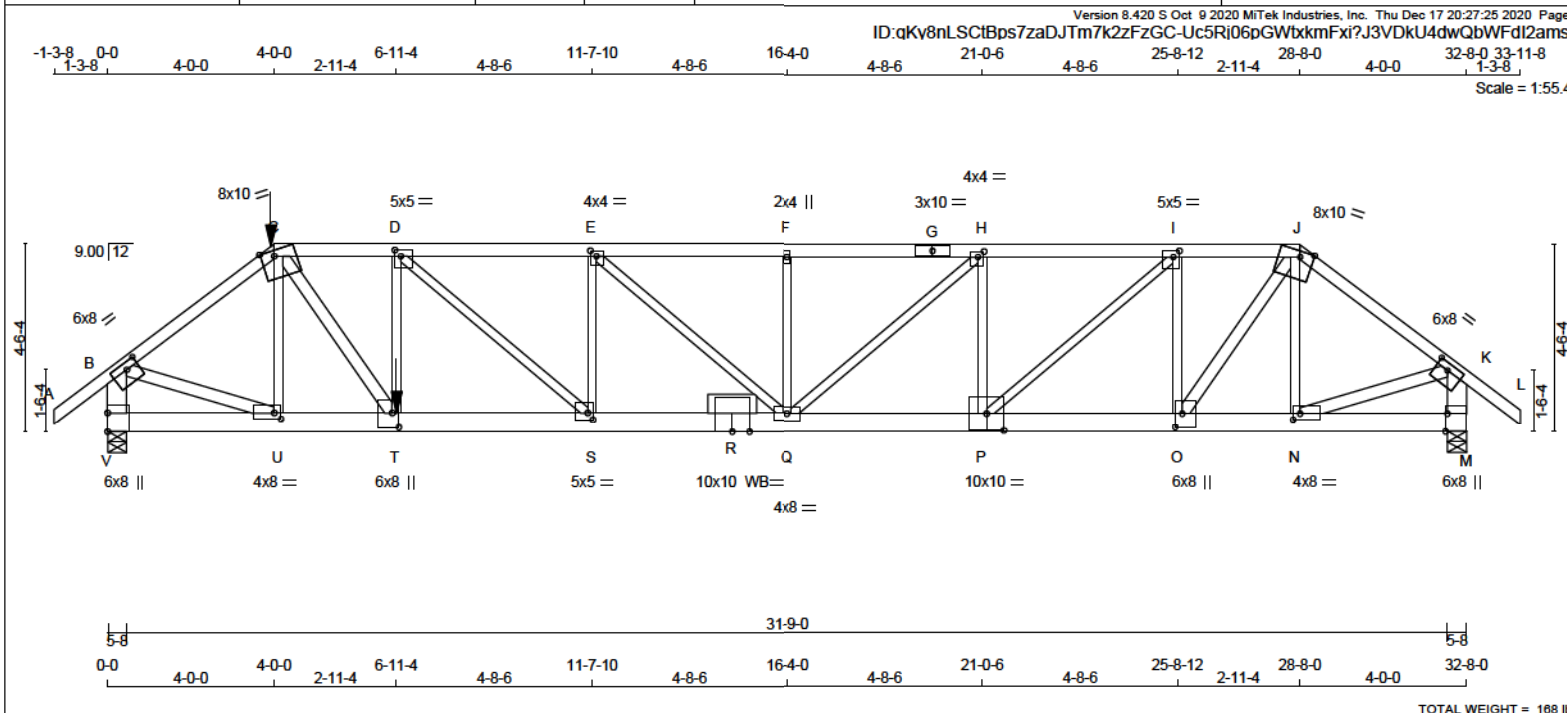


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



2020/04/22



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	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	2x6	DRY	No.2
M - K	2x6	DRY	2100F 1.8E
V - R	2x6	DRY	2100F 1.8E
R - P	2x6	DRY	2100F 1.8E
P - M	2x6	DRY	2100F 1.8E
ALL WEBS EXCEPT	2x3	DRY	No.2
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 TMVW-t	MT20	6.0	8.0	2.00	3.50
C TTWW-m	MT20	8.0	10.0	Edge	4.00
D TMVW-t	MT20	5.0	5.0	1.75	1.75
E TMVW-t	MT20	4.0	4.0	1.50	1.75
F TMVW-w	MT20	2.0	4.0		
G TS-t	MT20	3.0	10.0		
H TMVW-t	MT20	4.0	4.0	1.50	1.75
I TMVW-t	MT20	5.0	5.0	1.75	1.75
J TTWW-m	MT20	8.0	10.0	Edge	4.00
K TMVW-t	MT20	6.0	8.0	2.00	3.50
M BMV1+t	MT20	6.0	8.0	Edge	0.50
N BMVW-t	MT20	4.0	8.0	1.75	2.00
O BMVW+t	MT20	6.0	8.0	4.25	2.00
P BSWW-t	MT20	10.0	10.0	5.25	5.00
Q BMVW-t	MT20	4.0	8.0		
R BS-t	MT20	10.0	10.0		
S BMVW-t	MT20	5.0	5.0	2.00	1.50
T BMVW+t	MT20	6.0	8.0	4.25	2.00
U BMVW-t	MT20	4.0	8.0	1.75	2.00
V BMV1+t	MT20	6.0	8.0	5.50	

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	4893	4893	0	5-8
M VERT	3351	3351	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	3615	2104 / 0	608 / 0
V COMBINED	2472	1450 / 0	408 / 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				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LC)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
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	-8676 / 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 / 6676	-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/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.

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 (0.32")

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



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

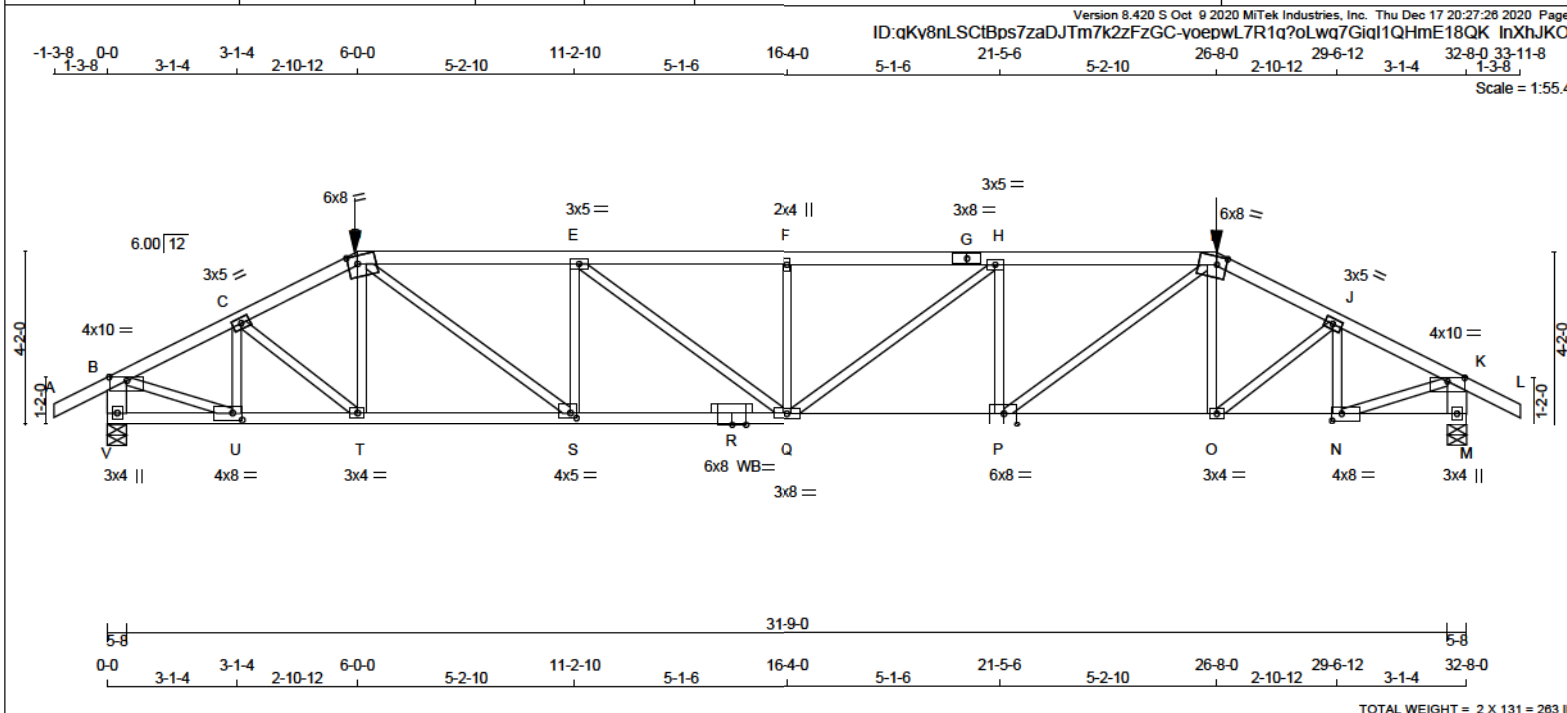


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Seismic System			
Zoning			



CONTINUED ON PAGE 2



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	12	TOP	
M - K	12	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	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	5108	0	5108	0	0	5-8	2-13		
M VERT	5108	0	5108	0	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									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)
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	0.58 (1)	3.28	E-Q	0 / 1240	0.15 (1)	
G-H	-11106 / 0	-234.6	-234.6	0.58 (1)	3.28	Q-F	-1110 / 0	0.15 (1)	
H-I	-10094 / 0	-234.6	-234.6	0.52 (1)	3.47	Q-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	HEEL	CONN.	
D	6-0-0	-560	-560	---	FRONT	VERT	TOTAL	---	C1
I	26-8-0	-560	-560	---	FRONT	VERT	TOTAL	---	C1

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 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. (LL) = L/360 (1.09")	
CALCULATED VERT. DEF. (LL) = L/969 (0.29")	
ALLOWABLE DEF. (TL) = L/360 (1.09")	
CALCULATED VERT. DEF. (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)
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)	

Dec 16, 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.

CONNECTION REQUIREMENTS

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

East Gwillimbury
Building Standards Branch BCIN #16467

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

CONTINUED ON PAGE 2

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Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Thu Dec 17 20:27:26 2020 Page 2

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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	BMWW-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

READ ALL NOTES ON THIS PAGE AND ON
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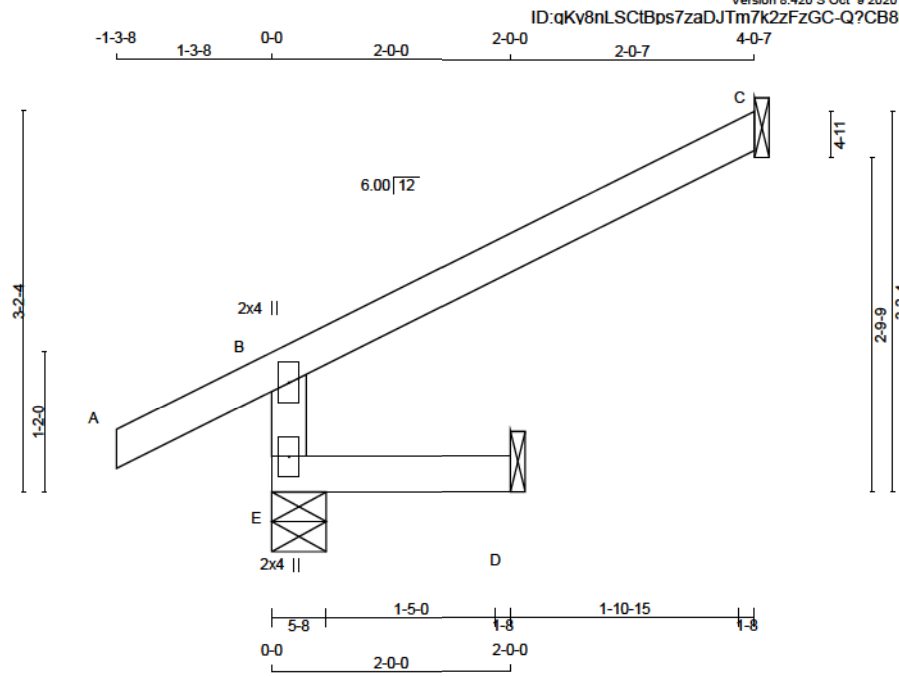
East Gwillimbury

Building Standards Branch BCIN #16487

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times. The building permit must be clearly
posted on site at all times.

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

KOTT



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	528	0	528	0
C	188	0	188	0
D	35	0	44	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
E	372	270 / 0	23 / 0
C	130	105 / 0	0 / 0
D	32	0 / 0	19 / 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC)	MEMB.
FR-TO		FROM TO	LENGTH	FR-TO			
E-B	-483 / 0	0.0	0.0 0.02 (3)	E-B	7.81		
A-B	0 / 38	-124.4	-124.4 0.16 (1)	A-B	10.00		
B-C	-28 / 0	-124.4	-124.4 0.34 (1)	B-C	6.25		
E-D	0 / 0	-39.2	-39.2 0.03 (3)	E-D	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



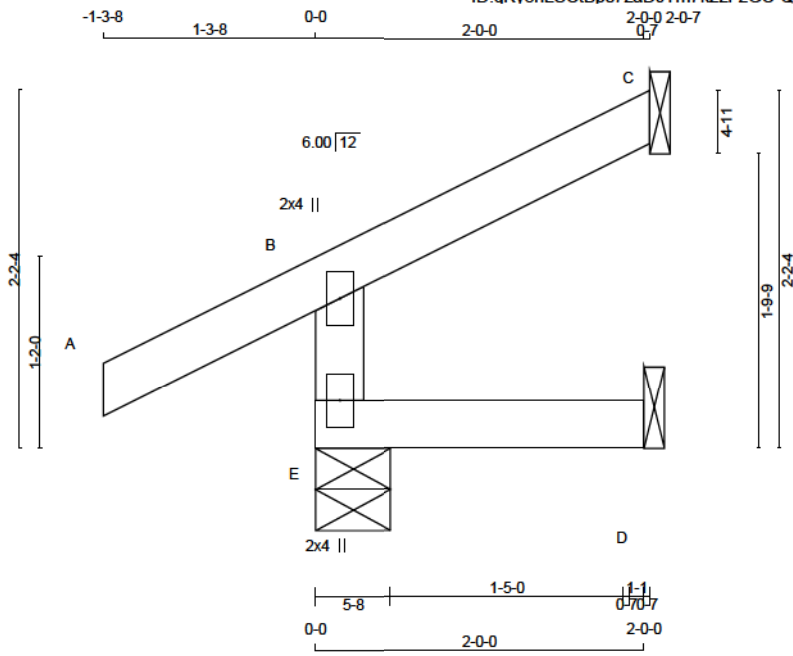
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

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
E	370	0	370	0
C	96	0	96	0
D	35	0	44	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
				SNOW
JT	COMBINED			LIVE
E	264	183	0	23
C	86	54	0	0
D	32	0	0	19

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 HORZ. LOAD (LC)	MAX. FACTORED FORCE (LBS)
FR-TO		FROM	TO	FR-TO		FROM	TO
E-B	-327	0	0.0	0.0	0.0	0.0	7.81
A-B	0	38	-124.4	-124.4	0.16	(1)	10.00
B-C	-14	0	-124.4	-124.4	0.09	(1)	6.25
E-D	0	0	-39.2	-39.2	0.03	(3)	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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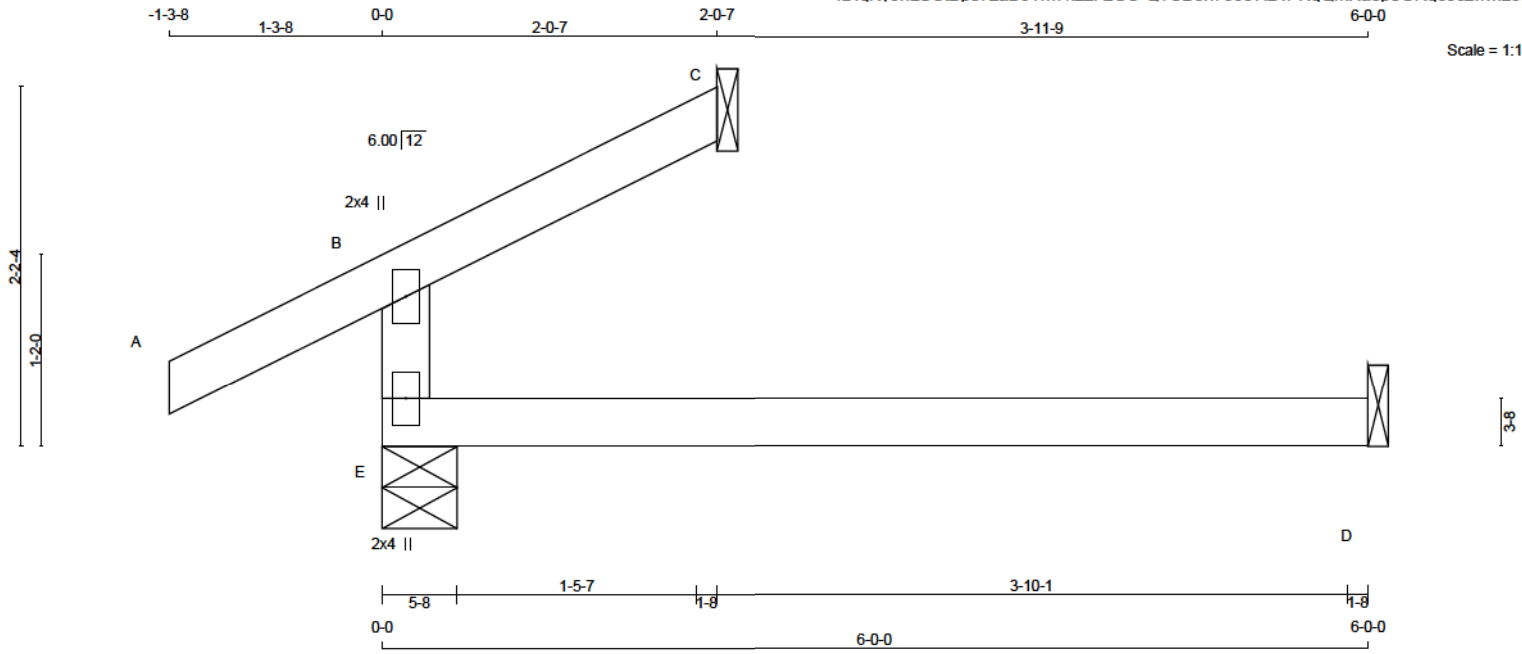


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Scale = 1:14.0



TOTAL WEIGHT = 2 X 12 = 24 LB

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

DRY: SEASONED LUMBER.

