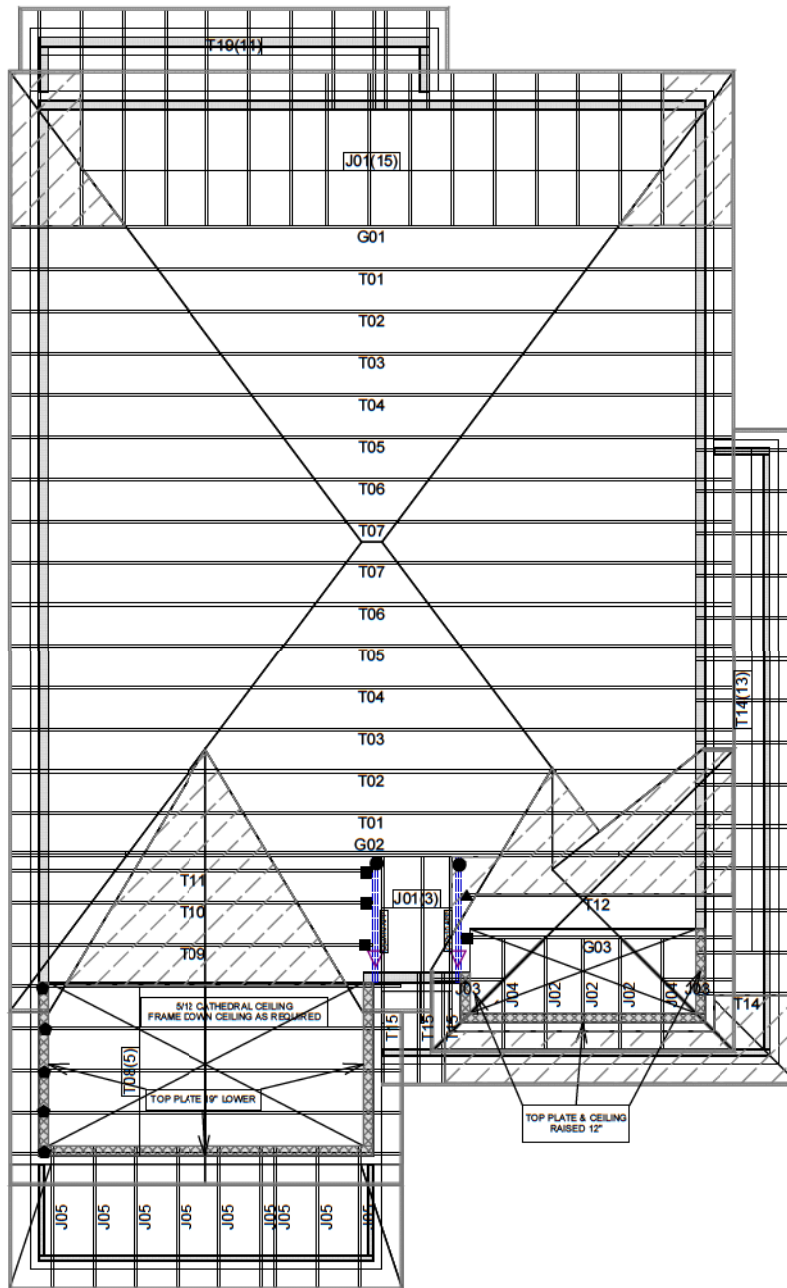




Hanger Name	Symbol	QTY
LUS24	▲	1
LJS26DS	■	4
HGUS26-2	●	2
TC26	◆	5

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

INSTALL TC26 CLIPS ON ONE SIDE OF SCISSOR TRUSSES TO ALLOW FOR HORIZONTAL MOVEMENT. THIS SIDE IS TO BE CONSISTENT FOR ALL TRUSSES.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
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 S/F @ 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 #	T20-00764
Address	TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 3A ELEV 2
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/16/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\GLENWAY 3A\ELEV 2\T-GLENWAY3A-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



NE1220-112
GREENPARK - TRINAR HALL -
GLENWAY 3A 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 supports. Members and do not necessarily take into account stability of the overall building
- Elevation of bearings must be carefully checked and shimmed to ensure level bearings
- Adequate wood truss bearing is the responsibility of the building designer

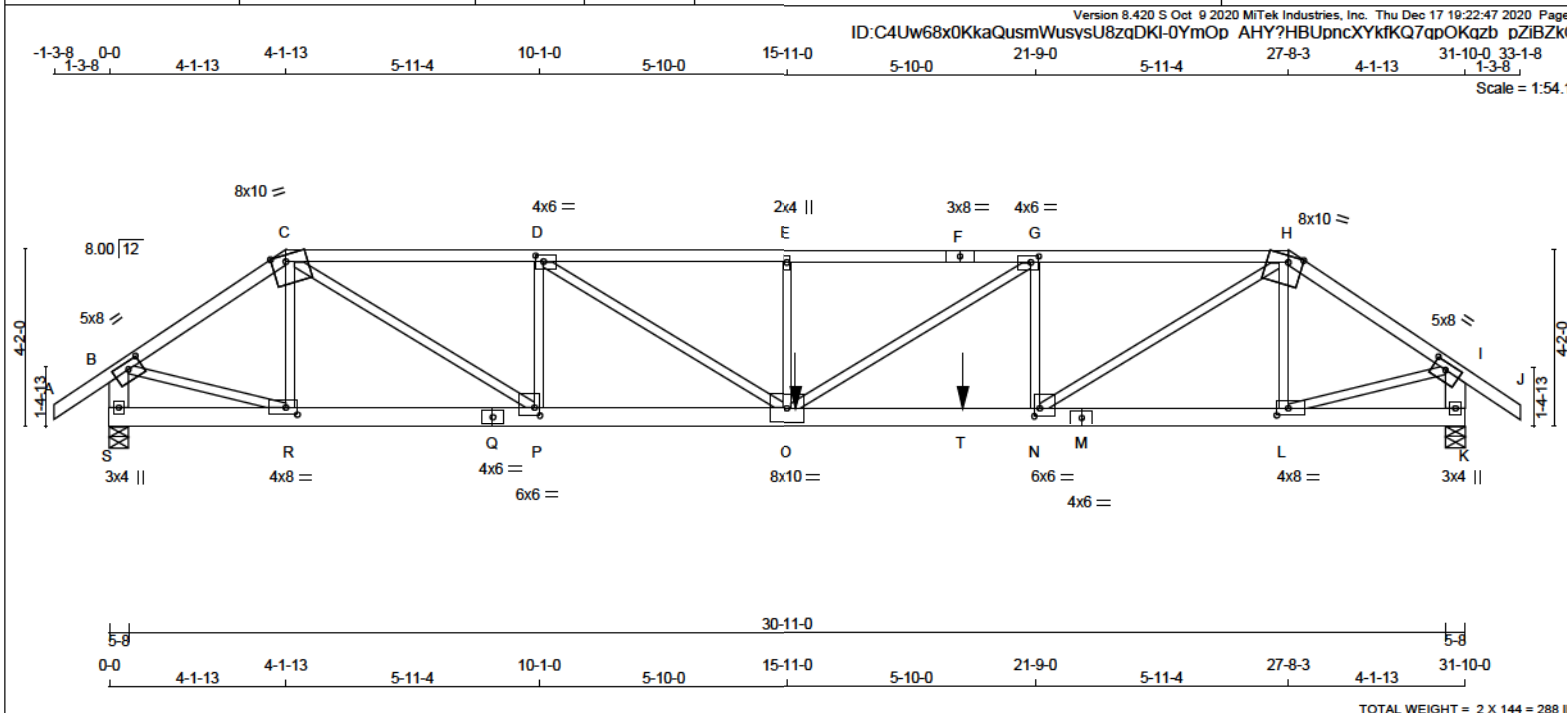
DIMENSIONS

- Geometry of the truss and dimensions indicated on the drawing must be followed for the installation of the installed truss.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



LUMBER			
N. L. G. A. RULES	CHORDS	SIZE	DESCR.
A - C	2x4	DRY	No.2
C - F	2x4	DRY	2100F 1.8E
F - H	2x4	DRY	2100F 1.8E
H - J	2x4	DRY	No.2
S - B	2x8	DRY	No.2
K - I	2x8	DRY	No.2
S - Q	2x8	DRY	2100F 1.8E
Q - M	2x8	DRY	2100F 1.8E
M - K	2x8	DRY	2100F 1.8E
ALL WEBS EXCEPT	2x3	DRY	No.2

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 - C	12	TOP
C - F	12	SIDE(51.2)
F - H	12	TOP
H - J	12	TOP
S - B	12	TOP
K - I	12	TOP
BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS		
S - Q	12	TOP
Q - M	12	SIDE(21.3)
M - K	12	TOP
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								
JT VERT	HORZ	DOWN	UPLIFT	IN-SX	IN-SX						
S	4701	0	4701	0	0	5-8	2-9				
K	5174	0	5174	0	0	5-8	2-13				
UNFACTORED REACTIONS											
1ST LCASE	MAX/MIN COMPONENT REACTIONS										
JT COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL					
S	3473	2022 / 0	581 / 0	0 / 0	0 / 0	889 / 0	0 / 0				
K	3823	2224 / 0	642 / 0	0 / 0	0 / 0	957 / 0	0 / 0				

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.95 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
MAX. FACTORED MEMB. FORCE (LBS)	MAX. FACTORED MEMB. FORCE (LBS)
FR-TO	FR-TO
A-B	0 / 47
B-C	-5629 / 0
C-D	-9923 / 0
D-E	-13884 / 0
E-F	-13884 / 0
F-G	-11423 / 0
G-H	-8195 / 0
H-I	0 / 47
I-J	-4858 / 0
J-K	-5084 / 0
S-R	0 / 0
R-Q	0 / 4854
Q-P	0 / 4854
P-O	0 / 9923
O-T	0 / 11423
T-N	0 / 5115
N-M	0 / 5115
M-L	0 / 0

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

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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 DEFLL(LL) = L/360 (1.08")
CALCULATED VERT. DEFLL(LL) = L/999 (0.33")
ALLOWABLE DEFLL(TL) = L/360 (1.08")
CALCULATED VERT. DEFLL(TL) = L/692 (0.55")

CSI: TC=0.71/1.00 (E-G-1), BC=0.62/1.00 (N-O-1), WB=0.93/1.00 (H-N-1), SSI=0.45/1.00 (N-O-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

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

JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL = 0.86 (Q) (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.

FACTORED CONCENTRATED LOADS (LBS)									
JT LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.	
O	16-1-8	-2200	-2200	—	FRONT	VERT	TOTAL	—	C1
T	20-0-8	-1533	-1533	—	FRONT	VERT	TOTAL	—	C1

CONNECTION REQUIREMENTS

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

Town of East Gwillimbury
Building Standards Branch BCIN #16487

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

PLATES (table is in inches)				
JT	TYPE	PLATES	W	LEN Y X
B	TMVW-t	MT20	5.0	8.0 2.00 3.75
C	TTWW-m	MT20	8.0	10.0 Edge 4.00
D	TMWW-t	MT20	4.0	6.0 1.75 2.25
E	TMW+w	MT20	2.0	4.0
F	TS-t	MT20	3.0	8.0
G	TMWW-t	MT20	4.0	6.0 1.75 2.25
H	TTWW-m	MT20	8.0	10.0 Edge 4.00
I	TMVW-t	MT20	5.0	8.0 2.00 3.75
K	BMV1+p	MT20	3.0	4.0
L	BMWW-t	MT20	4.0	8.0 2.00 3.25
M	BS-t	MT20	4.0	6.0
N	BMWW-t	MT20	6.0	6.0 2.25 1.50
O	BMWWW-t	MT20	8.0	10.0
P	BMWW-t	MT20	6.0	6.0 2.25 1.50
Q	BS-t	MT20	4.0	6.0
R	BMWW-t	MT20	4.0	8.0 2.00 3.25
S	BMV1+p	MT20	3.0	4.0

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

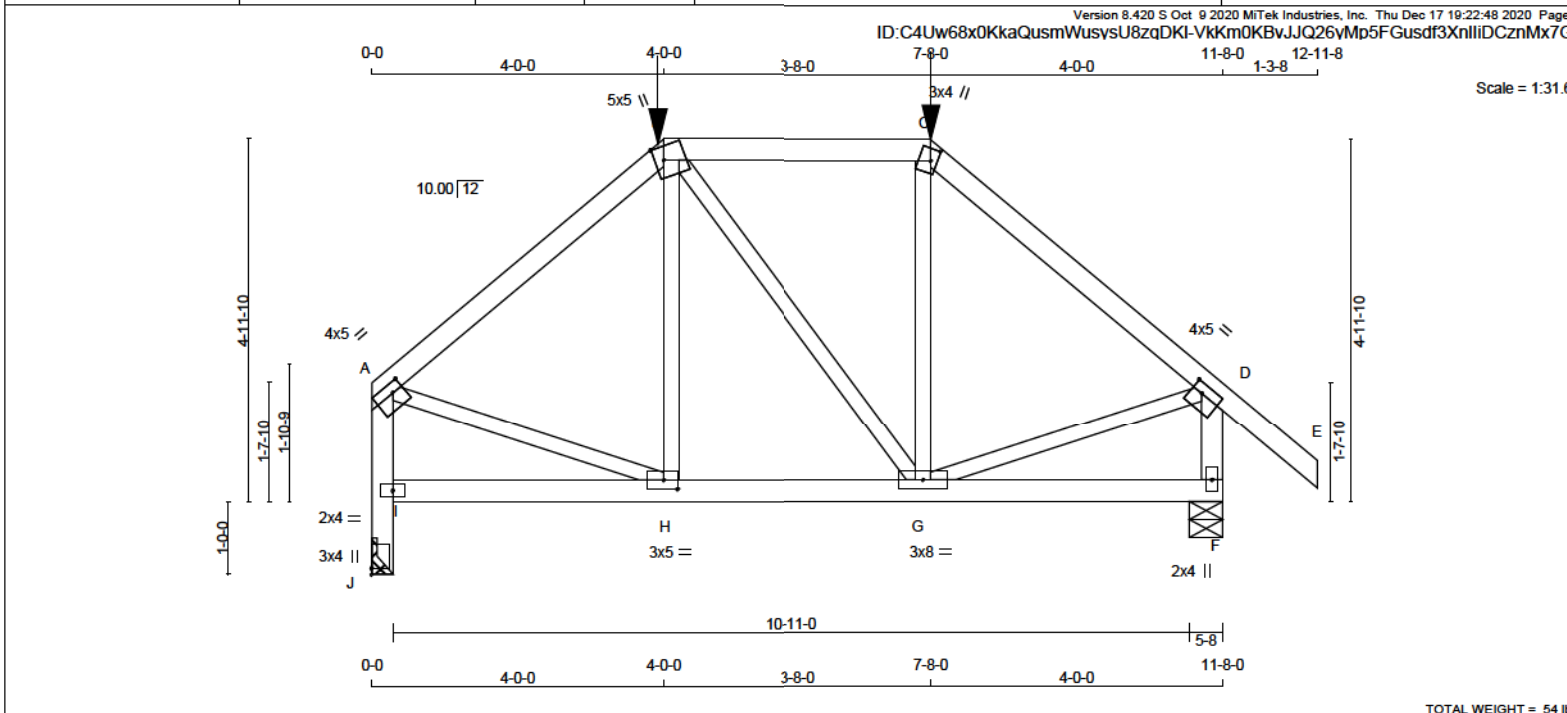
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





LUMBER

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMVW-t	MT20	4.0	5.0	1.50	1.75
B	TTWW+tm	MT20	5.0	5.0	2.25	1.50
C	TTW+tm	MT20	3.0	4.0	2.00	1.00
D	TMVW-t	MT20	4.0	5.0	1.50	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BMVWW-t	MT20	3.0	8.0		
H	BMVWW-t	MT20	3.0	5.0	1.50	2.25
I	BVM-t	MT20	2.0	4.0		
J	EBSP-t	MT20	3.0	4.0		1.00

