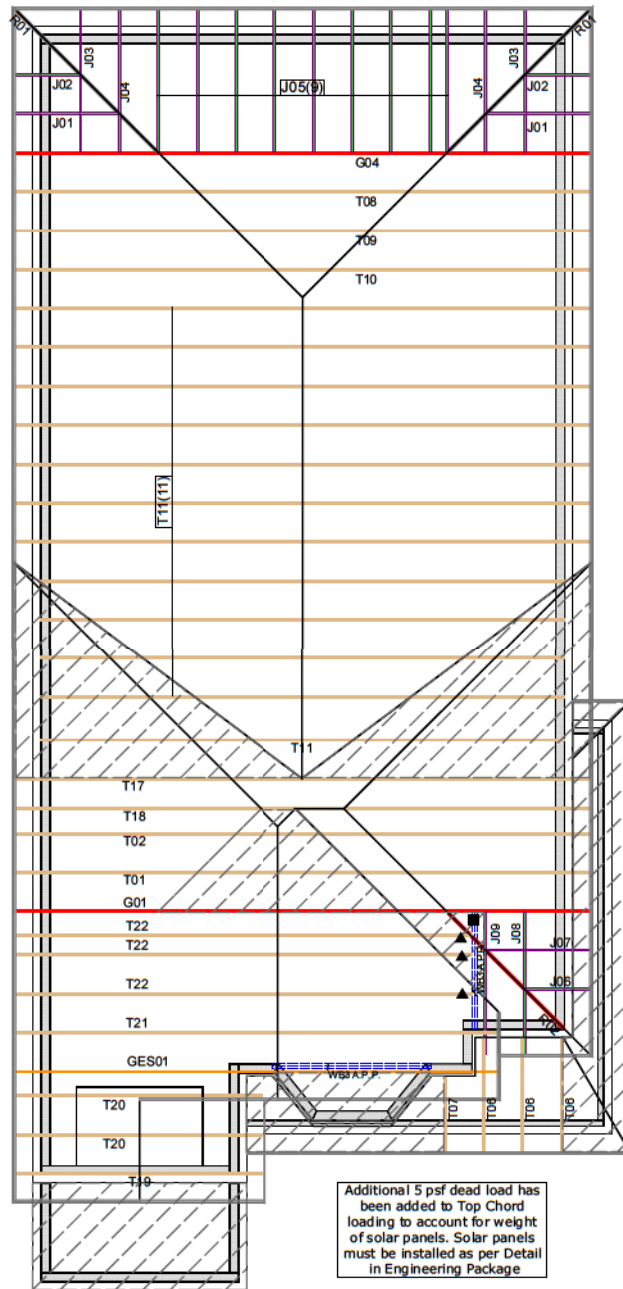




Hanger Name	Symbol	QTY
LJS26DS	▲	3
HGUS26-2	■	1



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



CONVENTIONAL FRAMING BY OTHERS

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

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	20-00417R0
Address	TRINAR HALL EAST GWILLIMBURY, ON
Model	BRENTWOOD 3 EL 3
Sales Rep	RALPH MIRIGELLO
Designer	KR
Date	12/16/2020
Path	C:\MITES\CA\JOBS\GREENPARK HOMES\TRINAR HALL\BRENTWOOD 3\LEVEL 3\T-BRENTWOOD3-3\

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





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

NE1220-121
GREENPARK - TRINAR HALL -
BRENTWOOD 3 EL 3

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION

RESPONSIBILITIES

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY KOTT DESIGN. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON THIS DRAWING. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER.

TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING

IT IS THE RESPONSIBILITY OF KOTT TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

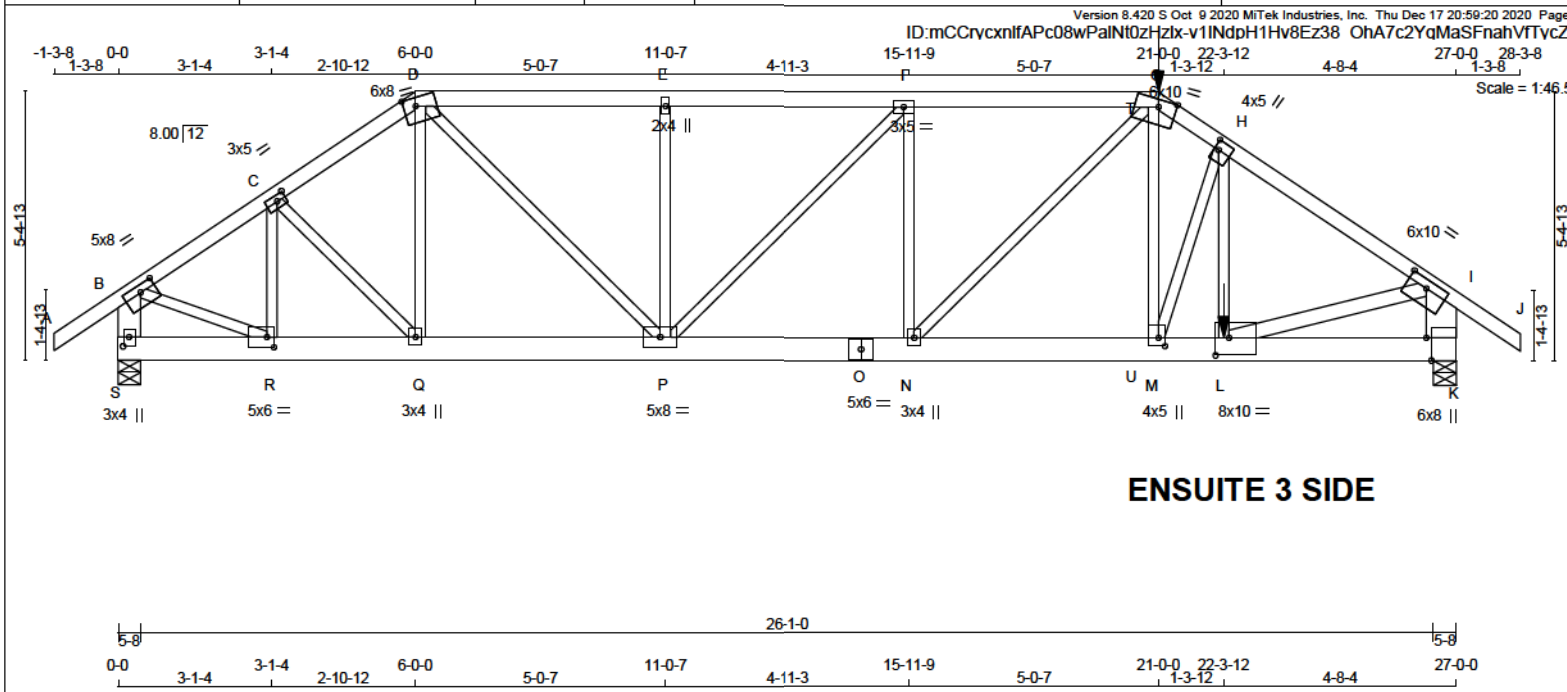
- The trusses must be handled and installed by a qualified professional as per the supplied document titled *Information for Truss Installers* and the BCSI-B1 and BCSI-B3 Summary Sheets
- The compression chords are laterally braced by continuous rigid diaphragm sheathing or as specified on the drawing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

SUPPORTS

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

DIMENSIONS

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



ENSUITE 3 SIDE

LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY	2100F 1.8E
D - G	2x4	DRY	2100F 1.8E
G - J	2x4	DRY	2100F 1.8E
S - B	2x6	DRY	No.2
K - I	2x8	DRY	No.2
S - O	2x6	DRY	No.2
O - K	2x6	DRY	2100F 1.8E
ALL WEBS	2x3	DRY	No.2
EXCEPT			
L - I	2x4	DRY	No.2

DRY: SEASONED LUMBER.

PLATES (Table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMWW-t	MT20	5.0	8.0	1.75	3.75
C TMWW-t	MT20	3.0	5.0	1.50	2.25
D TTWW-m	MT20	6.0	8.0	2.00	3.00
E TMWW-w	MT20	2.0	4.0		
F TMWW-t	MT20	3.0	5.0		
G TTWW-m	MT20	6.0	10.0	Edge	4.25
H TMWW-t	MT20	4.0	5.0	2.25	1.00
I TMWW-t	MT20	6.0	10.0	2.00	4.75
K BMVf+p	MT20	6.0	8.0	Edge	1.25
L BMWW-t	MT20	8.0	10.0	4.25	3.25
M BMWW-t	MT20	4.0	5.0	2.00	1.50
N BMWW-t	MT20	3.0	4.0		
O BS-t	MT20	5.0	6.0		
P BMWW-t	MT20	5.0	8.0		
Q BMWW-t	MT20	3.0	4.0		
R BMWW-t	MT20	5.0	8.0	2.50	1.75
S BMVf+p	MT20	3.0	4.0	2.25	1.50

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	3019	3019	0	5-8
S	5317	5317	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1314	0	359
S	2225	1314	359
K	3936	2264	680

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K
BEARING SIZE FACTOR = 1.15 AT JNT(S) K (BASED ON SUPPORT DEPTH = 1-8)

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX. CSI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM TO		LENGTH	FR-TO		
A-B	0 / 47	-124.4	-124.4 0.12 (1)	10.00	R-C	-814 / 0	0.17 (1)
B-C	-3148 / 0	-124.4	-124.4 0.16 (1)	4.44	C-Q	0 / 301	0.07 (1)
C-D	-3446 / 0	-124.4	-124.4 0.16 (1)	4.46	Q-D	0 / 131	0.04 (3)
D-E	-4326 / 0	-124.4	-124.4 0.43 (1)	3.80	D-P	0 / 2091	0.52 (1)
E-F	-4326 / 0	-124.4	-124.4 0.44 (1)	3.77	P-E	-860 / 0	0.28 (1)
F-T	-4056 / 0	-124.4	-124.4 0.49 (1)	3.52	P-F	-900 / 0	0.83 (1)
T-G	-4956 / 0	-234.6	-234.6 0.49 (1)	3.52	N-F	-27 / 155	0.04 (3)
G-H	-5774 / 0	-124.4	-124.4 0.28 (1)	3.44	N-G	0 / 282	0.06 (1)
H-I	-8309 / 0	-124.4	-124.4 0.81 (1)	3.08	M-G	0 / 2167	0.54 (1)
I-J	0 / 47	-124.4	-124.4 0.12 (1)	10.00	M-H	-1644 / 0	0.53 (1)
S-B	-2933 / 0	0.0	0.0 0.21 (1)	6.09	L-H	0 / 1346	0.83 (1)
K-I	-5060 / 0	0.0	0.0 0.28 (1)	5.42	B-R	0 / 2768	0.69 (1)
					L-I	0 / 5381	0.95 (1)
S-R	0 / 0	-39.2	-39.2 0.07 (1)	10.00			
R-Q	0 / 2635	-39.2	-39.2 0.42 (1)	10.00			
Q-P	0 / 2847	-39.2	-39.2 0.45 (1)	10.00			
P-O	0 / 4969	-39.2	-39.2 0.73 (1)	10.00			
O-N	0 / 4969	-39.2	-39.2 0.73 (1)	10.00			
N-U	0 / 4774	-39.2	-39.2 0.33 (1)	10.00			
U-M	0 / 4774	-74.0	-74.0 0.33 (1)	10.00			
M-L	0 / 5263	-74.0	-74.0 0.43 (1)	10.00			
L-K	0 / 0	-74.0	-74.0 0.18 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX	FACE	DIR.	TYPE	HEEL	CONN.
G	21-0-0	-560	-560	—	FRONT	VERT	TOTAL	C1
L	22-3-12	-2734	-2734	—	FRONT	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 = 6-0-0
END SETBACK = 6-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL.
LOADS APPLIED TO FIRST 6-6-0 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

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

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/998 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/998 (0.24")

CSI: TC=0.61/1.00 (H-I:1), BC=0.73/1.00 (N-P:1), WB=0.95/1.00 (I-L:1), SSI=0.32/1.00 (F-G:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

CONTINUED ON PAGE 2

Dec 16, 2020

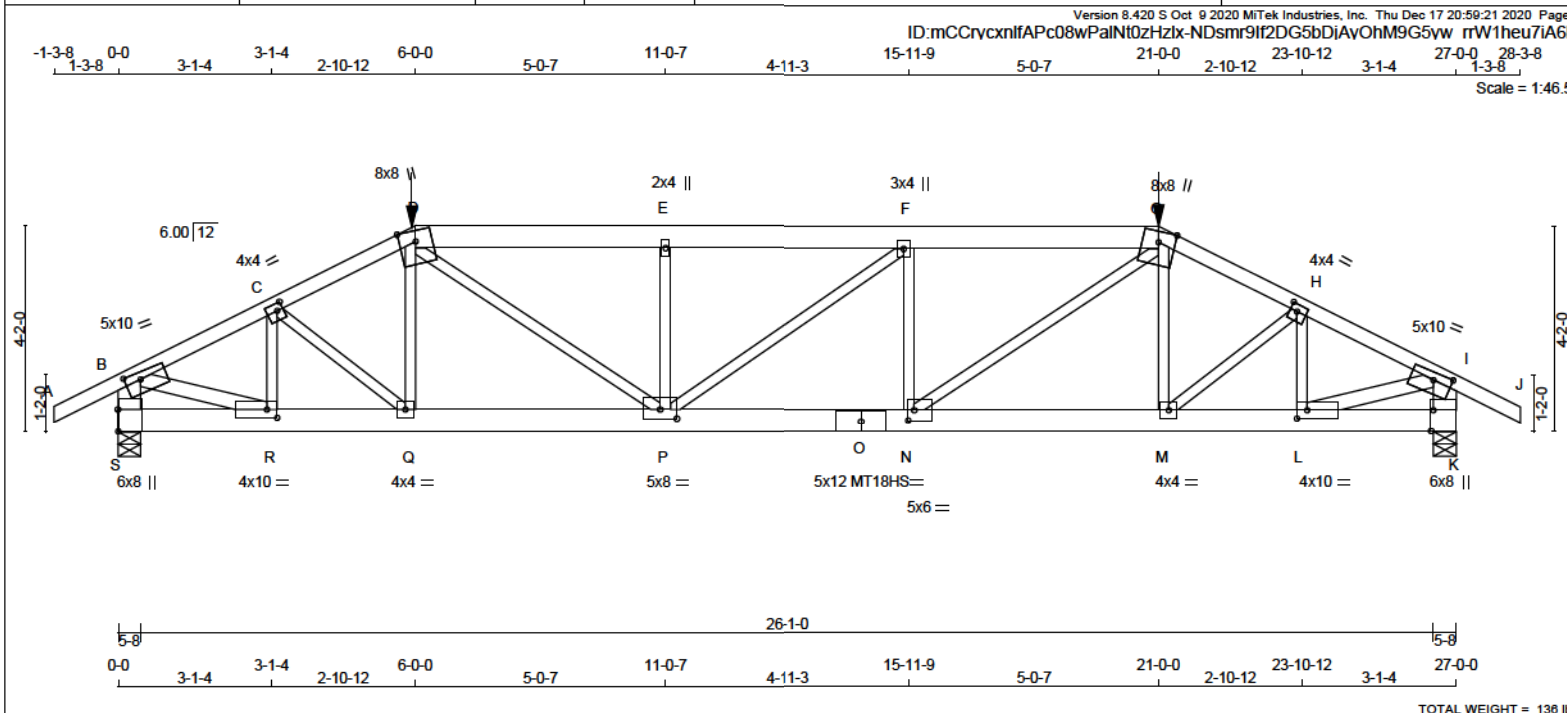
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

