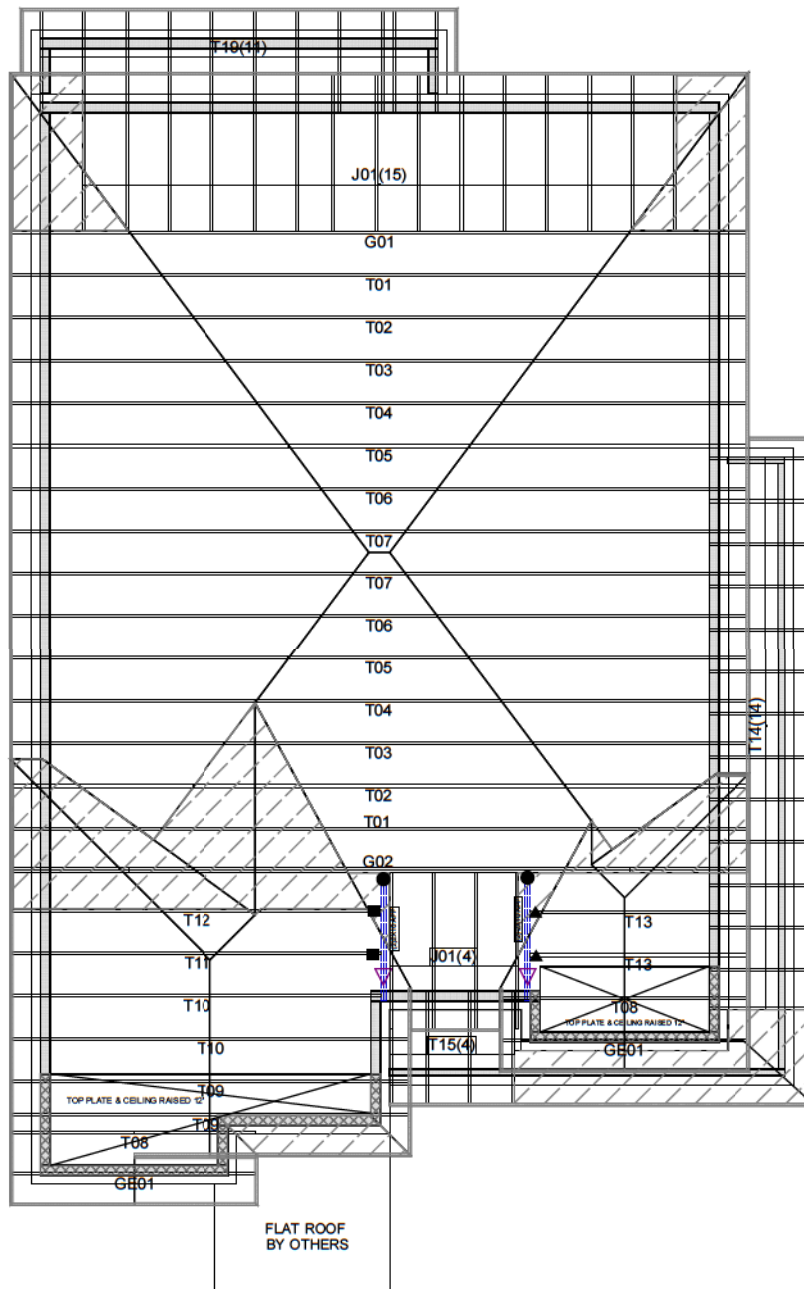




Hanger Name	Symbol	QTY
LUS24	▲	2
LJS26DS	■	2
HGUS26-2	●	2

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. Author	43236	2021-02-03
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 #	T20-00772
Address	LOT 31 TRINAR HALL EAST GWILLIMBURY, ON
Model	GLENWAY 3A ELEV 3
Sales Rep	RALPH MIRIGELLO
Designer	DM
Date	12/17/2020
Path	C:\DATA\JOBS\GREENPARK\TRINAR HALL\MODELS\LOT 31\T-4.OF.30A

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	2021-02-03
Sewage System			
Zoning			

NE1220-132

GREENPARK - TRINAR HALL - LOT 31

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")**

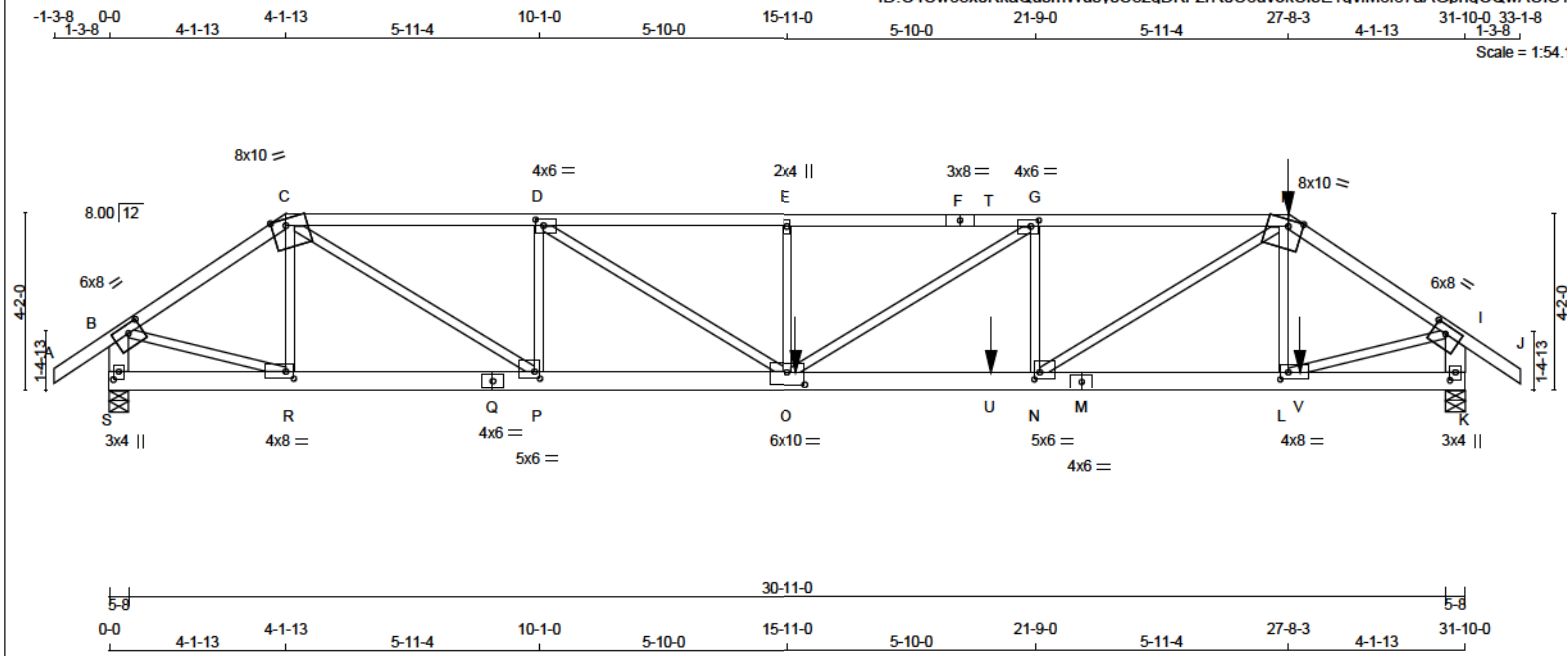
SUPPORTS

- 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.

Version 8.420 S Oct 9 2020 MiTek Industries, Inc. Sat Dec 19 21:01:14 2020 Page 1
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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	2100F 1.8E	SPF
F - H	2x4	DRY	2100F 1.8E	SPF
H - J	2x4	DRY	No.2	SPF
S - B	2x6	DRY	No.2	SPF
K - I	2x6	DRY	No.2	SPF
S - Q	2x6	DRY	2100F 1.8E	SPF
Q - M	2x6	DRY	2100F 1.8E	SPF
M - K	2x6	DRY	2100F 1.8E	SPF
ALL WEBS	2x3	DRY	No.2	SPF

EXCEPT
DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

CHORDS#ROWS	SURFACE SPACING (IN)	LOAD(PLF)
TOP CHORDS : (0.122"x3") SPIRAL NAILS		
A - C	12	TOP
C - F	12	SIDE(51.2)
F - H	12	SIDE(51.2)
H - J	12	SIDE(0.0)
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	SIDE(22.0)

WEBS : (0.122"x3") SPIRAL NAILS
2x3 1 6

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3/8 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	4749	4749	0	5-8
S	6432	6432	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	3507	2045 / 0	585 / 0
S	4780	2745 / 0	816 / 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 = 2.90 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. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.09 (1)	10.00	R-C	-833 / 0	0.11 (1)
B-C	-5689 / 0	-124.4	-124.4 0.36 (1)	3.78	C-P	0 / 6356	0.79 (1)
C-D	-10065 / 0	-124.4	-124.4 0.43 (1)	3.43	P-D	-3222 / 0	0.42 (1)
D-E	-13831 / 0	-124.4	-124.4 0.62 (1)	3.02	D-O	0 / 4492	0.56 (1)
E-F	-13831 / 0	-226.8	-226.8 0.74 (1)	2.90	O-E	-981 / 0	0.13 (1)
F-T	-13831 / 0	-226.8	-226.8 0.74 (1)	2.90	O-G	0 / 2217	0.27 (1)
T-G	-13831 / 0	-124.4	-124.4 0.74 (1)	2.90	N-G	-2236 / 0	0.29 (1)
G-H	-11972 / 0	-124.4	-124.4 0.84 (1)	3.19	N-H	0 / 6620	0.82 (1)
H-I	-7695 / 0	-124.4	-124.4 0.49 (1)	3.19	L-H	-221 / 166	0.03 (1)
I-J	0 / 47	-124.4	-124.4 0.09 (1)	10.00	B-R	0 / 4853	0.60 (1)
S-B	-4703 / 0	0.0	0.0 0.17 (1)	6.67	L-I	0 / 6566	0.81 (1)
K-I	-8211 / 0	0.0	0.0 0.22 (1)	5.95			
S-R	0 / 0	-39.2	-39.2 0.03 (2)	10.00			
R-Q	0 / 4702	-39.2	-39.2 0.16 (1)	10.00			
Q-P	0 / 4702	-39.2	-39.2 0.16 (1)	10.00			
P-O	0 / 10065	-39.2	-39.2 0.31 (1)	10.00			
O-U	0 / 11972	-81.8	-81.8 0.49 (1)	10.00			
U-N	0 / 11972	-39.2	-39.2 0.49 (1)	10.00			
N-M	0 / 6386	-39.2	-39.2 0.23 (1)	10.00			
M-L	0 / 6386	-39.2	-39.2 0.23 (1)	10.00			
L-V	0 / 0	-74.0	-74.0 0.07 (1)	10.00			
V-K	0 / 0	-74.0	-74.0 0.07 (1)	10.00			

FACTORED CONCENTRATED LOADS (LBS)

JT	LOC.	LC1	MAX-	MAX+	FACE	DIR.	TYPE	HEEL	CONN.
H	27-8-3	-387	-387	---	FRONT	VERT	TOTAL	---	C1
O	16-1-8	-2200	-2200	---	FRONT	VERT	TOTAL	---	C1
U	20-8-8	-1100	-1100	---	FRONT	VERT	TOTAL	---	C1
V	27-11-8	-1100	-1100	---	FRONT	VERT	TOTAL	---	C1

CONNECTION REQUIREMENTS

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

DESIGN CRITERIA

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

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

SPACING = 24.0 IN C/C

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

GIRDER TYPE: CPrimeHip
SIDE SETBACK = 4'-1-13
END SETBACK = 6'-0-0
END WALL WIDTH = 5'-8
CORNER FRAMING TYPE: CONVENTIONAL
END JACK TYPE: CONVENTIONAL
APPLIED TO FRONT SIDE
- ADDTL LOADS BASED ON 55 % OF GSL
LOADS APPLIED TO FIRST 4'-1-13 OF SPAN MEASURED FROM THE RIGHT.

