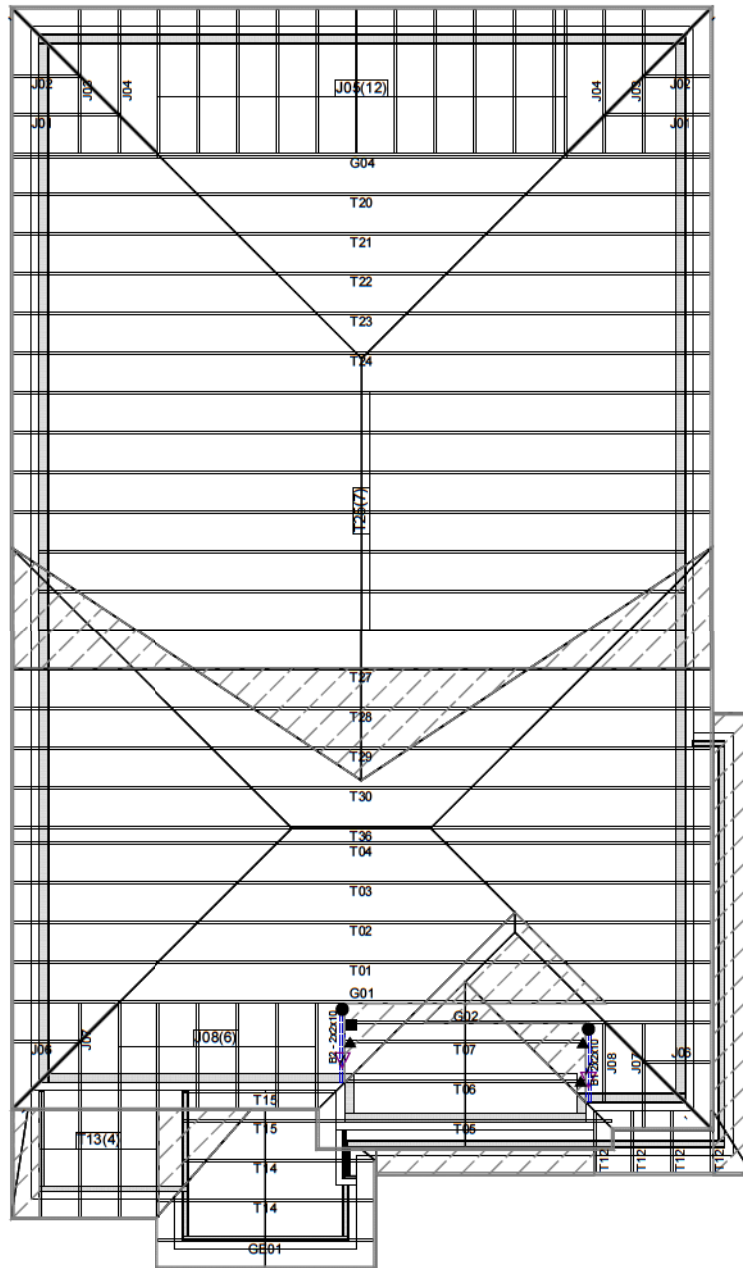




Hanger Name	Symbol	QTY
LUS24	▲	3
LJS26DS	■	1
HGUS26-2	●	2

Additional 5 psf dead load has been added to Top Chord loading to account for weight of solar panels. Solar panels must be installed as per Detail in Engineering Package



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



CONVENTIONAL FRAMING BY OTHERS

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

JOB INFORMATION

Customer	GREENPARK HOMES
Job #	T20-00767
Address	TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 7A ELEV 2
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/16/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\GLENWAY 7A\ELEV 2\T-GLENWAY7A-2\

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			

NE1220-119

GREENPARK - TRINAR HALL

- GLENWAY 7A ELE 2

ENGINEERING NOTE PAGE (ENP-1)

PLEASE READ PRIOR TO INSTALLATION

RESPONSIBILITIES

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

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

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

USE AND OCCUPANCY

- The building is of the type indicated on the drawing

LOADING

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

HANDLING, INSTALLATION AND BRACING

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

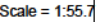
SUPPORTS

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

DIMENSIONS

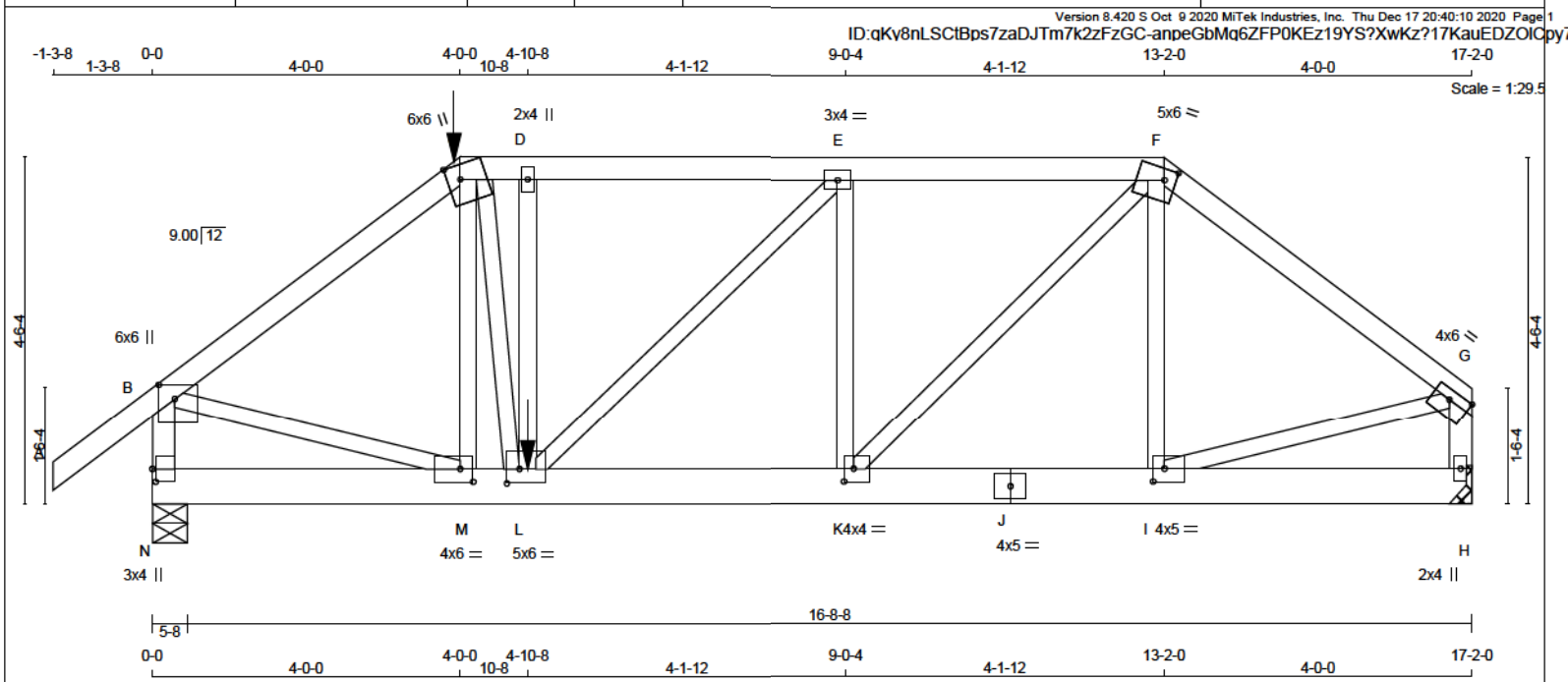
- Geometry of the truss and dimensions indicated on the drawing are identical to those of the installed truss.

ID:qKy8nLSCtBps7zaDJTm7k2zFzGC-6bFF3FM2LG7YOBfmTS0DSKN5oba2b044 veCaN



[11]





TOTAL WEIGHT = 87 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.25	2.50
C	CTTWW+m	MT20	6.0	6.0	Edge	2.00
D	TMW+w	MT20	2.0	4.0		
E	MTWW-t	MT20	3.0	4.0		
F	CTTWW-m	MT20	5.0	6.0	1.75	1.75
G	TMW/t	MT20	4.0	6.0	1.50	Edge
H	BMV1+p	MT20	2.0	4.0		
I	BMVW-t	MT20	4.0	5.0	2.00	1.75
J	CTTWW-t	MT20	4.0	6.0		
K	BMWW/t	MT20	4.0	4.0	2.00	1.50
L	MTWWWW-t	MT20	5.0	6.0	2.25	2.00
M	BMWV/t	MT20	4.0	6.0	2.00	2.00
N	BMV1+p	MT20	3.0	4.0	2.00	0.50

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

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

BEARINGS

FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
N	2542	0	2542	0	0	5-8	4-12
H	1757	0	1757	0	0	MECHANICAL	

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT H. MINIMUM BEARING LENGTH AT JOINT H = 2-3

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
N	1874	1103 / 0	308 / 0	0 / 0	0 / 0	486 / 0	0 / 0
H	1300	751 / 0	222 / 0	0 / 0	0 / 0	327 / 0	0 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.77 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)	LOCI MAX. CSI (LC)	MAX. UNBRAC.	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0/51	-124.4	-124.4	0.19 (1)	10.00	M-C	-17/117	0.03 (3)	
B-C	-2494/0	-124.4	-124.4	0.52 (1)	3.77	C-L	0/1051	0.28 (1)	
C-D	-2207/0	-172.4	-172.4	0.17 (1)	4.40	L-D	-336/0	0.10 (1)	
D-E	-2208/0	-124.4	-124.4	0.44 (1)	4.06	L-E	-2/7	0.00 (3)	
E-F	-2209/0	-124.4	-124.4	0.04 (1)	4.06	K-E	-568/0	0.18 (1)	
F-G	-1759/0	-124.4	-124.4	0.08 (1)	4.46	K-F	0/1144	0.28 (1)	
N-B	-2480/0	0.0	0.0	0.26 (1)	5.40	I-F	-208/60	0.06 (1)	
H-G	-1688/0	0.0	0.0	0.19 (1)	6.35	B-M	0/2062	0.51 (1)	
						I-G	0/1455	0.36 (1)	
N-M	0/0	-54.4	-54.4	0.10 (2)	10.00				
M-L	0/1990	-54.4	-54.4	0.37 (1)	10.00				
L-K	0/2209	-39.2	-39.2	0.41 (1)	10.00				
K-J	0/1399	-39.2	-39.2	0.22 (1)	10.00				
J-I	0/1399	-39.2	-39.2	0.22 (1)	10.00				
I-H	0/0	-39.2	-39.2	0.06 (3)	10.00				

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
C	4-0-0	-207	-207	—	FRONT	VERT	TOTAL	—	C1
L	4-10-8	-885	-885	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

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



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



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

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4-0-0
END SETBACK = 4-0-0
END WALL WIDTH = 5-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL
LOADS APPLIED TO FIRST 4-10-8 OF SPAN MEASURED
FROM THE LEFT.

*** NON STANDARD GIRDER ***
ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD
CASES

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL
BUILDING REQUIREMENTS OF PART 9, NBCC 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 (0.57")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL)= L/360 (0.57")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.08")

CSI: TC=0.52/1.00 (B-C:1), BC=0.41/1.00 (K-L:1), WB=0.51/1.00 (B-M:1), SSI=0.27/1.00 (E-F:1)

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

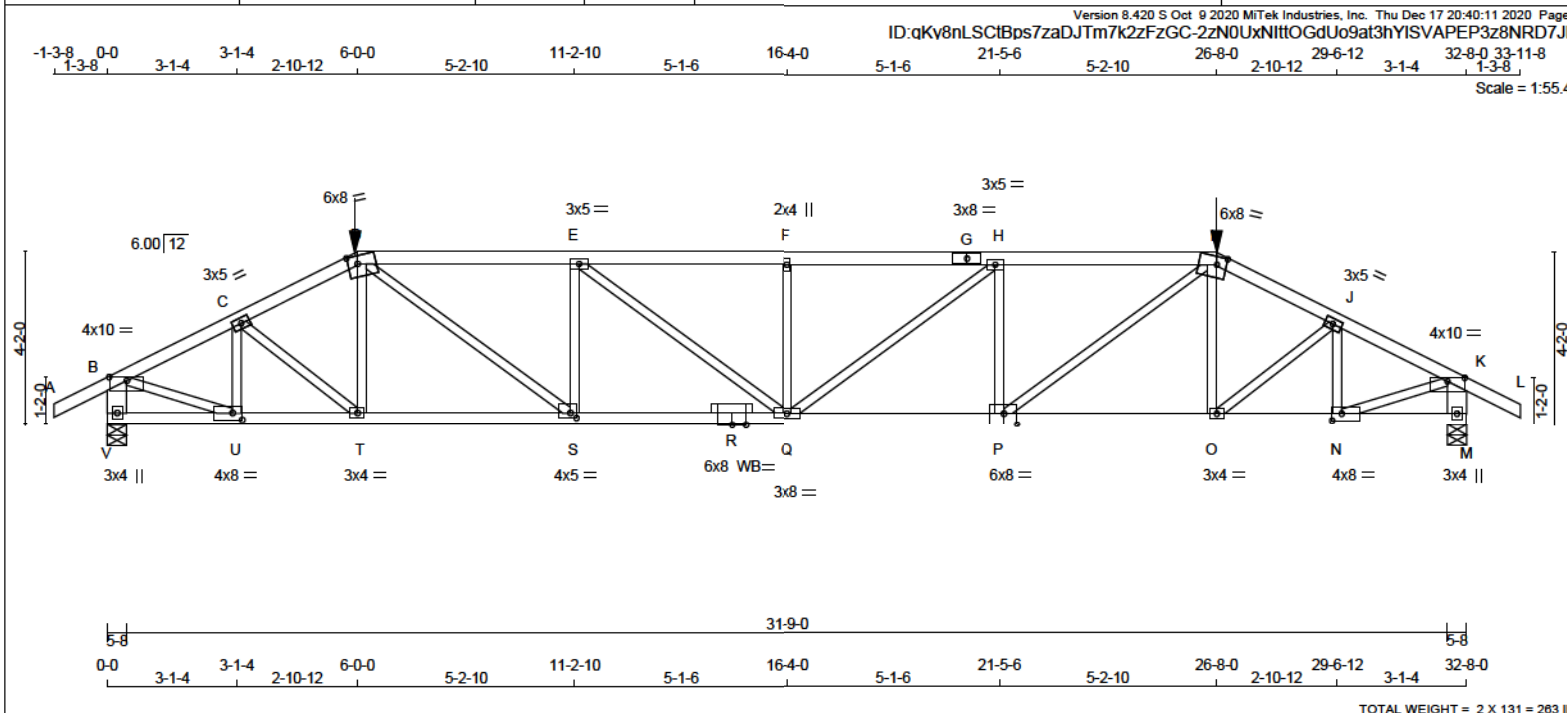
COMPANION LIVE LOAD FACTOR = 1.00

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

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

CONTINUED ON PAGE 2





LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	DESCR.
A - D	2x4	DRY	No.2
D - G	2x4	DRY	2100F 1.8E
G - I	2x4	DRY	2100F 1.8E
I - L	2x4	DRY	No.2
V - B	2x6	DRY	No.2
M - K	2x6	DRY	No.2
V - R	2x4	DRY	No.2
R - P	2x4	DRY	2100F 1.8E
P - M	2x4	DRY	No.2
ALL WEBS 2x3 DRY No.2			
EXCEPT			
DRY: SEASONED LUMBER.			
DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:			
CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)	
TOP CHORDS : (0.122"x3") SPIRAL NAILS			
A - D	12	SIDE(0.0)	
D - G	12	SIDE(55.1)	
G - I	12	SIDE(55.1)	
I - L	12	SIDE(0.0)	
V - B	12	TOP	
M - K	12	TOP	
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS			
V - R	12	SIDE(22.0)	
R - P	12	SIDE(22.0)	
P - M	12	SIDE(22.0)	
WEBS : (0.122"x3") SPIRAL NAILS			
2x3	6		
NAILS TO BE DRIVEN FROM ONE SIDE ONLY.			
GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.			
TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.			

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER									
BEARINGS									
FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG						
JT VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX				
M 5108	0	5108	0	0	5-8	2-13			
M 5108	0	5108	0	0	5-8	2-13			
UNFACTORED REACTIONS									
1ST LCASE MAX/MIN COMPONENT REACTIONS									
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL			
V 3780	2182 / 0	647 / 0	0 / 0	0 / 0	951 / 0	0 / 0			
M 3780	2182 / 0	647 / 0	0 / 0	0 / 0	951 / 0	0 / 0			
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) V, M									
BRACING									
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.28 FT.									
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.									
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.									
LOADING									
TOTAL LOAD CASES: (4)									
CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. UNBRACED	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)		
FR-TO	FROM	TO	LENGTH	FR-TO	FROM	TO	LENGTH		
A-B	0 / 38	-124.4	-124.4	0.09 (1)	10.00	U-C	-1494 / 0	0.13 (1)	
B-C	-8671 / 0	-124.4	-124.4	0.25 (1)	3.61	C-T	0 / 1047	0.13 (1)	
C-D	-7606 / 0	-124.4	-124.4	0.28 (1)	3.38	T-D	-294 / 181	0.04 (1)	
D-E	-10121 / 0	-234.6	-234.6	0.52 (1)	3.47	D-S	0 / 4156	0.51 (1)	
E-F	-11106 / 0	-234.6	-234.6	0.55 (1)	3.29	S-E	-2104 / 0	0.29 (1)	
F-G	-11106 / 0	-234.6	-234.6	0.56 (1)	3.28	E-Q	0 / 1240	0.15 (1)	
G-H	-11106 / 0	-234.6	-234.6	0.56 (1)	3.28	Q-F	-1110 / 0	0.15 (1)	
H-I	-10094 / 0	-234.6	-234.6	0.52 (1)	3.47	Q-H	0 / 1274	0.18 (1)	
I-J	-7619 / 0	-124.4	-124.4	0.28 (1)	3.37	P-H	-2127 / 0	0.29 (1)	
J-K	-8666 / 0	-124.4	-124.4	0.25 (1)	3.62	P-I	0 / 4109	0.51 (1)	
K-L	0 / 38	-124.4	-124.4	0.09 (1)	10.00	O-I	-260 / 236	0.04 (1)	
V-B	-4982 / 0	0.0	0.0	0.18 (1)	6.52	O-J	0 / 1064	0.13 (1)	
M-K	-4979 / 0	0.0	0.0	0.18 (1)	6.52	N-J	-1510 / 0	0.14 (1)	
V-U	0 / 0	-74.0	-74.0	0.09 (2)	10.00	B-U	0 / 6197	0.77 (1)	
U-T	0 / 5973	-74.0	-74.0	0.63 (1)	10.00	N-K	0 / 6193	0.77 (1)	
T-S	0 / 6782	-74.0	-74.0	0.70 (1)	10.00				
S-R	0 / 10121	-74.0	-74.0	0.98 (1)	10.00				
R-Q	0 / 10121	-74.0	-74.0	0.98 (1)	10.00				
Q-P	0 / 10094	-74.0	-74.0	0.51 (1)	10.00				
P-O	0 / 6792	-74.0	-74.0	0.73 (1)	10.00				
O-N	0 / 5970	-74.0	-74.0	0.66 (1)	10.00				
N-M	0 / 0	-74.0	-74.0	0.09 (2)	10.00				
FACTORED CONCENTRATED LOADS (LBS)									
JT LOC.	LC1	MAX.	MAX+	FACE	DIR.	TYPE	HEEL	CONN.	
D 6-0-0	-560	-560	---	FRONT	VERT	TOTAL	---	C1	
I 26-8-0	-560	-560	---	FRONT	VERT	TOTAL	---	C1	

DESIGN CRITERIA	
SPECIFIED LOADS:	
TOP CH. LL = 34.8	PSF
DL = 8.0	PSF
BOT CH. LL = 10.5	PSF
DL = 7.3	PSF
TOTAL LOAD = 60.8	PSF
SPACING = 24.0 IN. C/C	
LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM	
GIRDER TYPE: CPrimeHip	
SIDE SETBACK = 6-0-0	
END SETBACK = 6-0-0	
END WALL WIDTH = 5-8	
CORNER FRAMING TYPE: CONVENTIONAL	
END JACK TYPE: CONVENTIONAL	
APPLIED TO FRONT SIDE	
- ADDTL LOADS BASED ON 55 % OF GSL.	
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015	
THIS DESIGN COMPLIES WITH:	
- PART 9 OF BCBC 2018, ABC 2019	
- PART 9 OF OBC 2012 (2019 AMENDMENT)	
- CSA 086-14	
- TPIC 2014	
(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)	
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD	
ALLOWABLE DEF. (LL) = L/360 (1.09")	
CALCULATED VERT. DEF. (LL) = L/969 (0.29")	
ALLOWABLE DEF. (TL) = L/360 (1.09")	
CALCULATED VERT. DEF. (TL) = L/798 (0.49")	
CSI: TC=0.56/1.00 (F-H:1), BC=0.98/1.00 (Q-S:1), WB=0.77/1.00 (B-U:1), SS=0.31/1.00 (H-I:1)	
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00	
SHEAR=1.00 TENS=1.00	
COMPANION LIVE LOAD FACTOR = 1.00	
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.	
NAIL VALUES	
PLATE GRIP(DRY) SHEAR	SECTION
(PSI) (PLI) (PLI)	(PLI)
MAX MIN MAX MIN MAX MIN	
MT20 650 371 1747 788 1987 1873	
PLATE PLACEMENT TOL. = 0.250 inches	
PLATE ROTATION TOL. = 5.0 Deg.	
JSI GRIP= 0.90 (P) (INPUT = 0.90)	
JSI METAL = 0.97 (P) (INPUT = 1.00)	

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.

Building Standards Branch BCIN 816487

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

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

CONTINUED ON PAGE 2

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

WB - INDICATES BLOCKING REQUIRED

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

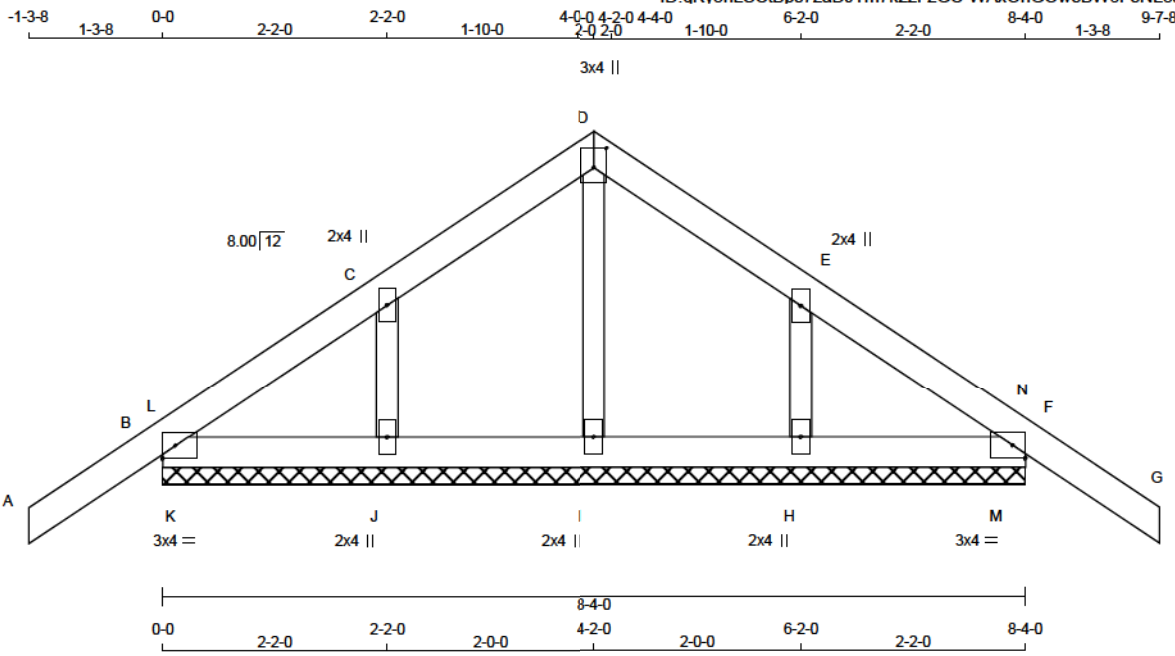


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MITek Industries, Inc. Thu Dec 17 20:40:12 2020 Page 1



Scale = 1:22.3

TOTAL WEIGHT = 29 lb

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

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

GABLE STUDS SPACED AT 2-0-0 OC.