East Gwillimbury
Building Standards Branch BCN #10487

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





LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										DESIGN CRITERIA									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										SPECIFIED LOADS:									
A - D 2x4 DRY 2100F 1.8E										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										TOP CH. LL = 34.8 PSF									
D - G 2x6 DRY No.2										S 4234 0 4234 0 0 5-8 5-8										DL = 8.0 PSF									
G - J 2x4 DRY 2100F 1.8E										K 4234 0 4234 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
S - B 2x6 DRY No.2																				DL = 7.3 PSF									
K - I 2x6 DRY No.2																				TOTAL LOAD = 60.6 PSF									
S - O 2x6 DRY 2100F 1.8E																													
O - K 2x6 DRY 2100F 1.8E																													
ALL WEBS 2x3 DRY No.2										UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
EXCEPT										1ST LCASE MAX/MIN COMPONENT REACTIONS																			
B - R 2x4 DRY No.2										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
L - I 2x4 DRY No.2										S 3132 1810 / 0 535 / 0 0 / 0 0 / 0 788 / 0 0 / 0										GIRDER TYPE: CPrimeHip									
										K 3132 1810 / 0 535 / 0 0 / 0 0 / 0 788 / 0 0 / 0										SIDE SETBACK = 6-0-0									
DRY: SEASONED LUMBER.										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K										END SETBACK = 6-0-0									
										BRACING										END WALL WIDTH = 5-8									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.29 FT.										CORNER FRAMING TYPE: CONVENTIONAL									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										END JACK TYPE: CONVENTIONAL									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										APPLIED TO FRONT SIDE									
																				- ADDTL LOADS BASED ON 55 % OF GSL.									
PLATES (table is in inches)										LOADING										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
JT TYPE PLATES W LEN Y X										TOTAL LOAD CASES: (4)										THIS DESIGN COMPLIES WITH:									
B TMVWm MT20 5.0 10.0 1.75 3.75										CHORDS										- PART 9 OF BCBC 2018 , ABC 2019									
C TMVW-t MT20 4.0 4.0 1.75 1.50										MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) LC1 MAX (LC) MAX. FACTORED (LC) UNBRAC										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
D TTWW+m MT20 8.0 8.0 Edge										MEMB. FR-TO FROM TO LENGTHFR-TO										- CSA 086-14									
E TMVW+w MT20 2.0 4.0										A-B 0 / 38 -124.4 -124.4 0.12 (1) 10.00 R-C -1227 / 0 0.21 (1)										TPIC 2014									
F TMVW+t MT20 3.0 4.0										B-C -5532 / 0 -124.4 -124.4 0.26 (1) 3.55 C-Q 0 / 846 0.21 (1)										(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)									
G TTWW+m MT20 8.0 8.0 Edge										C-D -8253 / 0 -124.4 -124.4 0.28 (1) 3.34 Q-D -58 / 269 0.07 (3)										EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD									
H TMVW-t MT20 4.0 4.0 1.75 1.75										D-E -7798 / 0 -234.6 -234.6 0.82 (1) 2.29 D-P 0 / 2727 0.68 (1)										ALLOWABLE DEFL.(LL)= L/360 (0.90")									
I TMVWm MT20 5.0 10.0 1.75 4.50										E-F -7798 / 0 -234.6 -234.6 0.74 (1) 2.44 P-E -1294 / 0 0.32 (1)										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.25")									
K BMV1+p MT20 6.0 8.0 5.50 0.50										F-G -7827 / 0 -234.6 -234.6 0.80 (1) 2.32 P-F -35 / 0 0.02 (1)										ALLOWABLE DEFL.(TL)= L/360 (0.90")									
L BMVW-t MT20 4.0 10.0 2.00 2.50										G-H -8247 / 0 -124.4 -124.4 0.28 (1) 3.34 N-F -1299 / 0 0.32 (1)										CALCULATED VERT. DEFL.(TL) = L/ 776 (0.42")									
M BMVW-t MT20 4.0 4.0										H-I -5533 / 0 -124.4 -124.4 0.26 (1) 3.55 N-G 0 / 2768 0.69 (1)										CSI: TC=0.82/1.00 (D-E:1) , BC=0.51/1.00 (N-P:1) ,									
N BMVW-t MT20 5.0 6.0 2.50 1.50										I-J 0 / 38 -124.4 -124.4 0.12 (1) 10.00 M-G -75 / 264 0.07 (3)										WB=0.90/1.00 (I-L:1) , SS=0.45/1.00 (F-G:1)									
O BS-I MT18HS 5.0 12.0										S-B -4053 / 0 0.0 0.0 0.29 (1) 5.28 M-H 0 / 838 0.21 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00									
P BMVW-t MT20 5.0 8.0 2.25 4.00										K-I -4054 / 0 0.0 0.0 0.29 (1) 5.28 L-H -1219 / 0 0.21 (1)										SHEAR=1.00 TENS=1.00									
Q BMVW-t MT20 4.0 4.0																				COMPANION LIVE LOAD FACTOR = 1.00									
R BMVW-t MT20 4.0 10.0 2.00 2.50																													
S BMV1+p MT20 6.0 8.0 5.50																													
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																													

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 DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/969 (0.25")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/778 (0.42")

CSI: TC=0.82/1.00 (D-E-1), BC=0.51/1.00 (N-P-1), WB=0.90/1.00 (I-L-1), SSI=0.45/1.00 (F-G-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
MT18HS588 403 2455 1382 3163 3004

PLATE PLACEMENT TOL. = 0.250 inches
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL= 0.96 (O) (INPUT = 1.00)

Dec 16, 2020

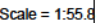
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Town of East Gwillimbury
Building Standards Branch BCIN #10487

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





[M][F]

DESCR.
SPF
SPF
SPF
SPF
SPF
SPF

SPF

SPF

S. AH.

HES

BEARINGS

MAX /MIN COMPONENT REACTIONS

SOIL
0 / 0
0 / 0
0 / 0

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.

Y RESTRA

LBS.

FORCE (PER
CE(S), 2 F

TOTAL LOAD CASES: (4)

ED
MAX
CSI (LC)

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

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

(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

CSI: TC=0.49/1.00 (B-D:1) , BC=0.29/1.00 (N-O:3) ,
WB=0.84/1.00 (D-N: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 .

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 (E) (INPUT = 0.90)
JSI METAL= 0.29 (B) (INPUT = 1.00)

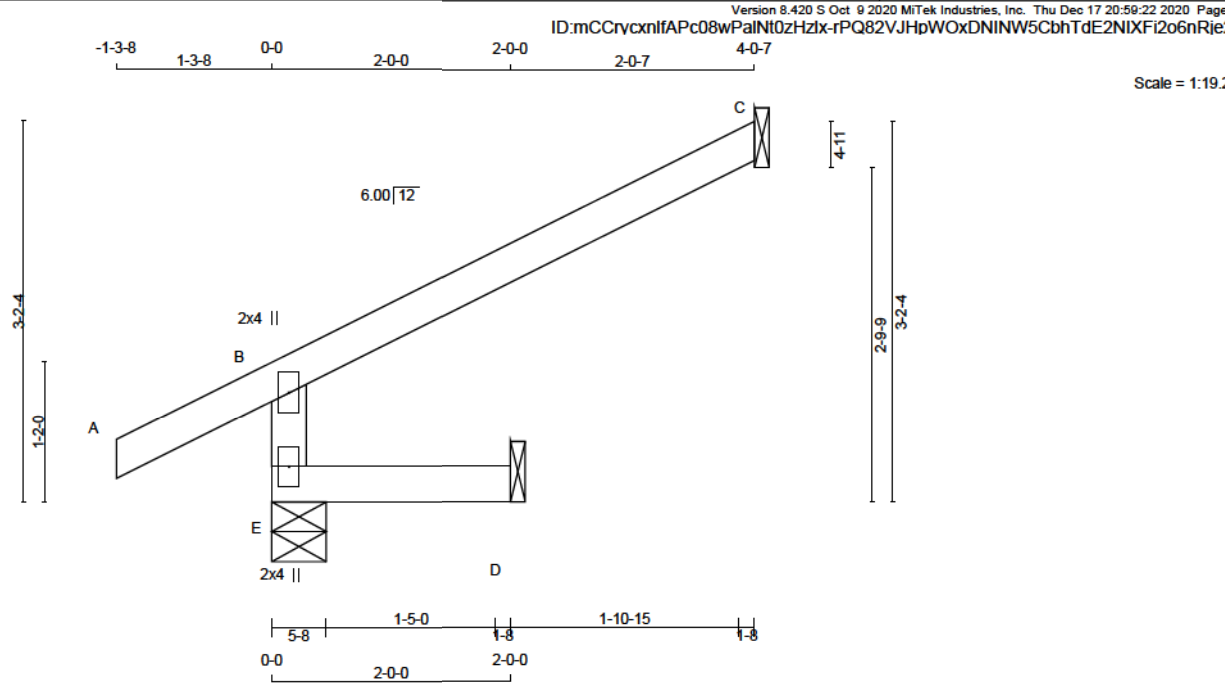


Town of
East Gwillimbury
Building Standards Branch BCIN #16487

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

CONTINUED ON PAGE 2





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
E	528	528	5-8	1-8
C	188	188	1-8	1-8
D	35	44	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN COMPONENT REACTIONS	WIND	DEAD	SOIL
E	372	270 / 0	23 / 0	0 / 0	78 / 0
C	130	105 / 0	0 / 0	0 / 0	24 / 0
D	32	0 / 0	19 / 0	0 / 0	13 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (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 0.02 (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		
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DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
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SPACING = 24.0 IN. C/C

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THIS DESIGN COMPLIES WITH:
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ALLOWABLE DEFL.(LL)= L/360 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
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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

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PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
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JSI METAL= 0.20 (B) (INPUT = 1.00)



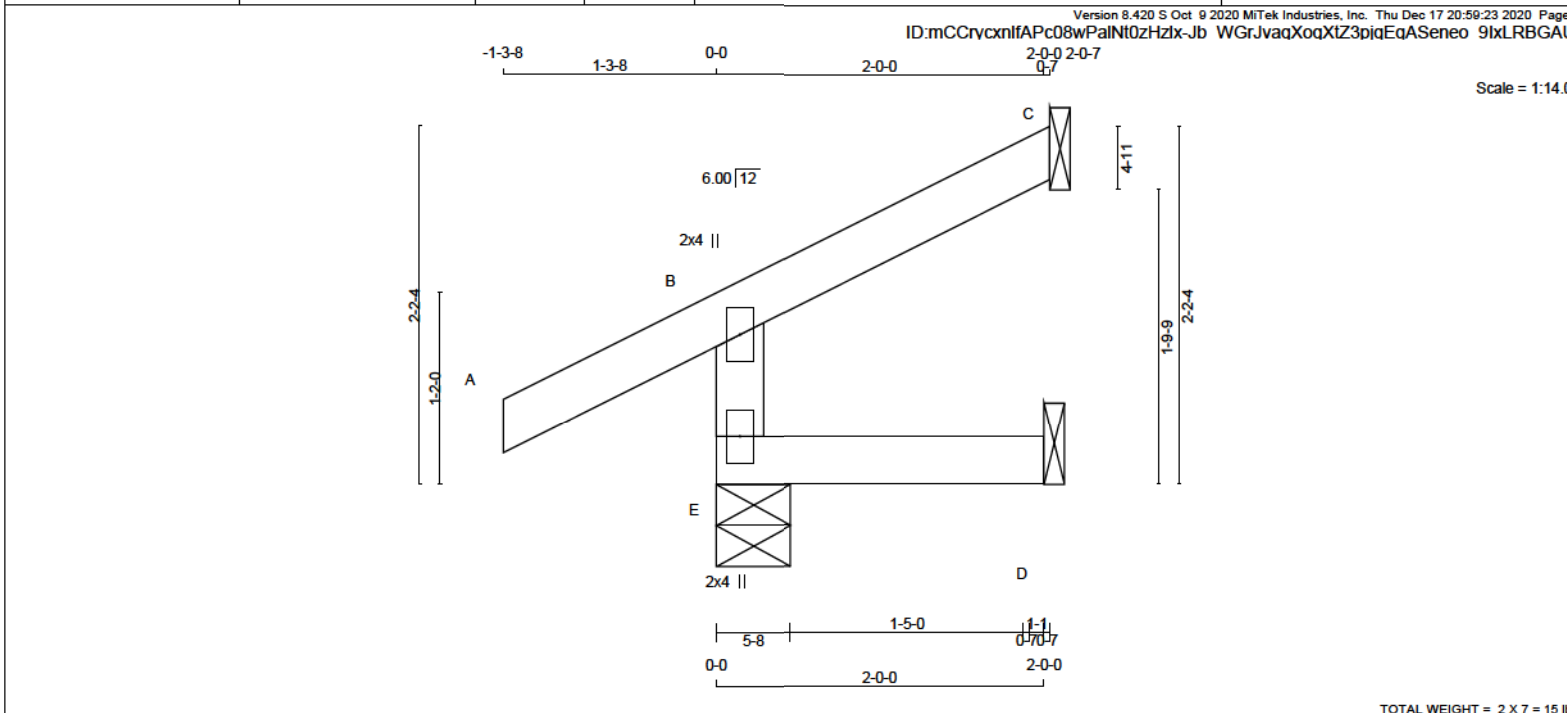
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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





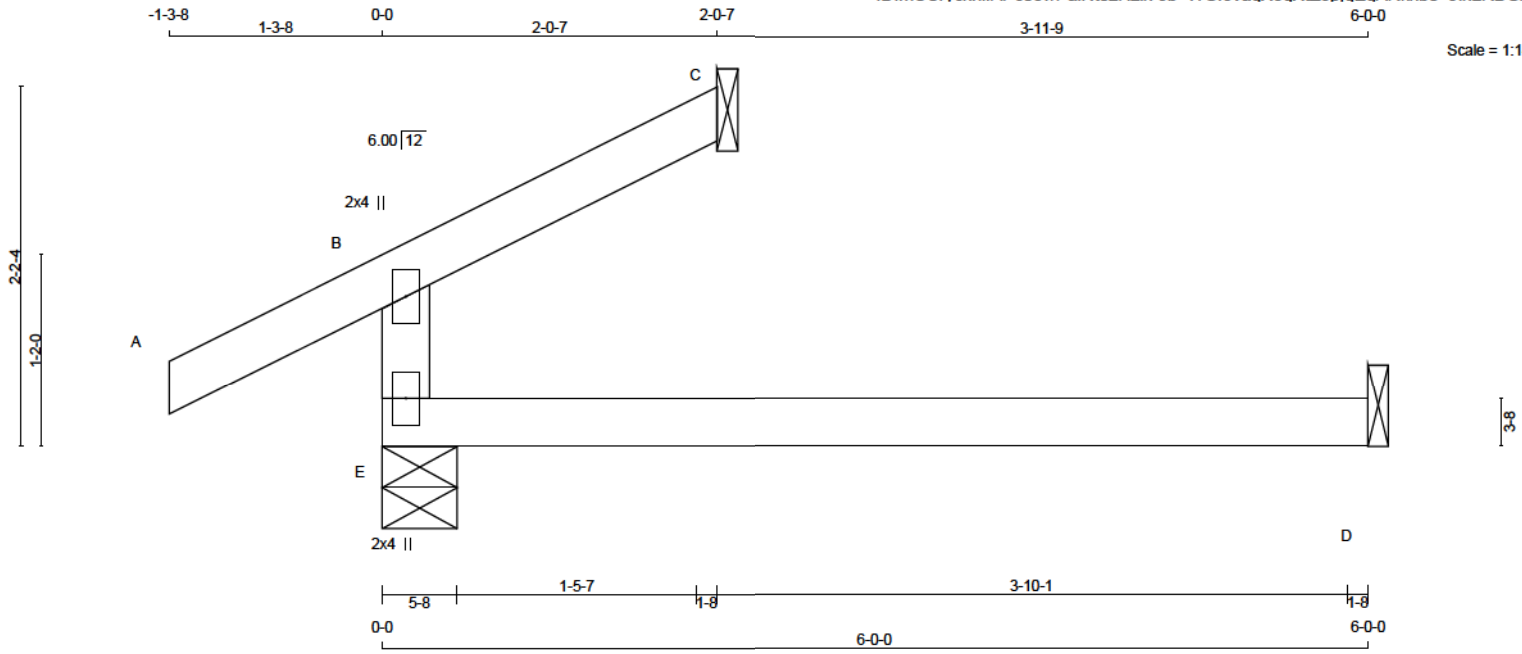
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Scale = 1:14.0



TOTAL WEIGHT = 2 X 12 = 24 LB

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
E - B	2x4	DRY	No.2		SPF
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JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	IN-SX	IN-SX
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C	96	0	96	0	0	1-8	1-8	1-8	1-8
D	97	0	123	0	0	1-8	1-8	1-8	1-8

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JSI METAL= 0.14 (B) (INPUT = 1.00)