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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	DOWN	UPLIFT	IN-SX
F 1511	0	1511	0
J 1338	0	1338	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM.LIVE
F 1109	688 / 0	170 / 0	0 / 0
J 990	571 / 0	170 / 0	0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.38 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM TO		FR-TO			
A-B	-1124 / 0	-124.4 -124.4	0.42 (1)	5.38	H-B	-49 / 172	0.05 (3)
B-C	-980 / 0	-172.4 -172.4	0.45 (1)	5.85	B-G	0 / 0	0.00 (1)
C-D	-1124 / 0	-124.4 -124.4	0.42 (1)	5.38	G-C	-50 / 173	0.05 (3)
D-E	0 / 55	-124.4 -124.4	0.19 (1)	10.00	A-H	0 / 904	0.22 (1)
J-I	-1338 / 0	0.0	0.0	0.15 (1)	G-D	0 / 903	0.22 (1)
I-A	-1244 / 0	0.0	0.0	0.15 (1)			
F-D	-1416 / 0	0.0	0.0	0.16 (1)			
I-H	0 / 0	-54.4	-54.4	0.17 (3)	10.00		
H-G	0 / 880	-54.4	-54.4	0.27 (2)	10.00		
G-F	0 / 0	-54.4	-54.4	0.16 (3)	10.00		

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
B	4-0-0	-207	-207		FRONT	VERT	TOTAL		C1
C	7-8-0	-207	-207		FRONT	VERT	TOTAL		C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.45/1.00 (B-C:1) , BC=0.27/1.00 (G-H:2) , WB=0.22/1.00 (A-H:1) , SSI=0.27/1.00 (B-C:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

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= 0.40 (D) (INPUT = 1.00)



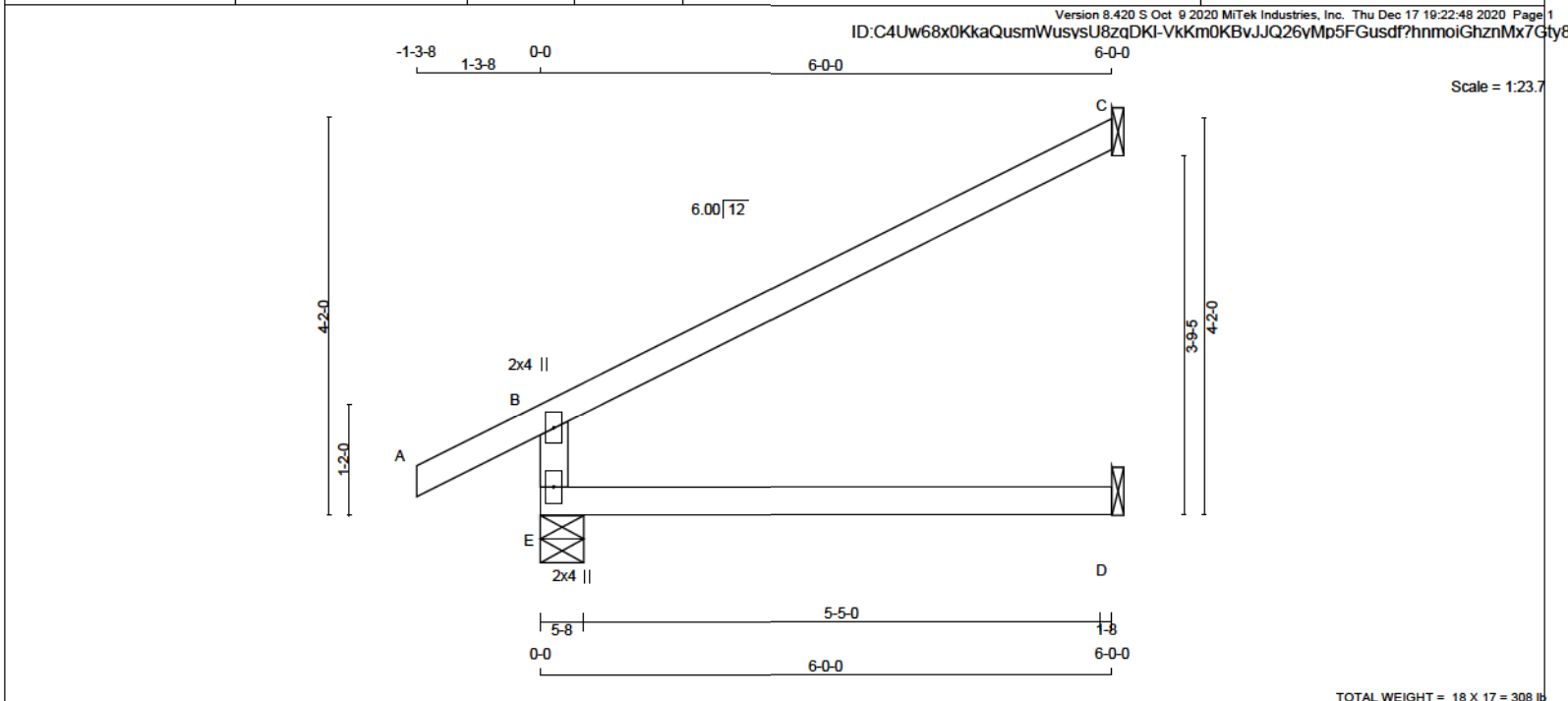
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Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



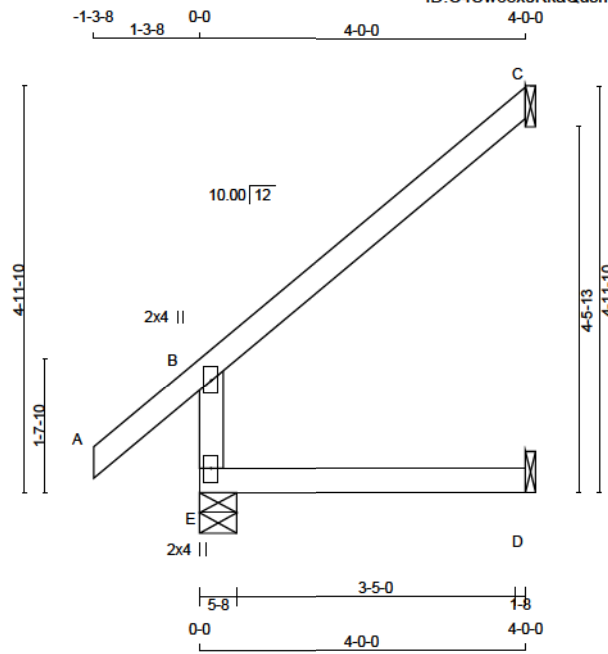


LUMBER										DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER										DESIGN CRITERIA										[M]									
N. L. G. A. RULES																																							
CHORDS SIZE LUMBER										DESCR.																													
E - B 2x4 DRY No.2										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																																							
										</																													

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TOTAL WEIGHT = 3 X 14 = 42 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	HORZ	GROSS REACTION	GROSS REACTION	DOWN	HORZ	BRG	IN-SX	BRG
E	572	0	572	0	0	0	5-8	1-8	
C	187	0	187	0	0	0	1-8	1-8	
D	69	0	87	0	0	0	1-8	1-8	

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

UNFACTORED REACTIONS							
JT	1ST LCASE	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
E	413	270 / 0	47 / 0	0 / 0	0 / 0	95 / 0	0 / 0
C	129	105 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
D	62	0 / 0	37 / 0	0 / 0	0 / 0	26 / 0	0 / 0

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (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 0.08 (3)	E-B	0 / 55	-124.4	-124.4 0.17 (1)
A-B	0 / 55	-124.4	-124.4 0.17 (1)	B-C	-40 / 0	-124.4	-124.4 0.34 (1)
B-C	-40 / 0	-124.4	-124.4 0.34 (1)	E-D	0 / 0	-39.2	-39.2 0.12 (3)
E-D	0 / 0	-39.2	-39.2 0.12 (3)				

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

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

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

AUTOSOLVE RIGHT HEEL ONLY

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.80)
JSI METAL = 0.26 (B) (INPUT = 1.00)



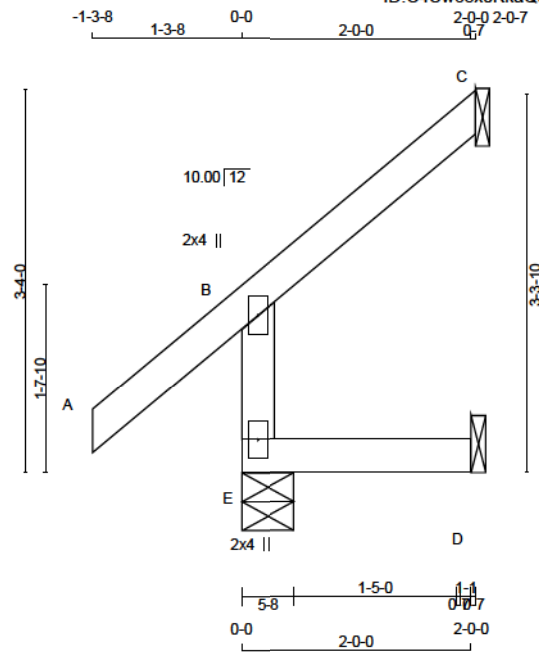
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





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

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	372	0	0	5-8
C	96	0	0	1-8
D	36	0	0	1-8

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
E	266	185 / 0	23 / 0
C	66	54 / 0	0 / 0
D	33	0 / 0	19 / 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: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
E-B	-330 / 0	0.0	0.0 (1)	E-B	7.81		
A-B	0 / 55	-124.4	-124.4 (1)	A-B	10.00		
B-C	-20 / 0	-124.4	-124.4 (1)	B-C	6.25		
E-D	0 / 0	-39.2	-39.2 (3)	E-D	10.00		

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.19")
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=0.10/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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= 0.23 (B) (INPUT = 0.80)
JSI METAL = 0.18 (B) (INPUT = 1.00)

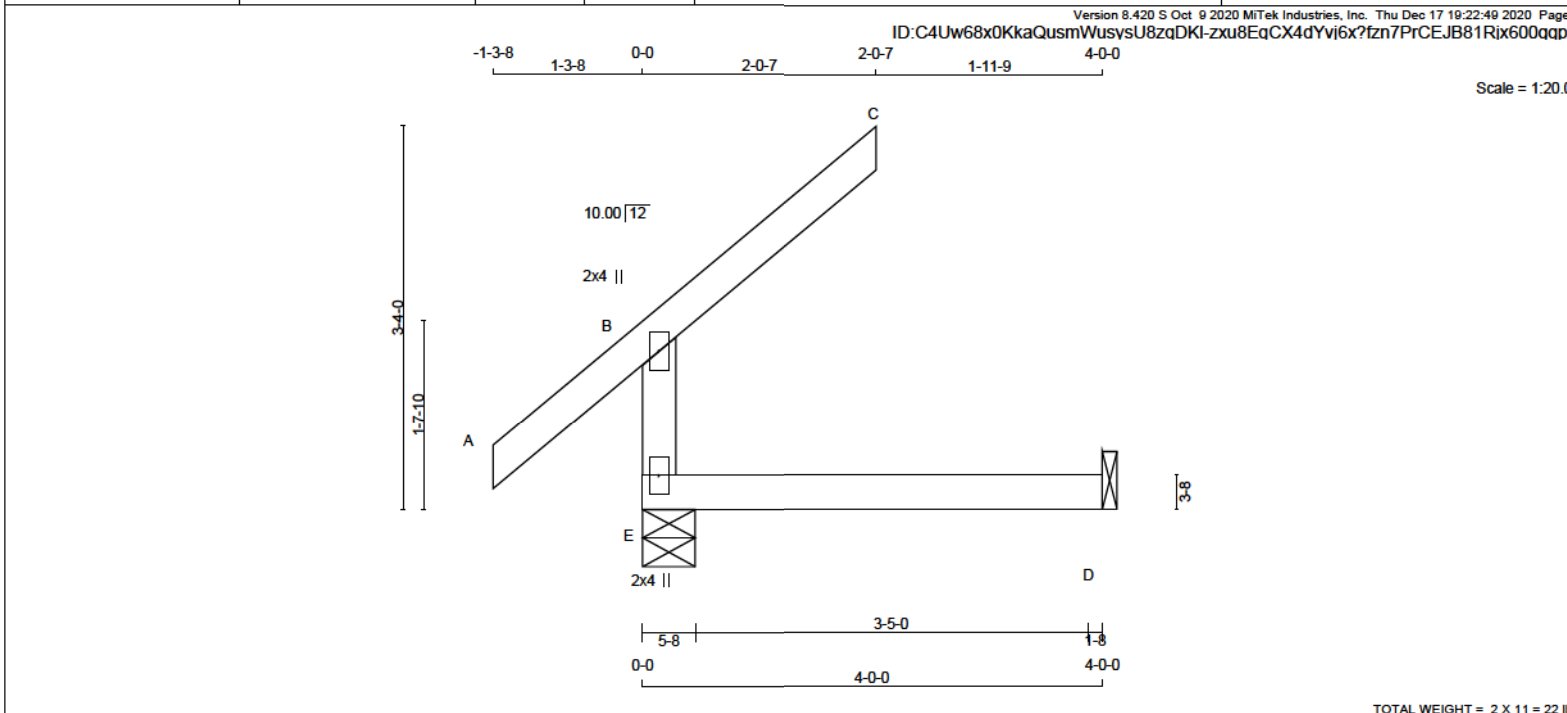


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



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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																				SPECIFIED LOADS:									
CHORDS SIZE LUMBER																				TOP CH. LL = 34.8 PSF									
E - B 2x4 DRY No.2																				DL = 8.0 PSF									
A - C 2x4 DRY No.2																				BOT CH. LL = 10.5 PSF									
E - D 2x4 DRY No.2																				DL = 7.3 PSF									
DRY: SEASONED LUMBER.																				TOTAL LOAD = 60.6 PSF									
										SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) D										SPACING = 24.0 IN. C/C									
PLATES (table is in inches)										UNFACTORED REACTIONS										THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015									
JT TYPE PLATES W LEN Y X										1ST LCASE MAX/MIN COMPONENT REACTIONS										THIS DESIGN COMPLIES WITH:									
B TMV+p MT20 2.0 4.0										JT COMBINED SNOW LIVE PERMLIVE WIND DEAD SOIL										- PART 9 OF CBC 2018, ABC 2019									
E BMV1+p MT20 2.0 4.0										E 381 245 / 0 47 / 0 0 / 0 0 / 0 89 / 0 0 / 0										- PART 9 OF OBC 2012 (2019 AMENDMENT)									
										D 62 0 / 0 37 / 0 0 / 0 0 / 0 26 / 0 0 / 0										- CSA 086-14									
										BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E										- TPIC 2014									
										BRACING										DESIGN ASSUMPTIONS									
										TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.										-OVERHANG NOT TO BE ALTERED OR CUT OFF.									
										MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.										(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)									
										ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.										EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD									
										LOADING										ALLOWABLE DEFL.(LL)= L/360 (0.19")									
										TOTAL LOAD CASES: (4)										CALCULATED VERT. DEFL.(LL) = L/ 999 (0.01")									
										CHORDS WEBS										ALLOWABLE DEFL.(TL)= L/360 (0.19")									
										MAX. FACTORED FACTORED MAX. FACTORED										CALCULATED VERT. DEFL.(TL) = L/ 999 (0.02")									
										MEMB. FORCE VERT. LOAD LC1 MAX. MAX. MEMB. MAX. FORCE MAX.										CSI: TC=0.39/1.00 (B-C:1) , BC=0.11/1.00 (D-E:3) ,									
										(LBS) (PLF) CSI (LC) UNBRAC LENGTHHFR-TO (LBS) CSI (LC)										WB=0.00/1.00 (n/a:0) , SSI=0.16/1.00 (B-C:1)									
										FR-TO FROM TO										DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10									
										E- B -437 / 0 0.0 0.0 0.07 (3) 7.81										SHEAR=1.10 TENS= 1.10									
										A- B 0 / 55 -124.4 -124.4 0.17 (1) 10.00										COMPANION LIVE LOAD FACTOR = 1.00									
										B- C -85 / 0 -124.4 -124.4 0.39 (1) 6.25										AUTOSOLVE RIGHT HEEL ONLY									
										E- D 0 / 0 -39.2 -39.2 0.11 (3) 10.00										TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .									
																				NAIL VALUES									
																				PLATE GRIP(DRY) SHEAR SECTION									
																				(PSI) (PLI) (PLI)									