PLATES (table is in inches)
JT TYPE PLATES W LEN Y X
B TMB1-I MT20 3.0 4.0 Edge
C TMW+w MT20 2.0 4.0
D TTW+p MT20 3.0 4.0 2.25 1.50
E TMW+w MT20 2.0 4.0
F TMB1-I MT20 3.0 4.0 Edge
H. I. J
H BMW1+w MT20 2.0 4.0

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

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

BEARINGS
THIS TRUSS DESIGNED FOR CONTINUOUS BEARINGS.

THIS TRUSS REQUIRES RIGID SHEATHING ON EXPOSED FACE.

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED LENGTH (FT)	MAX. FACTORED CSI (LC)
FR-TO	0 / 41	-124.4 -124.4 0.17 (1)	10.00	F-D	-131 / 0	0.02 (1)	
B-L	-100 / 0	-124.4 -124.4 0.01 (3)	6.25	J-C	-296 / 0	0.04 (1)	
L-C	-66 / 0	-124.4 -124.4 0.08 (1)	6.25	H-E	-296 / 0	0.04 (1)	
C-D	-79 / 0	-124.4 -124.4 0.08 (1)	6.25	K-L	-71 / 38	0.00 (1)	
D-E	-79 / 0	-124.4 -124.4 0.08 (1)	6.25	M-N	-71 / 38	0.00 (1)	
E-N	-66 / 0	-124.4 -124.4 0.08 (1)	6.25				
N-F	-100 / 0	-124.4 -124.4 0.01 (3)	6.25				
F-G	0 / 41	-124.4 -124.4 0.17 (1)	10.00				
B-K	0 / 68	-39.2 -39.2 0.03 (1)	10.00				
K-J	0 / 68	-39.2 -39.2 0.04 (2)	10.00				
J-I	0 / 53	-39.2 -39.2 0.04 (2)	10.00				
I-H	0 / 53	-39.2 -39.2 0.04 (2)	10.00				
H-M	0 / 68	-39.2 -39.2 0.04 (2)	10.00				
M-F	0 / 68	-39.2 -39.2 0.03 (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

CSI: TC=0.17/1.00 (A-B:1), BC=0.04/1.00 (J-K:2),
WB=0.04/1.00 (C-J:1), SSI=0.12/1.00 (A-B:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.37 (F) (INPUT = 0.90)
JSI METAL= 0.15 (C) (INPUT = 1.00)

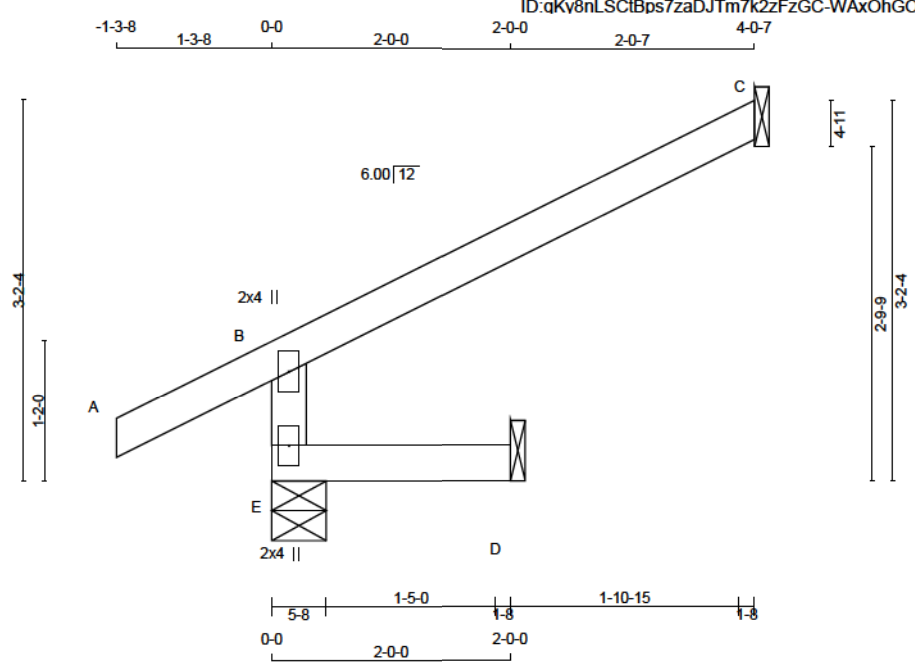


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	528	0	528	0
C	188	0	188	0
D	35	0	44	0

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

UNFACTORED REACTIONS

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO		FROM	TO	FR-TO		FROM	TO
E-B	-483 / 0	0.0	0.0	0.02 (3)	7.81		
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00		
B-C	-28 / 0	-124.4	-124.4	0.34 (1)	6.25		
E-D	0 / 0	-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 (0.19")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.00")

CSI: TC=0.34/1.00 (B-C:1) , BC=0.03/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.22/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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



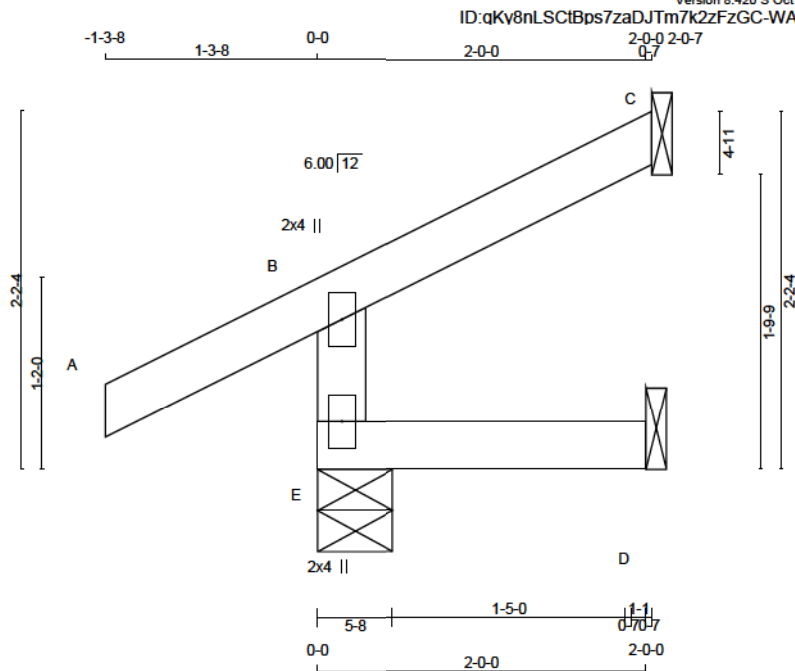
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

SPF
SPF
SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	370	0	370	0
C	96	0	96	0
D	35	0	44	0

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

UNFACTORED REACTIONS

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

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

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

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

LOADING
TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED HORZ. LOAD (LC)	MAX. FACTORED LENGTH
FR-TO		FROM	TO	FR-TO		FROM	TO
E-B	-327	0	0.02	E-B	58	0	7.81
A-B	0	-124.4	0.16	A-B	12	0	10.00
B-C	-14	-124.4	0.09	B-C	13	0	6.25
E-D	0	-39.2	0.03	E-D	13	0	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



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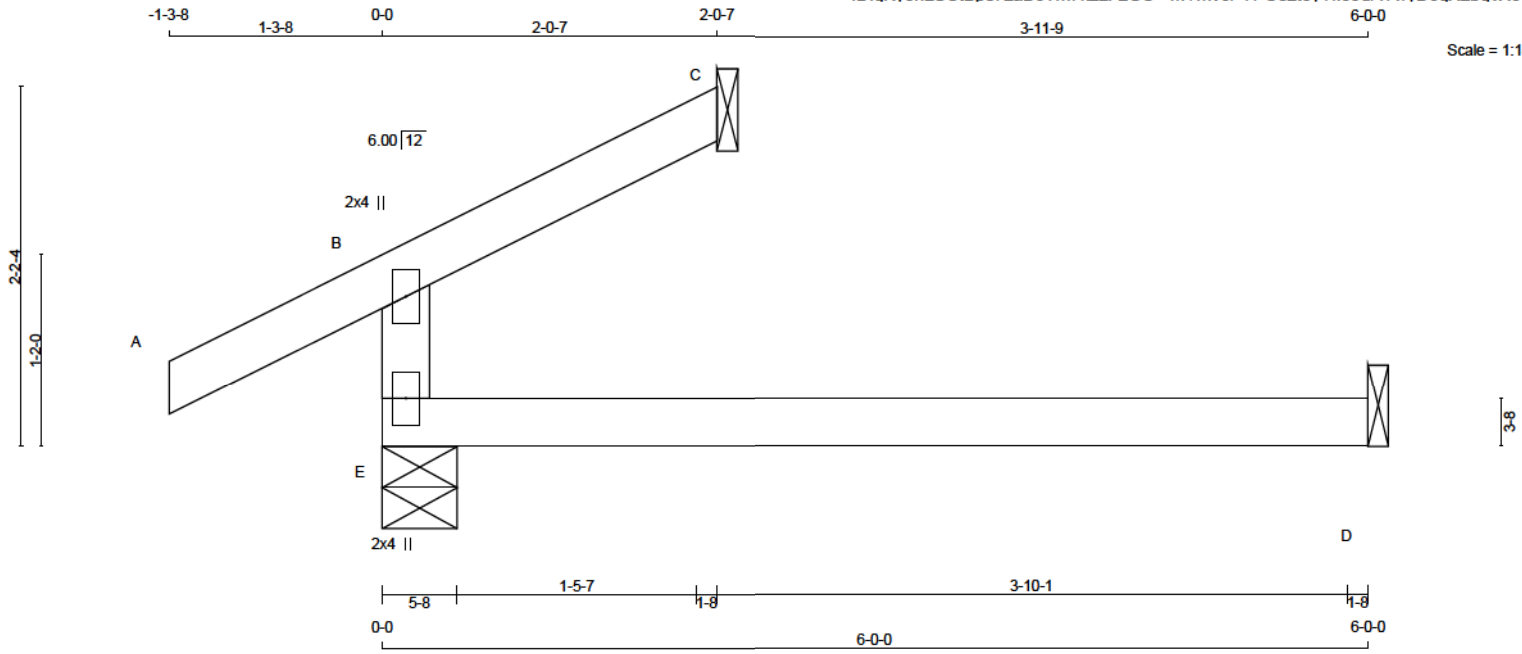


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Scale = 1:14.0



TOTAL WEIGHT = 2 X 12 = 24 LB

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

DRY: SEASONED LUMBER.

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

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

BEARINGS							
JT	FACTORED GROSS REACTION	VERT	HORZ	MAXIMUM FACTORED GROSS REACTION	DOWN	HORZ	INPUT BRG
E	465	0	0	465	0	0	5-8
C	96	0	0	96	0	0	1-8
D	97	0	0	123	0	0	1-8

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

UNFACTORED REACTIONS							
JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS	WIND	DEAD	SOIL
E	COMBINED	350	183 / 0	74 / 0	0 / 0	93 / 0	0 / 0
C	COMBINED	86	54 / 0	0 / 0	0 / 0	12 / 0	0 / 0
D	COMBINED	88	0 / 0	52 / 0	0 / 0	36 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX. (LC)	MEMB.
FR-TO		FROM TO	LENGTH	FR-TO		LENGTH	FR-TO
E-B	-327 / 0	0.0	0.0 0.22 (3)	7.81			
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00			
B-C	-14 / 0	-124.4	-124.4 0.09 (1)	6.25			
E-D	0 / 0	-39.2	-39.2 0.22 (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

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- CSA 086-14
- TPIC 2014

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



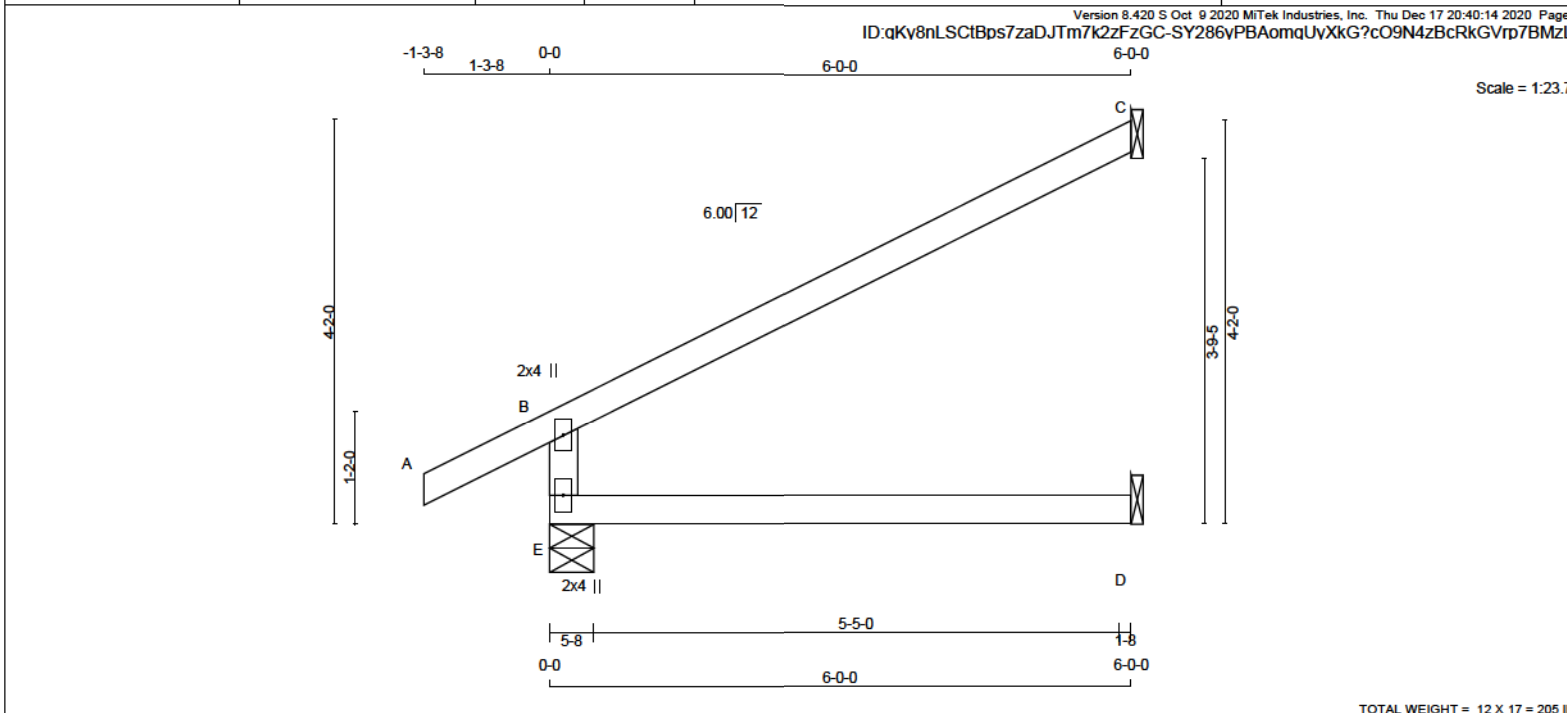
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER N.L.G.A. RULES CHORDS SIZE LUMBER E - B 2x4 DRY No.2 A - C 2x4 DRY No.2 E - D 2x4 DRY No.2 DRY: SEASONED LUMBER.				DESCR. SPF SPF SPF			
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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				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=0.76/1.00 (B-C:1) , BC=0.24/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.33/1.00 (B-C:1) DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10 COMPANION LIVE LOAD FACTOR = 1.00 TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT . NAIL VALUES PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI) MAX MIN MAX MIN MAX MIN MT20 650 371 1747 788 1987 1873 PLATE PLACEMENT TOL = 0.250 inches PLATE ROTATION TOL = 5.0 Deg. JSI GRIP= 0.36 (B) (INPUT = 0.90) JSI METAL= 0.26 (B) (INPUT = 1.00)			
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UNFACTORED REACTIONS 1ST LCASE MAX/MIN COMPONENT REACTIONS JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL E 563 355 / 0 74 / 0 0 / 0 0 / 0 133 / 0 0 / 0 C 193 157 / 0 0 / 0 0 / 0 0 / 0 36 / 0 0 / 0 D 88 0 / 0 52 / 0 0 / 0 0 / 0 36 / 0 0 / 0				BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E			
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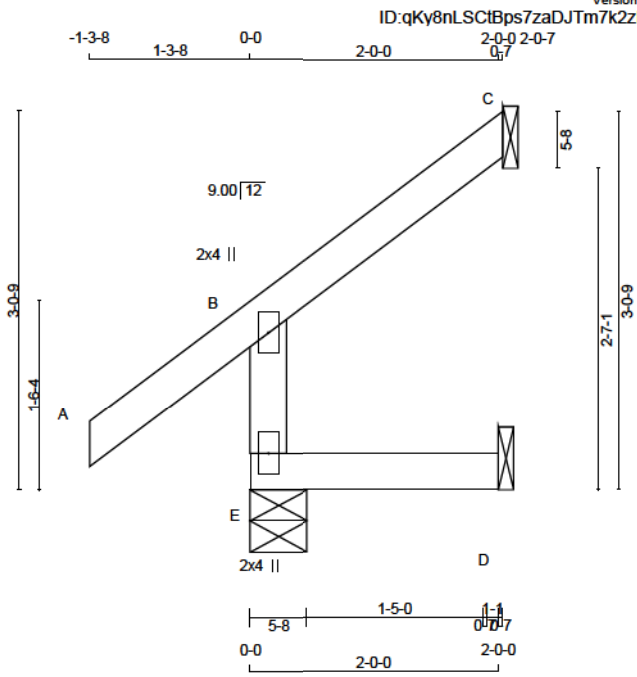
BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.				LOADING TOTAL LOAD CASES: (4)			
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CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (PLF) FACTORED LC1 MAX. (LC) UNBRACED LENGTH (FT) FR-TO E-B -635 / 0 0.0 0.0 0.24 (3) 7.81 A-B 0 / 38 -124.4 -124.4 0.16 (1) 10.00 B-C -42 / 0 -124.4 -124.4 0.76 (1) 6.25 E-D 0 / 0 -39.2 -39.2 0.24 (3) 10.00				WEBS MEMB. MAX. FACTORED FORCE (LBS) MAX. (LC) UNBRACED LENGTH (FT) FR-TO E-B -635 / 0 0.0 0.0 0.24 (3) 7.81 A-B 0 / 38 -124.4 -124.4 0.16 (1) 10.00 B-C -42 / 0 -124.4 -124.4 0.76 (1) 6.25 E-D 0 / 0 -39.2 -39.2 0.24 (3) 10.00			
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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



Scale = 1:18.5

TOTAL WEIGHT = 2 X 9 = 17 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

SPF
SPF
SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
E	372	0	372	0
C	96	0	96	0
D	36	0	45	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM. LIVE
E	265	184 / 0	23 / 0	0 / 0
C	66	54 / 0	0 / 0	0 / 0
D	32	0 / 0	19 / 0	0 / 0

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

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

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LC)
FR-TO		FROM TO			FR-TO		
E-B	-329 / 0	0.0	0.0 0.01 (3)	7.81			
A-B	0 / 51	-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) (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)



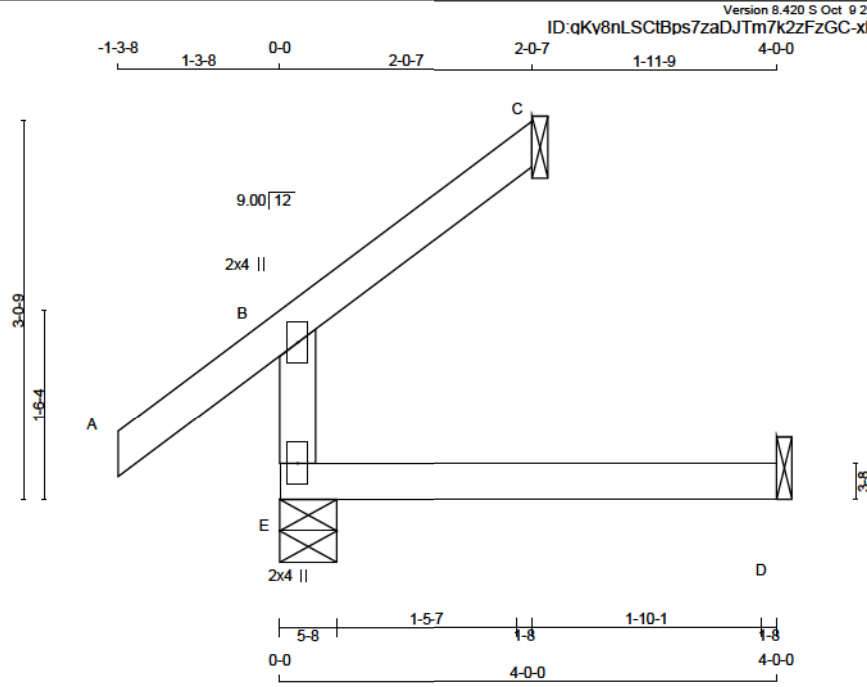
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





Scale = 1:18.5

LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
E	418	418	5-8	1-8
C	96	96	1-8	1-8
D	68	68	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
E	COMBINED	307	184 / 0	48 / 0
C	COMBINED	86	54 / 0	0 / 0
D	COMBINED	62	0 / 0	36 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED HORZ. LOAD (LC)	MAX. FACTORED LENGTH (FT)
FR-TO				FR-TO			
E-B	-329 / 0	0.0	0.0	E-B	307	184 / 0	48 / 0
A-B	0 / 51	-124.4	-124.4	A-B	86	54 / 0	0 / 0
B-C	-18 / 0	-124.4	-124.4	B-C	62	0 / 0	36 / 0
E-D	0 / 0	-39.2	-39.2	E-D			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

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

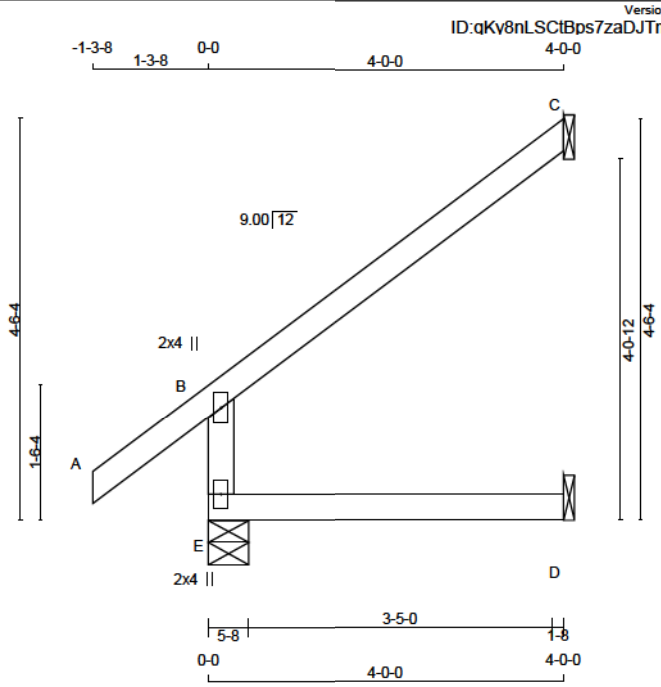


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



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LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	DOWN	UPLIFT	IN-SX
E	571	0	0	5-8
C	187	0	0	1-8
D	68	0	0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE	PERM. LIVE
E	413	270 / 0	48 / 0	0 / 0
C	129	105 / 0	0 / 0	0 / 0
D	62	0 / 0	36 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	LENGTH
FR-TO		FROM TO		FR-TO			
E-B	-482 / 0	0.0	0.0 0.08 (3)	E-B	7.81		
A-B	0 / 51	-124.4	-124.4 0.17 (1)	A-B	10.00		
B-C	-37 / 0	-124.4	-124.4 0.34 (1)	B-C	6.25		
E-D	0 / 0	-39.2	-39.2 0.12 (3)	E-D	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)
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= 0.31 (B) (INPUT = 0.90)
JSI METAL= 0.26 (B) (INPUT = 1.00)