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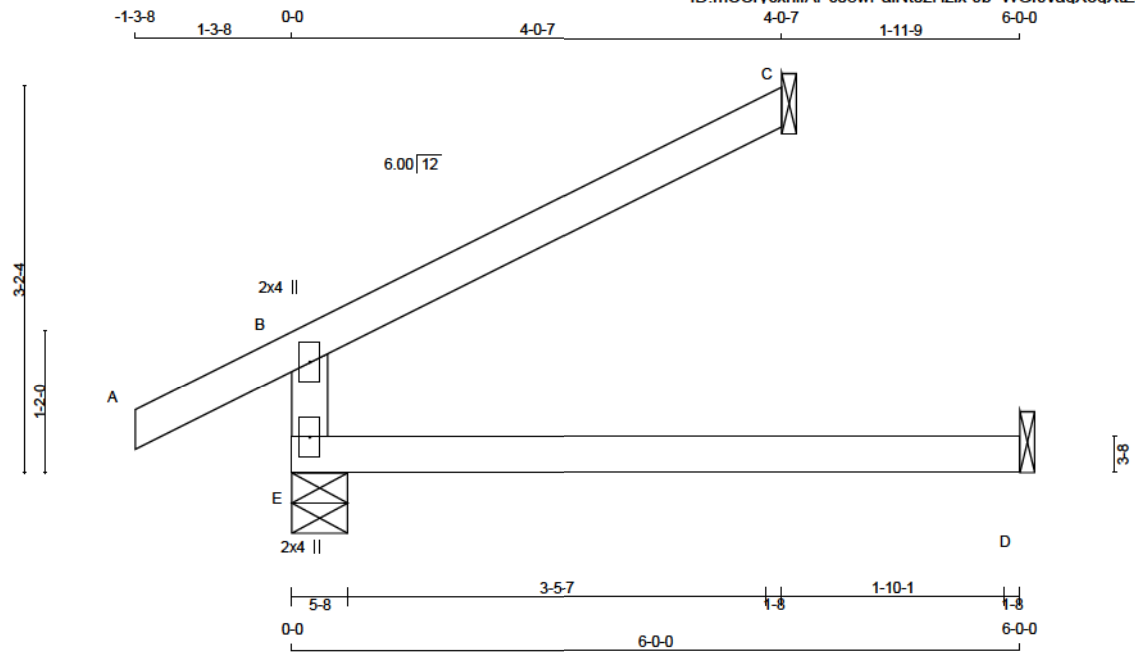


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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Thu Dec 17 20:59:23 2020 Page 1
ID:mCCrvcxnlFAPc08wPalNt0zHzlx-Jb WGrJvaqXoqXtZ3pjEqAPnnbi 9lxLRBGAUy7y



TOTAL WEIGHT = 2 X 15 = 29 lb

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ		
E	621	0	621	0	5-8	1-8
C	188	0	188	0	1-8	1-8
D	97	0	123	0	1-8	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX / MIN COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	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)

MEMB.	C H O R D S			W E B S		
	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. CSI (LC)	MEMB. MAX. FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO	LENGTH	FR-TO		
E-B	-483 / 0	0.0	0.0 0.23 (3)	7.81		
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00		
B-C	-28 / 0	-124.4	-124.4 0.34 (1)	6.25		
E-D	0 / 0	-39.2	-39.2 0.23 (3)	10.00		

DESIGN CRITERIA

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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 (0.20")
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)



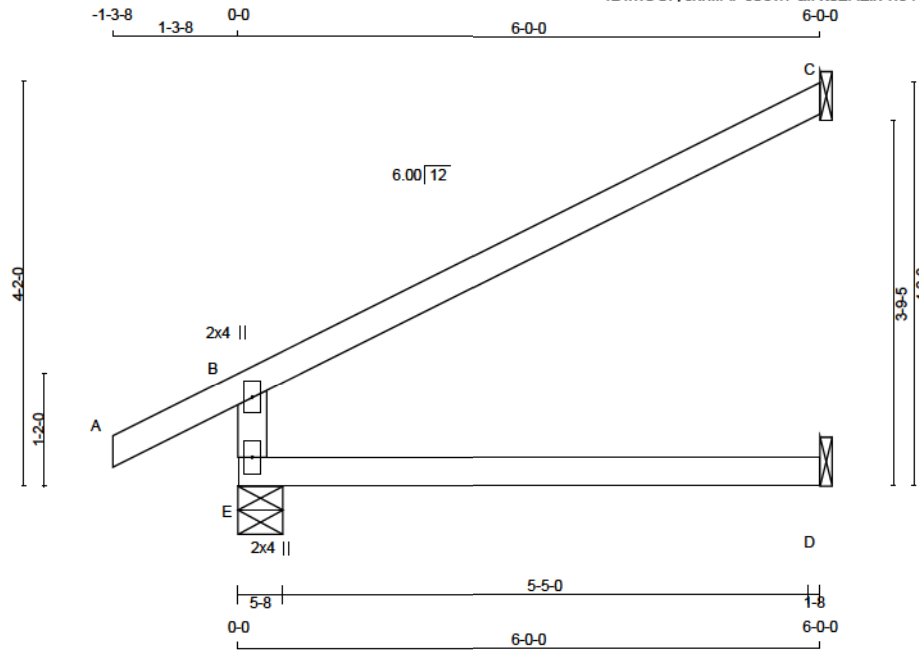
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 9 X 17 = 154 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS							
FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
E	774	0	774	0	0	5-8	1-8
C	280	0	280	0	0	1-8	1-8
D	97	0	123	0	0	1-8	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE	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	38 / 0	0 / 0
D	88	0 / 0	52 / 0	0 / 0	0 / 0	38 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
E-B	-835 / 0	0.0	0.0 0.24 (3)	7.81			
A-B	0 / 38	-124.4	-124.4 0.18 (1)	10.00			
B-C	-42 / 0	-124.4	-124.4 0.78 (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=0.78/1.00 (B-C:1) , BC=0.24/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.33/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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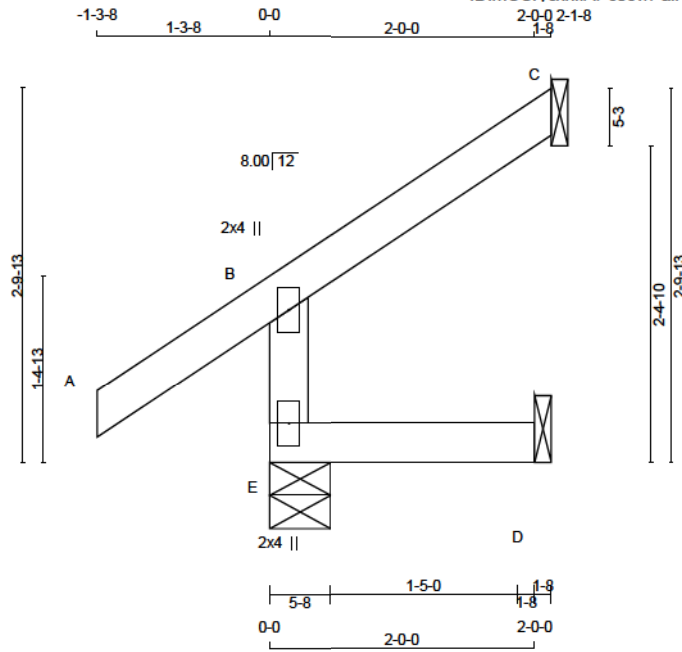
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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Thu Dec 17 20:59:24 2020 Page 1
ID: mCCrycxnlfAPc08wPaINt0zHzlx-noYuTBKXL8ffShSldWF3muidIB 0lcY5a5wqiw7y

Scale = 1:17.3



TOTAL WEIGHT = 8 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
E	378	0	378	0	5-8
C	100	0	100	0	1-8
D	36	0	45	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	270	188 / 0	23 / 0	0 / 0	0 / 0	59 / 0	0 / 0
C	69	56 / 0	0 / 0	0 / 0	0 / 0	13 / 0	0 / 0
D	32	0 / 0	19 / 0	0 / 0	0 / 0	13 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING
TOTAL LOAD CASES: (5)

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

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 8.0 PSF
BOT CH. LL = 10.5 PSF
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=0.17/1.00 (A-B:1) , BC=0.03/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.11/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



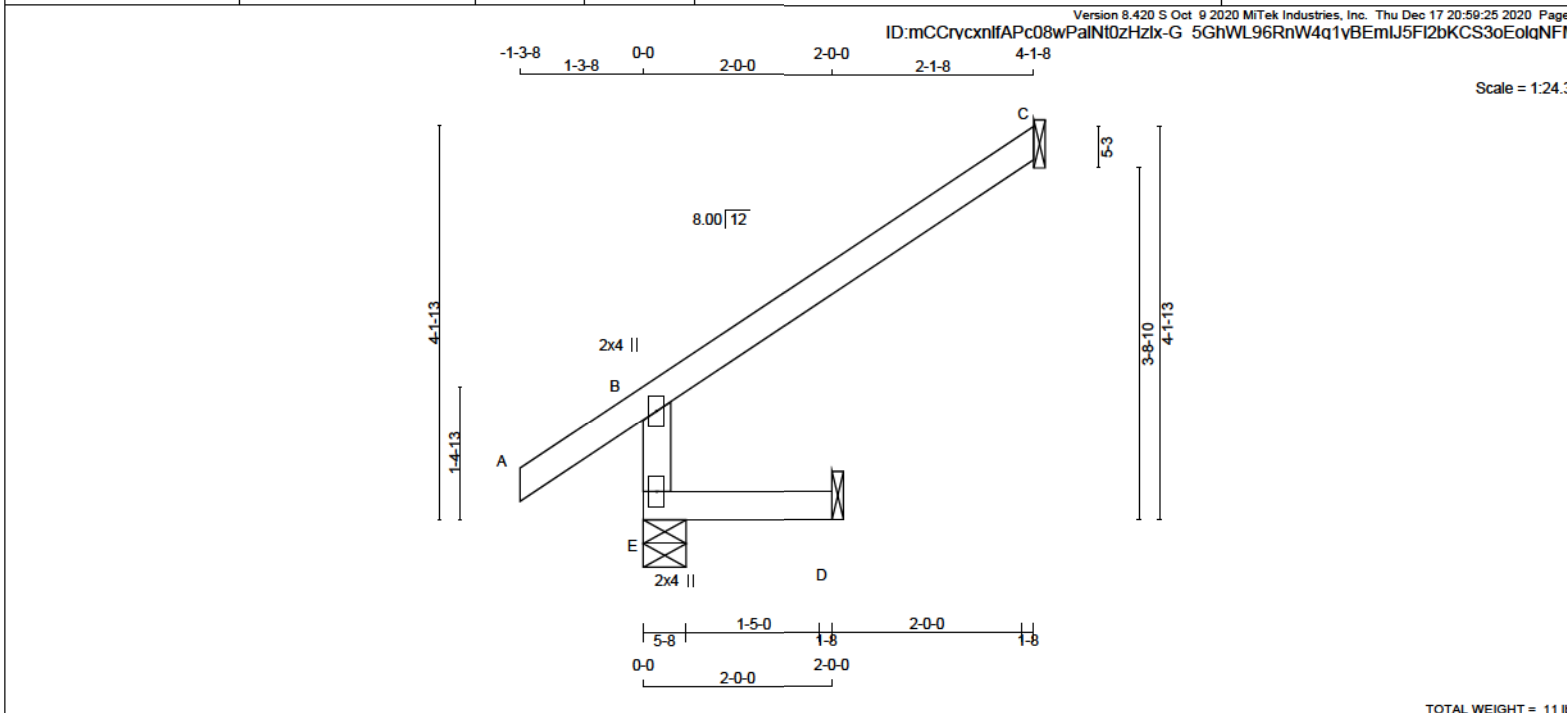
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





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			
E - B	2x4	DRY	No.2	GROSS REACTION	GROSS REACTION	BRG	BRG	DL = 8.0 PSF			
A - C	2x4	DRY	No.2	JT VERT	JT HORZ	DOWN	UPLIFT	BOT CH. LL = 10.5 PSF			
E - D	2x4	DRY	No.2	E 534	0	534	0	DL = 7.3 PSF			
DRY: SEASONED LUMBER.				C 193	0	193	0	TOTAL LOAD = 60.6 PSF			
				D 36	0	45	0				

							SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C , D							TOTAL LOAD = 80.6 PSF	
PLATES (table is in inches)							UNFACTORED REACTIONS							SPACING = 24.0 IN. C/C	
JT	TYPE	PLATES	W	LEN	Y	X	JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
B	TMV+p	MT20	2.0	4.0			JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD		
E	BMV1+p	MT20	2.0	4.0			E	377	275 / 0	23 / 0	0 / 0	0 / 0	79 / 0		
							C	133	108 / 0	0 / 0	0 / 0	0 / 0	25 / 0		
							D	32	0 / 0	19 / 0	0 / 0	0 / 0	13 / 0		
														THIS DESIGN COMPLIES WITH: - PART 9 OF CBCB 2018 , ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT)	

SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, 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				WEBS			
TOTAL LOAD CASES: (4)				MAX. FACTORED			
CHORDS		FACTORED		MAX. FACTORED		MAX. FACTORED	
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MEMB.	FORCE	MAX	MAX
	(LBS)	(PLF)	CSI (LC)		(LBS)	CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
E-B	-491 / 0	0.0	0.0 (3)	E-B	0 / 0	7.81	
A-B	0 / 47	-124.4	-124.4 (1)	A-B	0 / 0	10.00	
B-C	-36 / 0	-124.4	-124.4 (1)	B-C	0 / 0	6.25	
E-D	0 / 0	-39.2	-39.2 (3)	E-D	0 / 0	10.00	

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=0.36/1.00 (B-C:1) , BC=0.04/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.21/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



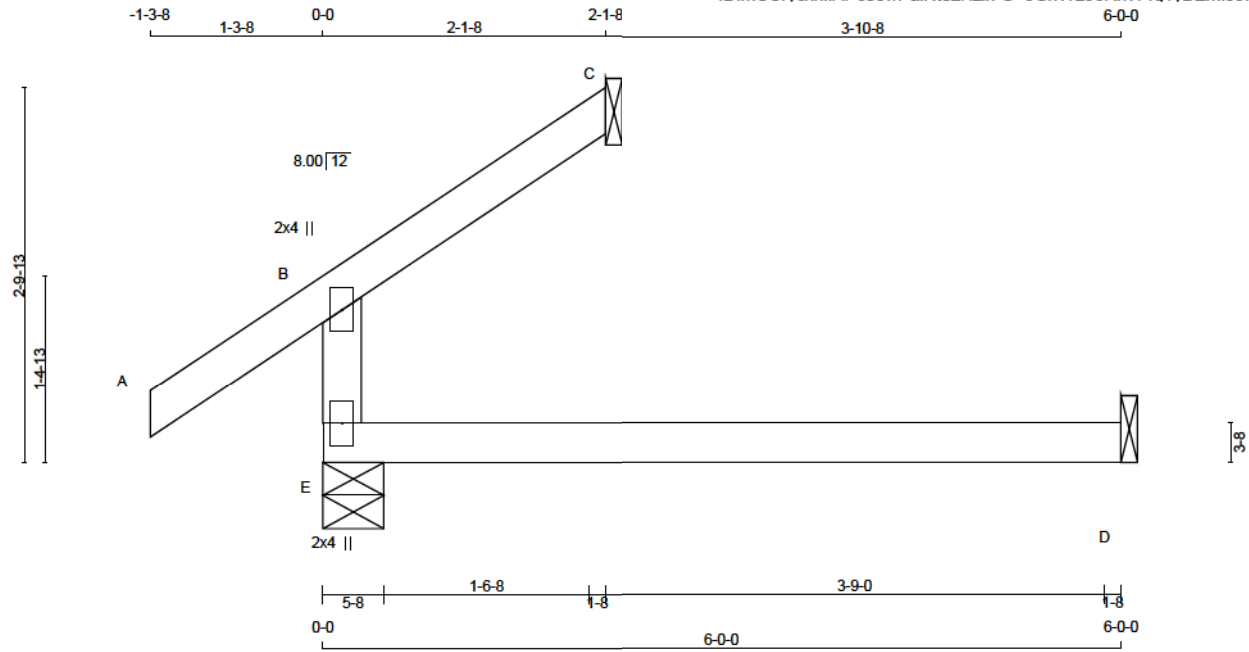
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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 13 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y
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	472	472	0	5-8	1-8		
C	100	100	0	1-8	1-8		
D	99	125	0	1-8	1-8		

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

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 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 L1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
E-B	-335 / 0	0.0	0.0 0.20 (3)	7.81			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00			
B-C	-18 / 0	-124.4	-124.4 0.09 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 0.22 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI)
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)



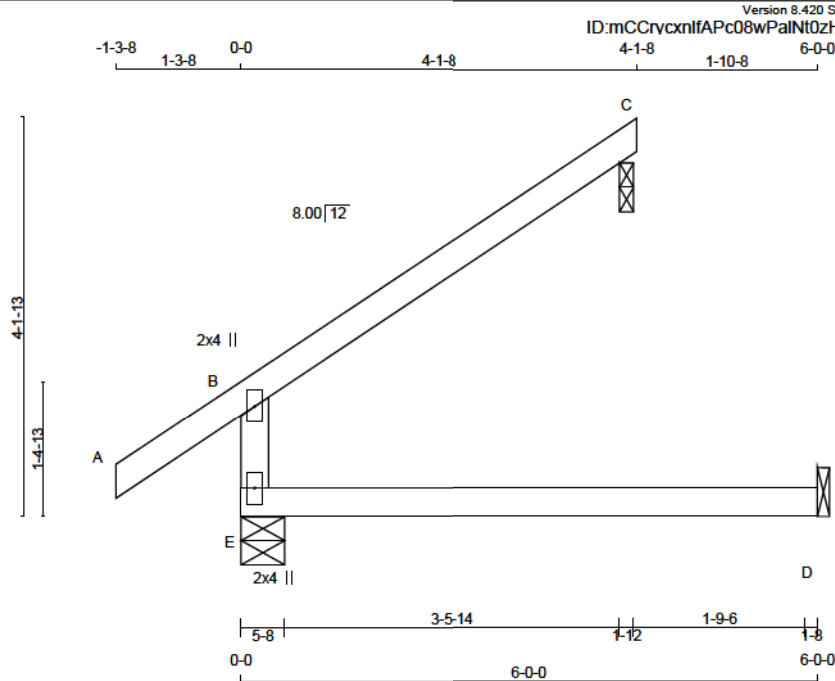
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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





TOTAL WEIGHT = 16 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
B	TMV+p	MT20	2.0	4.0	X
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
E	628	0	628	0	0
C	193	0	193	0	0
D	99	0	125	0	0

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

UNFACTORED REACTIONS		1ST LCASE	MAX / MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM. LIVE
E	462	275 / 0	73 / 0	0 / 0
C	133	108 / 0	0 / 0	0 / 0
D	89	0 / 0	53 / 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		MAX. FACTORED	FACTORED	WEBS	MAX. FACTORED
MEMB.	FORCE (LBS)	VERT. LOAD (PLF)	LOAD LC1 MAX (PLF)	MEMB. FORCE (LBS)	MAX. FACTORED (LBS)
FR-TO					
E-B	-491 / 0	0.0	0.0	0.21 (3)	7.81
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00
B-C	-36 / 0	-124.4	-124.4	0.36 (1)	6.25
E-D	0 / 0	-39.2	-39.2	0.23 (3)	10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.36/1.00 (B-C:1) , BC=0.23/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.21/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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.