Dec 16, 2020

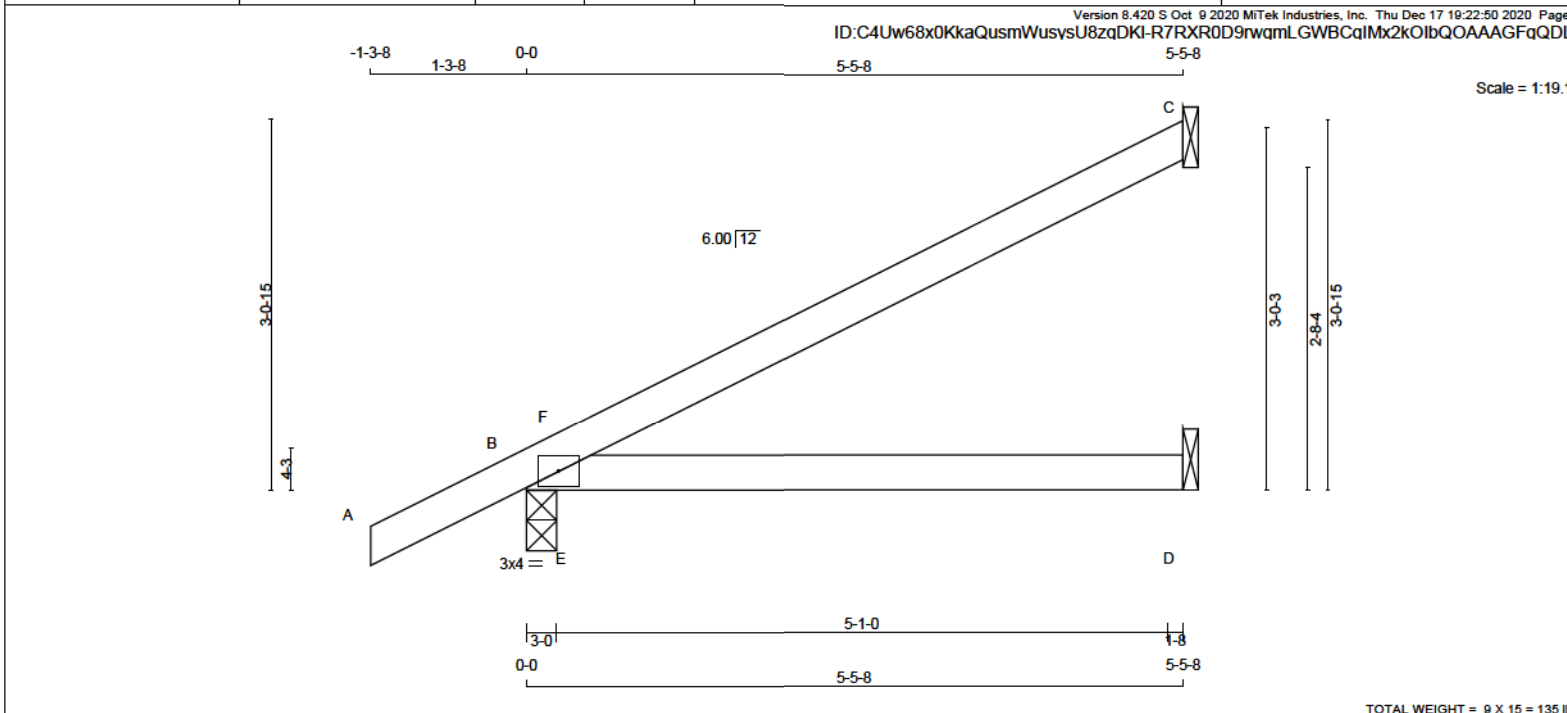
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

A - C 2x4 DRY No.2

B - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMB1-I	MT20	3.0	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
C	303	0	303	0	0	1-8	1-8
B	615	0	615	0	0	3-0	1-8
D	144	0	154	0	0	1-8	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX	MIN	COMPONENT REACTIONS			
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
C	211	161 / 0	8 / 0	0 / 0	0 / 0	42 / 0	0 / 0
B	447	284 / 0	57 / 0	0 / 0	0 / 0	105 / 0	0 / 0
D	119	29 / 0	50 / 0	0 / 0	0 / 0	41 / 0	0 / 0

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

BRACING

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

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. (LC) (1)	MAX. UNBRACED LENGTH (1)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED (LC) (1)
FR-TO		FROM TO			FR-TO		
A- B	0 / 38	-124.4 -124.4	0.16 (1)	10.00	E- F	-497 / 136	0.00 (1)
B- F	-60 / 74	-124.4 -124.4	0.11 (3)	6.25			
F- C	-5 / 6	-124.4 -124.4	0.50 (1)	10.00			
B- E	0 / 0	-39.2 -39.2	0.31 (1)	10.00			
E- D	0 / 0	-39.2 -39.2	0.36 (1)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

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

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

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

CALCULATED VERT. DEFL.(LL) = L/742 (0.09")

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

CALCULATED VERT. DEFL.(TL) = L/427 (0.15")

CSI: TC=0.50/1.00 (C-F:1), BC=0.36/1.00 (D-E:1), WB=0.00/1.00 (E-F:1), SSI=0.44/1.00 (B-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

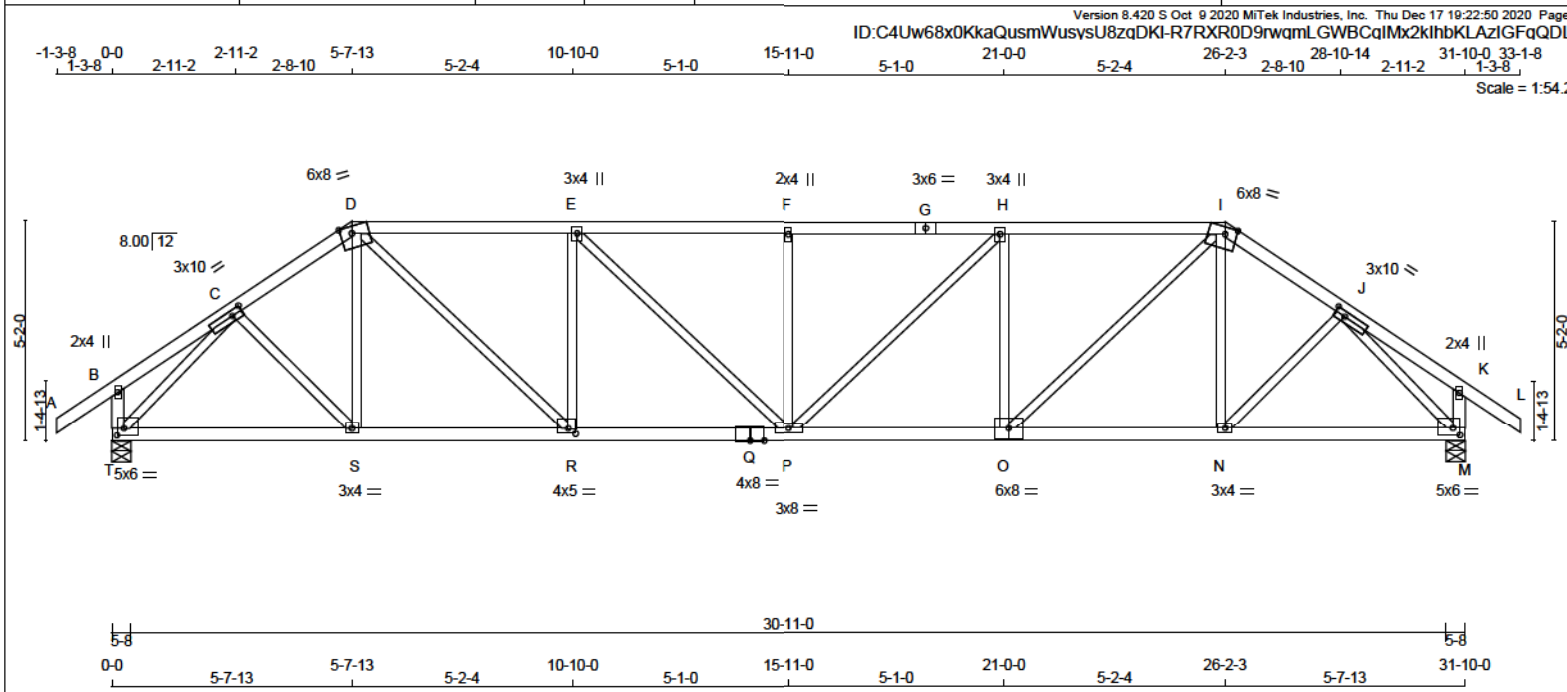
MT20 850 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

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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
T - B	2x4	DRY No.2	SPF
M - K	2x4	DRY No.2	SPF
T - Q	2x4	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - 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	TMV+p	MT20	2.0	4.0		
C	TMWW-t	MT20	3.0	10.0	1.50	3.00
D	TTWW-m	MT20	6.0	8.0	2.00	3.25
E	TMWW-t	MT20	3.0	4.0		
F	TMWW-w	MT20	2.0	4.0		
G	TS-t	MT20	3.0	6.0		
H	TMWW-t	MT20	3.0	4.0		
I	TTWW-m	MT20	6.0	8.0	2.00	3.25
J	TMWW-t	MT20	3.0	10.0	1.50	3.00
K	TMV+p	MT20	2.0	4.0		
M	BMVW-t	MT20	5.0	6.0	2.00	2.00
N	BMWW-t	MT20	3.0	4.0		
O	BSWW-t	MT20	6.0	8.0		
P	BMWWW-t	MT20	3.0	8.0		
Q	BS-t	MT20	4.0	8.0		
R	BMWW-t	MT20	4.0	5.0	1.50	2.00
S	BMWW-t	MT20	3.0	4.0		
T	BMVW-t	MT20	5.0	6.0	2.00	2.00



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

BEARINGS

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	REQD BRG
T	2776	0	2776	0	0	5-8	3-13
M	2776	0	2776	0	0	5-8	3-13

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
T	2047	1204 / 0	334 / 0
M	2047	1204 / 0	334 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.61 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 / 47	-124.4	-124.4 0.17 (1)	10.00	C-S	0 / 374	0.08 (1)
B-C	0 / 16	-124.4	-124.4 0.12 (1)	10.00	S-D	-20 / 139	0.03 (3)
C-D	-3046 / 0	-124.4	-124.4 0.23 (1)	3.82	D-R	0 / 1893	0.43 (1)
D-E	-3898 / 0	-124.4	-124.4 0.80 (1)	2.83	R-E	-1113 / 0	0.44 (1)
E-F	-4312 / 0	-124.4	-124.4 0.86 (1)	2.81	E-P	0 / 572	0.13 (1)
F-G	-4312 / 0	-124.4	-124.4 0.86 (1)	2.81	P-F	-582 / 0	0.23 (1)
G-H	-4312 / 0	-124.4	-124.4 0.86 (1)	2.81	P-H	0 / 588	0.13 (1)
H-I	-3887 / 0	-124.4	-124.4 0.80 (1)	2.83	O-H	-1124 / 0	0.44 (1)
I-J	-3052 / 0	-124.4	-124.4 0.23 (1)	3.82	O-I	0 / 1874	0.42 (1)
J-K	0 / 16	-124.4	-124.4 0.12 (1)	10.00	N-I	-5 / 180	0.04 (3)
K-L	0 / 47	-124.4	-124.4 0.17 (1)	10.00	N-J	0 / 375	0.08 (1)
T-B	-318 / 0	0.0	0.0 0.03 (1)	7.81	T-C	-3268 / 0	0.89 (1)
M-K	-318 / 0	0.0	0.0 0.03 (1)	7.81	J-M	-3271 / 0	0.89 (1)
T-S	0 / 2255	-39.2	-39.2 0.53 (1)	10.00			
S-R	0 / 2517	-39.2	-39.2 0.57 (1)	10.00			
R-Q	0 / 3899	-39.2	-39.2 0.74 (1)	10.00			
Q-P	0 / 3899	-39.2	-39.2 0.74 (1)	10.00			
P-O	0 / 3887	-39.2	-39.2 0.75 (1)	10.00			
O-N	0 / 2520	-39.2	-39.2 0.59 (1)	10.00			
N-M	0 / 2257	-39.2	-39.2 0.54 (1)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF BCBC 2018, ABC 2019
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.22")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.38")

CSI: TC=0.86/1.00 (F-H:1) , BC=0.75/1.00 (O-P:1) , WB=0.89/1.00 (J-M: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.

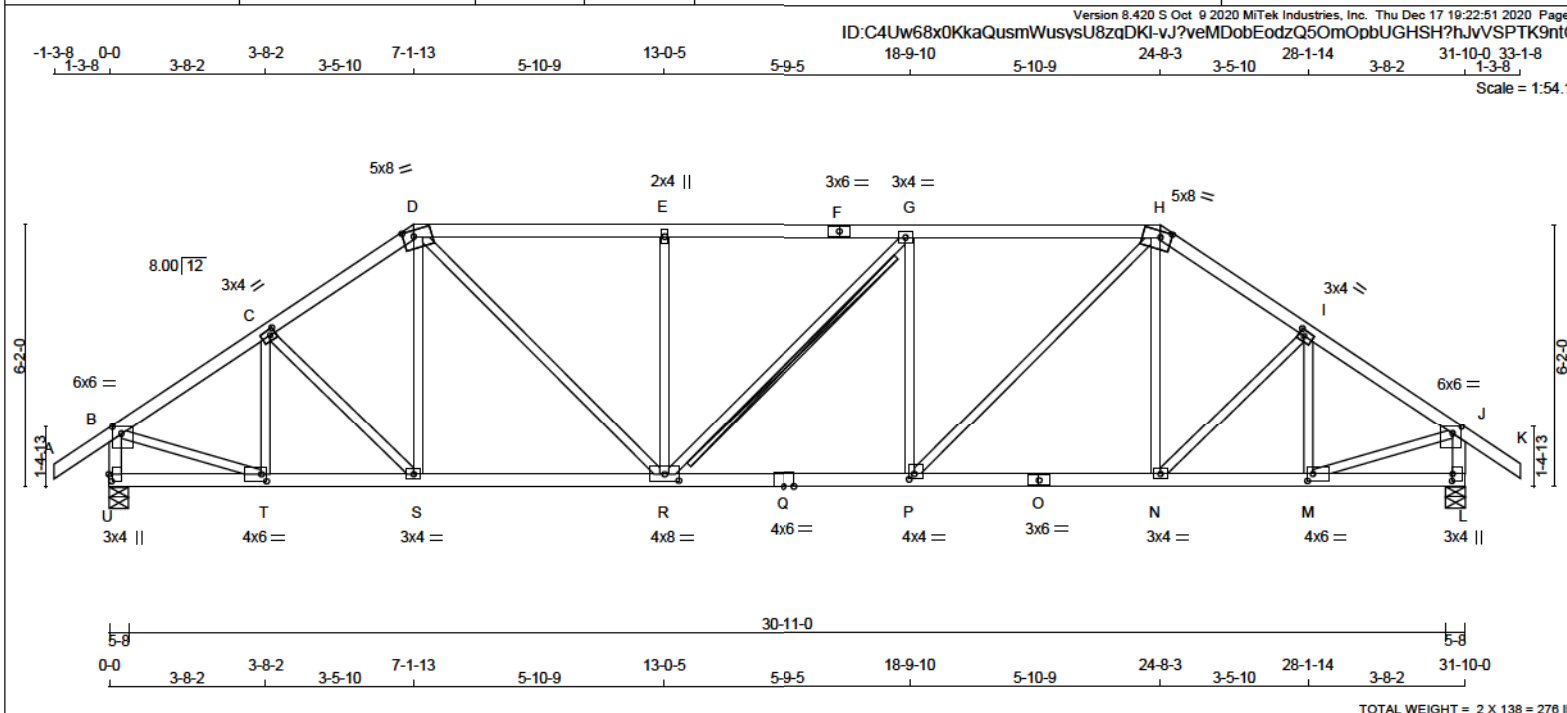
JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL = 0.83 (Q) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - F	2x4	DRY No.2	SPF
F - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
U - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
U - Q	2x4	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF
ALL WEBS	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	6.0	2.00	2.50
C	TMVW-t	MT20	3.0	4.0	1.50	1.50
D	TTWW-m	MT20	5.0	8.0	1.75	3.00
E	TMVW-w	MT20	2.0	4.0		
F	TS-t	MT20	3.0	6.0		
G	TMVW-t	MT20	3.0	4.0		
H	TTWW-m	MT20	5.0	8.0	1.75	3.00
I	TMVW-t	MT20	3.0	4.0	1.50	1.50
J	TMVW-p	MT20	6.0	6.0	2.00	2.50
L	BMV1+p	MT20	3.0	4.0	2.00	0.25
M	BMVW-t	MT20	4.0	6.0	2.00	1.50
N	BMVW-t	MT20	3.0	4.0		
O	BS-t	MT20	3.0	6.0		
P	BMVW-t	MT20	4.0	4.0	1.50	1.50
Q	BS-t	MT20	4.0	6.0		
R	BMVW-t	MT20	4.0	8.0	1.75	4.00
S	BMVW-t	MT20	3.0	4.0		
T	BMVW-t	MT20	4.0	6.0	2.00	1.50
U	BMV1+p	MT20	3.0	4.0	2.00	0.75