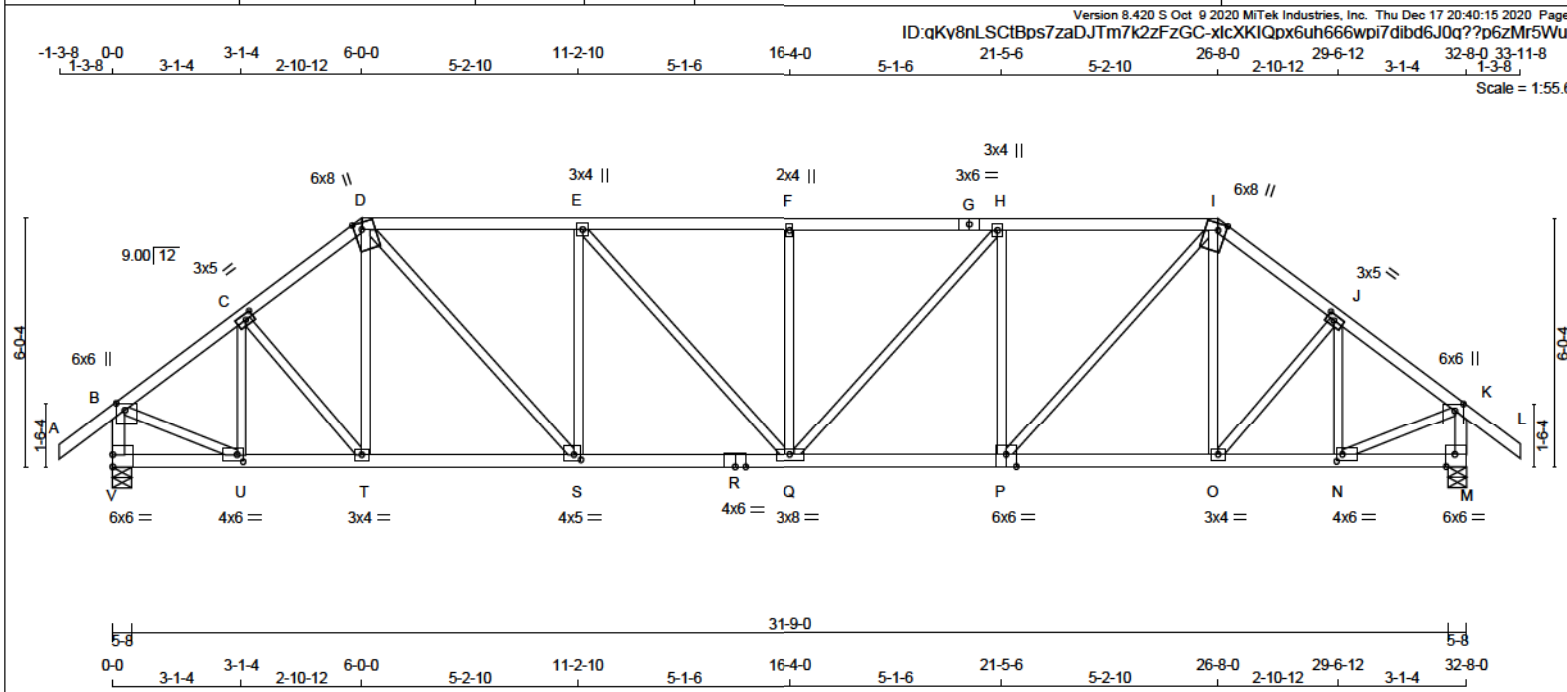
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Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

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

SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (J) (INPUT = 0.90)

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



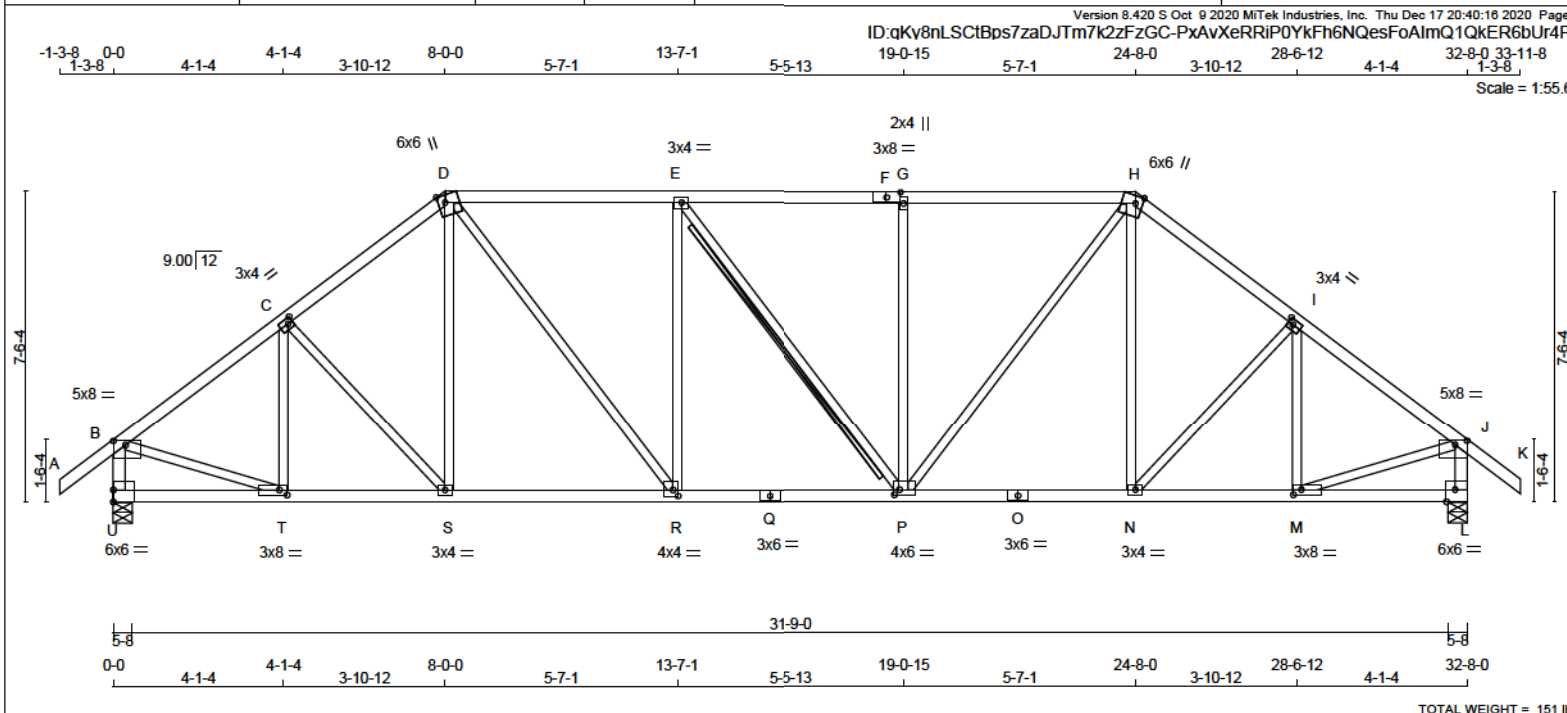
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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





LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA						
N. L. G. A. RULES					BEARINGS										SPECIFIED LOADS:						
CHORDS SIZE LUMBER DESCR.					FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG		REQRD BRG		TOP CH. LL = 34.8 PSF								
A - D 2x4 DRY No.2 SPF					JT VERT		HORIZ		DOWN		HORIZ		UPLIFT		IN-SX		DL = 8.0 PSF				
D - F 2x4 DRY No.2 SPF					U 2845 0		2845 0		0 5-8		5-8		BOT CH. LL = 10.5 PSF			DL = 7.3 PSF					
F - H 2x4 DRY No.2 SPF					L 2845 0		2845 0		0 5-8		5-8		TOTAL LOAD = 60.6 PSF								
H - K 2x4 DRY No.2 SPF					UNFACTORED REACTIONS																
U - B 2x4 DRY No.2 SPF					1ST LCASE MAX/MIN COMPONENT REACTIONS										SPACING = 24.0 IN. C/C						
L - J 2x4 DRY No.2 SPF					JT COMBINED		SNOW		LIVE		PERM.LIVE		WIND		DEAD		SOIL				
U - Q 2x4 DRY No.2 SPF					U 2098		1233 / 0		343 / 0		0 / 0		0 / 0		522 / 0		0 / 0		LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM		
Q - O 2x4 DRY No.2 SPF					L 2098		1233 / 0		343 / 0		0 / 0		0 / 0		522 / 0		0 / 0		THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL		
O - L 2x4 DRY No.2 SPF					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L																
ALL WEBS 2x3 DRY No.2 SPF																					
EXCEPT																					
DRY: SEASONED LUMBER																					

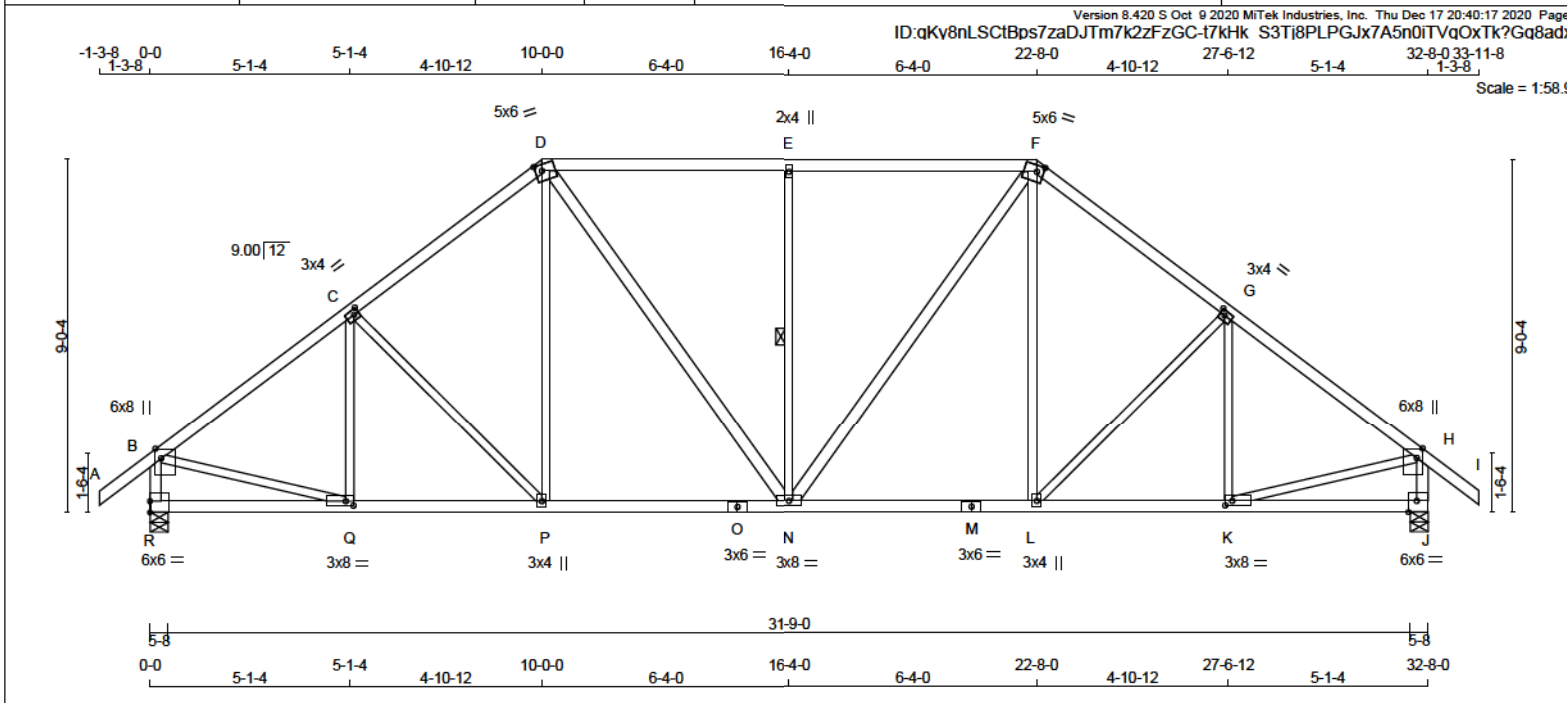
BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.23 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. 2x4 DRY SPF No.2 T-BRACE AT E-P FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH. END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW LOADING TOTAL LOAD CASES: (4)							DESIGN CRITERIA SPECIFIED LOADS: TOP CH. LL = 34.8 PSF DL = 8.0 PSF BOT CH. LL = 10.5 PSF DL = 7.3 PSF TOTAL LOAD = 60.6 PSF SPACING = 24.0 IN. C/C LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015 THIS DESIGN COMPLIES WITH: - PART 9 OF BCBC 2018 , ABC 2019 - PART 9 OF OBC 2012 (2019 AMENDMENT) - CSA 088-14 - TPIC 2014 (55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD ALLOWABLE DEFL.(LL)= L/360 (1.09") CALCULATED VERT. DEFL.(LL)= L/ 999 (0.14") ALLOWABLE DEFL.(TL)= L/360 (1.09") CALCULATED VERT. DEFL.(TL)= L/ 999 (0.24") CSI: TC=0.76/1.00 (D-E:1) , BC=0.61/1.00 (P-R:1) , WB=0.76/1.00 (E-R:1) , SSI=0.32/1.00 (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 (B) (INPUT = 0.90) JSI METAL = 0.98 (Q) (INPUT = 1.00)						
PLATES (table is in inches) JT TYPE PLATES W LEN Y X B TMVW-p MT20 5.0 8.0 1.25 3.50 C TMVW-t MT20 3.0 4.0 1.50 1.50 D TTWW+m MT20 6.0 6.0 Edge 2.00 E TMVW-t MT20 3.0 4.0 F TS-t MT20 3.0 8.0 1.50 4.00 G TMVW+w MT20 2.0 4.0 H TTWW+m MT20 6.0 6.0 Edge 2.00 I TMVW-t MT20 3.0 4.0 1.50 1.50 J TMVW-p MT20 5.0 8.0 1.25 3.50 L BMV1-t MT20 6.0 6.0 Edge 2.50 M BMVW-t MT20 3.0 8.0 1.50 2.25 N BMVW-t MT20 3.0 4.0 O BS-t MT20 3.0 6.0 P BMVW-t MT20 4.0 6.0 1.50 1.50 Q BS-t MT20 3.0 6.0 R BMVW-t MT20 4.0 4.0 1.75 1.50 S BMVW-t MT20 3.0 4.0 T BMVW-t MT20 3.0 8.0 1.50 2.25 U BMV1-t MT20 6.0 6.0 3.50 Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.							CHORDS MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD (LBS) LC1 MAX. FACTORED (PLI) (LC) UNBRACED LENGTH (FT) MEMB. MAX. FACTORED FORCE (LBS) MAX. FACTORED (LC) (LBS) FR-TO FROM TO FR-TO FROM TO A-B 0 / 51 -124.4 -124.4 0.17 (1) 10.00 T-C -514 / 0 0.16 (1) B-C -2851 / 0 -124.4 -124.4 0.47 (1) 3.69 C-S -98 / 0 0.05 (1) C-D -2852 / 0 -124.4 -124.4 0.46 (1) 3.69 S-D 0 / 290 0.07 (2) D-E -2999 / 0 -124.4 -124.4 0.76 (1) 3.23 D-R 0 / 1219 0.27 (1) E-F -2997 / 0 -124.4 -124.4 0.75 (1) 3.23 R-E -744 / 0 0.76 (1) F-G -2997 / 0 -124.4 -124.4 0.75 (1) 3.23 E-P -3 / 0 0.00 (1) G-H -2997 / 0 -124.4 -124.4 0.75 (1) 3.25 P-G -743 / 0 0.76 (1) H-I -2852 / 0 -124.4 -124.4 0.46 (1) 3.69 P-H 0 / 1216 0.27 (1) I-J -2851 / 0 -124.4 -124.4 0.47 (1) 3.69 N-H 0 / 292 0.07 (2) J-K 0 / 51 -124.4 -124.4 0.17 (1) 10.00 N-I -88 / 0 0.05 (1) K-L 2770 / 0 514 / 0 0.05 (1) 10.00						

	CHORDS					WEBS					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= 0.98 (Q) (INPUT = 1.00)
	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED UNBRACED LENGTH (IN)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED UNBRACED LENGTH (IN)		
	FR-TO					FR-TO					
	A-B	0/51	-124.4	-124.4	0.17 (1)	T-C	-514/0	0.18 (1)			
	B-C	-2851/0	-124.4	-124.4	0.47 (1)	C-S	-86/0	0.05 (1)			
	C-D	-2852/0	-124.4	-124.4	0.46 (1)	S-D	0/290	0.07 (2)			
	D-E	-2999/0	-124.4	-124.4	0.76 (1)	D-R	0/1219	0.27 (1)			
	E-F	-2997/0	-124.4	-124.4	0.75 (1)	R-E	-744/0	0.76 (1)			
	F-G	-2997/0	-124.4	-124.4	0.75 (1)	E-P	-3/0	0.00 (1)			
	G-H	-2997/0	-124.4	-124.4	0.75 (1)	P-G	-743/0	0.76 (1)			
	H-I	-2852/0	-124.4	-124.4	0.46 (1)	P-H	0/1216	0.27 (1)			
	I-J	-2851/0	-124.4	-124.4	0.47 (1)	N-H	0/292	0.07 (2)			
	J-K	0/51	-124.4	-124.4	0.17 (1)	N-I	-86/0	0.05 (1)			
	U-B	-2773/0	0.0	0.0	0.29 (1)	M-I	-515/0	0.18 (1)			
	L-J	-2773/0	0.0	0.0	0.29 (1)	B-T	0/2403	0.54 (1)			
					M-J	0/2403	0.54 (1)				

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

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



					TOTAL WEIGHT = 158 LB										
LUMBER					DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										[M]F
N. L. G. A. RULES					BEARINGS										DESIGN CRITERIA
CHORDS															SPECIFIED LOADS:
A - D 2x4 DRY No.2 SPF															TOP CH. LL = 34.8 PSF
D - F 2x4 DRY No.2 SPF															DL = 8.0 PSF
F - I 2x4 DRY No.2 SPF															BOT CH. LL = 10.5 PSF
R - B 2x4 DRY No.2 SPF															DL = 7.3 PSF
J - H 2x4 DRY No.2 SPF															TOTAL LOAD = 60.6 PSF
R - O 2x4 DRY No.2 SPF															
O - M 2x4 DRY No.2 SPF															
M - J 2x4 DRY No.2 SPF															
ALL WEBS 2x3 DRY No.2 SPF															SPACING = 24.0 IN. C/C
EXCEPT															
D - N 2x4 DRY No.2 SPF															
N - F 2x4 DRY No.2 SPF															
DRY: SEASONED LUMBER.															LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM
					UNFACTORED REACTIONS										
					1ST LCASE MAX MIN COMPONENT REACTIONS										
					JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										
					R 2098 1233 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										
					J 2098 1233 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										
					BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J										
					BRACING										
															THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.33 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0 . CBF = 121 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	Q-C	-348 / 36	0.15 (1)	
B-C	-2934 / 0	-124.4	-124.4 0.55 (1)	C-P	-347 / 0	0.33 (1)	
C-D	-2721 / 0	-124.4	-124.4 0.52 (1)	P-D	0 / 479	0.11 (2)	
D-E	-2585 / 0	-124.4	-124.4 0.76 (1)	D-N	0 / 754	0.12 (1)	
E-F	-2585 / 0	-124.4	-124.4 0.76 (1)	N-E	-965 / 0	0.51 (1)	
F-G	-2721 / 0	-124.4	-124.4 0.52 (1)	N-F	0 / 754	0.12 (1)	
G-H	-2934 / 0	-124.4	-124.4 0.55 (1)	L-F	0 / 479	0.11 (2)	
H-I	0 / 51	-124.4	-124.4 0.17 (1)	L-G	-347 / 0	0.33 (1)	
R-B	-2760 / 0	0.0	0.0 0.29 (1)	K-G	-348 / 36	0.15 (1)	
J-H	-2760 / 0	0.0	0.0 0.29 (1)	B-Q	0 / 2446	0.55 (1)	
				K-H	0 / 2446	0.55 (1)	
R-Q	0 / 0	-39.2	-39.2 0.17 (3)				
Q-P	0 / 2382	-39.2	-39.2 0.52 (1)				
P-O	0 / 2142	-39.2	-39.2 0.53 (2)				
O-N	0 / 2142	-39.2	-39.2 0.53 (2)				
N-M	0 / 2142	-39.2	-39.2 0.53 (2)				
M-L	0 / 2142	-39.2	-39.2 0.53 (2)				
L-K	0 / 2382	-39.2	-39.2 0.52 (1)				
K-J	0 / 0	-39.2	-39.2 0.17 (3)				

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF CBC 2018 (ABC 2019)
- PART 9 OF CBC 2012 (2010 AMENDMENT)
- CSA 085-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.76/1.00 (D-E-1) , BC=0.53/1.00 (N-P-2) .
WB=0.55/1.00 (B-Q-1) , SSI=0.38/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

MINIMUM MINIMUM MINIMUM

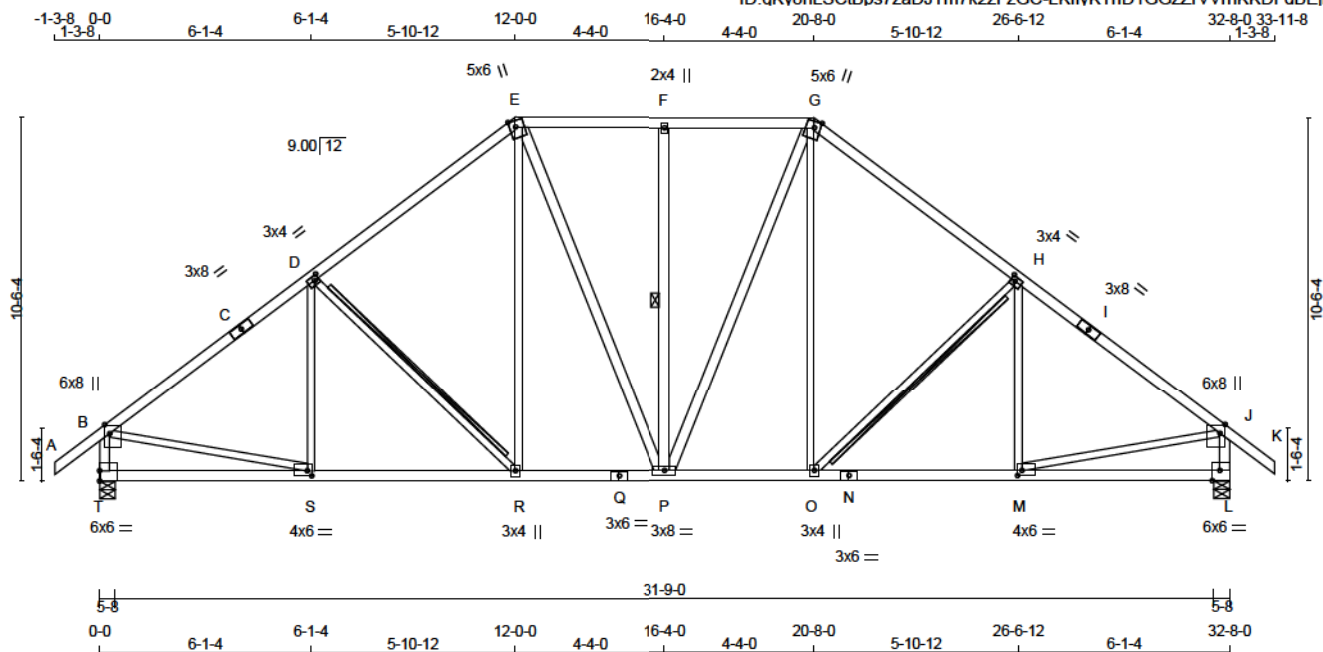
PLATES (table is in inches)

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

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

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



Scale = 1:66.6

TOTAL WEIGHT = 171 LB

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT DOWN	REQRD BRG
JT VERT	2845	0	2845	0
T	2845	0	2845	0
L	2845	0	2845	0

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS	
JT COMBINED	1233	0	343	0
T	1233	0	343	0
L	1233	0	343	0

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

BRACING

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P. DBS = 20-00. CBF = 81 LBS.
2x4 DRY SPF No.2 T-BRACE AT D-R, H-O