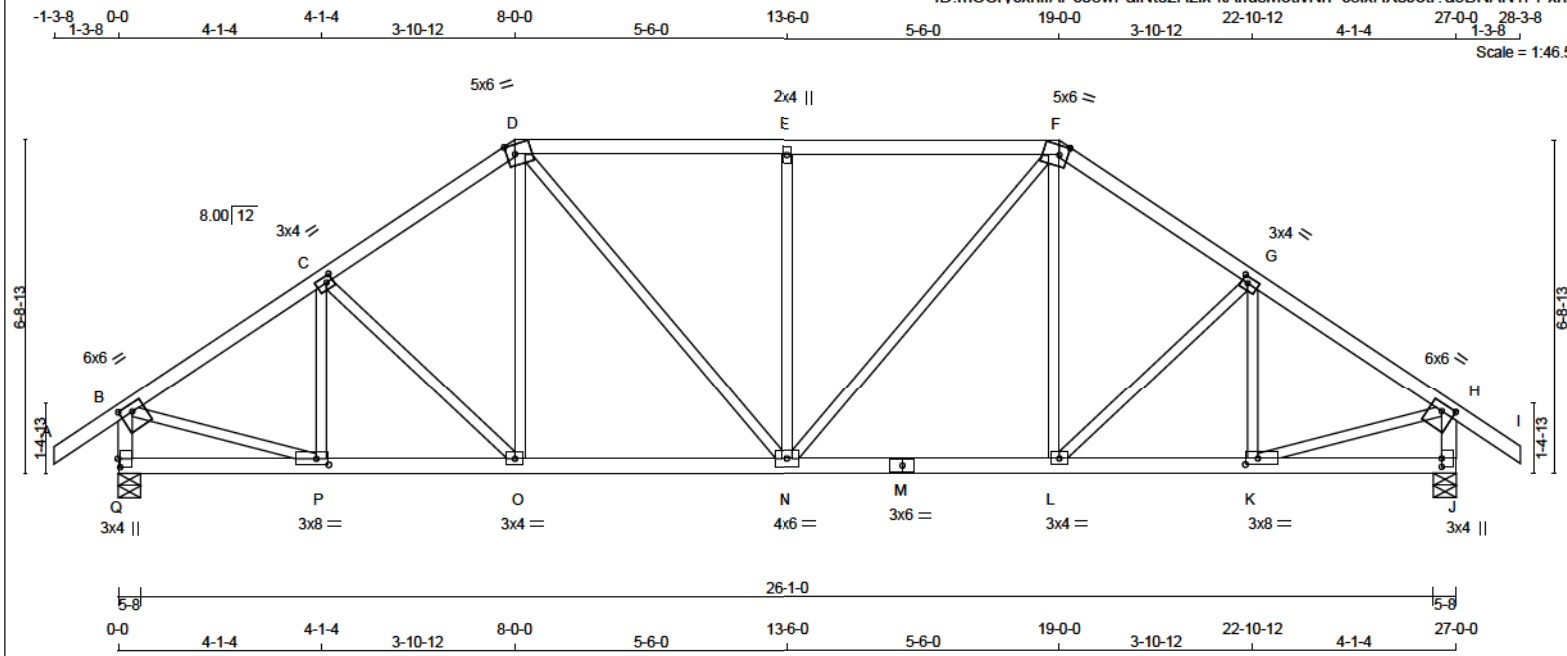


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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Thu Dec 17 20:59:26 2020 Page 1
ID: mCCrycnlfAPc08wPaINt0zHzlx-kAffusMotivNn c8lxHXsJoff?a9BNAN1PPxnp7y



LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
Q 2380 0	2380 0	0 5-8	4-4
J 2380 0	2380 0	0 5-8	4-4

UNFACTORED REACTIONS

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

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

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

LOADING
TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

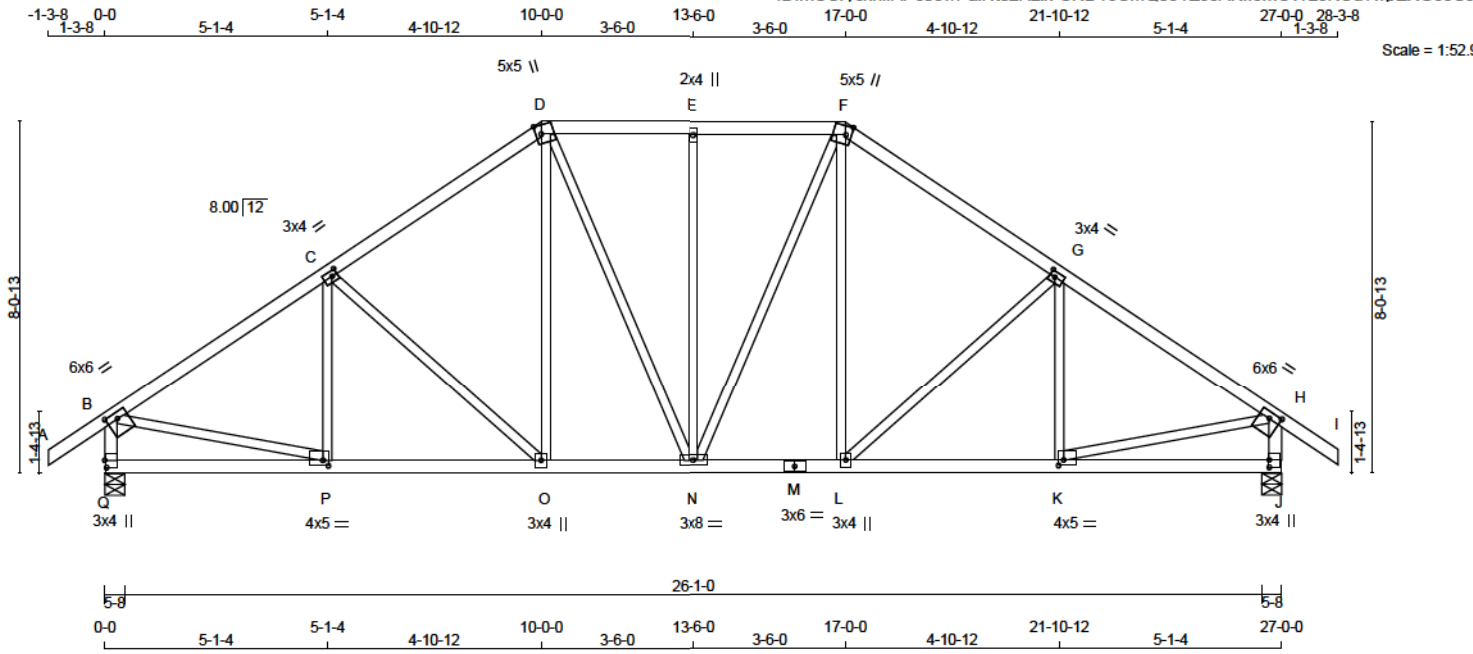


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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	42326	2021-02-05
Sewage System			
Zoning			

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TOTAL WEIGHT = 129 LB

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

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
Q	2380	0	2380	0	0	5-8	4-4
J	2380	0	2380	0	0	5-8	4-4

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.85 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1 MAX)	MAX. FACTORED FORCE (LBS)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LC1 MAX)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	P-C	-232 / 96
B-C	-2534 / 0	-124.4	-124.4	0.50 (1)	3.85	C-O	-466 / 0
C-D	-2202 / 0	-124.4	-124.4	0.47 (1)	4.12	O-D	0 / 480
D-E	-1943 / 0	-124.4	-124.4	0.22 (1)	4.64	D-N	0 / 345
E-F	-1943 / 0	-124.4	-124.4	0.22 (1)	4.64	N-E	-515 / 0
F-G	-2202 / 0	-124.4	-124.4	0.47 (1)	4.12	N-F	0 / 345
G-H	-2534 / 0	-124.4	-124.4	0.50 (1)	3.85	L-F	0 / 480
H-I	0 / 47	-124.4	-124.4	0.17 (1)	10.00	L-G	-466 / 0
Q-B	-2297 / 0	0.0	0.0	0.24 (1)	5.82	K-G	-232 / 96
J-H	-2297 / 0	0.0	0.0	0.24 (1)	5.82	B-P	0 / 2189
Q-P	0 / 0	-39.2	-39.2	0.19 (3)	10.00	K-H	0 / 2189
P-O	0 / 2142	-39.2	-39.2	0.46 (1)	10.00		
O-N	0 / 1801	-39.2	-39.2	0.37 (1)	10.00		
N-M	0 / 1801	-39.2	-39.2	0.37 (1)	10.00		
M-L	0 / 1801	-39.2	-39.2	0.37 (1)	10.00		
L-K	0 / 2142	-39.2	-39.2	0.46 (1)	10.00		
K-J	0 / 0	-39.2	-39.2	0.19 (3)	10.00		

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.50/1.00 (G-H:1) , BC=0.48/1.00 (K-L:1) , WB=0.64/1.00 (E-N:1) , SSI=0.25/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



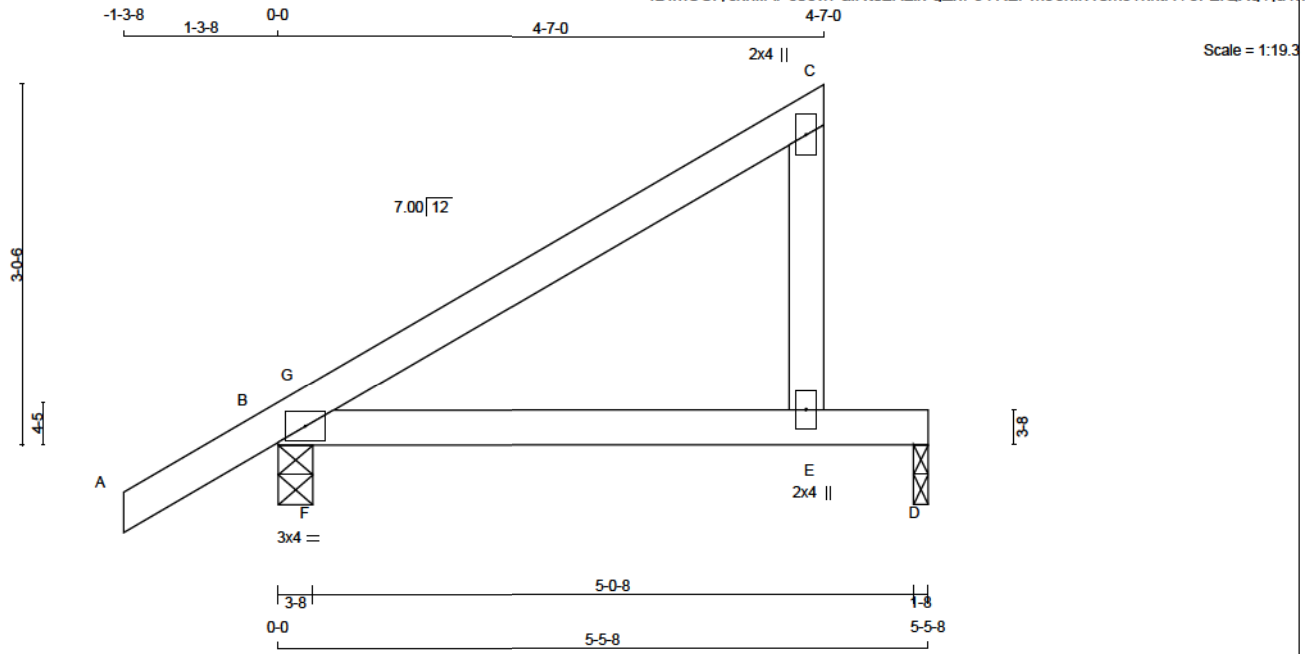
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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	42326	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 3 X 17 = 51 LB

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	2100F 1.8E		SPF
E - 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	TMB1-I	MT20	3.0	4.0	
C	TMV+p	MT20	2.0	4.0	
E	BMV+p	MT20	2.0	4.0	

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	IN-SX	BRG
B	608	0	608	0	0	3-8	1-8	1-8	
D	347	0	347	0	0	1-8	1-8	1-8	

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

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

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

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

LOADING				TOTAL LOAD CASES: (4)			
CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO		LENGTH	
A-B	0 / 41	-124.4 -124.4	0.11 (1)	10.00	F-G	-76 / 264	0.00 (1)
B-G	-166 / 0	-124.4 -124.4	0.10 (3)	6.25			
G-C	0 / 12	-124.4 -124.4	0.28 (1)	10.00			
E-C	-279 / 0	0.0	0.04 (1)	7.81			
B-F	0 / 0	-39.2 -39.2	0.10 (1)	10.00			
F-E	0 / 0	-39.2 -39.2	0.41 (1)	10.00			
E-D	0 / 0	-39.2 -39.2	0.39 (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 (0.10")
CALCULATED VERT. DEFL.(LL) = L/ 645 (0.10")
ALLOWABLE DEFL.(TL)= L/360 (0.10")
CALCULATED VERT. DEFL.(TL) = L/ 373 (0.18")

CSI: TC=0.28/1.00 (C-G-1) , BC=0.41/1.00 (E-F-1) ,
WB=0.00/1.00 (F-G-1) , SSI=0.27/1.00 (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= 0.39 (B) (INPUT = 0.90)
JSI METAL= 0.13 (C) (INPUT = 1.00)