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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
U	2776 0	2776 0	5-8	5-8
L	2776 0	2776 0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
U	2047	1204 / 0	334 / 0
L	2047	1204 / 0	334 / 0

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.81 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.
2x4 DRY SPF No.2 T-BRACE AT G-R
FASTEN T AND I-BRACES TO NARROW EDGE OF WEB WITH ONE ROW PER PLY OF 3" COMMON WIRE NAILS @ 6" O.C. WITH 3" MINIMUM END DISTANCE. BRACE MUST COVER 90% OF WEB LENGTH.
END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CS (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED CS (LC)	
FR-TO				FR-TO				
A-B	0 / 47	-124.4 -124.4	0.17 (1)	10.00	T-C	-595 / 0	0.14 (1)	
B-C	-2920 / 0	-124.4 -124.4	0.37 (1)	3.75	C-S	0 / 42	0.01 (2)	
C-D	-3011 / 0	-124.4 -124.4	0.37 (1)	3.69	S-D	0 / 221	0.05 (3)	
D-E	-3497 / 0	-124.4 -124.4	0.92 (1)	2.83	D-R	0 / 1435	0.32 (1)	
E-F	-3497 / 0	-124.4 -124.4	0.92 (1)	2.81	R-E	-784 / 0	0.47 (1)	
F-G	-3497 / 0	-124.4 -124.4	0.92 (1)	2.81	R-G	-3 / 0	0.00 (1)	
G-H	-3499 / 0	-124.4 -124.4	0.93 (1)	2.81	P-G	-785 / 0	0.47 (1)	
H-I	-3011 / 0	-124.4 -124.4	0.37 (1)	3.69	P-H	0 / 1438	0.32 (1)	
I-J	-2921 / 0	-124.4 -124.4	0.37 (1)	3.75	N-H	0 / 220	0.05 (3)	
J-K	0 / 47	-124.4 -124.4	0.17 (1)	10.00	N-I	0 / 42	0.01 (2)	
U-B	-2707 / 0	0.0	0.0	0.28 (1)	5.23	M-I	-564 / 0	0.14 (1)
L-J	-2707 / 0	0.0	0.0	0.28 (1)	5.23	B-T	0 / 2555	0.57 (1)
U-T	0 / 0	-39.2 -39.2	0.10 (3)	10.00	M-J	0 / 2555	0.57 (1)	
T-S	0 / 2451	-39.2 -39.2	0.51 (1)	10.00				
S-R	0 / 2481	-39.2 -39.2	0.53 (1)	10.00				
R-Q	0 / 3499	-39.2 -39.2	0.70 (1)	10.00				
Q-P	0 / 3499	-39.2 -39.2	0.70 (1)	10.00				
P-O	0 / 2481	-39.2 -39.2	0.54 (1)	10.00				
O-N	0 / 2481	-39.2 -39.2	0.54 (1)	10.00				
N-M	0 / 2451	-39.2 -39.2	0.51 (1)	10.00				
M-L	0 / 0	-39.2 -39.2	0.10 (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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.17")
ALLOWABLE DEFL.(TL) = L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.29")

CSI: TC=0.93/1.00 (G-H:1) , BC=0.70/1.00 (P-R:1) , WB=0.57/1.00 (J-M:1) , SSI=0.34/1.00 (G-H:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

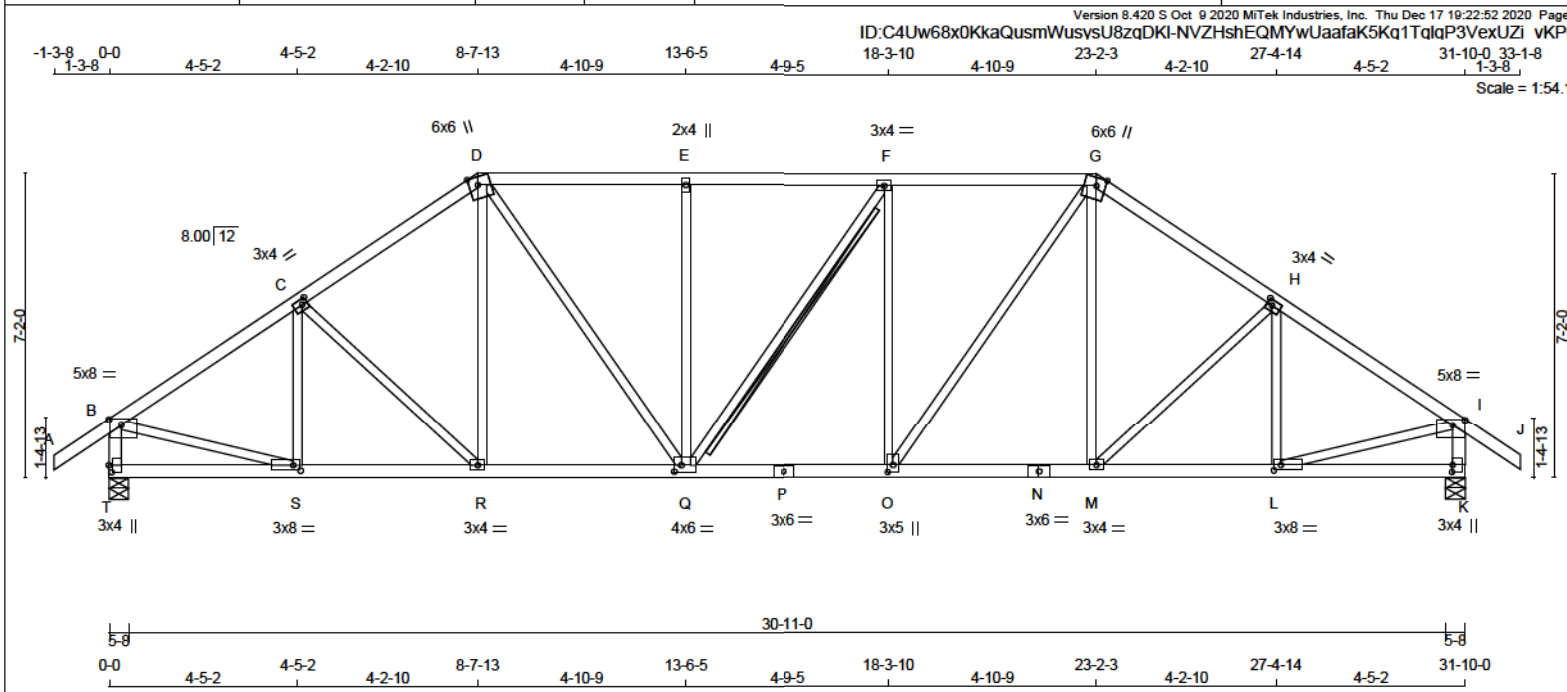
JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL = 0.88 (O) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	5.0	8.0	1.50	3.50
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	6.0	8.0	Edge 2.50	
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 2.50	
H TMVW-t	MT20	3.0	4.0	1.50	1.50
I TMVW-p	MT20	5.0	8.0	1.50	3.50
K BMV1+p	MT20	3.0	4.0	2.00	0.25
L BMVW-t	MT20	3.0	8.0	1.50	2.00
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	2.00
T BMV1+p	MT20	3.0	4.0	2.00	0.75

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	2776	2776	5-8	5-8
T	0	0	5-8	5-8
K	2776	2776	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1204	0	SNOW LIVE PERM. LIVE WIND DEAD SOIL
T	2047	1204	0
K	2047	1204	0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MAX. UNBRACED LENGTH (FT)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	S-C	-442 / 0	0.13 (1)
B-C	-3020 / 0	-124.4	-124.4 0.41 (1)	3.67	C-R	-194 / 0	0.12 (1)
C-D	-2922 / 0	-124.4	-124.4 0.40 (1)	3.74	R-D	0 / 338	0.08 (2)
D-E	-2996 / 0	-124.4	-124.4 0.44 (1)	3.63	D-Q	0 / 1022	0.23 (1)
E-F	-2996 / 0	-124.4	-124.4 0.41 (1)	3.67	Q-E	-848 / 0	0.58 (1)
F-G	-2996 / 0	-124.4	-124.4 0.44 (1)	3.63	Q-F	-4 / 0	0.00 (1)
G-H	-2922 / 0	-124.4	-124.4 0.40 (1)	3.74	O-F	-847 / 0	0.58 (1)
H-I	-3020 / 0	-124.4	-124.4 0.41 (1)	3.67	O-G	0 / 1027	0.23 (1)
I-J	0 / 47	-124.4	-124.4 0.17 (1)	10.00	M-G	0 / 338	0.08 (2)
T-B	-2700 / 0	0.0	0.0 0.28 (1)	5.23	M-H	-194 / 0	0.12 (1)
K-I	-2700 / 0	0.0	0.0 0.28 (1)	5.23	L-H	-441 / 0	0.12 (1)
					B-S	0 / 2615	0.58 (1)
					L-I	0 / 2019	0.59 (1)
T-S	0 / 0	-39.2	-39.2 0.13 (3)	10.00			
S-R	0 / 2540	-39.2	-39.2 0.50 (1)	10.00			
R-Q	0 / 2403	-39.2	-39.2 0.48 (1)	10.00			
Q-P	0 / 2998	-39.2	-39.2 0.57 (1)	10.00			
P-O	0 / 2998	-39.2	-39.2 0.57 (1)	10.00			
O-N	0 / 2403	-39.2	-39.2 0.48 (1)	10.00			
N-M	0 / 2403	-39.2	-39.2 0.48 (1)	10.00			
M-L	0 / 2541	-39.2	-39.2 0.50 (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 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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")
ALLOWABLE DEFL.(TL) = L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.24")

CSI: TC=0.44/1.00 (D-E-1), BC=0.57/1.00 (O-Q-1),

WB=0.59/1.00 (I-L-1), SSI=0.28/1.00 (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 (K) (INPUT = 0.90)

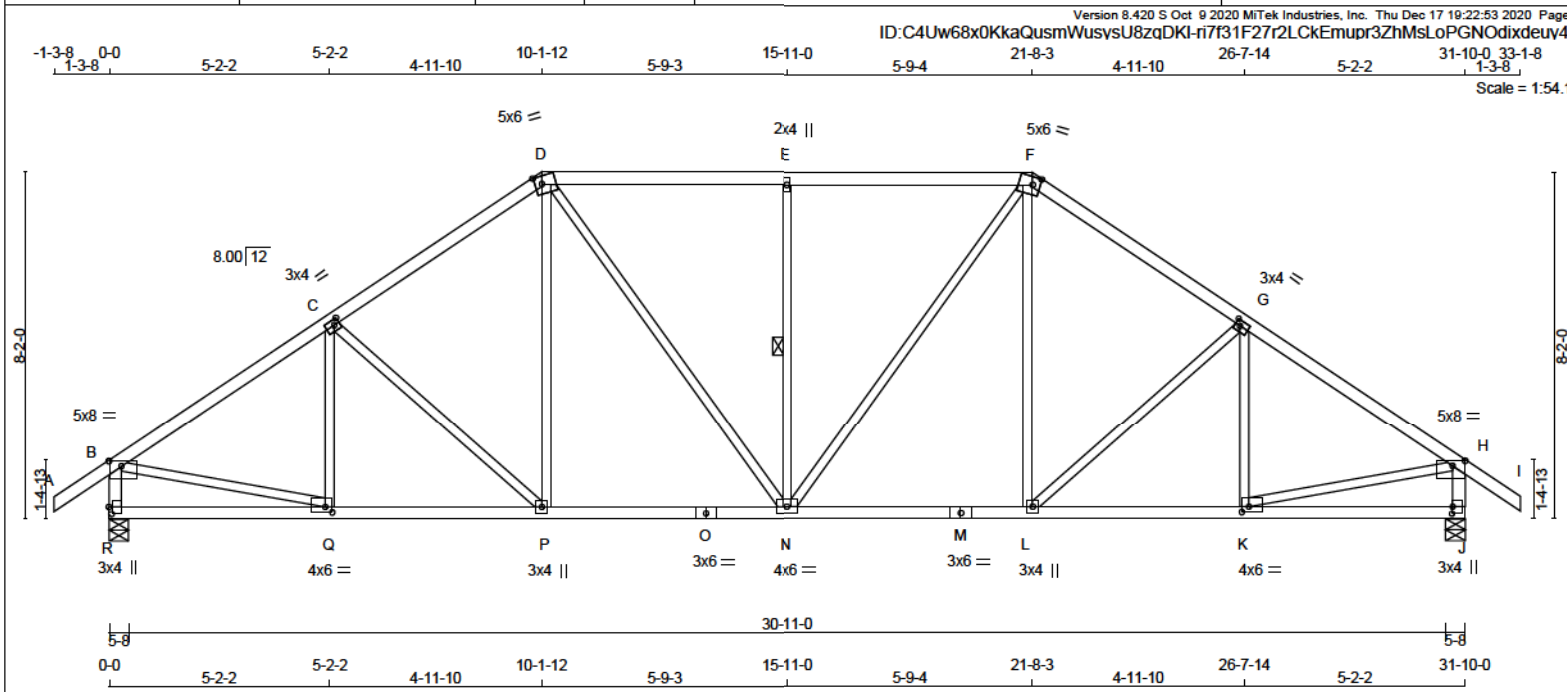
JSI METAL = 0.97 (P) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Author	43236	2021-02-08
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
B - F	2x4	DRY No.2	SPF
F - I	2x4	DRY No.2	SPF
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 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	5.0	8.0	1.50	3.50
C TMVW-t	MT20	3.0	4.0	1.50	1.50
D TTWW-m	MT20	5.0	8.0	2.25	2.00
E TMW+w	MT20	2.0	4.0		
F TTWW-m	MT20	5.0	8.0	2.25	2.00
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TMVW-p	MT20	5.0	8.0	1.50	3.50
J BMV1+p	MT20	3.0	4.0	2.00	0.25
K BMVW-t	MT20	4.0	6.0	1.50	2.00
L BMVW-t	MT20	3.0	4.0		
M BS-t	MT20	3.0	6.0		
N BMVW-t	MT20	4.0	6.0		
O BS-t	MT20	3.0	6.0		
P BMVW-t	MT20	3.0	4.0		
Q BMVW-t	MT20	4.0	6.0	1.50	2.00
R BMV1+p	MT20	3.0	4.0	2.00	0.75