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

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

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

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

ALLOWABLE DEFL (LL) = L/360 (1.06")
CALCULATED VERT. DEFL (LL) = L/998 (0.32")
ALLOWABLE DEFL (TL) = L/360 (1.06")
CALCULATED VERT. DEFL (TL) = L/707 (0.54")

CSI: TC=0.74/1.00 (E-G-1), BC=0.49/1.00 (N-O-1), WB=0.82/1.00 (H-N-1), SSI=0.40/1.00 (K-L-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

CONTINUED ON PAGE 2



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



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



PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	Y X
B	TMVW-t	MT20	6.0	8.0	2.25 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	6.0	8.0	2.25 3.75
K	BMV1+p	MT20	3.0	4.0	2.25 1.50
L	BMWW-t	MT20	4.0	8.0	2.00 2.25
M	BS-t	MT20	4.0	6.0	
N	BMWW-t	MT20	5.0	6.0	2.00 1.50
O	BMWWW-t	MT20	6.0	10.0	3.50 5.00
P	BMWW-t	MT20	5.0	6.0	2.00 1.50
Q	BS-t	MT20	4.0	6.0	
R	BMWW-t	MT20	4.0	8.0	2.00 2.25
S	BMV1+p	MT20	3.0	4.0	2.25 1.50

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (S) (INPUT = 0.60)
JSI METAL= 0.82 (Q) (INPUT = 1.00)

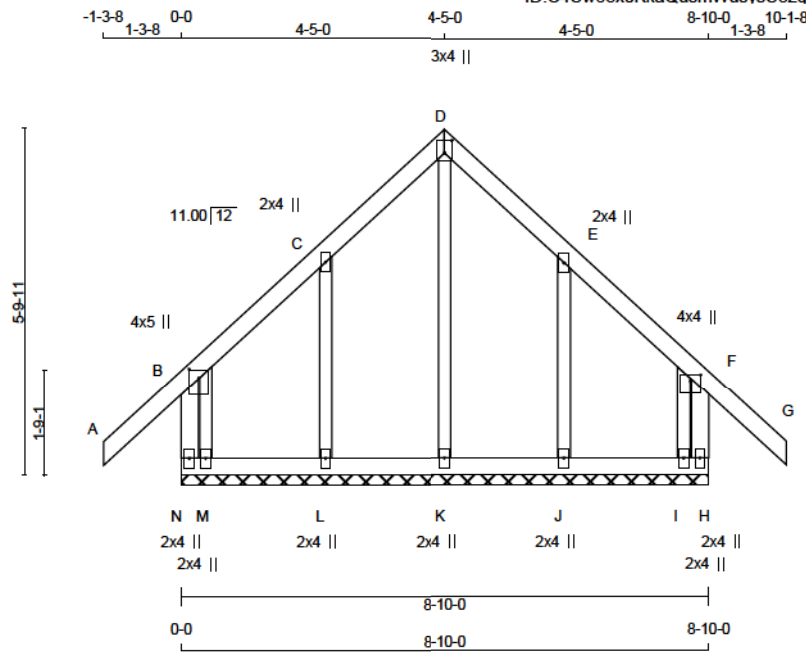
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Sewage System			
Zoning			





Scale = 1:38.5

TOTAL WEIGHT = 2 X 44 = 87 LB

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

PLATES (table is in inches)					
JT	TYPE	PLATES	W	LEN	X
B	TMVW+p	MT20	4.0	5.0	1.75 2.00
C	TMVW+w	MT20	2.0	4.0	
D	TTW+p	MT20	3.0	4.0	2.50 1.50
E	TMVW+w	MT20	2.0	4.0	
F	TMVW+p	MT20	4.0	4.0	1.25 2.00
H	BMV1+p	MT20	2.0	4.0	
I, J, K, L, M					
I	BMV1+w	MT20	2.0	4.0	
N	BMV1+p	MT20	2.0	4.0	

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 (LC)	MAX. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)
FR-TO		FROM TO			K-D		
N-B	-296 / 0	0.0	0.0 0.03 (1)	7.81	K-D	-241 / 0	0.12 (1)
A-B	0 / 58	-124.4 -124.4 0.17 (1)	10.00		L-C	-267 / 0	0.06 (1)
B-C	-22 / 0	-124.4 -124.4 0.08 (1)	6.25		M-B	-40 / 0	0.01 (1)
C-D	-12 / 0	-124.4 -124.4 0.07 (1)	6.25		J-E	-267 / 0	0.06 (1)
D-E	-12 / 0	-124.4 -124.4 0.07 (1)	6.25		I-F	-40 / 0	0.01 (1)
E-F	-22 / 0	-124.4 -124.4 0.08 (1)	6.25				
F-G	0 / 58	-124.4 -124.4 0.17 (1)	10.00				
H-F	-296 / 0	0.0	0.0 0.03 (1)	7.81			
N-M	0 / 25	-39.2 -39.2 0.03 (1)	10.00				
M-L	0 / 14	-39.2 -39.2 0.03 (3)	10.00				
L-K	0 / 7	-39.2 -39.2 0.03 (3)	10.00				
K-J	0 / 7	-39.2 -39.2 0.03 (3)	10.00				
J-I	0 / 14	-39.2 -39.2 0.03 (3)	10.00				
I-H	0 / 25	-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

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

CSI: TC=0.17/1.00 (A-B:1) , BC=0.03/1.00 (I-J:3) ,
WB=0.12/1.00 (D-K:1) , 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

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.

J31 GRIP= 0.34 (D) (INPUT = 0.80)
J31 METAL= 0.14 (C) (INPUT = 1.00)



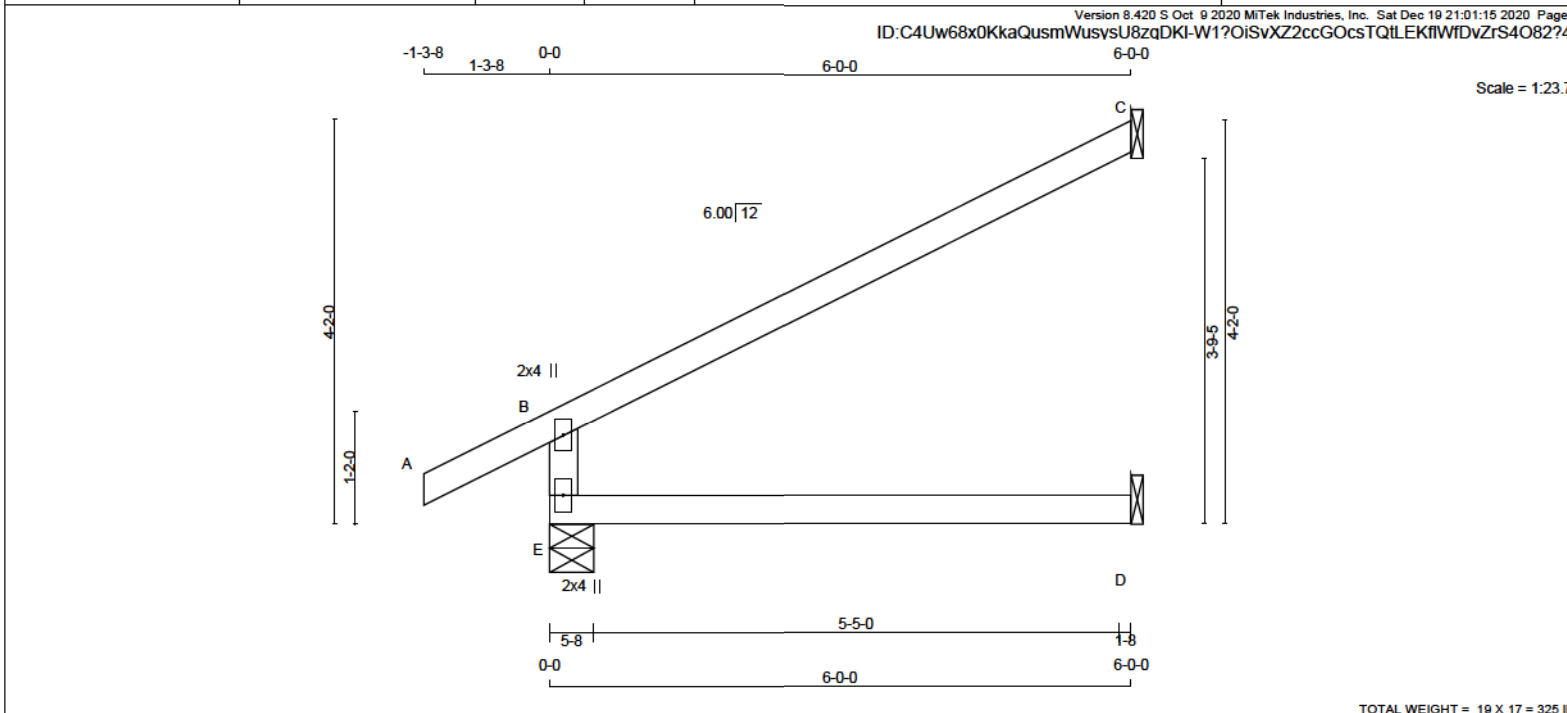
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Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

CHORDS SIZE LUMBER

E - B 2x4 DRY No.2

A - C 2x4 DRY No.2

E - D 2x4 DRY No.2

DRY: SEASONED LUMBER.

DESCR.

SPF

SPF

SPF

PLATES (table is in inches)

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

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

BEARINGS

JT	FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
	VERT	HORZ	DOWN	HORZ
E	774	0	774	0
C	280	0	280	0
D	97	0	123	0

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

UNFACTORED REACTIONS

JT	1ST LCASE	MAX MIN COMPONENT REACTIONS	WIND	DEAD	SOIL
	COMBINED	SNOW	LIVE	PERM. LIVE	
E	563	355 / 0	74 / 0	0 / 0	133 / 0
C	193	157 / 0	0 / 0	0 / 0	36 / 0
D	88	0 / 0	52 / 0	0 / 0	36 / 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)

C H O R D S				W E B S			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	FACTORED L1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	MEMB.
FR-TO				FR-TO			
E-B	-635 / 0	0.0	0.0 0.24 (3)	E-B	-635 / 0	0.0	0.0 0.24 (3)
A-B	0 / 38	-124.4	-124.4 0.16 (1)	A-B	0 / 38	-124.4	-124.4 0.16 (1)
B-C	-42 / 0	-124.4	-124.4 0.76 (1)	B-C	-42 / 0	-124.4	-124.4 0.76 (1)
E-D	0 / 0	-39.2	-39.2 0.24 (3)	E-D	0 / 0	-39.2	-39.2 0.24 (3)

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 34.8 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.3 PSF

TOTAL LOAD = 60.6 PSF

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, ABC 2019

- PART 9 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

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/380 (0.20")

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

ALLOWABLE DEFL.(TL)= L/380 (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