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)		
FR-TO		FROM TO		FR-TO				
A-B	0 / 51	-124.4 -124.4	0.17 (1)	10.00	S-D	-203 / 146	0.12 (1)	
B-C	-2908 / 0	-124.4 -124.4	0.83 (1)	3.19	D-R	-502 / 0	0.31 (1)	
C-D	-2908 / 0	-124.4 -124.4	0.83 (1)	3.19	R-E	0 / 610	0.14 (1)	
D-E	-2547 / 0	-124.4 -124.4	0.73 (1)	3.52	E-P	0 / 433	0.07 (1)	
E-F	-2165 / 0	-124.4 -124.4	0.35 (1)	4.29	P-F	-648 / 0	0.36 (1)	
F-G	-2165 / 0	-124.4 -124.4	0.35 (1)	4.29	P-G	0 / 433	0.07 (1)	
G-H	-2547 / 0	-124.4 -124.4	0.73 (1)	3.52	O-G	0 / 610	0.14 (1)	
H-I	-2908 / 0	-124.4 -124.4	0.83 (1)	3.19	O-H	-502 / 0	0.31 (1)	
I-J	-2908 / 0	-124.4 -124.4	0.83 (1)	3.19	M-H	-203 / 146	0.12 (1)	
J-K	0 / 51	-124.4 -124.4	0.17 (1)	10.00	B-S	0 / 2462	0.55 (1)	
T-B	-2748 / 0	0.0	0.0	2.29 (1)	5.20	M-J	0 / 2462	0.55 (1)
L-J	-2748 / 0	0.0	0.0	2.29 (1)	5.20			
T-S	0 / 0	-39.2 -39.2	0.29 (3)	10.00				
S-R	0 / 2417	-39.2 -39.2	0.58 (2)	10.00				
R-Q	0 / 1997	-39.2 -39.2	0.43 (1)	10.00				
Q-P	0 / 1997	-39.2 -39.2	0.43 (1)	10.00				
P-O	0 / 1997	-39.2 -39.2	0.43 (1)	10.00				
O-N	0 / 2417	-39.2 -39.2	0.58 (2)	10.00				
N-M	0 / 2417	-39.2 -39.2	0.58 (2)	10.00				
M-L	0 / 0	-39.2 -39.2	0.29 (3)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.85 (M) (INPUT = 0.90)
JSI METAL = 0.71 (N) (INPUT = 1.00)



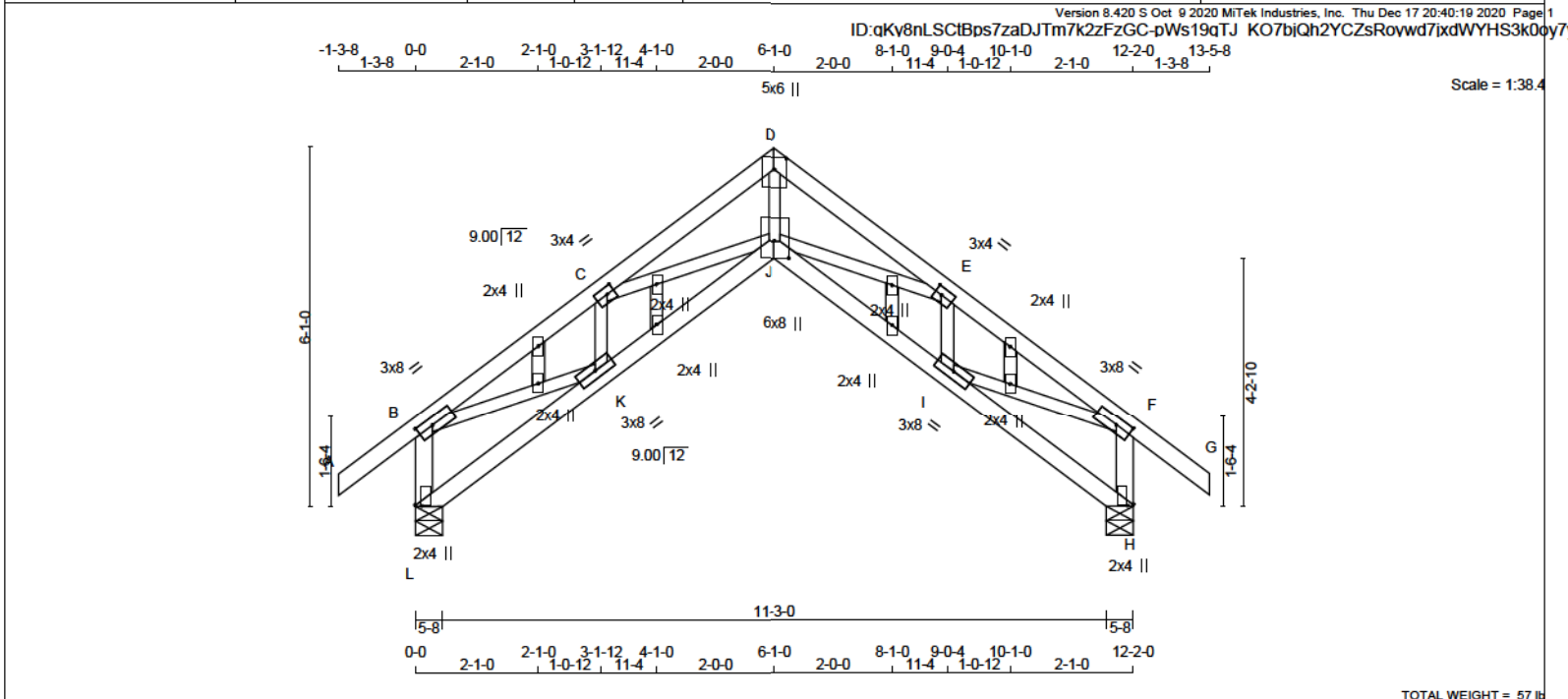
These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept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

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



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





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

L - B 2x4 DRY No.2

A - D 2x4 DRY No.2

D - G 2x4 DRY No.2

H - F 2x4 DRY No.2

L - J 2x4 DRY No.2

J - H 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

ALL GABLE WEBS 2x3 DRY No.2

DRY: SEASONED LUMBER.

GABLE STUDS SPACED AT 2-0-0 OC.

DESCR.

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	3.0	8.0	1.50	3.25
C	TMWW-t	MT20	3.0	4.0	1.50	1.50
D	TTW+p	MT20	5.0	6.0	2.25	2.50
E	TMWW-t	MT20	3.0	4.0	1.50	1.50
F	TMVW-t	MT20	3.0	8.0	1.50	3.25
H	BMV1+p	MT20	2.0	4.0	0.25	1.25
I	BMWW-t	MT20	3.0	8.0		
J	BBWWW+p	MT20	6.0	8.0	3.50	3.00
K	BMWW-t	MT20	3.0	8.0		
L	BMV1+p	MT20	2.0	4.0	0.25	1.25
M, N, O, P, Q, R, S, T						
M	NP+w	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	1167	1167	0	5-8
L VERT	1167	1167	0	5-8
H VERT	1167	1167	0	5-8

ALLOW FOR 0.3" OF HORIZONTAL MOVEMENT DUE TO TOTAL LOAD

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	855	520 / 0	128 / 0
L	855	520 / 0	128 / 0
H	855	520 / 0	128 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.19 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC)
FR-TO				FR-TO			
L-B	-1106 / 0	0.0	0.0 0.12 (1)	J-D	0 / 2724	0.61 (1)	0.09 (1)
A-B	0 / 51	-124.4	-124.4 0.17 (1)	J-E	0 / 421	0.09 (1)	0.09 (1)
B-C	-1995 / 0	-124.4	-124.4 0.19 (1)	I-E	-846 / 0	0.38 (1)	0.38 (1)
C-D	-2542 / 0	-124.4	-124.4 0.19 (1)	I-F	0 / 1669	0.38 (1)	0.38 (1)
D-E	-2542 / 0	-124.4	-124.4 0.19 (1)	C-J	0 / 421	0.09 (1)	0.09 (1)
E-F	-1995 / 0	-124.4	-124.4 0.19 (1)	K-C	-846 / 0	0.38 (1)	0.38 (1)
F-G	0 / 51	-124.4	-124.4 0.17 (1)	B-K	0 / 1669	0.38 (1)	0.38 (1)
H-F	-1106 / 0	0.0	0.0 0.12 (1)				
L-K	0 / 8	-39.2	-39.2 0.07 (2)				
K-J	0 / 2012	-39.2	-39.2 0.38 (1)				
J-I	0 / 2012	-39.2	-39.2 0.38 (1)				
I-H	0 / 8	-39.2	-39.2 0.07 (2)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018 , ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA D86-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.41")

CALCULATED VERT. DEFL.(LL)= L/ 999 (0.10")

ALLOWABLE DEFL.(TL)= L/360 (0.41")

CALCULATED VERT. DEFL.(TL)= L/ 842 (0.17")

CSI: TC=0.19/1.00 (D-E-1), BC=0.38/1.00 (I-J-1), WB=0.61/1.00 (D-J-1), SSI=0.14/1.00 (E-F-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

(M) (F)

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

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

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 (0.41")
 CALCULATED VERT. DEFL.(LL)= L/969 (0.10")
 ALLOWABLE DEFL.(TL)= L/360 (0.41")
 CALCULATED VERT. DEFL.(TL)= L/842 (0.17")

CSI: TC=0.19/1.00 (D-E-1), BC=0.38/1.00 (I-J-1), WB=0.61/1.00 (D-J-1), SSI=0.14/1.00 (E-F-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

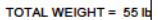
NAIL VALUES
 PLATE GRIP(DRY) SHEAR SECTION
 (PSI) (PLI) (PLI)
 MAX MIN MAX MIN MAX MIN
 MT20 850 371 1747 788 1987 1873

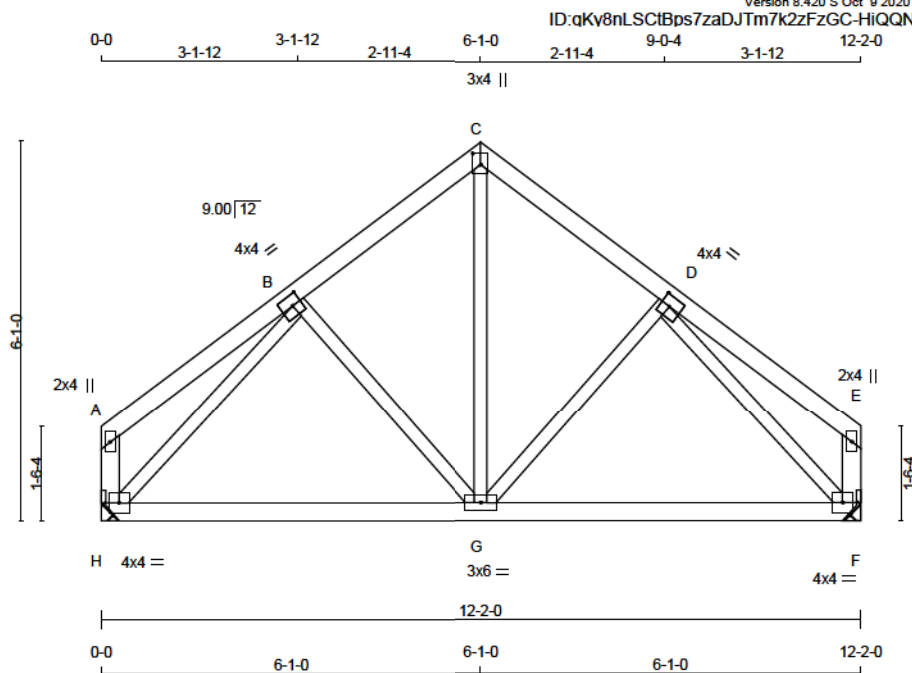
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (F) (INPUT = 0.90)
 JSI METAL = 0.59 (L) (INPUT = 1.00)

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





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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-I	MT20	4.0	4.0	2.00	1.75
C	TTW+p	MT20	3.0	4.0	2.25	1.50
D	TMWW-I	MT20	4.0	4.0	2.00	1.75
E	TMV+p	MT20	2.0	4.0		
F	BMVW1-I	MT20	4.0	4.0		
G	BMWW-I	MT20	3.0	6.0		
H	BMVW1-I	MT20	4.0	4.0		

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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
H	996	0	996	0	0	MECHANICAL	
F	996	0	996	0	0	MECHANICAL	

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
H	737	424 / 0	128 / 0	0 / 0	0 / 0	186 / 0	0 / 0
F	737	424 / 0	128 / 0	0 / 0	0 / 0	186 / 0	0 / 0

BRACING

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX (LC) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX (LC)	
FR-TO		FROM TO	LENGTH	FR-TO			
A-B	0 / 25	-124.4 -124.4	0.18 (1)	10.00	G-C	0 / 535	0.12 (1)
B-C	-720 / 0	-124.4 -124.4	0.14 (1)	6.25	G-D	-160 / 22	0.06 (1)
C-D	-720 / 0	-124.4 -124.4	0.14 (1)	6.25	B-G	-160 / 22	0.06 (1)
D-E	0 / 25	-124.4 -124.4	0.18 (1)	10.00	H-B	-1007 / 0	0.34 (1)
H-A	-146 / 0	0.0	0.0 0.02 (1)	7.81	D-F	-1007 / 0	0.34 (1)
F-E	-146 / 0	0.0	0.0 0.02 (1)	7.81			
H-G	0 / 662	-39.2	-39.2 0.39 (2)	10.00			
G-F	0 / 662	-39.2	-39.2 0.39 (2)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.41")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.41")
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.18/1.00 (D-E-1), BC=0.39/1.00 (G-H-2),
WB=0.34/1.00 (D-F-1), SSI=0.16/1.00 (F-G-3)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.85 (B) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)



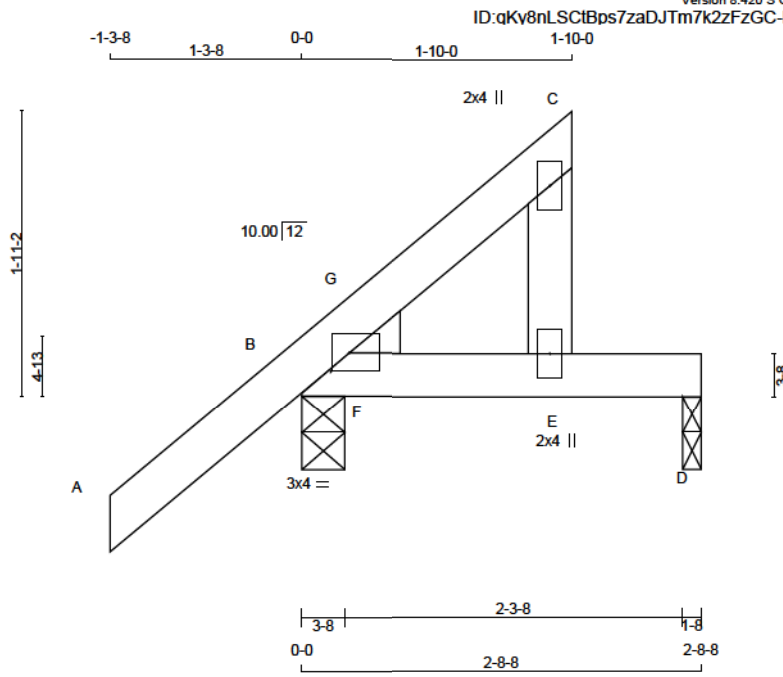
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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

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





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-I	MT20	3.0	4.0	1.50	1.50
C	TMV+p	MT20	2.0	4.0		
E	BMV+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG	HEEL
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
B	420	0	420	0	0
D	88	0	91	0	-17

PROVIDE ANCHORAGE AT BEARING JOINT D FOR 150 LBS. FACTORED UPLIFT

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
B	301	208	0
D	71	19	-25

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

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

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

LOADING
TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX. (CSI (LC) UNBRACED LENGTH)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (CSI (LC))	
FR-TO				FR-TO			
A-B	0 / 53	-124.4	-124.4 0.17 (1)	10.00	F-G	0 / 139	0.00 (1)
B-G	-106 / 0	-124.4	-124.4 0.16 (1)	8.25			
G-C	-15 / 0	-124.4	-124.4 0.04 (5)	8.25			
E-C	-84 / 14	0.0	0.0 0.01 (1)	7.81			
B-F	0 / 0	-39.2	-39.2 0.07 (5)	10.00			
F-E	0 / 0	-39.2	-39.2 0.08 (2)	10.00			
E-D	0 / 0	-39.2	-39.2 0.08 (2)	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 (0.01")
ALLOWABLE DEFL.(TL)= L/360 (0.19")
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.17/1.00 (A-B:1), BC=0.08/1.00 (E-F:2), WB=0.00/1.00 (F-G:1), SSI=0.15/1.00 (B-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= 0.32 (B) (INPUT = 0.90)
JSI METAL= 0.05 (B) (INPUT = 1.00)



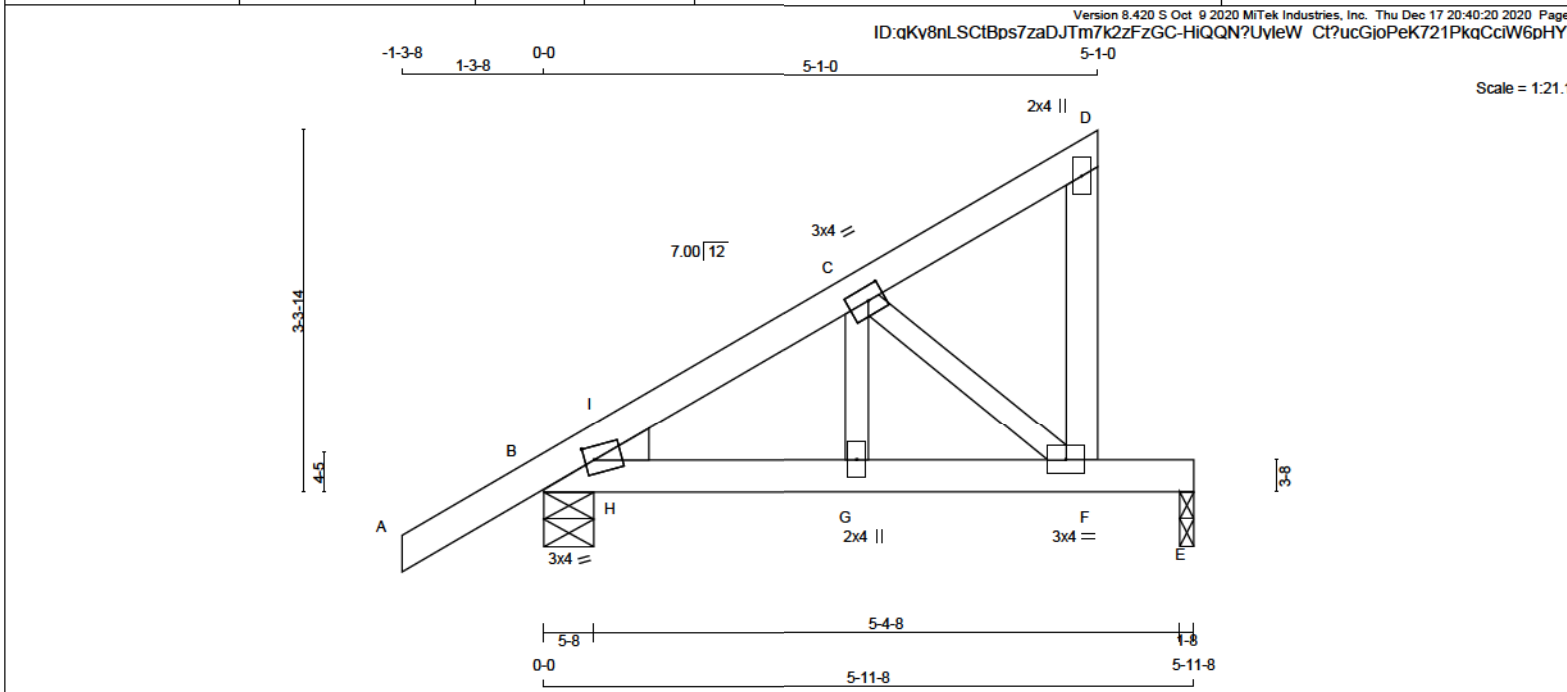
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
F - D	2x4	DRY No.2	SPF
B - E	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMBH1-m	MT20	3.0	4.0	1.50	1.00
C	TMWV-t	MT20	3.0	4.0	1.50	1.75
D	TMV+p	MT20	2.0	4.0		
F	BMV-w	MT20	3.0	4.0		
G	BMW+w	MT20	2.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG UPLIFT IN-SX	REQRD BRG IN-SX	HEEL WEDGE
B	649	0	649	0	5-8	1-8	2x4 L
E	387	0	387	0	1-8	1-8	

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX MIN COMPONENT REACTIONS SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
B	473	298 / 0	83 / 0	0 / 0	0 / 0	112 / 0	0 / 0
E	292	151 / 0	83 / 0	0 / 0	0 / 0	78 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, 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 (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 41	-124.4	-124.4	0.16 (1)	10.00	G-C	0 / 354
B-I	-805 / 0	-124.4	-124.4	0.02 (1)	8.25	C-F	-840 / 0
I-C	-567 / 0	-124.4	-124.4	0.09 (1)	8.25	H-I	-105 / 9
C-D	-15 / 0	-124.4	-124.4	0.09 (1)	8.25		
F-D	-108 / 0	0.0	0.0	0.02 (1)	7.81		
B-H	0 / 505	-39.2	-39.2	0.17 (1)	10.00		
H-G	0 / 505	-39.2	-39.2	0.22 (1)	10.00		
G-F	0 / 505	-39.2	-39.2	0.52 (1)	10.00		
F-E	0 / 0	-39.2	-39.2	0.44 (1)	10.00		

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.16/1.00 (A-B:1) , BC=0.52/1.00 (F-G:1) ,
WB=0.11/1.00 (C-F:1) , SSI=0.30/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.80 (F) (INPUT = 0.80)
JSI METAL= 0.23 (B) (INPUT = 1.00)



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

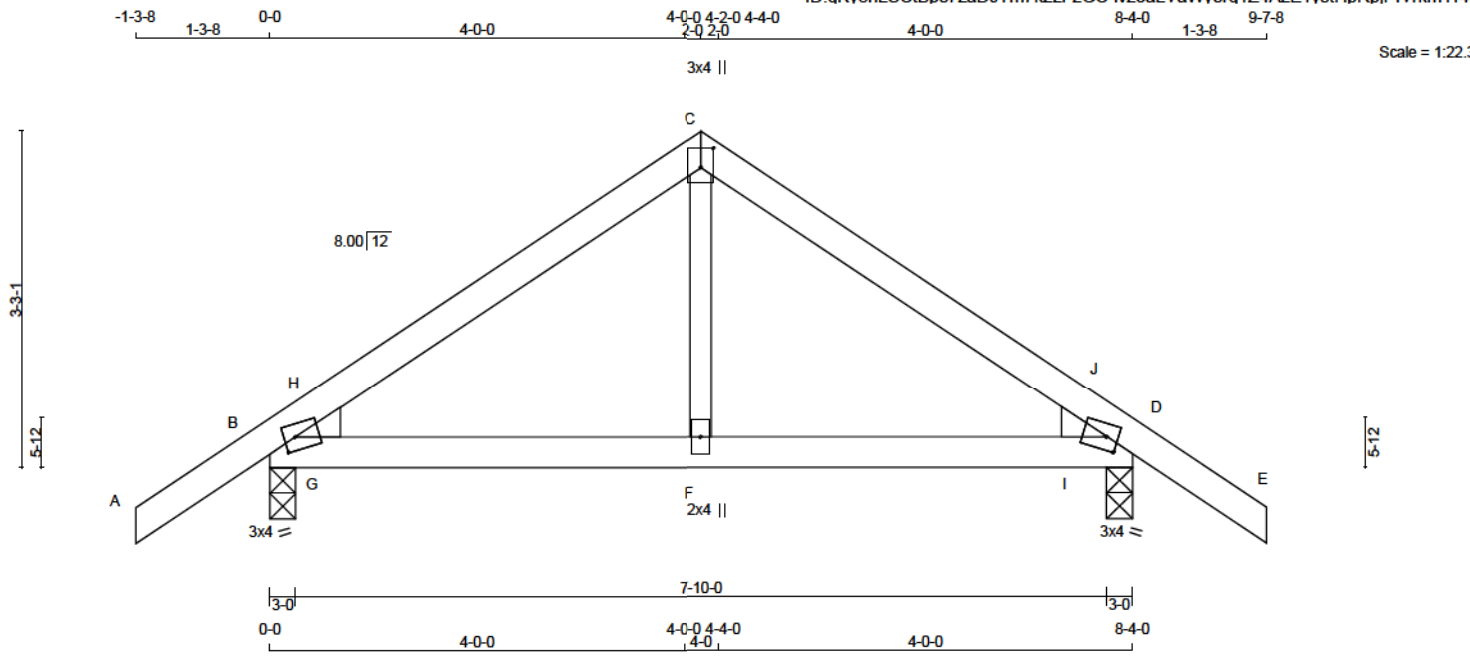


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			



Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Thu Dec 17 20:40:21 2020 Page 1
ID:qKv8nLSCtBps7zaDJTm7k2zFzGC-lvzoaLVaWwvq1Z4AzE1ystHpRpiPvRkmYr4gy7y



TOTAL WEIGHT = 2 X 28 = 56 lb

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMBH1-m	MT20	3.0	4.0	1.50 1.25
C	TTW+p	MT20	3.0	4.0	2.25 1.50
D	TMBH1-m	MT20	3.0	4.0	1.50 1.25
F	BMW+w	MT20	2.0	4.0	