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
E	485	0	485	0	5-8
C	96	0	96	0	1-8
D	97	0	123	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
E	350	183 / 0	74 / 0	0 / 0
C	86	54 / 0	0 / 0	0 / 0
D	88	0 / 0	52 / 0	0 / 0

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

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

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

LOADING
 TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
E-B	-327 / 0	E-B	7.81
A-B	0 / 38	A-B	10.00
B-C	-14 / 0	B-C	6.25
E-D	0 / 0	E-D	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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 SECTION
 (PSI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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

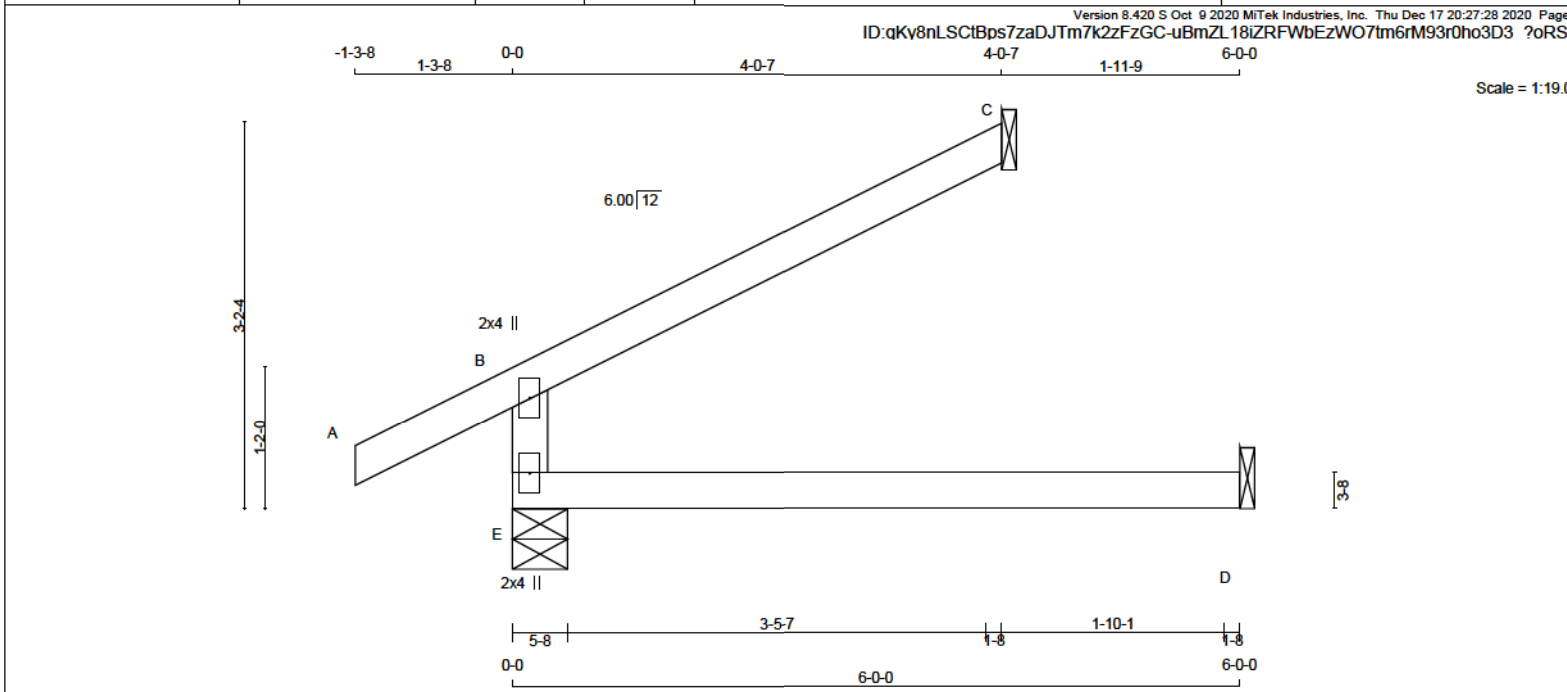


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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



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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	DOWN	UPLIFT	IN-SX
E 621	0	0	5-8
C 188	0	0	1-8
D 97	0	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 DEAD SOIL
E 458	270 / 0	74 / 0	0 / 0 0 / 0 114 / 0 0 / 0
C 130	105 / 0	0 / 0	0 / 0 0 / 0 24 / 0 0 / 0
D 88	0 / 0	52 / 0	0 / 0 0 / 0 36 / 0 0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	LENGTH
FR-TO		FROM TO		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

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- TPIC 2014

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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



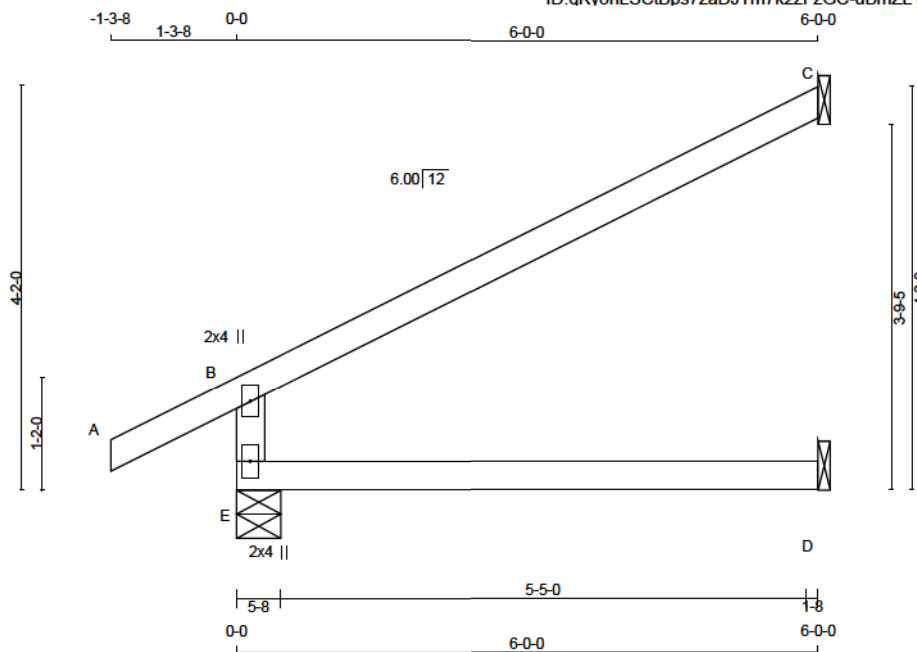
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





Scale = 1:23.7

TOTAL WEIGHT = 12 X 17 = 205 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		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	GROSS REACTION	HORZ	GROSS REACTION	HORZ	DOWN	UPLIFT	BRG	IN-SX
E	774	0	0	774	0	0	5-8	1-8	1-8
C	280	0	0	280	0	0	1-8	1-8	1-8
D	97	0	0	123	0	0	1-8	1-8	1-8

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

UNFACTORED REACTIONS		1ST LCASE		MAX / MIN		COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	563	355 / 0	74 / 0	0 / 0	0 / 0	133 / 0	0 / 0
C	193	157 / 0	0 / 0	0 / 0	0 / 0	36 / 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

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)	MAX. FACTORED FORCE (LBS)
FR-TO			
E-B	-635 / 0	0.0 0.0 0.24 (3)	7.81
A-B	0 / 38	-124.4 -124.4 0.16 (1)	10.00
B-C	-42 / 0	-124.4 -124.4 0.76 (1)	6.25
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

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)
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)



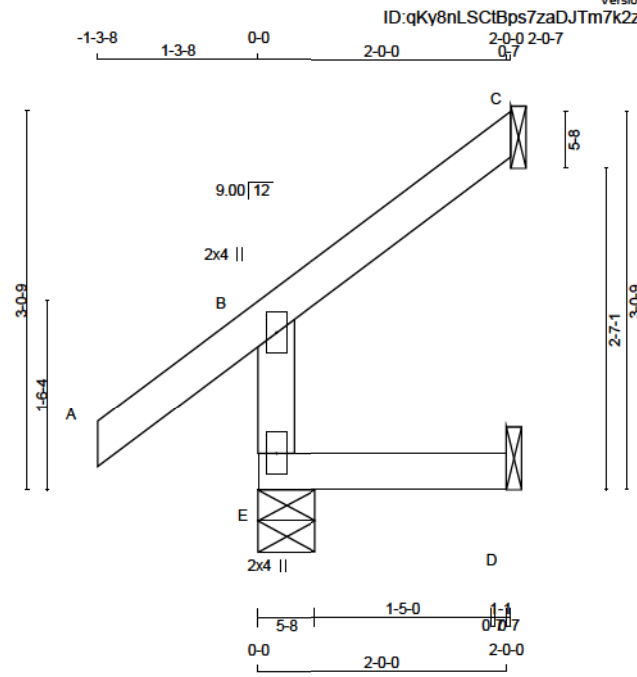
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





Scale = 1:18.5

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

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

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	REQD
E	372	0	372	0	0	5-8	1-8	1-8
C	96	0	96	0	0	1-8	1-8	1-8
D	36	0	45	0	0	1-8	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST CASE	MAX	MIN	COMPONENT	REACTIONS
E	265	184 / 0	23 / 0	0 / 0	0 / 0
C	66	54 / 0	0 / 0	0 / 0	0 / 0
D	32	0 / 0	19 / 0	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 = 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)

MEMB.	CHORDS			WEBS		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO						
E-B	-329 / 0	0.0	0.0 (3)	7.81		
A-B	0 / 51	-124.4	-124.4 (1)	10.00		
B-C	-18 / 0	-124.4	-124.4 (1)	6.25		
E-D	0 / 0	-39.2	-39.2 (3)	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

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

DESIGN ASSUMPTIONS
-OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



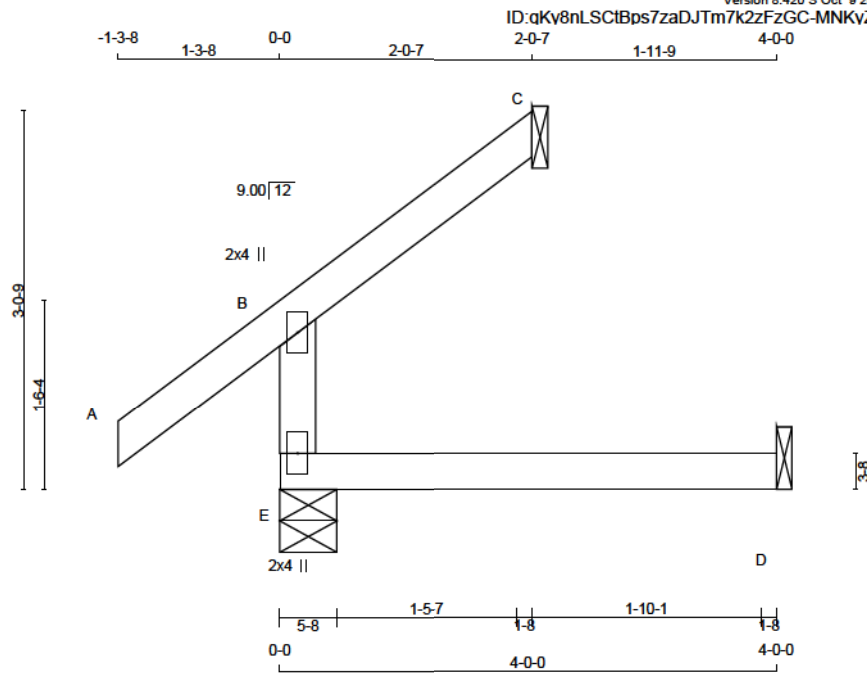
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





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

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
E	418	418	5-8	1-8
C	96	96	1-8	1-8
D	68	68	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	SNOW LIVE PERM.LIVE WIND DEAD SOIL
E	307	184 / 0 48 / 0 0 / 0 0 / 0 75 / 0 0 / 0
C	66	54 / 0 0 / 0 0 / 0 0 / 0 12 / 0 0 / 0
D	62	0 / 0 36 / 0 0 / 0 0 / 0 25 / 0 0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, 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 HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED HORZ. LOAD (LC)	MAX. FACTORED LENGTH (FT)
FR-TO		FROM TO		FR-TO			
E-B	-329 / 0	0.0 0.0 0.08 (3)	7.81	E-B	-329 / 0		
A-B	0 / 51	-124.4 -124.4 0.17 (1)	10.00	A-B	0 / 51		
B-C	-18 / 0	-124.4 -124.4 0.09 (1)	6.25	B-C	-18 / 0		
E-D	0 / 0	-39.2 -39.2 0.11 (3)	10.00	E-D	0 / 0		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:
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- TPIC 2014

DESIGN ASSUMPTIONS
- OVERHANG NOT TO BE ALTERED OR CUT OFF.
(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

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

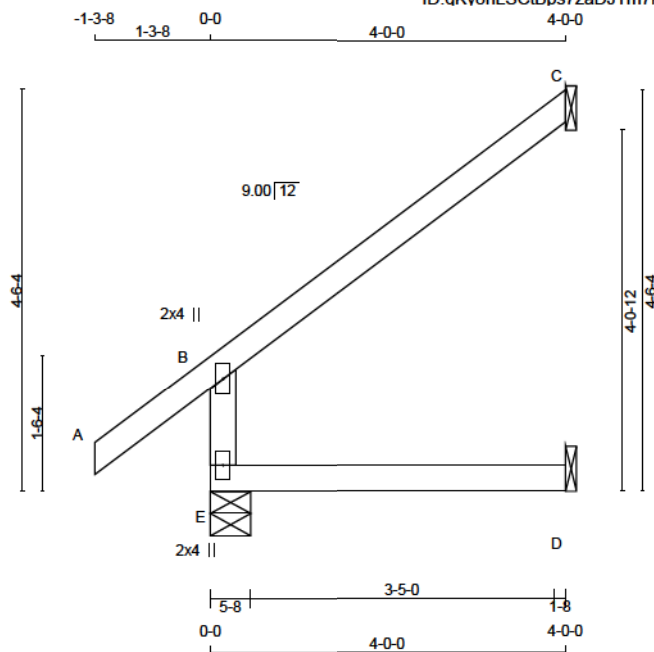


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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TOTAL WEIGHT = 2 X 14 = 27 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		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
E	571	0	571	0	5-8
C	187	0	187	0	1-8
D	68	0	86	0	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	413	270 / 0	48 / 0	0 / 0	0 / 0	95 / 0	0 / 0
C	129	105 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
D	62	0 / 0	36 / 0	0 / 0	0 / 0	25 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORZ. LOAD (LBS)
FR-TO			
E-B	-482 / 0	0.0	0.0
A-B	0 / 51	-124.4	-124.4
B-C	-37 / 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:

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

CSI: TC=0.34/1.00 (B-C:1) , BC=0.12/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.19/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 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)
MAX MIN	MAX MIN	MAX MIN	MAX MIN
MT20	650	371	1747

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (B) (INPUT = 0.90)
JSI METAL= 0.26 (B) (INPUT = 1.00)

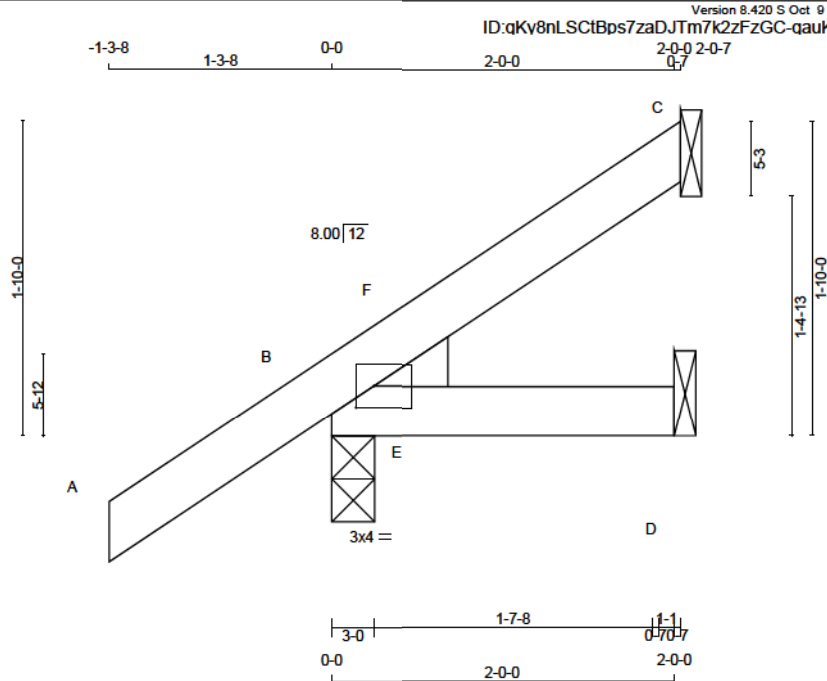


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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



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TOTAL WEIGHT = $2 \times 8 = 15 \text{ lb}$

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
B - D	2x4	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	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
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	WEDGE
C	106	0	106	0	0	1-8	1-8	
B	336	0	336	0	0	3-0	1-8	2x4 L
D	61	0	61	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	74	55 / 0	4 / 0	0 / 0	0 / 0	15 / 0	0 / 0
B	240	188 / 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 = 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)	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	0.17 (1)	10.00	E - F	-83 / 16
B - F	-24 / 0	-124.4	-124.4	0.02 (2)	8.25		
F - C	0 / 8	-124.4	-124.4	0.06 (1)	10.00		0.00 (1)
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:

- 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=0.06/1.00 (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

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.38 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



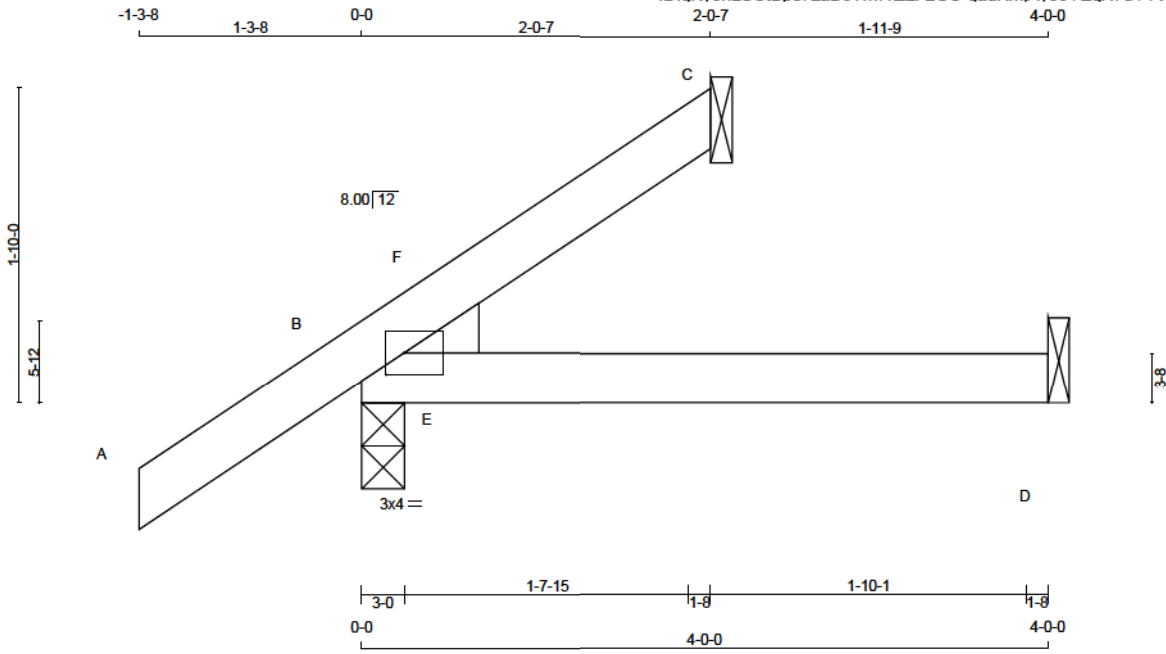
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-4
Sewage System			
Zoning			