AUTOSOLVE RIGHT HEEL ONLY

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

NAIL VALUES

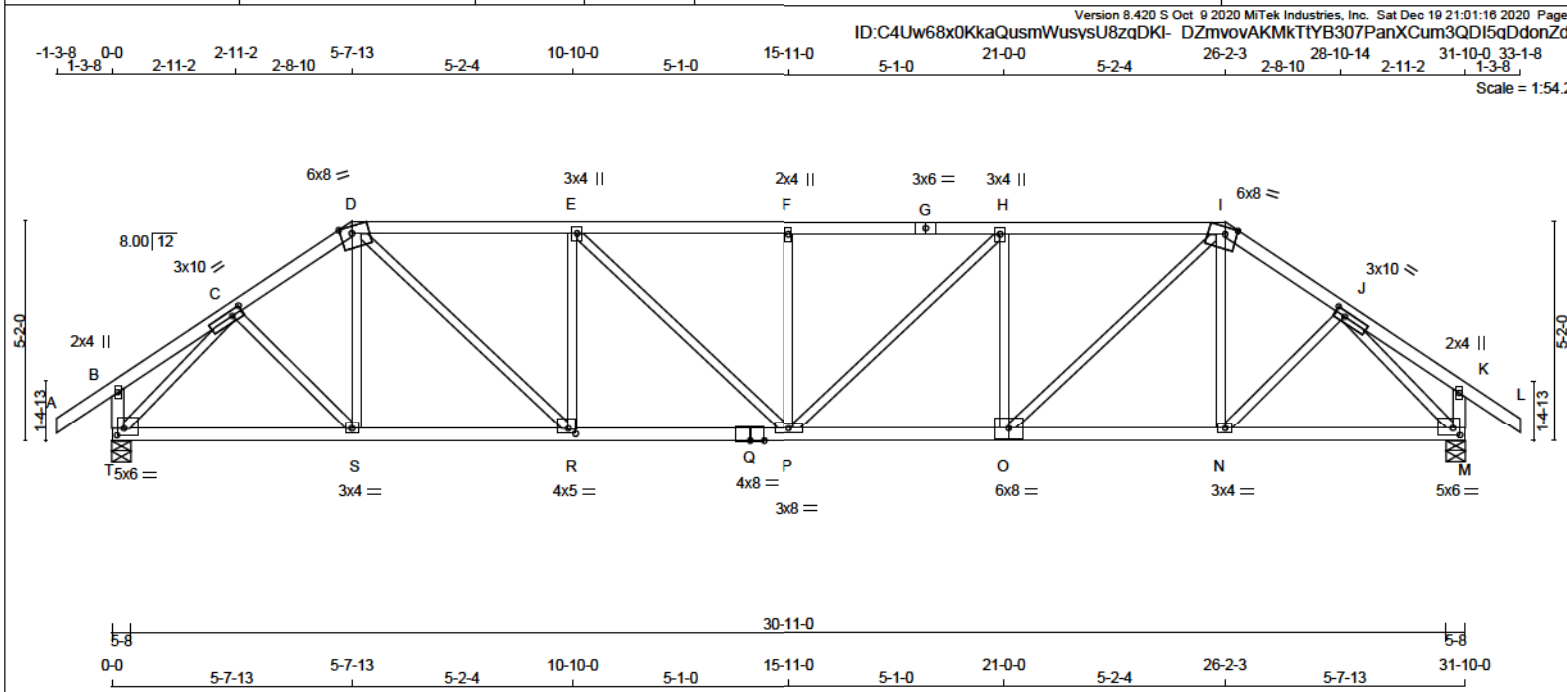
PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PL) (PL)

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

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



LUMBER

N. L. G. A. RULES	CHORDS	SIZE	LUMBER	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	2x3	DRY	No.2	SPF
EXCEPT				

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

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1204	0	334
T COMBINED	1204	0	334
M COMBINED	1204	0	334

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)	FACTORED MAX CSI (LC)	
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 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 (0.22")
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.

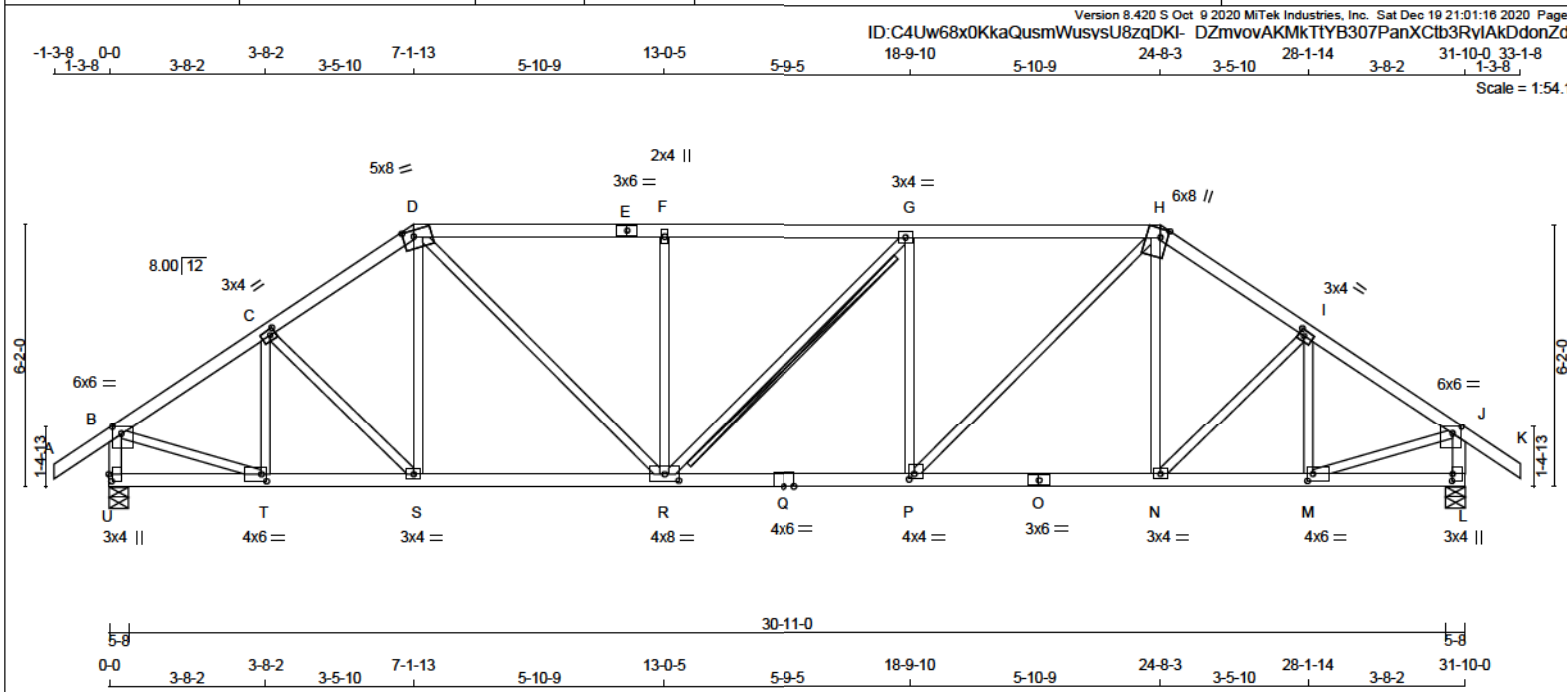
JSI GRIP= 0.90 (H) (INPUT = 0.90)
JSI METAL = 0.83 (Q) (INPUT = 1.00)



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





LUMBER
N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
A - D	2x4	DRY No.2	SPF
D - E	2x4	DRY No.2	SPF
E - H	2x4	DRY No.2	SPF
H - K	2x4	DRY No.2	SPF
U - B	2x4	DRY No.2	SPF
L - J	2x4	DRY No.2	SPF
U - Q	2x4	DRY No.2	SPF
Q - O	2x4	DRY No.2	SPF
O - L	2x4	DRY No.2	SPF
ALL WEBS EXCEPT	2x3	DRY No.2	SPF

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
B	TMVW-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	TS-t	MT20	3.0	6.0		
F	TMVW-w	MT20	2.0	4.0		
G	TMVW-t	MT20	3.0	4.0		
H	TTWW+m	MT20	6.0	8.0	Edge 2.00	
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

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	2776	0	5-8
U L	2776	0	5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1204	0	334
U	1204	0	334

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.80 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. UNBRACED LENGTH (FT)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH (FT)	MEMB.
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)	2.84	D-R	0 / 1434	0.32 (1)
E-F	-3497 / 0	-124.4	-124.4 0.92 (1)	2.84	R-F	-783 / 0	0.47 (1)
F-G	-3497 / 0	-124.4	-124.4 0.92 (1)	2.81	R-G	-4 / 0	0.00 (1)
G-H	-3499 / 0	-124.4	-124.4 0.93 (1)	2.80	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 (L) (INPUT = 0.90)
JSI METAL = 0.88 (O) (INPUT = 1.00)



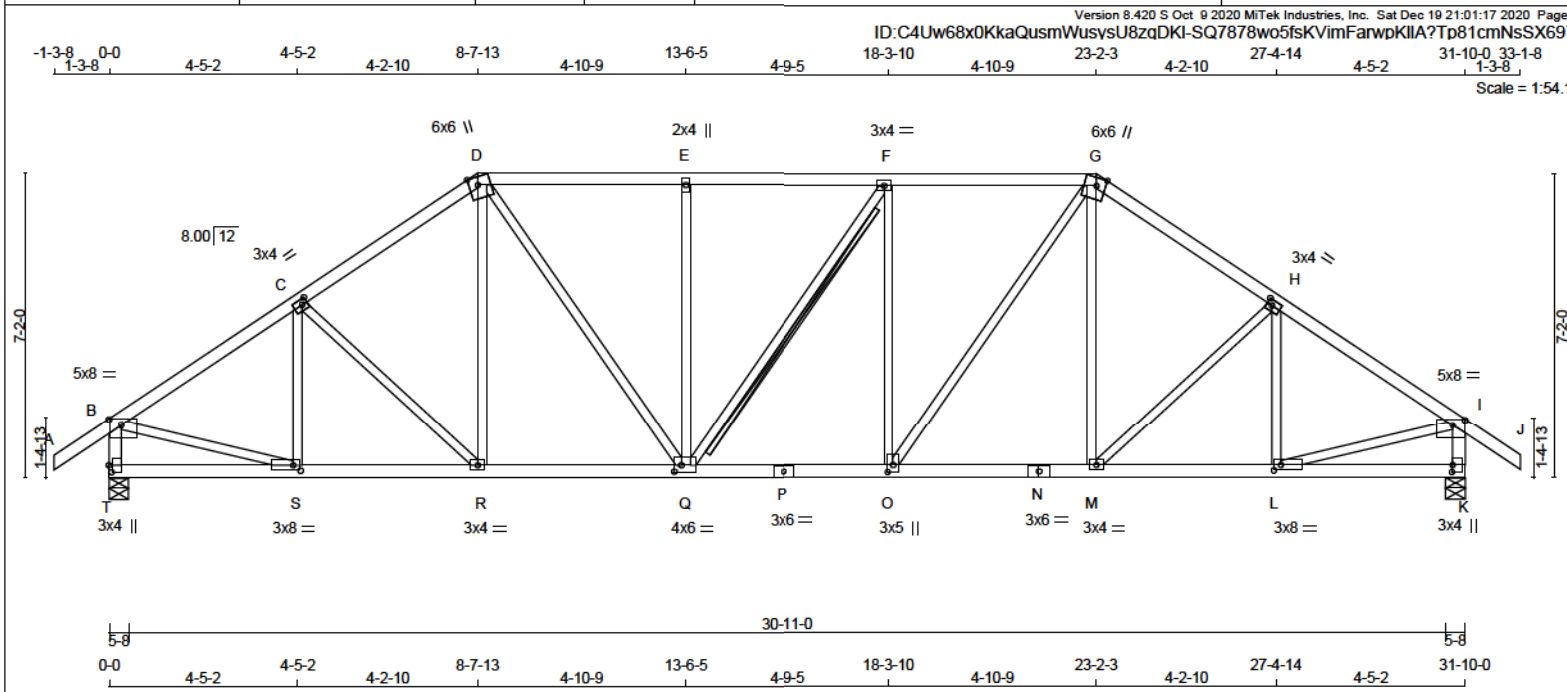
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





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 TMWW-p	MT20	5.0	8.0	1.50	3.50
C TMWW-t	MT20	3.0	4.0	1.50	1.50
D TTWW+m	MT20	6.0	8.0	Edge 2.50	
E TMWW+w	MT20	2.0	4.0		
F TMWW-t	MT20	3.0	4.0		
G TTWW+m	MT20	6.0	8.0	Edge 2.50	
H TMWW-t	MT20	3.0	4.0	1.50	1.50
I TMWW-p	MT20	5.0	8.0	1.50	3.50
K BMV1+p	MT20	3.0	4.0	2.00	0.25
L BMWW-t	MT20	3.0	8.0	1.50	2.00
M BMWW-t	MT20	3.0	4.0		
N BS-t	MT20	3.0	6.0		
O BMWW+t	MT20	3.0	5.0	2.00	1.50
P BS-t	MT20	4.0	6.0		
Q BMWW-t	MT20	4.0	6.0	1.75	2.00
R BMWW-t	MT20	3.0	4.0		
S BMWW-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	DOWN	UPLIFT	IN-SX
T 2776 0	2776 0	0 0	5-8 5-8
K 2776 0	2776 0	0 0	5-8 5-8

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	SNOW	LIVE	PERM. LIVE WIND DEAD SOIL
T 2047	1204 / 0	334 / 0	0 / 0 0 / 0 509 / 0 0 / 0
K 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) 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)

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 / 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.