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

BEARINGS

FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD IN-SX
JT VERT	DOWN	UPLIFT	IN-SX
R 2776	0	0	5-8
J 2776	0	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM.LIVE WIND DEAD SOIL
R 2047	1204 / 0	334 / 0	0 / 0 509 / 0 0 / 0
J 2047	1204 / 0	334 / 0	0 / 0 509 / 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 = 3.47 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 = 110 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 / 47	-124.4	-124.4 0.17 (1)	10.00	Q-C	-327 / 52	0.11 (1)
B-C	-3076 / 0	-124.4	-124.4 0.57 (1)	3.47	C-P	-395 / 0	0.34 (1)
C-D	-2808 / 0	-124.4	-124.4 0.53 (1)	3.85	P-D	0 / 483	0.11 (2)
D-E	-2708 / 0	-124.4	-124.4 0.64 (1)	3.50	D-N	0 / 683	0.15 (1)
E-F	-2708 / 0	-124.4	-124.4 0.64 (1)	3.50	N-E	-876 / 0	0.37 (1)
F-G	-2808 / 0	-124.4	-124.4 0.53 (1)	3.85	N-F	0 / 683	0.15 (1)
G-H	-3076 / 0	-124.4	-124.4 0.57 (1)	3.47	L-F	0 / 483	0.11 (2)
H-I	0 / 47	-124.4	-124.4 0.17 (1)	10.00	L-G	-395 / 0	0.34 (1)
R-B	-2689 / 0	0.0	0.0 0.28 (1)	5.25	K-G	-327 / 52	0.11 (1)
J-H	-2689 / 0	0.0	0.0 0.28 (1)	5.25	B-Q	0 / 2648	0.80 (1)
					K-H	0 / 2648	0.80 (1)
R-Q	0 / 0	-39.2	-39.2 0.18 (3)	10.00			
Q-P	0 / 2593	-39.2	-39.2 0.54 (1)	10.00			
P-O	0 / 2304	-39.2	-39.2 0.51 (1)	10.00			
O-N	0 / 2304	-39.2	-39.2 0.51 (1)	10.00			
N-M	0 / 2304	-39.2	-39.2 0.51 (1)	10.00			
M-L	0 / 2304	-39.2	-39.2 0.51 (1)	10.00			
L-K	0 / 2593	-39.2	-39.2 0.54 (1)	10.00			
K-J	0 / 0	-39.2	-39.2 0.18 (3)	10.00			

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:
- PART 9 OF 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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.84/1.00 (E-F:1) , BC=0.54/1.00 (K-L:1) , WB=0.60/1.00 (H-K:1) , SSI=0.35/1.00 (E-F:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

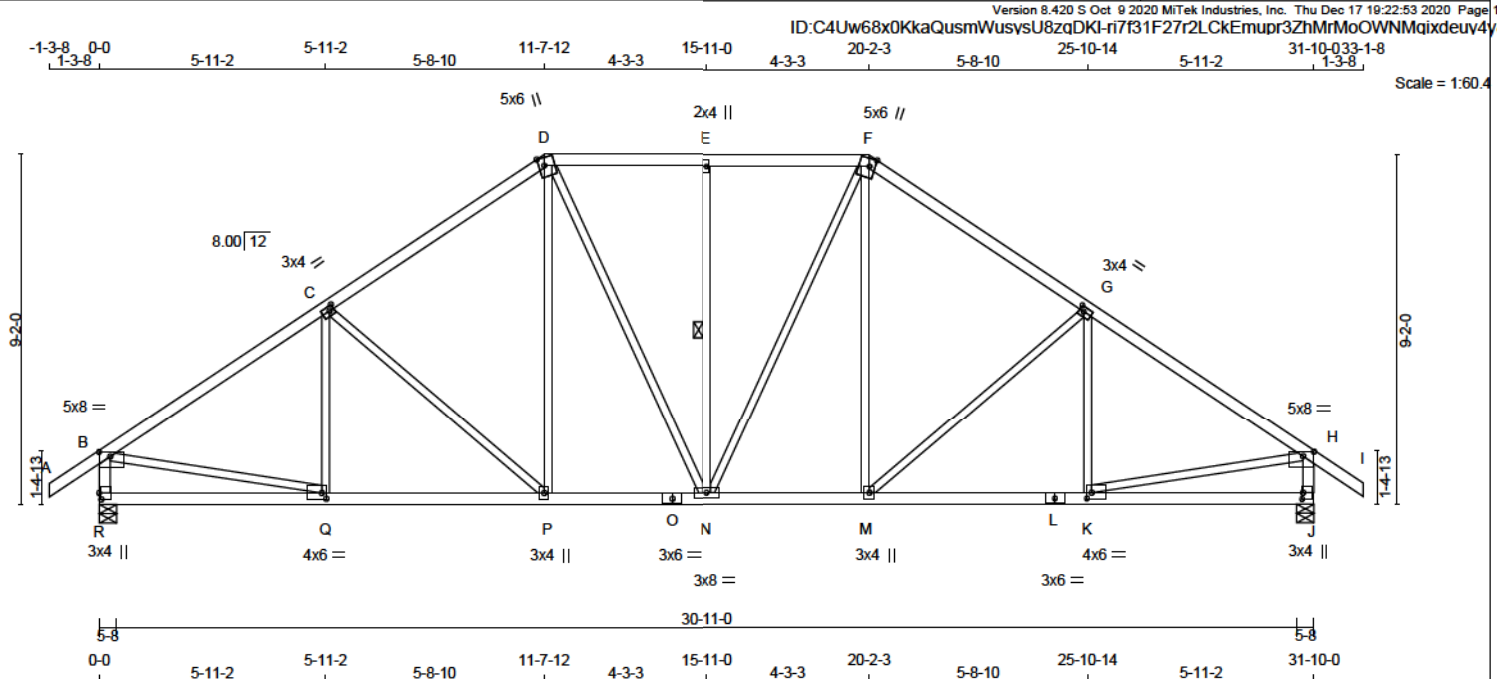
JSI GRIP= 0.89 (R) (INPUT = 0.80)
JSI METAL = 0.76 (O) (INPUT = 1.00)



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	2021-02-08
Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 149 = 299 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)						
JT	TYPE	PLATES	W	LEN	Y	X
B	TMWV-p	MT20	5.0	8.0	1.50	3.50
C	CTMWV-t	MT20	3.0	4.0	1.50	1.50
D	TTWV+m	MT20	5.0	6.0	Edge	1.75
E	TMW+w	MT20	2.0	4.0		
F	TTWV+m	MT20	5.0	6.0	Edge	1.75
G	CTMWV-t	MT20	3.0	4.0	1.50	1.50
H	CTMWV-p	MT20	3.0	4.0	1.50	3.50
J	BMVW-t	MT20	3.0	4.0	2.00	0.25
K	BMVW+p	MT20	4.0	6.0	1.75	1.50
L	BS-t	MT20	3.0	6.0		
M	BMWV+t	MT20	3.0	4.0		
N	BMWVW-t	MT20	3.0	8.0		
O	BS-t	MT20	3.0	6.0		
P	BMWV+t	MT20	3.0	4.0		
Q	BMWVW-t	MT20	4.0	6.0	1.75	1.50

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

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

BEARINGS							
FACTORED GROSS REACTION			MAXIMUM FACTORED GROSS REACTION			INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX
R	2776	0	2776	0	0	5-8	5-8
J	2776	0	2776	0	0	5-8	5-8

UNFACTORED REACTIONS

1ST LCASE		MAX/MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
R	2047	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0
J	2047	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 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 = 3.20 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 80 LBS.

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

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

LOADING

TOTAL LOAD CASES: (4)

CHORDS					WEBS				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LOAD LC1 C/SI (LC)	MAX. UNBRAC	MEMB.	MAX. FACTORED FORCE (LBS)	MAX C/SI (LC)		
FR-TO		FROM TO		LENGTH	FR-TO				
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	Q-C	-219 / 133	0.09 (1)		
B-C	-3104 / 0	-124.4	-124.4 0.77 (1)	3.20	C-P	-561 / 0	0.71 (1)		
C-D	-2686 / 0	-124.4	-124.4 0.88 (1)	3.51	P-D	0 / 585	0.13 (1)		
D-E	-2370 / 0	-124.4	-124.4 0.34 (1)	4.14	D-N	0 / 433	0.10 (1)		
E-F	-2370 / 0	-124.4	-124.4 0.34 (1)	4.14	N-E	-637 / 0	0.35 (1)		
F-G	-2686 / 0	-124.4	-124.4 0.88 (1)	3.51	N-F	0 / 433	0.10 (1)		
G-H	-3104 / 0	-124.4	-124.4 0.77 (1)	3.20	M-F	0 / 585	0.13 (1)		
H-I	0 / 47	-124.4	-124.4 0.17 (1)	10.00	M-G	-561 / 0	0.71 (1)		
R-B	-2680 / 0	0.0	0.0 0.28 (1)	5.26	K-G	-219 / 133	0.09 (1)		
J-H	-2680 / 0	0.0	0.0 0.28 (1)	5.26	B-Q	0 / 2665	0.60 (1)		
					K-H	0 / 2665	0.60 (1)		
R-Q	0 / 0	-39.2	-39.2 0.27 (3)	10.00					
P-O	0 / 2622	-39.2	-39.2 0.59 (1)	10.00					
Q-P	0 / 2182	-39.2	-39.2 0.46 (1)	10.00					
O-N	0 / 2182	-39.2	-39.2 0.46 (1)	10.00					
N-M	0 / 2182	-39.2	-39.2 0.46 (1)	10.00					
M-L	0 / 2622	-39.2	-39.2 0.59 (1)	10.00					
L-K	0 / 2622	-39.2	-39.2 0.59 (1)	10.00					
K-J	0 / 0	-39.2	-39.2 0.27 (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 (1.06")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL) = L/999 (0.20")

CSI: TC=0.77/1.00 (G-H:1) , BC=0.59/1.00 (K-M:1) ,
WB=0.71/1.00 (G-M:1) , SSI=0.29/1.00 (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)	(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= 0.89 (K) (INPUT = 0.90)
JSI METAL= 0.82 (L) (INPUT = 1.00)

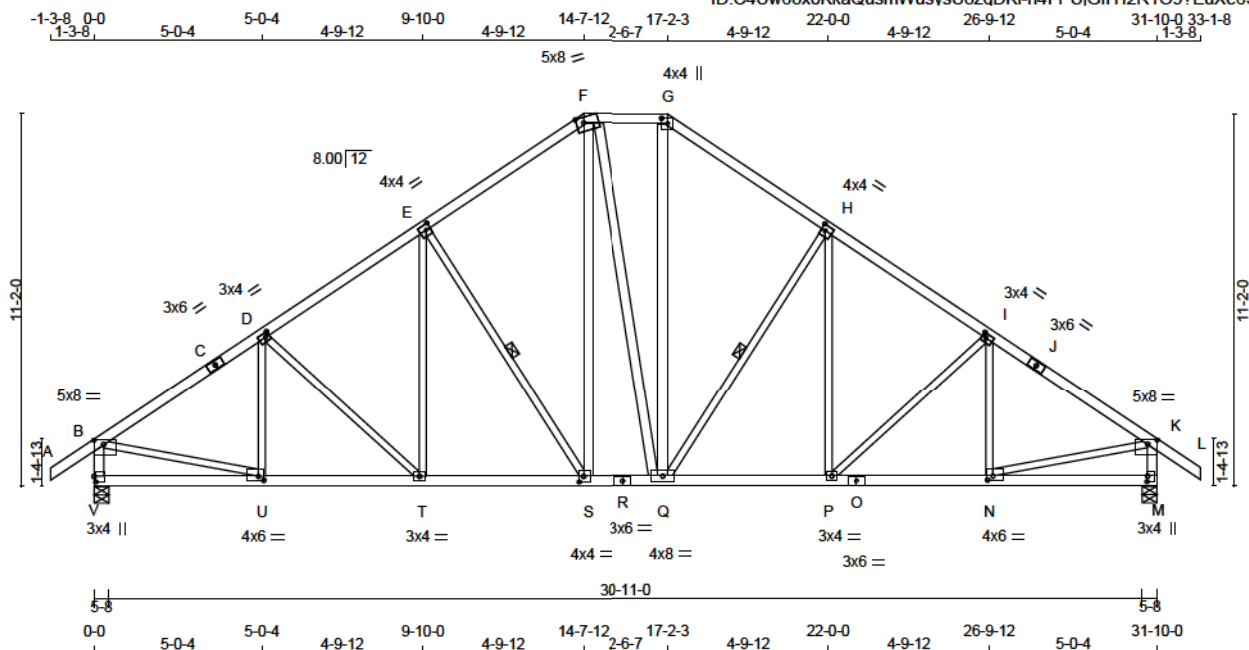


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



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



LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY No.2	SPF
C - 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 - R	2x4	DRY No.2	SPF
R - O	2x4	DRY No.2	SPF
O - M	2x4	DRY No.2	SPF
ALL WEBS	2x3	DRY No.2	SPF
EXCEPT			
S - F	2x4	DRY No.2	SPF
F - Q	2x4	DRY No.2	SPF
Q - G	2x4	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	5.0	8.0	1.50	3.50
C TS-t	MT20	3.0	6.0		
D TMVW-t	MT20	3.0	4.0	1.50	1.50
E TMVW-t	MT20	4.0	4.0	2.00	1.50
F TTWw-m	MT20	5.0	8.0	2.00	2.75
G TTWw-p	MT20	4.0	4.0	2.00	2.25
H TMVW-t	MT20	4.0	4.0	2.00	1.50
I TMVW-t	MT20	3.0	4.0	1.50	1.50
J TS-t	MT20	3.0	6.0		
K TMVW-p	MT20	5.0	8.0	1.50	3.50
M BMV1+p	MT20	3.0	4.0	2.00	0.25
N BMVW-t	MT20	4.0	6.0	1.50	2.00
O BS-t	MT20	3.0	6.0		
P BMVW-t	MT20	3.0	4.0		
Q BMVWw-t	MT20	4.0	8.0		
R BS-t	MT20	3.0	6.0		
S BMVW-t	MT20	4.0	4.0	2.00	1.75
T BMVW-t	MT20	3.0	4.0		
U BMVW-t	MT20	4.0	6.0	1.50	2.00
V BMV1+p	MT20	3.0	4.0	2.00	0.75