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

BEARINGS								
	FACTORED GROSS REACTION		MAXIMUM FACTORED GROSS REACTION		INPUT BRG	REQRD BRG	HEEL	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT IN-SX	IN-SX	WEDGE	
B	853	0	853	0	0	3-0	1-8	2x4 L
D	853	0	853	0	0	3-0	1-8	2x4 R

UNFACTORED REACTIONS							
1ST LCASE	MAX	MIN	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
B	623	386 / 0	88 / 0	0 / 0	0 / 0	149 / 0	0 / 0
D	623	386 / 0	88 / 0	0 / 0	0 / 0	149 / 0	0 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX (LC)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. CSI (LC)
FR-TO		FROM	TO		FR-TO		
A-B	0 / 41	-124.4	-124.4	0.17 (1)	10.00	F-C	0 / 308
B-H	-846 / 0	-124.4	-124.4	0.08 (1)	6.25	G-H	-257 / 50
H-C	-852 / 0	-124.4	-124.4	0.23 (1)	6.25	I-J	-257 / 50
C-J	-852 / 0	-124.4	-124.4	0.23 (1)	6.25		
J-D	-846 / 0	-124.4	-124.4	0.08 (1)	6.25		
D-E	0 / 41	-124.4	-124.4	0.17 (1)	10.00		
B-G	0 / 533	-39.2	-39.2	0.27 (1)	10.00		
G-F	0 / 533	-39.2	-39.2	0.28 (1)	10.00		
F-I	0 / 533	-39.2	-39.2	0.28 (1)	10.00		
I-D	0 / 533	-39.2	-39.2	0.27 (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

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- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.23/1.00 (C-H-1), BC=0.28/1.00 (F-G-1),
WB=0.07/1.00 (C-F-2), SSI=0.21/1.00 (B-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)	(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= 0.77 (B) (INPUT = 0.90)
JSI METAL= 0.27 (B) (INPUT = 1.00)

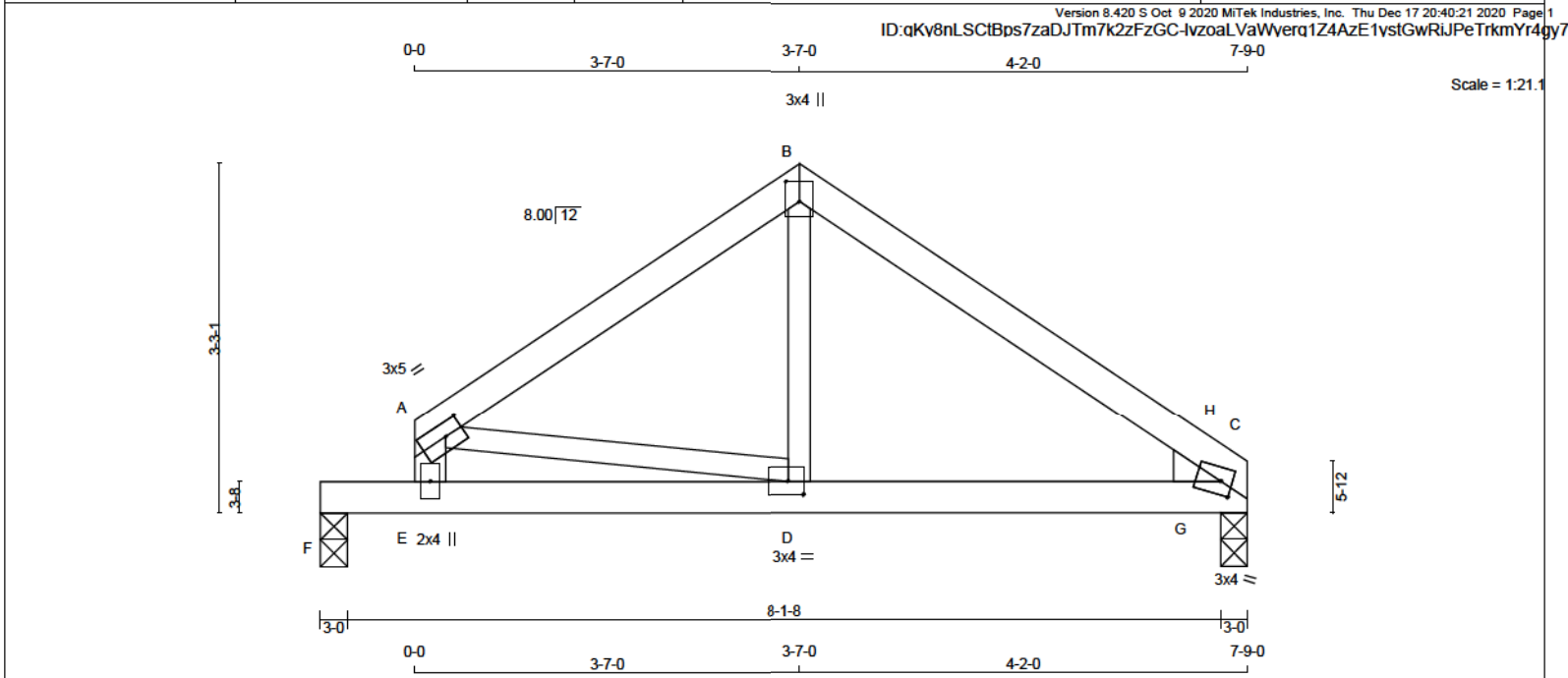


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

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LUMBER N. L. G. A. RULES CHORDS SIZE LUMBER A - B 2x4 DRY No.2 B - C 2x4 DRY No.2 E - A 2x4 DRY No.2 F - C 2x4 DRY No.2 ALL WEBS 2x3 DRY No.2 EXCEPT DRY: SEASONED LUMBER.	DESCR. SPF SPF SPF SPF SPF	TOTAL WEIGHT = 2 X 27 = 53 LB
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PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
A	TMVW-t	MT20	3.0	5.0	1.50 2.00
B	TTW+p	MT20	3.0	4.0	2.25 1.50
C	TMBH1-m	MT20	3.0	4.0	1.50 1.25
D	BMVW-t	MT20	3.0	4.0	1.50 1.75
E	BMV+p	MT20	2.0	4.0	

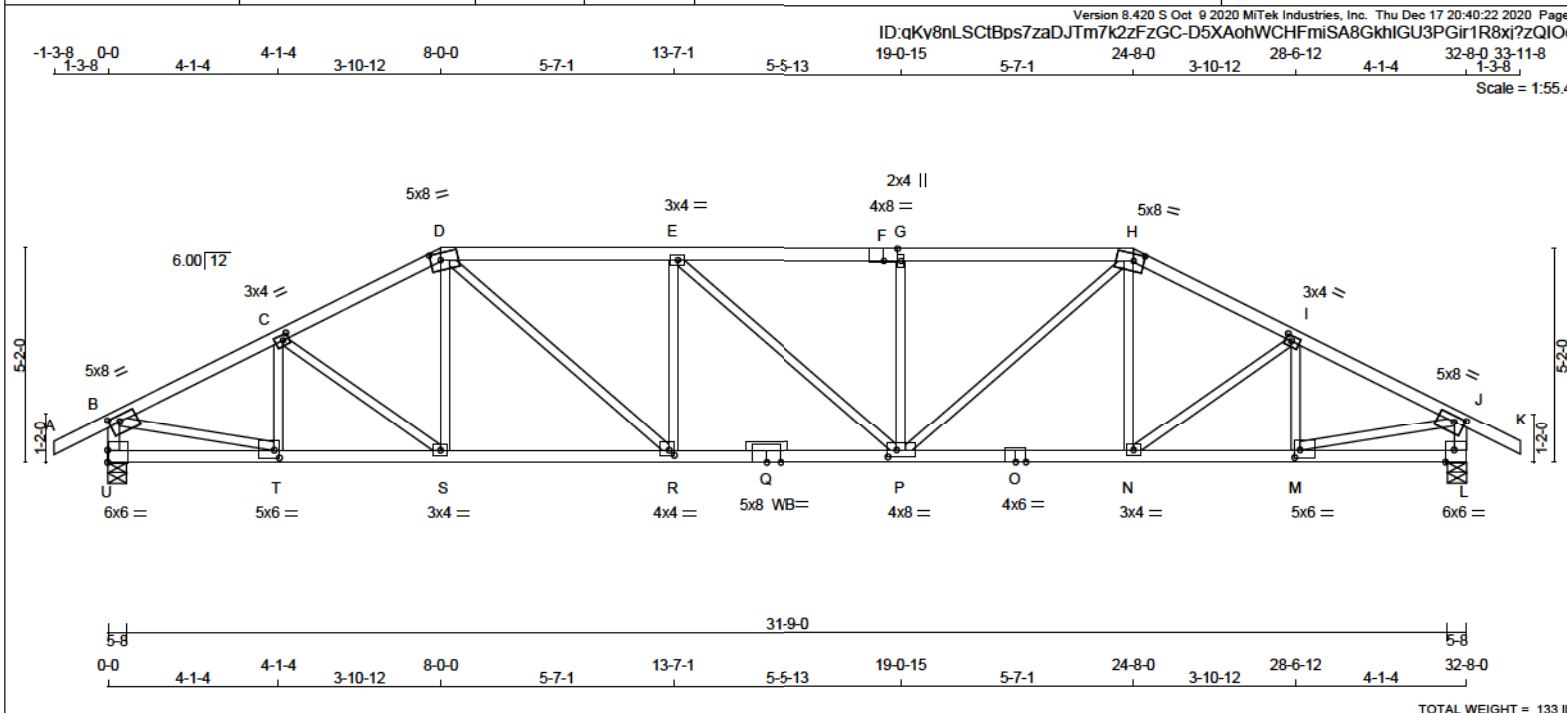
BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C																																																																																																																																											
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LOADING																																																																																																																																											
TOTAL LOAD CASES: (4)																																																																																																																																											
<table><tr><td colspan="5">C H O R D S</td><td colspan="5">W E B S</td></tr><tr><td colspan="2"></td><td>MAX. FACTORED</td><td>FACTORED</td><td></td><td colspan="2"></td><td>MAX. FACTORED</td><td></td><td></td></tr><tr><td>MEMB.</td><td>FORCE</td><td>VERT. LOAD</td><td>LC1 MAX</td><td>MAX.</td><td>MEMB.</td><td>FORCE</td><td>MAX</td><td></td><td></td></tr><tr><td></td><td>(LBS)</td><td>(PLF)</td><td>CSI (LC)</td><td>UNBRAC</td><td></td><td>(LBS)</td><td>CSI (LC)</td><td></td><td></td></tr><tr><td>FR-TO</td><td></td><td>FROM TO</td><td></td><td>LENGTH</td><td>FR-TO</td><td></td><td></td><td></td><td></td></tr><tr><td>A- B</td><td>-717 / 0</td><td>-124.4 -124.4</td><td>0.28 (1)</td><td>6.25</td><td>D- B</td><td>0 / 380</td><td>0.09 (2)</td><td></td><td></td></tr><tr><td>B- H</td><td>-732 / 0</td><td>-124.4 -124.4</td><td>0.23 (1)</td><td>6.25</td><td>A- D</td><td>0 / 604</td><td>0.14 (1)</td><td></td><td></td></tr><tr><td>H- C</td><td>-700 / 0</td><td>-124.4 -124.4</td><td>0.14 (1)</td><td>6.25</td><td>G- H</td><td>-294 / 29</td><td>0.00 (1)</td><td></td><td></td></tr><tr><td>E- A</td><td>-712 / 0</td><td>0.0 0.0</td><td>0.07 (1)</td><td>7.81</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>F- E</td><td>0 / 0</td><td>-163.7 -163.7</td><td>0.76 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>E- D</td><td>0 / 0</td><td>-39.2 -39.2</td><td>0.76 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>D- G</td><td>0 / 597</td><td>-39.2 -39.2</td><td>0.41 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>G- C</td><td>0 / 597</td><td>-39.2 -39.2</td><td>0.29 (1)</td><td>10.00</td><td></td><td></td><td></td><td></td><td></td></tr></table>										C H O R D S					W E B S							MAX. FACTORED	FACTORED				MAX. FACTORED			MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX				(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)			FR-TO		FROM TO		LENGTH	FR-TO					A- B	-717 / 0	-124.4 -124.4	0.28 (1)	6.25	D- B	0 / 380	0.09 (2)			B- H	-732 / 0	-124.4 -124.4	0.23 (1)	6.25	A- D	0 / 604	0.14 (1)			H- C	-700 / 0	-124.4 -124.4	0.14 (1)	6.25	G- H	-294 / 29	0.00 (1)			E- A	-712 / 0	0.0 0.0	0.07 (1)	7.81						F- E	0 / 0	-163.7 -163.7	0.76 (1)	10.00						E- D	0 / 0	-39.2 -39.2	0.76 (1)	10.00						D- G	0 / 597	-39.2 -39.2	0.41 (1)	10.00						G- C	0 / 597	-39.2 -39.2	0.29 (1)	10.00					
C H O R D S					W E B S																																																																																																																																						
		MAX. FACTORED	FACTORED				MAX. FACTORED																																																																																																																																				
MEMB.	FORCE	VERT. LOAD	LC1 MAX	MAX.	MEMB.	FORCE	MAX																																																																																																																																				
	(LBS)	(PLF)	CSI (LC)	UNBRAC		(LBS)	CSI (LC)																																																																																																																																				
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A- B	-717 / 0	-124.4 -124.4	0.28 (1)	6.25	D- B	0 / 380	0.09 (2)																																																																																																																																				
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H- C	-700 / 0	-124.4 -124.4	0.14 (1)	6.25	G- H	-294 / 29	0.00 (1)																																																																																																																																				
E- A	-712 / 0	0.0 0.0	0.07 (1)	7.81																																																																																																																																							
F- E	0 / 0	-163.7 -163.7	0.76 (1)	10.00																																																																																																																																							
E- D	0 / 0	-39.2 -39.2	0.76 (1)	10.00																																																																																																																																							
D- G	0 / 597	-39.2 -39.2	0.41 (1)	10.00																																																																																																																																							
G- C	0 / 597	-39.2 -39.2	0.29 (1)	10.00																																																																																																																																							

DESIGN CRITERIA									
SPECIFIED LOADS:									
TOP CH. LL = 34.8 PSF									
DL = 8.0 PSF									
BOT CH. LL = 10.5 PSF									
DL = 7.3 PSF									
TOTAL LOAD = 60.6 PSF									
SPACING = 24.0 IN. C/C									
THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
THIS DESIGN COMPLIES WITH:									
- PART 9 OF BCBC 2018, ABC 2019									
- PART 9 OF OBC 2012 (2019 AMENDMENT)									
- CSA 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 (0.29")									
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")									
ALLOWABLE DEFL.(TL)= L/360 (0.29")									
CALCULATED VERT. DEFL.(TL) = L/605 (0.17")									
CSI: TC=0.28/1.00 (A-B:1) , BC=0.78/1.00 (E-F:1) ,									
WB=0.14/1.00 (A-D:1) , SSI=0.55/1.00 (E-F:1)									
DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
SHEAR=1.10 TENS=1.10									
COMPANION LIVE LOAD FACTOR = 1.00									
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
NAIL VALUES									
PLATE GRIP(DRY) SHEAR SECTION									
(PSI) (PLI) (PLI)									
MAX MIN MAX MIN MAX MIN									
MT20 850 371 1747 788 1987 1873									
PLATE PLACEMENT TOL. = 0.250 inches									
PLATE ROTATION TOL. = 5.0 Deg.									
JSI GRIP= 0.86 (D) (INPUT = 0.90)									
JSI METAL = 0.27 (C) (INPUT = 1.00)									

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

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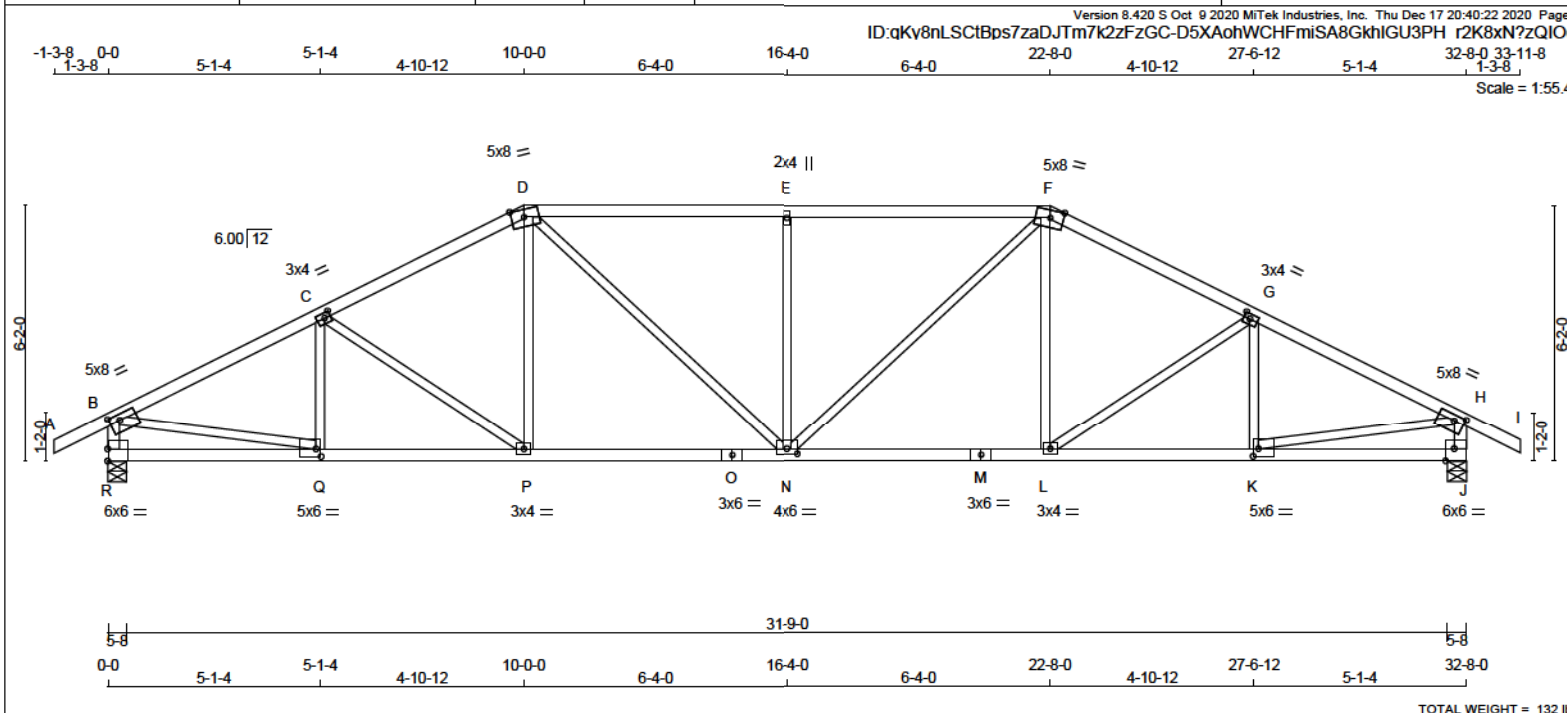


LUMBER							DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA			
N. L. G. A. RULES							BEARINGS										SPECIFIED LOADS:			
CHORDS SIZE LUMBER DESCR.							FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQD BRG										TOP CH. LL = 34.8 PSF			
A - D 2x4 DRY No.2 SPF							JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF			
D - F 2x4 DRY No.2 SPF							U 2842 0 2842 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF			
F - H 2x4 DRY No.2 SPF							L 2842 0 2842 0 0 5-8 5-8										DL = 7.3 PSF			
H - K 2x4 DRY No.2 SPF							UNFACTORED REACTIONS										TOTAL LOAD = 60.6 PSF			
U - B 2x4 DRY No.2 SPF							1ST LCASE MAX/MIN COMPONENT REACTIONS										SPACING = 24.0 IN. C/C			
L - J 2x4 DRY No.2 SPF							JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM			
U - Q 2x4 DRY No.2 SPF							U 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015			
Q - O 2x4 DRY No.2 SPF							L 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										THIS DESIGN COMPLIES WITH:			
O - L 2x4 DRY No.2 SPF							BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, L										- PART 9 OF BCBC 2018 , ABC 2019			
ALL WEBS 2x3 DRY No.2 SPF							BRACING										- PART 9 OF OBC 2012 (2019 AMENDMENT)			
EXCEPT							TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.46 FT.										- CSA 086-14			
DRY: SEASONED LUMBER.							MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										- TPIC 2014			
PLATES (table is in inches)							TOTAL LOAD CASES: (4)										(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD			
JT TYPE PLATES W LEN Y X							C H O R D S W E B S										ALLOWABLE DEFL.(LL)= L/360 (1.09")			
B TMVW-t MT20 5.0 8.0 1.75 3.00							MAX. FACTORED FORCE VERT. LOAD LC1 MAX MAX. FACTORED FORCE MAX										CALCULATED VERT. DEFL.(LL) = L/999 (0.28")			
C TMVW-t MT20 3.0 4.0 1.50 1.75							MEMB. (LBS) (PLF) CSI (LC) UNBRAC MEMB. (LBS) CSI (LC)										ALLOWABLE DEFL.(TL)= L/360 (1.09")			
D TTWW-m MT20 5.0 8.0 2.00 3.00							FR-TO FROM TO LENGTHFR-TO										CALCULATED VERT. DEFL.(TL) = L/905 (0.43")			
E TMVW-t MT20 3.0 4.0							A-B 0 / 38 -124.4 -124.4 0.16 (1) 10.00 T-C -560 / 0 0.11 (1)										CSI: TC=0.96/1.00 (D-E-1), BC=0.83/1.00 (P-R-1), WB=0.78/1.00 (B-T-1), SSI=0.32/1.00 (D-E-1)			
F TS-t MT20 4.0 8.0 Edge 4.00							B-C -3747 / 0 -124.4 -124.4 0.51 (1) 3.21 C-S -48 / 0 0.02 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10			
G TMVW-t MT20 2.0 4.0							C-D -3753 / 0 -124.4 -124.4 0.50 (1) 3.21 S-D 0 / 268 0.06 (2)										COMPANION LIVE LOAD FACTOR = 1.00			
H TTWW-m MT20 5.0 8.0 2.00 3.00							D-E -4443 / 0 -124.4 -124.4 0.99 (1) 2.46 D-R 0 / 1466 0.33 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .			
I TMVW-t MT20 3.0 4.0 1.50 1.75							E-F -4441 / 0 -124.4 -124.4 0.97 (1) 2.47 R-E -746 / 0 0.29 (1)										NAIL VALUES			
J TMVW-t MT20 5.0 8.0 1.75 3.00							F-G -4441 / 0 -124.4 -124.4 0.97 (1) 2.47 E-P -3 / 0 0.00 (1)										PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)			
L BMV1-t MT20 6.0 6.0 Edge 2.50							G-H -4441 / 0 -124.4 -124.4 0.98 (1) 2.48 P-G -745 / 0 0.29 (1)										MAX MIN MAX MIN MAX MIN			
M BMVW-t MT20 5.0 6.0 2.25 1.50							H-I -3753 / 0 -124.4 -124.4 0.50 (1) 3.21 P-H 0 / 1462 0.33 (1)										MT20 650 371 1747 788 1987 1873			
N BMVW-t MT20 3.0 4.0							I-J -3747 / 0 -124.4 -124.4 0.51 (1) 3.21 N-H 0 / 269 0.06 (2)										PLATE PLACEMENT TOL = 0.250 inches			
O BS-t MT20 4.0 6.0							J-K 0 / 38 -124.4 -124.4 0.16 (1) 10.00 N-I -47 / 0 0.02 (1)										PLATE ROTATION TOL = 5.0 Deg.			
P BMVWW-t MT20 4.0 8.0 2.00 2.50							U-B -2765 / 0 0.0 0.0 0.28 (1) 5.18 M-I -560 / 0 0.11 (1)										JSI GRIP= 0.90 (P) (INPUT = 0.90)			
Q BS-t MT20 5.0 8.0							L-J -2765 / 0 0.0 0.0 0.28 (1) 5.18 B-T 0 / 3444 0.78 (1)										JSI METAL = 0.96 (Q) (INPUT = 1.00)			
R BMVW-t MT20 4.0 4.0 1.50 1.50							U-T 0 / 0 -39.2 -39.2 0.12 (2) 10.00 M-J 0 / 3444 0.78 (1)													
S BMVW-t MT20 3.0 4.0							T-S 0 / 3371 -39.2 -39.2 0.65 (1) 10.00													
T BMVW-t MT20 5.0 6.0 2.25 1.50							S-R 0 / 3338 -39.2 -39.2 0.65 (1) 10.00													
U BMV1-t MT20 6.0 6.0 3.50							R-Q 0 / 4443 -39.2 -39.2 0.83 (1) 10.00													
							Q-P 0 / 4443 -39.2 -39.2 0.83 (1) 10.00													
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																				
WB - INDICATES BLOCKING REQUIRED																				