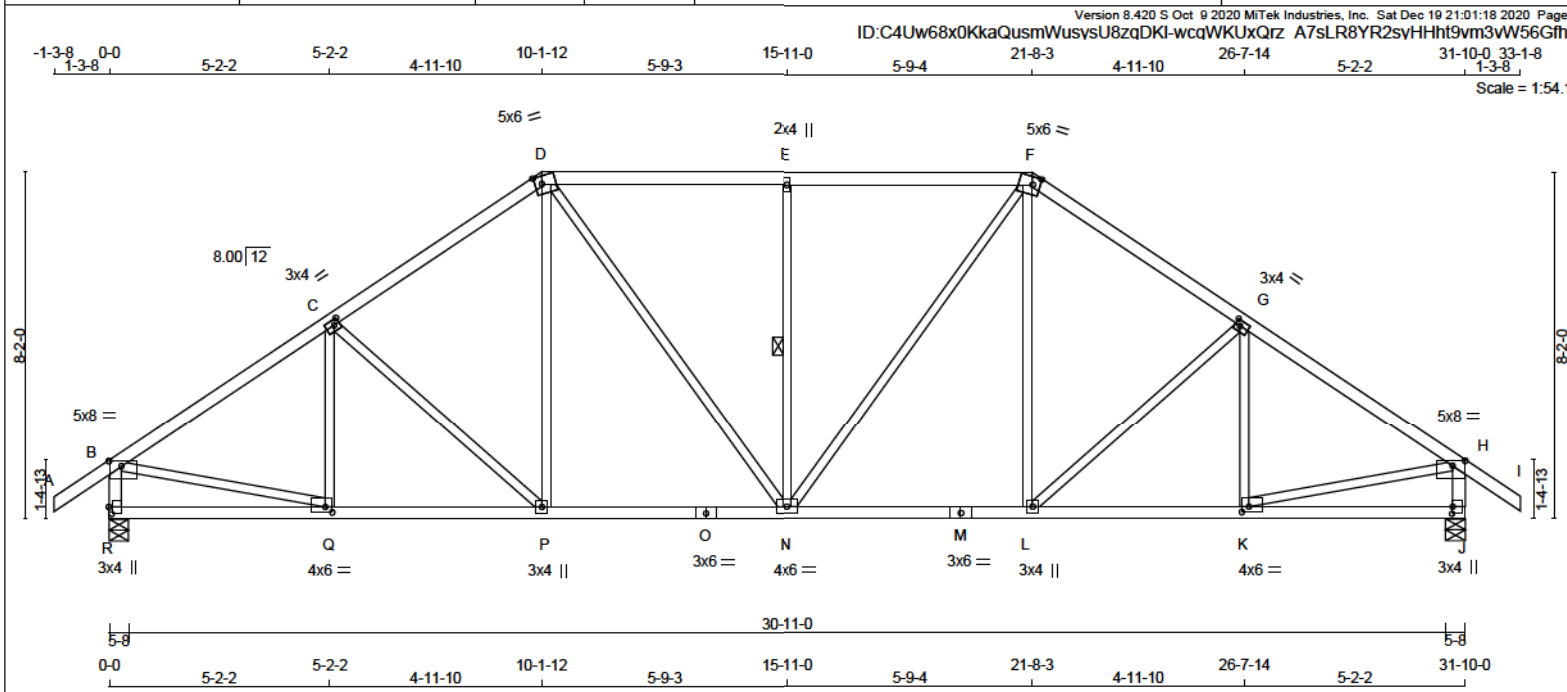
JSI GRIP= 0.90 (K) (INPUT = 0.90)
JSI METAL = 0.97 (P) (INPUT = 1.00)



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





LUMBER
N. L. G. A. RULES

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

DRY: SEASONED LUMBER.

PLATES (Table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	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

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

BEARINGS

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	2047	1204 / 0	334 / 0
R COMBINED	2047	1204 / 0	334 / 0
J LIVE	0	0	0
R LIVE	0	0	0
J WIND	0	0	0
R WIND	0	0	0
J DEAD	509	0	0
R DEAD	509	0	0
J SOIL	0	0	0
R SOIL	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 L1 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 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 (0.22")

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



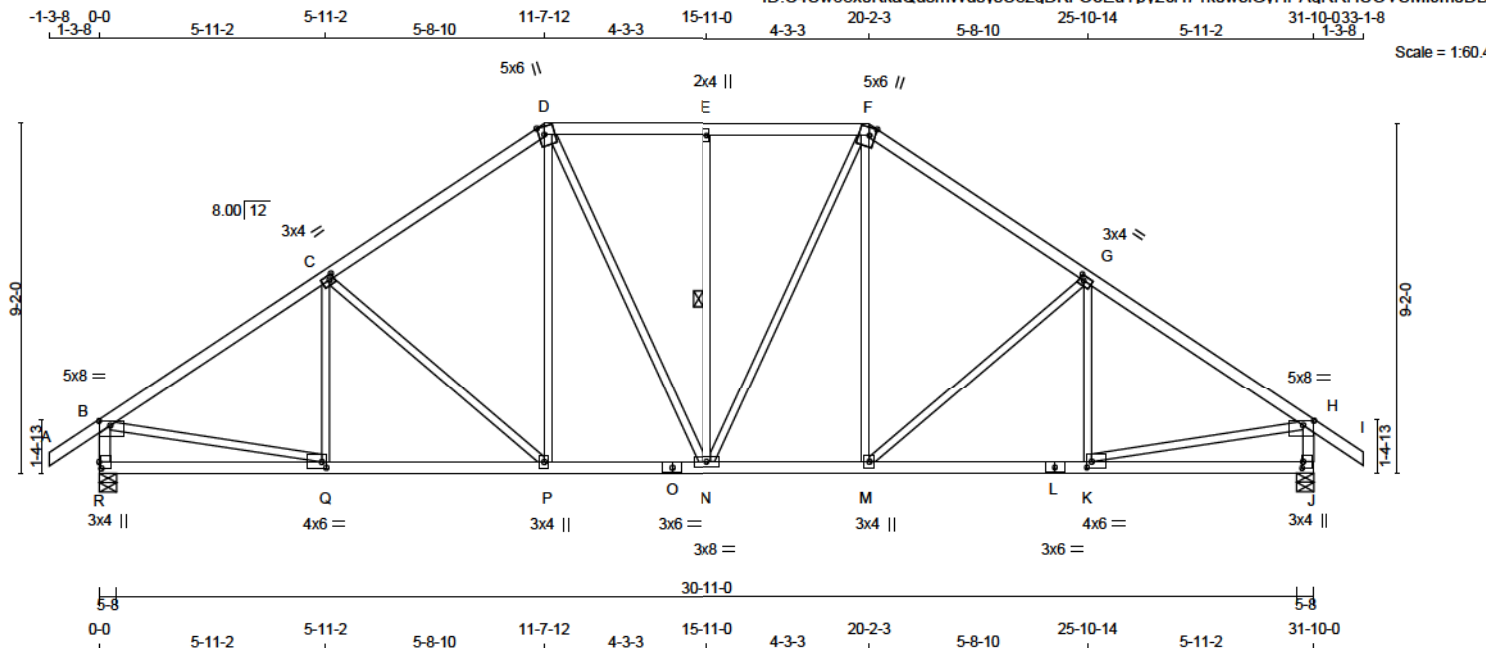
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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



ID: C4Uw68x0KkaQusmWusysU8zqDKI-OoEuYpy2cH71k0weiGvHPAqRRHUOVUMfJm0DD0y7



TOTAL WEIGHT = 2 X 149 = 298 lb

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

DRY: SEASONED LUMBER.

PLATES (table is in inches)

JT TYPE	PLATES	W	LEN	Y	X
B TMVW-p	MT20	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	Edge	1.75
E TMW+w	MT20	2.0	4.0		
F TTWW+m	MT20	5.0	8.0	Edge	1.75
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	1.75	1.50
L BS-t	MT20	3.0	6.0		
M BMVW+t	MT20	3.0	4.0		
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	4.0	6.0	1.75	1.50
R BMV1+p	MT20	3.0	4.0	2.00	0.75

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				
R 2776	0	2776	0	5-8
J 2776	0	2776	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 = 3.20 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)	FACTORED L1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED MAX CSI (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	-591 / 0	0.71 (1)
C-D	-2686 / 0	-124.4 -124.4	0.68 (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	0.68 (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	-591 / 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			
Q-P	0 / 2622	-39.2 -39.2	0.59 (1)	10.00			
P-O	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

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THIS DESIGN COMPLIES WITH:

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- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 088-14
- TPIC 2014

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

ALLOWABLE DEFL.(LL)= L/360 (1.06")
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)
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 = 0.80)
JSI METAL = 0.82 (L) (INPUT = 1.00)



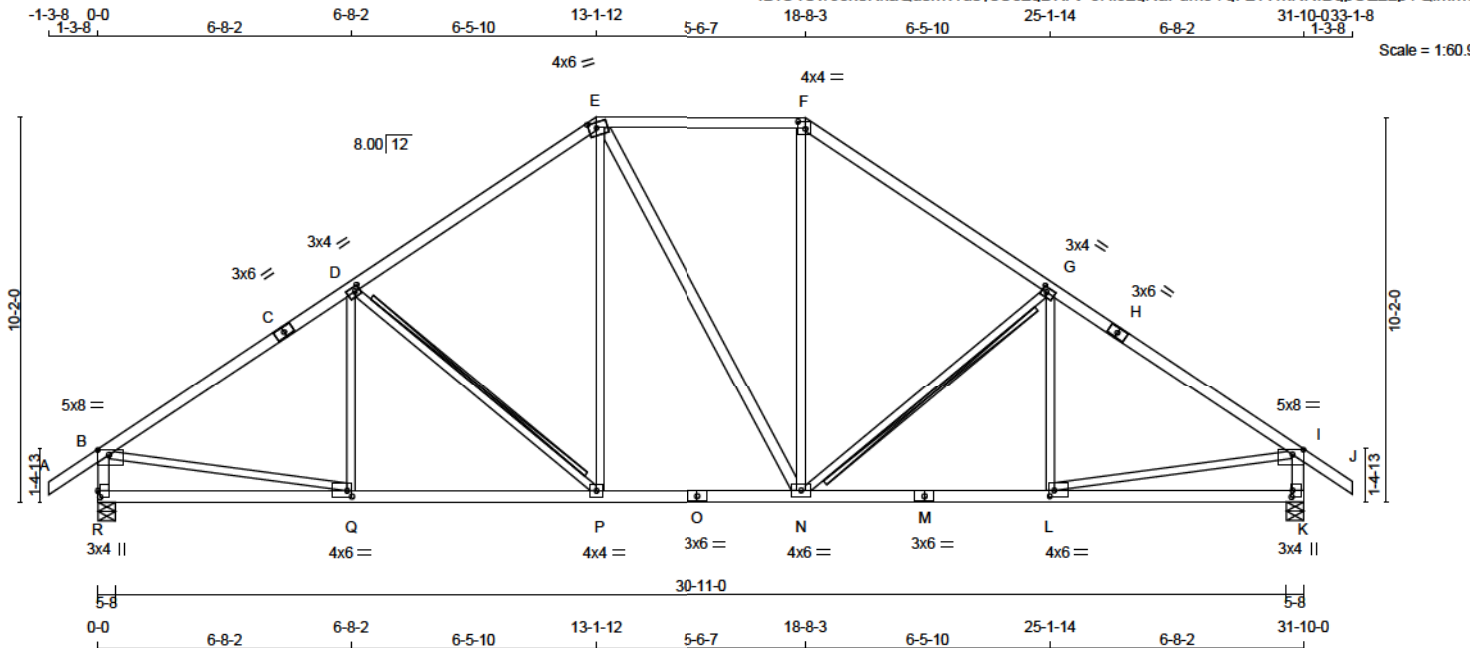
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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



Version 8.420 S Oct 9 2020 MITek Industries, Inc. Sat Dec 19 21:01:20 2020 Page 1
ID: C4Uw68x0KkaQusmWusvsU8zqDKI-t oHI9zqNaFuM9VqFz2TWxNNfBqpUEzLpYQlmm\$y71