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

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
B - D	2x4	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	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
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	WEDGE
C	144	0	144	0	0	1-8	1-8	
B	368	0	368	0	0	3-0	1-8	2x4 L
D	70	0	84	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
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 = 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 CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)
FR-TO		FROM TO		LENGTH-TO			
A-B	0 / 41	-124.4	-124.4 0.17 (1)	10.00	E-F	0 / 156	0.00 (1)
B-C	-111 / 0	-124.4	-124.4 0.12 (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/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					
	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= 0.32 (B) (INPUT = 0.90)
JSI METAL= 0.04 (B) (INPUT = 1.00)



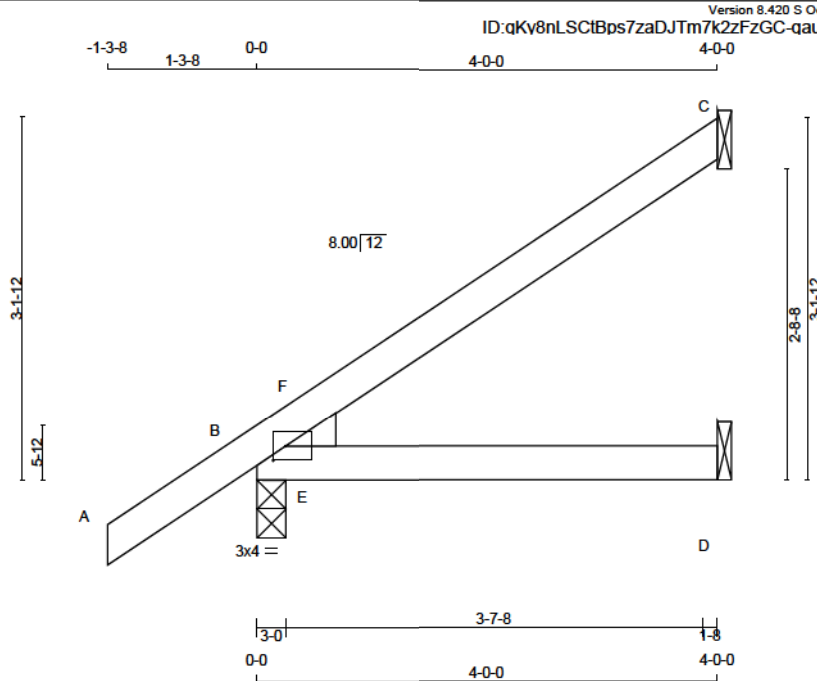
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-4
Sewage System			
Zoning			





Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Thu Dec 17 20:27:30 2020 Page 1
ID:qKv8nLScIBps7zaDJTm7k2ZFzGC-qauKmiAv53VeqX7uVYvECGRWwehSGzJMSJHXWsy7
Scale = 1:20.0
TOTAL WEIGHT = 2 X 13 = 25 lb

LUMBER				DESCR.
N. L. G. A. RULES	SIZE	LUMBER		
A - C	2x4	DRY	No.2	SPF
B - D	2x4	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	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	IN-SX	IN-SX	IN-SX		
C	217	0	217	0	0	1-8	1-8				
B	498	0	498	0	0	3-0	1-8			2x4 L	
D	110	0	110	0	0	1-8	1-8				

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

UNFACTORED REACTIONS		1ST LCASE		MAX / MIN		COMPONENT REACTIONS	
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
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)	MEMB.	MAX. FACTORED FORCE (LBS)
FR-TO		FR-TO	
A-B	0 / 41	A-B	-248 / 56
B-F	-68 / 0	B-F	0.00 (1)
F-C	0 / 7		
B-E	0 / 0		
E-D	0 / 0		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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 (0.03")
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) (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= 0.57 (B) (INPUT = 0.90)
JSI METAL = 0.07 (B) (INPUT = 1.00)



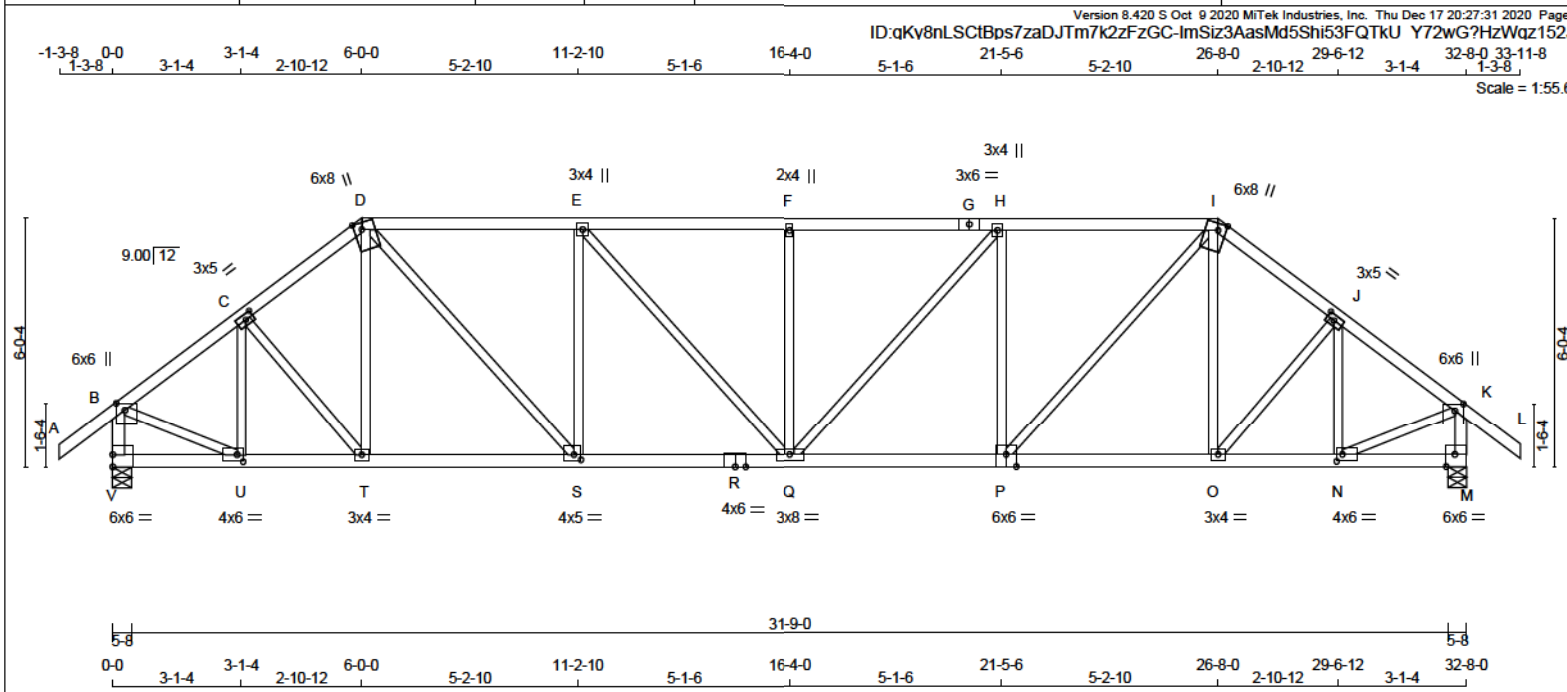
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	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
SPF

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	BMVWVW-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	DOWN 0	5-8	5-8
M	2845	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
V	2098	1233 / 0	343 / 0
M	2098	1233 / 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 = 2.82 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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED CSI (LC)	MEMB.
FR-TO		FROM	TO	LENGTH	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 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=0.80/1.00 (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)

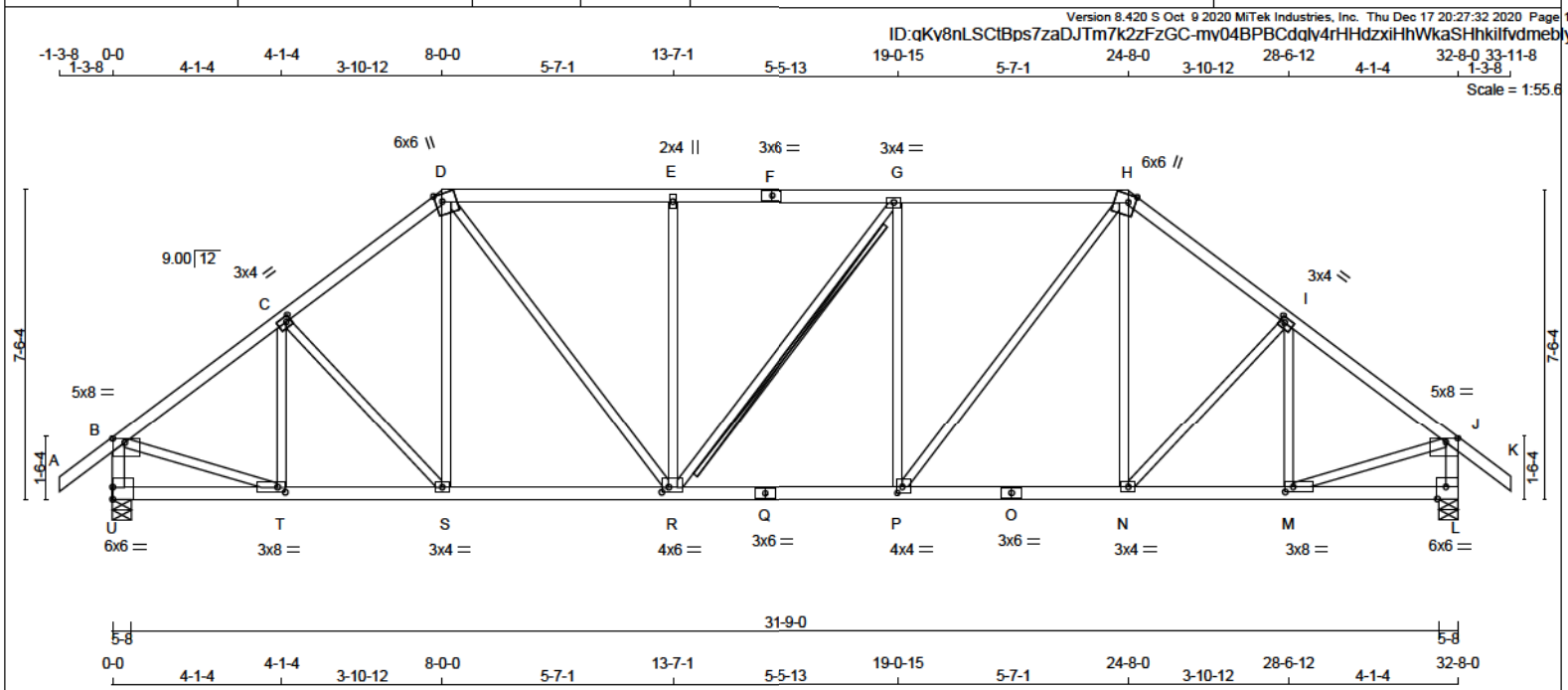


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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-05
Sewage System			
Zoning			



LUMBER			N. L. G. A. RULES	
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
D - F	2x4	DRY	No.2	SPF
F - H	2x4	DRY	No.2	SPF
H - K	2x4	DRY	No.2	SPF
U - B	2x4	DRY	No.2	SPF
U - 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	TMWV-p	MT20	5.0	8.0	1.25	3.50
C	CTMWV-t	MT20	3.0	4.0	1.50	1.50
D	TTWW+m	MT20	6.0	6.0	Edge	2.00
E	TMW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	MTMW-t	MT20	3.0	4.0		
H	TTWW+m	MT20	6.0	6.0	Edge	2.00
I	TMWV-t	MT20	3.0	4.0	1.50	1.50
J	TMWV-p	MT20	5.0	8.0	1.25	3.50
M	BMV1-t	MT20	6.0	6.0	Edge	2.50
N	BMWV-t	MT20	3.0	4.0	1.50	2.25
O	BMWV-t	MT20	3.0	4.0		
P	BS-t	MT20	3.0	6.0		
Q	BMWV-t	MT20	4.0	4.0	1.75	1.50
R	BS-t	MT20	3.0	6.0		
S	BMWVW-t	MT20	4.0	6.0	1.50	2.00
T	BMWV-t	MT20	3.0	4.0		
U	BMWV-t	MT20	3.0	8.0	1.50	2.25
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	HORZ	DOWN	HORZ	UPLIFT	IN-SX
U	2845	0	2845	0	0	5-8
L	2845	0	2845	0	0	5-8

UNFACTORED REACTIONS

UNFACTORED REACTIONS		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
U	2008	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0
L	2008	1233 / 0	343 / 0	0 / 0	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 = 3.23 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT G-R

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO			FR-TO		
A-B	0/51	-124.4	-124.4 0.17 (1)	10.00	T-C	-515 /0	0.16 (1)
B-C	-2851 /0	-124.4	-124.4 0.47 (1)	3.89	C-S	-86 /0	0.05 (1)
C-D	-2852 /0	-124.4	-124.4 0.06 (1)	3.89	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)	3.89	P-H	0 /1219	0.27 (1)
I-J	-2851 /0	-124.4	-124.4 0.47 (1)	3.89	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	0.16 (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 0.81 (1)	10.00			
Q-P	0 /2999	-39.2	-39.2 0.81 (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			

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 (0.14")
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) , SS=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

	MAX	MIN	MAX	MIN	MAX	MIN
MT20	650	371	1747	788	1987	1873

PLATE PLACEMENT TOL. = 0.002 inches

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)



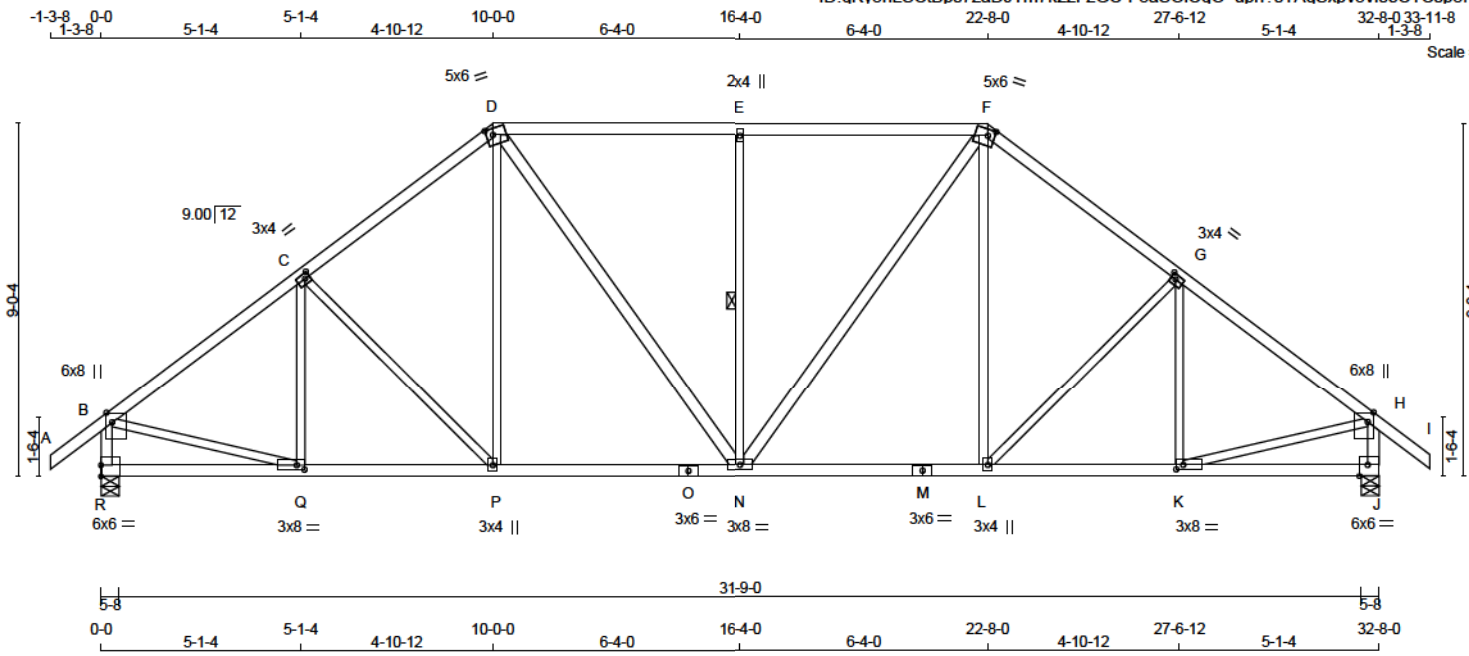
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



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

Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Thu Dec 17 20:27:33 2020 Page 1



TOTAL WEIGHT = 158 LB

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+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	BMV1-t	MT20	6.0	6.0	Edge 2.50	
K	BMVW-l	MT20	3.0	8.0	1.50	2.25
L	BMVW+t	MT20	3.0	4.0		
M	BS-t	MT20	3.0	6.0		
N	BMVW+l	MT20	3.0	6.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW+t	MT20	3.0	4.0		
Q	BMVW-l	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	REQD BRG
JT VERT	2845	2845	5-8	5-8
R	2845	2845	5-8	5-8