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Sewage System			
Zoning			

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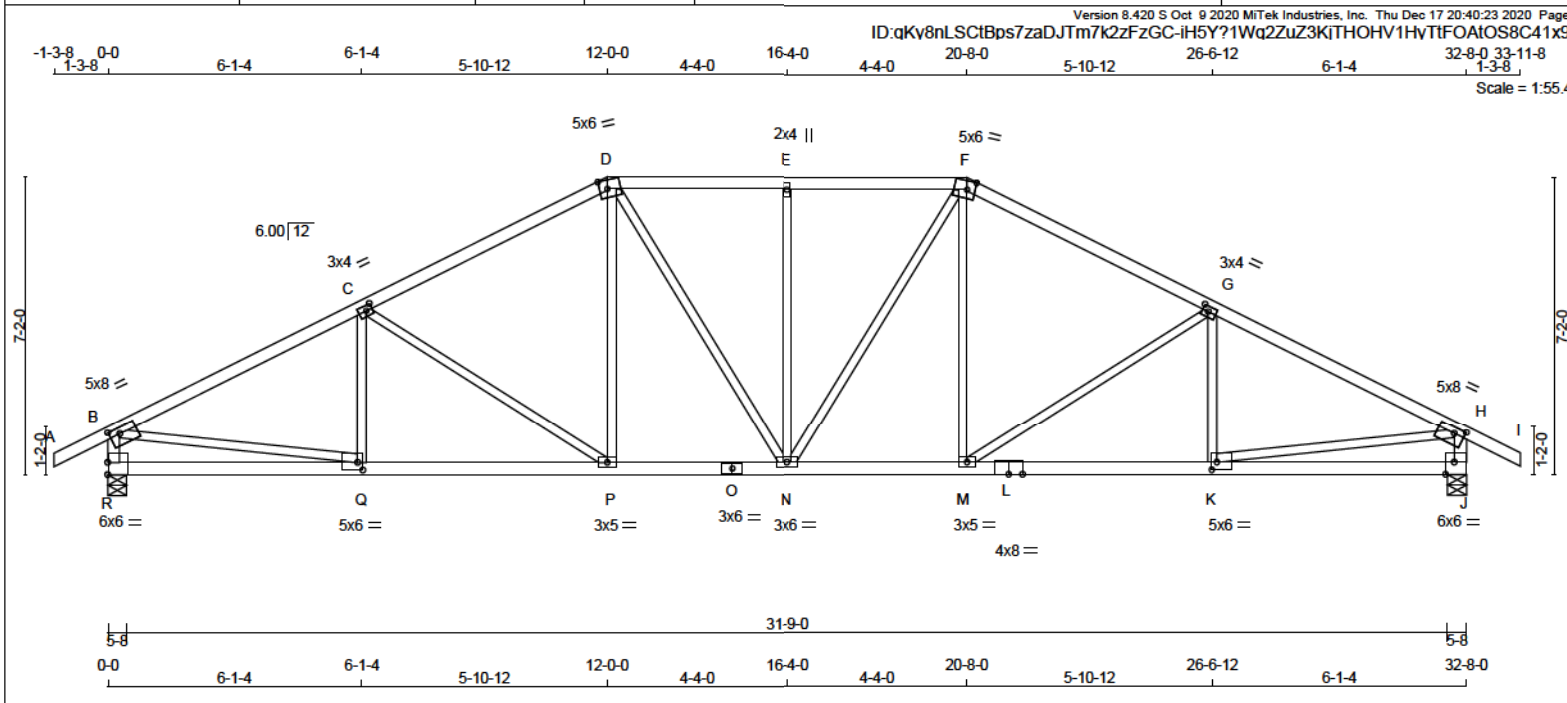


LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER DESCR.										FACTORED GROSS REACTION MAXIMUM FACTORED GROSS REACTION INPUT BRG REQRD BRG										TOP CH. LL = 34.8 PSF									
A - D 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										DL = 8.0 PSF									
D - F 2x4 DRY No.2 SPF										R 2842 0 2842 0 0 5-8 5-8										BOT CH. LL = 10.5 PSF									
R - B 2x4 DRY No.2 SPF										J 2842 0 2842 0 0 5-8 5-8										DL = 7.3 PSF									
J - H 2x4 DRY No.2 SPF																				TOTAL LOAD = 60.6 PSF									
R - O 2x4 DRY No.2 SPF																													
O - M 2x4 DRY No.2 SPF																													
M - J 2x4 DRY No.2 SPF																													
ALL WEBS 2x3 DRY No.2 SPF																													
EXCEPT																													
DRY: SEASONED LUMBER.																													
										UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
										1ST LCASE MAX/MIN COMPONENT REACTIONS										LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM									
										JT COMBINED SNOW LIVE PERM.LIVE WIND DEAD SOIL										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
										R 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										THIS DESIGN COMPLIES WITH:									
										J 2098 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0										- PART 9 OF BCBC 2018, ABC 2019									
										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
										BRACING										- CSA 088-14									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.55 FT.										- TPIC 2014									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.										ALLOWABLE DEFL.(LL)= L/360 (1.09")									
										LOADING										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.21")									
										TOTAL LOAD CASES: (4)										ALLOWABLE DEFL.(TL)= L/360 (1.09")									
										CHORDS WEBS										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.38")									
										MEMB. MAX. FACTORED FORCE (LBS) FACTORED VERT. LOAD LC1 MAX (PLF) CSI (LC) UNBRAC										CSI: TC=0.90/1.00 (D-E-1), BC=0.71/1.00 (P-Q-1),									
										FR-TO FROM TO LENGTHFR-TO										WB=0.80/1.00 (B-Q-1), SSI=0.38/1.00 (D-E-1)									
										A-B 0 / 38 -124.4 -124.4 0.16 (1) 10.00 Q-C -388 / 19 0.09 (1)										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
										B-C -3877 / 0 -124.4 -124.4 0.61 (1) 3.06 C-P -388 / 0 0.25 (1)										SHEAR=1.10 TENS=1.10									
										C-D -3583 / 0 -124.4 -124.4 0.56 (1) 3.22 P-D 0 / 463 0.10 (2)										COMPANION LIVE LOAD FACTOR = 1.00									
										D-E -3838 / 0 -124.4 -124.4 0.90 (1) 2.55 D-N 0 / 893 0.20 (1)										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE									
										E-F -3838 / 0 -124.4 -124.4 0.90 (1) 2.55 N-E -966 / 0 0.58 (1)										FOR QUALITY CONTROL IN THE TRUSS									
										F-G -3583 / 0 -124.4 -124.4 0.56 (1) 3.22 N-F 0 / 893 0.20 (1)										MANUFACTURING PLANT .									
										G-H -3877 / 0 -124.4 -124.4 0.61 (1) 3.06 L-F 0 / 463 0.10 (2)										NAIL VALUES									
										H-I 0 / 38 -124.4 -124.4 0.16 (1) 10.00 L-G -388 / 0 0.25 (1)										PLATE GRIP(DRY) SHEAR SECTION									
										R-B -2753 / 0 0.0 0.0 0.28 (1) 5.19 K-G -388 / 19 0.09 (1)										(PSI) (PLI) (PLI)									
										J-H -2753 / 0 0.0 0.0 0.28 (1) 5.19 B-Q 0 / 3544 0.80 (1)										MAX MIN MAX MIN MAX MIN									
																				MT20 650 371 1747 788 1987 1873									
										R-Q 0 / 0 -39.2 -39.2 0.17 (3) 10.00 K-H 0 / 3544 0.80 (1)										PLATE PLACEMENT TOL. = 0.250 inches									
										Q-P 0 / 3495 -39.2 -39.2 0.71 (1) 10.00										PLATE ROTATION TOL. = 5.0 Deg.									
										P-O 0 / 3182 -39.2 -39.2 0.67 (1) 10.00										JSI GRIP= 0.88 (O) (INPUT = 0.90)									
										O-N 0 / 3182 -39.2 -39.2 0.67 (1) 10.00										JSI METAL = 0.98 (M) (INPUT = 1.00)									
										N-M 0 / 3182 -39.2 -39.2 0.67 (1) 10.00																			
										M-L 0 / 3182 -39.2 -39.2 0.67 (1) 10.00																			
										L-K 0 / 3495 -39.2 -39.2 0.71 (1) 10.00																			

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Sewage System			
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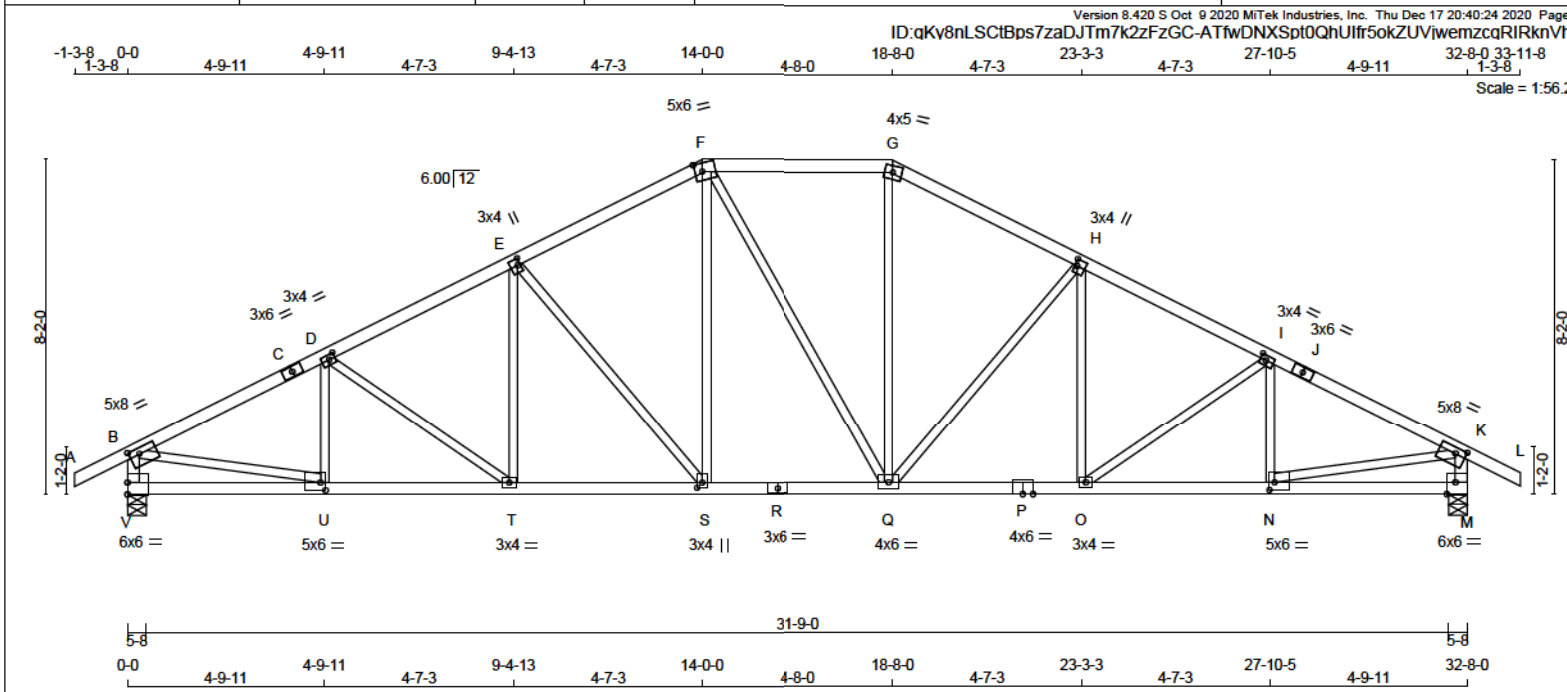


TOTAL WEIGHT = 138 L										[M]F																			
LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA									
N. L. G. A. RULES										BEARINGS										SPECIFIED LOADS:									
CHORDS SIZE LUMBER DESCR.										FACTORED MAXIMUM FACTORED INPUT REQD										TOP CH. LL = 34.8 PSF									
A - D 2x4 DRY No.2 SPF										GROSS REACTION GROSS REACTION BRG BRG										DL = 8.0 PSF									
D - F 2x4 DRY No.2 SPF										JT VERT HORZ DOWN HORZ UPLIFT IN-SX IN-SX										BOT CH. LL = 10.5 PSF									
F - I 2x4 DRY No.2 SPF										R 2842 0 2842 0 0 5-8 5-8										DL = 7.3 PSF									
R - B 2x4 DRY No.2 SPF										J 2842 0 2842 0 0 5-8 5-8										TOTAL LOAD = 60.6 PSF									
J - H 2x4 DRY No.2 SPF																													
R - O 2x4 DRY No.2 SPF																													
O - L 2x4 DRY No.2 SPF																													
L - J 2x4 DRY No.2 SPF																													
ALL WEBS 2x3 DRY No.2 SPF										UNFACTORED REACTIONS										SPACING = 24.0 IN. C/C									
EXCEPT										1ST LCASE MAX/MIN COMPONENT REACTIONS																			
										JT COMBINED SNOW LIVE PERM. LIVE WIND DEAD SOIL																			
										R 2096 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0																			
										J 2096 1232 / 0 343 / 0 0 / 0 0 / 0 522 / 0 0 / 0																			
DRY: SEASONED LUMBER.										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, J										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									
PLATES (table is in inches)																				ALLOWABLE DEFL.(LL)= L/360 (1.09")									
JT TYPE PLATES W LEN Y X																				CALCULATED VERT. DEFL.(LL) = L/999 (0.19")									
B TMVW-t MT20 5.0 8.0 1.75 3.00																				ALLOWABLE DEFL.(TL)= L/360 (1.09")									
C TMWW-t MT20 3.0 4.0 1.50 1.75																				CALCULATED VERT. DEFL.(TL) = L/999 (0.32")									
D TTWW-m MT20 5.0 6.0 2.50 2.25																													
E TMW+w MT20 2.0 4.0																													
F TTWW-m MT20 5.0 6.0 2.50 2.25																													
G TMWW-t MT20 3.0 4.0 1.50 1.75																													
H TMVW-t MT20 5.0 8.0 1.75 3.00																													
J BMV1-t MT20 6.0 6.0 Edge 2.50																													
K BMWW-t MT20 5.0 6.0 2.25 1.50																													
L BS-t MT20 4.0 8.0																													
M BMWW-t MT20 3.0 6.0																													
N BMWWW-t MT20 3.0 6.0																													
O BS-t MT20 3.0 6.0																													
P BMWW-t MT20 3.0 5.0																													
Q BMWW-t MT20 5.0 6.0 2.25 1.50																													
R BMV1-t MT20 6.0 6.0 3.50																													
Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.																				CSI: TC=0.90/1.00 (G-H:1) , BC=0.73/1.00 (K-M:1) , WB=0.81/1.00 (H-K:1) , SSI=0.32/1.00 (G-H:1)									
																				DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10									
																				COMPANION LIVE LOAD FACTOR = 1.00									
																				TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
																				NAIL VALUES									
																				PLATE GRIP(DRY) SHEAR SECTION									
																				(PSI) (PLI) (PLI)									

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LUMBER
N. L. G. A. RULES

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

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	UNBRACED LENGTH	WEBS	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO						FR-TO			
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00	U-D	-422	0	0.09 (1)
B-C	-3835 / 0	-124.4	-124.4	0.56 (1)	3.14	D-T	-215	0	0.12 (1)
C-D	-3835 / 0	-124.4	-124.4	0.56 (1)	3.14	T-E	0 / 336		0.08 (2)
D-E	-3661 / 0	-124.4	-124.4	0.46 (1)	3.33	E-S	-864	0	0.89 (1)
E-F	-3064 / 0	-124.4	-124.4	0.43 (1)	3.63	S-F	0 / 838		0.19 (1)
F-G	-2729 / 0	-124.4	-124.4	0.44 (1)	3.77	F-Q	0 / 4		0.00 (1)
G-H	-3066 / 0	-124.4	-124.4	0.43 (1)	3.63	Q-G	0 / 842		0.19 (1)
H-I	-3660 / 0	-124.4	-124.4	0.46 (1)	3.33	Q-H	-861	0	0.89 (1)
I-J	-3835 / 0	-124.4	-124.4	0.56 (1)	3.14	O-H	0 / 332		0.07 (2)
J-K	-3835 / 0	-124.4	-124.4	0.56 (1)	3.14	O-I	-216	0	0.12 (1)
K-L	0 / 38	-124.4	-124.4	0.16 (1)	10.00	N-I	-421	0	0.09 (1)
V-B	-2758 / 0	0.0	0.0	0.28 (1)	5.19	B-U	0 / 3505		0.79 (1)
M-K	-2759 / 0	0.0	0.0	0.28 (1)	5.19	N-K	0 / 3505		0.79 (1)
V-U	0 / 0	-39.2	-39.2	0.15 (3)	10.00				
U-T	0 / 3450	-39.2	-39.2	0.83 (1)	10.00				
T-S	0 / 3275	-39.2	-39.2	0.61 (1)	10.00				
S-R	0 / 2728	-39.2	-39.2	0.54 (1)	10.00				
R-Q	0 / 2728	-39.2	-39.2	0.54 (1)	10.00				
Q-P	0 / 3274	-39.2	-39.2	0.83 (1)	10.00				
P-O	0 / 3274	-39.2	-39.2	0.83 (1)	10.00				
O-N	0 / 3450	-39.2	-39.2	0.83 (1)	10.00				
N-M	0 / 0	-39.2	-39.2	0.15 (3)	10.00				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.31")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (E) (INPUT = 0.80)
JSI METAL = 0.83 (R) (INPUT = 1.00)



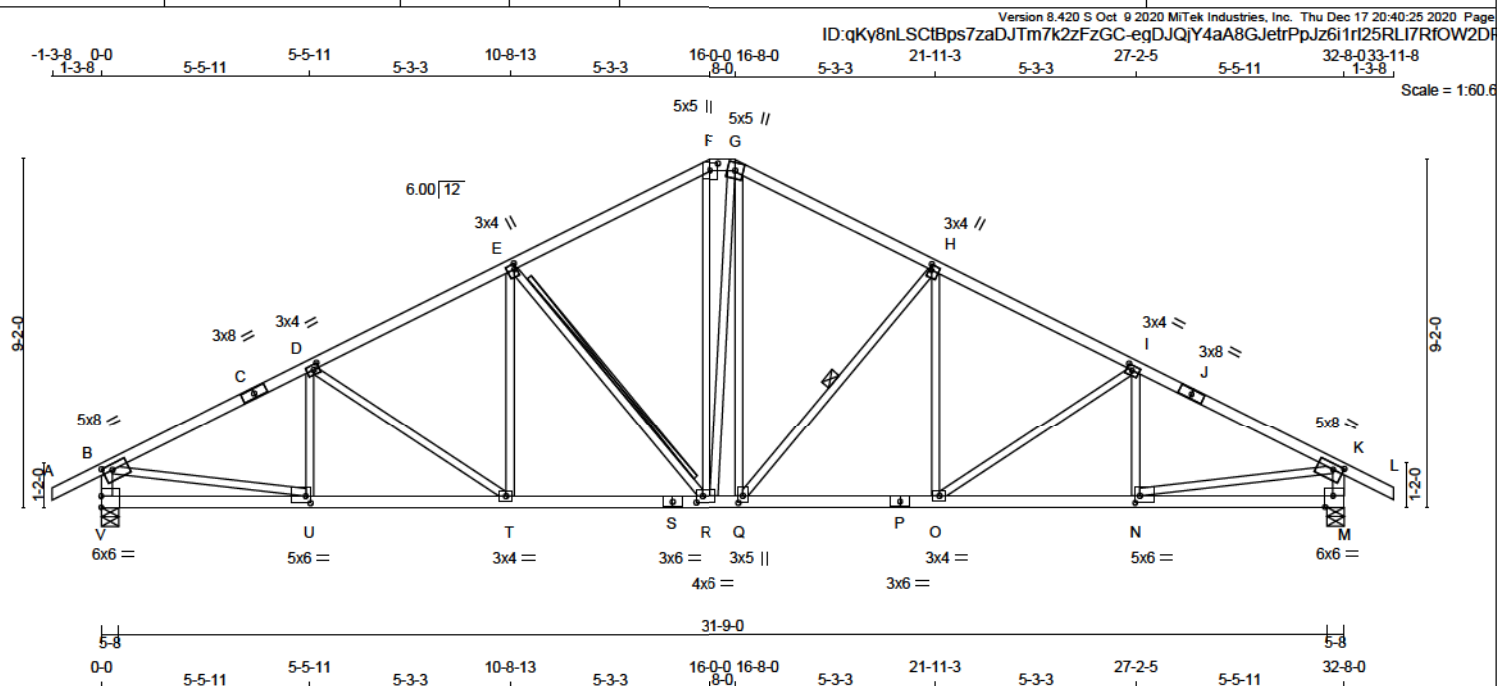
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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

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





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

ALL WEBS 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	5.0	8.0	1.75 3.00
C	TS-t	MT20	3.0	8.0	
D	TMVW-t	MT20	3.0	4.0	1.50 1.75
E	TMVW+t	MT20	3.0	4.0	1.75 0.75
F	TTW+p	MT20	5.0	5.0	2.25 2.50
G	TMVW+t	MT20	5.0	5.0	
H	TMVW+t	MT20	3.0	4.0	1.75 0.75
I	TMVW-t	MT20	3.0	4.0	1.50 1.75
J	TS-t	MT20	3.0	8.0	
K	TMVW-t	MT20	5.0	8.0	1.75 2.50
M	BMV1-t	MT20	6.0	6.0	Edge 3.00
N	BMVW-t	MT20	5.0	6.0	2.25 1.50
O	BMVW-t	MT20	3.0	4.0	
P	BS-t	MT20	3.0	6.0	
Q	BMVW+t	MT20	3.0	5.0	2.25 1.50
R	BMVWVW-t	MT20	4.0	6.0	2.00 2.25
S	TMVW-t	MT20	3.0	4.0	
T	BMVW-t	MT20	3.0	4.0	
U	BMVW-t	MT20	5.0	6.0	2.25 1.50
V	BMV1-t	MT20	6.0	6.0	3.50

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF H-Q. DBS = 20-0-0 . CBF = 134 LBS.
2x4 DRY SPF No.2 T-BRACE AT E-R

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

FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 8" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 80% OF WEB LENGTH.