TOTAL WEIGHT = 2 X 145 = 290 LB

LUMBER				DESCR.	
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - C	2x4	DRY	2100F 1.8E	SPF	
C - E	2x4	DRY	2100F 1.8E	SPF	
E - F	2x4	DRY	No.2	SPF	
F - H	2x4	DRY	2100F 1.8E	SPF	
H - J	2x4	DRY	2100F 1.8E	SPF	
R - B	2x4	DRY	No.2	SPF	
K - I	2x4	DRY	No.2	SPF	
R - O	2x4	DRY	No.2	SPF	
O - M	2x4	DRY	No.2	SPF	
M - K	2x4	DRY	No.2	SPF	
ALL WEBS	2x3	DRY	No.2	SPF	
EXCEPT					
E - N	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 TTWW-m	MT20	4.0	6.0	1.75	2.50
F TTW-I	MT20	4.0	4.0	2.25	2.25
G TMVW-t	MT20	3.0	4.0	1.50	1.50
H TS-t	MT20	3.0	6.0		
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	4.0	6.0		1.75
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	4.0	6.0		
Q BMVW-t	MT20	4.0	6.0	1.75	1.50
R 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	0	0	0	0
R 2776	0	2776	0	5-8
K 2776	0	2776	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	0 / 0	509 / 0	0 / 0			
K 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, K

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

2x4 DRY SPF No.2 T-BRACE AT D-P, G-N

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. FACTORED UNBRACED LENGTH (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (LC)	
FR-TO				FR-TO			
A-B	0 / 47	-124.4 -124.4 0.11 (1)	10.00	Q-D	-130 / 199	0.07 (1)	
B-C	-3110 / 0	-124.4 -124.4 0.58 (1)	4.24	D-P	-770 / 0	0.44 (1)	
C-D	-3110 / 0	-124.4 -124.4 0.58 (1)	4.24	P-E	0 / 718	0.16 (1)	
D-E	-2513 / 0	-124.4 -124.4 0.52 (1)	4.66	E-N	0 / 2	0.00 (1)	
E-F	-2051 / 0	-124.4 -124.4 0.55 (1)	4.08	N-F	0 / 720	0.16 (1)	
F-G	-2514 / 0	-124.4 -124.4 0.52 (1)	4.66	G-H	-768 / 0	0.44 (1)	
G-H	-3109 / 0	-124.4 -124.4 0.58 (1)	4.24	L-G	-132 / 197	0.07 (1)	
H-I	-3109 / 0	-124.4 -124.4 0.58 (1)	4.24	B-Q	0 / 2666	0.60 (1)	
I-J	0 / 47	-124.4 -124.4 0.11 (1)	10.00	L-I	0 / 2666	0.60 (1)	
R-B	-2670 / 0	0.0 0.0 0.28 (1)	5.26				
K-I	-2669 / 0	0.0 0.0 0.28 (1)	5.26				
R-Q	0 / 0	-39.2 -39.2 0.34 (3)	10.00				
Q-P	0 / 2632	-39.2 -39.2 0.66 (2)	10.00				
P-O	0 / 2050	-39.2 -39.2 0.48 (1)	10.00				
O-N	0 / 2050	-39.2 -39.2 0.48 (1)	10.00				
N-M	0 / 2632	-39.2 -39.2 0.66 (2)	10.00				
M-L	0 / 2632	-39.2 -39.2 0.66 (2)	10.00				
L-K	0 / 0	-39.2 -39.2 0.34 (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 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (1.06")
CALCULATED VERT. DEFL.(TL)= L/999 (0.21")

CSI: TC=0.58/1.00 (B-D-1) , BC=0.66/1.00 (P-Q-2) ,

WB=0.60/1.00 (B-Q-1) , SSI=0.33/1.00 (G-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= 0.89 (R) (INPUT = 0.90)
JSI METAL = 0.93 (M) (INPUT = 1.00)



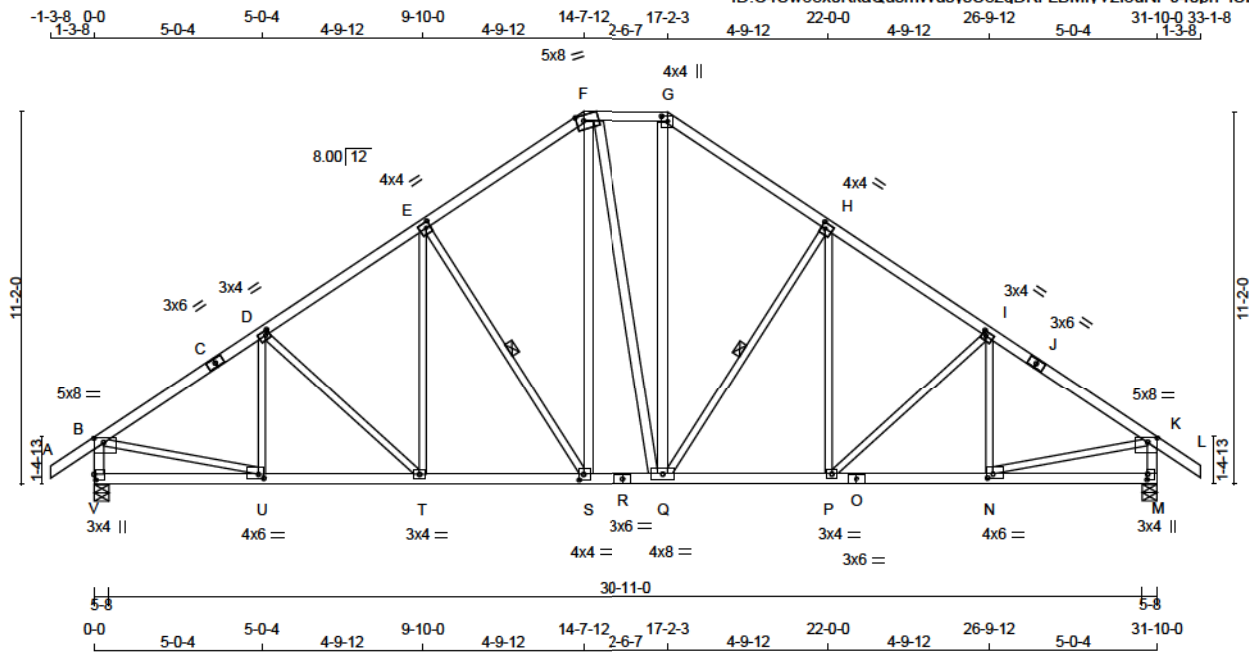
These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept 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	2021-02-03
Sewage System			
Zoning			



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

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TOTAL WEIGHT = 2 X 173 = 346 lb

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

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 TMWW-t	MT20	3.0	4.0	1.50	1.50
E TMWW-t	MT20	4.0	4.0	2.00	1.50
F TTWW-m	MT20	5.0	8.0	2.00	2.75
G TTW+p	MT20	4.0	4.0	2.00	2.25
H TMWW-t	MT20	4.0	4.0	2.00	1.50
I TMWW-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 BMWW-t	MT20	4.0	6.0	1.50	2.00
O BS-t	MT20	3.0	6.0		
P BMWW-t	MT20	3.0	4.0		
Q BMWW-t	MT20	4.0	8.0		
R BS-t	MT20	3.0	6.0		
S BMWW-t	MT20	4.0	4.0	2.00	1.75
T BMWW-t	MT20	3.0	4.0		
U BMWW-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	0	2776	0	5-8
V	2776	0	2776	0	5-8
M	2776	0	2776	0	5-8

UNFACTORED REACTIONS							
	1ST LCASE	MAX/MIN COMPONENT REACTIONS					
	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL
JT	2047	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0
V	2047	1204 / 0	334 / 0	0 / 0	0 / 0	509 / 0	0 / 0
M	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) 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)	MAX. UNBRACED LENGTH (FT)	MAX. FACTORED FORCE (LBS)
FR-TO				FR-TO			
A-B	0 / 47	-124.4	-124.4 0.17 (1)	10.00	U-D	-344 / 36	0.11 (1)
B-C	-3057 / 0	-124.4	-124.4 0.52 (1)	3.55	D-T	-279 / 0	0.22 (1)
C-D	-3057 / 0	-124.4	-124.4 0.52 (1)	3.55	T-E	0 / 409	0.09 (2)
D-E	-2842 / 0	-124.4	-124.4 0.44 (1)	3.76	E-S	-870 / 0	0.50 (1)
E-F	-2306 / 0	-124.4	-124.4 0.41 (1)	4.13	S-F	0 / 852	0.14 (1)
F-G	-1904 / 0	-124.4	-124.4 0.14 (1)	4.77	F-Q	0 / 14	0.00 (1)
G-H	-2310 / 0	-124.4	-124.4 0.41 (1)	4.13	Q-G	0 / 868	0.14 (1)
H-I	-2841 / 0	-124.4	-124.4 0.44 (1)	3.76	Q-H	-863 / 0	0.50 (1)
I-J	-3057 / 0	-124.4	-124.4 0.52 (1)	3.55	P-H	0 / 401	0.09 (2)
J-K	-3057 / 0	-124.4	-124.4 0.52 (1)	3.55	P-I	-281 / 0	0.22 (1)
K-L	0 / 47	-124.4	-124.4 0.17 (1)	10.00	N-I	-342 / 37	0.11 (1)
V-B	-2692 / 0	0.0	0.0 0.28 (1)	5.24	B-U	0 / 2028	0.59 (1)
M-K	-2692 / 0	0.0	0.0 0.28 (1)	5.24	N-K	0 / 2629	0.59 (1)
V-U	0 / 0	-39.2	-39.2 0.17 (3)	10.00			
U-T	0 / 2569	-39.2	-39.2 0.51 (1)	10.00			
T-S	0 / 2364	-39.2	-39.2 0.48 (1)	10.00			
S-R	0 / 1901	-39.2	-39.2 0.41 (1)	10.00			
R-Q	0 / 1901	-39.2	-39.2 0.41 (1)	10.00			
Q-P	0 / 2363	-39.2	-39.2 0.48 (1)	10.00			
P-O	0 / 2570	-39.2	-39.2 0.52 (1)	10.00			
O-N	0 / 2570	-39.2	-39.2 0.52 (1)	10.00			
N-M	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 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 (0.13")
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.



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

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





TOTAL WEIGHT = $2 \times 42 = 85$ lb

DRY: SEASONED LUMBER.

PLATES (table is in inches)

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

UNFACTORED REACTIONS

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

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	FACTORED		MAX. UNBRAC	MEMB.	MAX. FACTORED	FACTORED		
	FORCE (LBS)	VERT. LOAD (PLF)	LOCAL 1 CSI (LC)			FORCE (LBS)	MAX CSI (LC)		
FR-TO		FROM TO			LENGTH	FR-TO			
A-B	0 / 58	-124.4	-124.4	0.17 (1)	10.00	G-C	0 / 179	0.05 (3)	
B-C	-419 / 0	-124.4	-124.4	0.31 (1)	6.25	B-G	0 / 324	0.07 (1)	
C-D	-419 / 0	-124.4	-124.4	0.31 (1)	6.25	G-D	0 / 324	0.07 (1)	
D-E	0 / 58	-124.4	-124.4	0.17 (1)	10.00				
H-B	-829 / 0	0.0	0.0	0.09 (1)	7.81				
F-D	-829 / 0	0.0	0.0	0.09 (1)	7.81				
H-G	0 / 0	-39.2	-39.2	0.18 (3)	10.00				
G-F	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

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)= $L/999$ (0.01")
 ALLOWABLE DEFL.(TL)= $L/360$ (0.29")
 CALCULATED VERT. DEFL.(TL)= $L/999$ (0.02")

CSI: TC=0.31/1.00 (C-D:1), BC=0.18/1.00 (G-H:3),
WB=0.07/1.00 (B-G:1), SSI=0.16/1.00 (C-D:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

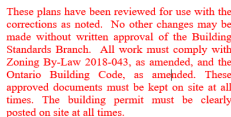
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.69 (D) (INPUT = 0.90)
JSI METAL= 0.21 (D) (INPUT = 1.00)