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1233	0	SNOW
R	1233	0	SNOW

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 L1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00	Q-C	-348 / 36	0.15 (1)
B-C	-2934 / 0	-124.4	-124.4 0.55 (1)	3.57	C-P	-347 / 0	0.33 (1)
C-D	-2721 / 0	-124.4	-124.4 0.52 (1)	3.72	P-D	0 / 479	0.11 (2)
D-E	-2585 / 0	-124.4	-124.4 0.76 (1)	3.33	D-N	0 / 754	0.12 (1)
E-F	-2585 / 0	-124.4	-124.4 0.76 (1)	3.33	N-E	-965 / 0	0.51 (1)
F-G	-2721 / 0	-124.4	-124.4 0.52 (1)	3.72	N-F	0 / 754	0.12 (1)
G-H	-2934 / 0	-124.4	-124.4 0.55 (1)	3.57	L-F	0 / 479	0.11 (2)
H-I	0 / 51	-124.4	-124.4 0.17 (1)	10.00	L-G	-347 / 0	0.33 (1)
R-B	-2760 / 0	0.0	0.0 0.29 (1)	5.19	K-G	-348 / 36	0.15 (1)
J-H	-2760 / 0	0.0	0.0 0.29 (1)	5.19	B-Q	0 / 2446	0.55 (1)
					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 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 (0.12")
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 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)

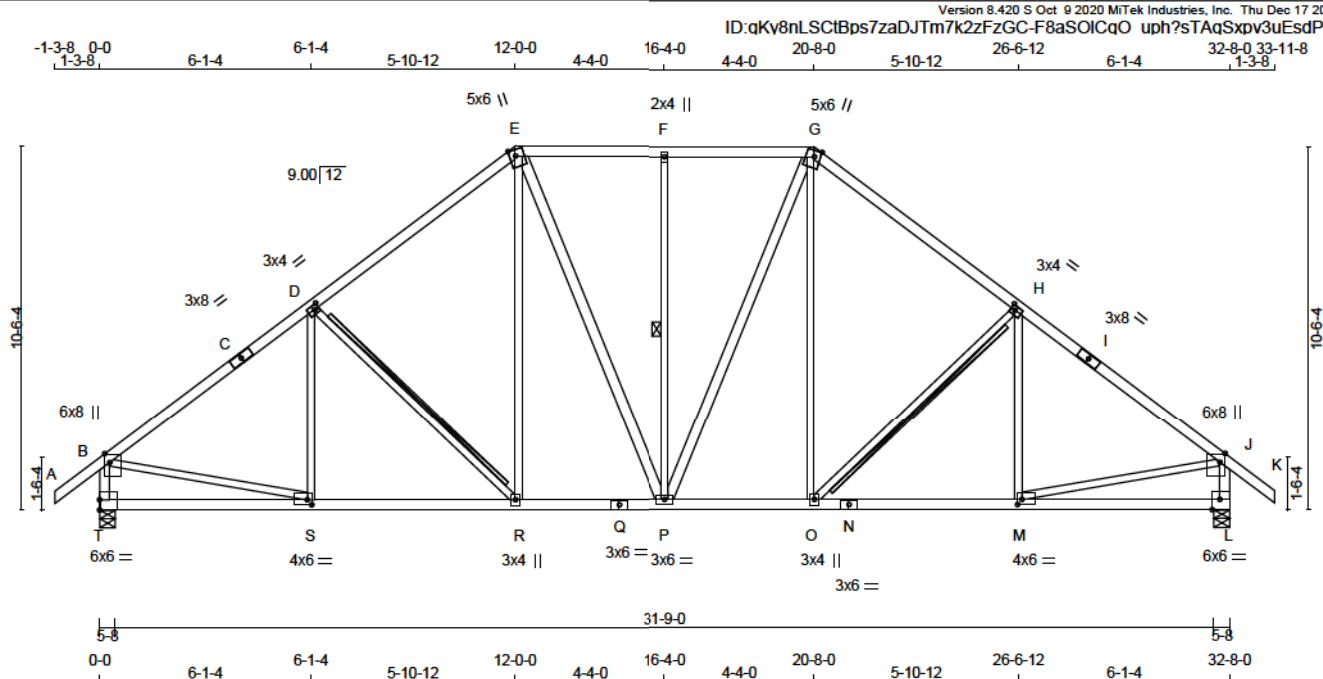


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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





Scale = 1:66.6

LUMBER			
N. L. G. A. RULES			
CHORDS	SIZE	LUMBER	DESCR.
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 EXCEPT	2x3	DRY	No.2
E - P	2x4	DRY	No.2
P - G	2x4	DRY	No.2

DRY: SEASONED LUMBER.

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	8.0	3.00	1.75
C	TS-t		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		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 BRG	REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX	
T	2845	0	2845	0	0	5-8	5-8
L	2845	0	2845	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN. COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
T	2098	1233 / 0	343 / 0	0 / 0	0 / 0	522 / 0	0 / 0
L	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) T, L

BRACING

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 @ 8" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 80% 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				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LO1 MAX (PLF)	MAX. CSI (LC)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0 / 51		-124.4	-124.4	0.17 (1)	10.00	S-D	-203 / 146	0.12 (1)
B-C	-2968 / 0		-124.4	-124.4	0.83 (1)	3.19	D-R	-562 / 0	0.31 (1)
C-D	-2968 / 0		-124.4	-124.4	0.83 (1)	3.19	R-E	0 / 810	0.14 (1)
D-E	-2547 / 0		-124.4	-124.4	0.73 (1)	3.52	E-P	0 / 432	0.07 (1)
E-F	-2186 / 0		-124.4	-124.4	0.34 (1)	4.30	P-F	-648 / 0	0.50 (1)
F-G	-2186 / 0		-124.4	-124.4	0.34 (1)	4.30	P-G	0 / 432	0.07 (1)
G-H	-2547 / 0		-124.4	-124.4	0.73 (1)	3.52	O-G	0 / 810	0.14 (1)
H-I	-2968 / 0		-124.4	-124.4	0.83 (1)	3.19	H-I	-562 / 0	0.31 (1)
I-J	-2968 / 0		-124.4	-124.4	0.83 (1)	3.19	M-H	-203 / 146	0.12 (1)
J-K	0 / 51		-124.4	-124.4	0.17 (1)	10.00	B-S	0 / 2462	0.55 (1)
T-B	-2748 / 0		0.0	0.0	0.29 (1)	5.20	M-J	0 / 2462	0.55 (1)
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 / 1997		-39.2	-39.2	0.43 (1)	10.00			
Q-P	0 / 1997		-39.2	-39.2	0.43 (1)	10.00			
P-O	0 / 1997		-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		= 60.8	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 (0.11")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL)= L/ 999 (0.18")

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) , SS=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)	(PLI)	(PLI)
	MAX	MIN	MAX	MIN	MAX
MT20	650	371	1747	788	1987

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



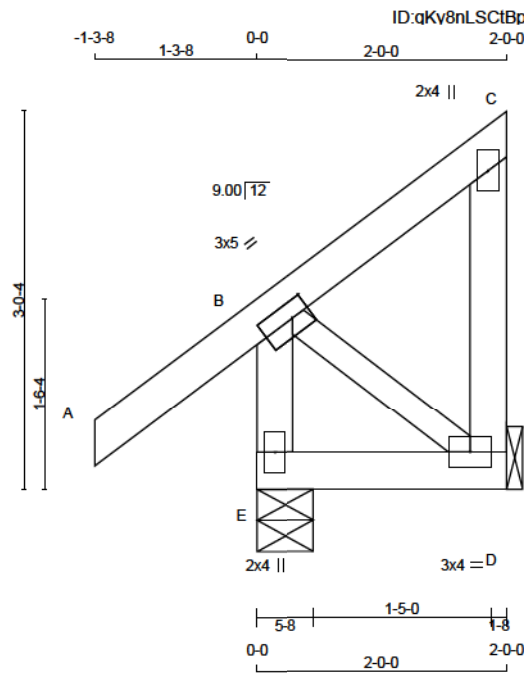
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-01
Sewage System			
Zoning			





TOTAL WEIGHT = 7 X 13 = 88 lb

LUMBER				DESCR.
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 No.2				SPF
DRY: SEASONED LUMBER.				

PLATES (table is in inches)					
JT TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	5.0	1.50 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	335	0	5-8	1-8		
D	164	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	239	166 / 0	21 / 0	PERM. LIVE	WIND	DEAD	SOIL
D	121	70 / 0	21 / 0	0 / 0	0 / 0	31 / 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)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX (LC)	
FR-TO		FROM	TO	FR-TO			
E-B	-298 / 0	0.0	0.0 0.03 (1)	B-D	0 / 0	0.00 (1)	
A-B	0 / 51	-124.4	-124.4 0.17 (1)				
B-C	0 / 0	-124.4	-124.4 0.08 (1)				
D-C	-124 / 0	0.0	0.0 0.02 (1)				
E-D	0 / 0	-39.2	-39.2 0.04 (3)				

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 (PSI)	SECTION (PLI)	
MT20	850	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

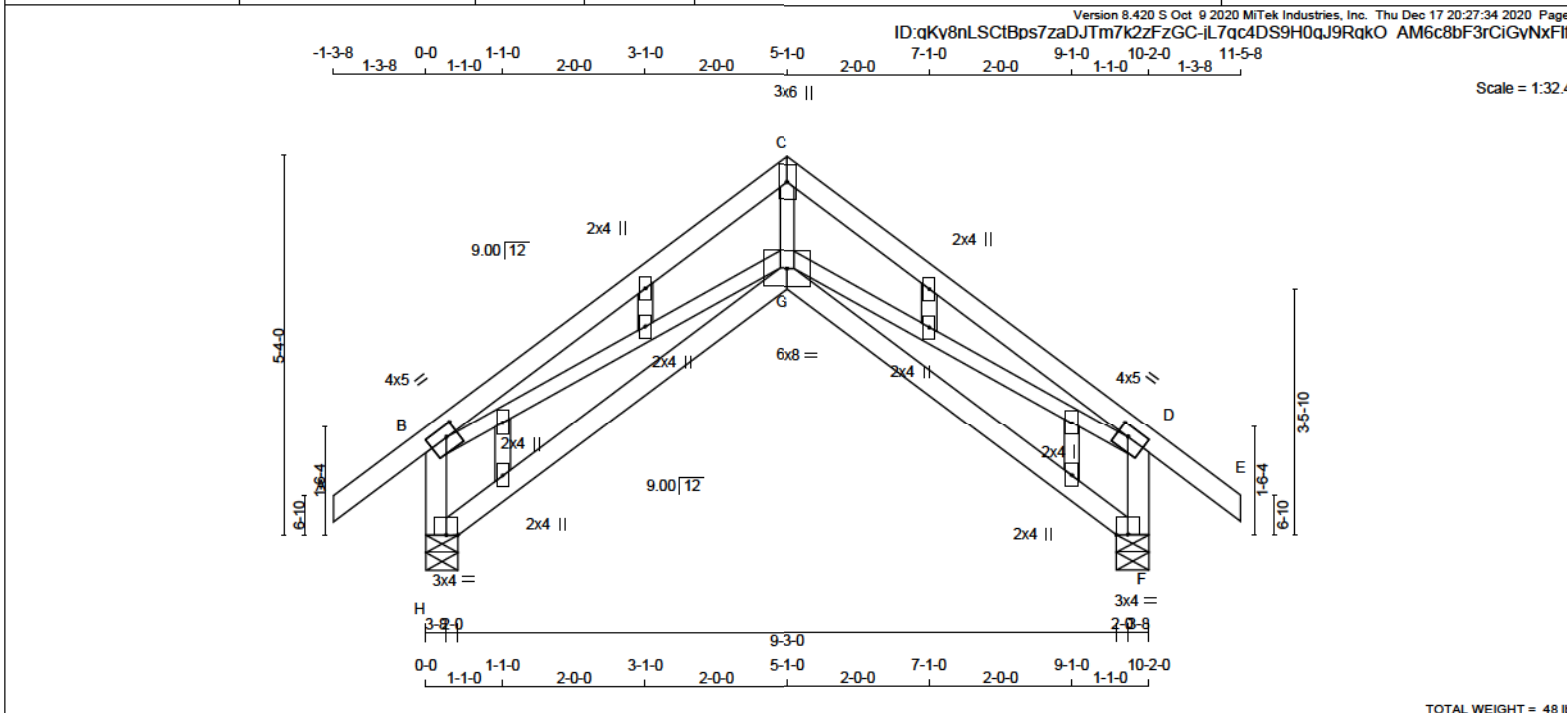


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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



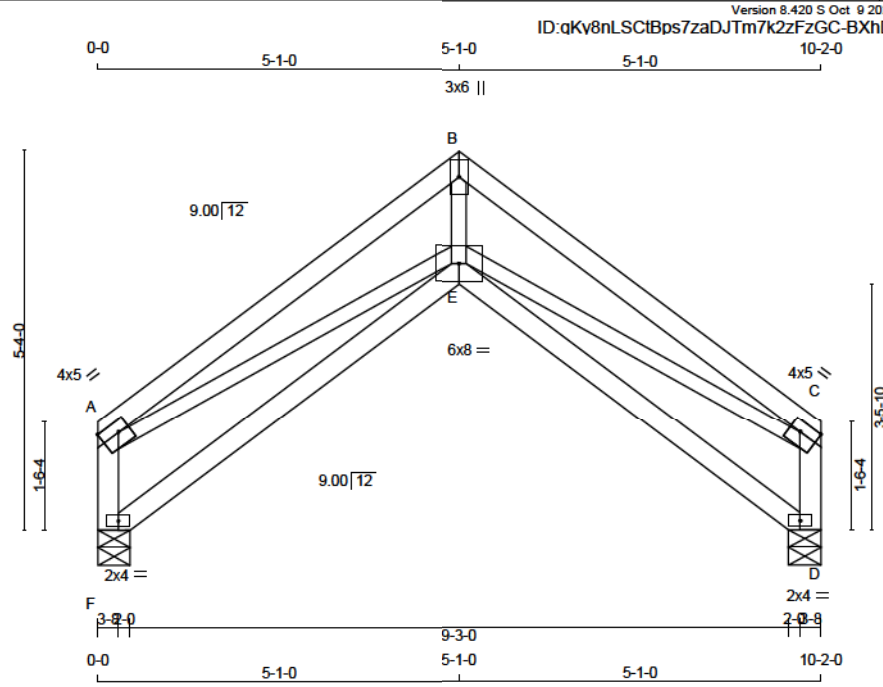


LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED INPUT REQD										TOP CH. LL = 34.8 PSF									
H - B 2x4 DRY No.2 SPF										GROSS REACTION GROSS REACTION BRG BRG										DL = 8.0 PSF									
A - C 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 10.5 PSF									
C - E 2x4 DRY No.2 SPF										H 1004 0 1004 0 0 5-8 5-8										DL = 7.3 PSF									
F - D 2x4 DRY No.2 SPF										F 1004 0 1004 0 0 5-8 5-8										TOTAL LOAD = 60.6 PSF									
H - G 2x4 DRY No.2 SPF																													
G - F 2x4 DRY No.2 SPF																													
										UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
ALL WEBS 2x3 DRY No.2 SPF										1ST LCASE MAX/MIN COMPONENT REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL									
ALL GABLE WEBS 2x3 DRY No.2 SPF										JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL										BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
DRY: SEASONED LUMBER.										H 734 450 / 0 107 / 0 0 / 0 0 / 0 178 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
										F 734 450 / 0 107 / 0 0 / 0 0 / 0 178 / 0 0 / 0										- PART 9 OF BCBC 2018 , ABC 2019									
GABLE STUDS SPACED AT 2-0-0 OC.										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, F										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
										BRACING										- CSA 086-14									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.51 FT.										- TPIC 2014									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)									
PLATES (table is in inches)										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD									
JT TYPE PLATES W LEN Y X										LOADING										ALLOWABLE DEFL.(LL)= L/360 (0.34")									
B TMVW-t MT20 4.0 5.0 1.75 2.00										TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(LL) = L/969 (0.09")									
C TTW+p MT20 3.0 6.0										CHORDS WEBS										ALLOWABLE DEFL.(TL)= L/360 (0.34")									
D TMVW-t MT20 4.0 5.0 1.75 2.00										MAX. FACTORED MAX. FACTORED										CALCULATED VERT. DEFL.(TL) = L/819 (0.15")									
F BVM1-p MT20 3.0 4.0										MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. MAX.										CSI: TC=0.47/1.00 (C-D-1) , BC=0.25/1.00 (G-H-3) ,									
G BBWWW-p MT20 6.0 8.0										(LBS) (PLF) CSI (LC) UNBRAC LENGTHFR-TO										WB=0.35/1.00 (D-G-1) , SSI=0.20/1.00 (C-D-1)									
H BVM1-p MT20 3.0 4.0										FR-TO FROM TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
I, J, K, L, M, N, O, P										H-B -904 / 0 0.0 0.0 0.10 (1) 7.81 G-C 0 / 1482 0.33 (1)										SHEAR=1.10 TENS=1.10									
										A-B 0 / 51 -124.4 -124.4 0.17 (1) 10.00 G-D 0 / 1549 0.35 (1)										COMPANION LIVE LOAD FACTOR = 1.00									
										B-C -1762 / 0 -124.4 -124.4 0.47 (1) 4.51 B-G 0 / 1549 0.35 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE									
										C-D -1762 / 0 -124.4 -124.4 0.47 (1) 4.51										FOR QUALITY CONTROL IN THE TRUSS									
										D-E 0 / 51 -124.4 -124.4 0.17 (1) 10.00										MANUFACTURING PLANT .									
										F-D -904 / 0 0.0 0.0 0.10 (1) 7.81										NAIL VALUES									
										H-G 0 / 0 -39.2 -39.2 0.25 (3) 10.00										PLATE GRIP(DRY) SHEAR SECTION									
										G-F 0 / 0 -39.2 -39.2 0.25 (3) 10.00										(PSI) (PLI) (PLI)									
																				MAX MIN MAX MIN MAX MIN									
																				MT20 850 371 1747 788 1987 1873									
																				PLATE PLACEMENT TOL. = 0.250 inches									

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

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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
B	TTW+p	MT20	3.0	6.0	
C	TMVW-t	MT20	4.0	5.0	1.75
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

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	832	0	5-8
F 832	0	0	1-8
D 832	0	0	1-8

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT COMBINED	SNOW LIVE PERM.LIVE WIND DEAD SOIL
F 618	354 / 0 107 / 0 0 / 0 0 / 0 156 / 0 0 / 0
D 618	354 / 0 107 / 0 0 / 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. PURLIN 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) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO	LENGTH	FR-TO			
F-A	-732 / 0	0.0	0.0 0.08 (1)	E-B	0 / 1482	0.35 (1)	
A-B	-1762 / 0	-124.4 -124.4	0.47 (1)	E-C	0 / 1549	0.35 (1)	
B-C	-1762 / 0	-124.4 -124.4	0.47 (1)	A-E	0 / 1549	0.35 (1)	
D-C	-732 / 0	0.0	0.0 0.08 (1)				
F-E	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 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 (0.34")
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)
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)