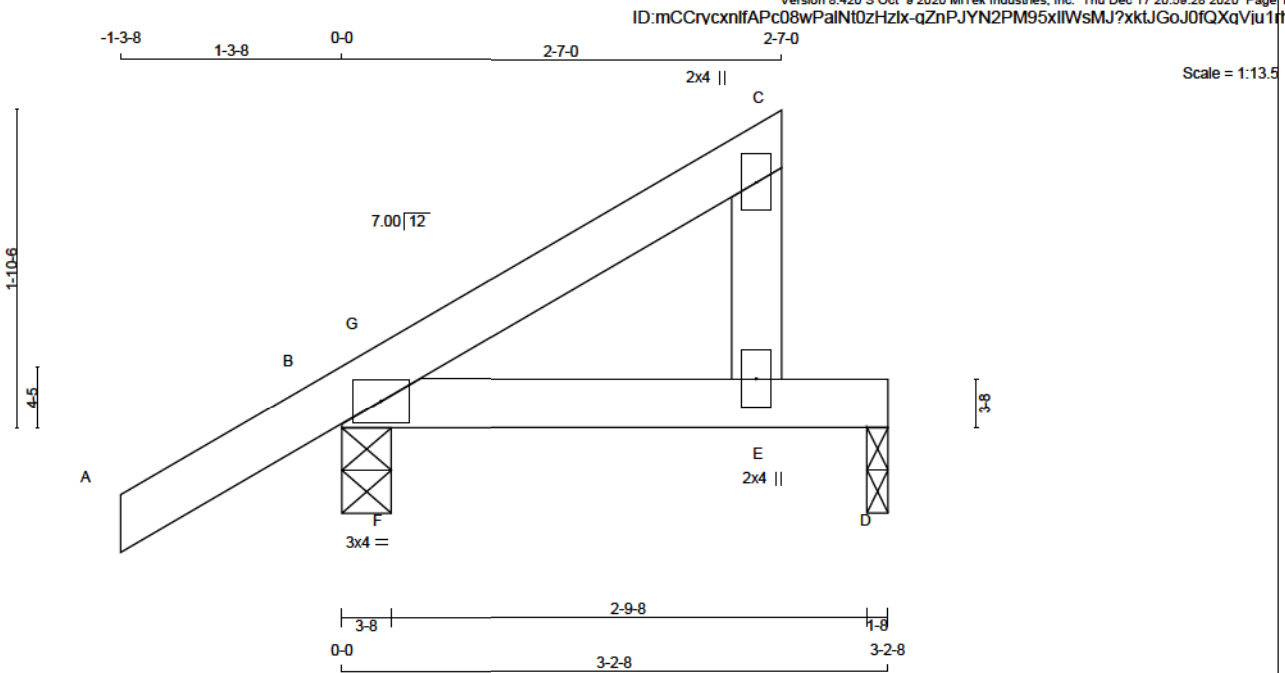
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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





TOTAL WEIGHT = 10 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMB1-I	MT20	3.0	4.0	
C	TMV+p	MT20	2.0	4.0	
E	BMV+p	MT20	2.0	4.0	

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

BEARINGS

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
B	425	0	425	0	0	3-8	1-8
D	192	0	192	0	0	1-8	1-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	306	202 / 0	34 / 0	0 / 0	0 / 0	70 / 0	0 / 0
D	146	72 / 0	34 / 0	0 / 0	0 / 0	40 / 0	0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. LOCAL 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 (5)	10.00	F-G	-54 / 83
B-G	-61 / 0	-124.4	-124.4	0.05 (2)	8.25		
G-C	0 / 8	-124.4	-124.4	0.13 (1)	10.00		
E-C	-153 / 0	0.0	0.0	0.02 (1)	7.81		
B-F	0 / 0	-39.2	-39.2	0.06 (1)	10.00		
F-E	0 / 0	-39.2	-39.2	0.16 (1)	10.00		
E-D	0 / 0	-39.2	-39.2	0.15 (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 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")

CSI: TC=0.17/1.00 (A-B:5) , BC=0.16/1.00 (E-F:1) ,
WB=0.00/1.00 (F-G:1) , SSI=0.15/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE	GRIP(DRY)		SHEAR		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= 0.28 (B) (INPUT = 0.90)
JSI METAL= 0.07 (C) (INPUT = 1.00)



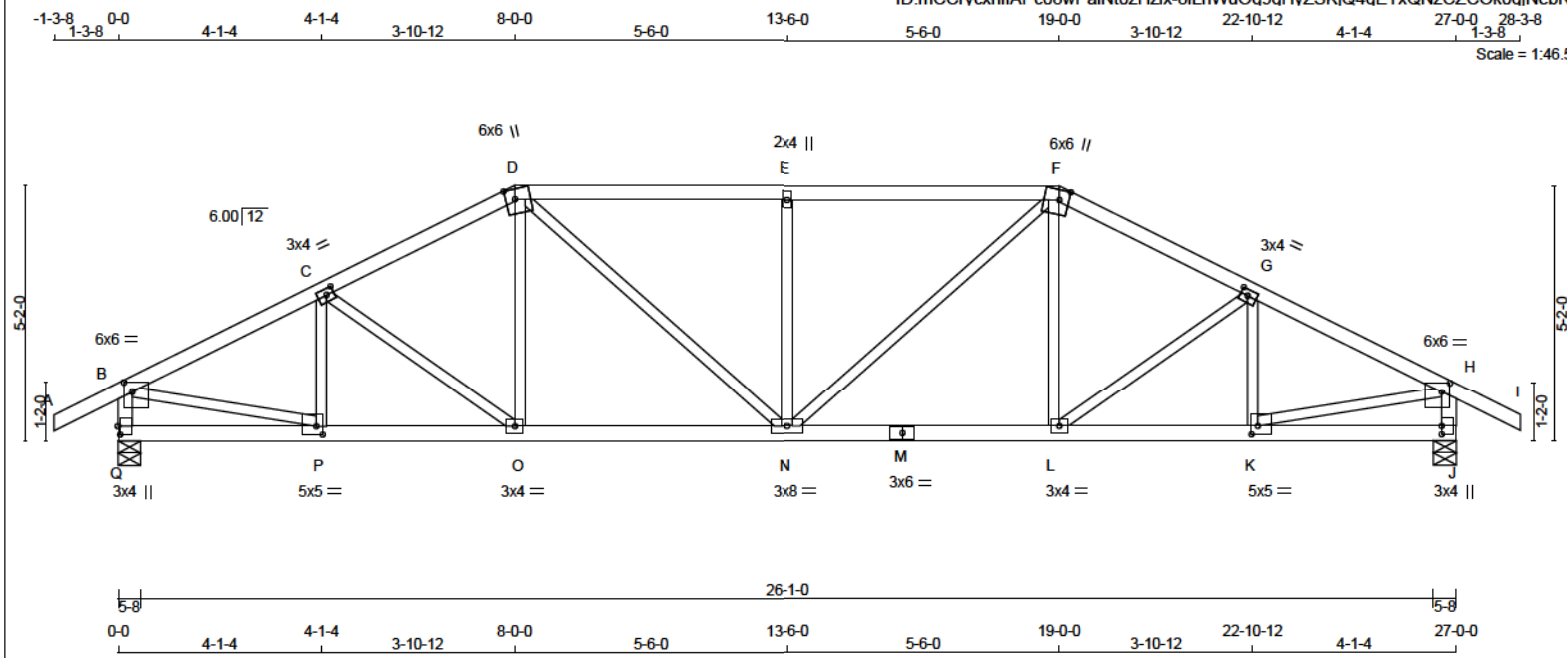
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
Q - B	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF
Q - M	2x4	DRY No.2	SPF
M - J	2x4	DRY No.2	SPF
ALL WEBS	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	4.0	2.25	2.00
C - TMVW-t	MT20	3.0	4.0	1.50	1.75
D - TTWW+m	MT20	6.0	6.0	2.50	2.25
E - TMVW-t	MT20	2.0	4.0		
F - TTWW+m	MT20	6.0	6.0	2.50	2.25
G - TMVW-t	MT20	3.0	4.0	1.50	1.75
H - TMVW-p	MT20	6.0	6.0	2.25	2.00
J - BMV1+p	MT20	3.0	4.0	2.00	
K - BMVW-t	MT20	5.0	5.0	2.00	1.50
L - BMVW-t	MT20	3.0	4.0		
M - BS-t	MT20	3.0	6.0		
N - BMVW-t	MT20	3.0	8.0		
O - BMVW-t	MT20	3.0	4.0		
P - BMVW-t	MT20	5.0	5.0	2.00	1.50
Q - BMV1+p	MT20	3.0	4.0	2.00	0.50



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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
Q 2378	0	0	5-8
J 2378	0	0	5-8

UNFACTORED REACTIONS

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

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J
BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.30 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

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

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

SPACING = 24.0 IN. C/C
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015
THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD
ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.14")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.24")
CSI: TC=0.62/1.00 (D-E:1) , BC=0.54/1.00 (K-L:1) ,
WB=0.63/1.00 (H-K:1) , SSI=0.33/1.00 (D-E:1)
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10
COMPANION LIVE LOAD FACTOR = 1.00

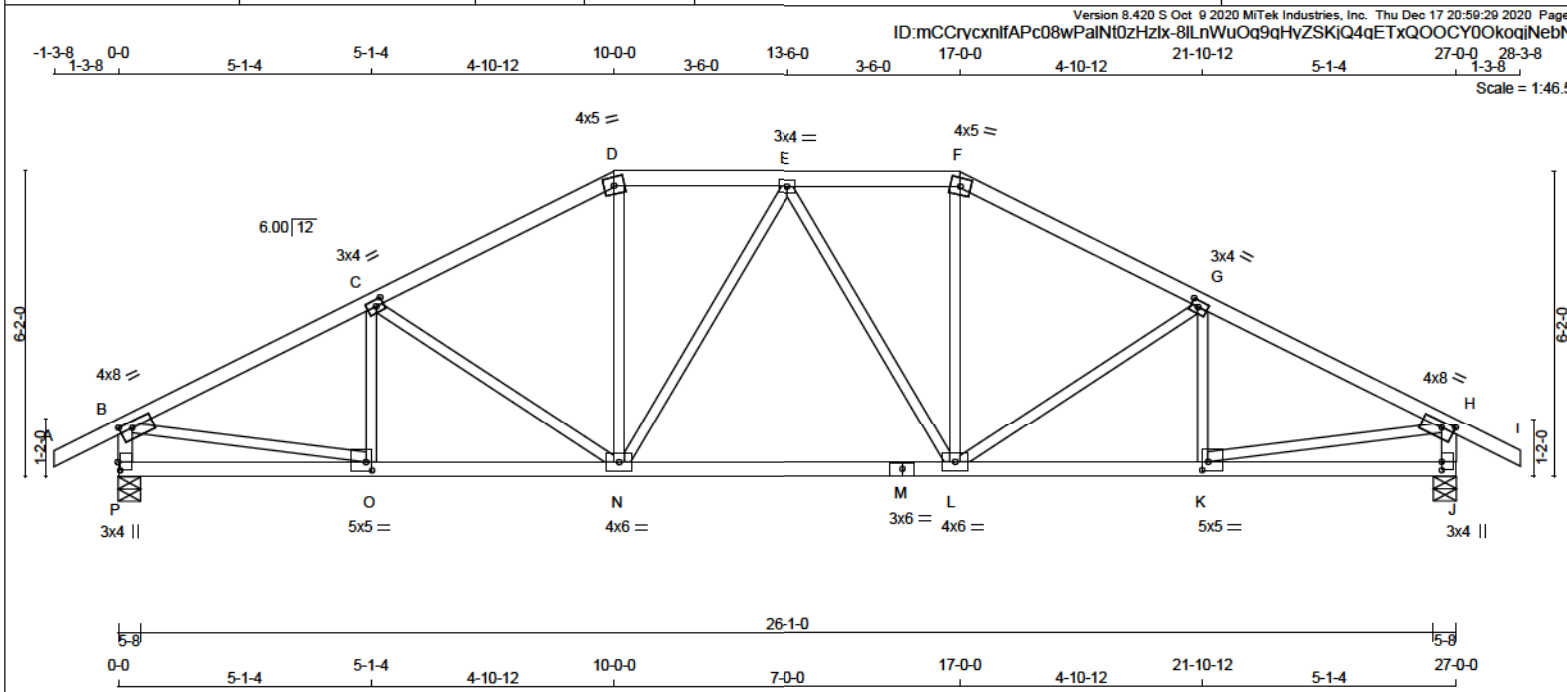
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .
NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873
PLATE PLACEMENT TOL = 0.250 inches
PLATE ROTATION TOL = 5.0 Deg.
JSI GRIP= 0.87 (H) (INPUT = 0.80)
JSI METAL = 0.88 (M) (INPUT = 1.00)



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





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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



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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UP	IN-SX
P 2378 0	2378 0	0 0	5-8 4-4
J 2378 0	2378 0	0 0	5-8 4-4

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.49 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING
TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

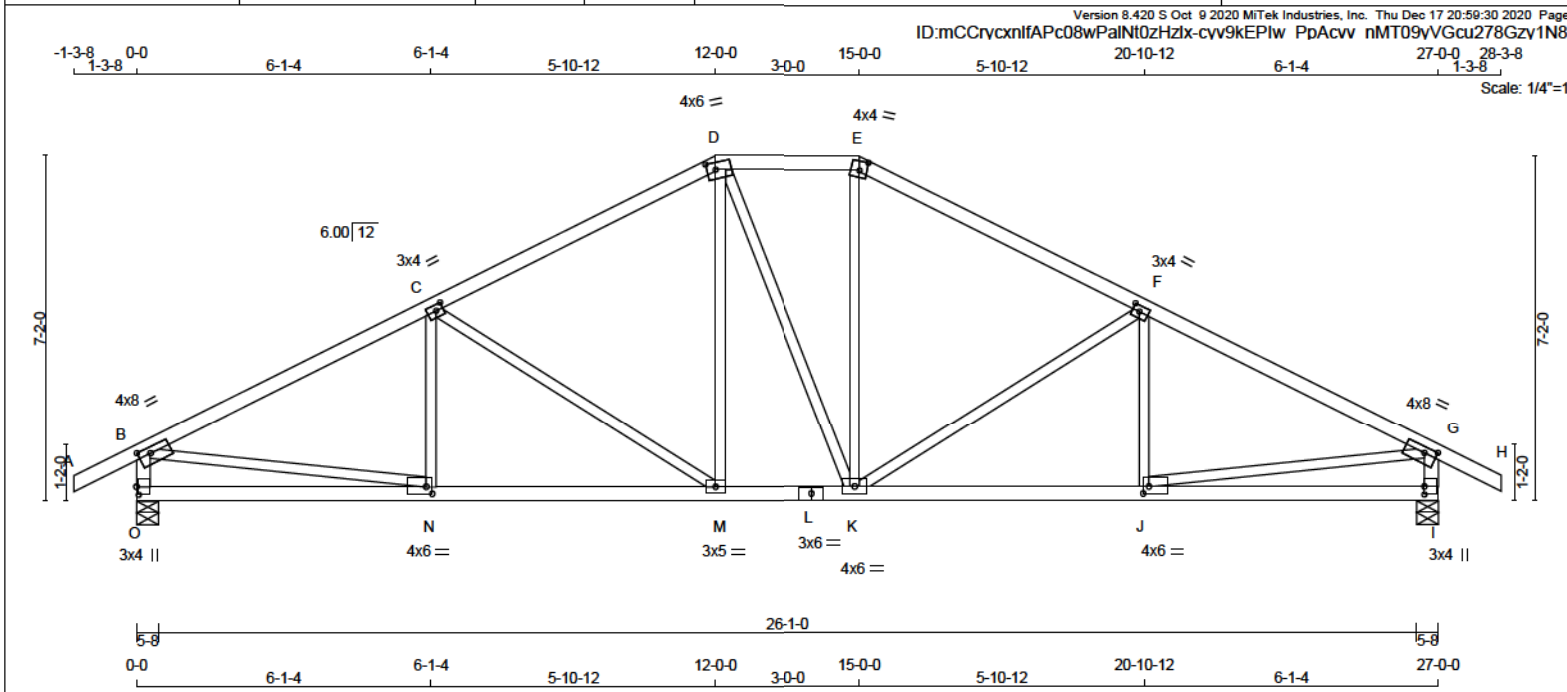
JSI GRIP= 0.90 (B) (INPUT = 0.90)
JSI METAL = 0.76 (O) (INPUT = 1.00)



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





LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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



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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
O	2378	0	5-8	4-4
I	2378	0	5-8	4-4

UNFACTORED REACTIONS

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

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.12 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00	N-C	-129 / 181	0.04 (3)
B-C	-3134 / 0	-124.4	-124.4 0.78 (1)	3.12	C-M	-826 / 0	0.82 (1)
C-D	-2441 / 0	-124.4	-124.4 0.67 (1)	3.63	M-D	0 / 608	0.14 (1)
D-E	-2158 / 0	-124.4	-124.4 0.19 (1)	4.47	D-K	0 / 5	0.00 (1)
E-F	-2443 / 0	-124.4	-124.4 0.67 (1)	3.63	K-E	0 / 614	0.14 (1)
F-G	-3133 / 0	-124.4	-124.4 0.78 (1)	3.12	K-F	-822 / 0	0.81 (1)
G-H	0 / 38	-124.4	-124.4 0.16 (1)	10.00	J-F	-132 / 179	0.04 (3)
O-B	-2280 / 0	0.0	0.0 0.23 (1)	5.65	B-N	0 / 2886	0.64 (1)
I-G	-2279 / 0	0.0	0.0 0.23 (1)	5.65	J-G	0 / 2885	0.64 (1)
O-N	0 / 0	-39.2	-39.2 0.29 (3)	10.00			
N-M	0 / 2838	-39.2	-39.2 0.63 (1)	10.00			
M-L	0 / 2156	-39.2	-39.2 0.45 (1)	10.00			
L-K	0 / 2156	-39.2	-39.2 0.45 (1)	10.00			
K-J	0 / 2837	-39.2	-39.2 0.63 (1)	10.00			
J-I	0 / 0	-39.2	-39.2 0.28 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