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MAX. FACTORED		FACTORED		MAX. FACTORED		MAX. FACTORED			
MEMB.	FORCE (LBS)	VERT. LOAD (LBS)	LOCAL MAX (PLF)	MAX. CSI (LBS)	MAX. UNBRAC	MEMB.	FORCE (LBS)	MAX. CSI (LBS)	
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0 / 38	-124.4	-124.4	0.16 (1)	10.00	U-D	-319 / 85	0.08 (1)	
B-C	-3860 / 0	-124.4	-124.4	0.71 (1)	2.97	D-T	-418 / 0	0.30 (1)	
C-D	-3860 / 0	-124.4	-124.4	0.71 (1)	2.97	T-E	0 / 446	0.10 (2)	
D-E	-3831 / 0	-124.4	-124.4	0.57 (1)	3.28	E-R	-1054 / 0	0.52 (1)	
E-F	-2509 / 0	-124.4	-124.4	0.52 (1)	3.66	R-F	0 / 941	0.21 (1)	
F-G	-2475 / 0	-124.4	-124.4	0.07 (1)	4.35	R-G	0 / 102	0.02 (1)	
G-H	-2798 / 0	-124.4	-124.4	0.52 (1)	3.67	Q-G	0 / 834	0.16 (1)	
H-I	-3536 / 0	-124.4	-124.4	0.57 (1)	3.28	Q-H	-1075 / 0	0.47 (1)	
I-J	-3888 / 0	-124.4	-124.4	0.71 (1)	2.97	O-H	0 / 467	0.11 (1)	
J-K	-3888 / 0	-124.4	-124.4	0.71 (1)	2.97	O-I	-412 / 0	0.30 (2)	
K-L	0 / 38	-124.4	-124.4	0.16 (1)	10.00	N-I	-325 / 62	0.08 (1)	
V-B	-2750 / 0	0.0	0.0	0.28 (1)	5.19	B-U	0 / 3546	0.80 (1)	
M-K	-2749 / 0	0.0	0.0	0.28 (1)	5.20	N-K	0 / 3545	0.80 (1)	
V-U	0 / 0	-39.2	-39.2	0.20 (3)	10.00				
U-T	0 / 3503	-39.2	-39.2	0.68 (1)	10.00				
T-S	0 / 3158	-39.2	-39.2	0.67 (1)	10.00				
S-R	0 / 3158	-39.2	-39.2	0.07 (1)	10.00				
R-Q	0 / 2465	-39.2	-39.2	0.56 (1)	10.00				
Q-P	0 / 3162	-39.2	-39.2	0.62 (1)	10.00				
P-O	0 / 3162	-39.2	-39.2	0.62 (1)	10.00				
O-N	0 / 3502	-39.2	-39.2	0.68 (1)	10.00				
N-M	0 / 0	-39.2	-39.2	0.20 (3)	10.00				

DESIGN CRITERIA

SPECIFIED LOADS:-

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg

JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL= 0.98 (S) (INPUT = 1.00)

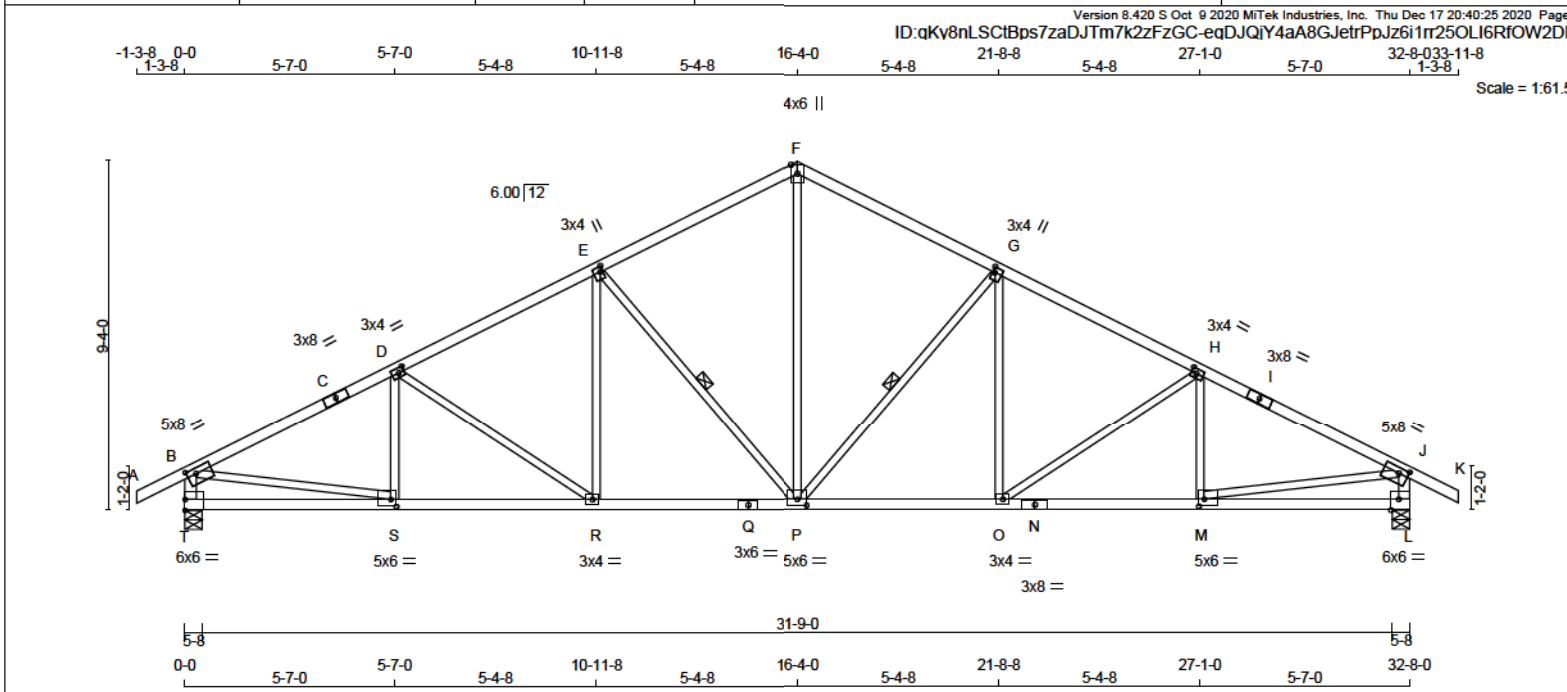


These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept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

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



**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	DRY	LUMBER	DESCR.
A - C	2x4	DRY	No.2	SPF	
C - F	2x4	DRY	No.2	SPF	
F - I	2x4	DRY	No.2	SPF	
I - K	2x4	DRY	No.2	SPF	
T - B	2x4	DRY	No.2	SPF	
L - J	2x4	DRY	No.2	SPF	
T - Q	2x4	DRY	No.2	SPF	
Q - N	2x4	DRY	No.2	SPF	
N - L	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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



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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
T	2842	0	2842	0
L	2842	0	2842	0

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.94 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF G-P, E-P, DBS = 20-0-0. CBF = 137 LBS.

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 38	-124.4	-124.4 0.16 (1)	10.00	P-F	0 / 1889	0.43 (1)
B-C	-3896 / 0	-124.4	-124.4 0.74 (1)	2.94	P-G	-1093 / 0	0.51 (1)
C-D	-3896 / 0	-124.4	-124.4 0.74 (1)	2.94	O-G	0 / 473	0.11 (2)
D-E	-3508 / 0	-124.4	-124.4 0.59 (1)	3.27	O-H	-449 / 0	0.34 (1)
E-F	-2748 / 0	-124.4	-124.4 0.54 (1)	3.67	M-H	-306 / 76	0.07 (1)
F-G	-2748 / 0	-124.4	-124.4 0.54 (1)	3.67	E-P	-1093 / 0	0.51 (1)
G-H	-3508 / 0	-124.4	-124.4 0.59 (1)	3.27	R-E	0 / 473	0.11 (2)
H-I	-3896 / 0	-124.4	-124.4 0.74 (1)	2.94	D-R	-449 / 0	0.34 (1)
I-J	-3896 / 0	-124.4	-124.4 0.74 (1)	2.94	S-D	-306 / 76	0.07 (1)
J-K	0 / 38	-124.4	-124.4 0.16 (1)	10.00	B-S	0 / 3551	0.80 (1)
T-B	-2748 / 0	0.0	0.0 0.28 (1)	5.20	M-J	0 / 3551	0.80 (1)
L-J	-2748 / 0	0.0	0.0 0.28 (1)	5.20			
T-S	0 / 0	-39.2	-39.2 0.21 (3)	10.00			
S-R	0 / 3509	-39.2	-39.2 0.68 (1)	10.00			
R-Q	0 / 3138	-39.2	-39.2 0.64 (1)	10.00			
Q-P	0 / 3138	-39.2	-39.2 0.64 (1)	10.00			
P-O	0 / 3138	-39.2	-39.2 0.64 (1)	10.00			
O-N	0 / 3509	-39.2	-39.2 0.68 (1)	10.00			
N-M	0 / 3509	-39.2	-39.2 0.68 (1)	10.00			
M-L	0 / 0	-39.2	-39.2 0.21 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

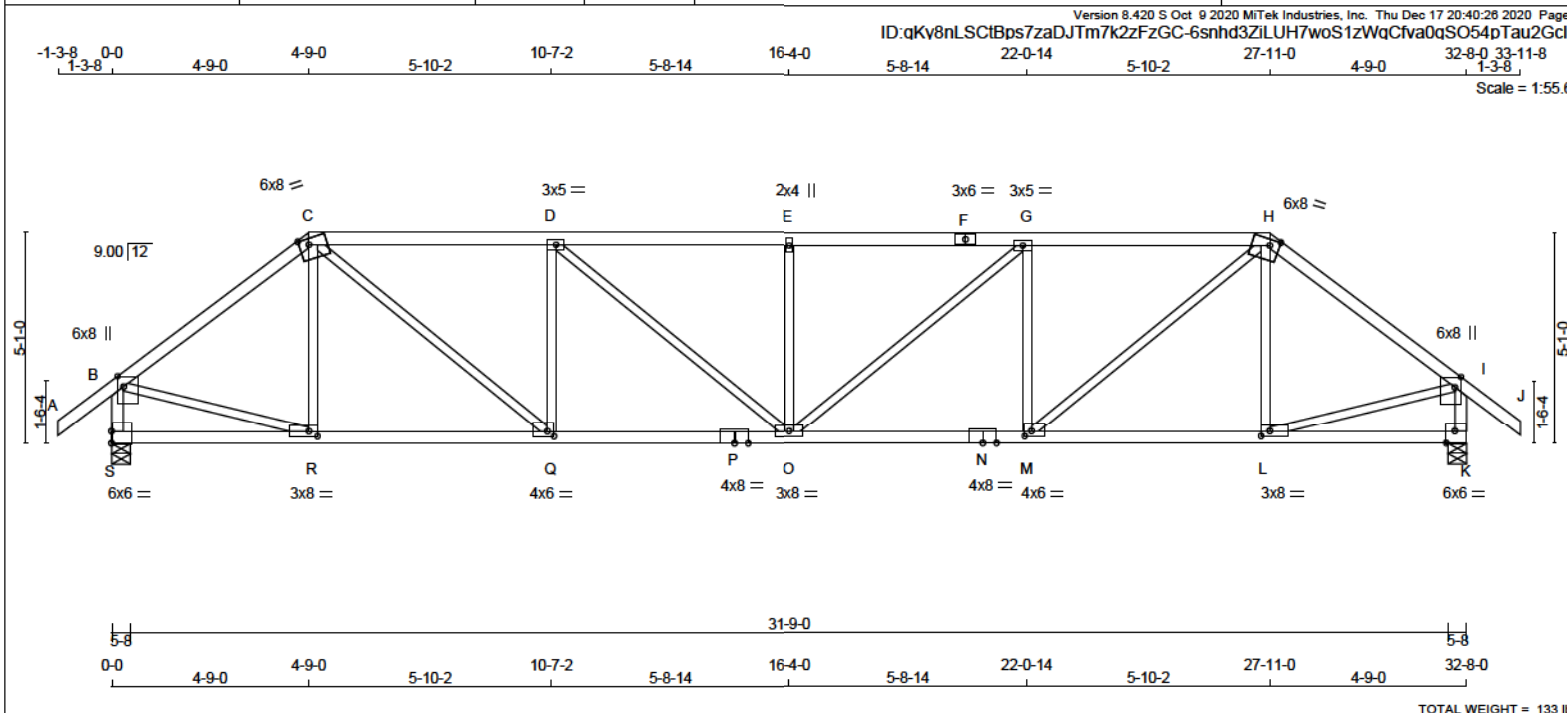
JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL = 1.00 (N) (INPUT = 1.00)



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





LUMBER
N. L. G. A. RULES

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

EXCEPT
DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	8.0	3.00	1.75
C	TTWW-m	MT20	6.0	8.0	1.75	2.75
D	TMWW-t	MT20	3.0	5.0		
E	TMVW+w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMWW-t	MT20	3.0	5.0		
H	TTWW-m	MT20	6.0	8.0	1.75	2.75
I	TMVW+p	MT20	6.0	8.0	3.00	1.75
K	BMV1-t	MT20	6.0	6.0	Edge 2.50	
L	BMWW-t	MT20	3.0	8.0	1.50	2.50
M	BMWW-t	MT20	4.0	6.0	1.50	2.00
N	BS-t	MT20	4.0	8.0		
O	BMWWWW-t	MT20	3.0	8.0		
P	BS-t	MT20	4.0	8.0		
Q	BMWW-t	MT20	4.0	6.0	1.50	2.00
R	BMWW-t	MT20	3.0	8.0	1.50	2.50
S	BMV1-t	MT20	6.0	6.0	3.50	

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2845	2845	0	5-8
S VERT	2845	2845	0	5-8
K VERT	2845	2845	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1233	0	SNOW LIVE PERM. LIVE WIND DEAD SOIL
S	2098	1233	0
K	2098	1233	0

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

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

LOADING
TOTAL LOAD CASES: (4)

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.23")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.38")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

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



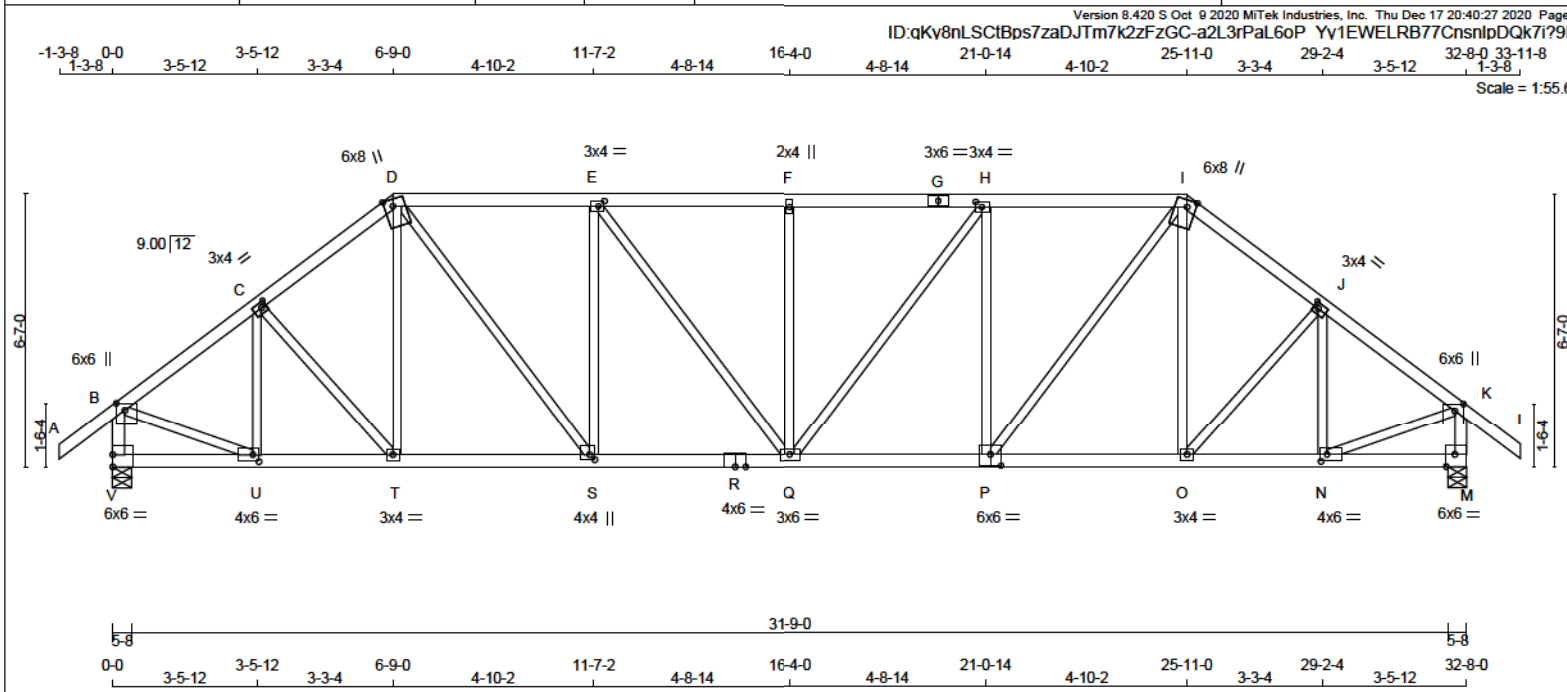
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B	TMVW+p	MT20	6.0	6.0	2.00 2.50
D	TMVW-t	MT20	3.0	4.0	1.50 1.50
E	TTWW+m	MT20	6.0	8.0	2.00 2.50
F	TMVW-t	MT20	3.0	4.0	1.50 1.75
G	TS-t	MT20	3.0	6.0	
H	TMVW-t	MT20	3.0	4.0	1.50 1.75
I	TTWW+m	MT20	6.0	8.0	2.00 2.50
J	TMVW-t	MT20	3.0	4.0	1.50 1.50
K	TMVW+p	MT20	6.0	6.0	2.00 2.50
M	BMV1-t	MT20	6.0	6.0	Edge 2.50
N	BMVW-t	MT20	4.0	6.0	2.00 1.75
O	BMVW-t	MT20	3.0	4.0	
P	BSWW-t	MT20	6.0	6.0	3.25 3.00
Q	BMVWVW-t	MT20	3.0	6.0	
R	BS-t	MT20	4.0	6.0	
S	BMVW+t	MT20	4.0	4.0	1.50 1.50
T	BMVW-t	MT20	3.0	4.0	
U	BMVW-t	MT20	4.0	6.0	2.00 1.75
V	BMV1-t	MT20	6.0	6.0	3.50

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	U-C	-839 / 0	0.17 (1)	10.00
B-C	-2762 / 0	-124.4	-124.4 0.33 (1)	C-T	0 / 93	0.02 (1)	3.89
C-D	-2901 / 0	-124.4	-124.4 0.33 (1)	T-D	0 / 167	0.04 (3)	3.80
D-E	-3234 / 0	-124.4	-124.4 0.62 (1)	D-S	0 / 1540	0.35 (1)	3.30
E-F	-3510 / 0	-124.4	-124.4 0.64 (1)	S-E	-1033 / 0	0.74 (1)	3.14
F-G	-3510 / 0	-124.4	-124.4 0.64 (1)	E-Q	0 / 457	0.10 (1)	3.14
G-H	-3510 / 0	-124.4	-124.4 0.64 (1)	Q-F	-542 / 0	0.39 (1)	3.14
H-I	-3224 / 0	-124.4	-124.4 0.62 (1)	Q-H	0 / 474	0.11 (1)	3.30
I-J	-2905 / 0	-124.4	-124.4 0.33 (1)	P-H	-1047 / 0	0.75 (1)	3.80
J-K	-2760 / 0	-124.4	-124.4 0.33 (1)	P-I	0 / 1518	0.34 (1)	3.89
K-L	0 / 51	-124.4	-124.4 0.17 (1)	O-I	0 / 195	0.05 (3)	10.00
V-B	-2781 / 0	0.0	0.0 0.29 (1)	O-J	0 / 99	0.02 (1)	5.17
M-K	-2780 / 0	0.0	0.0 0.29 (1)	N-J	-847 / 0	0.17 (1)	5.17
V-U	0 / 0	-39.2	-39.2 0.08 (3)	B-U	0 / 2358	0.53 (1)	10.00
U-T	0 / 2230	-39.2	-39.2 0.44 (1)	N-K	0 / 2357	0.53 (1)	10.00
T-S	0 / 2294	-39.2	-39.2 0.46 (1)				
S-R	0 / 3235	-39.2	-39.2 0.61 (1)				
R-Q	0 / 3235	-39.2	-39.2 0.61 (1)				
Q-P	0 / 3224	-39.2	-39.2 0.63 (1)				
P-O	0 / 2297	-39.2	-39.2 0.48 (1)				
O-N	0 / 2229	-39.2	-39.2 0.47 (1)				
N-M	0 / 0	-39.2	-39.2 0.09 (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 OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.28")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (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 (C) (INPUT = 0.90)
JSI METAL = 0.75 (R) (INPUT = 1.00)



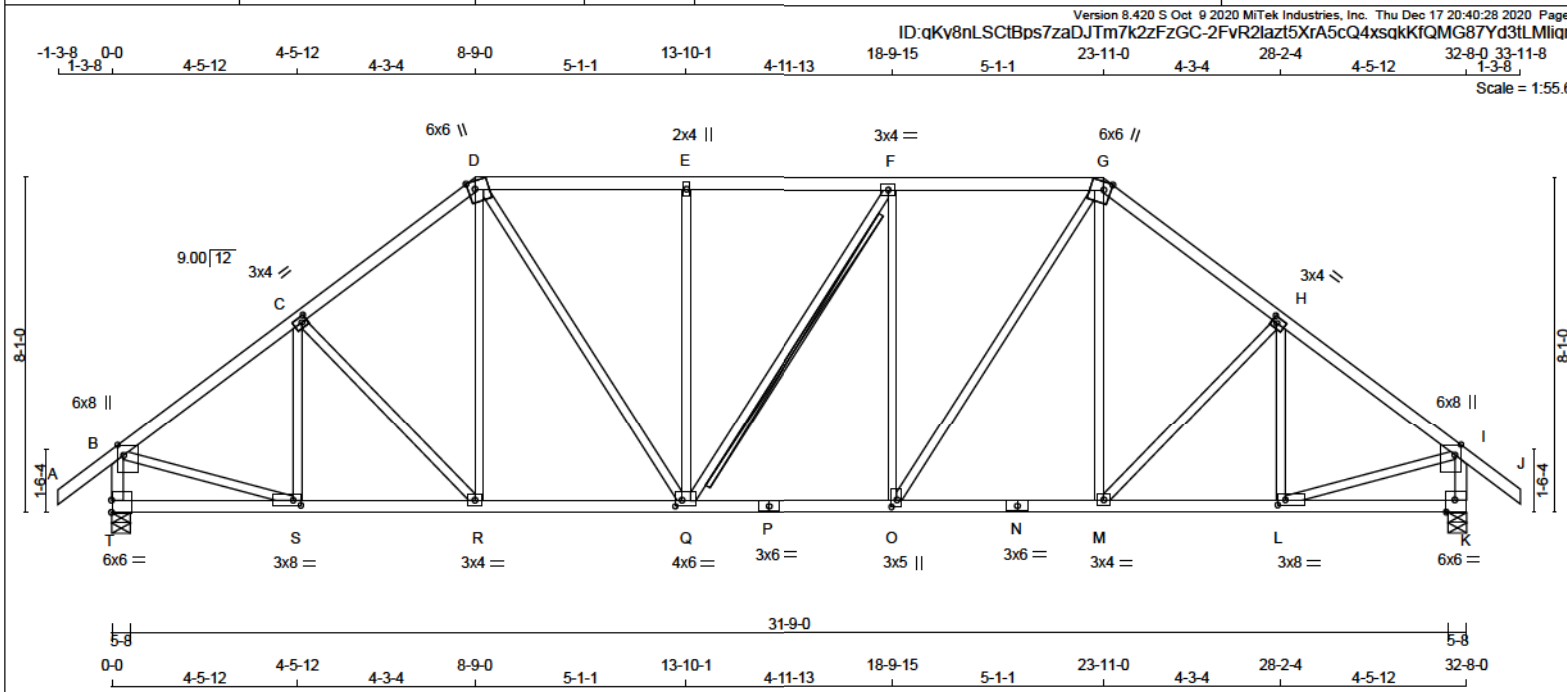
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - G	2x4	DRY No.2	SPF
G - J	2x4	DRY No.2	SPF
T - B	2x4	DRY No.2	SPF
K - I	2x4	DRY No.2	SPF
T - P	2x4	DRY No.2	SPF
P - N	2x4	DRY No.2	SPF
N - K	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF

EXCEPT
SPF

DRY: SEASONED LUMBER.