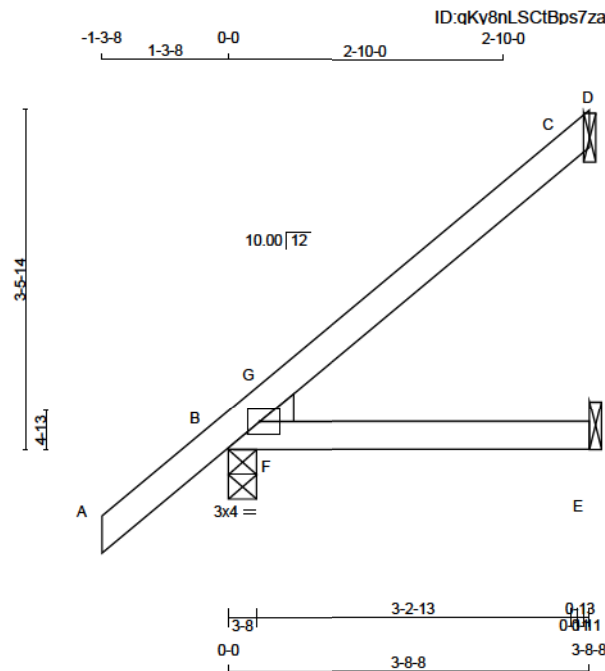
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = $4 \times 12 = 48$ lb

LUMBER				
N. L. G. A. RULES				
CHORDS	SIZE		LUMBER	DESCR.
A - D	2x4	DRY	No.2	SPF
B - E	2x4	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	4.0	1.50	1.50

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	HEEL	
	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX	WEDGE	
B	469	0	469	0	0	3-8	1-8	2x4 L
E	101	0	107	0	0	1-8	1-8	
C	198	0	198	0	0	1-8	1-8	

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

UNFACTORED REACTIONS

1ST LCASE		MAX / MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	339	222 / 0	39 / 0	0 / 0	0 / 0	78 / 0	0 / 0
E	83	22 / 0	33 / 0	0 / 0	0 / 0	28 / 0	0 / 0
C	139	102 / 0	6 / 0	0 / 0	0 / 0	31 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 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: (5)

CHORDS					WEBS				
MEMB.	MAX. FACTORED	FACTORED		MAX.	MAX.	MEMB.	MAX. FACTORED	MAX.	
	FORCE	VERT. LOAD	LC1				UNBRAC		FORCE
	(LBS)	(PLF)	CS1 (LC)				(LBS)		
FR-TO		FROM TO				FR-TO			
A-B	0 / 53	-124.4	-124.4	0.19 (5)	10.00				
B-G	-51 / 0	-124.4	-124.4	0.06 (3)	6.25	F-G	-209 / 50	0.00 (1)	
G-C	0 / 8	-124.4	-124.4	0.21 (1)	10.00				
C-D	-2 / 0	-20.0	-20.0	0.00 (4)	10.00				
B-F	0 / 0	-39.2	-39.2	0.17 (1)	10.00				
F-E	0 / 0	-39.2	-39.2	0.18 (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) = $L/999$ (0.02")
ALLOWABLE DEFL.(TL)= $L/360$ (0.19")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.03")

CSI: TC=0.21/1.00 (C-G:1) , BC=0.18/1.00 (E-F:1) ,
WB=0.00/1.00 (F-G:1) , SSI=0.20/1.00 (B-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)		SHEAR		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= 0.45 (B) (INPUT = 0.90)
JSI METAL= 0.07 (B) (INPUT = 1.00)



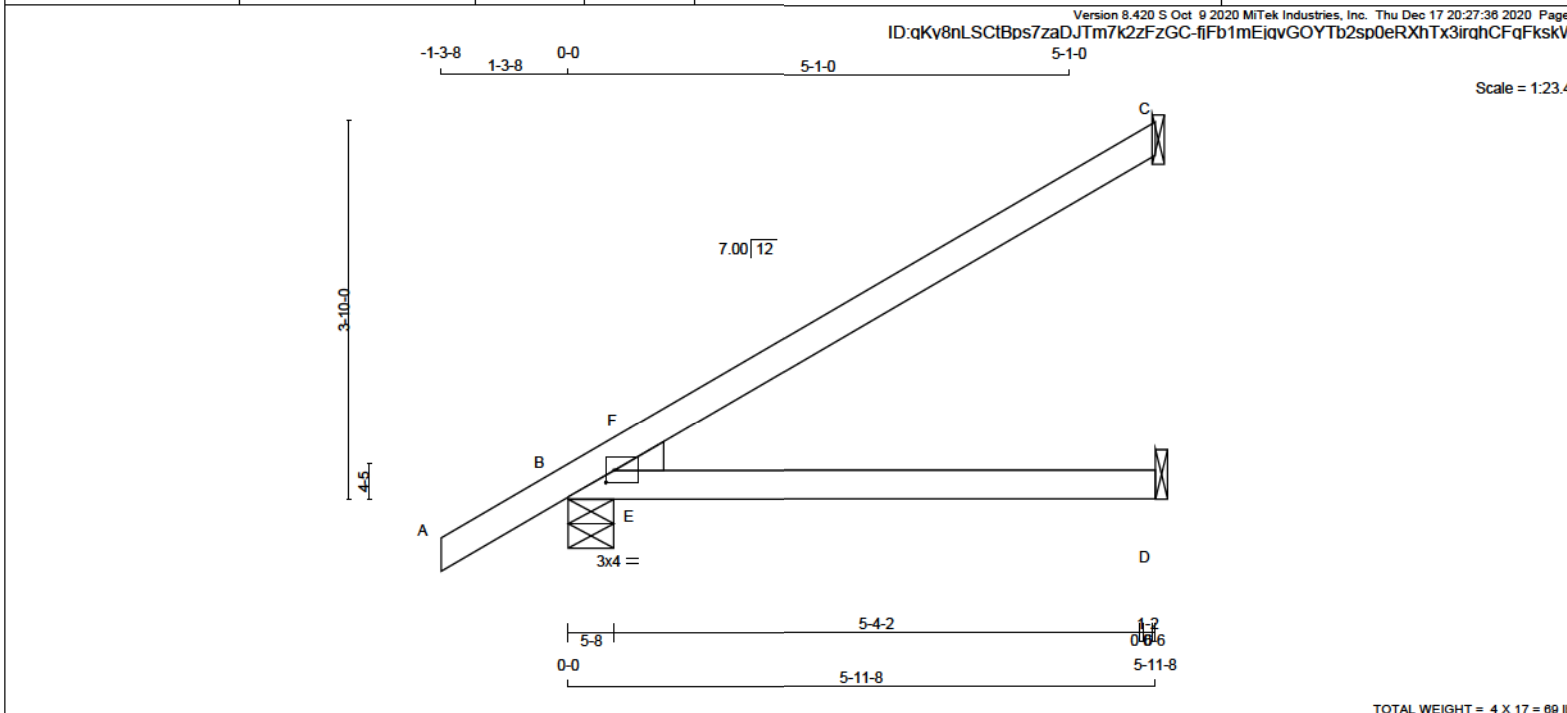
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-4
Sewage System			
Zoning			



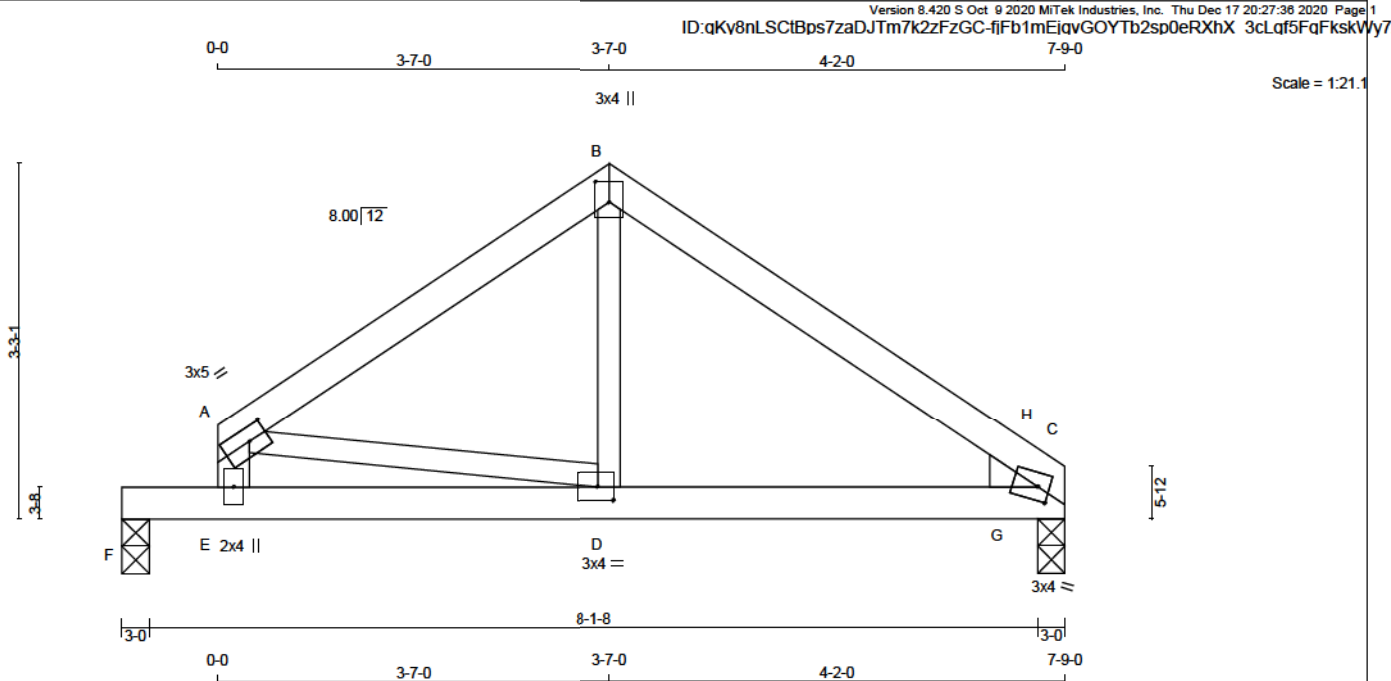


LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER A - C 2x4 DRY No.2 B - D 2x4 DRY 2100F 1.8E DESCR. SPF DRY: SEASONED LUMBER.	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><th>JT</th><th>VERT</th><th>HORZ</th><th>DOWN</th><th>HORZ</th><th>UPLIFT</th><th>IN-SX</th><th>IN-SX</th><th>HEEL</th></tr><tr><td>C</td><td>315</td><td>0</td><td>315</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td><td></td></tr><tr><td>B</td><td>657</td><td>0</td><td>657</td><td>0</td><td>0</td><td>5-8</td><td>1-8</td><td>2x4 L</td></tr><tr><td>D</td><td>172</td><td>0</td><td>180</td><td>0</td><td>0</td><td>1-8</td><td>1-8</td><td></td></tr></table> SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D UNFACTORED REACTIONS <table><tr><th>JT</th><th>1ST LCASE</th><th>MAX</th><th>MIN</th><th>COMPONENT</th><th>REACTIONS</th></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM. LIVE</td><td>WIND</td><td>DEAD</td><td>SOIL</td></tr><tr><td>C</td><td>220</td><td>168 / 0</td><td>8 / 0</td><td>0 / 0</td><td>0 / 0</td><td>44 / 0</td><td>0 / 0</td></tr><tr><td>B</td><td>478</td><td>302 / 0</td><td>63 / 0</td><td>0 / 0</td><td>0 / 0</td><td>113 / 0</td><td>0 / 0</td></tr><tr><td>D</td><td>141</td><td>39 / 0</td><td>55 / 0</td><td>0 / 0</td><td>0 / 0</td><td>47 / 0</td><td>0 / 0</td></tr></table> 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) <table><tr><th colspan="4">CHORDS</th><th colspan="4">WEBS</th></tr><tr><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>FACTORED VERT. LOAD (PLF)</th><th>FACTORED L1 MAX. (LC)</th><th>MEMB.</th><th>MAX. FACTORED FORCE (LBS)</th><th>MAX. FACTORED VERT. LOAD (PLF)</th><th>MAX. FACTORED L1 MAX. (LC)</th></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td>LENGTH</td><td>FR-TO</td><td></td><td>FROM TO</td><td>LENGTH</td></tr><tr><td>A- B</td><td>0 / 41</td><td>-124.4 -124.4</td><td>0.16 (1)</td><td>10.00</td><td>E- F</td><td>-457 / 60</td><td>0.00 (1)</td></tr><tr><td>B- F</td><td>-67 / 41</td><td>-124.4 -124.4</td><td>0.12 (3)</td><td>6.25</td><td></td><td></td><td></td></tr><tr><td>F- C</td><td>-5 / 7</td><td>-124.4 -124.4</td><td>0.54 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>B- E</td><td>0 / 0</td><td>-39.2 -39.2</td><td>0.33 (1)</td><td>10.00</td><td></td><td></td><td></td></tr><tr><td>E- D</td><td>0 / 0</td><td>-39.2 -39.2</td><td>0.34 (1)</td><td>10.00</td><td></td><td></td><td></td></tr></table>	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	HEEL	C	315	0	315	0	0	1-8	1-8		B	657	0	657	0	0	5-8	1-8	2x4 L	D	172	0	180	0	0	1-8	1-8		JT	1ST LCASE	MAX	MIN	COMPONENT	REACTIONS	JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL	C	220	168 / 0	8 / 0	0 / 0	0 / 0	44 / 0	0 / 0	B	478	302 / 0	63 / 0	0 / 0	0 / 0	113 / 0	0 / 0	D	141	39 / 0	55 / 0	0 / 0	0 / 0	47 / 0	0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED L1 MAX. (LC)	FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH	A- B	0 / 41	-124.4 -124.4	0.16 (1)	10.00	E- F	-457 / 60	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
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	HEEL																																																																																																																																				
C	315	0	315	0	0	1-8	1-8																																																																																																																																					
B	657	0	657	0	0	5-8	1-8	2x4 L																																																																																																																																				
D	172	0	180	0	0	1-8	1-8																																																																																																																																					
JT	1ST LCASE	MAX	MIN	COMPONENT	REACTIONS																																																																																																																																							
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CHORDS				WEBS																																																																																																																																								
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED L1 MAX. (LC)																																																																																																																																					
FR-TO		FROM TO	LENGTH	FR-TO		FROM TO	LENGTH																																																																																																																																					
A- B	0 / 41	-124.4 -124.4	0.16 (1)	10.00	E- F	-457 / 60	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																																																																																																																																								
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These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

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

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



TOTAL WEIGHT = $2 \times 27 = 53$ lb

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

DIMENSION BEARINGS

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG	HEEL WEDGE
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	
F	706	0	706	0	0	3-0	1-8	
C	706	0	706	0	0	3-0	1-8	2x4 R

UNFACTORED REACTIONS

UNFACTORED REACTIONS							
1ST LCASE		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 = 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)	CS1 MAX (LBS)	MAX. UNBRAC (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM-TO		LENGTH-FR-TO					
A-B	-717 / 0	-124.4 -124.4	0.28 (1)	6.25	D-B	0 / 380	0.09 (2)		
B-H	-732 / 0	-124.4 -124.4	0.23 (1)	6.25	A-D	0 / 604	0.14 (1)		
H-C	-700 / 0	-124.4 -124.4	0.41 (1)	6.25	G-H	-294 / 29	0.00 (1)		
E-A	-712 / 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		= 60.8	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)= $L/360$ (0.29")
CALCULATED VERT. DEFL.(LL) = $L/999$ (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

	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)