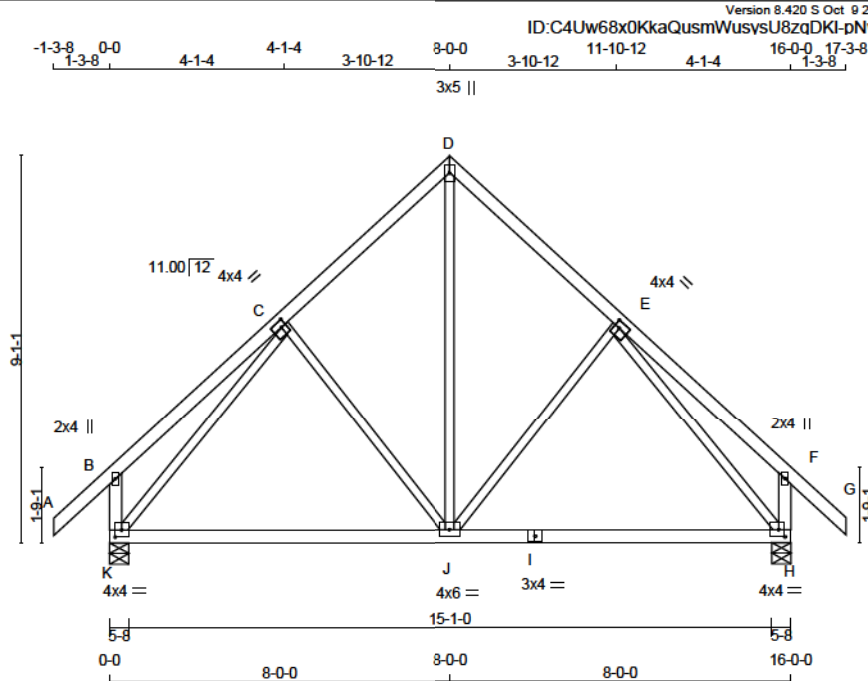


**READ ALL NOTES ON THIS PAGE AND ON
ENGINEERING NOTE PAGE ENP-1. THIS
NOTE PAGE IS AN INTEGRAL PART OF
THIS DRAWING AS IT CONTAINS
SPECIFICATIONS AND CRITERIA USED IN
THE DESIGN OF THIS COMPONENT.**



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





TOTAL WEIGHT = 2 X 77 = 155 LB

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

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

BEARINGS		FACTORED GROSS REACTION	MAXIMUM FACTORED GROSS REACTION	INPUT BRG	REQRD BRG
JT	VERT	HORZ	DOWN	HORZ	UPLIFT
K	1482	0	1482	0	0
H	1482	0	1482	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX. MIN. COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
K	1089	854 / 0	168 / 0
H	1089	854 / 0	168 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.18 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.	FORCE (LBS)	MEMB.	FORCE (LBS)
FR-TO	FROM	FR-TO	FROM
A-B	0 / 58	J-D	0 / 774
B-C	0 / 40	J-E	-246 / 7
C-D	-808 / 0	C-J	-246 / 7
D-E	-808 / 0	K-C	-1274 / 0
E-F	0 / 40	E-H	-1274 / 0
F-G	0 / 58		
K-B	-361 / 0		
H-F	-361 / 0		
K-J	0 / 787		
J-I	0 / 787		
I-H	0 / 787		

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/969 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.53")
CALCULATED VERT. DEFL.(TL) = L/936 (0.21")

CSI: TC=0.32/1.00 (B-C:1), BC=0.65/1.00 (J-K:3),
WB=0.93/1.00 (C-K:1), SSI=0.22/1.00 (J-K: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)
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 (C) (INPUT = 0.90)
JSI METAL = 0.43 (E) (INPUT = 1.00)



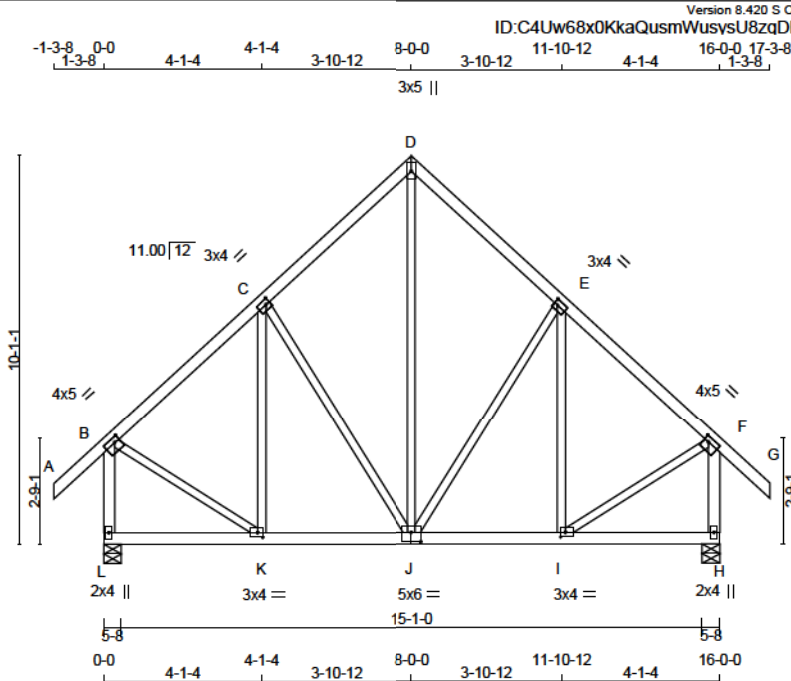
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





TOTAL WEIGHT = 2 X 89 = 178 LB

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
A - D	2x4	DRY	No.2		SPF
D - G	2x4	DRY	No.2		SPF
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		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	1.50 1.50
C	TMWW-t	MT20	3.0	4.0	1.50 1.25
D	TTW+p	MT20	3.0	5.0	
E	TMWW-t	MT20	3.0	4.0	1.50 1.25
F	TMVW-t	MT20	4.0	5.0	1.50 1.50
H	BMV1+p	MT20	2.0	4.0	
I	BMWW-t	MT20	3.0	4.0	1.50 1.50
J	BSWWW-t	MT20	5.0	6.0	3.00 3.00
K	BMWW-t	MT20	3.0	4.0	1.50 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	HORZ	DOWN	HORZ	UPLIFT
L	1482	0	1482	0	0
H	1482	0	1482	0	0

UNFACTORED REACTIONS		1ST LCASE	MAX/MIN COMPONENT REACTIONS
JT	COMBINED	SNOW	LIVE
L	1089	854 / 0	168 / 0
H	1089	854 / 0	168 / 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 = 6.15 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	LC1 MAX CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED CSI (LC)	
FR-TO		FROM	TO	LENGTH	FR-TO		
A-B	0 / 58	-124.4	-124.4	0.17 (1)	10.00	J-D	0 / 823
B-C	-906 / 0	-124.4	-124.4	0.26 (1)	8.15	J-E	-299 / 0
C-D	-770 / 0	-124.4	-124.4	0.26 (1)	8.25	I-E	-218 / 72
D-E	-770 / 0	-124.4	-124.4	0.26 (1)	8.25	C-J	-299 / 0
E-F	-906 / 0	-124.4	-124.4	0.26 (1)	8.15	K-C	-218 / 72
F-G	0 / 58	-124.4	-124.4	0.17 (1)	10.00	B-K	0 / 808
L-B	-1419 / 0	0.0	0.0	0.21 (1)	6.85	I-F	0 / 808
H-F	-1419 / 0	0.0	0.0	0.21 (1)	6.85		
L-K	0 / 0	-39.2	-39.2	0.14 (3)	10.00		
K-J	0 / 897	-39.2	-39.2	0.22 (2)	10.00		
J-I	0 / 897	-39.2	-39.2	0.22 (2)	10.00		
I-H	0 / 0	-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 086-14
- TPI 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 (0.02")
ALLOWABLE DEFL.(TL) = L/360 (0.53")
CALCULATED VERT. DEFL.(TL) = L/999 (0.04")

CSI: TC=0.26/1.00 (B-C-1), BC=0.22/1.00 (I-J-2),
WB=0.31/1.00 (E-J-1), SS=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

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= 0.83 (K) (INPUT = 0.90)
JSI METAL = 0.34 (F) (INPUT = 1.00)



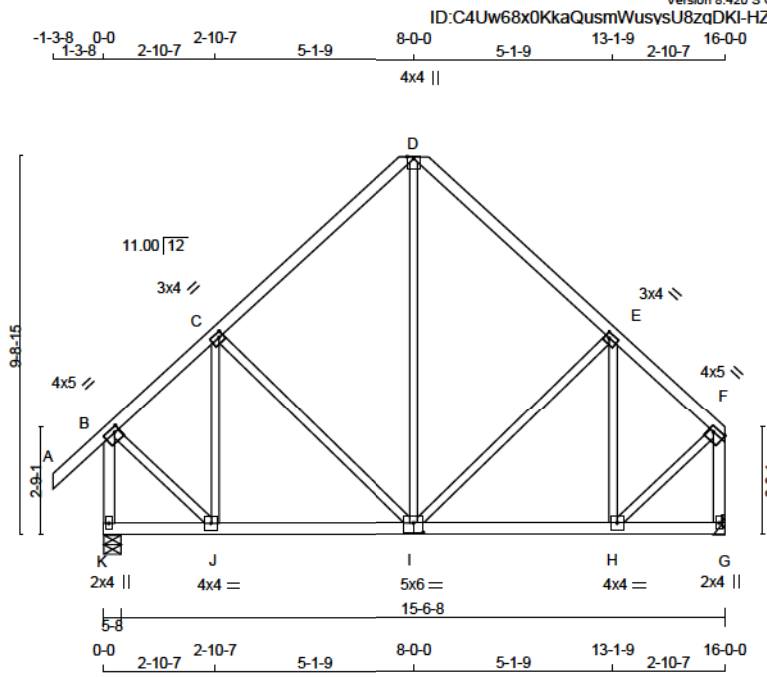
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





Scale = 1:59.3

TOTAL WEIGHT = 83 lb

LUMBER				N. L. G. A. RULES		DESCR.	
CHORDS	SIZE	LUMBER					
A - D	2x4	DRY	No.2			SPF	
D - F	2x4	DRY	No.2			SPF	
K - B	2x4	DRY	No.2			SPF	
G - F	2x4	DRY	No.2			SPF	
K - I	2x4	DRY	No.2			SPF	
I - G	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-I	MT20	4.0	5.0	1.50	1.50
C	TMVW-I	MT20	3.0	4.0	1.50	1.25
D	TMVW-I	MT20	4.0	4.0	Edge	
E	TMVW-I	MT20	3.0	4.0	1.50	1.25
F	TMVW-I	MT20	4.0	5.0	1.50	Edge
G	BMVW-I	MT20	2.0	4.0		
H	BMVW-I	MT20	4.0	4.0		
I	BSVW-I	MT20	5.0	6.0	3.00	3.00
J	BMVW-I	MT20	4.0	4.0		
K	BMVW-I	MT20	2.0	4.0		

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
K	1482	0	1482	0	0	5-8	1-10		
G	1309	0	1309	0	0	MECHANICAL			

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	SNOW	LIVE	PERM.LIVE	WIND	DEAD
K	1089	854 / 0	168 / 0	0 / 0	0 / 0	267 / 0
G	970	557 / 0	168 / 0	0 / 0	0 / 0	245 / 0

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

BRACING
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.18 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	0 / 58	-124.4	-124.4 0.17 (1)	J-C	-373 / 17	0.18 (1)	0.10 (1)
A-B	-863 / 0	-124.4	-124.4 0.32 (1)	I-D	0 / 464	0.18 (1)	0.10 (1)
B-C	-768 / 0	-124.4	-124.4 0.39 (1)	H-E	-373 / 17	0.18 (1)	0.10 (1)
C-D	-768 / 0	-124.4	-124.4 0.39 (1)	C-I	-211 / 0	0.21 (1)	0.21 (1)
D-E	-863 / 0	-124.4	-124.4 0.32 (1)	I-E	-212 / 0	0.21 (1)	0.21 (1)
E-F	-1456 / 0	0.0	0.0 0.21 (1)	B-J	0 / 899	0.20 (1)	0.20 (1)
F-G	-1284 / 0	0.0	0.0 0.19 (1)	H-F	0 / 899	0.20 (1)	0.20 (1)
K-J	0 / 0	-39.2	-39.2 0.18 (3)				
J-I	0 / 888	-39.2	-39.2 0.25 (2)				
I-H	0 / 888	-39.2	-39.2 0.25 (2)				
H-G	0 / 0	-39.2	-39.2 0.18 (3)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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

(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 (0.04")
ALLOWABLE DEFL.(TL) = L/360 (0.53")
CALCULATED VERT. DEFL.(TL) = L/999 (0.08")