PLATES (Table is in inches)

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

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



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

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT VERT	2845	0	5-8
T	2845	0	5-8
K	2845	0	5-8

UNFACTORED REACTIONS

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

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

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

2x4 DRY SPF No.2 T-BRACE AT F-Q
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00	S-C	-443 / 0	0.18 (1)
B-C	-2891 / 0	-124.4	-124.4 0.42 (1)	3.74	C-R	-191 / 0	0.14 (1)
C-D	-2807 / 0	-124.4	-124.4 0.41 (1)	3.80	R-D	0 / 348	0.08 (2)
D-E	-2784 / 0	-124.4	-124.4 0.46 (1)	3.73	D-Q	0 / 1040	0.23 (1)
E-F	-2784 / 0	-124.4	-124.4 0.43 (1)	3.77	Q-E	-674 / 0	0.85 (1)
F-G	-2786 / 0	-124.4	-124.4 0.46 (1)	3.72	Q-F	-4 / 0	0.00 (1)
G-H	-2806 / 0	-124.4	-124.4 0.41 (1)	3.80	O-F	-675 / 0	0.85 (1)
H-I	-2891 / 0	-124.4	-124.4 0.42 (1)	3.74	O-G	0 / 1045	0.24 (1)
I-J	0 / 51	-124.4	-124.4 0.17 (1)	10.00	M-G	0 / 348	0.08 (2)
T-B	-2768 / 0	0.0	0.0 0.29 (1)	5.17	M-H	-162 / 0	0.14 (1)
K-I	-2768 / 0	0.0	0.0 0.29 (1)	5.17	L-H	-442 / 0	0.15 (1)
					B-S	0 / 2424	0.55 (1)
					L-I	0 / 2424	0.59 (1)
T-S	0 / 0	-39.2	-39.2 0.13 (3)	10.00			
S-R	0 / 2342	-39.2	-39.2 0.48 (1)	10.00			
R-Q	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
Q-P	0 / 2786	-39.2	-39.2 0.55 (1)	10.00			
P-O	0 / 2786	-39.2	-39.2 0.55 (1)	10.00			
O-N	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
N-M	0 / 2214	-39.2	-39.2 0.46 (1)	10.00			
M-L	0 / 2342	-39.2	-39.2 0.47 (1)	10.00			
L-K	0 / 0	-39.2	-39.2 0.13 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.46/1.00 (D-E-1), BC=0.55/1.00 (O-Q-1),
WB=0.85/1.00 (F-O-1), SSI=0.29/1.00 (F-G-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

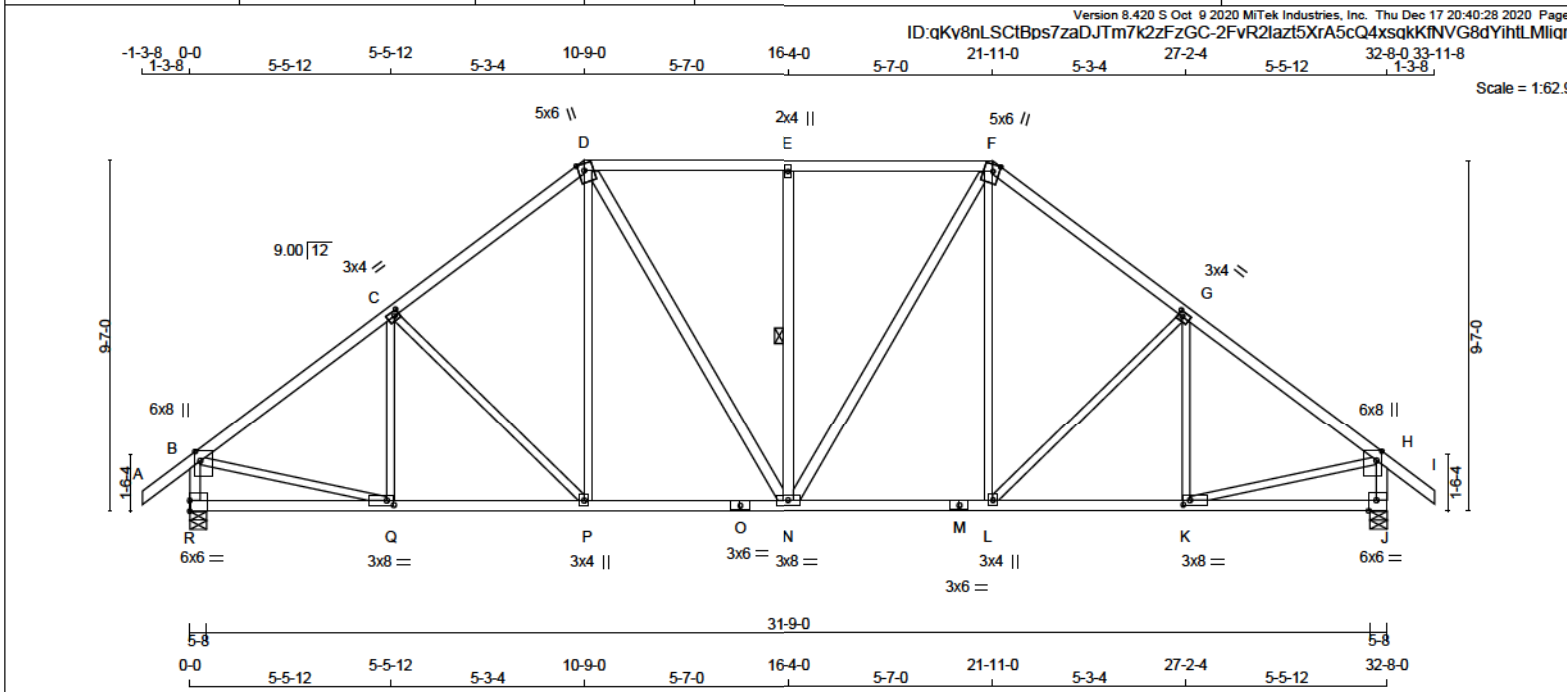
JSI GRIP= 0.90 (Q) (INPUT = 0.90)
JSI METAL = 0.90 (P) (INPUT = 1.00)



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





LUMBER

N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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



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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.45 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0.0 . CBF = 108 LBS.
DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS : 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (LC)	UNBRACED LENGTH
FR-TO				FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	Q-C	-289 / 81	0.14 (1)	10.00
B-C	-2952 / 0	-124.4	-124.4 0.85 (1)	C-P	-442 / 0	0.50 (1)	3.45
C-D	-2658 / 0	-124.4	-124.4 0.59 (1)	P-D	0 / 522	0.12 (2)	3.86
D-E	-2410 / 0	-124.4	-124.4 0.58 (1)	D-N	0 / 622	0.10 (1)	3.77
E-F	-2410 / 0	-124.4	-124.4 0.58 (1)	N-E	-847 / 0	0.37 (1)	3.77
F-G	-2658 / 0	-124.4	-124.4 0.59 (1)	N-F	0 / 622	0.10 (1)	3.86
G-H	-2952 / 0	-124.4	-124.4 0.85 (1)	L-F	0 / 522	0.12 (2)	3.45
H-I	0 / 51	-124.4	-124.4 0.17 (1)	L-G	-442 / 0	0.50 (1)	10.00
R-B	-2758 / 0	0.0	0.0 0.29 (1)	K-G	-289 / 81	0.14 (1)	5.19
J-H	-2758 / 0	0.0	0.0 0.29 (1)	B-Q	0 / 2455	0.55 (1)	5.19
				K-H	0 / 2455	0.55 (1)	5.19
R-Q	0 / 0	-39.2	-39.2 0.22 (3)				10.00
Q-P	0 / 2399	-39.2	-39.2 0.52 (1)				10.00
P-O	0 / 2090	-39.2	-39.2 0.47 (1)				10.00
O-N	0 / 2090	-39.2	-39.2 0.47 (1)				10.00
N-M	0 / 2090	-39.2	-39.2 0.47 (1)				10.00
M-L	0 / 2090	-39.2	-39.2 0.47 (1)				10.00
L-K	0 / 2399	-39.2	-39.2 0.52 (1)				10.00
K-J	0 / 0	-39.2	-39.2 0.22 (3)				10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

CSI: TC=0.85/1.00 (G-H-1) , BC=0.52/1.00 (P-Q-1) ,
WB=0.55/1.00 (B-Q-1) , SSI=0.34/1.00 (D-E-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

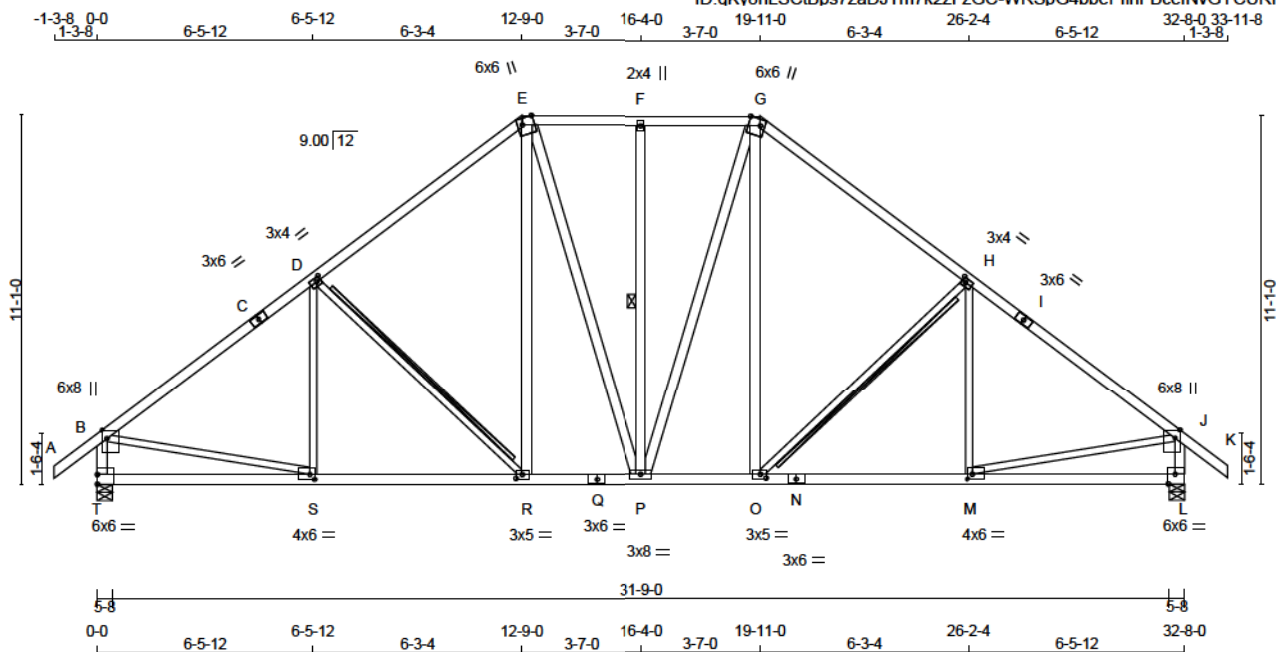
JSI GRIP= 0.87 (N) (INPUT = 0.80)
JSI METAL = 0.63 (M) (INPUT = 1.00)



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





TOTAL WEIGHT = 183 LB

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

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

UNFACTORED REACTIONS

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

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

BRACING

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

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-P. DBS = 20-00. CBF = 68 LBS.
2x4 DRY SPF No.2 T-BRACE AT D-R, H-O

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

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX (LC) UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LC)	
FR-TO		FROM	TO	FR-TO			
A-B	0 / 51	-124.4	-124.4 0.17 (1)	10.00	S-D	-157 / 182	0.10 (1)
B-C	-2971 / 0	-124.4	-124.4 0.95 (1)	2.97	D-R	-677 / 0	0.41 (1)
C-D	-2971 / 0	-124.4	-124.4 0.95 (1)	2.97	R-E	0 / 669	0.11 (1)
D-E	-2474 / 0	-124.4	-124.4 0.83 (1)	3.37	E-P	0 / 325	0.05 (1)
E-F	-2041 / 0	-124.4	-124.4 0.24 (1)	4.53	P-F	-526 / 0	0.33 (1)
F-G	-2041 / 0	-124.4	-124.4 0.24 (1)	4.53	P-G	0 / 325	0.05 (1)
G-H	-2474 / 0	-124.4	-124.4 0.83 (1)	3.37	O-G	0 / 669	0.11 (1)
H-I	-2971 / 0	-124.4	-124.4 0.95 (1)	2.97	O-H	-677 / 0	0.41 (1)
I-J	-2971 / 0	-124.4	-124.4 0.95 (1)	2.97	M-H	-157 / 182	0.10 (1)
J-K	0 / 51	-124.4	-124.4 0.17 (1)	10.00	B-S	0 / 2463	0.55 (1)
T-B	-2742 / 0	0.0	0.0 0.29 (1)	5.20	M-J	0 / 2463	0.55 (1)
L-J	-2742 / 0	0.0	0.0 0.29 (1)	5.20			
T-S	0 / 0	-39.2	-39.2 0.33 (3)	10.00			
S-R	0 / 2422	-39.2	-39.2 0.62 (2)	10.00			
R-Q	0 / 1939	-39.2	-39.2 0.43 (1)	10.00			
Q-P	0 / 1939	-39.2	-39.2 0.43 (1)	10.00			
P-O	0 / 1939	-39.2	-39.2 0.43 (1)	10.00			
O-N	0 / 2422	-39.2	-39.2 0.62 (2)	10.00			
N-M	0 / 2422	-39.2	-39.2 0.62 (2)	10.00			
M-L	0 / 0	-39.2	-39.2 0.33 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL) = L/360 (1.09")
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")
ALLOWABLE DEFL.(TL) = L/360 (1.09")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

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

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN

MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (S) (INPUT = 0.80)
JSI METAL = 0.74 (N) (INPUT = 1.00)



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

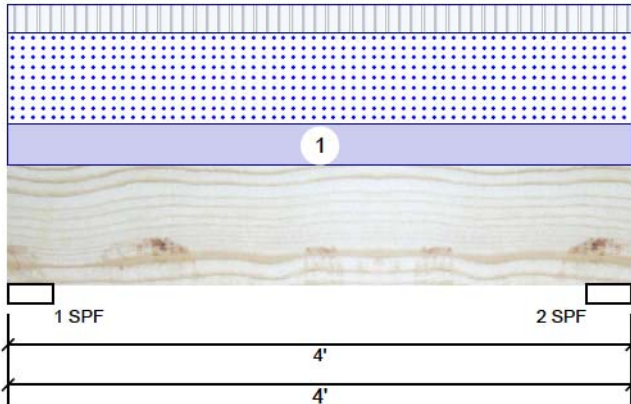
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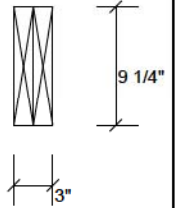
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

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

Level: Level



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



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	128	186	423	0
2	128	186	423	0

Bearings and Factored Reactions

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	15%	233 / 763	996	L	1.25D+1.5S +L
2 - SPF	3.500"	15%	233 / 763	996	L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	780 ft-lb	2'	6039 ft-lb	0.129 (13%)	1.25D+1.5S +L	L
Unbraced	780 ft-lb	2'	5667 ft-lb	0.138 (14%)	1.25D+1.5S +L	L
Shear	881 lb	1'	3984 lb	0.221 (22%)	1.25D+1.5S +L	L
LL Defl inch	0.003 (L/13430)	2' 1/16"	0.118 (L/360)	0.030 (3%)	S+0.5L	L
TL Defl inch	0.004 (L/9718)	2' 1/16"	0.118 (L/360)	0.040 (4%)	D+S+0.5L	L

Design Notes

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Uniform		6-1-0	Near Face	15.3 PSF	10.5 PSF	34.0 PSF	0 PSF	

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



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

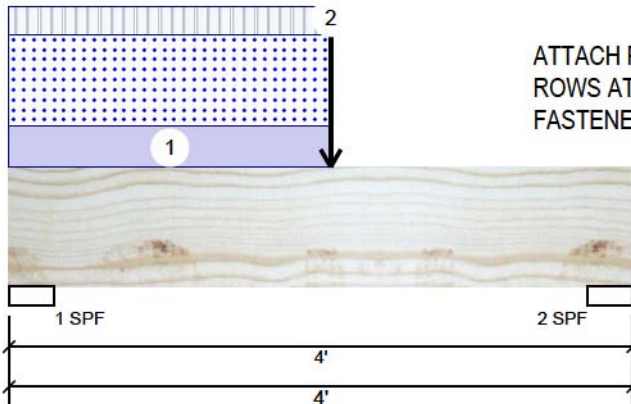


Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-05
Sewage System			
Zoning			

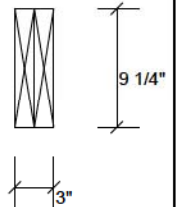
This design is valid until 10/10/20

B2 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



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



Member Information

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

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind
1	209	306	698	0
2	145	213	489	0

Bearings and Factored Reactions

Bearing	Length	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	25%	382 / 1256	1638 L	1.25D+1.5S +L
2 - SPF	3.500"	18%	267 / 879	1146 L	1.25D+1.5S +L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1957 ft-lb	2' 3/4"	6039 ft-lb	0.324 (32%)	1.25D+1.5S +L	L
Unbraced	1957 ft-lb	2' 3/4"	5667 ft-lb	0.345 (35%)	1.25D+1.5S +L	L
Shear	1530 lb	3'	3984 lb	0.384 (38%)	1.25D+1.5S +L	L
LL Defl inch	0.007 (L/6324)	1'11 13/16"	0.118 (L/360)	0.060 (6%)	S+0.5L	L
TL Defl inch	0.009 (L/4582)	1'11 13/16"	0.118 (L/360)	0.080 (8%)	D+S+0.5L	L

Design Notes

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



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Part. Uniform	0-0-0 to 2-0-12	6-1-0	Near Face	15.3 PSF	10.5 PSF	34.8 PSF	0 PSF	
2	Point	2-0-12		Near Face	327 lb	222 lb	751 lb	0 lb	

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



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

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



CSD | DRAW DESIGN BUILD

This design is valid until 10/10/20

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)

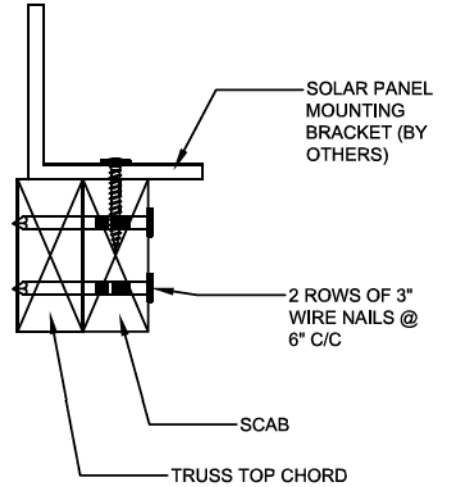
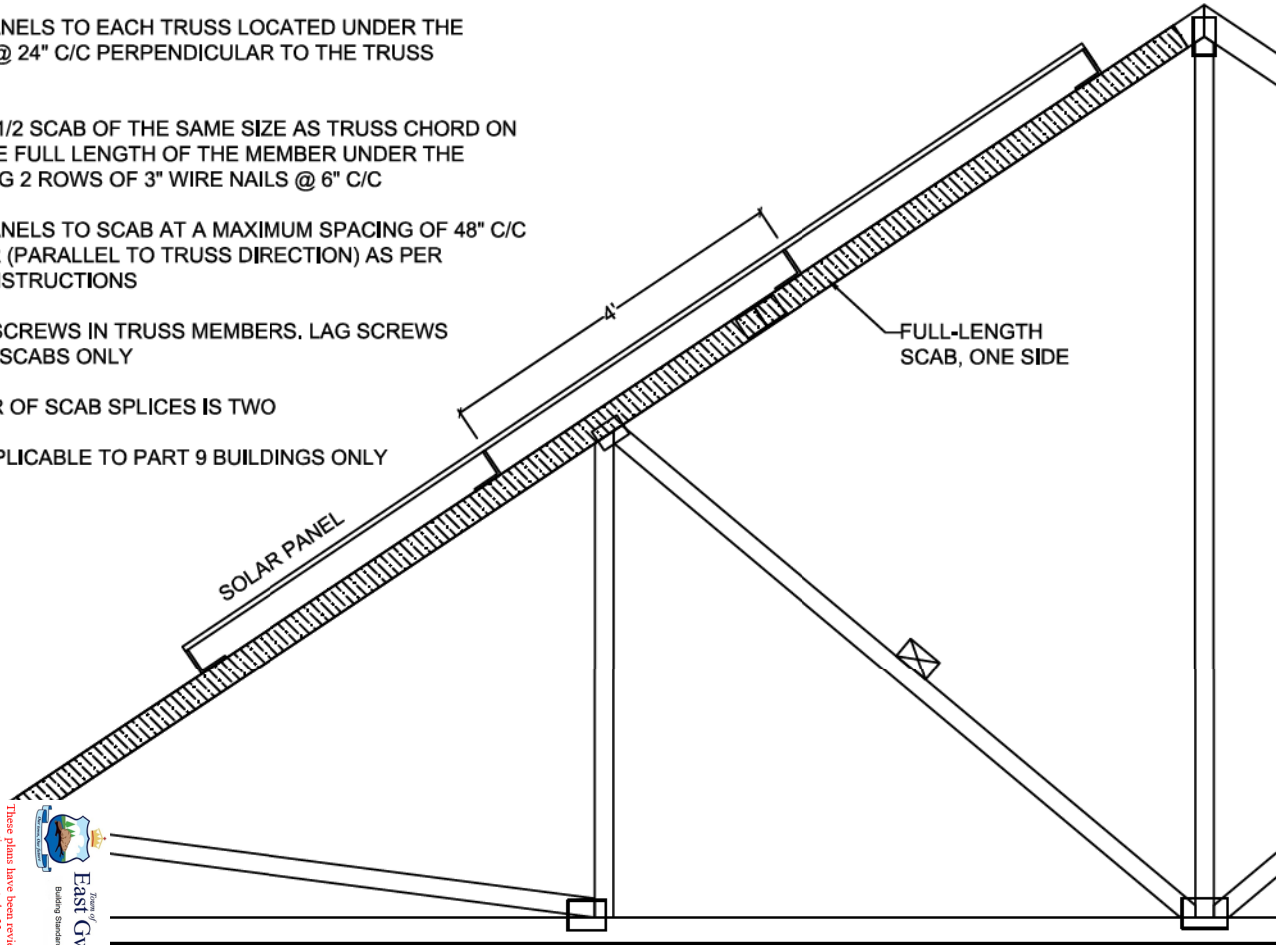
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

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



Discipline	Reviewer	BCIN	Date
Building Code	H. Aulthoff	43226	2021-02-05
Seismic System			
Zoning			

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East Gwillimbury
Building Standards Branch BCIN #16467

NE1220-119
GREENPARK - TRINAR HALL -
GLENWAY 7A ELE 2



Detail for Installation of Solar Panels - Scab Method



NE1220-119
GREENPARK - TRINAR HALL
- GLENWAY 7A ELE 2

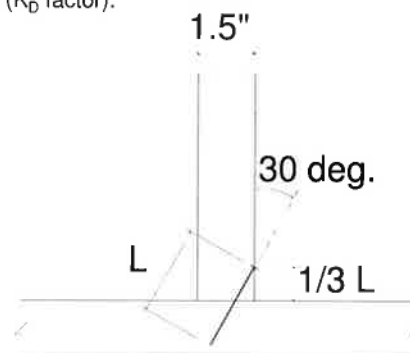
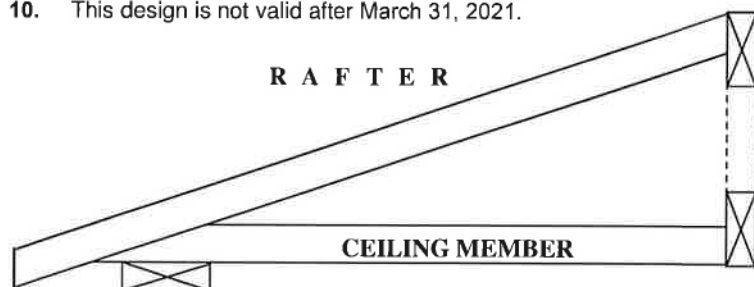
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

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

NOTES:

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



TOE-NAIL INSTALLATION

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

MiTek

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



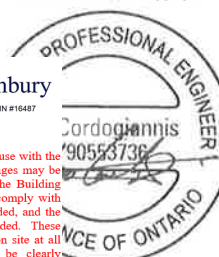
Town of
East Gwillimbury
Building Standards Branch BCIN 816487

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December

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

PEO
Certificate No. 10889485



BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

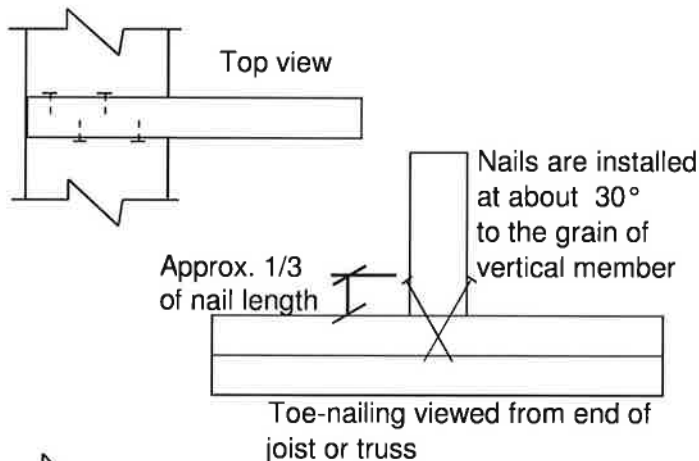
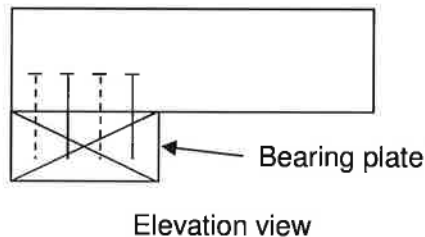
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

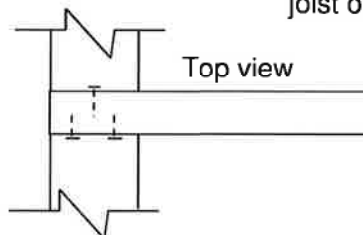
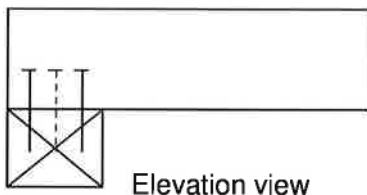
NOTES:

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

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



MiTek

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



Town of
East Gwillimbury
Building Standards Branch BCIN 816487

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

PEO
Certificate No. 10889485