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT VERT	2776	2776	0	5-8
V	2776	2776	0	5-8
M	2776	2776	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX MIN COMPONENT REACTIONS	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT COMBINED	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0	0 / 0
V	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0	0 / 0
M	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 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 = 3.55 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-S, H-Q. DBS = 20-0-0. CBF = 109 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				U-D	-344 / 36	0.11 (1)	
A-B	0 / 47	-124.4	-124.4 0.17 (1)	D-T	-279 / 0	0.22 (1)	
B-C	-3057 / 0	-124.4	-124.4 0.52 (1)	T-E	0 / 409	0.09 (2)	
C-D	-3057 / 0	-124.4	-124.4 0.52 (1)	E-S	-870 / 0	0.50 (1)	
D-E	-2842 / 0	-124.4	-124.4 0.44 (1)	S-F	0 / 852	0.14 (1)	
E-F	-2306 / 0	-124.4	-124.4 0.41 (1)	F-Q	0 / 14	0.00 (1)	
F-G	-1904 / 0	-124.4	-124.4 0.14 (1)	Q-G	0 / 868	0.14 (1)	
G-H	-2310 / 0	-124.4	-124.4 0.41 (1)	H-I	-863 / 0	0.50 (1)	
H-I	-2841 / 0	-124.4	-124.4 0.44 (1)	I-J	0 / 401	0.09 (2)	
I-J	-3057 / 0	-124.4	-124.4 0.52 (1)	J-K	-281 / 0	0.22 (1)	
J-K	-3057 / 0	-124.4	-124.4 0.52 (1)	K-L	-342 / 37	0.11 (1)	
K-L	0 / 47	-124.4	-124.4 0.17 (1)	L-M	0 / 2028	0.58 (1)	
L-M	-2692 / 0	0.0	0.0 0.28 (1)	M-K	0 / 2629	0.59 (1)	
M-K	-2692 / 0	0.0	0.0 0.28 (1)				
V-U	0 / 0	-39.2	-39.2 0.17 (3)				
U-T	0 / 2569	-39.2	-39.2 0.51 (1)				
T-S	0 / 2364	-39.2	-39.2 0.48 (1)				
S-R	0 / 1901	-39.2	-39.2 0.41 (1)				
R-Q	0 / 1901	-39.2	-39.2 0.41 (1)				
Q-P	0 / 2363	-39.2	-39.2 0.48 (1)				
P-O	0 / 2570	-39.2	-39.2 0.52 (1)				
O-N	0 / 2570	-39.2	-39.2 0.52 (1)				
N-M	0 / 0	-39.2	-39.2 0.17 (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 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 (1.06")
CALCULATED VERT. DEFL.(LL)= L/999 (0.13")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL)= L/999 (0.21")

CSI: TC=0.52/1.00 (I-K:1), BC=0.52/1.00 (N-P:1),
WB=0.59/1.00 (K-N:1), SSI=0.24/1.00 (I-K: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 (G) (INPUT = 0.90)
JSI METAL = 0.72 (O) (INPUT = 1.00)



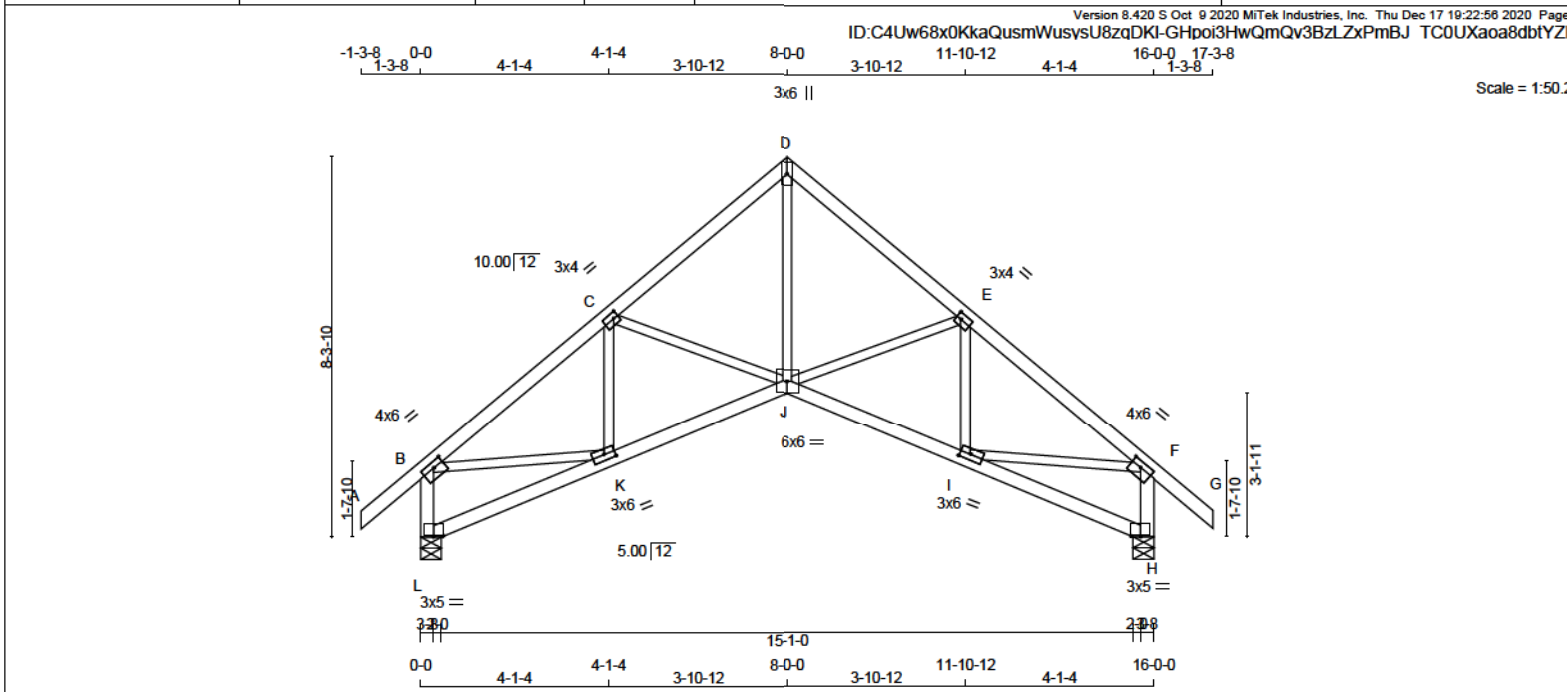
READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-1. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
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
L - B	2x4	DRY No.2	SPF
H - F	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
J - H	2x4	DRY No.2	SPF

ALL WEBS 2x3 DRY No.2

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	6.0	1.50	2.75
C	TMVW-t	MT20	3.0	4.0	1.50	1.25
D	TTW+p	MT20	3.0	6.0		
E	TMVW-t	MT20	3.0	4.0	1.50	1.25
F	TMVW-t	MT20	4.0	6.0	1.50	2.75
H	BVM1-p	MT20	3.0	5.0	Edge	
I	BMVW-t	MT20	3.0	6.0	1.50	2.75
J	BMVW-t	MT20	6.0	6.0		
K	BMVW-t	MT20	3.0	6.0	1.50	2.75
L	BVM1-p	MT20	3.0	5.0	Edge	

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

JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	BRG	REQRD
L	1482	0	1482	0	0	5-8	1-10	1-10
H	1482	0	1482	0	0	5-8	1-10	1-10

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
L	1088	653 / 0	168 / 0	0 / 0	0 / 0	267 / 0	0 / 0
H	1088	653 / 0	168 / 0	0 / 0	0 / 0	267 / 0	0 / 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 = 4.82 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)	FACTORED VERT. LOAD (PLF)	FACTORED LC1 MAX CSI (LC)
FR-TO				FR-TO			
A-B	0 / 55	-124.4	-124.4 0.17 (1)	10.00	J-D	0 / 1445	0.33 (1)
B-C	-1711 / 0	-124.4	-124.4 0.28 (1)	4.82	J-E	-273 / 0	0.08 (1)
C-D	-1453 / 0	-124.4	-124.4 0.27 (1)	5.15	I-E	-298 / 38	0.06 (1)
D-E	-1453 / 0	-124.4	-124.4 0.27 (1)	5.15	C-J	-273 / 0	0.08 (1)
E-F	-1711 / 0	-124.4	-124.4 0.28 (1)	4.82	K-C	-298 / 38	0.06 (1)
F-G	0 / 55	-124.4	-124.4 0.17 (1)	10.00	B-K	0 / 1344	0.30 (1)
L-B	-1415 / 0	0.0	0.0 0.16 (1)	6.85	I-F	0 / 1344	0.30 (1)
H-F	-1415 / 0	0.0	0.0 0.16 (1)	6.85			
L-K	0 / 8	-39.2	-39.2 0.14 (3)	10.00			
K-J	0 / 1448	-39.2	-39.2 0.31 (1)	10.00			
J-I	0 / 1448	-39.3	-39.3 0.31 (1)	10.00			
I-H	0 / 8	-39.2	-39.2 0.14 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.53")

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

ALLOWABLE DEFL.(TL)= L/360 (0.53")

CALCULATED VERT. DEFL.(TL) = L/999 (0.09")

CSI: TC=0.28/1.00 (E-F:1) , BC=0.31/1.00 (I-J:1) , WB=0.33/1.00 (D-J:1) , SSI=0.19/1.00 (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	650	371	1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (I) (INPUT = 0.80)

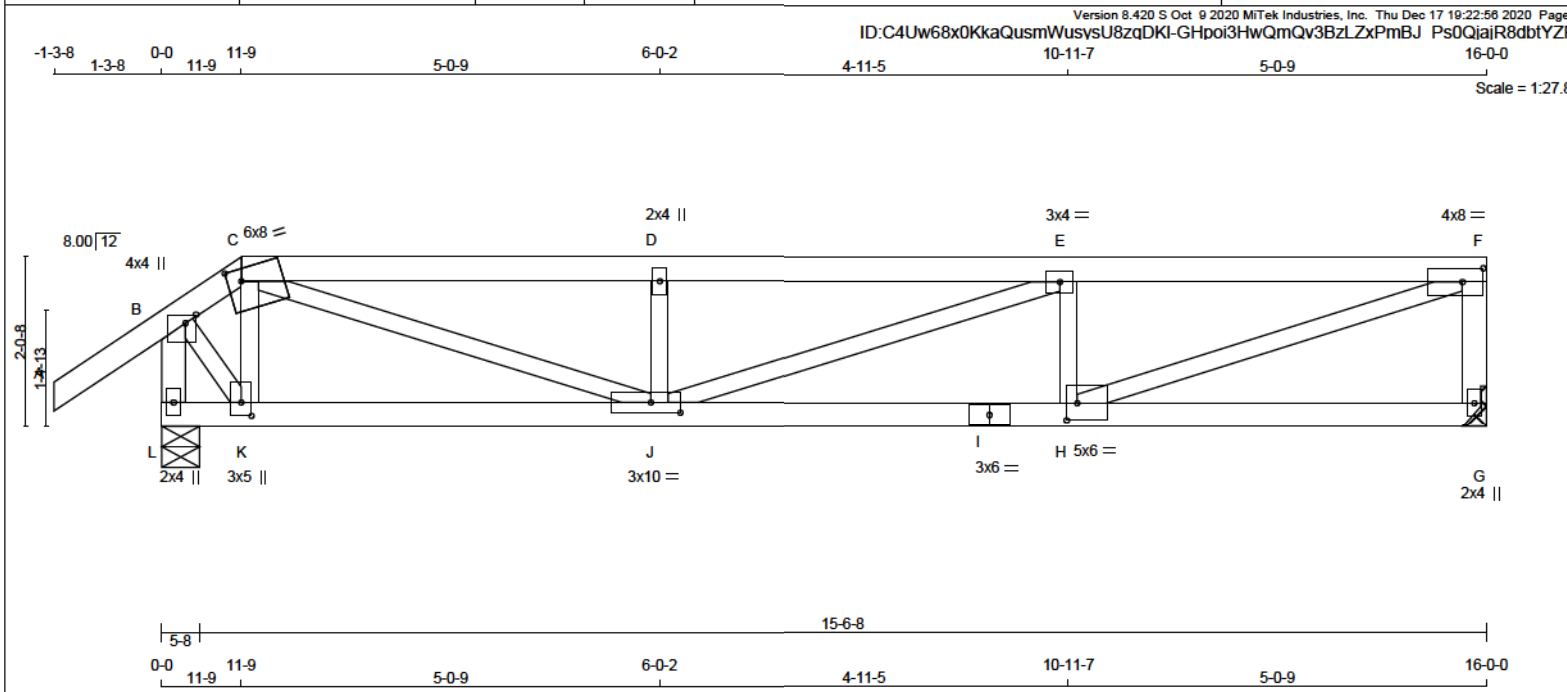
JSI METAL = 0.83 (L) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
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
G - I	2x4	DRY No.2	SPF
L - B	2x4	DRY No.2	SPF
L - I	2x4	DRY No.2	SPF
I - G	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	4.0	4.0	1.25	1.50
C	TTWW-m	MT20	6.0	8.0	1.75	2.00
D	TMVW-w	MT20	2.0	4.0		
E	TMVW-t	MT20	3.0	4.0		
F	TMVW-t	MT20	4.0	8.0	2.00	3.00
G	BMV1+p	MT20	2.0	4.0		
H	BMVW-t	MT20	5.0	6.0	2.50	1.50
I	BS-t	MT20	3.0	6.0		
J	BMVW-t	MT20	3.0	10.0	1.50	4.25
K	BMVW-t	MT20	3.0	5.0	2.00	1.50
L	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 1302	0	1302	0
G DOWN 1487	0	1487	0
L UP 1487	0	0	5-8

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

UNFACTORED REACTIONS

1ST CASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	965	553 / 0	168 / 0
G SNOW	1092	657 / 0	168 / 0
L LIVE			0 / 0
PERM. LIVE			0 / 0
WIND			0 / 0
DEAD			244 / 0
SOIL			0 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.53 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (PLF)
FR-TO A-B	0 / 47	-124.4	-124.4	10.00	K-C	-488 / 0	0.07 (1)
B-C	-940 / 0	-124.4	-124.4	6.17	C-J	0 / 2381	0.53 (1)
C-D	-2923 / 0	-124.4	-124.4	3.53	J-D	-864 / 0	0.10 (1)
D-E	-2923 / 0	-124.4	-124.4	3.56	H-E	0 / 185	0.04 (1)
E-F	-2749 / 0	-124.4	-124.4	3.64	H-E	-738 / 0	0.11 (1)
G-F	-1215 / 0	0.0	0.0	1.14 (1)	H-F	0 / 2909	0.65 (1)
L-B	-1573 / 0	0.0	0.0	0.16 (1)	B-K	0 / 1025	0.23 (1)
L-K	0 / 0	-39.2	-39.2	0.17 (2)			10.00
K-J	0 / 891	-39.2	-39.2	0.27 (2)			10.00
J-I	0 / 2749	-39.2	-39.2	0.56 (1)			10.00
I-H	0 / 2749	-39.2	-39.2	0.56 (1)			10.00
H-G	0 / 0	-39.2	-39.2	0.17 (3)			10.00

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

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

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 (0.53")
CALCULATED VERT. DEFL.(LL)= L/999 (0.15")
ALLOWABLE DEFL.(TL)= L/360 (0.53")
CALCULATED VERT. DEFL.(TL)= L/782 (0.25")

CSI: TC=0.58/1.00 (C-D-1), BC=0.58/1.00 (H-J-1),
WB=0.65/1.00 (F-H-1), SSI=0.29/1.00 (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 (F30) (FLI) (FLI)
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= 0.83 (I) (INPUT = 1.00)



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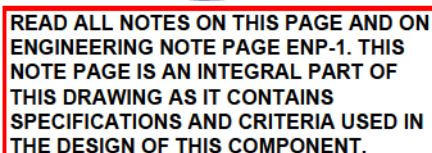
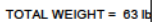