CSI: TC=0.39/1.00 (D-E-1), BC=0.25/1.00 (H-I-2),
WB=0.21/1.00 (E-I-1), SSI=0.22/1.00 (C-D-1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.87 (J) (INPUT = 0.90)
JSI METAL= 0.31 (F) (INPUT = 1.00)



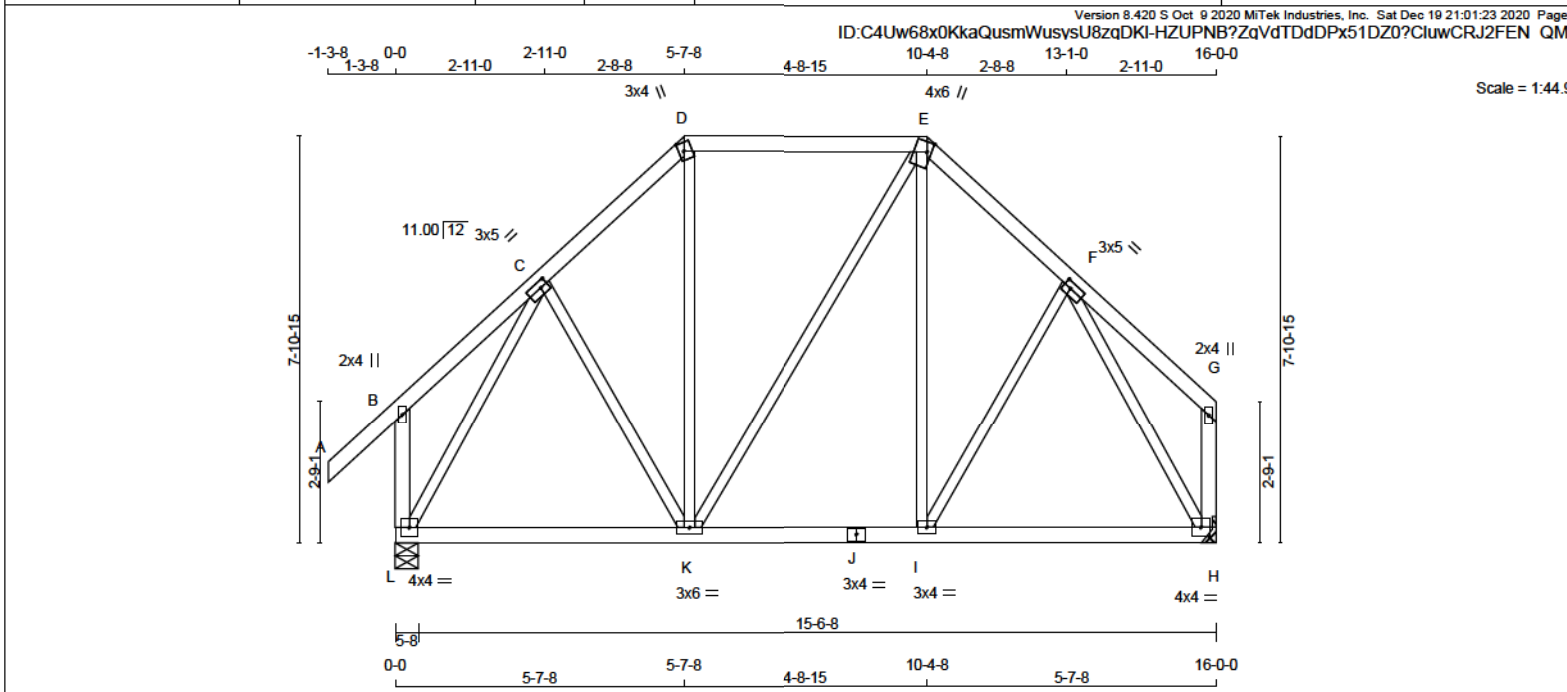
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			





LUMBER

N. L. G. A. RULES

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

EXCEPT

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+1	MT20	3.0	5.0	1.50	1.75
D - TTW+m	MT20	3.0	4.0	2.00	1.25
E - TTWW+m	MT20	4.0	8.0	2.25	1.00
F - TMWW+1	MT20	3.0	5.0	1.50	1.75
G - TMV+p	MT20	2.0	4.0		
H - BMVW1+1	MT20	4.0	4.0		
I - BMWW+1	MT20	3.0	4.0		
J - BS+1	MT20	3.0	4.0		
K - BMWW+1	MT20	3.0	6.0		
L - BMVW1+1	MT20	4.0	4.0		



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	1482	0	5-8
H	1309	0	MECHANICAL

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS
JT COMBINED	1089	654 / 0	168 / 0
L	970	557 / 0	168 / 0

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

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

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

LOADING
TOTAL LOAD CASES: (4)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)	MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. FACTORED VERT. LOAD (PLF)
FR-TO				FR-TO			
A-B	0 / 58	-124.4	-124.4 0.17 (1)	C-K	0 / 100	0.02 (3)	
B-C	0 / 25	-124.4	-124.4 0.15 (1)	K-D	0 / 201	0.05 (3)	
C-D	-901 / 0	-124.4	-124.4 0.12 (1)	D-E	0 / 0	0.00 (1)	
D-E	-844 / 0	-124.4	-124.4 0.36 (1)	E-F	0 / 200	0.05 (3)	
E-F	-900 / 0	-124.4	-124.4 0.12 (1)	F-G	0 / 99	0.02 (3)	
F-G	0 / 25	-124.4	-124.4 0.15 (1)	G-H	-1237 / 0	0.67 (1)	
G-H	-312 / 0	0.0	0.0 0.05 (1)	H-I	-1236 / 0	0.67 (1)	
H-I	-139 / 0	0.0	0.0 0.02 (1)				
I-J	0 / 810	-39.2	-39.2 0.27 (2)				
J-K	0 / 844	-39.2	-39.2 0.27 (2)				
K-L	0 / 844	-39.2	-39.2 0.27 (2)				
L-H	0 / 609	-39.2	-39.2 0.28 (2)				

DESIGN CRITERIA

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

SPACING = 24.0 IN. C/C

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

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 (0.08")

CSI: TC=0.36/1.00 (D-E:1) , BC=0.28/1.00 (H-I:2) ,
WB=0.67/1.00 (C-L:1) , SSI=0.23/1.00 (D-E:1)

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

COMPANION LIVE LOAD FACTOR = 1.00

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

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

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

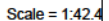
JSI GRIP= 0.88 (C) (INPUT = 0.90)
JSI METAL = 0.33 (C) (INPUT = 1.00)



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





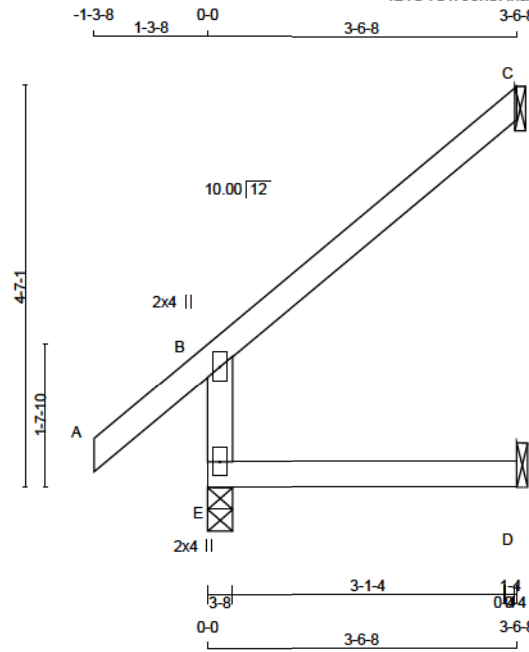
TOTAL WEIGHT = 2 X 44 = 88 lb



**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.**

Version 8.420 S Oct 9 2020 Mitek Industries, Inc. Sat Dec 19 21:01:24 2020 Page 1
ID: C4Uw68x0KkaQusmWusysU8zqDKl-lm2nbX0BRpIKmobUpYS6DXO2IJAwhPT1i vDy7

Scale = 1:26.3



TOTAL WEIGHT = 14 X 13 = 180 lb

LUMBER					DESCR.
N. L. G. A. RULES	CHORDS	SIZE	LUMBER		
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	165	0	165	0
E	525	0	525	0
D	61	0	78	0

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

UNFACTORED REACTIONS

1ST LCASE	MAX	MIN	COMPONENT REACTIONS				
JT	COMBINED	SNOW	LIVE	PERM. LIVE	WIND	DEAD	SOIL
C	114	93 / 0	0 / 0	0 / 0	0 / 0	21 / 0	0 / 0
E	378	250 / 0	42 / 0	0 / 0	0 / 0	86 / 0	0 / 0
D	56	0 / 0	33 / 0	0 / 0	0 / 0	23 / 0	0 / 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 L1 MAX. CSI (LC)	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED UNBRACED LENGTH (FT)	MAX. FACTORED UNBRACED LENGTH (FT)
FR-TO							
A-B	0 / 55	-124.4	-124.4 0.18 (5)				
B-C	-35 / 0	-124.4	-124.4 0.28 (1)				
E-B	-447 / 0	0.0	0.0 0.06 (3)				
E-D	0 / 0	-39.2	-39.2 0.09 (3)				

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

DESIGN CRITERIA

SPECIFIED LOADS:

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

SPACING = 24.0 IN. C/C

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

THIS DESIGN COMPLIES WITH:

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

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=0.26/1.00 (B-C:1) , BC=0.09/1.00 (D-E:3) ,
WB=0.00/1.00 (n/a:0) , SSI=0.16/1.00 (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)
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 = 0.80)
JSI METAL = 0.24 (B) (INPUT = 1.00)



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

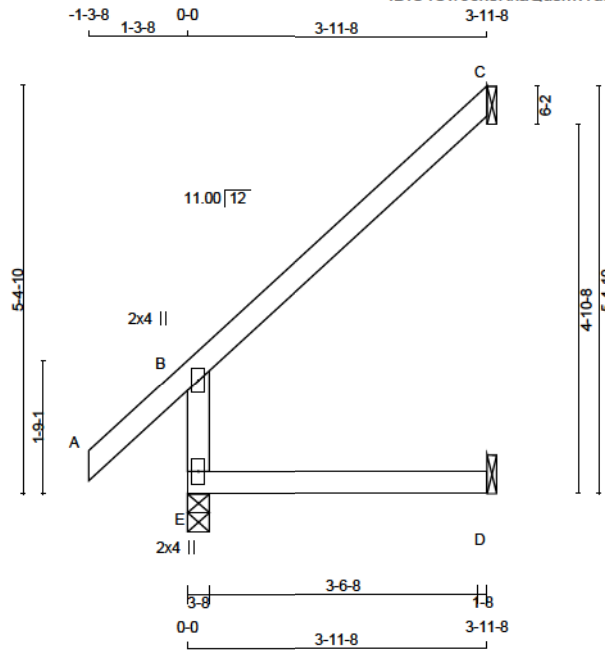


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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			



Scale = 1:30.3



TOTAL WEIGHT = 4 X 14 = 58 lb

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

DRY: SEASONED LUMBER.