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

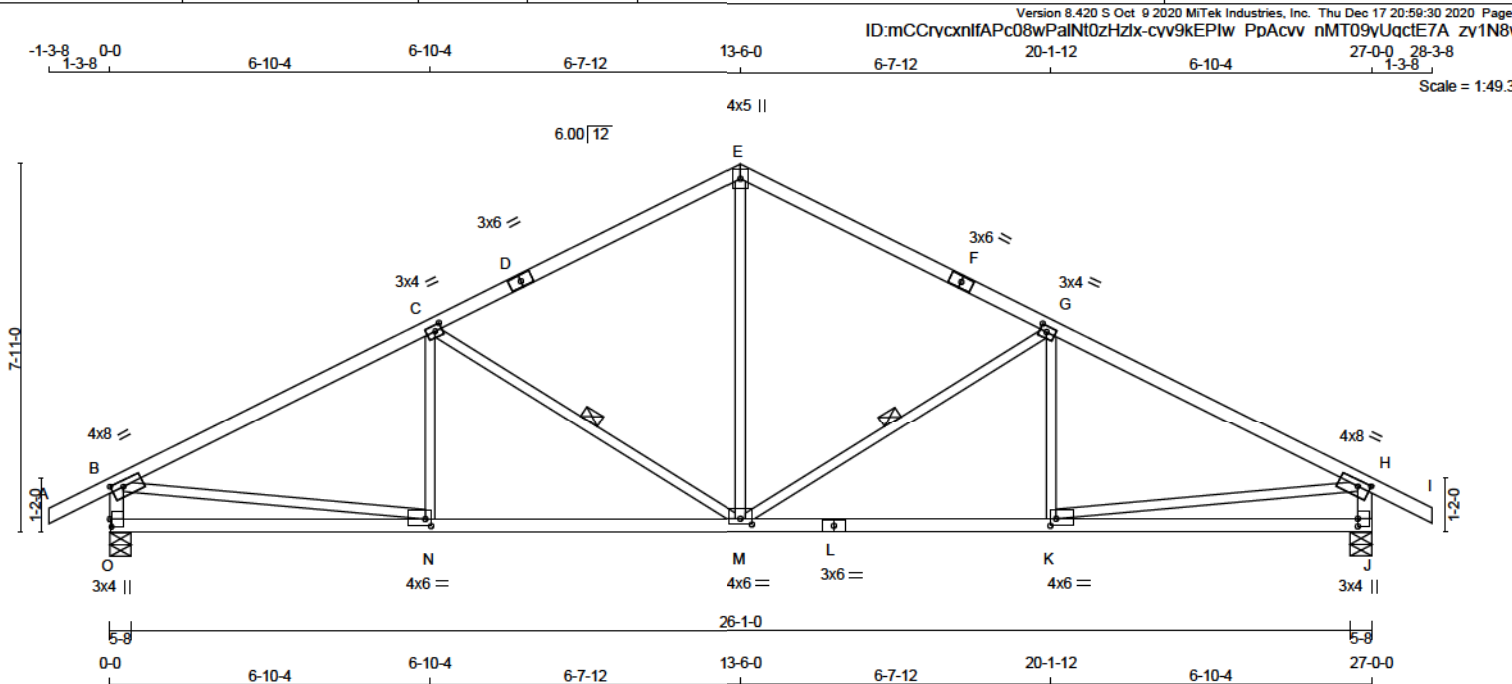
JSI GRIP= 0.89 (B) (INPUT = 0.80)
JSI METAL = 0.71 (L) (INPUT = 1.00)



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





LUMBER		N. L. G. A. RULES		LUMBER		DESCR.	
CHORDS	SIZE						
A - D	2x4	DRY		2100F 1.8E			SPF
D - E	2x4	DRY		No.2			SPF
E - F	2x4	DRY		No.2			SPF
F - G	2x4	DRY		2100F 1.8E			SPF
O - B	2x4	DRY		No.2			SPF
J - H	2x4	DRY		No.2			SPF
O - L	2x4	DRY		No.2			SPF
L - J	2x4	DRY		No.2			SPF

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

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

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

BEARINGS

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

UNFACTORED REACTIONS

1ST LCASE MAX./MIN. COMPONENT REACTIONS

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

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

BRACING

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-M, C-M. DBS = 20-0-0 . CBF = 128 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				
MAX. FACTORED		FACTORED			MAX. FACTORED		MAX. FACTORED		
MEMB.	FORCE (LBS)	VERT. LOAD	LC1 MAX (PLF)	LC1 MAX (CSI (LC))	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM	TO		LENGTH	FR-TO			
A-B	0 / 38	-124.4	-124.4	0.11 (1)	10.00	M-E	0 / 1362	0.31 (1)	
B-C	-3128 / 0	-124.4	-124.4	0.59 (1)	4.17	M-G	-1025 / 0	0.43 (1)	
C-D	-2258 / 0	-124.4	-124.4	0.87 (1)	3.28	K-G	-62 / 230	0.06 (3)	
D-E	-2258 / 0	-124.4	-124.4	0.87 (1)	3.28	C-M	-1025 / 0	0.43 (1)	
E-F	-2258 / 0	-124.4	-124.4	0.87 (1)	3.28	N-C	-62 / 230	0.06 (3)	
F-G	-2258 / 0	-124.4	-124.4	0.87 (1)	3.28	B-N	0 / 2861	0.64 (1)	
G-H	-3128 / 0	-124.4	-124.4	0.59 (1)	4.17	K-H	0 / 2861	0.64 (1)	
H-I	0 / 38	-124.4	-124.4	0.11 (1)	10.00				
O-B	-2268 / 0	0.0	0.0	0.23 (1)	5.66				
J-H	-2268 / 0	0.0	0.0	0.23 (1)	5.66				
O-N	0 / 0	-39.2	-39.2	0.35 (3)	10.00				
N-M	0 / 2839	-39.2	-39.2	0.68 (2)	10.00				
M-L	0 / 2839	-39.2	-39.2	0.68 (2)	10.00				
L-K	0 / 2839	-39.2	-39.2	0.68 (2)	10.00				
K-J	0 / 0	-39.2	-39.2	0.35 (3)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.23")

CSI: TC=0.87/1.00 (E-G:1), BC=0.68/1.00 (K-M:2),
WB=0.64/1.00 (H-K:1), SSI=0.37/1.00 (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

	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 (B) (INPUT = 0.90)
JSI METAL= 0.91 (L) (INPUT = 1.00)



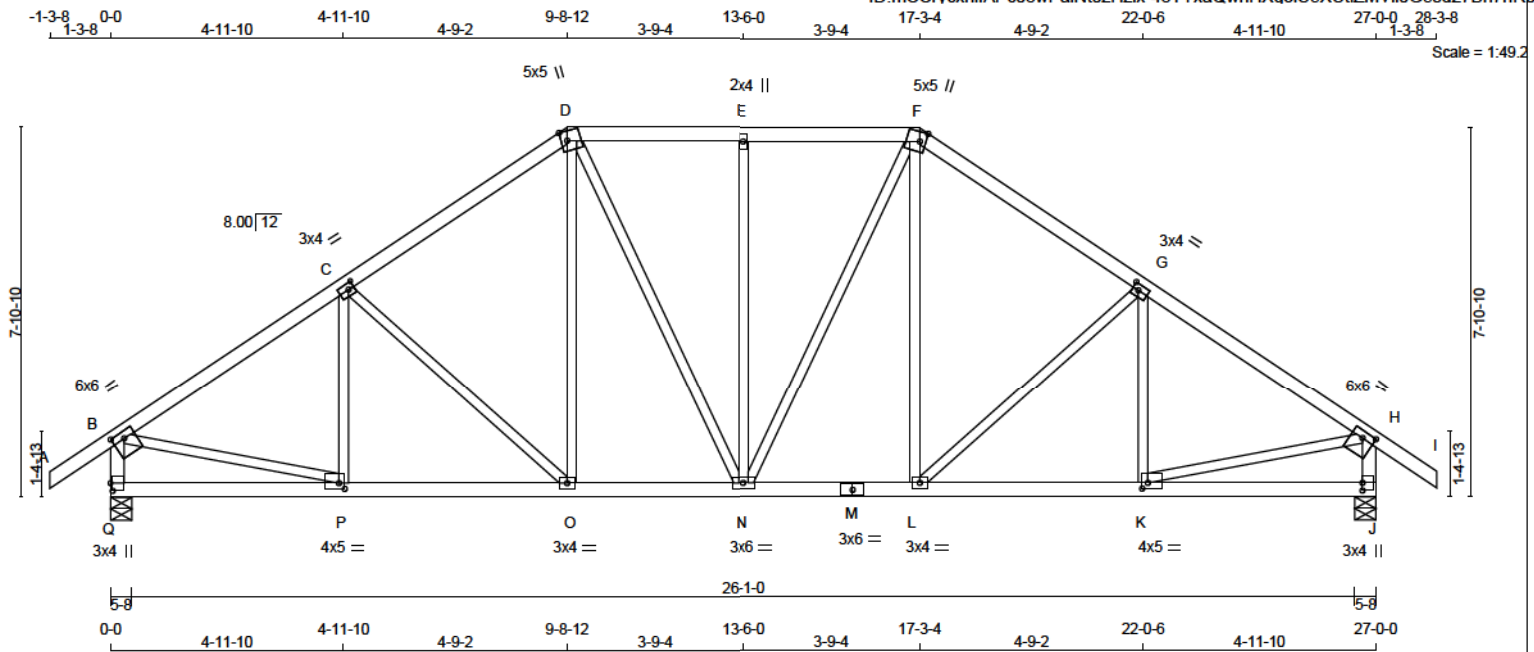
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			





[M][F]

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

DRY: SEASONED LUMBER.

BEARINGS

FACT

JT	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQD BRG
	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX
Q	2380	0	2380	0	0	5-8
J	2380	0	2380	0	0	5-8

1ST LCASE MAX.

NOW LIVE PERM.LIVE WI

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
Q	1754	1035 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0
J	1754	1035 / 0	284 / 0	0 / 0	0 / 0	435 / 0	0 / 0

TOP CHO

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CE

TOTAL LO

CHORDS					WEBS				
MAX. FACTORED		FACTORED		MAX.		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LC1 MAX (PLF)	MAX. CSI (LC)	UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LC)	
FR-TO		FROM TO				LENGTH-TO			
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	P-C	-251 / 82	0.08 (1)	
B-C	-2529 / 0	-124.4	-124.4	0.47 (1)	3.89	C-D	-431 / 0	0.34 (1)	
C-D	-2227 / 0	-124.4	-124.4	0.44 (1)	4.13	O-D	0 / 459	0.10 (1)	
D-E	-1994 / 0	-124.4	-124.4	0.25 (1)	4.55	D-N	0 / 385	0.09 (1)	
E-F	-1994 / 0	-124.4	-124.4	0.25 (1)	4.55	N-E	-559 / 0	0.86 (1)	
F-G	-2227 / 0	-124.4	-124.4	0.44 (1)	4.13	N-F	0 / 385	0.09 (1)	
G-H	-2229 / 0	-124.4	-124.4	0.47 (1)	3.89	L-F	0 / 459	0.10 (1)	
H-I	0 / 47	-124.4	-124.4	0.17 (1)	10.00	I-J	-431 / 0	0.34 (1)	
Q-B	-2599 / 0	0.0	0.0	0.24 (1)	5.82	K-G	-251 / 82	0.08 (1)	
J-H	-2299 / 0	0.0	0.0	0.24 (1)	5.82	B-P	0 / 2187	0.49 (1)	
						K-H	0 / 2187	0.49 (1)	
Q-P	0 / 0	-39.2	-39.2	0.18 (3)	10.00				
P-O	0 / 2137	-39.2	-39.2	0.45 (1)	10.00				
N-M	0 / 1823	-39.2	-39.2	0.37 (1)	10.00				
O-N	0 / 1823	-39.2	-39.2	0.37 (1)	10.00				
M-L	0 / 1823	-39.2	-39.2	0.37 (1)	10.00				
L-K	0 / 2137	-39.2	-39.2	0.45 (1)	10.00				
K-J	0 / 0	-39.2	-39.2	0.18 (3)	10.00				

TOP CH. LL =

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

	_____	_____	_____
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- PART 9 OF BCBC 2018 . ABC 20

- CSA 086-14

100

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

WB=0.68/1.00 (E-N:1) . SSI=0.25/1.00 (B-C:1)

[illegible]

PLATE GRIP

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

JSI METAL= 0.67 (H) (INPUT = 1.00)



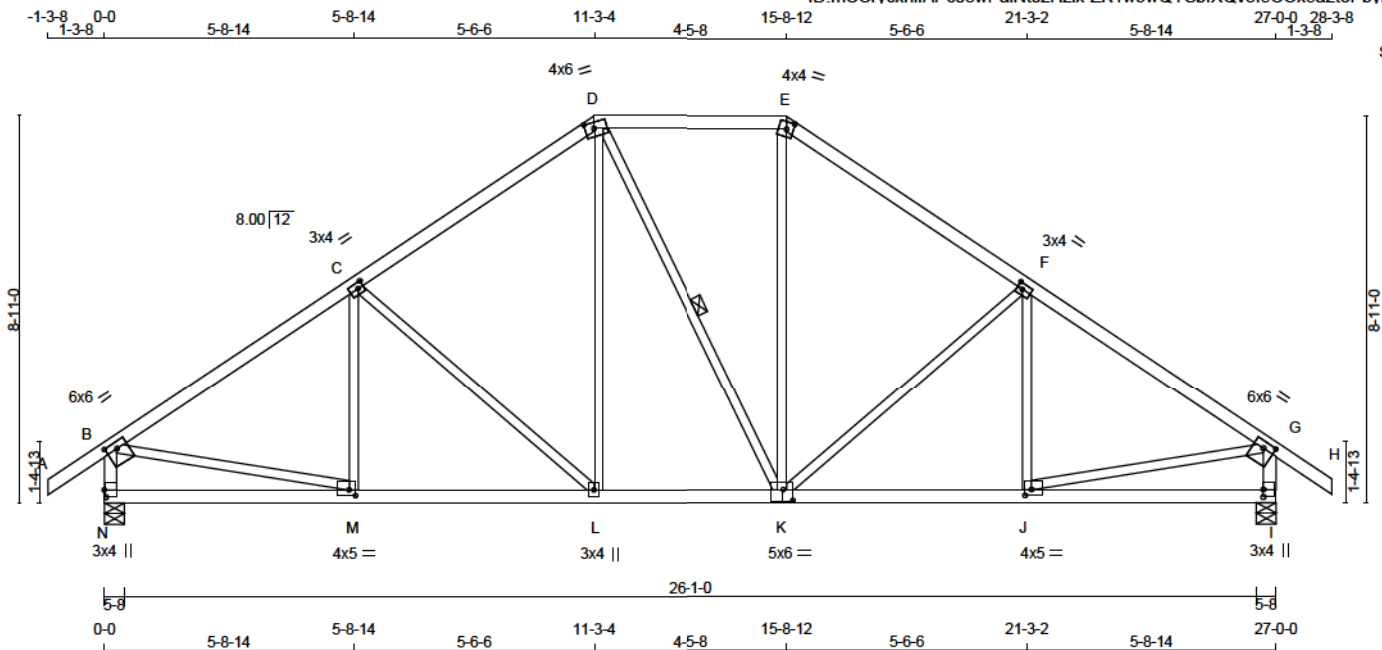
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-0
Sewage System			
Zoning			