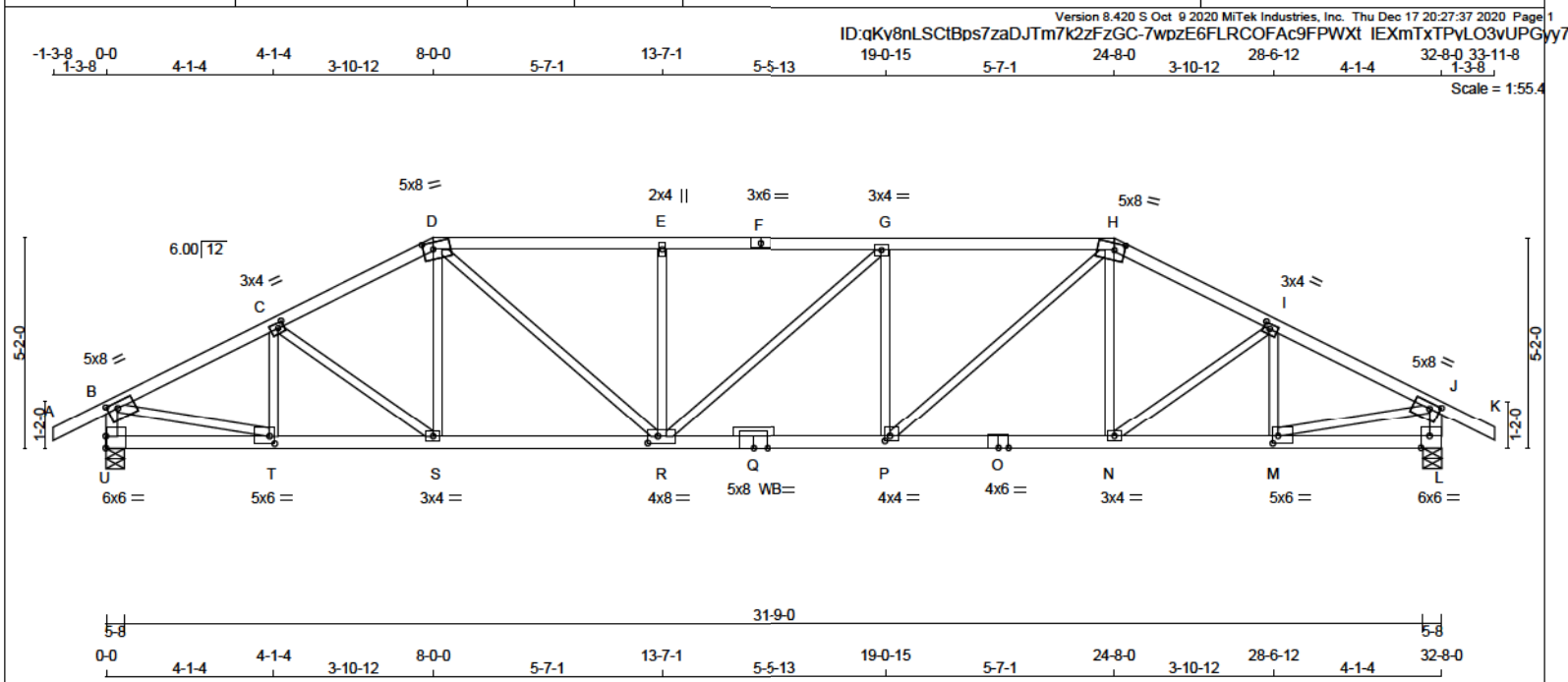


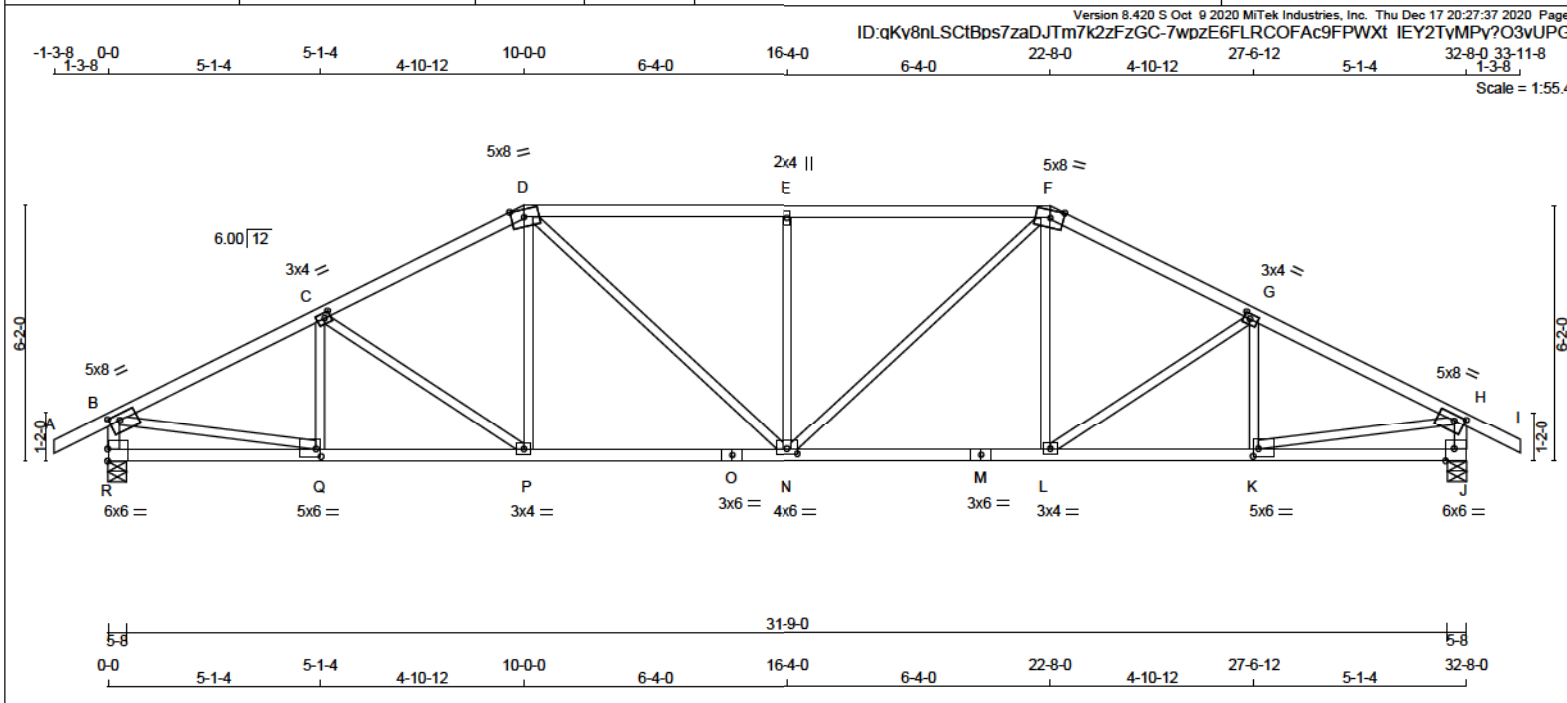
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-4
Sewage System			
Zoning			



**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.**

[illegible]



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

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

TMWW-t

MT20

3.0

4.0

1.50

1.75

D

TTWW-m

MT20

5.0

8.0

2.25

3.75

E

TMW+w

MT20

2.0

4.0

F

TTWW-m

MT20

5.0

8.0

2.25

3.75

G

TMWW-t

MT20

3.0

4.0

1.50

1.75

H

TMVW-t

MT20

5.0

8.0

1.75

3.00

K

BMV1-t

MT20

6.0

6.0

Edge 2.50

L

BMWW-t

MT20

5.0

6.0

2.25

1.50

M

BS-t

MT20

3.0

4.0

N

BMWW-t

MT20

4.0

6.0

1.50

3.00

O

BS-t

MT20

3.0

4.0

P

BMWW-t

MT20

3.0

4.0

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

HORZ

DOWN

HORZ

UPLIFT

IN-SX

IN-SX

R

2842

0

2842

0

0

5-8

5-8

J

2842

0

2842

0

0

5-8

5-8

UNFACTORED REACTIONS

1ST LCASE

MAX

MIN

COMPONENT REACTIONS

JT

COMBINED

SNOW

LIVE

PERM.LIVE

WIND

DEAD

SOIL

R

2096

1232 / 0

343 / 0

0 / 0

0 / 0

522 / 0

0 / 0

J

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) R, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.55 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 FORCE (LBS)

FACTORED VERT. LOAD (PLF)

FACTORED LC1 MAX CSI (LC) UNBRAC

WEBS

MAX. FACTORED FORCE (LBS)

MAX. FACTORED FORCE (LBS)

FR-TO

A-B

0 / 38

-124.4

-124.4 0.16 (1)

10.00

Q-C

-388 / 19

0.09 (1)

B-C

-3877 / 0

-124.4

-124.4 0.61 (1)

3.06

C-P

-388 / 0

0.25 (1)

C-D

-3583 / 0

-124.4

-124.4 0.56 (1)

3.22

P-D

0 / 463

0.10 (2)

D-E

-3838 / 0

-124.4

-124.4 0.90 (1)

2.55

D-N

0 / 893

0.20 (1)

E-F

-3838 / 0

-124.4

-124.4 0.90 (1)

2.55

N-E

-966 / 0

0.58 (1)

F-G

-3583 / 0

-124.4

-124.4 0.56 (1)

3.22

N-F

0 / 893

0.20 (1)

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)

R-Q

0 / 0

-39.2

-39.2 0.17 (3)

10.00

K-H

0 / 3544

0.80 (1)

Q-P

0 / 3495

-39.2

-39.2 0.71 (1)

10.00

P-O

0 / 3182

-39.2

-39.2 0.67 (1)

10.00

O-N

0 / 3182

-39.2

-39.2 0.67 (1)

10.00

N-M

0 / 3182

-39.2

-39.2 0.67 (1)

10.00

M-L

0 / 3182

-39.2

-39.2 0.67 (1)

10.00

L-K

0 / 3495

-39.2

-39.2 0.71 (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

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 (0.21")

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

CALCULATED VERT. DEFL.(TL) = L/999 (0.39")

CSI: TC=0.90/1.00 (D-E-1), BC=0.71/1.00 (P-Q-1),

WB=0.80/1.00 (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 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 (O) (INPUT = 0.90)

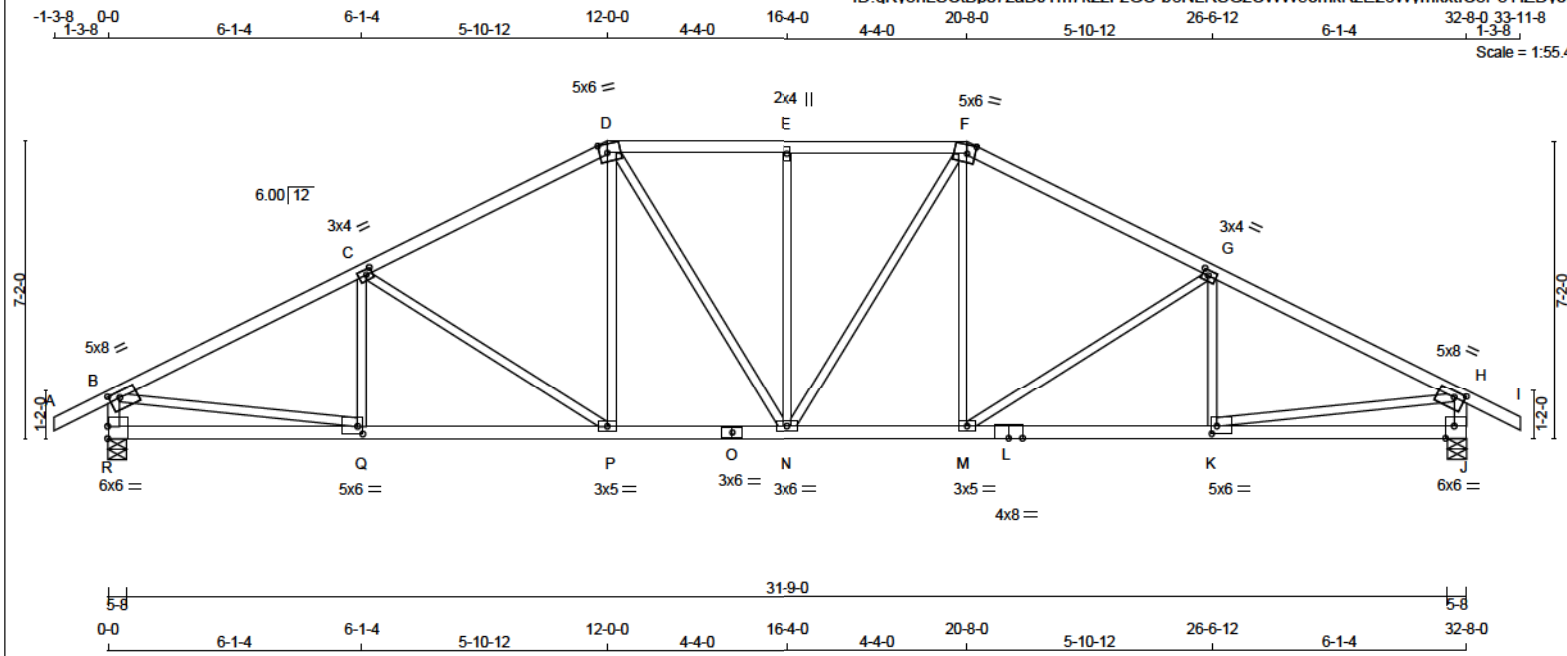
JSI METAL= 0.98 (M) (INPUT = 1.00)

900

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



LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA							
N. L. G. A. RULES					BEARINGS										SPECIFIED LOADS:							
CHORDS	SIZE	LUMBER			DESCR.	FACTORED		MAXIMUM FACTORED		INPUT		REQRD		TOP CH. LL = 34.8 PSF								
A - D	2x4	DRY	No.2			SPF	GROSS REACTION		GROSS REACTION		BRG		BRG		DL = 8.0 PSF							
D - F	2x4	DRY	No.2			SPF	JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BOT CH. LL = 10.5 PSF							
F - I	2x4	DRY	No.2			SPF	R	2842	0	2842	0	0	5-8	5-8	DL = 7.3 PSF							
R - B	2x4	DRY	No.2			SPF	J	2842	0	2842	0	0	5-8	5-8	TOTAL LOAD = 60.6 PSF							
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											SPACING = 24.0 IN. C/C					
EXCEPT																	LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM					
DRY: SEASONED LUMBER.																			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 (0.19")			
																			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)			



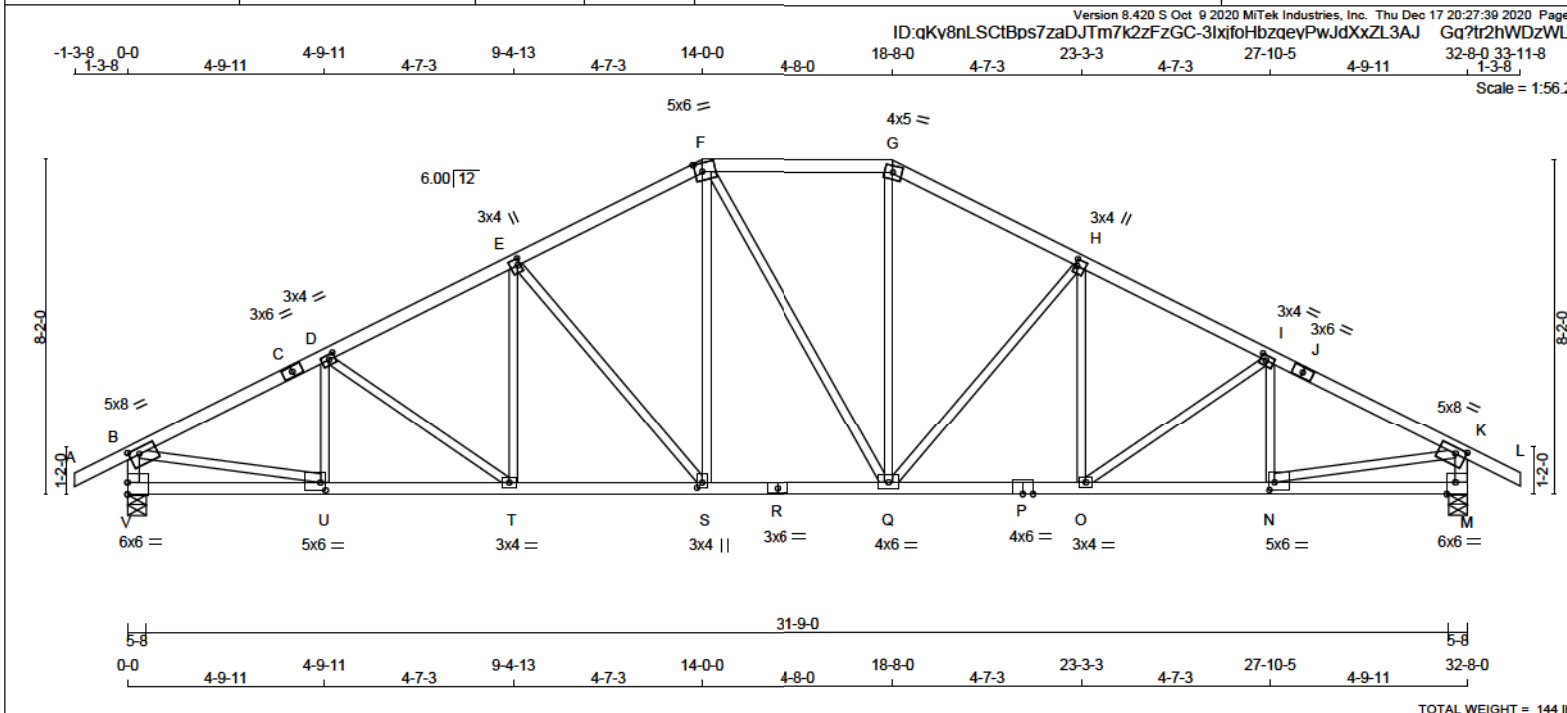
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										TOP CH. LL = 34.8 PSF									
A - C 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF									
C - F 2x4 DRY No.2 SPF										V 2842 0 2842 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
F - G 2x4 DRY No.2 SPF										M 2842 0 2842 0 0 5-8 5-8										DL = 7.3 PSF									
G - J 2x4 DRY No.2 SPF										UNFACTORED REACTIONS										TOTAL LOAD = 60.6 PSF									
J - L 2x4 DRY No.2 SPF										1ST LCASE MAX/MIN COMPONENT REACTIONS										SPACING = 24.0 IN. C/C									
V - B 2x4 DRY No.2 SPF										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
M - K 2x4 DRY No.2 SPF										V 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
V - R 2x4 DRY No.2 SPF										M 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
R - P 2x4 DRY No.2 SPF										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M										- PART 9 OF BCBC 2018 , ABC 2019									
P - M 2x4 DRY No.2 SPF										BRACING										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
ALL WEBS 2x3 DRY No.2 SPF										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 FT.										- CSA 086-14									
EXCEPT										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										- TPIC 2014									
DRY: SEASONED LUMBER.										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										(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									
PLATES (table is in inches)										LOADING										ALLOWABLE DEFL.(LL)= L/360 (1.09")									
JT TYPE PLATES W LEN Y X										TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(LL) = L/999 (0.18")									
B TMVW-t MT20 5.0 8.0 1.75 3.00										C H O R D S W E B S										ALLOWABLE DEFL.(TL)= L/360 (1.06")									
C TS-t MT20 3.0 6.0										MAX. FACTORED MAX. FACTORED MAX. FACTORED										CALCULATED VERT. DEFL.(TL) = L/999 (0.31")									
D TMWW-t MT20 3.0 4.0 1.50 1.75										MEMB. FORCE VERT. LOAD LC1 MAX MAX. MEMB. FORCE MAX										CSI: TC=0.56/1.00 (I-K:1) , BC=0.63/1.00 (T-U:1) ,									
E TMWW+t MT20 3.0 4.0 2.00 0.75										(LBS) (PLF) CSI (LC) UNBRAC (LBS) CSI (LC)										WB=0.89/1.00 (E-S:1) , SSI=0.24/1.00 (B-D:1)									
F TTWW-m MT20 5.0 6.0 2.50 2.25										FR-TO FROM TO LENGTHFR-TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
G TTWW-t MT20 4.0 5.0										A-B 0 / 38 -124.4 -124.4 0.16 (1) 10.00 U-D -422 / 0 0.09 (1)										SHEAR=1.10 TENS=1.10									
H TMWW+t MT20 3.0 4.0 2.00 0.75										B-C -3835 / 0 -124.4 -124.4 0.56 (1) 3.14 D-T -215 / 0 0.12 (1)										COMPANION LIVE LOAD FACTOR = 1.00									
I TMWW-t MT20 3.0 4.0 1.50 1.75										C-D -3835 / 0 -124.4 -124.4 0.56 (1) 3.14 T-E 0 / 336 0.08 (2)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
J TS-t MT20 3.0 6.0										D-E -3861 / 0 -124.4 -124.4 0.46 (1) 3.33 E-S -864 / 0 0.89 (1)										NAIL VALUES									
K TMVW-t MT20 5.0 8.0 1.75 3.00										E-F -3064 / 0 -124.4 -124.4 0.43 (1) 3.63 S-F 0 / 838 0.19 (1)										PLATE GRIP(DRY) SHEAR SECTION									
M BMV1-t MT20 6.0 6.0 Edge 2.50										F-G -2729 / 0 -124.4 -124.4 0.44 (1) 3.77 F-Q 0 / 4 0.00 (1)										(P.S.I) (P.L.I) (P.L.I)									
N BMWW-t MT20 5.0 6.0 2.25 1.50										G-H -3066 / 0 -124.4 -124.4 0.43 (1) 3.63 Q-G 0 / 842 0.19 (1)																			
O BMWW-t MT20 3.0 4.0										H-I -3860 / 0 -124.4 -124.4 0.46 (1) 3.33 Q-H -861 / 0 0.89 (1)																			
P BS-t MT20 4.0 6.0										I-J -3835 / 0 -124.4 -124.4 0.56 (1) 3.14 O-H 0 / 332 0.07 (2)																			
Q BMWWW-t MT20 4.0 6.0										J-K -3835 / 0 -124.4 -124.4 0.56 (1) 3.14 O-I -216 / 0 0.12 (1)																			
R BS-t MT20 3.0 6.0										K-L 0 / 38 -124.4 -124.4 0.16 (1) 10.00 N-I -421 / 0 0.09 (1)																			
S BMWW+t MT20 3.0 4.0 1.50 1.50										V-B -2758 / 0 0.0 0.0 0.28 (1) 5.19 B-U 0 / 3505 0.79 (1)																			
T BMWW-t MT20 3.0 4.0										M-K -2759 / 0 0.0 0.0 0.28 (1) 5.19 N-K 0 / 3505 0.79 (1)																			
U BMWW-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.																													
										V-U 0 / 0 -39.2 -39.2 0.15 (3) 10.00																			
										U-T 0 / 3450 -39.2 -39.2 0.63 (1) 10.00																			
										T-S 0 / 3275 -39.2 -39.2 0.61 (1) 10.00																			
										S-R 0 / 2728 -39.2 -39.2 0.54 (1) 10.00																			