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

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

BEARINGS		FACTORED		MAXIMUM FACTORED		INPUT		REQRD	
JT	VERT	HORZ	DOWN	HORZ	UPLIFT	IN-SX	IN-SX	BRG	BRG
E	568	0	568	0	0	3-8	1-8		
C	185	0	185	0	0	1-8	1-8		
D	68	0	87	0	0	1-8	1-8		

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

UNFACTORED REACTIONS		1ST LCASE		MAX MIN COMPONENT REACTIONS					
JT	COMBINED	SNOW	LIVE	PERM.LIVE	WIND	DEAD	SOIL		
E	410	269 / 0	47 / 0	0 / 0	0 / 0	94 / 0	0 / 0		
C	127	103 / 0	0 / 0	0 / 0	0 / 0	24 / 0	0 / 0		
D	62	0 / 0	37 / 0	0 / 0	0 / 0	25 / 0	0 / 0		

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

BRACING

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

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

LOADING

TOTAL LOAD CASES: (5)

CHORDS		WEBS	
MEMB.	MAX. FACTORED FORCE (LBS)	MAX. FACTORED VERT. LOAD (PLF)	MAX. FACTORED HORZ. LOAD (LBS)
FR-TO			
E-B	-481 / 0	0.0 0.0 0.07 (3)	7.81
A-B	0 / 58	-124.4 -124.4 0.19 (6)	10.00
B-C	-41 / 0	-124.4 -124.4 0.33 (1)	6.25
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

SPACING = 24.0 IN. C/C

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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=0.33/1.00 (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= 0.35 (B) (INPUT = 0.80)
JSI METAL = 0.25 (B) (INPUT = 1.00)



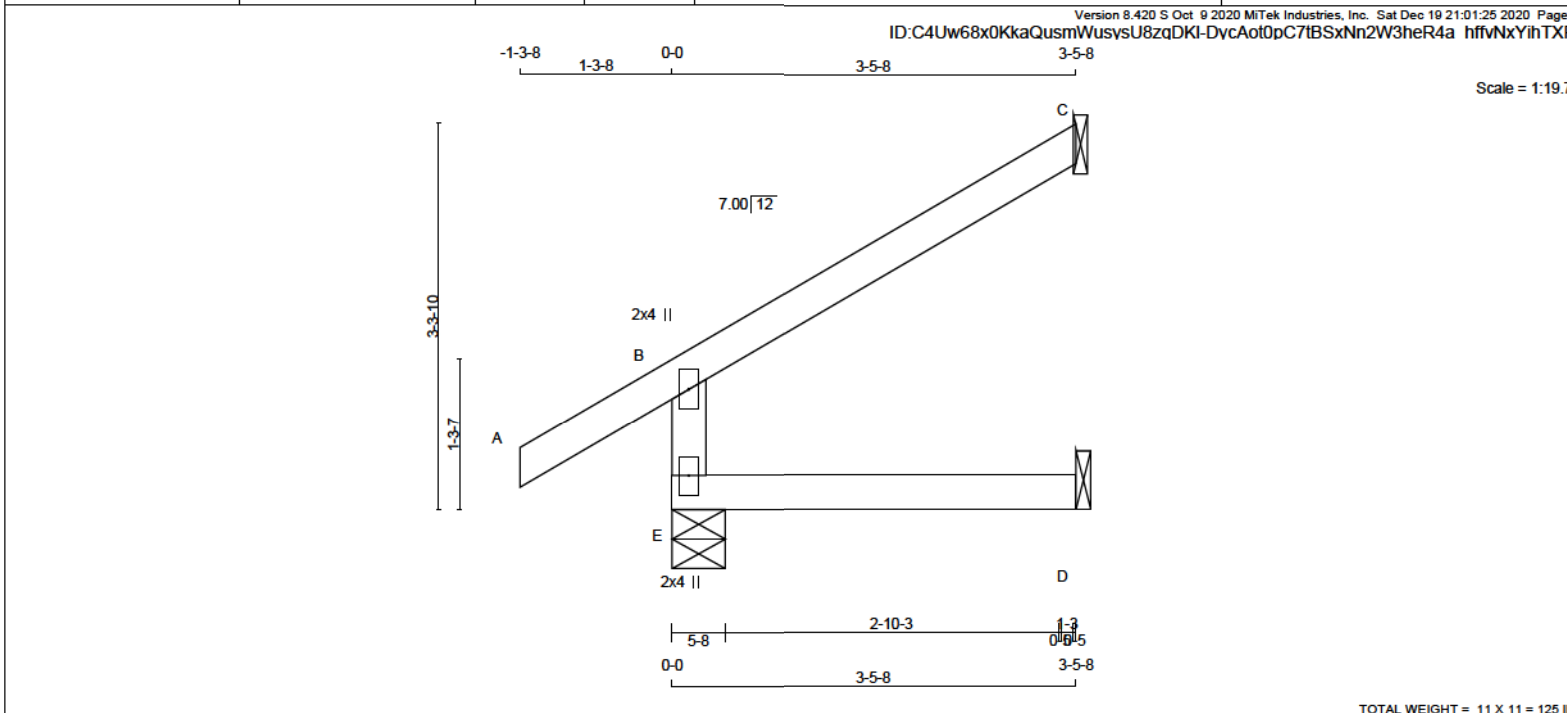
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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Seismic System			
Zoning			





LUMBER N. L. G. A. RULES <table><tr><td>CHORDS</td><td>SIZE</td><td></td><td>LUMBER</td></tr><tr><td>A - C</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>E - B</td><td>2x4</td><td>DRY</td><td>No.2</td></tr><tr><td>E - D</td><td>2x4</td><td>DRY</td><td>No.2</td></tr></table> DESCR. SPF SPF SPF DRY: SEASONED LUMBER.	CHORDS	SIZE		LUMBER	A - C	2x4	DRY	No.2	E - B	2x4	DRY	No.2	E - D	2x4	DRY	No.2	DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER BEARINGS <table><tr><td></td><td colspan="2">FACTORED</td><td colspan="2">MAXIMUM FACTORED</td><td>INPUT</td><td>REQRD</td></tr><tr><td></td><td colspan="2">GROSS REACTION</td><td colspan="2">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><td>UPLIFT</td><td>IN-SX</td></tr><tr><td>C</td><td>162</td><td>0</td><td>162</td><td>0</td><td>0</td><td>1-8</td></tr><tr><td>E</td><td>516</td><td>0</td><td>516</td><td>0</td><td>0</td><td>5-8</td></tr><tr><td>D</td><td>59</td><td>0</td><td>74</td><td>0</td><td>0</td><td>1-8</td></tr></table> SEE MITEK STANDARD DETAIL B97791H FOR CONNECTION TO JOINT(S) C, D UNFACTORED REACTIONS <table><tr><td></td><td colspan="2">1ST LOASE</td><td colspan="2">MAX MIN</td><td colspan="2">COMPONENT REACTIONS</td></tr><tr><td>JT</td><td>COMBINED</td><td>SNOW</td><td>LIVE</td><td>PERM. LIVE</td><td>WIND</td><td>DEAD</td></tr><tr><td>C</td><td>111</td><td>90 / 0</td><td>0 / 0</td><td>0 / 0</td><td>0 / 0</td><td>21 / 0</td></tr><tr><td>E</td><td>372</td><td>245 / 0</td><td>41 / 0</td><td>0 / 0</td><td>0 / 0</td><td>85 / 0</td></tr><tr><td>D</td><td>53</td><td>0 / 0</td><td>31 / 0</td><td>0 / 0</td><td>0 / 0</td><td>22 / 0</td></tr></table> BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) C, 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: (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 LC1 MAX. CSI (LC)</td><td>MEMB.</td><td>MAX. FACTORED FORCE (LBS)</td><td>MAX. 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LIVE	WIND	DEAD	C	111	90 / 0	0 / 0	0 / 0	0 / 0	21 / 0	E	372	245 / 0	41 / 0	0 / 0	0 / 0	85 / 0	D	53	0 / 0	31 / 0	0 / 0	0 / 0	22 / 0	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)	MEMB.	FR-TO		FROM	TO	FR-TO				A - B	0 / 43	-124.4	-124.4 0.18 (5)	10.00				B - C	-27 / 0	-124.4	-124.4 0.25 (1)	6.25				E - B	-439 / 0	0.0	0.0 0.06 (3)	7.81				E - D	0 / 0	-39.2	-39.2 0.09 (3)	10.00				DESIGN CRITERIA SPECIFIED LOADS: <table><tr><td>TOP</td><td>CH.</td><td>LL</td><td>=</td><td>34.8</td><td>PSF</td></tr><tr><td></td><td></td><td>DL</td><td>=</td><td>8.0</td><td>PSF</td></tr><tr><td>BOT</td><td>CH.</td><td>LL</td><td>=</td><td>10.5</td><td>PSF</td></tr><tr><td></td><td></td><td>DL</td><td>=</td><td>7.3</td><td>PSF</td></tr><tr><td colspan="2">TOTAL LOAD</td><td>=</td><td>60.6</td><td>PSF</td><td></td></tr></table> SPACING = 24.0 IN. 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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-03
Sewage System			
Zoning			

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

NE1220-132

GREENPARK - TRINAR HALL - LOT 31

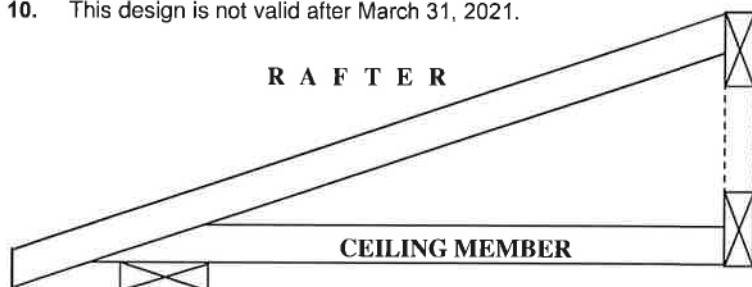
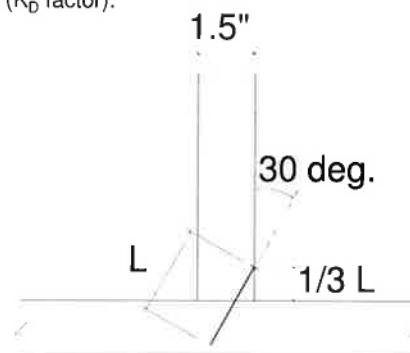
BEARING ANCHORAGE BY TOE-NAILS FOR LATERAL CAPACITY

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



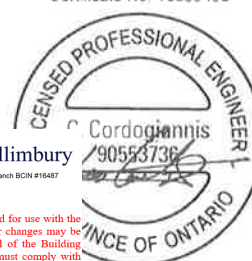
Town of
East Gwillimbury
Building Standards Branch BCIN #15487

December

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

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

PEO
Certificate No. 10889485



NE1220-132
GREENPARK - TRINAR HALL - LOT 31

BEARING ANCHORAGE BY TOE-NAILS FOR WIND LOADING

B97791H2

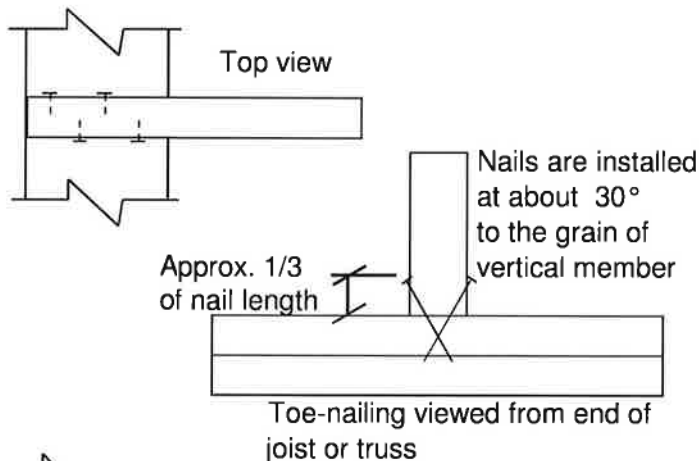
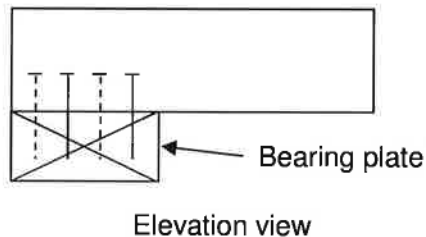
NAIL TYPE	LENGTH (IN)	DIAMETER (IN)	NAIL WITHDRAWAL CAPACITY (LB)	
			S-P-F	D. FIR
COMMON WIRE	3.00	0.144	30	42
	3.25	0.144	32	45
	3.50	0.160	38	52
COMMON SPIRAL	3.00	0.122	26	36
	3.25	0.122	28	40
	3.50	0.152	36	50

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

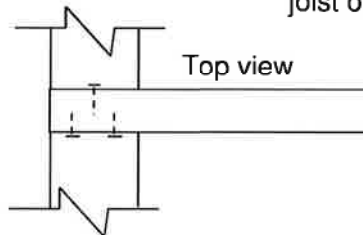
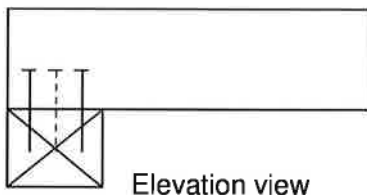
NOTES:

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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