LUMBER				DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER	
A - D	2x4	DRY	No.2	SPF
D - E	2x4	DRY	No.2	SPF
E - H	2x4	DRY	No.2	SPF
N - B	2x4	DRY	No.2	SPF
I - G	2x4	DRY	No.2	SPF
N - K	2x4	DRY	No.2	SPF
K - I	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	X
B	TMVW-t	MT20	6.0	6.0	1.75 3.00
C	TMVW-t	MT20	3.0	4.0	1.50 1.50
D	TTWW-m	MT20	4.0	6.0	1.75 2.50
E	TTW-m	MT20	4.0	4.0	2.00 1.75
F	TMVW-t	MT20	3.0	4.0	1.50 1.50
G	TMVW-t	MT20	6.0	6.0	1.75 3.00
I	BMV1+p	MT20	3.0	4.0	2.00
J	BMVW-t	MT20	4.0	5.0	1.50 1.75
K	BSWWW-t	MT20	5.0	6.0	3.00 2.75
L	BMVW-t	MT20	3.0	4.0	
M	BMVW-t	MT20	4.0	5.0	1.50 1.75
N	BMV1+p	MT20	3.0	4.0	2.00 0.50

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX
N	2380	0	2380	0	5-8
I	2380	0	2380	0	5-8

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
N	1754	1035 / 0	284 / 0
I	1754	1035 / 0	284 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.64 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-K. DBS = 20-0-0. CBF = 4 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED FORCE (LBS)
FR-TO	FROM	TO	LENGTH
A-B	0 / 47	-124.4 -124.4	0.17 (1)
B-C	-2545 / 0	-124.4 -124.4	0.85 (1)
C-D	-2080 / 0	-124.4 -124.4	0.59 (1)
D-E	-1686 / 0	-124.4 -124.4	0.35 (1)
E-F	-2070 / 0	-124.4 -124.4	0.58 (1)
F-G	-2550 / 0	-124.4 -124.4	0.85 (1)
G-H	0 / 47	-124.4 -124.4	0.17 (1)
N-B	-2288 / 0	0.0	0.24 (1)
I-G	-2291 / 0	0.0	0.24 (1)
N-M	0 / 0	-39.2 -39.2	0.24 (3)
M-L	0 / 2155	-39.2 -39.2	0.50 (2)
L-K	0 / 1697	-39.2 -39.2	0.39 (1)
K-J	0 / 2159	-39.2 -39.2	0.54 (2)
J-I	0 / 0	-39.2 -39.2	0.28 (3)

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

CSI: TC=0.65/1.00 (F-G-1), BC=0.54/1.00 (J-K-2),

WB=0.70/1.00 (F-K-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= 0.89 (G) (INPUT = 0.90)
JSI METAL = 0.68 (G) (INPUT = 1.00)



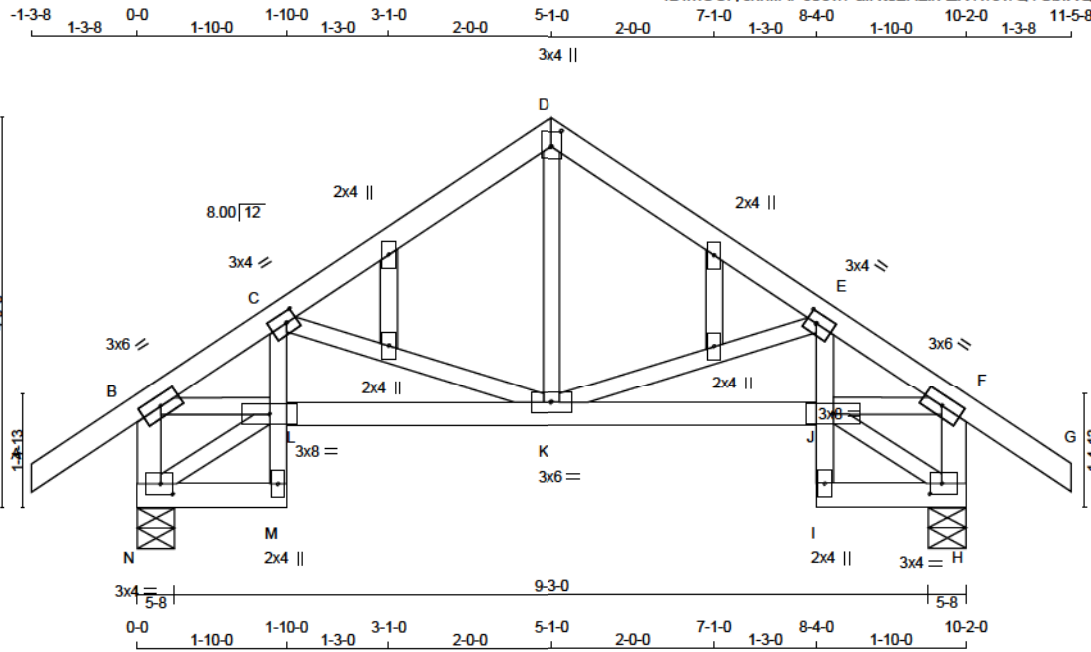
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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





TOTAL WEIGHT = 50 LB

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

PLATES (table is in inches)				
JT TYPE	PLATES	W	LEN Y	X
B TMVW-t	MT20	3.0	6.0	
C TMVW-t	MT20	3.0	4.0	1.50 1.50
D TTW+p	MT20	3.0	4.0	2.25 1.50
E TMVW-t	MT20	3.0	4.0	1.50 1.50
F TMVW-t	MT20	3.0	6.0	
H BMVW1-t	MT20	3.0	4.0	1.50 1.75
I BMV+p	MT20	2.0	4.0	
J BMVWW-H	MT20	3.0	8.0	
K BMVWW-H	MT20	3.0	6.0	
L BMVWW-H	MT20	3.0	8.0	
M BMV+p	MT20	2.0	4.0	
N BMVW1-t	MT20	3.0	4.0	1.50 1.75
O, P, Q, R				
O NP+tw	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
N	1003	0	1003	0
H	1003	0	1003	0

UNFACTORED REACTIONS

1ST LCASE	MAX/MIN COMPONENT REACTIONS				
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD
N	734	449 / 0	107 / 0	0 / 0	178 / 0
H	734	449 / 0	107 / 0	0 / 0	178 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.06 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	K-D	0 / 415	0.09 (1)
B-C	-1221 / 0	-124.4	-124.4 0.14 (1)	5.06	K-E	-459 / 0	0.11 (1)
C-D	-722 / 0	-124.4	-124.4 0.18 (1)	6.25	C-K	-459 / 0	0.11 (1)
D-E	-722 / 0	-124.4	-124.4 0.18 (1)	6.25	B-L	0 / 1005	0.23 (1)
E-F	-1221 / 0	-124.4	-124.4 0.14 (1)	5.06	J-F	0 / 1005	0.23 (1)
F-G	0 / 47	-124.4	-124.4 0.17 (1)	10.00	N-L	-20 / 0	0.00 (1)
N-B	-958 / 0	0.0	0.0 0.10 (1)	7.81	J-H	-20 / 0	0.00 (1)
H-F	-958 / 0	0.0	0.0 0.10 (1)	7.81			
N-M	0 / 17	-39.2	-39.2 0.03 (3)	10.00			
M-L	0 / 43	0.0	0.0 0.06 (1)	10.00			
L-C	0 / 137	0.0	0.0 0.08 (1)	10.00			
L-K	0 / 1021	-39.3	-39.3 0.23 (1)	10.00			
K-J	0 / 1021	-39.2	-39.2 0.23 (1)	10.00			
I-J	0 / 43	0.0	0.0 0.06 (1)	10.00			
J-E	0 / 137	0.0	0.0 0.08 (1)	10.00			
I-H	0 / 17	-39.2	-39.2 0.03 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

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

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

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

CSI: TC=0.18/1.00 (C-D:1) , BC=0.23/1.00 (K-L:1) ,

WB=0.23/1.00 (B-L:1) , SSI=0.15/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR	SECTION
(PSI)	(PLI)
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 (L) (INPUT = 0.90)

JSI METAL= 0.33 (B) (INPUT = 1.00)



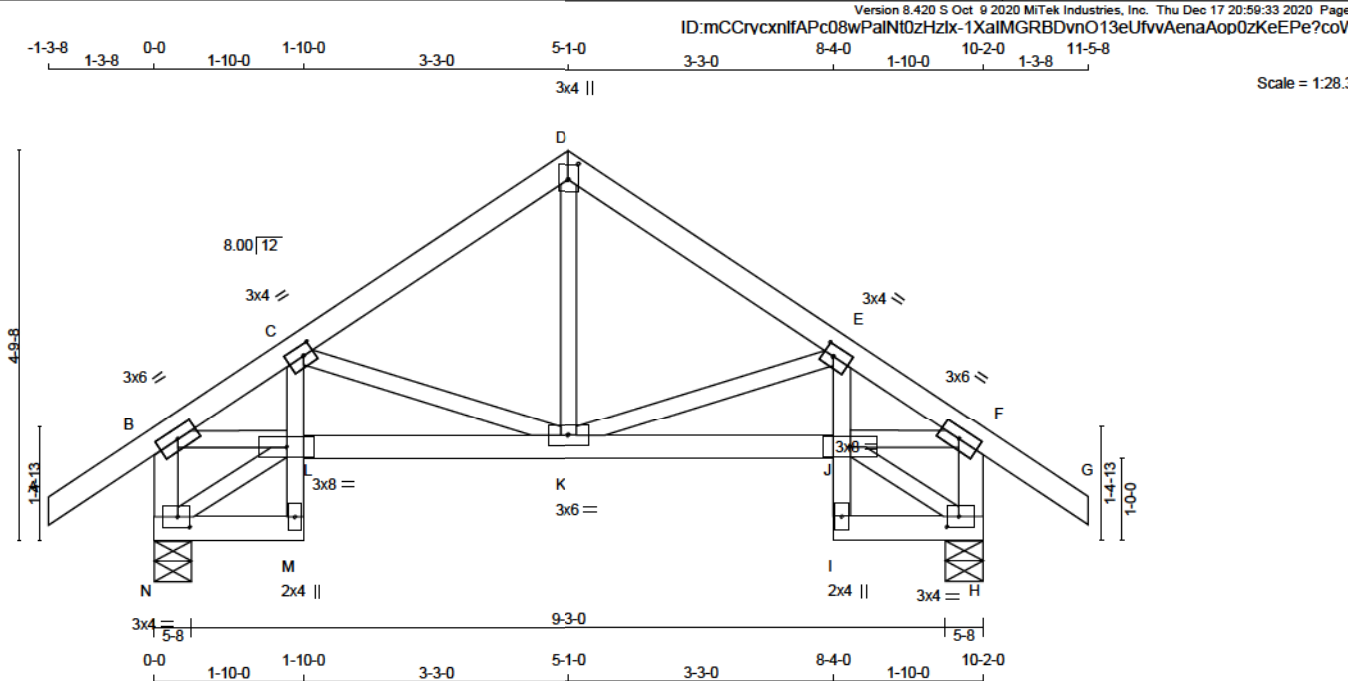
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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 48 = 96 LB

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	6.0		
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	3.0	4.0	2.25	1.50
E	TMVW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW-t	MT20	3.0	6.0		
H	BMVW1-t	MT20	3.0	4.0	1.50	1.75
I	BMV+p	MT20	2.0	4.0		
J	BVMWW-t	MT20	3.0	8.0		
K	BVMWW-t	MT20	3.0	6.0		
L	BVMWW-t	MT20	3.0	8.0		
M	BMV+p	MT20	2.0	4.0		
N	BMVW1-t	MT20	3.0	4.0	1.50	1.75

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
N	1003	0	1003	0
H	1003	0	1003	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS						
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
N	734	449 / 0	107 / 0	0 / 0	0 / 0	178 / 0	0 / 0		
H	734	449 / 0	107 / 0	0 / 0	0 / 0	178 / 0	0 / 0		

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.06 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	K-D	0 / 415	0.09 (1)
B-C	-1221 / 0	-124.4	-124.4 0.14 (1)	5.06	K-E	-459 / 0	0.11 (1)
C-D	-722 / 0	-124.4	-124.4 0.18 (1)	6.25	C-K	-459 / 0	0.11 (1)
D-E	-722 / 0	-124.4	-124.4 0.18 (1)	6.25	B-L	0 / 1005	0.23 (1)
E-F	-1221 / 0	-124.4	-124.4 0.14 (1)	5.06	J-F	0 / 1005	0.23 (1)
F-G	0 / 47	-124.4	-124.4 0.17 (1)	10.00	N-L	-20 / 0	0.00 (1)
N-B	-958 / 0	0.0	0.0 0.10 (1)	7.81	J-H	-20 / 0	0.00 (1)
H-F	-958 / 0	0.0	0.0 0.10 (1)	7.81			
N-M	0 / 17	-39.2	-39.2 0.03 (3)	10.00			
M-L	0 / 43	0.0	0.0 0.08 (1)	10.00			
L-C	0 / 137	0.0	0.0 0.08 (1)	10.00			
L-K	0 / 1021	-39.3	-39.3 0.23 (1)	10.00			
K-J	0 / 1021	-39.2	-39.2 0.23 (1)	10.00			
I-J	0 / 43	0.0	0.0 0.08 (1)	10.00			
J-E	0 / 137	0.0	0.0 0.08 (1)	10.00			
I-H	0 / 17	-39.2	-39.2 0.03 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

ALLOWABLE DEFL.(LL)= L/360 (0.34")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.34")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")

CSI: TC=0.18/1.00 (C-D-1), BC=0.23/1.00 (K-L-1),
WB=0.23/1.00 (B-L-1), SSI=0.15/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (L) (INPUT = 0.90)
JSI METAL = 0.33 (B) (INPUT = 1.00)



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

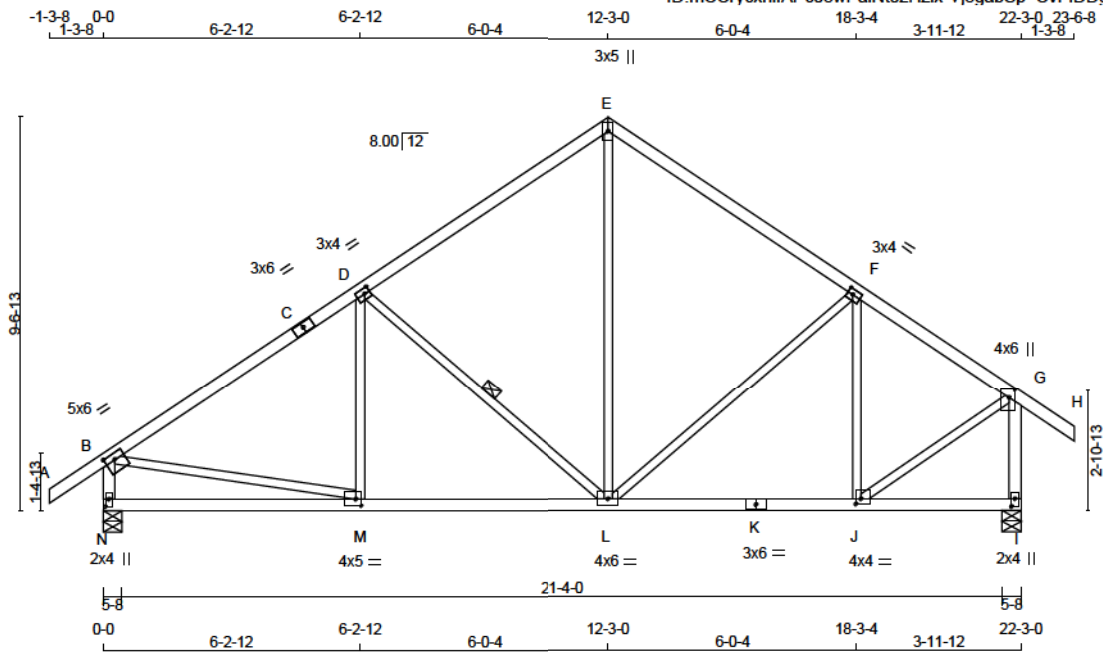


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Discipline	Reviewer	BCDN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MITek Industries, Inc. Thu Dec 17 20:56:34 2020 Page 1
ID:mCCrycxnlfAPc08wPaInT0zHzlx-Vj8gabSp CvFfDDqDdQPA77CGDHO32zZtflM2L7



Scale = 1:55.8

TOTAL WEIGHT = 100 LB

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	No.2	SPF	
C - E	2x4	DRY	No.2	SPF	
E - H	2x4	DRY	No.2	SPF	
N - B	2x4	DRY	No.2	SPF	
I - G	2x4	DRY	No.2	SPF	
N - K	2x4	DRY	No.2	SPF	
K - I	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	X
B	TMVW-t	MT20	5.0	6.0	1.75 3.00
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	5.0	
F	TMVW-t	MT20	3.0	4.0	1.50 1.50
G	TMVW+p	MT20	4.0	6.0	2.25 1.75
I	BMV1+p	MT20	2.0	4.0	2.25 1.00
J	BMVW-t	MT20	4.0	4.0	1.50 1.50
K	BS-t	MT20	3.0	6.0	
L	BMVW-t	MT20	4.0	6.0	
M	BMVW-t	MT20	4.0	5.0	2.00 1.50
N	BMV1+p	MT20	2.0	4.0	2.25 1.00