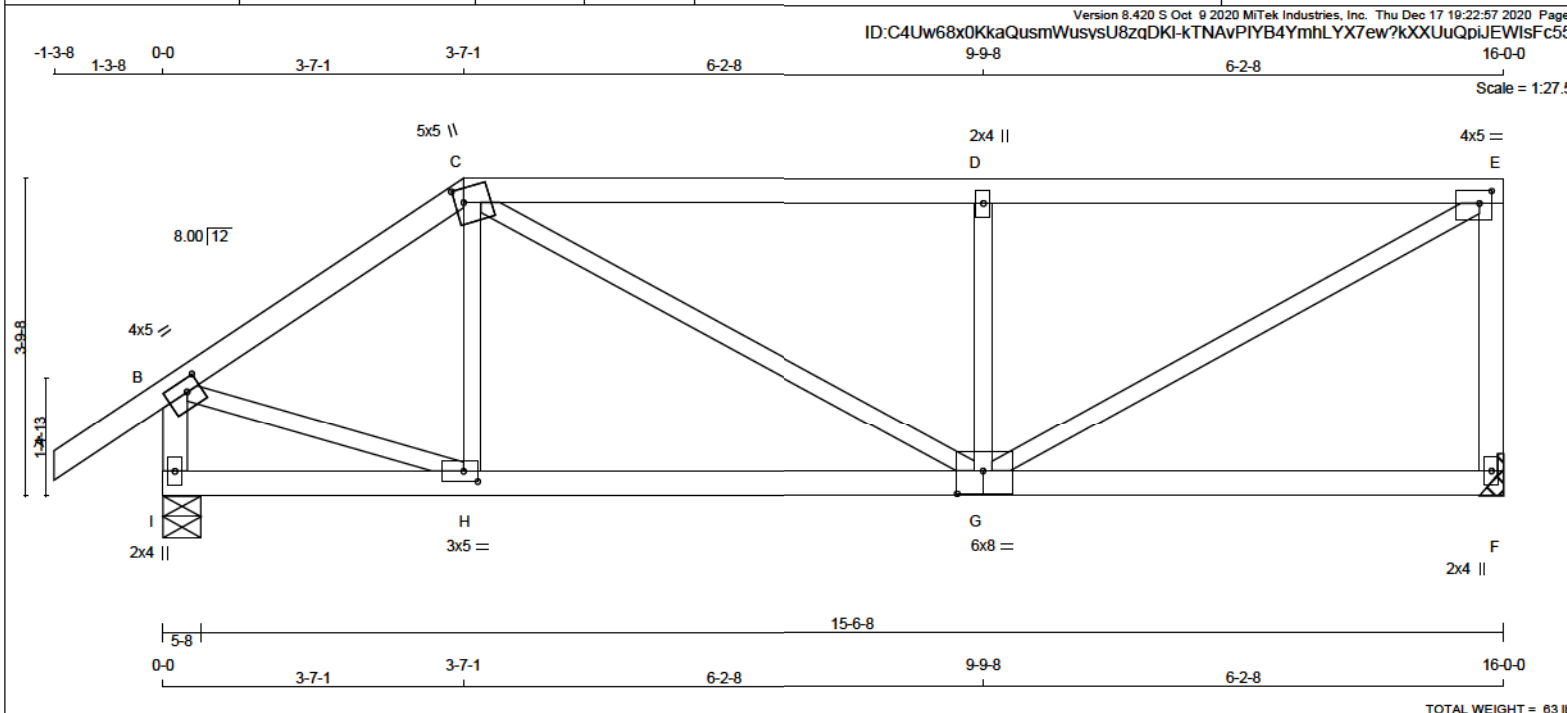
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



Scale = 1:27.8





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER DESCR.

A - C 2x4 DRY No.2 SPF

C - E 2x4 DRY No.2 SPF

F - E 2x4 DRY No.2 SPF

I - B 2x4 DRY No.2 SPF

I - G 2x4 DRY No.2 SPF

G - F 2x4 DRY No.2 SPF

ALL WEBS 2x3 DRY No.2 SPF

EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-t	MT20	4.0	5.0	1.75	2.00
C	TTWW+m	MT20	5.0	5.0	2.00	1.25
D	TMVW+w	MT20	2.0	4.0		
E	TMVW-t	MT20	4.0	5.0	1.75	1.75
F	BMV1+p	MT20	2.0	4.0		
G	BSWWW-I	MT20	6.0	8.0	3.25	3.75
H	BMWW-t	MT20	3.0	5.0	1.50	2.00
I	BMV1+p	MT20	2.0	4.0		

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
F	1309	0	1309	0
I	1480	0	1480	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
F	970	557 / 0	168 / 0
I	1087	652 / 0	168 / 0

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

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.56 FT.

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

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

LOADING

TOTAL LOAD CASES: (4)

C H O R D S				W E B S				
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (LC)		
FR-TO	0 / 47	-124.4 -124.4	0.17 (1)	10.00	H- C	-70 / 173	0.04 (3)	
A- B	-1311 / 0	-124.4 -124.4	0.31 (1)	5.27	C- G	0 / 571	0.13 (1)	
B- C	-1585 / 0	-124.4 -124.4	0.93 (1)	3.56	G- D	-953 / 0	0.22 (1)	
C- D	-1585 / 0	-124.4 -124.4	0.93 (1)	3.56	G- E	0 / 1820	0.41 (1)	
D- E	-1187 / 0	0.0	0.0	2.6 (1)	7.32	B- H	0 / 1135	0.28 (1)
F- E	-1443 / 0	0.0	0.0	0.15 (1)	6.81			
I- B								
I- H	0 / 0	-39.2	-39.2	0.26 (3)	10.00			
H- G	0 / 1087	-39.2	-39.2	0.38 (2)	10.00			
G- F	0 / 0	-39.2	-39.2	0.36 (3)	10.00			

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

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

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 088-14

- TPIC 2014

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

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

ALLOWABLE DEFL.(LL)= L/360 (0.53")

CALCULATED VERT. DEFL.(LL) = L/999 (0.11")

ALLOWABLE DEFL.(TL)= L/360 (0.53")

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

CSI: TC=0.93/1.00 (D-E-1) , BC=0.38/1.00 (G-H-2) ,

WB=0.41/1.00 (E-G-1) , SSI=0.37/1.00 (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

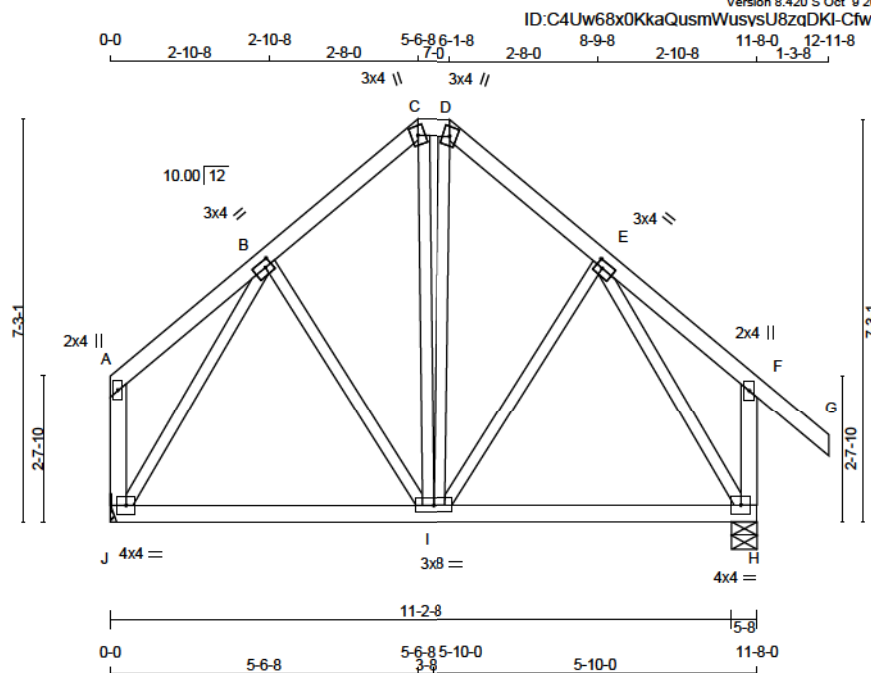
PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



TOTAL WEIGHT = 65 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
A	TMV+p	MT20	2.0	4.0		
B	TMWW-I	MT20	3.0	4.0	1.50	1.50
C	TTW+m	MT20	3.0	4.0		
D	TTW+m	MT20	3.0	4.0		
E	TMWW-I	MT20	3.0	4.0	1.50	1.50
F	TMV+p	MT20	2.0	4.0		
H	BMVW1-I	MT20	4.0	4.0		
I	BMWWWW*-MT20		3.0	8.0		
J	BMVW1-I	MT20	4.0	4.0		

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQD BRG
JT	VERT	HORZ	DOWN	HORZ
J	955	0	955	0
H	1127	0	1127	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
J	707	406 / 0	123 / 0	0 / 0	0 / 0	179 / 0	0 / 0
H	826	502 / 0	123 / 0	0 / 0	0 / 0	201 / 0	0 / 0

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

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 (LC1)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC1)
FR-TO		FROM	TO	FR-TO		FROM	TO
A-B	0 / 24	-124.4	-124.4 0.15 (1)	B-I	-48 / 53	0.02 (1)	0.40 (1)
B-C	-568 / 0	-124.4	-124.4 0.12 (1)	C-I	-855 / 0	0.40 (1)	0.40 (1)
C-D	-423 / 0	-124.4	-124.4 0.01 (1)	D-E	0 / 184	0.04 (2)	0.04 (2)
D-E	-568 / 0	-124.4	-124.4 0.12 (1)	E-H	-48 / 53	0.02 (1)	0.40 (1)
E-F	0 / 24	-124.4	-124.4 0.15 (1)	F-G	0 / 55	-124.4	-124.4 0.17 (1)
F-G	0 / 55	-124.4	-124.4 0.17 (1)	G-H	-136 / 0	0.0	0.0 0.02 (1)
G-H	-136 / 0	0.0	0.0 0.02 (1)	H-I	-308 / 0	0.0	0.0 0.04 (1)
H-I	-308 / 0	0.0	0.0 0.04 (1)	I-J	0 / 442	-39.2	-39.2 0.34 (3)
I-J	0 / 442	-39.2	-39.2 0.34 (3)	J-H	0 / 442	-39.2	-39.2 0.34 (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 088-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (0.39")
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")
ALLOWABLE DEFL.(TL)= L/360 (0.39")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.17/1.00 (F-G:1) , BC=0.34/1.00 (H-I:3) ,
WB=0.40/1.00 (E-H:1) , SSI=0.18/1.00 (H-I: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

AUTOSOLVE LEFT HEEL ONLY

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

NAIL VALUES

PLATE GRIP(DRY) SHEAR	SECTION
(PSI)	(PLI)
MAX MIN	MAX MIN
MT20	650 371 1747 758 1987 1573

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.86 (E) (INPUT = 0.90)
JSI METAL= 0.28 (E) (INPUT = 1.00)

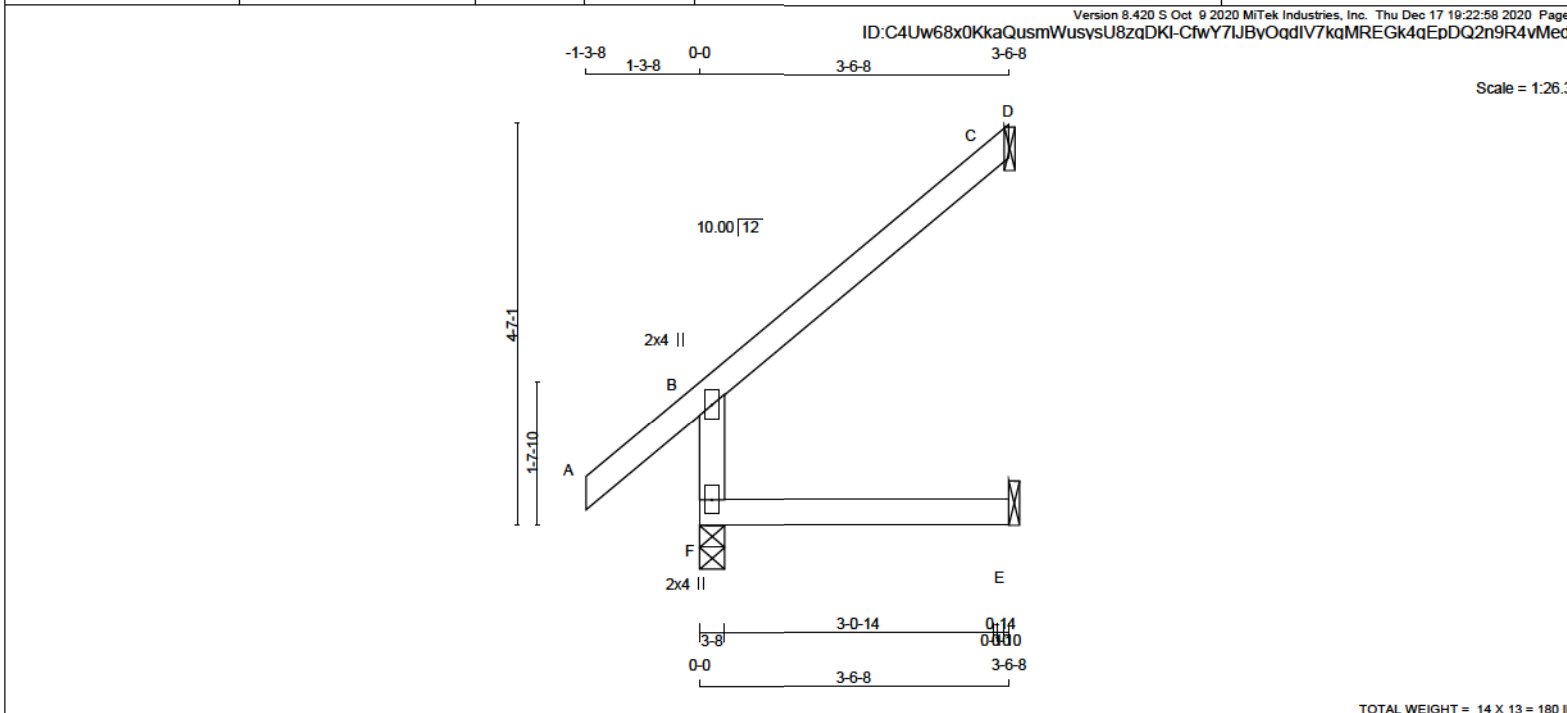


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



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 <table><tr><td>CHORDS</td><td>SIZE</td><td></td><td>LUMBER</td></tr><tr><td>A - D</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>F - B</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>F - E</td><td>2x4</td><td>DRY</td><td>No.2</td></tr></table> DESCR. SPF SPF SPF DRY: SEASONED LUMBER.	CHORDS	SIZE		LUMBER	A - D	2x4	DRY	No.2	F - B	2x4	DRY	No.2	F - E	2x4	DRY	No.2	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td>FACTORED</td><td>MAXIMUM FACTORED</td><td>INPUT</td><td>REQRD</td></tr><tr><td></td><td>GROSS REACTION</td><td>GROSS REACTION</td><td>BRG</td><td>BRG</td></tr><tr><td>JT</td><td>VERT</td><td>HORZ</td><td>DOWN</td><td>HORZ</td></tr><tr><td>F</td><td>516</td><td>0</td><td>516</td><td>0</td></tr><tr><td>E</td><td>61</td><td>0</td><td>78</td><td>0</td></tr><tr><td>C</td><td>164</td><td>0</td><td>164</td><td>0</td></tr></table> SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) E, C UNFACTORED REACTIONS <table><tr><td></td><td>1ST LCASE</td><td>MAX MIN</td><td>COMPONENT REACTIONS</td></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE PERM. LIVE WIND DEAD SOIL</td></tr><tr><td>F</td><td>372</td><td>245 / 0</td><td>42 / 0 0 / 0 0 / 0 85 / 0 0 / 0</td></tr><tr><td>E</td><td>56</td><td>0 / 0</td><td>33 / 0 0 / 0 0 / 0 23 / 0 0 / 0</td></tr><tr><td>C</td><td>114</td><td>90 / 0</td><td>0 / 0 0 / 0 0 / 0 24 / 0 0 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F BRACING TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED. ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED. LOADING TOTAL LOAD CASES: (5) <table><tr><td colspan="4">CHORDS</td><td colspan="4">WEBS</td></tr><tr><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>FACTORED VERT. LOAD (PLF)</td><td>FACTORED L1 MAX (LC) (LC)</td><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>MAX. FACTORED FORCE (LBS)</td><td>MAX. 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LIVE WIND DEAD SOIL	F	372	245 / 0	42 / 0 0 / 0 0 / 0 85 / 0 0 / 0	E	56	0 / 0	33 / 0 0 / 0 0 / 0 23 / 0 0 / 0	C	114	90 / 0	0 / 0 0 / 0 0 / 0 24 / 0 0 / 0	CHORDS				WEBS				MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX (LC) (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED FORCE (LBS)	MAX. 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Dec 16, 2020