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



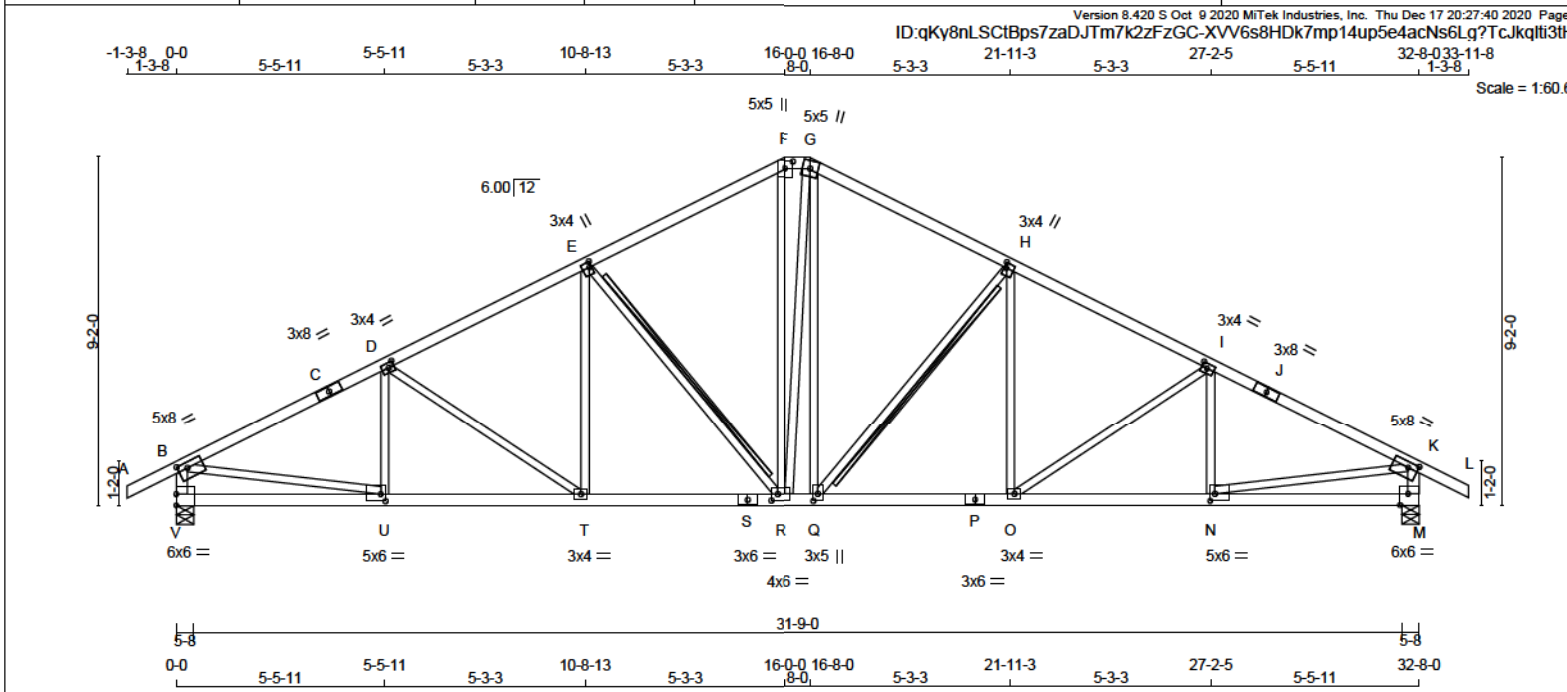
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Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - 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
M	BMV1-t	MT20	6.0	6.0	Edge 2.50	
N	BMVW-t	MT20	5.0	6.0	2.25	1.50
O	BMVW-t	MT20	3.0	4.0		
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 BRG	REQRD BRG
JT VERT	2842	0	5-8
V	2842	0	5-8
M	2842	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1232	0	SNOW
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 = 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. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	CSF (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	-2748 / 0	0.0	0.0	0.28 (1)	5.20	N-K	0 / 3548	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

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 (0.20")
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)



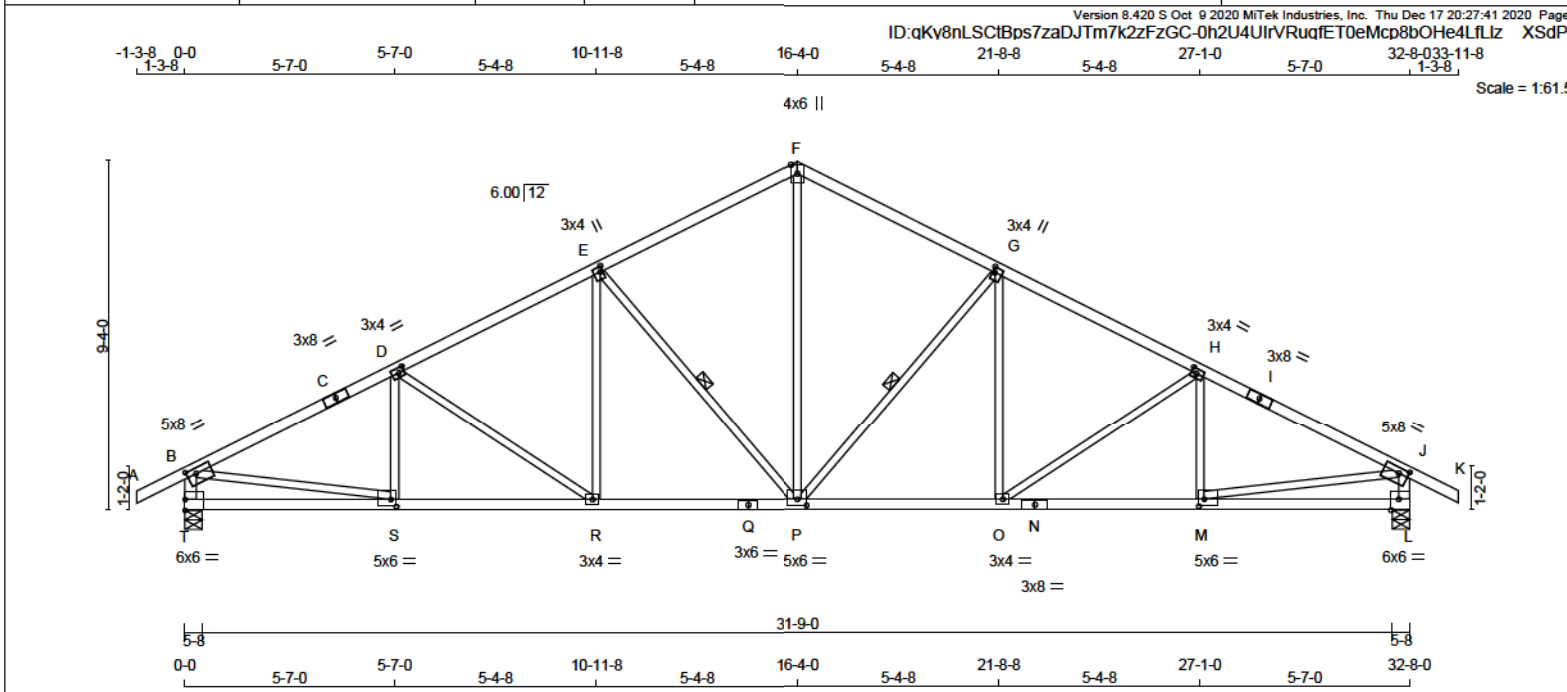
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





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 - 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	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	4.0	6.0	Edge	
G	TMVW-t	MT20	3.0	4.0	1.75	0.75
H	TMVW-t	MT20	3.0	4.0	1.50	1.75
I	TS-t	MT20	3.0	8.0		
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	1.75
N	BS-t	MT20	3.0	8.0		
O	BMVW-t	MT20	3.0	4.0		
P	BMVW-t	MT20	5.0	6.0	2.00	3.00
Q	BS-t	MT20	3.0	8.0		
R	BMVW-t	MT20	3.0	4.0		
S	BMVW-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.



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	2842	0	5-8	5-8
T	2842	0	5-8	5-8
L	2842	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	2098	1232 / 0	343 / 0
T	2098	1232 / 0	343 / 0
L	2098	1232 / 0	343 / 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)	FACTORED L1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	
FR-TO				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-E	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 0.64 (1)	10.00			
Q-P	0 / 3138	-39.2	-39.2 0.64 (1)	10.00			
P-O	0 / 3138	-39.2	-39.2 0.64 (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 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=0.74/1.00 (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 850 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

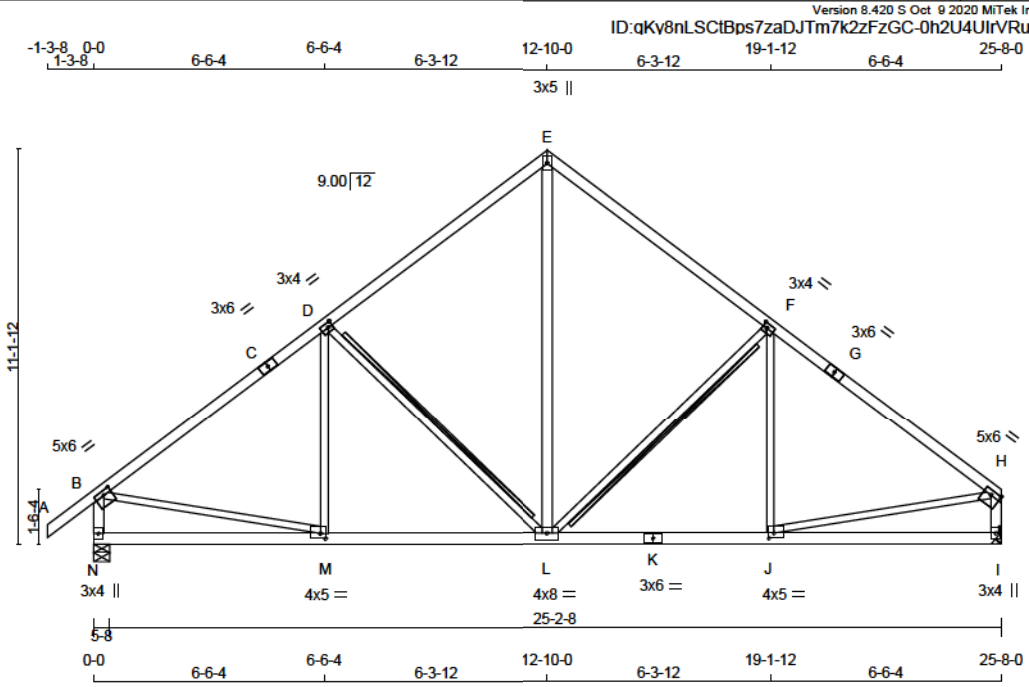
JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL = 1.00 (N) (INPUT = 1.00)



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





TOTAL WEIGHT = 116 lb

LUMBER				
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF
C - E	2x4	DRY	No.2	SPF
E - G	2x4	DRY	No.2	SPF
G - 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+p	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+p	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+p	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	REQD BRG			
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
N	2272	0	2272	0	0	5-8	3-14
I	2101	0	2101	0	0	MECHANICAL	

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

UNFACTORED REACTIONS							
1ST CASE	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 (LBS)	MAX. FACTORED CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	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	-2168 / 0	0.0	0.0	0.23 (1)			
I-H	-1997 / 0	0.0	0.0	0.21 (1)			
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), SSI=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)



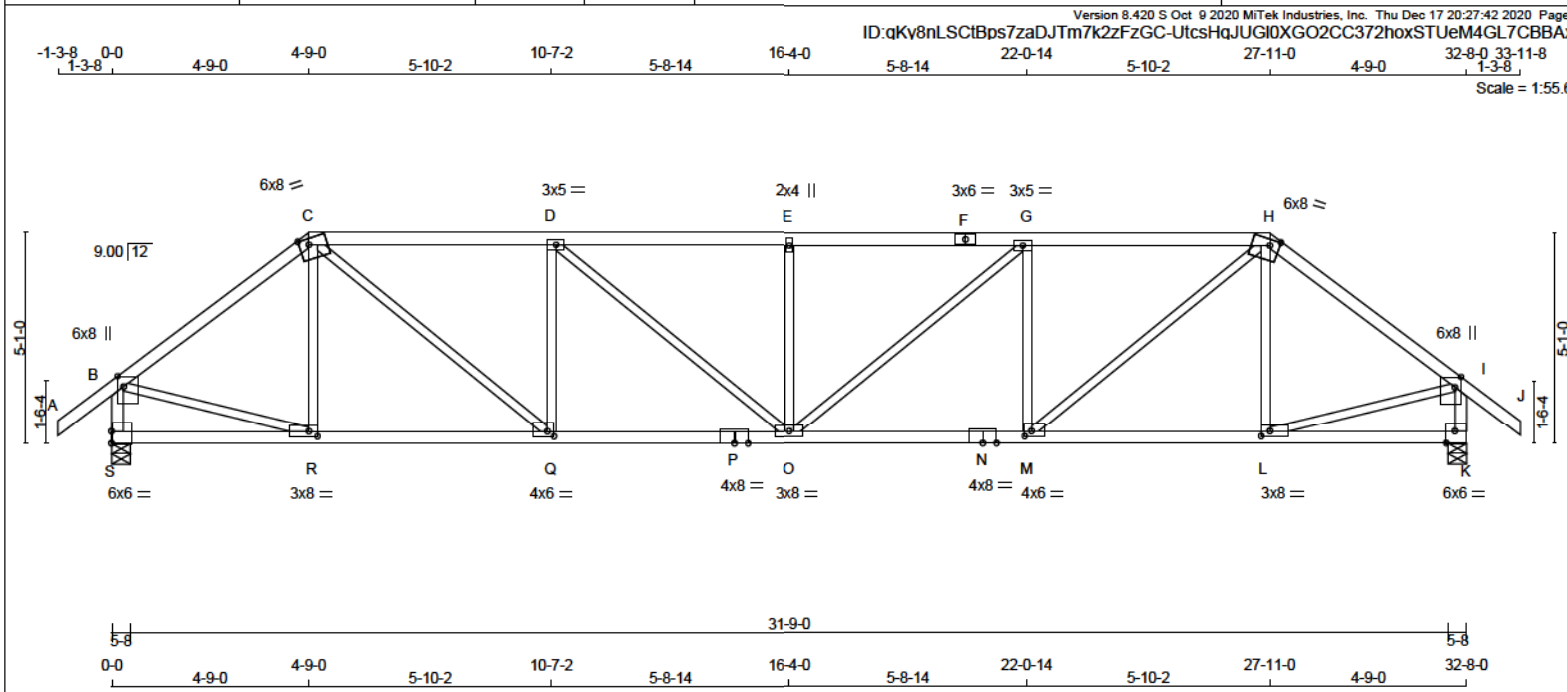
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





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	BMV1-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	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	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 CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO				FR-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 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 (0.23")
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)