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	
N	1992 0	1992 0	5-8	3-0	
I	1992 0	1992 0	5-8	3-0	

UNFACTORED REACTIONS					
JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	
N	1466	870 / 0	234 / 0	PERM. LIVE	0 / 0
I	1466	870 / 0	234 / 0	WIND	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-L DBS = 20-00 . CBF = 99 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

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

A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	M-D	-28 / 218	0.05 (3)
B-C	-1987 / 0	-124.4 -124.4	0.71 (1)	3.89	D-L	-793 / 0	0.34 (1)
C-D	-1987 / 0	-124.4 -124.4	0.71 (1)	3.89	L-E	0 / 877	0.20 (1)
D-E	-1370 / 0	-124.4 -124.4	0.64 (1)	4.64	L-F	-184 / 0	0.24 (1)
E-F	-1357 / 0	-124.4 -124.4	0.56 (1)	4.82	J-F	-586 / 0	0.27 (1)
F-G	-1426 / 0	-124.4 -124.4	0.47 (1)	4.87	B-M	0 / 1721	0.39 (1)
G-H	0 / 47	-124.4 -124.4	0.17 (1)	10.00	J-G	0 / 1472	0.33 (1)
N-B	-1891 / 0	0.0	0.0 0.19 (1)	6.10			
I-G	-1937 / 0	0.0	0.0 0.30 (1)	6.04			
N-M	0 / 0	-39.2 -39.2	0.29 (3)	10.00			
M-L	0 / 1695	-39.2 -39.2	0.48 (2)	10.00			
L-K	0 / 1235	-39.2 -39.2	0.37 (2)	10.00			
K-J	0 / 1235	-39.2 -39.2	0.37 (2)	10.00			
J-I	0 / 0	-39.2 -39.2	0.19 (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 (0.74")
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")
ALLOWABLE DEFL.(TL)= L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.71/1.00 (B-D-1) , BC=0.48/1.00 (L-M-2) ,
WB=0.39/1.00 (B-M-1) , SSI=0.31/1.00 (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	MAX MIN
MT20	850 371	1747 788	1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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

JSI METAL = 0.76 (G) (INPUT = 1.00)

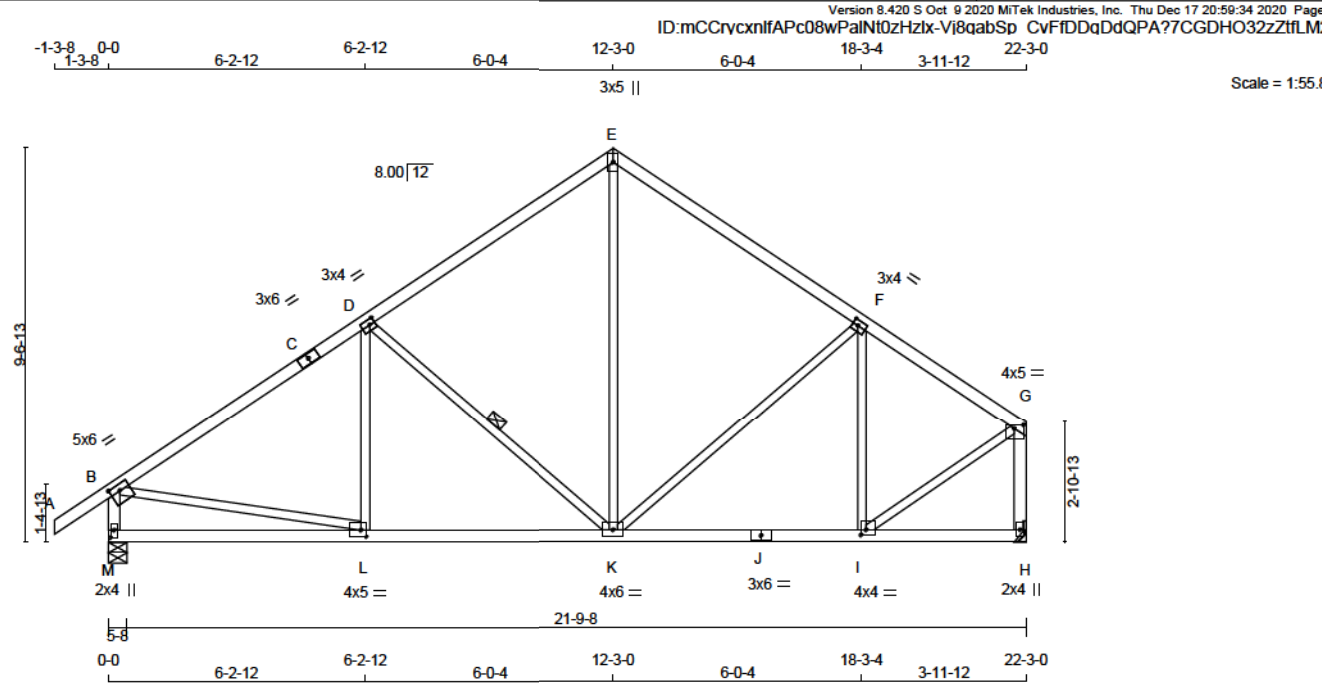


These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept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

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

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





LUMBER

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

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	5.0	6.0	1.75	3.00
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	5.0		
F	TMVW-t	MT20	3.0	4.0	1.50	1.50
G	TMVW-p	MT20	4.0	5.0	1.00	2.75
H	BMV1+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	4.0	1.50	1.50
J	BS-t	MT20	3.0	6.0		
K	BMVW-t	MT20	4.0	6.0		
L	BMVW-t	MT20	4.0	5.0	2.00	1.50
M	BMV1+p	MT20	2.0	4.0	2.25	1.00

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
M 1992	0	1992	0
H 1821	0	1821	0

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 2'-7".

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM.LIVE
M 1486	870 / 0	234 / 0	0 / 0
H 1349	775 / 0	234 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.89 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF D-K. DBS = 20-0-0. CBF = 99 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 HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (LC)	FACTORED HORZ. LOAD (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 47	-124.4	-124.4	0.17 (1)	10.00	L-D	-28 / 218
B-C	-1987 / 0	-124.4	-124.4	0.71 (1)	3.89	D-K	-793 / 0
C-D	-1987 / 0	-124.4	-124.4	0.71 (1)	3.89	K-E	0 / 877
D-E	-1370 / 0	-124.4	-124.4	0.64 (1)	4.64	E-F	-184 / 0
E-F	-1357 / 0	-124.4	-124.4	0.58 (1)	4.82	F-G	-580 / 0
F-G	-1426 / 0	-124.4	-124.4	0.47 (1)	4.87	G-H	0 / 1721
M-B	-1891 / 0	0.0	0.0	0.19 (1)	6.10	H-I	0 / 1472
H-G	-1766 / 0	0.0	0.0	0.27 (1)	6.28		
M-L	0 / 0	-39.2	-39.2	0.28 (3)	10.00		
L-K	0 / 1095	-39.2	-39.2	0.48 (2)	10.00		
K-J	0 / 1235	-39.2	-39.2	0.37 (2)	10.00		
J-I	0 / 1235	-39.2	-39.2	0.37 (2)	10.00		
I-H	0 / 0	-39.2	-39.2	0.19 (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, NBC 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 (0.74")
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ALLOWABLE DEFL.(TL) = L/360 (0.74")
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.71/1.00 (B-D-1), BC=0.48/1.00 (K-L-2), WB=0.39/1.00 (B-L-1), SSI=0.31/1.00 (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= 0.89 (L) (INPUT = 0.90)
JSI METAL = 0.55 (B) (INPUT = 1.00)



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

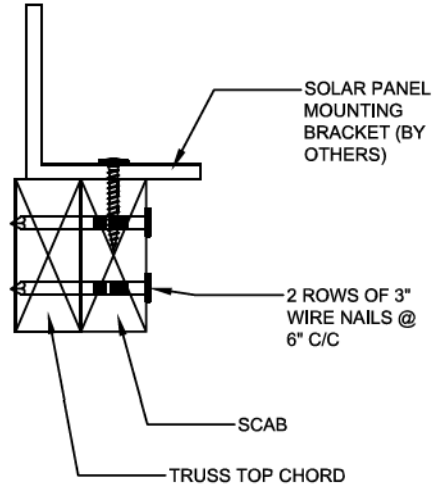
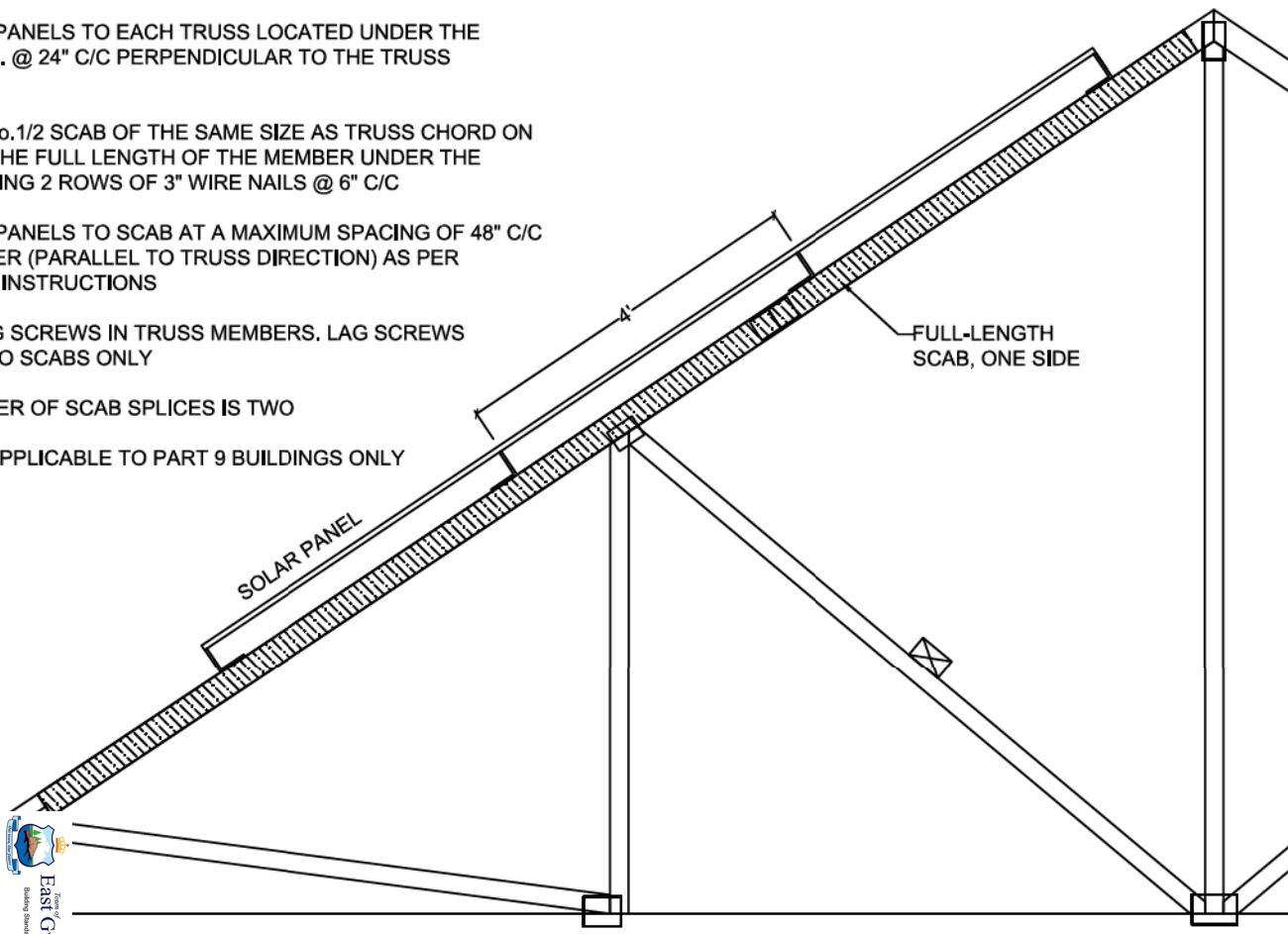


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Discipline	Reviewer	BCDN	Date
Building Code	H. Author	43236	2021-02-05
Sewage System			
Zoning			



- 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



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East Gwillimbury
Building Standards Branch (B304 & B342)

Discipline	Reviewer	BCIN	Date
Building Code	H. Ashraf	43236	2021-01-06
Seismic System			
Roofing			

NE1220-121
GREENPARK - TRINAR
HALL - BRENTWOOD 3 EL 3

Detail for Installation of Solar Panels - Scab Method



NE1220-121
GREENPARK - TRINAR HALL -
BRENTWOOD 3 EL 3

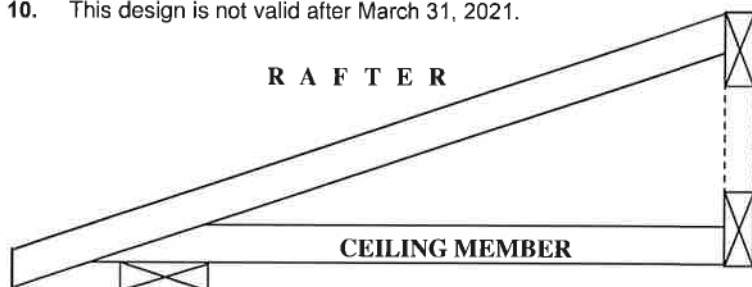
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

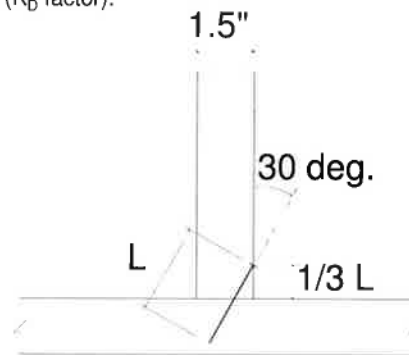
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

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



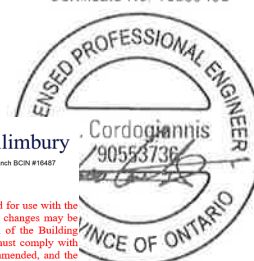
Town of
East Gwillimbury
Building Standards Branch BCN #10487

December

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

PEO
Certificate No. 10889485



BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

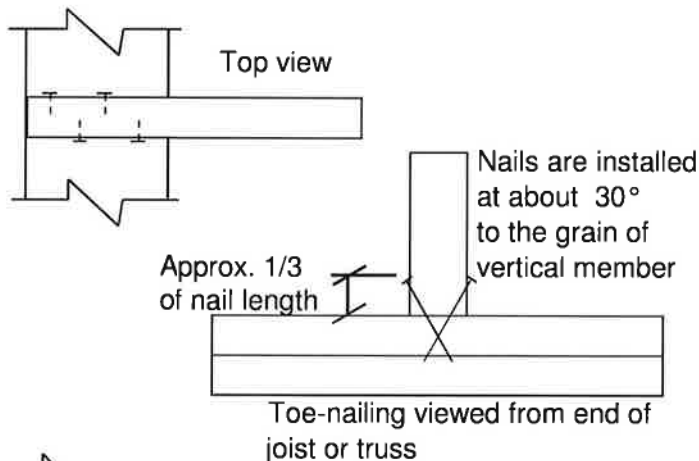
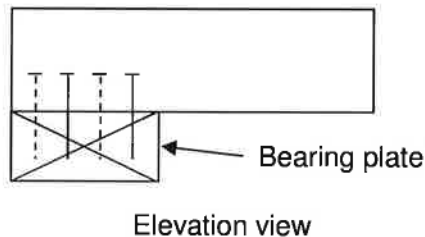
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

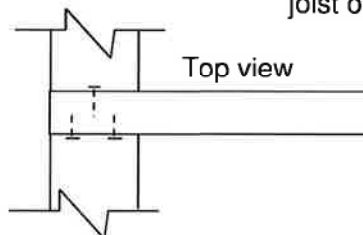
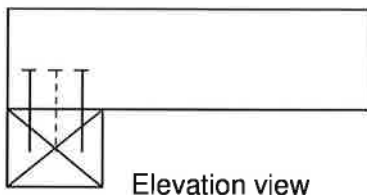
NOTES:

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

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



MiTek

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



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

PEO
Certificate No. 10889485