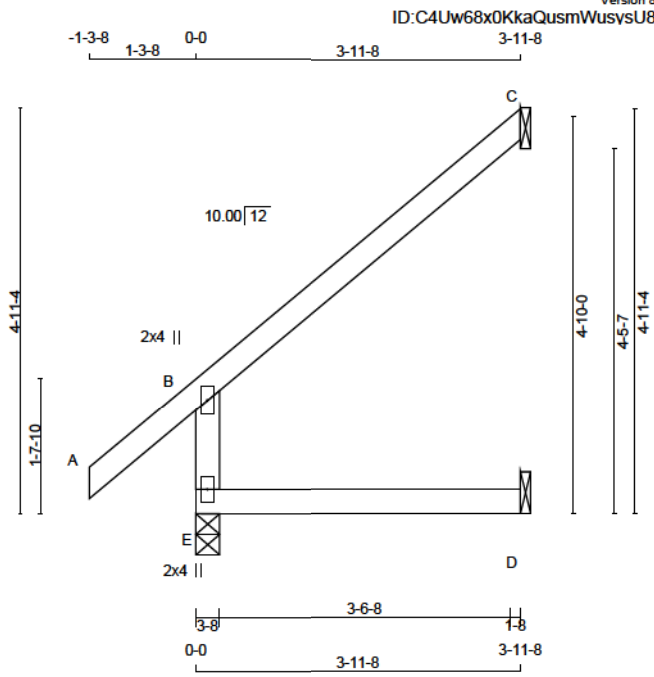
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

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

BEARINGS

	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ
C	185	0	185	0
E	567	0	567	0
D	68	0	68	0

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

UNFACTORED REACTIONS

JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	127	103 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0
E	410	269 / 0	47 / 0	0 / 0	0 / 0	94 / 0	0 / 0
D	62	0 / 0	36 / 0	0 / 0	0 / 0	25 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, 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)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO		FR-TO			
A-B	0 / 55	-124.4 -124.4	0.19 (5)	10.00			
B-C	-39 / 0	-124.4 -124.4	0.33 (1)	6.25			
E-B	-480 / 0	0.0	0.0	0.08 (3)	7.81		
E-D	0 / 0	-39.2 -39.2	0.12 (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

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

THIS DESIGN COMPLIES WITH:
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- PART 9 OF OBC 2012 (2019 AMENDMENT)
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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")
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CSI: TC=0.33/1.00 (B-C:1) , BC=0.12/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.18/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.33 (B) (INPUT = 0.80)
JSI METAL = 0.26 (B) (INPUT = 1.00)



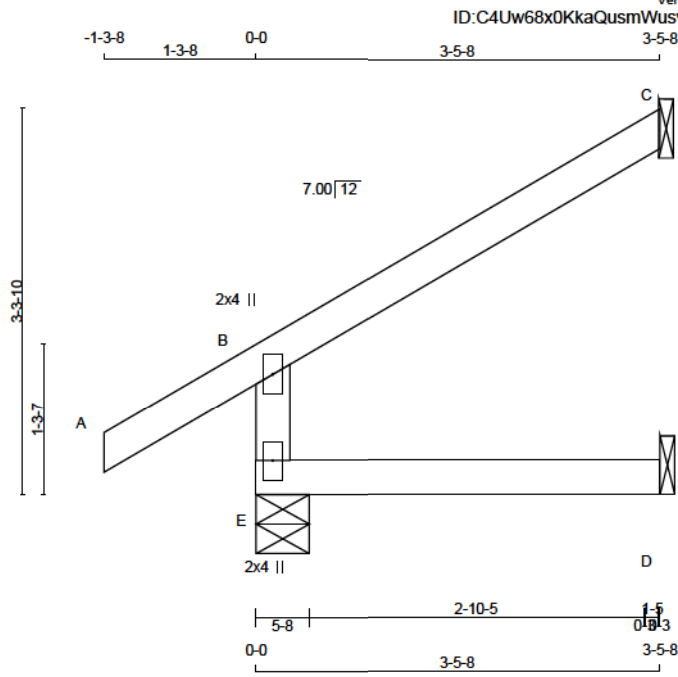
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Sewage System			
Zoning			





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - C	2x4	DRY	No.2
E - B	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		
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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
C	162	162	0	1-8
E	516	516	0	5-8
D	59	74	0	1-8

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN	COMPONENT REACTIONS
C	111	90 / 0	0 / 0
E	372	245 / 0	41 / 0
D	53	0 / 0	31 / 0

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

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED HORZ. LOAD (LC)
FR-TO				FR-TO			
A-B	0 / 43	-124.4	-124.4 (5)	A-B	0 / 0	0 / 0	10.00
B-C	-27 / 0	-124.4	-124.4 (1)	B-C	0 / 0	0 / 0	6.25
E-B	-439 / 0	0.0	0.0 (3)	E-B	0 / 0	0.06	7.81
E-D	0 / 0	-39.2	-39.2 (3)	E-D	0 / 0	0.09	10.00

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

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

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- TPIC 2014

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

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

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

CSI: TC=0.25/1.00 (B-C:1) , BC=0.09/1.00 (D-E:3) , WB=0.00/1.00 (n/a:0) , SSI=0.18/1.00 (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

AUTOSOLVE RIGHT HEEL ONLY

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= 0.25 (B) (INPUT = 0.80)
JSI METAL = 0.20 (B) (INPUT = 1.00)



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



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

1) ENSURE TRUSS HAS BEEN DESIGNED WITH ADDITIONAL TOP CHORD DEAD LOAD EQUAL TO OR GREATER THAN WEIGHT OF SOLAR PANELS BEING INSTALLED

2) ATTACH SOLAR PANELS TO EACH TRUSS LOCATED UNDER THE SOLAR PANELS (I.E. @ 24" C/C PERPENDICULAR TO THE TRUSS DIRECTION)

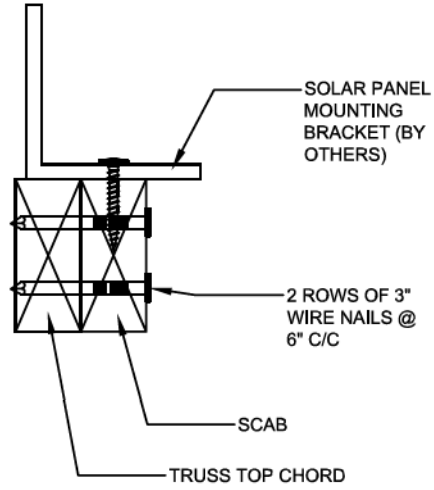
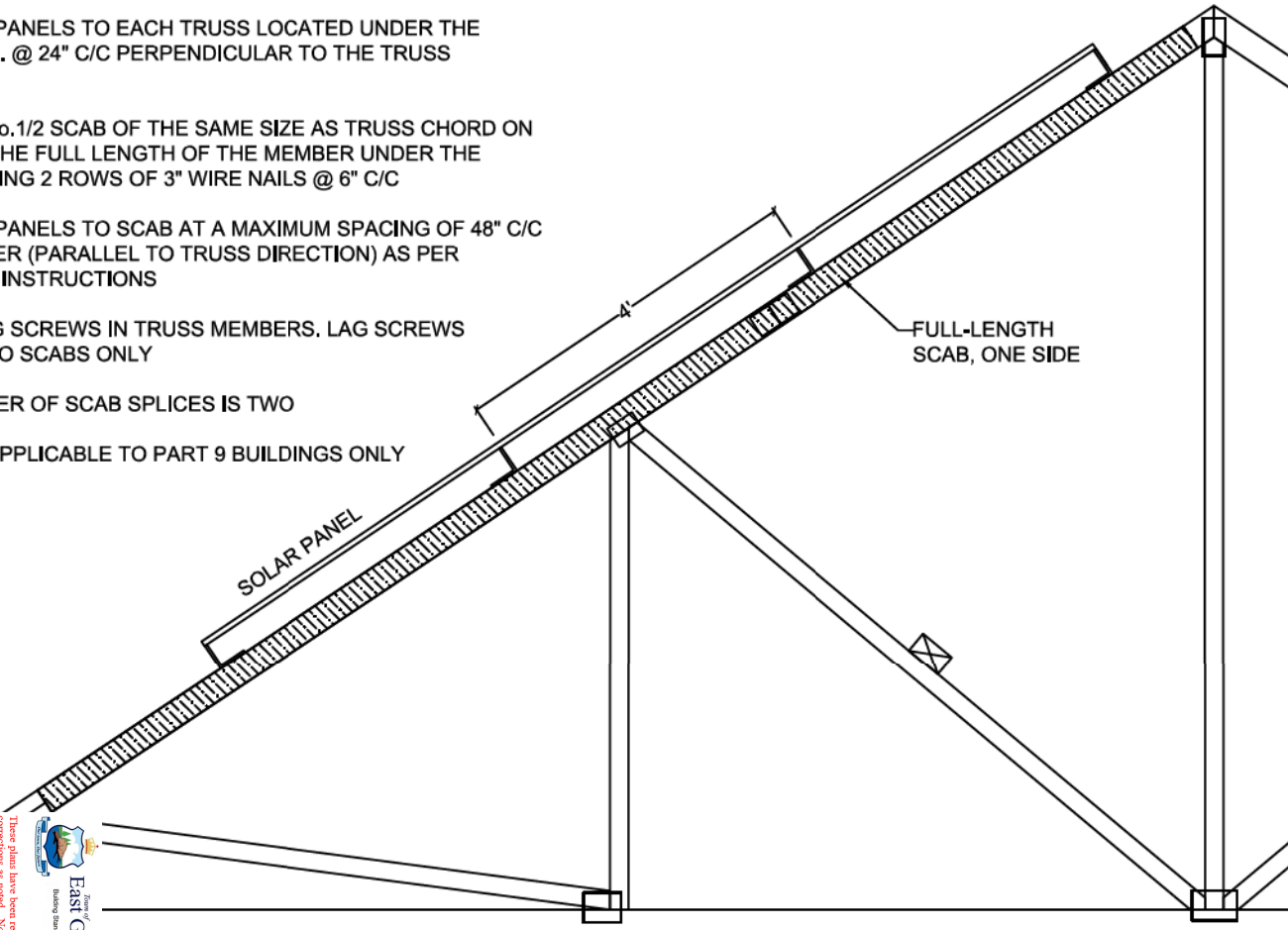
3) ATTACH A SPF No.1/2 SCAB OF THE SAME SIZE AS TRUSS CHORD ON ONE SIDE ALONG THE FULL LENGTH OF THE MEMBER UNDER THE SOLAR PANELS USING 2 ROWS OF 3" WIRE NAILS @ 6" C/C

4) ATTACH SOLAR PANELS TO SCAB AT A MAXIMUM SPACING OF 48" C/C ALONG THE MEMBER (PARALLEL TO TRUSS DIRECTION) AS PER MANUFACTURER'S INSTRUCTIONS

5) DO NOT USE LAG SCREWS IN TRUSS MEMBERS. LAG SCREWS SHOULD ATTACH TO SCABS ONLY

6) MAXIMUM NUMBER OF SCAB SPLICES IS TWO

7) THIS DETAIL IS APPLICABLE TO PART 9 BUILDINGS ONLY



There is a plan has been prepared for use with the correction as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with the Building Code of Ontario, Part 9, and the approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

East Gwillimbury
Building Standards Branch (BCN) Permit

Discipline	Reviewer	BCN	Date
Building Code	H. A. El-Masri	4228	2021.02.09
Seismic System			
Zone			

NE1220-112
GREENPARK - TRINAR HALL -
GLENWAY 3A ELE 2

Detail for Installation of Solar Panels - Scab Method



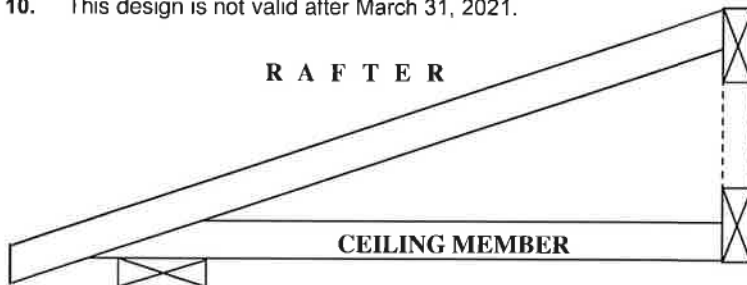
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

B97791H1

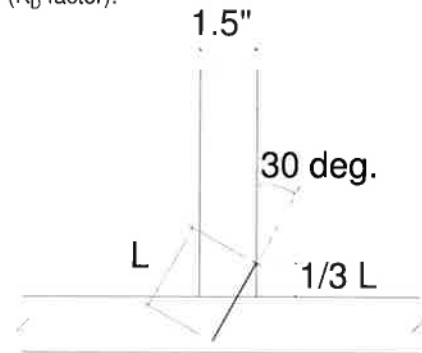
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL LATERAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	132	147
	3.25	0.144	132	147
	3.50	0.160	159	177
COMMON SPIRAL	3.00	0.122	97	108
	3.25	0.122	97	108
	3.50	0.152	145	162

NOTES:

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



G
I
R
D
E
R



TOE-NAIL INSTALLATION

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

MiTek

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



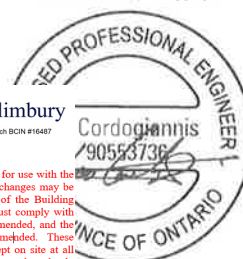
Town of
East Gwillimbury
Building Standards Branch BCIN #16487

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December

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

PEO
Certificate No. 10889485



NE1220-112
GREENPARK - TRINAR HALL -
GLENWAY 3A ELE 2

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

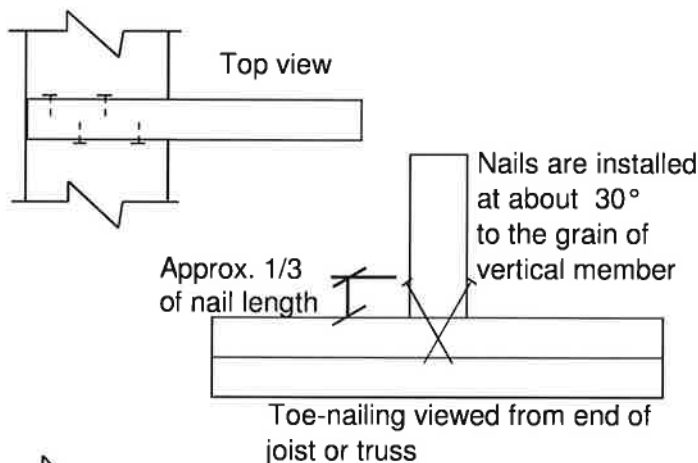
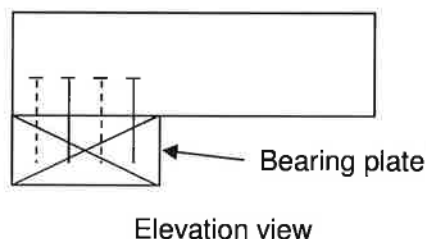
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

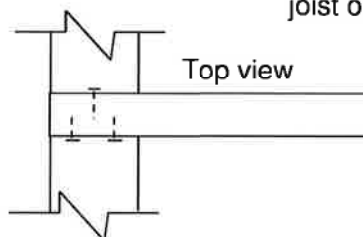
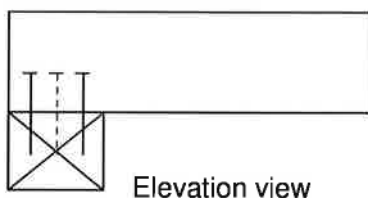
NOTES:

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

Toe-nailing on 2x6 Bearing Plate



Toe-nailing on 2x4 Bearing Plate



MiTek

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



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			