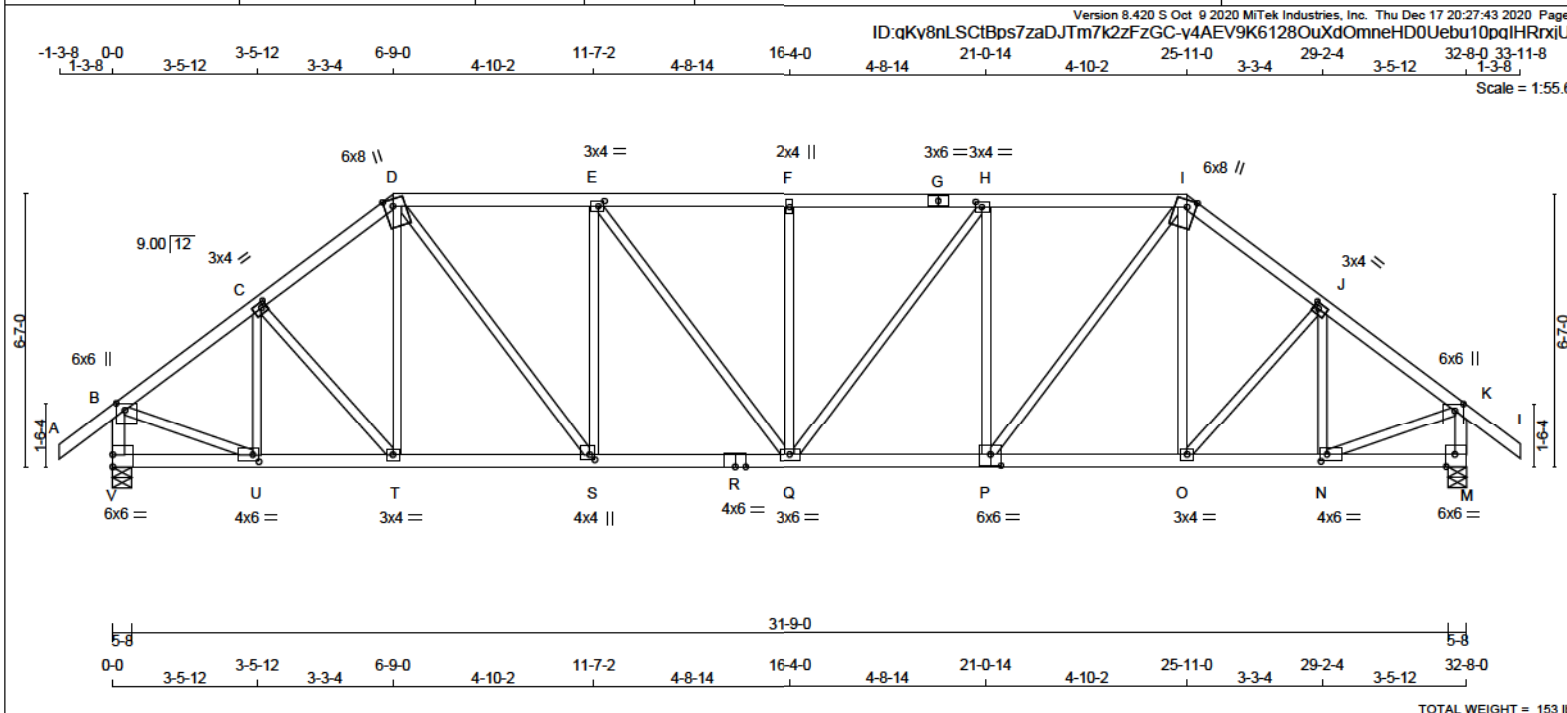
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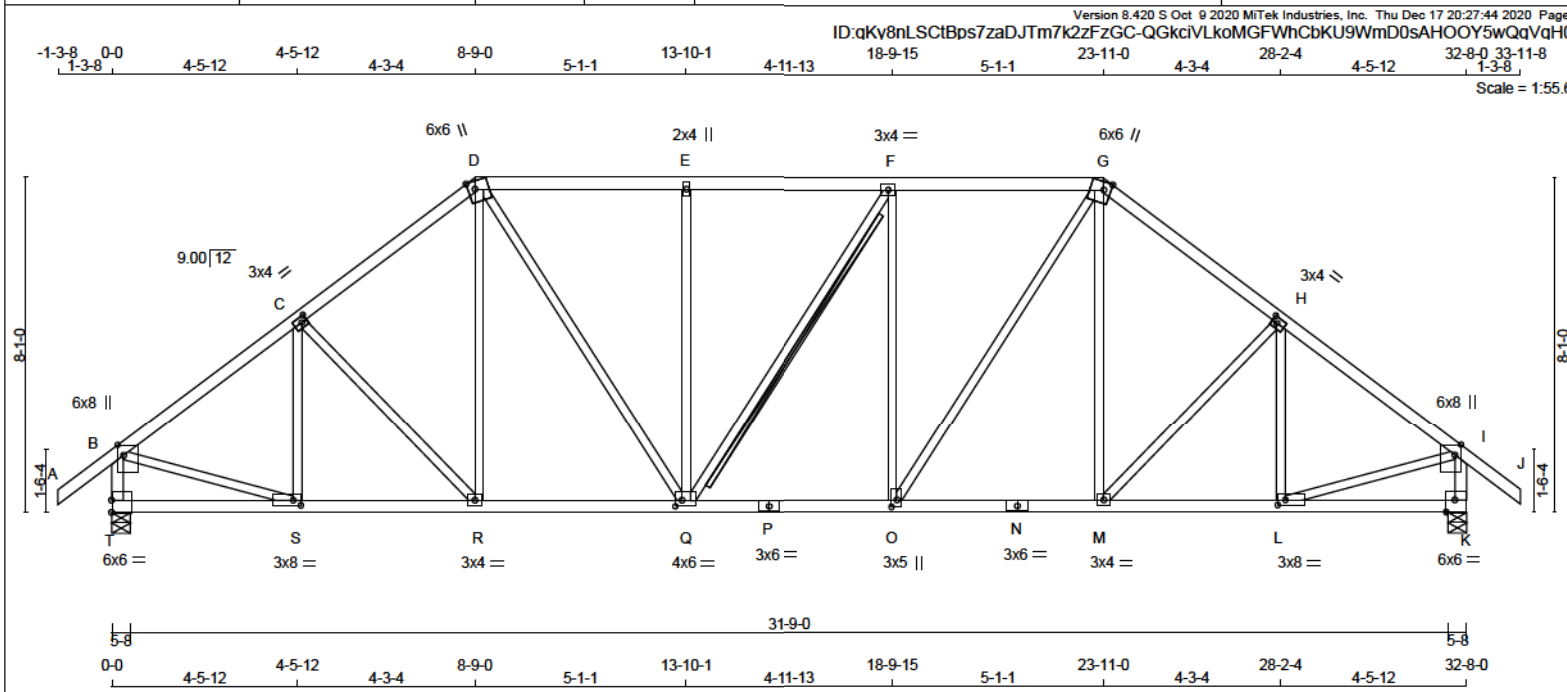
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER				DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER				DESIGN CRITERIA			
N. L. G. A. RULES				BEARINGS				SPECIFIED LOADS:			
CHORDS	SIZE	LUMBER	DESCR.	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	TOP CH. LL = 34.8 PSF	DL = 8.0 PSF	BOT CH. LL = 10.5 PSF	DL = 7.3 PSF
A - D	2x4	DRY	No.2	JT VERT 2845 0	2845 0	0 0	5-8 5-8	TOTAL LOAD = 60.6 PSF			
D - G	2x4	DRY	No.2	M VERT 2845 0	2845 0	0 0	5-8 5-8				
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 EXCEPT	2x3	DRY	No.2								
DRY: SEASONED LUMBER.				UNFACTORED REACTIONS				SPACING = 24.0 IN. C/C			
				1ST LCASE MAX/MIN COMPONENT REACTIONS				LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
				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				THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
				BRACING				THIS DESIGN COMPLIES WITH:			
				TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 FT.				- PART 9 OF CBC 2018, ABC 2019			
				MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.				- PART 9 OF OBC 2012 (2019 AMENDMENT)			
				ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				- CSA 088-14			
				LOADING				(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			
				TOTAL LOAD CASES: (4)				ALLOWABLE DEFL.(LL)= L/360 (1.09")			
				CHORDS				CALCULATED VERT. DEFL.(LL) = L/999 (0.17")			
				MEMB. MAX. FACTORED FORCE (LBS)				ALLOWABLE DEFL.(TL)= L/360 (1.09")			
				FACTORED VERT. LOAD LC1 MAX (PLF)				CALCULATED VERT. DEFL.(TL) = L/999 (0.28")			
				CSI (LC)				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), SSI=0.28/1.00 (H-I:1)			
				FROM TO				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10			
				LENGTH				COMPANION LIVE LOAD FACTOR = 1.00			
				FR-TO				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.			
				A-B				NAIL VALUES			
				B-C				PLATE GRIP(DRY) SHEAR SECTION			
				C-D				(PSI) (PLI) (PLI)			
				D-E				MAX MIN MAX MIN MAX MIN			
				E-F				MT20 650 371 1747 788 1987 1873			
				F-G				PLATE PLACEMENT TOL = 0.250 inches			
				G-H				PLATE ROTATION TOL = 5.0 Deg.			
				H-I				JSI GRIP= 0.90 (C) (INPUT = 0.90)			
				I-J				JSI METAL = 0.75 (R) (INPUT = 1.00)			
				J-K							
				K-L							
				L-M							
				M-N							
				N-O							
				O-P							
				P-Q							
				Q-R							
				R-S							
				S-T							
				T-U							
				U-V							
				V-W							
				W-X							
				X-Y							
				Y-Z							
				Z-A							



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	8.0	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	8.0	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	8.0	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	2845	0	5-8
T	2845	2845	0	5-8
K	2845	2845	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	2098	1233	0
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)	MAX. FACTORED UNBRACED LENGTH (FT)	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	-874 / 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	-162 / 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 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 (0.13")
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)



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.



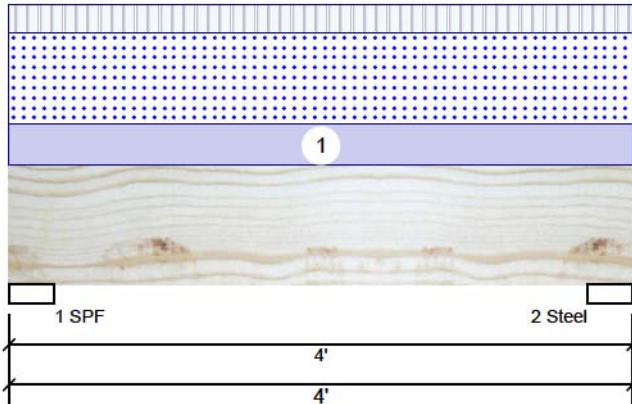
These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept 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	2021-02-05
Sewage System			
Zoning			

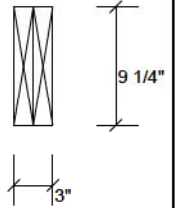


B1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



ATTACH PLIES TOGETHER USING 3"
NAILS IN 3 ROWS AT 12" C/C NAILED
HANGERS MUST BE FASTENED WITH
MIN. 3" NAILS



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	

**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.

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	2021-02-05
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)

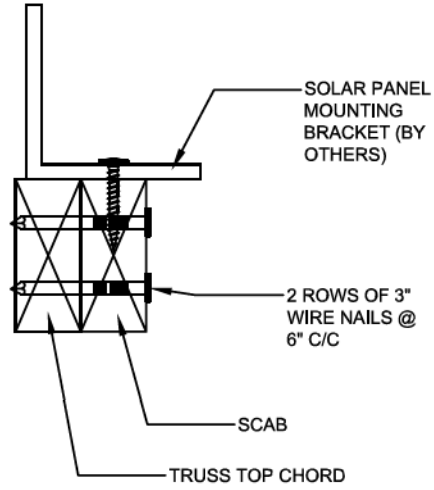
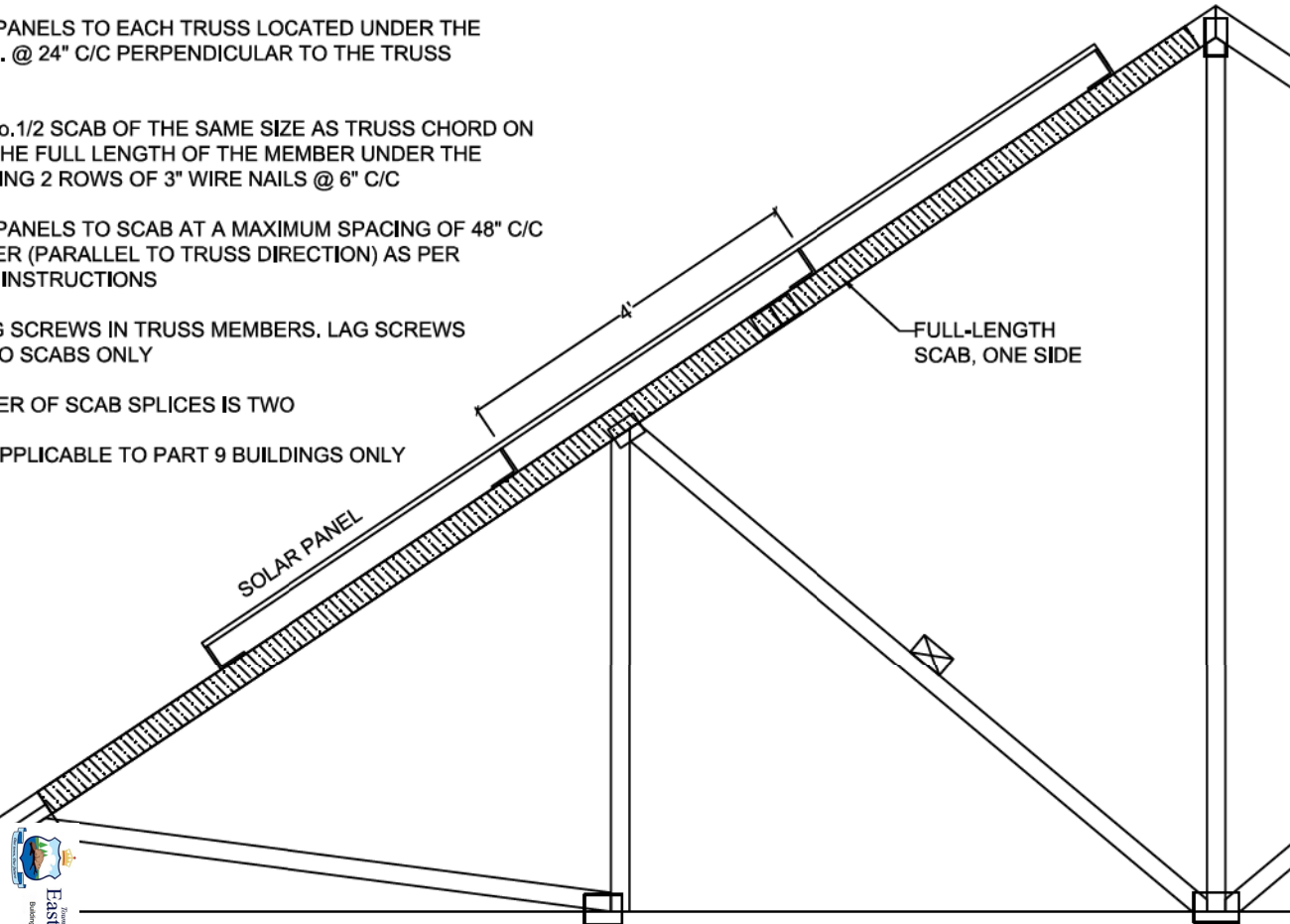
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

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



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Department. The Building Department is not responsible for the accuracy of the information provided on these plans. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Aulher	43236	2021-02-08
Seismic System			
Zoning			

NE1220-118
GREENPARK - TRINAR HALL -
GLENWAY 7A ELE 1

Detail for Installation of Solar Panels - Scab Method



NE1220-118
GREENPARK - TRINAR HALL -
GLENWAY 7A ELE 1

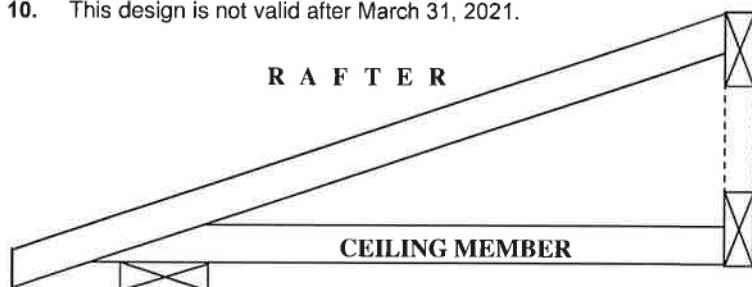
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

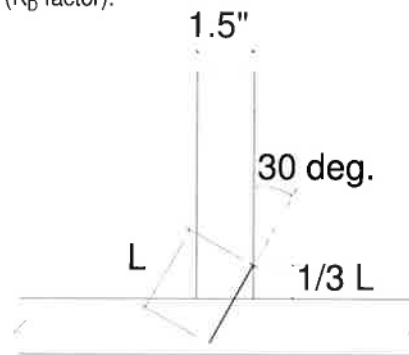
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

1. Rafter and ceiling members may be anchored to top and bottom chords of girder truss by toe-nailing rafter and ceiling members to girder chords provided the reaction does not exceed the lateral capacities in the table. Hangers (specified by others) are required for reactions higher than the maximum toe-nail capacity. Reactions are based on factored loads.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.4.1.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in tables below.
5. Nail values in table are based on the following relative lumber densities: G = 0.42 (SPF), G = 0.49 (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See next page for nailing on bearing plate).
7. For loads due to **wind** the nail lateral capacity in this table may be multiplied by 1.15 (K_D factor).
8. Lumber must be dry (< 19% moisture content) at the time of nail installation.
9. Nail values in this table comply with CSA O86-14, section 12.9.4
10. This design is not valid after March 31, 2021.



G
I
R
D
E
R



TOE-NAIL INSTALLATION

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

MiTek

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



Town of
East Gwillimbury
Building Standards Branch BCIN #10487

December 2

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

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

PEO
Certificate No. 10889485



BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

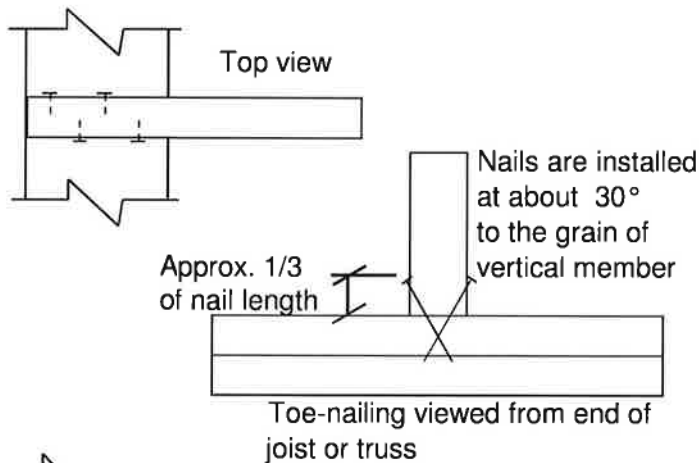
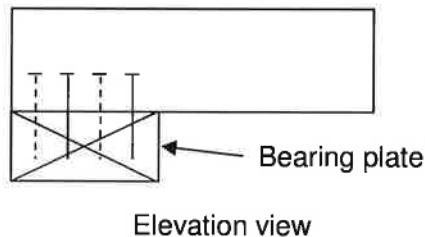
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

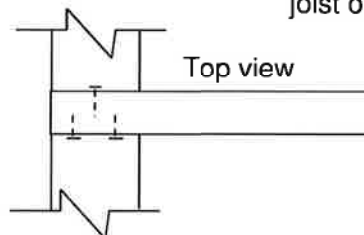
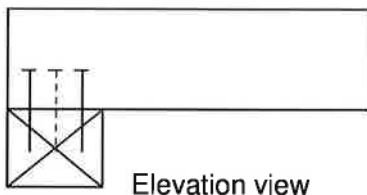
NOTES:

1. Truss chord, rafter, or ceiling members may be anchored to bearing plate by toe-nails, provided that the actual factored uplift force due to **wind** or **earthquake** load does not exceed the withdrawal capacities in the table. Hangers (specified by others) are required for uplift forces that are higher than the maximum toe-nail withdrawal capacity.
2. Toe nail capacities shown in the table are for **one** toe-nail. For additional toe-nails multiply values in table by the number of toe-nails used. Toe-nail capacities take into account toe-nailing factor J_A in CSA O86-14, section 12.9.5.2.
3. For 9- 3/4 gauge 3.25" common wire gun nails (diameter = 0.120") use 3" common spiral nail values.
4. Maximum number of toe-nails allowed depends on the lumber size & species to be toe-nailed to supporting member and nail diameter, as shown in table above.
5. Nail values in table are based on the following relative lumber densities: $G = 0.42$ (SPF), $G = 0.49$ (D. Fir).
6. Toe-nails shall be driven at approximately 1/3 the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member (See drawing on detail B37579H1).
7. Lumber must be dry (< 19% moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-14, section 12.9.5
9. This design is not valid after March 31, 2021.

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



MiTek

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



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

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

PEO
Certificate No. 10889485

